



#ASB2018

Friday, September 28

12:00-6:00 pm **Registration Desk**
Jean-Cadieux Building Hall

2:00-5:30 pm **Doctoral Consortium**
Room: 307

3:00-3:30 pm **Nutrition Break**
Jean-Cadieux Building
Room: 273

4:00 -5:30 pm **ASB Executive Meeting**
Room: 240

2:00-5:00 pm **Case Competition (Friday and Saturday)**
Bar Le Coude (Students Center)

6:00-8:00 pm **Conference Welcome Reception**
Acadian Museum

Saturday, September 29

8:15am – 5:00pm **Registration Desk**
Jean-Cadieux Building Hall

8:15 - 9:00 am **Buffet Breakfast**
Jean-Cadieux Building, Room: 273

9:00-10:30 am **Session 1**

Case (Chair - Robert A. MacDonald)
Room 301

Pinecone construction (A): getting it together. Investigating forms of business ownership
by Robert A. MacDonald

Pinecone construction (B): Making it work. Exploring the breakeven analysis
by Robert A. MacDonald

Pinecone construction (C): Keeping it going. Understanding human resource management

by Robert A. MacDonald

The hole truth: Building Mrs. Dunster's donuts into a regional baking powerhouse via acquisition strategy

by Robert A. MacDonald, Heather Steeves

Two are better than one? Multi-site models and the challenges of implementing an acquisition strategy

(A) The Journey Church considers Riverview Baptist Church HE

(B) Riverview Baptist Church considers the Journey Church

by Robert A. MacDonald, Noah Lohnes

Business and Organizational History Session I (Chair- Gabrielle Durepos)

Room 351

Is history a non-corporeal actant; a review

by Chris Hartt (p.15)

IS HISTORY A NON-CORPOREAL ACTANT; A REVIEW

Actor-Network Theory (ANT) plays an important role in the development of inscribed history, whether explicitly invoked or not. This paper extends the idea of actants in history to explore (H)[h]history as both a corporeal and Non-Corporeal Actant . The process of exploration relies on the history of history as well as review of recent work employing ANT in both History and Documentary.

Worms, cheese and other actants: the cosmos of a 20th century historian

by Albert Mills

Unifying legitimacy using history

by Kasha Krishnamurty

Accounting Session I (Chair – Mohamed Zaher Bouaziz)

Room 206

The Market Relevance of Green House Gas Emission Disclosure by Canadian Firms

by Caroline Pomare, David Lont, Paul Griffin

The Future of Undergraduate Accounting Education in an Increasing Complex World

by Michael Kennedy

Unification of the Canadian Accounting Profession: the Future Outlook of the Disciplinary Process in Ontario

by Leslie J. Wardley, C. Seonaid Macneill

Valorisation boursière de la comptabilité en juste valeur au Canada : examen critique

by Mohamed Zaher Bouaziz

Symposium: Strategy (Chair –Mark Fuller)

Room 307

New approaches to undergraduate teaching of strategic management

by Mark Fuller, Chantal Hervieux, Shansud Chowdhury

Management Education (Chair –Conor Vibert)

Room 207

Examining the knowledge production processes of business studies in Canada: Atlantic Schools of Business Conference

by Nicholous M. Deal, Rene Arseneault, Albert J. Mills, Jean Helms Mills

A graduate student research autobiography

by Megan Y. H. Baker

Problematizing commercialization of higher management education: Productive innovation or delegitimization

by Cathy Driscoll, David Wicks, Margaret McKee, Wendy Carroll

Gender and Diversity Session I (Chair, Stéphanie Maillet)

Room 205

The impact of intersecting identities and context on student evaluations of teaching effectiveness: A critical review

by Firat K. Sayin

Bold vision: Gender diversity stick in transition

by Gary Evans

L'étude du comportement des femmes entrepreneures face au financement de leur entreprise

by Yves Robichaud, Egbert McGraw, Jean Charles Cachon

10:30-11:00 am **Nutrition break**
Room: 273 (Jean-Cadieux Building)

11:00-12:15 pm **Session 2**

Open Session (Chair – Terry Weatherbee)

Room 207

Love Search Strategy with Dynamic Programming

by Liufang Yao, Andrew Carrothers (p. 26)

LOVE SEARCH STRATEGY WITH DYNAMIC PROGRAMMING

This paper extends the famous *secretary problem* in the context of the Chinese cultural phenomenon of *sheng nu* or leftover women. We use dynamic programming to investigate the impact of love search strategies on optimal stopping decisions under time pressure. Our results suggest that time pressure has negative impact on the quality of the match. When there is no time pressure, remaining single may be the optimal decision. Finally, the environment matters — searchers reasonably have higher expectations when the average quality of suitors in a marriage pool is higher.

Circular Economy in Nova Scotia: Study of Plastic Films

by Sahand Ashtab, Gemma Whyte

Missing something important? The state of work and employment in economic and social policy in the Atlantic provinces

by Rachele Pascoe-Deslauriers, Brianna Eagles Eaton (p.37)

MISSING SOMETHING IMPORTANT? THE STATE OF WORK AND EMPLOYMENT
IN ECONOMIC AND SOCIAL POLICY IN THE ATLANTIC PROVINCES

The Atlantic provinces of Canada face persistent social and economic challenges, including low labour productivity, high levels of public debt, and a declining workforce. There are also persistent issues of low wages and high levels of underemployment and seasonal/part-time work. Much of the policy focus has been on attracting and retaining skilled immigrants to the region and upgrading the workforce's skills. The supply side focus of these policies remains largely disconnected from the extant national and international research on the impact of poverty, insecure work and poor quality jobs for individuals and societal outcomes – such as costs to the health and social welfare systems, reduced social cohesion, and economic exclusion.

Business and Organizational History Session II

(Co-Chairs: Trish McLaren and Gabrielle Durepos)

Room 205

Paper development workshop and information session

The upcoming Academy of Management Learning and Education Special Issue: New Histories of Business Schools and How They May Inspire New Futures

Integrating ICT into Higher Education: Onsite and Online students' Perceptions in a Large Vs a Small

by Gérard Fillion, Jean-Pierre Booto-Ekionea, Kathy Gonye, Aurelia Nicole Nguejo

INTEGRATING ICT INTO HIGHER EDUCATION: ONSITE AND ONLINE STUDENTS' PERCEPTIONS IN A LARGE VS A SMALL UNIVERSITY¹

For the past two decades, information and communication technologies (ICT) have transformed the ways professors teach and students learn. This paper aims to compare the perceptions of onsite students (blended mode) and of those taking the same courses on the Internet (online mode) in a large vs a small university. To guide the studies, a moderator-type theoretical research model was developed, out of which eight hypotheses were formulated. The model was tested in a field experiment in two universities located in two different countries in Canada: a large university with an enrollment of 48,000 students and a small university with an enrollment of 4,000 students. To collect data, we used a multi-method approach, that is, a Web survey involving open- and closed-ended questions. The samples were formed of 313 onsite and online students from the large university and of 192 onsite and online students from the small university. The quantitative data analysis was performed using a structural equation modeling software, that is, Partial Least Squares (PLS); the qualitative data were analyzed following a thematic structure using QSR NVivo software. In this paper we present a comparison between the two universities of the quantitative results (closed-ended questions) supported and enriched by the qualitative results of the students (open-ended questions).

Testing an extension to the model of acceptance of technology in household with undergraduate and graduate students of four universities in three global countries

by Gérard Fillion, Jean-Pierre Booto-Ekionea, Kathy Gonye, Aurelia Nicole Nguejo

TESTING AN EXTENTION TO THE MODEL OF ACCEPTANCE OF TECHNOLOGY IN HOUSEHOLD WITH UNDERGRADUATE AND GRADUATE STUDENTS OF FOUR UNIVERSITIES IN THREE GLOBAL COUNTRIES²

Individual adoption of technology has been studied extensively in the workplace, but far less attention has been paid to adoption of technology in the household (Brown &

¹The authors would sincerely like to thank Professor Wynne W. Chin (University of Houston at Texas) who kindly offered to us a license of the last version of his structural equation modeling software PLS to perform the quantitative data analysis of this study. We are also grateful to the *Faculté des Études Supérieures et de la Recherche* (FESR) at the University of Moncton for its financial contribution to this study.

²The authors would sincerely like to thank Professor Wynne W. Chin (University of Houston at Texas) who kindly offered to us a license of the last version of his structural equation modeling software PLS to perform the quantitative data analysis of this study. We are also grateful to the *Faculté des Études Supérieures et de la Recherche* (FESR) at the University of Moncton for its financial contribution to this study.

Venkatesh, 2005). Obviously, mobile phone is now integrated into our daily life. Indeed, according to International Data Corporation (IDC), the market reached 1.472 billion mobile phones sold in the world in 2017 (ZDNet, 2018). In addition, according to Statista, there was 4.77 billion mobile phone users worldwide in 2017 while the population was reaching 7.6 billion people, and there will be 5.07 billion mobile phone users worldwide by 2019 (Statista, 2018). The purpose of this study is then to pursue the investigation on the determining factors that make such people around the world are so using the mobile phone. On the basis of the model of acceptance of technology in household (MATH) developed by Brown and Venkatesh (2005) to verify the determining factors in intention to adopt a computer in household by American people, this study extends this moderator-type research model to examine the determining factors in the use of mobile phone in household by undergraduate and graduate students from four universities within three countries over the world. Data were randomly gathered from 750 undergraduate and graduate students from Yaounde in Cameroon, Kinshasa in Congo, and New Brunswick in Canada who own a mobile phone. Data analysis was performed using the structural equation modeling software Partial Least Squares (PLS). The results revealed, among others, that two-third of the variables examined in the study, including the three new variables we added to the Brown and Venkatesh's research model, showed to be determining factors in the use of mobile phone by undergraduate and graduate students.

Management Education Symposium (Moderator, Megan Baker)

Room 206

Setting up for success: A thoughtful discussion on teaching assistants in Canadian Academia

Panelists: Jean Helms Mills, Christopher M. Hartt, Ellen C. Shaffner, Nicholous M. Deal

Marketing Session I (Chair – Brigitte Prud'Homme)

Room 351

A Person-Centered Approach to Customer Commitment

by Gordon Fullerton

What should Canada export under The CETA? An Examination of the Canada-European trade agreement for The aircraft Sector

by Lovika Soral, Hsin-Chen Lin (p. 48)

WHAT SHOULD CANADA EXPORT UNDER THE CETA? AN EXAMINATION OF THE CANADA-EUROPEAN TRADE AGREEMENT FOR THE AIRCRAFT SECTOR

We identify three specific products within the aircraft sectors that offer Canadian exporters the highest potential to export to the European Union under the newly signed Comprehensive Economic and Trade Agreement between Canada and European Union. The results suggest that the trade agreement will enhance the Canadian export potential to the European Union for these products.

Are Avoidable and Unavoidable Dissociative Groups Equally Negative? Social Distance to a Dissociative Group and Consumer Choice

by Wenxia Guo, Na Wen

12:15 - 1:30 pm **Buffet Luncheon & Keynote Speaker – Michel Cormier**
Room: 273 (Jean-Cadieux Building)

1:30 - 2:45 pm **Session 3**

Tourism (Chair, Mary Beth Doucette)
Room 206

First thoughts on an event: What do they tell us? Preliminary findings from a project on the First World War

by Mallika Das, E. Wanda George (p. 60)

FIRST THOUGHTS ON AN EVENT: WHAT DO THEY TELL US?
PRELIMINARY FINDINGS FROM A PROJECT ON THE FIRST WORLD WAR

This year marks the end of the centenary of the First World War (FWW/WWI from now on), an historic event that changed the course of history in significant ways. The centenary of the FWW has been marked by special events around the world. This paper focuses how respondents from around the world viewed the FWW *before* the centenary celebrations began; it examines the first thoughts that come to respondents' minds when they think of the FWW and whether these are related to demographic variables (e.g., age, gender) and others such as whether they had visited a FWW site, and their ties to FWW (e.g., emotional connections to the event).

The Wolfville Magic Winery Bus: A Grounded Theory Approach to Understanding the Consumer View of the Winescape

by Jenna Robertson, Donna Sears, Terrance Weatherbee (p. 62)

THE WOLFVILLE MAGIC WINERY BUS: A GROUNDED THEORY APPROACH TO
UNDERSTANDING THE CONSUMER VIEW OF WINESCAPE

The tourism literature uses two perspectives to understand the wine tourism, the micro approach (an individual winery) and the macro approach (the winery area/region). This study reveals the important role played by tour guides in linking the micro and macro perspectives, creating a social environment and mediating the winery experience.

Motivational Dynamics: Understanding the Perceptions of Self and Others in the Canadian Lodging Industry

by William C. Murray (p. 71)

MOTIVATIONAL DYNAMICS: UNDERSTANDING THE PERCEPTIONS OF SELF
AND OTHERS IN THE CANADIAN LODGING INDUSTRY

This study explores the motivations of Canadian hotel employees by measuring self-reported rankings of preferred job rewards using the Ten Factor Model. Responses were compared specifically between job levels, as well as against perceived reward preferences of both peer and management groups. Results showed that job reward preferences varied by job level, from line employees to executives. Management groups demonstrated a keen insight of the rewards most valuable to their frontline employees; however, while peer groups seemed to understand

the ordered preferences of job rewards, numerous misinterpretations of weighted value appeared.

Workshop: La coopérative comme organisation différente (Chair : Izold Guihur)

Room 301

La diversité des formes organisationnelle et le rôle de la coopérative dans une société juste

by Dominic Martin

Les enjeux distinctifs de la gouvernance coopérative

by Myriam Michaud

Diversité du genre sur les conseils d'administration : Le paradoxe des perceptions

by Hanen Khemakhem

L'avantage coopératif auprès du capital humain

by Marie-Claude Beaudin

Finance (Chair – Hamadou Boubacar)

Room 351

Alternative Asset Holdings by US Pension Funds Since the 2008 Financial Crisis

by Stephen J. MacLean (p. 82)

ALTERNATIVE ASSET HOLDINGS BY US PENSION FUNDS SINCE THE 2008
FINANCIAL CRISIS

Since the financial crisis of 2008, the percentage of alternative asset holdings by institutional investors has increased dramatically. The current study utilizes the Public Plans Database to analyze both the drivers and impacts of this increased allocation to alternative assets on US pension funds. The results indicate that there has been a significant divergence in the asset mixes of US pension funds since the 2008 financial crisis, with the largest adaptors of alternatives now holding one-third of their funds in these assets. Regression analysis shows that Funded Ratio and Actuarially Assumed Rate of Return are both negatively related to the adaptation of alternatives. Finally, the naïve simulation analysis shows that, despite the argued motivation for the adaptation of alternatives by market research, those funds that adapted the highest level of alternatives would have actually performed worse during the 2008 financial crisis than those funds that made only modest allocation changes since that time.

Changing attitudes toward executive perquisites: Indications from TARP

by Andrew Carrothers, Liufang Yao (p. 93)

CHANGING ATTITUDES TOWARD
EXECUTIVE PERQUISITES: INDICATIONS FROM TARP

This paper examines what happened to Chief Executive Officer (CEO) monetary and nonmonetary compensation at Standard & Poors (S&P) 500 firms in the years surrounding the 2008 financial crisis and in the context of the Troubled Asset Relief Program (TARP) legislation. We use novel data on executive perks at S&P 500 firms from 2006 to 2012. Overall, the results are consistent with lasting impact on nonmonetary compensation and temporary

impact on monetary compensation.-

Evolution des critères d'investissement des business angels : de la pré-sélection des projets à l'investissement final

by Annie Bellier, Abdoukarim Idi Cheffou

Comparée des déterminants de la qualité du portefeuille a risque des IMF : le cas des pays de la zone UEMOA

by Ndiouma Ndour

Accounting Session II (Chair- Mohamed Zaher Bouaziz)

Room 207

L'adoption de la nouvelle réforme de l'acte uniforme relatif au droit comptable et à l'information financière face aux normes IFRS : mimétisme ou réalisme ?

by Donatien Avelé, Vincent Tachouola (p. 106)

L'ADOPTION DE LA NOUVELLE RÉFORME DE L'ACTE UNIFORME RELATIF AU DROIT COMPTABLE ET À L'INFORMATION FINANCIÈRE FACE AUX NORMES IFRS : MIMÉTISME OU RÉALISME ?

Le passage d'une culture comptable plan OCAM à un système comptable doté d'un cadre conceptuel inspiré des normes comptables internationales est une avancée notoire dans les économies de l'Afrique sub-saharienne. Les anciens systèmes comptables utilisés dans les Etats membres ne répondaient plus aux exigences des besoins en informations de plus en plus diversifiés des utilisateurs des états financiers. L'acte uniforme portant organisation et harmonisation des comptabilités des entreprises adopté dans le cadre du traité de l'OHADA auquel on a annexé le système comptable OHADA (SYSCOHADA) a eu l'avantage de moderniser le système d'information comptable des entreprises africaines des Etats – parties et de l'adapter aux évolutions de l'environnement économique, financier et juridique. Toutefois, la problématique relative à la convergence du référentiel OHADA aux IFRS mérite d'être examinée. Les réflexions s'inscrivant sur les conséquences d'une telle expérience sont au cœur de cette recherche. Enfin notre analyse aussi bien qu'elle soit théorique, s'interroge si cette expérience serait-elle un éventuel comportement mimétique ou réaliste de la part des décideurs de l'espace OHADA.

Accounting and Accountability in Workfare Programs

by Akhila, Chawla Zhou (p. 122 – Draft)

ACCOUNTING AND ACCOUNTABILITY IN WORKFARE PROGRAMS

With global economic swings, aging populations, poverty, political instability and international migration, social services has become a dominant sector in national economies (Broadbent & Guthrie, 2007), battling economic, political and social challenges as well as diverse welfare ideologies. Social services programs draw on different economic, historical, socio-political and institutional settings and relationships that have remained fairly insulated from academic accounting inquiry. Current research in the field is strongly focused on developed world models and traditional accounting areas such as budgeting, governance, new public management (Hood, 1995; Broadbent & Guthrie, 1992) and devolution (Thomas & Davies, 2005; Llewellyn,

1998a, b; Smyth, 2017). Research on developing nations emphasizes developmental themes related to non-governmental organizations (NGO's), program implementation, accountability, development (Unerman & O'Dwyer, 2006; Davison, 2007; Ebrahim, 2003) and diffusion of western accounting practices (Neu, Gomez, Leon & Zepeda, 2002). At a time of significant change, not much is known about comparative frames of transnational reference (Broadbent & Guthrie, 2007), the organization and socio-cultural contextuality, the complexity and nature of the domain that produce and sustain dramatically different program structures and accounting regimes, especially in developing nations.

Can Efficiency and Equality Have Both

by Grace Lei (p. 53)

CAN EFFICIENCY AND EQUALITY HAVE BOTH?

Based on The Micro-Enterprise Income Liquidity and Performance

This paper extends the theory of income liquidity to the study of listed companies, shows the relationship between pay gap, income liquidity and enterprise performance, and improves the classical tournament model. This paper tries to analyze how equity (income liquidity as proxy variable) affects enterprise performance under the theoretical framework of efficiency wages, so as to provide policy suggestions for enterprises to achieve both efficiency and equity.

The relationship between Corporate Governance and Dividend Payouts in Canada

by Ken MacAuley, Mary Oxner (p. 167)

THE RELATIONSHIP BETWEEN CORPORATE GOVERNANCE AND DIVIDEND PAYOUTS IN CANADA

This paper studies the relationship between corporate governance and dividend policy in Canada. We find that corporate governance is positively related to the size of the dividend paid for dividend paying companies. We do not, however, find support for a relationship between corporate governance and the propensity to pay a dividend.

2:45 - 3:15 pm **Nutrition Break**

Room: 273 (Jean-Cadieux Building)

3:15 - 4:45 pm **Session 4**

Cooperatives and Communications (Chair – Jim Grant)

Room 205

Economic impact of New Brunswick's social enterprise sector

by George Karaphillis

Determinants of the growth of credit unions in Costa Rica, 1996-2017

by Miguel Rojas, Sébastien Deschênes, Philip Merrigan, Hanen Khemakhem

Volkswagen – Identity and plausibility in social media

by Amy Thurlow

Entrepreneurship Session I (Chair – Vivi Koffi)

Room 207

A third wave for entrepreneurship research: Mending the split between causation and effectuation through complexity

by Rick Nason, Albert James (p. 180)

A THIRD WAVE FOR ENTREPRENEURSHIP RESEARCH: MENDING THE SPLIT BETWEEN CAUSATION AND EFFECTUATION THROUGH COMPLEXITY

In this paper we propose that the theoretical framework for understanding entrepreneurship of Effectuation as developed in Sarasvathy (2001) can be reframed as a subset of complexity management as proposed by Nason (2017). Doing so has five main advantages. Firstly, it places effectuation as part of the well-developed theory of complexity science. This in turn allows for a refinement of the concepts of effectuation as they are reframed in the language of the more widely studied concepts of complexity science. Secondly, it separates the false dichotomy between causation and effectuation and recasts it into complementary complicated and complex systems whose selection for appropriateness depends on the specific underlying context or system of the entrepreneurial venture. Thirdly, it expands the applicability of the concept of effectuation beyond the purview of the entrepreneur into general management regardless of the scope, scale or development of the business organization in question. Fourthly, it changes the discussion of the criticisms of effectuation by showing many criticisms are based on incorrect methodologies for examining complex systems and non-reductionist systems. Finally, the recasting of effectuation as a subset of complexity management, helps to reinforce that complexity is a valid concept to expand from the social sciences where it is well accepted into the business literature where the study of complexity is in many ways still in its nascent stages.

Processus de succession et problèmes de pérennité des entreprises familiales : cas des « Nanas Benz » du Togo

by Vivi Koffi, Sassou Atisso

Emergence of women's entrepreneurship in local development processes: What are the key factors to consider in rural areas?

by Ayi Gavriel Ayayi Chantale Dali Théophile Serge Nomo (p. 189)

EMERGENCE OF WOMEN'S ENTREPRENEURSHIP IN LOCAL DEVELOPMENT PROCESSES: WHAT ARE THE KEY FACTORS TO CONSIDER IN RURAL AREAS?

The article aims to clarify the factors that promote women's micro-enterprises in a rural local development context. Specifically, the study examines the impact of entrepreneurial capacities, environmental support and the implementation of a planning strategy that promotes women's participation in the emergence of female entrepreneurial dynamics. The results show that entrepreneurial capacities strongly stimulate the emergence of female entrepreneurial dynamics in a rural local development context. Community support and gender mainstreaming also promote women's participation in the local development process.

L'entreprenariat et l'innovation en management

by Amira Aimen

Gender and Diversity Session II (Chair, Stéphanie Maillet)

Room 205

Embodiment of intersecting differences: Immigrant women’s narratives of work

by Hui (Vivi) Zhang

Employee resource groups in the workplace: Their prevalence, composition, and concerns

by Keshav Krishnamurty, Maureen Scully, Edward J. Carberry (p. 225)

EMPLOYEE RESOURCE GROUPS IN THE WORKPLACE: THEIR PREVALENCE,
COMPOSITION, AND CONCERNS

Employee resource groups (ERGs) in the U.S. are voluntary employee-led groups that are created to act as a resource for both employees and the organization and to foster a more inclusive and diverse work environment. These originated with the Black Caucus group at Xerox and have since spread to encompass a wide range of groups representing diverse social identities (Scully, 2009). ERGs can serve as a form of intrafirm employee voice (Freeman & Rogers, 1999) for employees belonging to different demographics and life stages. Our 3 purposes in this paper are to investigate the prevalence, composition, and nature of ERGs, because they are a phenomenon of broad interest for research on inclusion and voice. Further study – and debate about ERG efficacy as a representation form – can proceed meaningfully once this empirical baseline is established. Future exploration of ERGs beyond the U.S., in both multinational and domestic organizations, will also widen the lens of collective voice mechanisms.

Restoring Activism and Precarious Work through the Story of Denise Cole’s Dedication to protecting Labrador lands and Waters

by Ali Barnes, Gerald Schwartz

“You are just a temp” Intersectional experiences of temporary help agency workers in Nova Scotia

by Ellen C. Shaffner (p. 236)

“YOU ARE JUST A TEMP”
INTERSECTIONAL EXPERIENCES OF TEMPORARY HELP AGENCY WORKERS
IN NOVA SCOTIA

This paper examines the intersectional experiences of temporary help agency workers. Temporary help agency work is overrepresented by women and individuals occupying multiple marginalized categories of identity, such as race. I interview eight individuals about their experiences as temporary help agency workers, using an intersectional lens to better understand the complexity of their experiences as they relate to categories of identity. I use critical discourse analysis to analyze their interviews and find that consistent themes emerge related to insecurity and precariousness, as well as competence and professionalism. These themes are explored in the context of intersectional identities. This analysis provides insight into a marginalized population of workers who are understudied in current organizational research.

Symposium: Business and Organizational History Session III (Chair –Gabie Durepos)
Room 351

Canadian pluralism an institutional logic in CJAS

by Mary E. Beth Doucette (p. 255)

CANADIAN PLURISM AN INSTITUTIONAL LOGIC IN CJAS

The Administrative Sciences Association of Canada (ASAC) is comprised of management educators and practitioners interested in advancing Canadian management scholarship, teaching and practice. It has been challenged by a weak definition of one of its core institutional logics, Canadian, but has balanced it with a seemingly incompatible logic of international relevance. The Canadian Journal of Administrative Science (CJAS), part of the ASAC model, is ideal example of Canadian organizing in practice. Through a discourse analysis of CJAS editorials and Canadian articles, I propose these logics should not be viewed as incompatible, they demonstrate an acceptance of plurality in Canadian management.

What should business and management history look like in Canada? On the virtues of broad historiography

by Jason Russell

Symposium: Governance (Chair- Tania Morris)

Room 307

Aperçu théorique et vérification empirique: Cas des pays du Moyen-Orient et d’Afrique du Nord (MENA)

by Soumeya Bacha

Qualité de la gouvernance d’entreprise et performance financière des sociétés anonymes camerounaises

by Ndongo Obama Jean

Stock-units based compensation and its impact on risk: A Canadian study

by Alexandre Savoie-Comeau, Tania M. Morris, Amos Sodjahn, Hamadou Boubacar

La structure de propriété influence-t-elle la représentation féminine au sein des conseils d’administration?

by Tania M. Morris, Amos Sodjahn, Hamadou Boubacar

6:00 - 7:00 pm **Evening Reception**
Room: 157 (Taillon Building)

7:00 - 9:00 pm **Awards Dinner**
Room: 157 (Taillon Building)

Sunday, September 30

8:00 – 10:15am **Registration Desk**
Jean-Cadieux Building Hall

8:00 - 9:00 am **Buffet Breakfast & Annual General Meeting (8:30)**

Room: 273 (Jean-Cadieux Building)

9:00-10:15 am **Session 1**

Symposium: Business and Organizational History (Session IV)

Room 205

Academic career trajectory and historic contemplations of the loneliness of living as an academic
by Trish McLaren, Gabrielle Durepos, Deryk Stec, Caterina Bettin

Entrepreneurship Session II (Chair- Vivi Koffi)

Room 206

Findings from the Atlantic Entrepreneurial Ecosystem Study

by Kevin McKague, Ellen Farrell, Nathan Denison

Les changements dans les modèles d'affaires : Exploration et exploitation

by Hélène Delerue, Alidou Ouedraogo, Pascal Picard, Michel Boyer

The Impact of Wellbeing on Entrepreneurial Exits

by Matthew Pauley

Entrepreneuriat et diversité des territoires : l'opposition rural / urbain

by Chantal Dali

Marketing Session II (Chair – Brigitte Prud'Homme)

Room 208

Towards a better understanding of consumer coping behavior: Ressources required for coping with shopping stress and constraints to using available resources

by Elaine MacNeil, Peter MacIntyre

Place-based paradox and regenerative organisations

by Natalie Slawinski, Blair Winsor, John Schouten, Daina Mazutis, Wendy Smith

Of hockey stars, movies producers, singers, and wine: celebrity, wine, and conspicuous production

by Donna Sears, Terrance Weatherbee

10:15-10:45 am **Nutrition break**

Room: 273 (Jean-Cadieux Building)

10:45-12:00 pm **Session 2**

Strategy (Chair – Mark Fuller)

Room 205

L'influence d'une diversité d'acteurs sur la conduite d'un changement

by Stéphanie Collin

Mobilizing for change in large-scale systems: a social movements approach

by Judith Holton

Strategic positioning of Niger agricultural products on the agricultural world market

by Hamadou Sidibé

Diaspora involvement in the socio-economic development of the homeland: case of Jamaica

by Indianna Minta-Coy, Maria Elo, Elie Chrysostome

Human Resource/Industrial Relations & Leadership (Chair – Stéphanie Maillet)

Room 206

Les enjeux et les défis de l’immigration économique au Nouveau-Brunswick : Une analyse préliminaire

by Gilles Marcoux

A differentiated, hydraulic model of work regulation

by David Jacobs

Gestion différenciée de la diversité et niches d’emplois en Acadie du N.-B.

by Leyla Sall

Abusive Visions: The Effect of Vision Content and Abusive Supervision on Followers

by John Fiset, Melanie Robinson, Ma Carolina Saffie-Robertson

Symposium: Business and Organizational History Session V (Gabie Durepos)

Room 207

Organizational historicising: the need for the new to be old

by Terrance Weatherbee, Donna Sears (p. 273)

ORGANIZATIONAL HISTORICIZING: THE NEED FOR THE NEW TO BE OLD

This paper investigates processes of *organizational historicizing* as undertaken by Nova Scotia wineries. Results suggest that wineries engage in intentional construction of rhetorical histories and the projection of a ‘sense of the past’ using a combination of rhetorical, symbolic, and material elements at both the firm and product levels.

An information session on the Canadian History Business Association (CBHA): Origins, Purpose and Future

by Jason Russell, Andrew Smith

IS HISTORY A NON-CORPOREAL ACTANT; A REVIEW

Actor-Network Theory (ANT) plays an important role in the development of inscribed history, whether explicitly invoked or not. This paper extends the idea of actants in history to explore (H)[h]history as both a corporeal and Non-Corporeal Actant. The process of exploration relies on the history of history as well as review of recent work employing ANT in both History and Documentary.

Introduction

The corpus of history is large, often ponderous, but obviously concrete. This would seem to obviate any discussion of history as non-corporeal (without body). However, merely scratching the surface of the history of history we begin to see cracks in the cement which holds the mass together. This paper will discuss (in brief) the historiography of history [possibly the other way around] and then the nature of history as an actor. In the third act the paper will argue that history (a view of the past), History (an inscription of the past), and *history* (the postmodern contestation of the past) are Non-Corporeal Actants (NCAs). In this analyses, Oral Histories are not specifically considered, they seem to oscillate between history and History as they are both the view of the storyteller and persistent accounts.

The method embraced in this discussion is a form of narrative review followed by a review of and development of theory related to the NCA. The concept employed in the narrative review is the belief that a thorough systematic review, while more complete in the description of the field, does not provide sufficient opportunity for exploration of the ideas (Bryman, Bell, Mills, & Yue, 2011). The form of narrative review prosecuted is a focus on disparate application of ANT in history or historiography to surface the range of use and the commonalities of ideas found across this wide range. This provides a means to interrogate how history uses ANT as a method, how ideas from ANT interrelates with historiography; and ultimately how history, History, and *history* could be non-corporeal and actors (thus NCAs) in the manner of ANT.

The History of History

Just about any dictionary will explain that the word history originated with the Greek and passed through Latin into Old French and eventually for our use, English. The words used along this trail are often the same for *story* and *history*. Although the ancient Greeks coined their word to refer to the results of enquiry, which should really end the debate as to what history is; they immediately adopted styles which reflected prehistory. Thereby contesting their own definition of history and establishing a precedent for the plurality of constructions.

Prehistory broadly refers to the period before the narratives were written down. The oral traditions of families, clans, tribes, and peoples continue today as illustrations of this method of remembering events. Key to the success of prehistoric accounts is the use of forms, which enable remembering and audience building. A storyteller would ply the trade at a gathering from which food, shelter and sometime coin (or goods in trade) would be the reward of a good storyteller. Not unlike a modern busker, the storyteller (prehistorian) would expect more benefaction from a larger crowd.

Earliest among those (whose fame is retained) that transcribed stories and began what became history is Homer, who composed poetic chronicles of events. From these ideas of storytelling and the concept of transcribing more than just the records of business came the development of Greek history via Herodotus, sometimes called the father of history and sometimes the father of fables (Foster & Lateiner, 2012). These contrasting views seem focused on Herodotus' use of narrative forms in his writings,

echoing more of Homer than a reporter of enquiry. Analysis of Herodotus could produce ideas of tropes as later embraced by Hayden White and others.

Following Herodotus is Thucydides who many cite as more a trustworthy historian. Thucydides could be viewed as the progenitor of Objective History often associated with authors such as von Ranke, sometimes Hegel and Lakatos (depending on your view of each). Thucydides went beyond reportage but attempted to remain within his understanding of *truth*. He tended to rely less on entertaining stories than Herodotus (and much less than Homer). In these debates among proponents of these two very early historians is the dialectic between the rational and the passion. Many cite Thucydides as rational history, history that attempts to report the outcome of enquiry; and, criticize Herodotus as passionate history, history which expresses the feelings of the times. However, coming on the heels of Homer, passion, narrative, and accepted trope appear to be found in both accounts. Difference between them seems fostered by anonymous criticisms of Herodotus generally attributed to Thucydides.

Herodotus and Thucydides both evolved the chronicle of Homer and others into a history by attempting to explain why events occurred. As such they open the door to later developments in political, geographical and other structuration approaches to events and particularly conflict. Herodotus is criticized for possibly inventing events to explain other events; Thucydides seems to have relied more on research and evidence. Like Qian (discussed below) Thucydides rejected stories he could not confirm through multiple sources. The rejection of the work of his predecessor (Herodotus) by Thucydides as being fake history sets us upon a trail of argument in historiography, which continues today.

The China Project

Greek history is firmly established around 450 BCE; in China annals and chronicles can be found back to 1600 BCE, but systematic histories appear closer to 100 BCE in the work of Sima Qian (Stuurman, 2008). Interestingly, both English and Chinese have separate words for *History* and *Story* Although there is more interaction in the English forms. Whereas Greek History (the precursor to English History) has its roots in poetry and storytelling; Chinese History evolved from chronicles of the dynasties (lists of events and inventories of assets). Both forms involve an interaction with storytelling and the oral traditions of travelling entertainment.

One of the chroniclers Qian relied upon was Confucius, who had compiled some of the material used as source by Qian. The *turn* in Chinese Historiography begun by Qian involved several innovations, two are key to this paper, the use of multiple sources and the use of literary style. In these two ways Qian, like Thucydides, moves History from storytelling based on one account to History based on serious research yet written in a consumable manner. Thucydides moved Greek History away from romance toward reportage; Qian moved Chinese History in the opposite direction. Chronicles were dry reportage; Qian brought life to them as explanations of the events reported in the annals. Qian's methods have been respected throughout most of the last 2,200 years of East-Asian Historiography.

Shared Controversy

The early historians were criticized for allowing their political beliefs, personal biases and grudges to influence which stories were told and how motives were attributed. Qian is accused of refusing to write about those he did not like, inventing genealogies and other stories to serve his own interests and other biases based on personal experience and ethnic prejudice. Herodotus is accused of vilifying city-states which denied him access or tribute and for relying primarily of the upper-classes and ruling groups as his informants of events. Thucydides in contrast often wrote of events in which he took part (war), he suffused his own memory with eyewitness accounts and seems to have written as factually as possible within a political view. His rational approach that events were effects with identifiable causes and his presentation of political history within that context leave him open to criticism of promoting his political beliefs through the crafting of the narratives.

Even these early historians seem unable to get out of the way of their own prejudices, biases and

beliefs in the choice of narrative, method of reportage and manner of explanation. It is conceivable that their introduction of issues of culture and discussions of persons outside their own political experience (others) generated inevitable bias along with explanations of events. Concurrently with inventing the practice of History, they imbued it with potential for plurality. Most History (inscription of the past) in the ensuing 2,500 or so years has been tainted with the same issues. The controversy of the manner of reportage and the linking of reportage to the sensemaking of one inevitably flawed author opens all History, and Historiography to controversy and therefore scatters the corpus of History from a perceived essential singularity to a diverse universe. Consistent through this history of history is the interaction of people, places, things, values, beliefs, ideas, and ideologies in the production of History (knowledge). This implies an application of Actor-Network Theory (ANT).

Although ANT in the more orthodox sense eschews history in an attempt to collapse the past, present and future in the same manner as the macro, meso and micro (Akrich, 1992; Latour, 1986, 1987, 2005; Latour & Woolgar, 1979), these dimensions keep coming up. In one of the earliest works in the Sociology of Knowledge, John Law examined the Portuguese expansion of the 15th and 16th centuries (Law, 1987). Law demonstrated an alternate approach to understanding the *history* (contested past) but examining the tools, technological advancements, ideas, and understandings which played a role in the story. He provided some chronology and tended to focus on the humans in the manner of traditional history but made a strong case for the symmetry of non-humans in the retelling of the events. History and ANT seem enrolled in a network of explanans, symbiotically.

Is history (History, *history*) an actor (s)?

Several fields of study discuss ANT and history, often combined with historiography. These analyses frequently employ ideas from ANT to *do history*. In some the product is a revision of history (McLean & Hassard, 2004). Other work uses ANT approaches to construct History without the shackles of human agency enforcing an orthodoxy upon the explanations. The arguments made to provide symmetrical agency to humans and non-humans in the understandings of the past are compelling. The review of these studies could consume many pages. For the purpose of discussion, four exemplar fields have been chosen.

Urban History

Are cities the makers of history or the products of history? In this discussion of history, we consider Political History, History of Industry, and the History of Knowledge. Often we consider cities as the product of capitalism and modernity, but is it possible that capitalism is the product of cities (De Munck, 2017). This is also true of the other dualisms often studied in critical Urban History: (hu)man versus machine; materiality versus ideology; economy versus society. Recent historical research has employed ANT as a means of exploring these ideas beyond the single connection of a dualism and more cartographically as a pluralism. [It should be noted that this approach appears to study process rather than action and demonstrates a shift in ANT away from the study of action (McLean & Hassard, 2004).]

The history of each of these ideas often commences with interrogation of the dualism as the one influencing the other in the production of urbanism. An alternate narrative might be presented that a natural movement toward urbanization existed. This movement might well have generated the needs for efficiency in production, which in course produced capitalism as more effective than feudalism. So, rather than a push-pull interaction implied by the word “versus” there is an inevitability produced by the factors in symbiosis.

Clocks and the 1500s

This idea is also demonstrated in the history of clocks and clock making (Zanetti, 2014). As

more people moved from the country there was a need for more clocks and therefore more clock makers. (In the 16th century, town and city people had to coordinated schedules more often than in rural areas, where a more natural rhythm ruled). As the number of clockmakers increased in cities such as Paris and importantly Nuremberg, a guild of clockmakers was formed [process or action?]. In the German cities these guilds led to cooperation among clockmakers, generating efficiencies and lowering the price of clocks. Time moved from being the property of the highborn to accessible to many, particularly merchants.

Zanetti further explains the importance of clocks to Charles V, Emperor. His passion for clocks was a contested history but the traces seem to bear it out. Consequently, this contemporary history (as it was at the time) of the Emperor generated great interest. His efforts to protect and enhance key mechanical advances led to their inscription into Histories and the subsequent fascination of generations of mathematicians and clockmakers with such devices as the microcosm. Histories of Charles V, changed the actions of future generations, and from our perspective in 2018, changed the Histories of clockmaking, mathematics and related fields. As urbanization might well have led to these developments through the interactions of many creative artisans and scientists, history seems to have had agency in the intersement of these actor-networks.

Canadian Urban Planning history

Ironically, in her thesis, Ulmer eschews ANT as an approach to the study of the history of Urban Planning in Canada while unintentionally making a strong case for the role of History as an actant (Ulmer, 2017). She cites several books, which posit that the arrival of a British born planner was the beginning of Urban Planning for Canadians and note a later *International Turn* in the field. In a sort of revision to this history she points out various international influences in the 18th century and earlier; however, she describes the influence of the narrative of the key man (without using that phrasing) and the need to produce a history based on that hero suppressing narratives related to Canadian planners, planners from other countries and the roles of female planners. Her work parallels much of the work of the Halifax School on female contributors to management thought (Williams & Mills, 2017, 2018). Ulmer shows, (as do Williams & Mills) that histories of a field or profession legitimize a narrative and become actants in the writing of future Histories as well as the understandings of past events among future practitioners. In many cases it has been shown that incorrect narratives persist regardless of the revisions of erroneous (contested) Histories.

Management History (ANTi-History)

Narratives have been established as actors in the development of h/Histories either oral or inscribed (Durepos & Mills, 2012). This seems particularly true when the narrative supports the emplotment of an accepted trope (White, 1985, 1987). In the history of Pan American Airlines (Pan Am), Durepos has shown the power of the trope supporting discourse that Juan Trippe founded the airline over competing narratives, which suggest that others played a more important role (Durepos, Helms Mills, & Mills, 2008). Following the traces of Pan Am, it is easy to find narratives of individuals who claim to have started the airline; a strong relationship between the airline and the U.S. military and Central Intelligence Agency is also found in the story of Pan Am, but generally not reported in the official Histories.

A narrative is not a history (view of the past), but it is certainly part of a history. The Pan Am official History, *The Chosen Instrument* (Bender & Altschul, 1982), is built upon the narrative of Juan Trippe as the founder of the company. Hence the narrative becomes an important actor in the making of the History. The narrative (myth) that Juan Trippe founded Pan Am becomes the premise for the book, which carries the sub-title “the rise and fall of an American entrepreneur”, firmly establishing the story as

one of White's primary tropes – synecdoche. The hero of the tragedy fights against all odds to bring an airline into being. The story consists of winning support from the U.S. government via the winning of Air Mail contracts from the U.S. Postal Service. Many of these contracts establish air routes of expeditionary heroism. The narrative of Juan Trippe working tirelessly alone fits into the trope and helps establish the story of him struggling to build an airline, which ultimately fails when he is no longer in control.

The strength of the history is reified by the repetition of the narrative. Other books on early airlines, as well as other histories of Pan Am, repeat the story of Juan Trippe as founder and rarely mention the roles of others. Even Wikipedia repeats this story but ironically, the Wikipedia article (as of July 2018), recounts Hap Arnold's story that he founded Pan Am [with two other U.S. military officers] but only as a shell company, which eventually merged with Trippe's company to carry the mail to Havana first, and later the world. The Pan Am story as told by Durepos and others seems to support the argument that not only is a narrative an actor, but also a History (or history) may be an actor.

This status as an actor seems to require persistence of the h/History. It also seems obvious that the narrative must necessarily be false or at least contestable for the status of actor to be conveyed. However, if we adopt a postmodern approach, all narratives should be contested, therefore those which have attracted the status of *truth* should be seen as very powerful actors. A criticism of ANTi-History is rooted in a general distrust of revisionism in contemporary history; however, history in the past often ignored the victims, thereby prompting a need for re-examination (Law, 1987).

Doing History (and Related Events)

Durepos, and the many who have taken up the use of ANTi-History, often examine the practice of *doing history* or how the History (written or oral) is constructed. This is sometimes examined as a network of people and ideas related to the publication, distribution and sale of inscriptions of the past. It has also been looked at as an action of the network of informants (those who provide or preserve the traces), which privileges some information and ideas over others. Both these discussions centre on humans. Even when inscriptions are examined, they are examined in the context of the people who promote those inscriptions or suppress alternate stories.

An interesting complexity is offered by the study of Documentary film and audio recording (Gershon & Malitsky, 2010), filmography in this context being parallel to historiography. In this work it is pointed out that the tools for recording were and are often developed in Europe. Therefore, the lenses used in filming are designed to reproduce the image of a European; the microphones record the European voice best; and this continues throughout the technology. The social image of the people interviewed, followed or investigated is also produced via the interaction of Documentary crew, equipment and subject, as well as any other networks of entanglement each are enrolled within. A key piece of the story may be missed or underrepresented due to equipment or schedule failures. The outcome of the Documentary might well be a social construction based on affinities, ideas and preferences:

“The Thin Blue Line explicitly revolves around a network that makes one actant, David Harris, a far less appealing candidate for prosecution for a murder than another actant, Randall Adams. David Harris' youth, community ties and personality all combine to help him navigate with fewer penalties this network of police, cars, lawyers, judges and milkshakes. Morris, by means of his film, exposes and transforms this network, ultimately encouraging this network to free Randall Adams from prison. Thus, the effects these heterogeneities can have are quite different for those who are privileged in particular networks, and those who are not” (p. 68)

Gershon and Malitsky engage in discussion of other forms of representation and, as such, enroll history and fiction in their examination of Documentary film. They seem to provide symmetry to the three forms under discussion: history, History and *history*. Documentary and History relying on a believed objectivity or truth claim, fiction (unintentionally?) disputing unitary truth but often representing

a vision of the past and reproducing generally accepted truth claims, and . The paper overall provides discussions of Documentary, which echo the criticisms of h/History found in Management History uses of ANT.

The Documentary as a History relies on a network of informants, is informed by the personal biases of the documentarian, requires funding and therefore relies on a network of circulation (like a network of publication), and is shaped by the technology employed, including the inherent privileging produced by that technology. A Documentary technique, which relies on the use of *found footage* to demonstrate untold or suppressed history, provides a significant link to Non-Corporeal Actant (NCA) theory as the changing understanding of actors and society influences the footage (traces) selected for inclusion. In particular, the discussion of Soviet Documentary versus post-Soviet Documentary shows how values, beliefs and ideas shape the decisions made by documentarians.

A history of Milk

Milk is a compelling exemplar given that Latour valorized the beverage via a sentinel ANT work *The Pasteurization of France* (Latour, 1993). In more recent work, Nimmo employed concepts developed by Latour and Law to study the history of milk (Nimmo, 2010, 2011). He worked both on a History of milk and historiography of Histories concerning milk. In this way he has contributed to both the discussion of the use of ANT in History as well as the understanding of the History as an actor.

In fascinating descriptions, Nimmo describes the transition of milk from a local product preferred to be “warm from the cow” to an industrial product described as pure and natural. Non-human actors are very important to this story - as Latour described in 1993, bacteria are important actors in the story of milk. Nimmo explains that human actors who often doctored milk (echoed in the 2000s) by adding water and other extenders or artificially keeping the milk warm, caused a demand for local milk where the buyer could see the cow (Nimmo, 2010). This unfortunately put the cows at risk of disease from their urban environment.

Most of the town cows died. This resulted in milk being shipped from the rural areas. As milk is a near perfect medium for bacterial growth, warm milk was now a sign of risk. Refrigeration was brought on board and ironically, cold milk, which had previously been suspect, was reconstructed as the safer form. Ultimately growing understanding of bacteria led to the development of pasteurization and other forms of protection. Milk went from local and natural to distant and purified.

Through his History, Nimmo has demonstrated the importance of non-human actors, such as railroads, trucks, containers, refrigerators, the beer industry, science, bacteria, and viruses and their agency in the story of milk. At the same time, he has interrogated the Histories he has cited and the means of their construction via key ideas from Latour, Law, Mol and others.

In an approach to the historiography, distinct from Durepos but reminiscent of her Halifax School co-author Hartt, Nimmo interrogates the History as an inscription. He describes it as a mobilization of an actor-network. Hartt describes the History as a product of a network of informants and a network of publication (Hartt, 2010, 2013; Hartt, Mills, Helms Mills, & Corrigan, 2014). Nimmo describes the inscription that is the History as a product of the network and suggests that discourse analysis of the text provides insight into the intentions of the authors. Nimmo presents a history as both the product of found traces and implied ideas rather than simply a recounting of *facts*.

Discussion

History as Product of an Actor-Network

These examples of the use of ANT in history (H & h included), Documentary, and historiography interlock with the postmodern plurality of accounts to raise interesting discussions of the applicability of NCA Theory to history. It appears that there is a strong case for the use of ANT in the interrogation of

the past, which forms either history (an understanding of the past) or History (a published text *also referred to as an inscription*), and, most assuredly, in a postmodern analysis of *history* (a contested/contestable understanding of a plural or multiple past). *The final point does not rely on string theory although application of Hugh Everett's ideas can be useful for a more complex explanation of variations in accounts* (Hart & Peters, 2016). The literature provides indicators of non-corporeality of each of these conceptualizations of history.

The historiographic examinations provide a demonstration of how historians move among previous accounts and traces to develop their narrative and understanding of the past. This is concretized in articles, books and documentaries (and in traditional oral stories). The process implied by the theory of a method as proposed by Latour (2005) is demonstrated in the re-assemblage of traces and recollections which forms History and is inscribed. Clues to the manner in which the reportage is constructed can be found in each of the discussions from the works of Homer through to the analyses of Documentary and History as discussed.

History (all forms including Documentary) find roots in annals and chronicles as sourced by Qian and others (including Tolkien and Lewis) and entertainment as practiced by the travelling storyteller. In the discussions of the History and the Documentary we have surfaced the need to obtain funds through patronage and/or sales of inscriptions. Both these sources of funds imply a network. If a storyteller were to survive at the court of Charles V, he had to entertain not only the emperor but also his confidants (a network); if the author of "The Chosen Instrument" wanted access to the traces and to sell his book to Pan Am employees, he needed the support of Juan Trippe and those around him; if a documentarian would like to make their film, they need the support of financial backers, potential distributors and possibly PBS or The History Channel. The "pitch" must entertain the funders and informants and the final product must attract readers, listeners, viewers, and other potential purchasers.

Human actors are clearly networked into the production of history; this establishes a sociology of historic knowledge. The next step is to examine the role of non-human corporeal actors (actants). The discussions above of Documentary provide a clear means to enroll *things* as it has been established that the nature of the technology (lenses, microphones, etc.) impacts how and what is collected. This would also be true of such other actants as schedules, trains, planes, weather, daylight, and money. These latter items would also impact History (inscriptions such as articles and books) as they also rely on informants, travel and often recording devices. In addition, History relies on the collection and preservation of traces as well as the communication, duplication and related costs. Postmodern *history* might well not exist without improved opportunities for preservation of traces, the longer lives of informants (presumably a product of the actor-network of health care and nutrition), and improved methods for finding and unearthing artifacts. Modern fetishes with saving records and opening archives (after a suitable period of secrecy) have produced opportunities to source traces of previously suppressed accounts and evidence. The Cold War (as an actor) produced much of this secrecy and the armistice of the 1990s and early 2000s generated many alternate histories. In the same manner as History and *history*, history is changed, impacted and preserved by each of these actants. In many cases, it is the plurality of accounts, which enables an individual to cling to their history as the true history and to describe other accounts as "fake history".

History as an Actor(Actant)

As it is established that ANT plays a key role in the production of history (even when not explicitly cited); it has been hinted that history, History and *history* might well be actors in the reproductions of their forms. It is not difficult to conceive of history as an actor in the production of History. Often, historians rely on informants who recount their understanding of the past. In the accumulation of these accounts the author assembles a network of traces, artifacts and accounts into the History and inscribes a proposition of the past.

As history appears to act and have agency in the construction of History, and *history* seems impossible without competing histories and their supporting traces, what are the roles of History and

history the formation of history? The inscribed History is shown by Durepos and others to be an actor in the inscription of other Histories. Reading a History is logically an influence on an individual's construction of their remembrance of the past (history). This plausibility is reinforced by the role of extant History in new History. If an author can be persuaded to retell an account because they have read it in a book, other individuals (it can be deduced) would be similarly influenced by reading about an event in their recollection of the event. There is also significant research into the effect of other sources of information about the past and the individual's recollection of the past (Loftus, 2017; Schooler, Foster, & Loftus, 1988).

Then malleability of history enables the hypotheses of *history* as well as the proliferation of Histories. The many different and changing accounts enable the publication of new History as well as the contestation, revision and legitimized pluralization of *history*. The existence of pluralization and contestations enables individuals to discount those who seek to correct or dispute their history. In the same manner that much of science is discounted because, "one day coffee is good for you and the next day a judge in California is declaring it a cause of cancer", alternate accounts are dismissed as self-serving or influenced. *History* protects history, an individual may cling to a falsified account following the logic that the falsification will eventually be falsified.

Although complex in construction, it seems clear that all forms of history are actors in the networks of each of the other forms (although this would likely be contested by Realist (Objective) Historians. The historical record also seems to support this as it is clear that Homer, Herodotus, Thucydides, Qian, their contemporaries and successors all worked within actor networks of people, things, and traces regardless of whether they knew ANT was in play.

Is History Non-Corporeal?

It has been supported that all three expressions of history are products of actor-networks consisting of humans (actors), things (actants) and NCAs. It has also been established that all three forms of history are actors in the networks of production of all three forms of other histories; however, when histories act are they corporeal or non-corporeal? Authors often experience situations when they read or hear an interpretation of their work, which they did not intend (personal experience). This implies a non-corporeality of the inscription.

In the establishment of NCA Theory, Hartt (2013) described the concept of inscription as a corporeal fiction of agreement or consensus. *Corporeal was used to give the sense of having a physical existence or corpus in order to initiate a contrast with the NCA.* In his work he describes the event of hearing someone describe a policy statement as saying one thing yet meaning another. The role of non-human actants is central to this phenomenon. For example, the policy format requires certain wording, the form has only so much room, the printer will only print on A4 paper, etc. . Each influencing non-human actant changes the policy. From this (and other) evidence Hartt presents an inscription as a starting point from which an understanding of a value, belief, concept, or idea evolves and changes. Ultimately, each individual produces their own understanding of the inscription within a (re-) formative context of other NCAs. For example, a policy on hiring is impacted by an understanding of a policy on equity. In history, a History is understood within the context of an understanding of other Histories, ideologies, important NCAs holding a network together (such as profitability), and the remainder of the individual's context.

Regardless of the *prima facie* reality that a History (or Documentary) is corporeal, the understanding of the inscription is impacted by context and thereby that understanding becomes plural (from slightly to possibly significantly variable from individual to individual). The reader or hearer of a h/History makes sense of the account in a manner impacted by all the other actants from networks in which they are enrolled. The account (h/History/history which influences the sensemaker is understood uniquely by that individual. Therefore the h/History/history which has influence or power over the choices of the individual is not the inscription or account but the meaning and power they give. The h/History/history which has agency and therefore influences and acts within an actor-network loses corporeality. History becomes non-corporeal when acting. Therefore, History is (or can be) an NCA.

In the same manner, history (one's perception of the past) becomes non-corporeal as it interests and enrolls in an actor-network. It goes from "my story" to "a story" as distributed through the network. As demonstrated by Loftus and others, the actant history is quite malleable and therefore cannot be considered corporeal. But, the originator of the history might consider "my story" as fixed and therefore corporeal. However, the work by Loftus suggests that the remembrance is also malleable. Often, individuals will hear another person's recounting of their story and adopt the differences as a better version thereby reducing the durability of their account in pursuit of an account, which is more durable in the network. The history (view of the past) therefore appears to oscillate between corporeal and non-corporeal as an actant. It may concretize in changed forms as it acts and circulates and become non-corporeal as it passes through the network.

It seems less likely that *history* would ever be a corporeal actant as it relies on postmodern contestation, which suggests that *history* is never corporeal even when inscribed. The nature of contesting is to destabilize and therefore pluralize and provide individuals opportunity to create their own understandings.

Conclusion

Over the course of a few thousand words, several examples and much reflection, the concept of history and the *theory of a method* that is ANT have been teased apart and glued together. Through discussions of the historiography of history and the history of historiography we have seen how history has used forms of ANT to develop its products regardless of the names given to the processes. We have also seen how ANT has been used to prosecute historiography and history as well as Documentary and filmography.

The role of actants: human, non-human and non-corporeal has been demonstrated in the production of history. The word history was examined in three forms: inscribed History, recalled history and contested *history*. It can be concluded from the examination of the roles of all three forms that they each have agency as actants in the networks producing history in any form. History in any form is an actor and can be an actant in the production of knowledge. History should be a primary consideration in any Sociology of Knowledge work.

Understandings of History, history and/or *history* vary as a function of context and the stew of NCAs in which they exist. Therefore, each form of history dissolves into the context and is reformed and malleable; the understandings act via the individual therefore the history itself becomes non-corporeal. History, history, and *history* can be both corporeal and non-corporeal actors, but as actants they seem to be NCAs, as it is the version of the actor as understood by the other human actors or mediatable by non-human actors which acts. Therefore, understandings of the account are the actors rather than the accounts themselves, understandings of the books rather than the books, understandings of the contestations rather than the contestations; these are what act and these understandings are NCAs.

Finally, from the earliest forms of history there has been at least a duality between history as story and history as a record and explanation of events. Not the least of NCAs in this duality has been the traditional role of history as entertainment. Many scholars have pointed out that history is written in a manner that is consumable and therefore molded to acceptable narratives and fit within tropes. The conflict within the dualism naturally leads to postmodern contestation of any history (likely long before it was described as postmodern). This leads us to discuss History, history, and *history* in this paper, which is strong evidence of the non-corporeality of history.

Yes, history is an Non-Corporeal Actant .

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LOVE SEARCH STRATEGY WITH DYNAMIC PROGRAMMING

This paper extends the famous *secretary problem* in the context of the Chinese cultural phenomenon of *sheng nu* or leftover women. We use dynamic programming to investigate the impact of love search strategies on optimal stopping decisions under time pressure. Our results suggest that time pressure has negative impact on the quality of the match. When there is no time pressure, remaining single may be the optimal decision. Finally, the environment matters — searchers reasonably have higher expectations when the average quality of suitors in a marriage pool is higher.

Introduction

In keeping with the Atlantic Schools of Business (ASB) conference theme for 2018, *Diversity and Management*, we revisit the famous *secretary problem* in the context of the Chinese cultural phenomenon called *sheng nu*. By focusing on this topic, we hope to cast light on how social and cultural realities impacting an individual's quality of life might crossover to the business domain and thereby provide insight for managers trying to integrate diversity management into their daily behavior. In particular we delve into diversity dimensions including ethnic, social, cultural, age, and gender.

From the Western perspective, firms usually have a positive view of strategies that incorporate diversity management and governments typically endorse the benefits of social policy that embraces equal opportunities and equal treatment — in short, diversity improves organizational performance. Our example highlights the issues that arise when government policy and cultural norms *do not* encourage fair and equal opportunity and treatment. We then examine optimization strategies to suggest a more optimistic and valuable approach for individuals to counter the abhorrent state-sponsored media campaign exemplified by *sheng nu*.

This paper makes the following contributions. First, we extend the literature on optimal stopping problems by examining the selection of love search strategies under time pressure. While there is a large literature investigating the famous secretary problem as a nexus of decision theory, statistics, and applied probability, there has been little inquiry into the impact of optimal stopping based on perceived utility obtained by the decision maker. Second, we contribute to the discussion of optimal stopping strategies on decisions related to matters of the heart in the context of *leftover women*.

Background and Literature Review

Sheng Nu

Now a well-established Chinese cultural zeitgeist, *sheng nu* or *leftover women* began as a state-sponsored media campaign designed to bully educated, professional women into early marriages, ostensibly to protect social stability. Beginning in 2007, Chinese media (including magazines, newspapers, and websites) have relentlessly promoted the concept that unmarried urban females over the age of 27 are leftover women — the term *sheng nu* has even become part of China's Ministry of Education's official lexicon. Many of these women have post graduate university degrees and well-established careers. However, the perspective of state-controlled media, parents, and society overall is that these women are fundamentally worthless without husbands and children (Fincher, 2016). Ironically, one of the most vocal entities advocating *sheng nu* is the All-China Women's Federation, a government organization created in 1949 with the express mandate to defend women's rights. The New York Times (Fincher, 2012) quotes a passage from an All-China Women's Federation article that coincided with the 2011 International Women's Day:

“Pretty girls don't need a lot of education to marry into a rich and powerful family, but girls with an average or ugly appearance will find it difficult. These kinds of girls hope to further their education in order to increase their competitiveness. The tragedy is, they don't realize that as women age, they are worth less and less, so by the time they get their M.A. or Ph.D., they are already old, like yellowed pearls.”

This campaign against single, educated women may be a response to the long-standing Chinese bias of favouring male offspring over female. Selective, widespread pregnancy terminations based on gender has created the situation in China in which, as of 2016, there were 117.5 males for every 100 females between the ages of 0 and 19 (China Statistical Yearbook, 2017). The Chinese government recognizes the risk to social stability and security of the increasing backlog of unmarried men of traditional marrying age, and this continued gender imbalance will exacerbate the problem. The State Council identifies upgrading population quality or *suzhi* as a primary goal and views the All-China Women's Federation as an important mechanism for driving population planning policy. In essence, the tactic is to use shame to induce educated and talented women to rush into marriage with the express purpose of producing children with superior genetic makeup.

Given the unquestionably negative connotations of *sheng nu* with respect to gender equality and the impact on the management of diversity, we surveyed the literature to uncover research that might suggest a more optimistic approach for an active love-search strategy. To (2013) found that the primary causes of Chinese women remaining unwed were controlling and discriminatory gendered constraints created by their male suitors. These constraints reflect the persistence of the Chinese patriarchal structure. In contrast, although parents' traditional views exert powerful influence on their daughter's marital timing and partner selection, there is clear evidence that parents advocate, value and support their daughter's strong educational and economic achievements (Tsui & Rich, 2002). These parents may be torn between long-standing cultural attitudes and an implicit, visceral, and personal understanding that *sheng nu* is simply wrong.

Based on an empirical study surveying women from across China, To (2013) identifies four strategies for modern women to adopt in light of *sheng nu*: **maximizers** seek open-minded Western men or those with high economic status as partners; **traditionalists** have no concrete strategy to realize marriage goals; **satisficers** are willing to accept partners with lower economic status if such men are more egalitarian; and **innovators** seek nontraditional relationship forms outside of marriage. A research challenge is to test the optimal stopping model against these four types.

In our analysis, we have two assumptions. First, active strategies may exist to help modern Chinese women enjoy successful life partnerships. Second, the choices of either remaining single or enduring

unhappy marriage are both inferior to a happy, nourishing relationship. Further to the second assumption, studies show the phenomenon of lower marriage rate in other Asian countries experiencing economic surge and increasing proportion of well-educated women (Economist, 2011). However, society has given those well-established single women a much nicer title — the Gold Misses. Hwang (2016) surveyed data from Japan, South Korea and the US and found that the intergenerational gender attitude played a critical role. As a consequence, Gold Misses are more willing to marry “less traditional” or open-minded men when they are available, and their marriage rate is not affected by their education and salary level in countries popular with egalitarian attitudes.

The highly-influential *Harvard Study of Adult Development* (e.g., Vaillant, 2012) seeks to answer the question “What keeps us happy and healthy as we go through life?” It is the longest panel-data study of adults that has ever been done (80 years and counting), and provides evidence regarding the secrets of living a healthy and happy life. The *Grant Study* examines 268 graduates from Harvard College from the classes of 1939-1944 and the *Glueck Study* examines 456 men from the most disadvantaged families of Boston's poorest neighborhood. Dr. Robert Waldinger, 4th director of the study, summarized the key findings: “It is not about money, fame or working harder and harder, the clearest message is good relationships keep us happier and healthier. . . . However, quality, not quantity, of your relationships matter. High-conflict marriages without much affection hurt more than getting divorced.” The preceding suggests the following order of preference in love search outcomes: loving and nourishing relationship; remaining single; affectionless marriage.

The Secretary Problem

Instead of capitulating to cultural and social pressure, the essence of this paper is to suggest alternative strategies by recasting the famous *secretary problem* to matters of the heart. This secretary problem focuses on optimal stopping decisions and has important implications in the areas of decision theory, statistics, and applied probability.

Consider the following problem:

A human resources manager wants to hire the best secretary out of n applicants and it is possible to assign a rank to each applicant. Individual interviews take place randomly and the manager decides about the applicant immediately after the interview, and, once rejected, the applicant is no longer part of the pool. Clearly, the manager can compare the current applicant with all those who have already been interviewed but is unaware of the quality of the remaining applicants. The research question focuses on the optimal strategy, or stopping rule, to maximize the probability of choosing the best secretary. If it were possible to defer the decision until the completion of all interviews, then selecting the best candidate is trivial. However, when the secretary problem becomes a love search, it would be a unique individual who would be willing to wait for the suitor to explore all possible love interests before making the decision to settle down. Our problem becomes more interesting because of the requirement to make a decision before proceeding to the next candidate.

The optimal stopping rule for the above problem prescribes always rejecting the first n/e^3 applicants and then stopping at the first one who is better than every applicant interviewed so far (e.g., Ferguson, 1989). If this does not happen, we select the n th applicant. The optimal solution is elegantly simple, maximizes the probability of selecting the best candidate, and selects the single best candidate about 37% ($1/e$) of the time regardless of the number of applicants, which is consistently better than a random selection policy. For example, with a pool of 1000, a random selection rule yields a probability of selecting the best candidate of 0.1% ($1/n$) compared to 37% for the optimal stopping rule.

³ e is a mathematical constant approximately equal to 2.71828.

One issue with the secretary problem setting is the insistence that there is value only in selecting the *best* candidate. Clearly, in reality, it is possible for couples to enjoy a happy life after choosing, for example, the 2nd or 3rd best love interests. This motivates us toward the classic optimal stopping problem. The key difference is that the value of each candidate is measured by a nonzero utility.

The Optimal Stopping Problem

Consider the following scenario:

A traveling professor, upon finishing her sabbatical, decides to sell her car before returning to her home country in N days. After posting the advertisement, she receives random offers w_0, w_1, \dots, w_N (one offer per day), which are independently and identically distributed. Each day, she needs to decide whether to accept the current offer, which stops the process; or to turn it down and wait until the next day to evaluate a new offer. As in the classic secretary problem, we assume that once an offer is rejected, it cannot be retained — the potential buyer goes somewhere else. For discussion on retained past offer, readers can refer to Bertsekas (2015). The optimization question is to maximize the professor's revenue before she leaves the country.

The above mentioned problem is also referred to as the stopping-rule problem. The earliest studies on this subject can be traced back to the sequential analysis by Wald (1947). In his review of dynamic programming, Howard (1966) discussed the action-timing problem — an elementary stopping-rule problem. Applications are found in various areas, such as in economics of job search (e.g., McCall and McCall, 1987), computing the values and early exit boundaries of options (e.g., AitSahlia & Lai, 2000 and Carmona & Touzi, 2008), and event-trigger sensing and actuation in network control system (e.g., Johansson & Johansson, 2008).

Model and Results

Love Search Model

The optimal stopping problem is a typical problem in sequential analysis, which is the process of making decisions during a certain time span. A general tool to find optimal solutions in sequential analysis is dynamic programming (DP). As in the “Principle of Optimality” first articulated by Campbell (1952), dynamic programming is used to “divide and conquer” a sequential analysis problem by decomposing it into a series of smaller problems. Once the smaller problems are solved, they are combined to form the solution for the complete problem.

First, we introduce a few basic concepts before constructing the model of optimal stopping problems. *State variables* result from quantifying the process and provide complete information needed to make a decision. For example, the state variable *perceived utility* is one's perception of the candidate's value in an intimate relationship, measured as a score in the interval $[0, 1]$. Perceived utility is very subjective — for example, it could be "lovely smile, good manners, a good companion to talk about science fictions, AI, politics and math: Score 0.92"; or "Expensive clothing, two houses downtown, one Mercedes parked outside: Score 0.89".

Selecting decisions are made at certain times called *stages*. If the decisions are made every year, then the stage variables would be discrete and sequentially numbered by the integers $t=0, 1, 2, \dots, T$, where T is the total number of stages.

In love search, we use state variable $x_t = w_{t-1}$ to denote perceived utility of the candidate at the beginning of period t , which is equivalent to the realization of random variable w from the previous period (i.e., $t-1$). We assume that the random variable w_t represents the perceived utility of best candidate shown in period t (i.e., the searcher may interact with multiple candidates in stage t). For simplicity and with losing generality, we assume that w_t follows identical and independent distributions for each t . Table 1 shows the definition of states.

Table 1
States and Stages in Love Search

Variables	Definition
Stage t	Decision horizon of the love search problem, $t=0, 1, \dots, T$
State $x_t \in [0, 1]$	Perceived utility received by the searcher, which equals the utility of the best candidate at previous stage w_{t-1}

The concept of a *decision* is an opportunity to change the state variable. Results from decisions are *actions*. In love search, we have two possible actions after observing the current candidate; one is to accept the current candidate and *stop* searching while the other is to reject the current candidate and *continue* the search. If one chooses to continue the search, the state variable will be updated to the value of the next candidate. Table 2 shows the connection between states and corresponding actions.

Table 2
An Example of Making Decisions Based on the Perceived Utility

States	Actions
Suitable candidate	STOP searching and invest in the partner
Unsuitable candidate	CONTINUE the love search

Finally, *strategy (policy)* π is a set of decision rules that computes an optimal decision for each value of the state variable x_t at stage $t=0, 1, \dots, T$, i.e., $\pi = [\mu_0(x_0), \mu_1(x_1), \dots, \mu_N(x_N)]$. Defining $V_t(x_t)$ as the *value function*, we obtain the DP functional equation as:

$$V_t(x_t) = \max \begin{cases} x_t & \text{if the decision is to accept candidate } w_{t-1} \\ E[V_{t+1}(x_t)] & \text{if the decision is to reject candidate } w_{t-1} \end{cases}$$

Note that if the decision is to accept the best candidate of the previous stage w_{t-1} , then at the beginning of period t , the searcher will receive the utility of x_t and the process will STOP. If the searcher turns down the candidate, then $V_t(x_t)$ is equal to the expected value of continuing optimally in period $t+1, t+2, \dots, T$, i.e., $E[V_{t+1}(x_t)] = \int_0^{\infty} V_{t+1}(w) dF(w)$ where $F(w)$ is the distribution function of the perceived utility w .

Thus, the optimal policy is to accept candidate $x_t = w_{t-1}$ in period t if x_t exceeds the threshold level $\theta_t = E[V_{t+1}(x_t)]$ and reject it if x_t is below θ_t ,

$$\mu_t(x_t) = \begin{cases} \text{Accept and Stop searching} & \text{if } x_t > \theta_t \\ \text{Reject and Continue} & \text{if } x_t < \theta_t \end{cases}$$

with either accept or reject being optimal when $x_t = \theta_t$. The value function can be revised to $V_t(x_t) = \max(x_t, \theta_t)$. We can get $V_0(x_0) = \max(x_0, \theta_0) = \theta_0$ because initial state $x_0 \equiv 0$.

Since the threshold θ_t is defined in the form of expectation of the value function, i.e., $E[V_{t+1}(x_t)]$, we can construct the differential equation to compute the value of θ_t , $t=0, 1, \dots, T$ recursively using Maple (Parlar, 2012).

$$\begin{aligned} \theta_t &= E[V_{t+1}(x_t)] = E[\max(x_{t+1}, \theta_{t+1})] = E[\max(w_t, \theta_{t+1})] \\ &= \int_0^{\theta_{t+1}} \theta_{t+1} dF(w) + \int_{\theta_{t+1}}^{\infty} w dF(w) \\ &= \theta_{t+1} F(\theta_{t+1}) + A(\theta_{t+1}) \end{aligned}$$

where $A(\theta_{t+1}) = \int_{\theta_{t+1}}^{\infty} w dF(w)$. Note the boundary value $\theta_T = 0$ since the searcher is willing to settle down with any level of perceived utility when time expires. The typical optimal stopping problem is now reduced to finding the solution of the following nonlinear differential equation:

$$\theta_t = \theta_{t+1} F(\theta_{t+1}) + A(\theta_{t+1})$$

with $A(\theta_{t+1})$ and θ_T defined previously.

We now apply the optimal stopping problem model to love search. The underlining timeline of *leftover women* is that a female must get married before age 27. Recognizing the typical prohibition (in China) of romantic relationships until after high school and assuming two years to adjust to life in a new environment, a women's love search reasonably starts at age 20 — she has only seven years, ranging from age 20 to age 26, before being labelled as a *leftover woman*. Suppose at the end of each year she makes a decision, we have seven stages, i.e., stages $t=0, 1, \dots, 7$. We assume that the distribution of perceived utility of the best candidate in each stage, $F(w_t)$, follows identical and independent normal distribution, $t=0, 1, \dots, T$. In our numerical example, we use the normal distribution, $N(0.60, 0.12^2)$. In this case, the empirical law suggests that the perceived utility of 99.7% candidates will fall in the range of $[0.24, 0.96]$. All notations in the love search problem are shown in Table 3.

Table 3
Notation and Definitions in Love Search

Notation	Definition
t	Decision time horizon, stage $t=0, 1, \dots, T$
w_t	Perceived utility of the best candidate in stage t
$f(w_t)$	Probability density function for w_t , normal and i.i.d.
x_t	State variable at t , $x_t = w_{t-1}$
$V_t(x_t)$	Value function at t that obtains the optimal expected

	value for $t=0, 1, \dots, T$ given state x_t
θ_t	Stopping threshold at stage t

In the following numerical examples, we explore three questions:

1. Does time pressure improve the quality of the searcher's results?
2. If there is no time pressure, would it benefit the searcher?
3. Is it beneficial for the searcher to start with a better environment that has high quality of candidates?

Results

Figure 1 show the impact of decision time horizon on the decision maker's perceived utility. Each dot represents the threshold the candidate must exceed for the searcher to be willing to end the process. For example with $t = 2$ and $T = 7$, the searcher's utility of the candidate must exceed 0.708 for that candidate to be the successful suitor. Otherwise, the searcher remains in the marriage market. Unsurprisingly, for both $T=7$ and 12 , as t increases, the searcher is willing to settle for candidates offering lower utility because at the ending stage, the searcher is willing to accept any candidate as the threshold becomes zero. Comparing $T=7$ and $T=12$, we note that for each stage t , the threshold for $T=12$ exceeds that of $T=7$ (i.e., the curve formed by the blue dots is higher than that of the red dots). The implication is that the searcher realizes higher utility when there is less time pressure. Moreover, the rate of decay of the $T=12$ curve is less than that of the $T=7$, indicating that, if the searcher chooses to continue, the risk of settling with a worse partner is less.

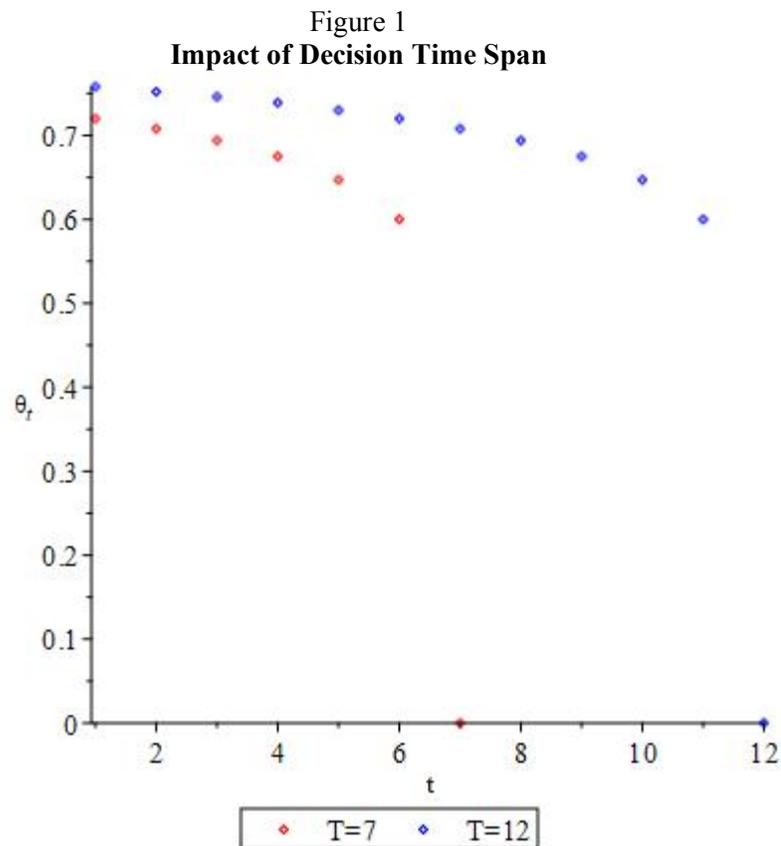


Figure 2 examines the situation when there is no urgency to find the ideal match. In this case, we add a curve representing $T=\infty$. The curve for $T=\infty$ exceeds those for other T 's given any stage t , indicating that the searcher experiences higher utility when there are no time constraints for selecting a partner. Also note that for $T=7$ and $T=12$, the boundary threshold is zero (i.e., for stages 7 and 12, respectively). For $T=\infty$, the boundary threshold asymptotically approaches a nonzero utility equal to 0.579. From a practical point of view, this implies the searcher chooses a single life rather than succumbing to a poor quality marriage (i.e., zero utility) because of arbitrary time pressure had a satisfactory candidate not shown up. This result is consistent with the results of the Harvard Study of Adult Development (e.g., Vaillant, 2012) and corresponds to To's (2013) innovator strategy.

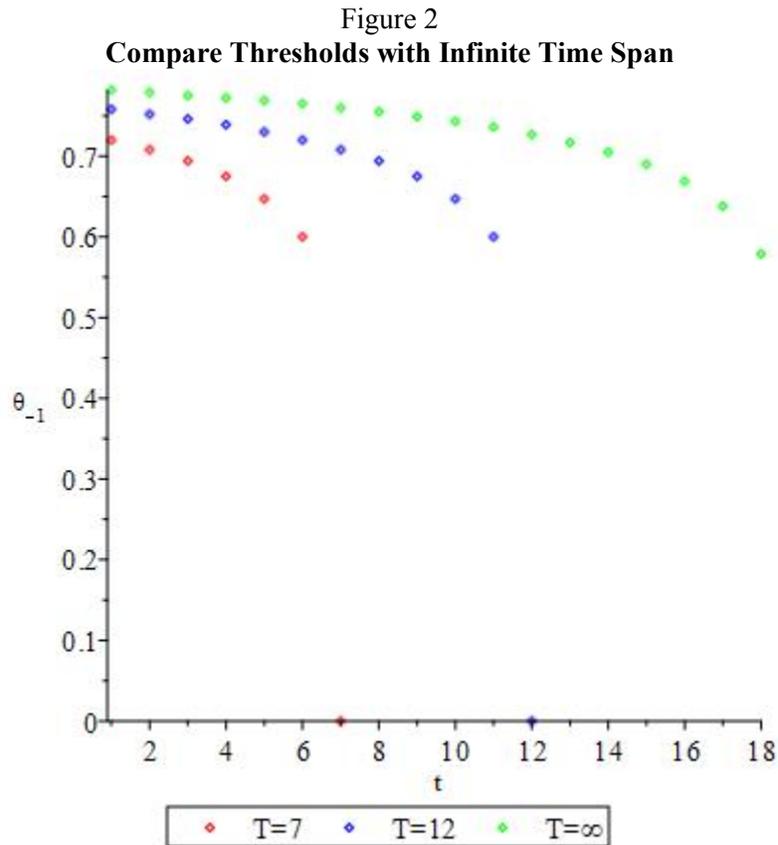
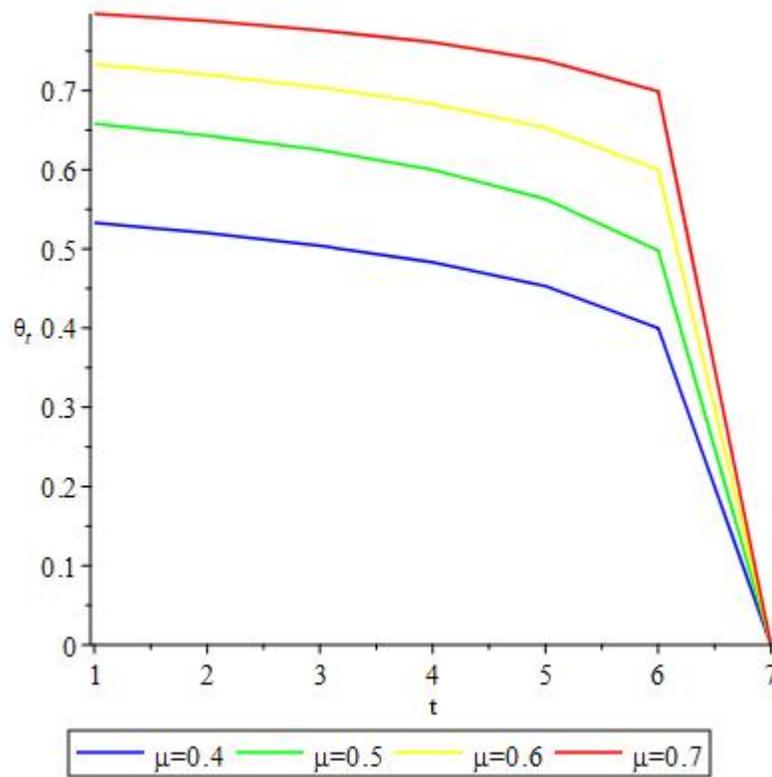


Figure 3 portrays the situation in which we improve the average quality of all candidates given a base love search time horizon of seven years (i.e., $T=7$). The parameter μ is the searcher's average utility of the candidate pool. The first observation is that, for any stage, the searcher sets a higher threshold when the average quality of the candidate pool is higher, which implies that the searcher expects to get a higher quality match when the environment is better. This result is consistent with the finding of Hwang (2016) that Gold Misses are more willing to marry "less traditional" or open-minded men when they are available, and their marriage rate is not affected by their education and salary level in countries popular with egalitarian attitudes. Also note that the searchers set their thresholds above the candidate pool average for all stages $t=1$ to $t=6$. They maintain high standards until immediate time pressure of the end stage shatters their confidence. Figure 3 aligns with To's (2013) maximizer strategy.

Figure 3
Impact of Environment, i.e., the General Quality of Candidate Group



Conclusions

We investigate the impact of love search strategies on optimal stopping decisions under time pressure. The state-sponsored media campaign of *sheng nu* has been arguably ineffective in achieving the goals of fostering social stability by reducing the backlog of unmarried men of traditional marrying age, and of upgrading population quality (*suzhi*) by inducing talented and educated women to marry and have children. The policy may be counterproductive by driving some elite women to seek marriage options abroad and by forcing others into early marriage and possibly decreasing the quality of and satisfaction with their relationships. Egalitarian attitudes toward marriage may provide better outcomes.

Our results suggest three important insights. First, time pressure has a negative impact on the quality of the match. For longer time horizons, the searcher will have higher thresholds for each time stage (i.e., she will demand higher levels of perceived utility from a suitor before being willing to marry). Importantly, the year-over-year decrease in threshold is lower when the total love search time horizon is longer — the searcher is able to maintain high standards with respect to the caliber of prospective partners when time pressure is lower. Second, when we eliminate time pressure altogether then remaining single becomes a viable alternative. The resulting pecking order of outcomes becomes: loving and nourishing relationship; remaining single; and affectionless marriage. This observation is consistent with the innovator strategy and the findings of the Harvard Study of Adult Development. Third, environment

matters — searchers reasonably have higher expectations when the average quality of suitors in a marriage pool is higher. Early in the love search, a searcher will not agree to marry unless she perceives the prospective partner as being much better than the average of the particular marriage pool. Even in the penultimate time stage, her threshold remains above the pool average. Well established and educated women may naturally have access to marriage pools with higher average quality — consistent with the maximizer strategy, they may set higher thresholds to guide their decisions about marriage.

For those feeling the pressure, we respectfully offer the following suggestion. Don't panic; choose your strategy; enjoy life; and find love.

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Missing something important? The state of work and employment in economic and social policy in the Atlantic Provinces

By Rachele Pascoe-Deslauriers, Brianna Eagles Eaton

Introduction

The Atlantic provinces of Canada face persistent social and economic challenges, including low labour productivity, high levels of public debt, and a declining workforce. There are also persistent issues of low wages and high levels of underemployment and seasonal/part-time work. Much of the policy focus has been on attracting and retaining skilled immigrants to the region and upgrading the workforce's skills. The supply side focus of these policies remains largely disconnected from the extant national and international research on the impact of poverty, insecure work and poor quality jobs for individuals and societal outcomes – such as costs to the health and social welfare systems, reduced social cohesion, and economic exclusion.

This working paper argues that there is insufficient attention being placed on the role of employing organizations as key actors in shaping the quality of work, and as architects of employment systems that impact workforce participation and regional retention. It is disconnected from debates on the role of income inequality and poor quality work on labour productivity, employees' discretionary effort and aggregate economic growth. This paper is organized as follows: first, we offer a preliminary review of the issues raised by policymakers, business leaders and academics with support from publically available administrative and survey data. Secondly, we consider how these issues are constructed and perceived in regional policy debates recognizing that how policy problems are construed shapes the approaches to interventions. Lastly, we consider the extant national and international debates on job quality and skills policy to question the extent to which the region's policy approach may be addressing the underlying social and economic challenges. We argue that debate on the quality of work and demand-side interventions are missing from social and economic development policy in Atlantic Canada and that this is a significant gap worth addressing.

Current challenges

The challenges faced by the Atlantic provinces include a high demand for social and welfare services, high levels of public debt and budgetary constraints, a declining labour force through outmigration and aging population, and stagnating business base (Beckley, 2015; Government of New Brunswick, 2017, 2018; Saillant, 2016). Although Canadian labour productivity lags behind many G7 and EU19 comparator nations, within Canada, New Brunswick, followed Nova Scotia and PEI have the lowest levels of labour productivity (Conference Board of Canada, 2018; Statistics Canada, 2018a). These are interconnected challenges for the governments of the region (Auditor General of New Brunswick, 2015).

The region has also long grappled with challenges in its labour markets. The four provinces have higher unemployment and underemployment rates, more temporary and seasonal jobs, lower wages, and higher earnings inequality than other regions in Canada (Galarneau, 2005, 2010; Martha MacDonald, 2009; Sanga, 2000). The region's historical and persistent high unemployment rates have been seen as responsible for the many of the social and economic challenges, notably the declining workforce through out-migration by locals and newcomers

(Maureen MacDonald, 1998). In-migration has tended to be older retirees, who typically will require more healthcare services and are generally not contributing in the labour force. While the region tends to have more workers in full-time rather than part-time work, compared to the national average, of the region's workers in part-time employment in 2017, they were slightly more likely to be involuntarily part-time (Statistics Canada, 2018d). Whilst 24% of part-time workers nationally are considered underemployed, 25% of those in New Brunswick, 26% in NS and PEI and 37% in NL find themselves wanting more hours (Statistics Canada, 2018d).

The region makes greater use of temporary work arrangement than the average nationally. The national average of temporary employees was 14% of all workers compared to 86% of workers on permanent arrangement for 2017 (Statistics Canada, 2018e). Across the Atlantic region, the rate of job permanence falls and the prevalence of temporary employment increases to 23% of all workers in NL, 21% in PEI and 17% for both NB and NS (Statistics Canada, 2018e). Seasonal work and casual work represent the highest proportion of those on temporary work arrangements.

Whilst seasonal and temporary contract employment is common in primary industries (Galarneau, 2005), these industries no longer represent the main employers in the region (Statistics Canada, 2018b). Based on the 2016 Census, health care and social assistance, along with wholesale and retail trade are the dominant employing industries. Atlantic Canadians report finding it difficult to attain work with levels of security that was found in the past (Savoie, 2000).

The region lags behind other areas in terms of wages. The average hourly wage in 2017 was \$27.60, compared to \$26.80 in NL, \$24.65 in NS, \$21.95 in NB, and \$21.70 in PEI (Statistics Canada, 2018b). These averages mask variation in wages and the disparities between groups. For example, recognizing that unionization, contractual status and male-ness provide wage premia, the wage difference for women workers in temporary and non-unionized roles is \$10.88 per hour less than her permanently employed, unionized male counterparts nationally; and \$11.70 per hour less in NL, \$13.91 less per hour in NS, \$14.61 less per hour in NB and \$8.55 per hour less in PEI (Statistics Canada, 2018c).

NB, PEI and NS have some of the highest proportion of minimum wage earners as a share of the median wage among Canadian provinces at roughly 7% of workers (NBJobs, 2017). Minimum wage earners are assumed to be young people in part time work. However, only 41% are below the age of 19 (NBJobs, 2017), consistent with broader trends of low wage earners (e.g. British Retail Consortium, 2016; Grugulis & Bozkurt, 2011). It should also be noted that the minimum wage is not considered to be a living wage. Whereas the minimum wages varies between \$11.00 and \$11.55 per hour across the 4 provinces, roughly \$18-19 per hour is considered to be the 2018 Maritime living wage (Hicks, 2018; Saulnier, 2018). Therefore while income inequality is rising across Canada and advanced economies (OECD, 2015), the region's workers are falling further behind the rest of the country (Macdonald, 2018).

The implications of these challenges

The costs of low wage, poor quality and precarious employment, and underemployment are not inconsequential. Furthermore, they should be seen as inextricably linked to the concerns related

to increased costs of social and welfare spending, lagging economic productivity and declining tax bases. Job quality is connected to individual and societal well-being, the cost of current health, social care and education, and the region's capacity to invest in its development for the future. Poor quality work is bad for individuals' psychological and physical well-being (e.g. Caplan, Vinokur, Price, & Van Ryn, 1989; Grzywacz & Dooley, 2003). Consequently, poor quality work can lead to higher direct expenditure in areas of health care, tax credits for low income, and indirectly through the underutilization of investments in workers' skills, knowledge and abilities (KSAs), and the loss of tax revenues had they been in appropriately remunerated employment. In a 2011 estimate by the Canadian Centre for Policy Alternatives, the impact of poverty and underemployment on productivity in New Brunswick was between \$950 million and \$1.67 billion per annum – representing between 3% to 6% of annual economic output as measured by GDP (MacEwan & Saulnier, 2011). These findings are consistent with international research on the adverse impacts of income inequality. Recent work from the OECD argued that between 1985 and 2005, had income inequality not widened in the UK and the USA over that time, the growth rate would have been more than one fifth higher than it was (Cingano, 2014; OECD, 2015).

It is not surprising that these complex challenges have drawn the interest of regional and national policymakers, business leaders and economic development academics. Solutions to these concerns and to the declining workforce have focused on the areas of skills development for the local population, and focused extensively on issues related to the recruitment and retention of a skilled immigrant workforce to drive value creation and improve regional economic performance (see e.g. Atlantic Growth Advisory Group, 2018). More recently, the untapped economic and labour potential of the younger than average Atlantic Indigenous workforce has been highlighted as a potential solution (Atlantic Provinces Economic Council, 2018). Other important policy recommendations for the region have promoted investments in innovation – largely through research and development, and in infrastructure and regulatory development for reducing the market-related barriers in which businesses operate (ACOA-APECA, 2018).

Whilst these policy responses are important components for addressing the region's productivity puzzle, they risk overlooking the mechanisms by which human, social, intellectual and financial capitals lead to improved business outcomes, such as greater innovation, increased exporting and greater market penetration. These types of policies risk treating organizations and businesses, and what happens within them as 'black boxes', mysteriously transforming the KSAs of workers into aggregated, regional and national economic value.

Skills policies, including both those seeking to attract and retain higher skilled workers and those which seek to develop the existing stock of skills, are often deployed as "a social and economic panacea" (Keep & Mayhew, 2010). Skills policy has been expected to be the solution for lagging productivity, insufficient innovation by firms, weak relative economic performance, welfare dependency, widening income inequality, amongst other societal ills (Keep & Mayhew, 2010; Keep, Mayhew, & Payne, 2006; Leitch, 2006; Payne, 2012; Warhurst & Findlay, 2012). It rests on an underlying assumption of "simple, direct causal links between increases in stocks of human capital and subsequent economic outcomes" (Keep & Mayhew, 2010, p. 571). The underlying argument is that, if the state were to help employers by developing the workforce's skills, the employers will upgrade their production and technical requirements to more skill-

intensive processes (Keep & Mayhew, 2010). In other words, if a more highly skilled workforce were available, employers would naturally take advantage of the resource, and produce more complex goods and services thereby using the newly available higher skills. This pushes up the value of the work, the product, and economic outputs. Relatedly then, increasing the skills of low-end workers will improve their long-term labour market prospects as more employers will require and demand higher skilled workers (Keep & Mayhew, 2010; c.f. Leitch, 2006). Whilst laudable, the belief that increasing the supply of skilled labour encourages employers to upgrade their production and products, and that this will reduce the number of low skill, poor quality jobs may be overly optimistic (Keep et al., 2006; Snower, 1996).

There is little discussion of the nature and quality of work and employment or the role of employers in this process within the regional policy debate on economic growth, lagging productivity or the challenge of labour force retention. This emphasis on supply-side solutions fails to recognize the roles played by employing organizations in shaping the circumstances of value creation and the role of job quality in organizational and business outcomes. Value is created through the productive organizational activities of workers, employees and managers in organizations (Findlay, Thompson, Cooper, & Pascoe-Deslauriers, 2017). Employers and organizational decision-makers can, and do, make choices in how they define their value proposition, how to organize and run business operations, and consequently how to design work and jobs. Through these choices, employers adopt business models and practices which have implications for how value is created, how human, social and intellectual capital is attracted, developed and deployed in the workplace, and crucially, who shares in the gains of the value created (Findlay et al., 2017). The circumstances that workers find themselves in, both in the workplace and beyond, have implications for their wider societal participation and well-being, and critically, their retention in the region. The extant debate in the Atlantic region overlooks the quality of jobs and business practices for supporting economic growth and labour force retention objectives.

The concept of a good job extends beyond a job that provides sufficient remuneration for the person and her household's material needs (Warr, 2007). A good quality job includes a set of features of work which foster self-validation, self-development, well-being and participation of the worker (Findlay, Kalleberg, & Warhurst, 2013; Green, Felstead, & Gallie, 2015). It includes extrinsic features of work, such as remuneration, and contractual and hours stability. It also includes intrinsic features such as skills use, opportunities for development and training, and discretion over the intensity, pace and ordering of work tasks (Muñoz de Bustillo, 2011). A good quality job is positively associated with job satisfaction, although job satisfaction is a distinct concept (see e.g. Brown, Charlwood, & Spencer, 2012). Indeed, task discretion followed by consultative participation in decision-making are the most important factors impacting job satisfaction, followed by skills use and skills development (Gallie, 2013). What makes a good job is defined by what is good for the worker and recognizes that not all jobs have equal requirements and rewards (Green et al., 2015). Despite this, there is a general consensus amongst organizational, employment and medical researchers around what makes poor quality and bad jobs (Burgard & Lin, 2013; Findlay & Thompson, 2017; Heery & Salmon, 2000; Kalleberg, 2013; McGovern, Smeaton, & Hill, 2004; Vosko, 2006).

As argued above, good quality work has been found to be important for individual and societal outcomes. It is, however, also important for organizational outcomes. Poor quality work is

associated with increased disengaged and dissatisfied workers; low organizational commitment, overall job satisfaction and work satisfaction being the highest predictors of quit decisions (Griffeth, Hom, & Gaertner, 2000). Other predictors in meta-analyses of turnover include characteristics of the work environment, such as job content, stress, autonomy and work group cohesion (Griffeth et al., 2000), which are also important features of job quality. Poor quality work has adverse effects for psychological and physiological well-being (Lewchuk, Clarke, & de Wolff, 2008; Virtanen et al., 2005) and overall employee well-being (Green, Felstead, Gallie, & Inanc, 2013; Guest, 2017) with both sickness absence and presenteeism representing a direct cost to the organization as well as an indirect cost from loss of productive labour (Aronsson & Gustafsson, 2005; Burgard & Lin, 2013).

Importantly, overall job quality can improve employee satisfaction and engagement. Various facets of job quality, such as opportunities for decision-making, task discretion, skills development and autonomy, play important roles in fostering innovative work behaviours and discretionary effort (Damanpour, 1991; Fredrickson, 1986; Gallie, 2013; Marchington, 2015). Innovation has been widely argued to be an important driver of business competitiveness and establishing long-term competitive advantages (Burns & Stalker, 1994; Darroch & McNaughton, 2002; Roberts, 1998). However, innovation cannot merely be considered an outcome of organizational activities. The question arises as to how do innovations arrive?

In broad terms, innovation is a concept that encapsulates ‘any idea, practice or material artefact perceived to be new by the relevant unit of adoption’ (Zaltman, Duncan, & Holbek, 1973) and the ‘process of bringing together problem-solving ideas into use’ (Kanter, 1985). The process of innovation has been defined as, “the development and implementation of new ideas by people who over time engage in transactions with others within an institutional context” (Van de Ven, 1986, p. 591). It is a deliberately wide definition, covering the range of technical, product, process and administration innovations and recognizing both the role of context and relationships between people and their labour in the workplace. As a process, simplified here to consider idea generation, idea development/promotion and idea realisation (Janssen, 2004), innovating involves a diverse set of practices and skillsets, and varying levels of intra-organisational support (see e.g. Damanpour, 1991; Damanpour & Aravind, 2012; Janssen, van de Vliert, & West, 2004; Utterback, 1971). People engage in a range of interactions and individual processes as they develop, react and respond to, and modify these ideas in the context of their working lives. Indeed, features of the organisational and job context influence the extent to which individuals will come up with ideas, feel encouraged to engage in innovative work behaviours, and influence the usefulness of these behaviours (Janssen et al., 2004; Scott & Bruce, 1994; Stock, 2015). The innovation process begins with someone coming up with a problem-solving idea (or part of one), promoting their ideas to potential allies who may in turn develop and improve the idea, but people can realise and implement the idea (see Janssen, 2004). This requires that people apply different skills, energy levels and knowledge to the ideas, which they bring from their experience, backgrounds, and activities (Van de Ven, 1986).

The importance of skills, human capital – and thus of individual workers as central actors in the process of innovation is implicit in these debates. While managerial employees and science and technology employees are often seen as the main drivers of innovation (Eisenhardt & Martin, 2000; Roberts, 1998), the extant literature suggests that features that make good quality jobs are

also necessary components for employees – at any and all levels of the organization – to engage in innovating (see e.g. Damanpour, 2014; Damanpour & Aravind, 2012).

It is therefore crucial to consider the role of jobs, and of employers who create and design these jobs, in debates and discussions of innovation and economic development. Although the looming demographic crises in the Atlantic region, rightly, represent a concern for social and economy policy actors and for employers, it is insufficient to assume that supply side interventions can resolve the problems. This paper has argued that there are two central problems with the policy approach, both of which requiring greater research attention. Firstly, the responses to the existing socio-economic challenges rest largely on supply-side interventions that focus on recruiting skills workers, largely immigrants, and upgrading the existing stock of skill. As argued, these policies suggest that supply will drive new and upgrade existing demand. However, furthermore, it underemphasizes the challenges of labour market matching that efficiently allocates workers to appropriate jobs. Lastly, it fails to recognize the inherently human components and implicitly assumes that workers will come to the region but subsequently become immobile. While work is an exchange of effort for primarily financial and material rewards, these are not the only rewards or demands which workers seek from work (Rose, 2003). Secondly, this paper has argued that beyond just improving work for the sake of workers and society, there are organizational benefits that can aggregate up to regional benefits from the use of better quality employment practices. In drawing from national and international research on job quality, innovation – specifically workplace innovation – and organizational and human resource management practice, this area of research is one requiring greater attention and development.

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INTEGRATING ICT INTO HIGHER EDUCATION: ONSITE AND ONLINE STUDENTS' PERCEPTIONS IN A LARGE VS A SMALL UNIVERSITY⁴

For the past two decades, information and communication technologies (ICT) have transformed the ways professors teach and students learn. This paper aims to compare the perceptions of onsite students (blended mode) and of those taking the same courses on the Internet (online mode) in a large vs a small university. To guide the studies, a moderator-type theoretical research model was developed, out of which eight hypotheses were formulated. The model was tested in a field experiment in two universities located in two different countries in Canada: a large university with an enrollment of 48,000 students and a small university with an enrollment of 4,000 students. To collect data, we used a multi-method approach, that is, a Web survey involving open- and closed-ended questions. The samples were formed of 313 onsite and online students from the large university and of 192 onsite and online students from the small university. The quantitative data analysis was performed using a structural equation modeling software, that is, Partial Least Squares (PLS); the qualitative data were analyzed following a thematic structure using QSR NVivo software. In this paper we present a comparison between the two universities of the quantitative results (closed-ended questions) supported and enriched by the qualitative results of the students (open-ended questions).

Introduction

For the past two decades information and communication technologies (ICT) have transformed the ways professors teach and students learn. Some professors have actively shifted the information flow from a face-to-face mode (student listening, onsite presence) to an entirely online mode (student reading, onsite non presence); that is, they have designed courses and curricula offered completely online using the Internet and the Web. Others have developed the hybrid or blended mode (a combination of face-to-face and online activities; less student onsite presence, ongoing use of ICT both inside and outside the classroom). Hence, knowledge acquisition and dissemination have been re-conceptualized, and new methods developed in order to satisfy the rapidly evolving needs of a population of individuals in search of more knowledge, heterogeneous, and geographically distributed.

In today's global economy, organizations (including universities) who want to survive and strive to stay highly competitive must continually innovate at the human, material, and technological levels. Alavi and Leidner (2001) pointed out that, during the past decade, universities and corporate training facilities have at an increasing rate invested into ICT to improve education and training. Marshall (2002) added that actual classrooms are more and more enriched by technology. Some studies by the National Center for Education

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Statistics (Waits & Lewis, 2003), the Sloan Consortium (Allen & Seaman, 2004, 2005, 2006, 2007, 2008, 2009, 2010), Aggarwal and Legon (2006), Borstorff and Lowe (2007), Martz and Shepherd (2007), Kinuthia and Dagada (2008), and Washburn (2011) showed a growing appeal and acceptance of online learning. On the other hand, the Babson Survey Research Group (Allen & Seaman, 2015) noted that the growth rate was a little bit declining since a few years. But the last reports from Babson Survey Research Group (Allen & Seaman, 2017; Seaman et al., 2018) found that distance education enrollment growth is increasing. Other studies by Kim and Bonk (2006), Gomez et al. (2007), Eynon (2008), Young and Ku (2008), Steele (2008), Moskal and Dziuban (2011), as well as the Garrison and Vaughan's (2008) book showed the growth of blended learning. Further, it is argued by Giddens (1999) that one of the more important functions of the university is to allow people to play a significant role in today's new economy. Thus, universities, faculties, and professors are currently looking for ways to improve teaching and curricula, as well as develop new modes capable of satisfying the actual and future needs of organizations and societies. Out of their recursive attempts, the four fundamental questions often revisited are the following: (1) What are we teaching? (2) What should we be teaching? (3) What is the best way to teach it (pedagogy)? and (4) What are the impacts on students?

The studies described in this paper aim at helping universities to stay highly competitive in the current global shift in higher education, an approach that is innovative in its exploration of new directions regarding the last two above-mentioned questions. So we examine the relation between students' learning outcomes (undergraduate and graduate students) and learning environments integrating ICT. Also, specific relations between student onsite presence and student online presence are examined as to identify their effect on the basic relation between learning environments and students' learning outcomes. More particularly, these two studies compare onsite technology-rich hybrid or blended learning environments and online learning environments from a large university with those from a small university located in two different countries in Canada. Moreover, these studies bring to the foreground several moderator variables related to students' characteristics (psychology) and professors' pedagogy in order to better understand the relation between learning environments and students' learning outcomes from the two different universities.

Building on questions 3 and 4 raised previously (professor's pedagogy and impacts on students), these studies focus on the following three research questions: (1) Are there differences between learning outcomes of onsite students and of those taking the same courses online from a large vs a small university? If so, which ones? (2) Do students' characteristics influence the relation between learning environments and students' learning outcomes, and are there differences in this influence between onsite and online students from a large vs a small university? If so, which ones? and (3) Does professors' pedagogy influence the relation between learning environments and students' learning outcomes, and are there differences in this influence between onsite and online students from a large vs a small university? If so, which ones?

This paper builds on a framework suggested by Fillion (2004) in the conduct of hypothetico-deductive scientific research in organizational sciences, and it is structured as follows. First, the theoretical background supporting the two studies is examined; second, the methodology followed to conduct the studies is presented; and finally, the results of the studies are reported, compared and discussed.

Theoretical Background

The two studies conducted and compared in this paper are theoretically-based on Leidner and Jarvenpaa's, and Phipps and Merisotis' key research works. On the basis of three case studies, Leidner and Jarvenpaa (1993) developed a theoretical research model for other researchers to test in future studies. And, in a literature review, Leidner and Jarvenpaa (1995) inventoried numerous educational variables to be examined in future studies according to different scenarios using ICT. Several of the variables suggested by these

authors are used in our two studies.

In their literature review on distance learning effectiveness in the 1990's, Phipps and Merisotis (1999) pointed out that the studies comparing the distance ICT-based learning environments with conventional learning environments (face-to-face without ICT use) fall into three categories: (1) students' results (performance); (2) students' attitude toward learning in these two types of environments; and (3) students' general satisfaction. So we use the last two categories (learning effectiveness and satisfaction) as dependent variables in our two studies.

Of the 8,110 papers published over a period of 15 years in the journals and reviews examined, Chin et al. (2003) found only 74 that contained moderator variables. Moreover, several IS dominant theories (e.g., Davis' 1989 Technology Acceptance Model (TAM) and Doll and Torkzadeh's 1991 user participation/involvement model; quoted in Chin et al., 2003, p. 192) as well as the streams of research that have extended these models (e.g., Barki et al., 2007; Bhattacharjee & Sanford, 2006; Brown et al., 2010; Carswell & Venkatesh, 2002; Chin et al., 2008; Davis & Venkatesh, 2004; Devaraj et al., 2008; Hartwick & Barki, 1994; Karahanna et al., 2006; Limayem et al., 2007; Morris & Venkatesh, 2010; Venkatesh & Davis, 2000; Venkatesh & Speier, 1999; Venkatesh & Speier, 2000; Venkatesh & Johnson, 2002; Venkatesh et al., 2003; Venkatesh et al., 2008) suggest that moderator variables are an important avenue of future development. Furthermore, numerous researchers within the IS field have suggested that models using moderator variables be tested (Anderson, 1985, Doll & Torkzadeh, 1989, Ives & Olson, 1984, McKeen et al., 1994, Sambamurthy & Zmud, 1999, Tait & Vessey, 1988; quoted in Chin et al., 2003, p. 192; Barki et al., 2007; Brown et al., 2010) as have researchers in other fields (Chin et al., 2003). Hence, most of the variables identified by Leidner and Jarvenpaa (1993, 1995) are used as moderator variables in our two studies. The resulting theoretical research model is shown in Figure 1.

Figure 1 shows that the theoretical research model which guides the studies is articulated around an independent construct, learning environments, a dependent construct, student learning outcomes, as well as two moderator constructs, student characteristics and professor pedagogy. And, on the basis of this theoretical research model, eight research hypotheses are formulated.

H1: Students whose onsite presence is required to take courses (blended mode) find learning more effective than those whose onsite presence is not required (online mode).

H2: Students whose onsite presence is required to take courses (blended mode) are more satisfied than those whose onsite presence is not required (online mode).

H3: Students' autonomy has an influence on the relation between learning environments (students' onsite presence and non-presence) and their learning outcomes ((a) learning effectiveness; and (b) satisfaction), and (c) this influence is more pronounced for students whose onsite presence is not required.

H4: Students' anxiety has an influence on the relation between learning environments (students' onsite presence and non-presence) and their learning outcomes ((a) learning effectiveness; and (b) satisfaction), and (c) this influence is more pronounced for students whose onsite presence is not required.

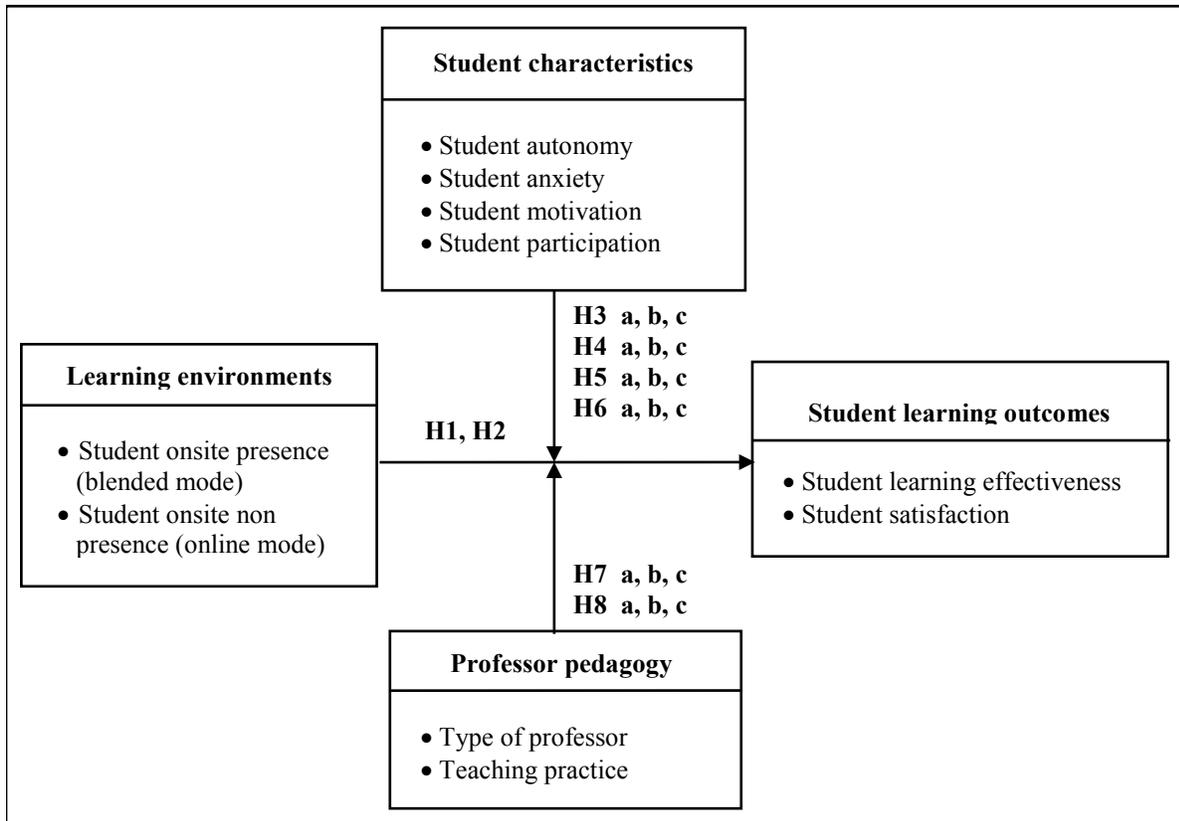
H5: Students' motivation has an influence on the relation between learning environments (students' onsite presence and non-presence) and their learning outcomes ((a) learning effectiveness; and (b) satisfaction), and (c) this influence is more pronounced for students whose onsite presence is not required.

H6: Students' participation has an influence on the relation between learning environments (students' onsite presence and non-presence) and their learning outcomes ((a) learning effectiveness; and (b) satisfaction), and (c) this influence is more pronounced for students whose onsite presence is not required.

H7: Type of professor has an influence on the relation between learning environments (students' onsite presence and non-presence) and students' learning outcomes ((a) learning effectiveness; and (b) satisfaction), and (c) this influence is more pronounced for students whose onsite presence is required.

H8: Teaching practice has an influence on the relation between learning environments (students' onsite presence and non-presence) and students' learning outcomes ((a) learning effectiveness; and (b) satisfaction), and (c) this influence is more pronounced for students whose onsite presence is required.

Figure 1
Theoretical Research Model



In the next section of the paper, we describe the methodologies followed to conduct the studies.

Methodology

Sample and Data Collection

Large University Study

Regarding the first study, the theoretical research model depicted in Figure 1 was tested in a field experiment at the Faculty of Administration of a large Canadian university with an enrollment of 48,000 students. The sample was composed of students of five undergraduate and three graduate courses, which were offered at the same university in the two modes taken into account in the study: hybrid mode and online mode. Students were not randomly assigned, that is, for each course selected, the students were asked to participate in the study. The study was spread over two semesters, fall and winter, and in each semester

four courses were studied. Each course had to meet the four following criteria: (1) to use a similar set of ICT in the two modes; (2) to be taught by a different professor in the two modes; (3) to have the same course content in the two modes; and (4) to have, as much as possible, a similar group size in the two modes. In addition, each course was selected so that groups of students in the two modes were the most homogeneous possible in terms of age and ICT experience. Finally, the course selection was made in order to cover a large area of disciplines offered at the Faculty of Administration of the university chosen for the study. Thus, the sample of the study consisted of 841 students, 438 (242 in fall and 196 in winter) in hybrid mode courses and 403 (198 in fall and 205 in winter) in online mode courses.

Three weeks before the end of each semester of the data collection, students were asked to fill out an electronic survey on a Web site. To that end, an e-mail, including an URL and a password allowing access to the electronic survey, was sent to students. As follow up, ten days after the students had been asked to fill out the survey on the Web site, an e-mail was sent to students relating the importance of filling out the electronic survey for the advancement of scientific knowledge on integration of ICT into higher education. Finally, a few days later, all professors were asked to relay the importance of the study to students during class or in the discussion forums of the online courses.

In the fall semester, 174 students (113, hybrid mode; 61, online mode) out of 440 completed the electronic survey for a response rate of 40%; in the winter semester, 139 students (70, hybrid mode; 69, online mode) out of 401 completed the electronic survey for a response rate of 35%. Overall, 313 students (183, hybrid mode; 130, online mode) out of 841 completed the electronic survey on the Web site for a global response rate of 37%. And, of these 313 students, 262 (156, hybrid mode; 106, online mode) completed the qualitative section (open-ended questions) of the Web survey for a response rate of 84%.

Small University Study

As for the second study, the theoretical research model depicted in Figure 1 was tested in a field experiment at a small Canadian university with an enrollment of 4,000 students. The sample was formed of students of eight undergraduate and seven graduate courses, which were offered at the university in the two modes taken into account in the study: blended mode and online mode. Students were not randomly assigned, that is, for each course selected, the students were asked to participate in the study. The study was spread over two semesters: winter and fall. Each course had to meet the four following criteria: (1) to use a similar set of ICT in the two modes (computer, e-mail, chat, discussion forum, Web browser, Internet-based software, videoconferencing system, etc.); (2) to be taught by a different professor in the two modes; (3) to have the same course content in the two modes; and (4) to have, as much as possible, a similar group size in the two modes. In addition, each course was selected so that groups of students in the two modes were the most homogeneous possible in terms of age and ICT experience. Finally, the course selection was made in order to cover a large area of administration disciplines offered at the university chosen for the study. Thus, the sample of the study consisted of 192 students, 105 (42 in winter and 63 in fall) in blended mode courses and 87 (34 in winter and 53 in fall) in online mode courses.

Three weeks before the end of each semester of the data collection, students were asked to fill out an electronic survey on a Web site. To that end, an e-mail, including an URL and a password allowing access to the electronic survey, was sent to students. As follow up, ten days after the students had been asked to fill out the survey on the Web site, an e-mail was sent to students relating the importance of the study for the advancement of scientific knowledge on integration of ICT into higher education. Finally, a few days later, all professors were asked to relay the importance of the study to students during class or in the discussion forums of the online courses.

In the winter semester, 76 students (42, blended mode; 34, online mode) out of 392 completed the electronic survey for a response rate of 19.5%; in the fall semester, 116 students (63, blended mode; 53,

online mode) out of 508 completed the electronic survey for a response rate of 22.9%. Overall, 192 students (105, blended mode; 87, online mode) out of 900 completed the electronic survey on the Web site for a global response rate of 21.3%. And, of these 192 students, 174 (98, blended mode; 76, online mode) completed the qualitative section (open-ended questions) of the Web survey for a response rate of 90.6%.

Constructs Measurements

The learning environments construct was dummy coded with students' onsite presence (blended mode) as "1" and students' onsite non-presence (online mode) as "2". And to measure all the variables that made up the other constructs, with the exception of teaching practice, we used various measures validated by other authors in past studies. They are presented in Table 1.

Table 1	
Measures of Variables	
<i>Variables</i>	<i>Measures and (# of items)</i>
Learning effectiveness^a	Alavi (1994); Centra (1979); Hiltz (1988) (12 items)
Student satisfaction	Hobbs and Osburn (1989) (15 items)
Student autonomy^b	Hackman and Oldham (1975) (2 items); Wilson (1990) (4 items)
Student anxiety	Spielberger et al. (1970) (20 items)
Student motivation	Hackman and Oldham (1975) (10 items)
Student participation	Green and Taber (1980) (5 items)
Type of professor^b	Hiltz (1990) (11 items); Thach and Murphy (1995) (2 items)
Teaching practice^c	Chickering and Gamson (1987) (7 items)

^aThe measure of this variable was formed using 12 items developed by Alavi (1994) and derived from Hiltz's (1988) survey on the basis of Centra's (1979) theoretical summary.

^bThe measure of this variable was formed using items of two instruments. Following Keller and Dansereau (2001) who showed the importance of retesting the validity and reliability of an instrument after the addition or removal of some items, we pre-tested the modified instrument with a sample of 63 students.

^cThe seven principles of a good teaching practice proposed by Chickering and Gamson (1987) were used for the first time to measure teaching practice in a large study conducted by Fillion (2005) (see also Fillion et al., 2010) and the new instrument was then pre-tested with a sample of 63 students. This one showed a high level of validity and reliability.

Data Analysis

The quantitative data analysis of the two studies was performed using a structural equation modeling software, Partial Least Squares (PLS-Graph 3.0). And the PLS bootstrap resampling procedure was used with an iteration of 100 sub-sample extracted from the initial samples (313 students, large university; 192 students, small university) to ensure the stability of each model developed in order to test the research hypotheses (the interested reader is referred to a more detailed exposition of bootstrapping (see Chin, 1998; Efron & Tibshirani, 1993)). Some analyses were also performed using the Statistical Package for the Social Sciences (SPSS) software. As for the qualitative data analysis of the two studies, it was made using the Qualitative Solutions & Research NVivo (QSR NVivo) software. We performed thematic analyses on the qualitative data provided by students from the two universities; the results are presented on the form of within-case/cross-case matrix as suggested by Miles and Huberman (1994). The results of both quantitative and qualitative data analyses follow.

Results

Constructs Reliability

To ensure the reliability of a construct using PLS, we must verify the three following properties: individual item reliability, internal consistency, and discriminant validity (Yoo and Alavi, 2001; see the paper for more

details).

Large University Study

To verify individual item reliability, a confirmatory factor analysis (CFA) was performed on the eight variables of the moderator and dependent constructs. After the first iteration of the CFA, only some items were retired of the following variables given their loadings were inferior to 0.50: type of professor (1 item), student anxiety (4 items), student motivation (4 items), learning effectiveness (2 items), and student satisfaction (1 item). And after the second iteration of the CFA, no item was withdrawn. Indeed, in the whole, items had high loadings, that is between 0.65 and 0.87, which suppose a high level of internal consistency of their corresponding variables. In addition, loadings of each variable were superior to cross-loadings with other variables of the model. The first criterion of discriminant validity was therefore satisfied.

And to get composite reliability indexes and average variance extracted (AVE) in order to satisfy the second criterion of discriminant validity as well as to verify internal consistency of the variables, we used PLS bootstrap resampling procedure with an iteration of 100 sub-sample extracted from the initial sample (313 students). PLS analysis indicates that all square roots of AVE (boldfaced elements on the diagonal of the correlation matrix) are higher than the correlations with other variables of the model. In other words, each variable shares more variance with its measures than it shares with other variables of the model. Consequently, discriminant validity is then verified. Finally, as supposed previously, PLS analysis showed high composite reliability indexes for all variables of the theoretical research model. The variables have therefore a high internal consistency, with composite reliability indexes ranging from 0.81 to 0.93.

Small University Study

To verify individual item reliability, a confirmatory factor analysis (CFA) was performed on the eight variables of the moderator and dependent constructs. Only one iteration of the CFA was needed and no item was withdrawn. Indeed, in the whole, items had high loadings, that is, between 0.62 and 0.86, which suppose a high level of internal consistency of their corresponding variables. In addition, loadings of each variable were superior to cross-loadings with other variables of the model. The first criterion of discriminant validity was therefore satisfied.

And to get composite reliability indexes and average variance extracted (AVE) in order to satisfy the second criterion of discriminant validity and to verify internal consistency of the variables, we used the PLS bootstrap resampling procedure with an iteration of 100 sub-sample extracted from the initial sample (192 students). PLS analysis indicates that all square roots of AVE (boldfaced elements on the diagonal of the correlation matrix) are higher than the correlations with other variables of the model. In other words, each variable shares more variance with its measures than it shares with other variables of the model. Consequently, discriminant validity is verified. Finally, as supposed previously, PLS analysis showed high composite reliability indexes for all variables of the theoretical research model. The variables have therefore a high internal consistency, with composite reliability indexes ranging from 0.70 to 0.94.

Test of Hypotheses

For the two studies, to test hypotheses involving independent and dependent variables (H1-H2), we developed a PLS model similar to those of Fillion (2005), Fillion et al. (2010), and Yoo and Alavi (2001). And to test hypotheses involving moderator variables (H3-H8), we developed several PLS models according to the Chin et al.'s (2003) and Carte and Russell's (2003) procedures. We used PLS bootstrap resampling procedure with an iteration of 100 sub-sample extracted from the initial samples (313 students, large university; 192 students, small university) to ensure the stability of each of these models.

Table 2 presents a summary of the test of hypotheses for the large university study.

Table 2 Summary of the Test of Hypotheses		
<i>Hypotheses</i>	<i>Results</i>	<i>Software (Sig.)</i>
H1 Learning effectiveness	Not supported	SPSS ^a (0.692) PLS (0.022)
H2 Satisfaction	Not supported ^c	SPSS ^a (0.006**) PLS (0.059**)
H3 Autonomy	(a) Supported (b) Not supported (c) Supported	PLS (-0.113*) PLS (-0.030) SPSS ^b (0.000****)
H4 Anxiety	(a) Not supported (b) Not supported (c) Not supported ^c	PLS (0.049) PLS (0.000) SPSS ^b (0.000****)
H5 Motivation	(a) Not supported (b) Not supported ^d (c) Not supported ^c	PLS (-0.038) PLS (-0.049†) SPSS ^b (0.000****)
H6 Participation	(a) Supported (b) Supported (c) Not supported ^c	PLS (-0.155****) PLS (-0.116**) SPSS ^b (0.000****)
H7 Type of professor	(a) Not supported (b) Not supported ^d (c) Not supported ^c	PLS (-0.045) PLS (-0.037†) SPSS ^b (0.000****)
H8 Teaching practice	(a) Not supported (b) Not supported ^d (c) Not supported ^c	PLS (0.034) PLS (-0.034†) SPSS ^b (0.000****)

^aBonferroni's One-Way Anova multiple comparisons test at a level of significance $p \leq 0.05$ was used to verify the difference in group means. Bonferroni's test takes into account inequality in group sizes in adjusting the selected alpha level before each separate test to control the overall Type I error rate.

^bBox's M test of equality of covariance matrix was used to verify whether there is a difference in the interaction effect of the moderator variable between onsite and online students (blended mode vs online mode).

^cThe test is significant, but the result is in opposition with which is formulated in the hypothesis.

^dThe hypothesis is not supported given the level of significance of the test is too low ($p < 0.10$).

† $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; **** $p < 0.001$.

As shown in Table 2, online students from the large university were more satisfied than those onsite ($p < 0.01$). As for the moderator variables, autonomy had an influence on the relation between learning environments and student learning effectiveness ($p < 0.05$), and this influence was more pronounced for online students than for those onsite ($p < 0.001$). And participation had an influence on the relation between learning environments and student learning effectiveness ($p < 0.001$) and satisfaction ($p < 0.01$). To summarize, the quantitative data analysis of the study provided very interesting and somewhat surprising results, particularly with regard to students' satisfaction and professors' pedagogy.

Small University Study

Table 3 presents a summary of the test of hypotheses for the small university study.

Table 3 Summary of the Test of Hypotheses	
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<i>Hypothesis</i>	<i>Result</i>	<i>Software (Sig.)</i>
H1 Learning effectiveness	Not supported ^c	SPSS ^a (0.000****) PLS (0.180*)
H2 Satisfaction	Not supported ^c	SPSS ^a (0.000****) PLS (0.362*)
H3 Autonomy	(a) Supported (b) Supported (c) Supported	PLS (0.521*) PLS (0.841*) SPSS ^b (0.000****)
H4 Anxiety	(a) Supported (b) Supported (c) Not supported	PLS (0.759**) PLS (0.920*) SPSS ^b (0.957)
H5 Motivation	(a) Not supported (b) Supported (c) Supported	PLS (-0.130) PLS (0.867*) SPSS ^b (0.000****)
H6 Participation	(a) Not supported (b) Supported (c) Supported	PLS (-0.077) PLS (-0.351*) SPSS ^b (0.000****)
H7 Type of professor	(a) Not supported ^d (b) Not supported ^d (c) Not supported	PLS (-0.527†) PLS (-0.320†) SPSS ^b (0.283)
H8 Teaching practice	(a) Not supported ^d (b) Not supported ^d (c) Not supported	PLS (-0.469†) PLS (-0.276†) SPSS ^b (0.482)

^aBonferroni's One-Way Anova multiple comparisons test at a level of significance $p \leq 0.05$ was used to verify the difference in group means. Bonferroni's test takes into account inequality in group sizes in adjusting the selected alpha level before each separate test to control the overall Type I error rate.

^bBox's M test of equality of covariance matrix was used to verify whether there is a difference in the interaction effect of the moderator variable between onsite and online students (blended mode vs online mode).

^cThe test is significant, but the result is in opposition with which is formulated in the hypothesis.

^dThe hypothesis is not supported given the level of significance of the test is too low ($p < 0.10$).

† $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; **** $p < 0.001$.

Table 3 shows that online students from the small university found learning more effective ($p < 0.05$) and they were more satisfied than those onsite ($p < 0.05$). As for the moderator variables, autonomy had an influence on the relation between learning environments and student learning effectiveness ($p < 0.05$) and satisfaction ($p < 0.05$), and this influence was more pronounced for online students than for those onsite ($p < 0.001$). Anxiety also had an influence on the relation between learning environments and student learning effectiveness ($p < 0.01$) and satisfaction ($p < 0.05$), but this influence was not more pronounced for online students than for those onsite. Motivation and participation had an influence on the relation between learning environments and student satisfaction ($p < 0.05$), and this influence was more pronounced for online students than for onsite students ($p < 0.001$). To summarize, the quantitative data analysis of the study provided very interesting and somewhat surprising results, particularly with regard to students' learning effectiveness and satisfaction, as well as professors' pedagogy.

In fact, in the whole, the quantitative results observed in this study involving a small Canadian university are consistent with those observed in the previous study involving a large Canadian university (see Fillion, 2005; Fillion et al., 2007; Fillion et al., 2008; Fillion et al., 2009; Fillion et al., 2010). So these results allow us to conclude, "cautiously" of course, that ICT use at the university (onsite vs online) has relatively similar impacts on students and that students have relatively similar behaviors when using ICT, whether in a large or in a small university. Assuredly, future similar studies are needed to reinforce these findings. The quantitative results got in these two studies are also relatively consistent with the body of research which compares these two learning modes: blended learning vs online learning. The results of the qualitative data analyses follow.

Open-Ended Questions

Large University Study

In the first open-ended question of the Web survey students were asked to indicate what they appreciated the most in the course. Table 4 shows the themes extracted from the thematic analysis of the onsite and online students' responses. Boldfaced themes represent the interrelation between onsite and online students' responses.

Table 4			
The Elements Most Appreciated by Students in the Course When Using ICT			
<i>Onsite Students (n = 156)</i>		<i>Online students (n = 106)</i>	
<i>Themes</i>	<i>n</i>	<i>Themes</i>	<i>n</i>
Professor	62	Professor	27
Course usefulness	59	Course flexibility and schedule	24
Access to the course material on the Web site	19	Course material	20
Course material	16	Prompt feedback	19
ICT use	16	Assignments	17
Assignments	11	Discussion forums	16
Student/student, student/professor interaction	9	Course usefulness	15
Discussion forums	8	Distance course via the Internet	14
Nothing	4	ICT use	13
Course structure	4	Access to the course material on the Web site	8
Evaluations	4	Course structure	6
Participation	3	Student/student, student/professor interaction	4
Help	3	Evaluations	3
Onsite sporadic presence	2	Collaboration	1
Prompt feedback	2	Participation	1
Learning	2	Fulfillment	1
Collaboration	1	Buying some things on the Internet	1
Freedom of expression	1	Nothing	1

We can see in Table 4 that the elements most appreciated by both onsite and online students (in order of priority) are professor, course usefulness, course material, ICT use, assignments, access to the course material on the Web site, discussion forums, prompt feedback, student/student and student/professor interaction, course structure, evaluations, nothing, participation, and collaboration. Thus, we can conclude that whether or not students come to class to take courses, when the same set of ICT is used, they appreciate the same elements related to these courses. And, among the elements they appreciate the most, professor and course usefulness in everyday life and for their career are by far at the lead. Clearly, professors still take a predominant place in the formation of students at the beginning of the 21st century.

In the second question, students were asked to suggest ways of improving the course. The themes derived from the thematic analysis of the onsite and online students' responses are presented in Table 5. Boldfaced themes represent the interrelation between onsite and online students' responses.

Table 5			
The Elements that Students Suggest to Improve in the Course When Using ICT			
<i>Onsite students (n = 156)</i>		<i>Online students (n = 106)</i>	
<i>Themes</i>	<i>n</i>	<i>Themes</i>	<i>n</i>
Professor	41	Course material	21
Presentation of the material	38	Professor	18
Course content	22	Nothing	15
ICT use	21	Presentation of the material	12
Amount of work	16	Assignments	11
Assignments	13	Course structure	10
Student/student, student/professor interaction	8	Evaluations	8
Evaluations	7	Web site	8
Course material	7	Amount of work	7
Course organization	7	Discussion forums	7
Classroom	5	Feedback	5
Discussion forums	4	Student/student, student/professor interaction	4
Nothing	4	Technical aspects	1
Group size	2	Course content	1
Attribution of the courses to professors	1	Correction of assignments and exams (corrector)	1
Discipline	1	WebCT use	1
WebCT use	1		

The results in Table 5 show that the elements the students want improved in the course (in order of priority) are professor, presentation of the material, course material, assignments, amount of work, course content, nothing, evaluations, student/student and student/professor interaction, discussion forums, and WebCT use. Thus, we can conclude that whether or not the students come to class to take courses, when the same set of ICT is used, generally both sets of students suggest improving the same elements related to these courses. And, of the elements proposed, professor and presentation of the material are by far at the lead. As a result, whether the students take courses onsite or online, they put crucial importance on the professor and his/her teaching practice, as much to appreciate them when they are satisfied (as we have seen in the analysis of the first open-ended question previously in Table 4) as to criticize them when they are dissatisfied (as we can see in Table 5).

The third open-ended question of the Web survey asked students whether the onsite presence provided benefits to them with the integration of ICT into higher education, and why? The themes extracted from the thematic analysis of the onsite and online students' responses are regrouped in Table 6. Boldfaced themes represent the interrelation between onsite and online students' responses.

Table 6			
To What Extent Students' Onsite Presence Is Advantageous When Using ICT			
<i>Onsite students (n = 156)</i>		<i>Online students (n = 106)</i>	
<i>Themes</i>	<i>n</i>	<i>Themes</i>	<i>n</i>
Advantageous	4	Advantageous	1
Allows a better understanding of the material	55	Allows a better understanding of the material	25

ICT complement the conventional classroom	26	It depends for which course and type of student	15
Promotes student/student and student/professor interaction	21	Promotes student/student and student/professor interaction	9
If professor is not just reading PowerPoint slides	11	If professor is not just reading PowerPoint slides	5
Allows social contact	9	Allows social contact	4
It depends for which course and type of student	8	Allows having more information	4
No interest without onsite presence	6	Some students need onsite presence to succeed	2
Some students need onsite presence to succeed	1	Promotes student motivation	2
If the network is well functioning	1	It depends on undergraduate/graduate course	1
Brings a personal satisfaction	1	Promotes collaboration between students	1
		Onsite and online formation are complementary	1
<i>Non-advantageous</i>	2	<i>Non-advantageous</i>	11
We can learn as well at home with a book	14	ICT allow taking courses at a distance	12
Many students are playing with their laptop without listening to the professor	5	We can learn as well at home with a book	8
ICT allow taking courses at a distance	3	Much waste of time onsite	4
Professors have some difficulties to use ICT	1	Some professors do not have a good teaching practice	1
All the material is on the Web site	1		
Much waste of time onsite	1		
<i>Neutral (more or less advantageous)</i>	1	<i>Neutral (more or less advantageous)</i>	1
No time to go to class, too much work	1		

As shown in Table 6, students' responses to this question are regrouped in three categories: advantageous, non-advantageous, and more or less advantageous. In the first category, the two themes that are by far at the lead are that onsite presence allows a better understanding of the material and promotes student/student and student/professor interaction. As for the second category, the two themes that are most evident are that the students can learn as well at home with a book and that ICT allow students to take courses at a distance without onsite presence. For the third category, there is no interrelation between onsite and online students' responses.

In the fourth open-ended question of the survey, students were asked to indicate the impacts of using ICT into higher education on students' characteristics (autonomy, anxiety, motivation, and participation). Table 7 shows the themes extracted from the thematic analysis of the onsite and online students' responses. Boldfaced themes represent the interrelation between onsite and online students' responses.

Table 7			
The Impacts of Students' Characteristics When Using ICT			
<i>Onsite students (n = 156)</i>		<i>Online students (n = 106)</i>	
<i>Themes</i>	<i>n</i>	<i>Themes</i>	<i>n</i>
<i>Autonomy</i>			
ICT increase autonomy	34	ICT increase autonomy	32
Autonomous students appreciate more			

distance courses	1		
Anxiety			
ICT increase anxiety	13	ICT increase anxiety	12
ICT decrease anxiety	6	ICT decrease anxiety	6
		Students have no apprehension about ICT	1
Motivation			
ICT increase motivation	22	ICT increase motivation	28
ICT decrease motivation	2	ICT decrease motivation	4
Onsite presence can have an influence on student motivation	1		
Participation			
ICT increase participation	15	ICT increase participation	9
ICT decrease participation	9	ICT decrease participation	2
Others			
These characteristics have an influence on student learning outcomes	34	These characteristics have an influence on student learning outcomes	25
ICT use at the university is excellent for the workplace	6	No impact	5
No impact	6	It depends on students	2
I don't know	3	ICT use at the university is excellent for the workplace	1
ICT use brings a certain security	2	Major impacts	1
		I don't know	1

As shown in Table 7, the three impacts that have been by far the most important for students are that ICT use at the university increases the level of autonomy and motivation, and that the students' characteristics (autonomy, anxiety, motivation, and participation) taken into account in this study have an influence on their learning outcomes. The two next most important impacts for students of the two modes are that ICT use at university increases their level of anxiety and participation.

Finally, in the fifth and last open-ended question of the Web survey, students were asked to indicate the impacts of using ICT into higher education on professors' pedagogy (type of professor and teaching practice). The themes derived from the thematic analysis of the onsite and online students' responses are regrouped in Table 8. Boldfaced themes represent the interrelation between onsite and online students' responses.

Table 8			
The Impacts of Professors' Pedagogy When Using ICT			
Onsite students (n = 156)		Online students (n = 106)	
Themes	n	Themes	n
Type of professor (professor must:)			
Be dynamic to keep students' interest	32	Make good use of ICT to bring motivation to students	25
Make good use of ICT to bring motivation to students	29	Be dynamic to keep students' interest	24
Get more familiarized with ICT	15	Be there for students	22
Be there for students	9	Have a well-organized course	16
Be very engaged	7	Get more familiarized with ICT	6
Have a well-organized course	6	Be very engaged	1

Promote ICT use	4	Promote ICT use	1
Be confident	2		
Teaching practice (professor must:)			
Use active learning techniques	27	Use active learning techniques	22
Motivate students	9	Provide prompt feedback	10
Establish links between theory and real life	2	Motivate students	2
Provide prompt feedback	2		
Promote student/student and student/professor interaction	1		
Others			
Very important impacts	6	Few impacts	7
ICT use provides students with a good experience	3	Very important impacts	1
Professors' pedagogy has an influence on student learning outcomes	2	No impact	1
Most of the professors do not have a good pedagogy	2		
Technology is too present in the courses	2		
No impact	2		

Table 8 shows that the four impacts that have been by far the most important for students are: when we use ICT at the university, professors must be dynamic to keep students' interest, they must make good use of ICT to bring motivation to students, use active learning techniques, and be there for students. We can see here that these impacts related to professors and their teaching practices (the two variables taken into account in this study to assess the quality of professors' pedagogy) are of crucial importance to students. And the next most important impacts for students of the two modes are that, when professors are using ICT at the university, they must have a well-organized course and get more familiarized with ICT.

Small University Study

In the first open-ended question of the Web survey students were asked to indicate what they appreciated the most in the course. Table 9 shows the themes extracted from the thematic analysis of the onsite and online students' responses. Boldfaced themes represent the interrelation between onsite and online students' responses.

Table 9			
The Elements Most Appreciated by Students in the Course When Using ICT			
<i>Onsite students (n = 98)</i>		<i>Online students (n = 76)</i>	
<i>Themes</i>	<i>n</i>	<i>Themes</i>	<i>n</i>
Professor	47	Professor	31
Course usefulness	38	Course flexibility and schedule	19
Access to the course material on the Web site	13	Course material	16
Course material	12	Prompt feedback	14
ICT use	12	Assignments	10
Assignments	10	Discussion forums	10
Student/student and student/professor interaction	8	Course usefulness	9
Discussion forums	6	Distance course via the Internet	8

Nothing	4	ICT use	8
Course structure	4	Access to the course material on the Web site	7
Evaluations	4	Course structure	4
Participation	3	Student/student and student/professor interaction	4
Help	3	Evaluations	3
Prompt feedback	2	Collaboration	1
Learning	2	Participation	1
Collaboration	1	Fulfillment	1
Freedom of expression	1	Nothing	1

We can see in Table 9 that the elements most appreciated by both onsite and online students (in order of priority) are professor, course usefulness, course material, ICT use, assignments, access to the course material on the Web site, discussion forums, prompt feedback, student/student and student/professor interaction, course structure, evaluations, nothing, participation, and collaboration. We can then conclude that whether or not students come to class to take courses, when the same set of ICT is used, they appreciate the same elements related to these courses. And, among the elements they appreciate most, professor and course usefulness in everyday life and for their career are by far at the lead. Clearly, professors still take a predominant place in the formation of students at the beginning of the 21st century.

In the second question, it was asked of students to suggest ways of improving the course. The themes derived from the thematic analysis of the onsite and online students' responses are presented in Table 10. Boldfaced themes represent the interrelation between onsite and online students' responses.

The results at Table 10 show that the elements the students want improved in the course (in order of priority) are professor, presentation of the material, course material, assignments, amount of work, course content, nothing, evaluations, student/student and student/professor interaction, discussion forums, and Desire2Learn (D2L) use. Thus, we can conclude that whether or not the students come to class to take courses, when the same set of ICT is used, generally both groups of students suggest improving the same elements related to these courses. And, of the elements proposed, professor and presentation of the material are by far at the lead. As a result, whether the students take courses onsite or online, they put crucial importance on the professors and their teaching practice, as much to appreciate them when they are satisfied (as we have seen previously in the analysis of the first question in Table 9) as to criticize them when they are dissatisfied (as we can see in Table 10).

Table 10			
The Elements that Students Suggest to Improve in the Course When Using ICT			
<i>Onsite students (n = 98)</i>		<i>Online students (n = 76)</i>	
<i>Themes</i>	<i>n</i>	<i>Themes</i>	<i>n</i>
Professor	27	Course material	16
Presentation of the material	21	Professor	14
Course content	16	Nothing	10
ICT use	14	Presentation of the material	9
Amount of work	13	Assignments	8
Assignments	11	Course structure	8
Student/student and student/professor interaction	7	Evaluations	7
Evaluations	6	Web site	5

Course material	6	Amount of work	4
Course organization	6	Discussion forums	4
Classroom	5	Feedback	3
Discussion forums	4	Student/student and student/professor interaction	3
Nothing	3	Technical aspects	2
Group size	1	Course content	1
Attribution of the courses to professors	1	Correction of assignments and exams (corrector)	1
Discipline	1	D2L use	1
D2L use	1		

The third open-ended question of the Web survey asked students if the onsite presence provided benefits to them with the integration of ICT into higher education, and why? The themes extracted from the thematic analysis of the onsite and online students' responses are regrouped in Table 11. Boldfaced themes represent the interrelation between onsite and online students' responses.

Table 11			
To What Extent Students' Onsite Presence Is Advantageous When Using ICT			
<i>Onsite students (n = 98)</i>		<i>Online students (n = 76)</i>	
<i>Themes</i>	<i>n</i>	<i>Themes</i>	<i>n</i>
Advantageous	3	Advantageous	2
Allows a better understanding of the material	41	Allows a better understanding of the material	20
Promotes student/student and student/professor interaction	18	Promotes student/student and student/professor interaction	10
Allows social contact	10	It depends on which course and type of student	6
It depends on which course and type of student	6	Allows social contact	6
No interest without onsite presence	4	Allows having more information	5
Some students need onsite presence to succeed	3	Some students need onsite presence to succeed	4
ICT complement the conventional classroom	2	Promotes student motivation	2
Non-advantageous	1	Non-advantageous	4
We can learn as well at home with a book	12	ICT allow taking courses at a distance	11
Many students are playing with their computer without listening to the professor	5	We can learn as well at home with a book	8
ICT allow taking courses at a distance	4	Much waste of time onsite	3
All the material is on the Web site	2		
Much waste of time onsite	1		

As shown in Table 11, students' responses to this question are regrouped in two categories: advantageous and non-advantageous. In the first category, the two themes which are by far at the lead are that onsite presence allows a better understanding of the material and promotes student/student and student/professor interaction. As for the second category, the two themes which are most evident are that students can learn as well at home with a book and that ICT allow students to take courses at a distance without onsite presence.

In the fourth question, students were asked to indicate the impacts of using ICT on students' characteristics

(autonomy, anxiety, motivation, and participation). Table 12 shows the themes extracted from the thematic analysis of the onsite and online students' responses. Boldfaced themes represent the interrelation between onsite and online students' responses.

Table 12			
The Impacts of Using ICT on Students' Characteristics			
<i>Onsite students (n = 98)</i>		<i>Online students (n = 76)</i>	
<i>Themes</i>	<i>n</i>	<i>Themes</i>	<i>n</i>
<i>Autonomy</i>			
ICT increase autonomy	29	ICT increase autonomy	23
Autonomous students appreciate more distance courses	3		
<i>Anxiety</i>			
ICT increase anxiety	11	ICT increase anxiety	10
ICT decrease anxiety	5	ICT decrease anxiety	4
<i>Motivation</i>			
ICT increase motivation	22	ICT increase motivation	17
ICT decrease motivation	2	ICT decrease motivation	3
<i>Participation</i>			
ICT increase participation	14	ICT increase participation	10
ICT decrease participation	4	ICT decrease participation	2
<i>Others</i>			
These characteristics have an influence on student learning outcomes	17	These characteristics have an influence on student learning outcomes	13
ICT use at the university is excellent for the workplace	3	ICT use at the university is excellent for the workplace	2
It depends on students	2	It depends on students	1

As shown in Table 12, the three impacts that have been by far the most important for students are that ICT use at the university increases the level of autonomy and motivation, and that the students' characteristics (autonomy, anxiety, motivation, and participation) taken into account in this study have an influence on their learning outcomes. And the two next most important impacts for students of the two modes are that ICT use at the university increases their level of participation and anxiety.

Finally, in the fifth and last question of the Web survey, students were asked to indicate the impacts of using ICT into higher education on professors' pedagogy (type of professor and teaching practice). The themes derived from the thematic analysis of the onsite and online students' responses are regrouped in Table 13. Boldfaced themes represent the interrelation between onsite and online students' responses.

Table 13 shows that the four impacts that have been by far the most important for students are: when using ICT at the university, professors must be dynamic to keep students' interest, they must make good use of ICT to bring motivation to students, use active learning techniques, and be more familiar with ICT. We can see here that these impacts related to professors and their teaching practices (the two variables taken into account in this study to assess the quality of professors' pedagogy) are of crucial importance to students. And the next most important impacts for students of the two modes are that, when professors are using ICT at the university, they must be there for students and have a well-organized course.

Table 13	
The Impacts of Using ICT on Professors' Pedagogy	

<i>Onsite students (n = 98)</i>		<i>Online students (n = 76)</i>	
<i>Themes</i>	<i>n</i>	<i>Themes</i>	<i>n</i>
<i>Type of professor (professor must:)</i>			
Be dynamic to keep students' interest	21	Make good use of ICT to bring motivation to students	18
Make good use of ICT to bring motivation to students	17	Be dynamic to keep students' interest	14
Get more familiarized with ICT	12	Be there for students	9
Be there for students	8	Have a well-organized course	7
Be very engaged	5	Get more familiarized with ICT	7
Have a well-organized course	4	Be very engaged	2
Promote ICT use	3	Promote ICT use	2
<i>Teaching practice (professor must:)</i>			
Use active learning techniques	19	Use active learning techniques	15
Motivate students	7	Provide prompt feedback	8
Establish links between theory and real life	3	Establish links between theory and real life	3
Provide prompt feedback	3	Motivate students	3
Promote student/student and student/professor interaction	3	Promote student/student and student/professor interaction	2
<i>Others</i>			
Very important impacts	4	Few impacts	3
ICT use provides students with a good experience	4	Very important impacts	2
Professors' pedagogy has an influence on student learning outcomes	2	I do not know	1
No impact	1	No impact	1

The qualitative results got in the present study involving a small Canadian university are consistent with those observed in the previous study involving a large Canadian university (see Fillion, 2005; Fillion et al., 2007; Fillion et al., 2008; Fillion et al., 2009; Fillion et al., 2010). As mentioned previously in the interpretation of the quantitative results, these qualitative results allow us to conclude, “cautiously” of course, that ICT use at the university (onsite vs. online) has relatively similar impacts on students and that students have relatively similar behaviors when using ICT, whether in a large or in a small university. Future similar studies are also needed to reinforce these findings. The last section of the paper is devoted to a discussion on the research findings of the two studies.

Discussion

Comparison of the Research Findings: Large University vs Small University

First, we will begin to compare the quantitative research findings of the large university study vs those of the small university study. Regarding the two independent variables learning effectiveness and satisfaction, there is practically no difference between the two universities (large vs small), that is, both hypotheses H1 and H2 are not supported. Effectively, with the exception of learning effectiveness that is not significant in the large university study, online students found learning more effective and were more satisfied than onsite students in the two studies, which is in opposition with which is formulated in our hypotheses.

As for the moderator variables, autonomy had an influence on the relation between learning environments and learning effectiveness in the two studies. But autonomy had not an influence on the relation between

learning environments and satisfaction in the large university study, while it had in the small university study. And this influence is more pronounced for online students than for those onsite in the two studies.

Anxiety had an influence on the relation between learning environments and learning effectiveness and satisfaction for the small university students, while it had not for the large university students. But this influence is not more pronounced for online students than for those onsite in the two studies (large university vs small university), as formulated in our hypothesis.

Motivation had an influence on the relation between learning environments and satisfaction for the small university students, and this influence was more pronounced for online students than for the onsite ones, as formulated in our hypothesis. Concerning the large university students, as for the moderator variable anxiety, the moderator variable motivation had no significant influence on any relation or an influence which is in opposition with what we formulated in our hypothesis.

The scenario is practically similar regarding the moderator variable participation. Indeed, participation had an influence on the relation between learning environments and satisfaction for the small university students. But, here, participation also had an influence on the relation between learning environments and satisfaction, and also on the relation between learning environments and learning effectiveness for the large university students. On the other hand, this influence is more pronounced for online students than for onsite students in the small university, while it is not for the large university students.

Finally, concerning professors' pedagogy moderator variables, type of professor and teaching practice had no influence on any relation between learning environments and learning effectiveness and satisfaction.

So, in the whole, we can conclude from our two field experiment studies that, with the exception of few differences, both online and onsite students' behaviors when using ICT into the courses are practically similar in a large university and in a small university. Of course, other similar studies are needed to reinforce the external validity of these research findings.

Comparison of the Research Findings with Existing Theories

First, with respect to student learning effectiveness, our findings are in opposition to those of Allen and Seaman (2004, 2015), and Phipps and Merisotis (1999), who concluded that students' learning is as effective online as in the classroom ("the no significant difference phenomenon"). In fact, the findings of our studies suggest that, even with the addition of the permanent use of ICT into conventional learning environments, online students found learning more effective than onsite students, as much as in a large university than in a small one. So here is a very surprising result which will require further investigation.

With respect to student satisfaction, similar to learning effectiveness above, our findings are in opposition to those of Allen and Seaman (2004, 2015), and Phipps and Merisotis (1999), who concluded that students taking the courses at a distance are as satisfied as those in conventional education ("the no significant difference phenomenon"). In fact, in our two studies, even with the addition of the permanent use of ICT into conventional learning environments, online students were more satisfied than those onsite, as much as in a large university than in a small one. Therefore, at this stage, further investigation is needed to reinforce these findings.

Let us now examine the results of the verification of hypotheses involving moderator variables. Our findings show a significant influence of student autonomy on the relation between learning environments and student learning effectiveness and satisfaction, and this influence is more pronounced for online students than for those onsite. Thus, if we add the permanent use of ICT into conventional learning environments, as in the present studies, given that online students were more autonomous than those onsite, our results provide support for what Bilodeau (1995) and Allen and Seaman (2015) stressed, that is, students

at a distance are less dependent on their professor and then become more autonomous, and need more discipline, respectively.

Past research has shown that students experience moderate to high levels of anxiety in courses, as much in conventional environments as in online ones. In these two studies, we found that the level of anxiety was relatively low both for onsite and online students. Here is another surprising result which will require further investigation in future studies. In addition, our findings suggest that anxiety has a significant influence on the relation between learning environments and student learning effectiveness and satisfaction in a small university, but this influence is not more pronounced for students taking the courses online than for those taking the same courses in the classrooms. So if we add the permanent use of ICT into conventional learning environments, our research results provide support for what Harasim (1987a, 1987b; quoted in Harasim et al., 1995, p. 15) and Hiltz and Turoff (1997) said, that is, connected environments might bring anxiety into communication. On the other hand, our findings are in opposition to those of the study carried out by Jegede and Kirkwood (1992) in a distance learning environment, which indicated that students experienced a high level of anxiety and were more anxious at the end of the semester than at the beginning. Further investigation is then needed here in order to shed more light on the moderating role of anxiety between learning environments and students' learning outcomes.

In our studies, we found that student motivation has a significant influence on the relation between learning environments and student satisfaction in a small university, and that this influence is more pronounced for online students than for onsite students. Thus, when adding the permanent use of ICT into conventional learning environments, and given that online students were more motivated than their peers taking the courses onsite, our results are partially supportive of the conclusion drawn by Riel (1993), Harasim et al. (1995) as well as Hiltz and Wellman (1997) indicating an increase in students' motivation in the connected classroom environments compared to the conventional environment. On the other hand, our findings provide support for the conclusion of the studies conducted by Barron and Orwig (1997), and Blyth (2000) that pointed to an increase in students' motivation in the Internet and the Web environment compared to the conventional environment.

Previous studies have argued that participation is crucial in distance learning environments (Alavi et al., 1995; Leidner & Jarvenpaa, 1993; Webster & Hackley, 1997). Our findings somewhat challenge these results as we found that student participation is crucial in both onsite and online environments. Indeed, in the whole, we noted relatively high levels of student participation, and participation has an influence on the relation between learning environments and learning effectiveness and satisfaction. And this influence is more pronounced for students taking courses online rather than onsite in the small university. Thus, if we add the permanent use of ICT into conventional learning environments, and given that online students participated more than those onsite, our results are partially supportive of the conclusion drawn from the studies conducted by Hiltz (1990) and Hiltz and Wellman (1997) indicating an increase in students' participation in the connected classroom environments. On the other hand, our findings are in opposition to those of Karp and Yoels (1976) who, while following the observation of 10 undergraduate courses, noted that even in small classrooms, only few students participated in the discussions. Clearly, in our two studies, student participation is one of the moderator variables that showed having a great influence on the relation between learning environments and student satisfaction. Consequently, it is an important variable to take into account in future development of courses and curricula, and in future studies.

Finally, the findings of our studies show that type of professor and teaching practice have not a significant influence on the relation between learning environments and student learning effectiveness and satisfaction. Here again, these are very surprising results. According to us, a fact that may explain these surprising results is that type of professor and teaching practice had such a strong direct (independent) influence on the dependent variables that they did not have a significant indirect one (moderator). But, type of professor and teaching practice assuredly require further investigation as moderator variables in future studies.

Limitations

First, the experimental research design (a field experiment) used in these studies inherits the limits of this research approach: a weak level of control on independent variables and a weak level of internal validity compared to the laboratory experiment. But, inversely, it presents a higher level of external validity as it was conducted into a real life environment instead of a laboratory. In addition, these studies were carried out at only two universities instead of several universities. If it would have been conducted in several universities, the external validity would have been even higher.

Second, as these two studies tested for a second and third times a new moderator-type theoretical research model which, to our knowledge, had never been used before, it was then necessary to interpret the findings using different perspectives that make sense of one or several independent variables influencing one or several dependent variables. In these studies, we used moderator variables that cannot have a direct influence on dependent variables, but rather an indirect one. As a result, we needed to use a different approach to compare the findings with existing theories.

Third, to compare the results of these studies with existing theories, we stress that both onsite and online students were using a similar set of ICT. In other words, both learning environments were ICT-supported or technology-rich.

Theoretical and Practical Contributions

From a theoretical point of view, these studies provides academic and organizational communities with theoretical foundations which are innovative, interesting, useful to strategic decision-makers to anticipate the future with a greater certainty, and generalizable to other universities with regard to the impacts of students' onsite presence and non presence on their learning outcomes, as well as to the influence of numerous moderating variables on the relations between highly technological learning environments and students' learning outcomes. These studies are also opening the door to the comparison of different ICT-supported or technology-rich learning environments, whereas until now researchers have always compared an ICT-supported learning environment with the conventional learning environment (face-to-face without ICT use). To our knowledge, these studies are also only the few which explore the impact of several important moderating variables related to students' characteristics (psychology) and professors' pedagogy in order to better understand the relation between learning environments and students' learning outcomes. Hence, they shed some light on the role of students' characteristics and professors' pedagogy in the students' learning process while they are in ICT-based learning environments. In addition, our new and creative moderator-type theoretical research model might be tested by other researchers in other universities and/or other situations.

From a practical point of view, these studies will help educational institutions to develop curricula better adapted to ICT-supported or technology-rich learning environments so that students take full advantage of their learning activities into these new environments. It will also allow decision-makers of educational institutions to target professors likely to be "the best" in these highly technological learning environments or at least to make such that those already teaching in these environments become more aware of the importance of adapting their pedagogy to these new environments and to continually be innovative in the ways of presenting their material to students. Moreover, these studies will allow ICT providers to be more proactive in the design of these new technology-rich learning environments in choosing "the best" technologies to support them.

Conclusion

The purpose of these studies was to investigate the perceptions of onsite students (hybrid or blended mode) and of those taking the same courses on the Internet (online mode) and to compare these perceptions from a large university vs a small university. To guide the studies, a moderator-type theoretical research model was developed, out of which eight hypotheses were formulated. The model was tested in two field experiments, one conducted in a large Canadian university and the other performed in a small Canadian university. To collect data, we used a multi-method approach, that is, a Web survey involving open- and closed-ended questions. The samples of the studies were formed of 313 onsite and online students from the large university and of 192 onsite and online students from the small university. The quantitative data analysis was performed using a structural equation modeling software, PLS; the qualitative data were analyzed following a thematic structure using QSR NVivo software.

The quantitative results indicate that online students find learning more effective and are more satisfied than their peers taking the same courses onsite. As regards to students' characteristics, autonomy has an influence on the relation between learning environments and student learning effectiveness and satisfaction, and this influence is more pronounced for online students. Anxiety has an influence on the relation between learning environments and students learning effectiveness and satisfaction in the small university, but this influence is not more pronounced for online students. And, participation has an influence on the relation between learning environments and student satisfaction, and this influence is more pronounced for online students from the small university.

As for the qualitative results, *grosso modo*, they are the following: the elements the most appreciated by students are professor and course usefulness; the elements that the students suggest improving are professor and presentation of the material; students' onsite presence is still advantageous when using ICT as it allows a better understanding of the material and promotes student/student and student/professor interaction; ICT use at the university increases the level of autonomy and motivation in students, and students' characteristics (autonomy, anxiety, motivation, and participation) have an influence on their learning outcomes; and when using ICT at the university, professors must be dynamic to keep students' interest, they must make good use of ICT to bring motivation to students, use active learning techniques, and be more familiar with ICT.

Finally, much more research will be needed as technology-rich environments unfold. Better understanding of their impacts on students, professors, and educational institutions will be required in order to improve them or design new ones still better adapted to higher education students. So we will continue to inquire into this exciting field.

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TESTING AN EXTENTION TO THE MODEL OF ACCEPTANCE OF TECHNOLOGY IN HOUSEHOLD WITH UNDERGRADUATE AND GRADUATE STUDENTS OF FOUR UNIVERSITIES IN THREE GLOBAL COUNTRIES⁵

Individual adoption of technology has been studied extensively in the workplace, but far less attention has been paid to adoption of technology in the household (Brown & Venkatesh, 2005). Obviously, mobile phone is now integrated into our daily life. Indeed, according to International Data Corporation (IDC), the market reached 1.472 billion mobile phones sold in the world in 2017 (ZDNet, 2018). In addition, according to Statista, there was 4.77 billion mobile phone users worldwide in 2017 while the population was reaching 7.6 billion people, and there will be 5.07 billion mobile phone users worldwide by 2019 (Statista, 2018). The purpose of this study is then to pursue the investigation on the determining factors that make such people around the world are so using the mobile phone. On the basis of the model of acceptance of technology in household (MATH) developed by Brown and Venkatesh (2005) to verify the determining factors in intention to adopt a computer in household by American people, this study extends this moderator-type research model to examine the determining factors in the use of mobile phone in household by undergraduate and graduate students from four universities within three countries over the world. Data were randomly gathered from 750 undergraduate and graduate students from Yaounde in Cameroon, Kinshasa in Congo, and New Brunswick in Canada who own a mobile phone. Data analysis was performed using the structural equation modeling software Partial Least Squares (PLS). The results revealed, among others, that two-third of the variables examined in the study, including the three new variables we added to the Brown and Venkatesh's research model, showed to be determining factors in the use of mobile phone by undergraduate and graduate students.

Introduction

Since numerous years, mobile phone is used for different professional purposes, particularly by senior managers in the workplace. And this technology is more and more used in the workplace since mobile

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applications have been integrated to business strategies. Individual adoption of technology has been studied extensively in the workplace, but far less attention has been paid to adoption of technology in the household (Brown & Venkatesh, 2005). Obviously, mobile phone is now integrated into our daily life. Indeed, according to International Data Corporation (IDC), the market reached 1.472 billion mobile phones sold in the world in 2017 (ZDNet, 2018). In addition, according to Statista, there was 4.77 billion mobile phone users worldwide in 2017 while the population was reaching 7.6 billion people, and there will be 5.07 billion mobile phone users worldwide by 2019 (Statista, 2018).

Few studies have been conducted until now which investigate the intention to adopt a mobile phone by people in household (in the case of those who do not yet own a mobile phone) or the use of mobile phone in the everyday life of people in household (in the case of those who own a mobile phone). We can easily see that mobile phone is actually completely transforming the ways of communication of people around the world. It is therefore crucial to more deeply investigate the determining factors in the use of mobile phone by people in household. The purpose of this study is then to pursue this investigation of the determining factors that make such people around the world are so using the mobile phone. The related literature on the actual research areas of mobile phone is summarized in Table 1.

Table 1	
Related Literature Survey	
(adapted from Isiklar and Büyüközhan, 2007, p. 267; and updated)	
Mobile phone diffusion and its impacts on people's daily life	
LaRose (1989) Kwon & Chidambaram (2000) Botelho & Costa Pinto (2004) Funk (2005) Andonova (2006) Centrone et al. (2007) Ehlen & Ehlen (2007) Fillion & Berthelot (2007) Fillion & Le Dinh (2008) Kurniawan (2008) Abu & Tsuji (2010) Sripalawat et al. (2011) Abdul-Karim et al. (2010) Fillion & Booto Ekionea (2010) Glajchen (2011) Kuznekoff & Titsworth (2013) Kwun et al. (2013)	De Matos et al. (2014) Fillion & Booto Ekionea (2014) Fortunati & Taipale (2014) Kafyulilo (2014) Suyinn et al. (2014) Takao (2014) Velmurugan & Velmurugan. (2014) Paul et al. (2015) Darcy et al. (2016) Fillion & Booto Ekionea (2016) Hatuka & Toch (2016) Kim et al. (2016) Aitameemy (2017) Brinkman et al. (2017) Liu (2017) Venkatesh et al. (2017) Ye & Kankanhalli (2018)
Mobile phone ownership and usage	
LaRose (1989) Kwon & Chidambaram (2000) Palen et al. (2000) Aoki & Downes (2003) Selwyn (2003) Davie et al. (2004) Mazzoni et al. (2007) Peters et al. (2007) Tucker et al. (2007)	Fortunati & Taipale (2014) Kafyulilo (2014) Kim & Park (2014) Saaksjarvi et al. (2014) Suyinn et al. (2014) Takao (2014) Velmurugan & Velmurugan (2014) Fortunati et al. (2015) Paul et al. (2015)

Sohn & Kim (2008) Wessels & Drennan (2010) Chong et al. (2010) Gebauer et al. (2010) Wesolowski et al. (2012) Kwun et al. (2013) De Matos et al. (2014)	Darcy et al. (2016) Hatuka & Toch (2016) Kim et al. (2016) Hilao & Wichadee (2017) O'Bannon et al. (2017) Ketterer Hobbis (2018) Vernon et al. (2018)
Mobile phone ownership and usage from a behavioral and psychological perspective	
Karjaluoto et al. (2003) Wilska (2003) Davie et al. (2004) Liljander et al. (2007) White et al. (2007) Butt & Phillips (2008) Abu & Tsuji (2010) Kimiloglu et al. (2010) Lane & Manner (2011) Kim & Park (2014)	Suyinn et al. (2014) Takao (2014) Chan (2015) Lin et al. (2015) Takashi (2015) Darcy et al. (2016) Lusinga & Kyobe (2017) Ketterer Hobbis (2018) Vernon et al. (2018)
Effects on human health and daily activities	
Repacholi (2001) Salvucci & Macuga (2002) Weinberger & Richter (2002) Sullman & Baas (2004) Treffner & Barrett (2004) Westerman & Hocking (2004) Balik et al. (2005) Balikci et al. (2005) Eby et al. (2006) Rosenbloom (2006)	Törnros & Bolling (2006) Cocosila & Archer (2010) Kuznekoff & Titsworth (2013) Suyinn et al. (2014) Chan (2015) Lin et al. (2015) Paul et al. (2015) Lusinga & Kyobi (2017) Ketterer Hobbis (2018)
Evaluation and design of mobile phone features for user interface and user satisfaction	
Chuang et al. (2001) Chen et al. (2003) Han & Wong (2003) Chae & Kim (2004) Han et al. (2004) Lee et al. (2006) Kimiloglu et al. (2010)	Haverila (2011) Saaksjarvi et al. (2014) Takashi (2015) Brinkman et al. (2017) O'Bannon et al. (2017) Venkatesh et al. (2017) Ye & Kankanhalli (2018)
Analytical evaluations of mobile phone-related observations	
Tam & Tummala (2001) Campbell and Russo (2003) Han & Wong (2003) Wang & Sung (2003)	Lai et al. (2006) Haque et al. (2010) Liu (2010) Lusinga & Kyobi (2017)
Comparative analysis on the use of mobile phone according to the cultures	
Zhang & Maruping (2008) Lee & Lee (2010) Wesolowski et al. (2012)	Kim & Park (2014) Takao (2014) Velmurugan & Velmurugan (2014)
New mobile phone generation on the form of mobile computer and virtual life	
Brown (2008)	Kwun et al. (2013)

Hurlburt et al. (2011) Murugesan (2011)	De Matos et al. (2014) Fortunati et al. (2015)
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In addition to the summary of literature on the actual research areas of mobile phone presented in Table 1, other researchers have identified some factors which may increase the use of mobile phone by people in household. For example, in a large study conducted in 43 countries over the world, Kauffman and Techatassanasoontorn (2005) noted a faster increase in the use of mobile phone in countries having a more developed telecommunications infrastructure, being more competitive on the wireless market, and having lower wireless network access costs and less standards regarding the wireless technology. Another study involving 208 users by Wei (2007) showed that different motivations predict diverse uses of mobile phone. According to the Wei's findings, mobile phone establishes a bridge between interpersonal communication and mass communication. A large study conducted by Abu and Tsuji (2010) in 51 countries classified by the *Banque Mondiale* revealed that, in general, income is a very important factor to adopt a mobile phone in the countries having a fix telephone infrastructure. And, in a study examining the effect of peer influence in the diffusion of the iPhone 3G across a number of communities sampled from a large dataset provided by a major European Mobile Carrier in one country, De Matos et al. (2014) found that, during a period of 11 months, 14% of the iPhone 3Gs sold by this carrier were due to peer influence.

As we can see in the summary of literature related to mobile phone presented above, relatively few studies until now examined the determining factors in the use of mobile phone by people in household. And there are practically no studies performed on the use of mobile phone by students. Thus, the present study brings an important contribution to fill this gap as it allows a better understanding of the impacts of mobile phone usage into people's daily life (in this case, undergraduate and graduate students). It focuses on the following research question: What are the determining factors in the use of mobile phone by undergraduate and graduate students?

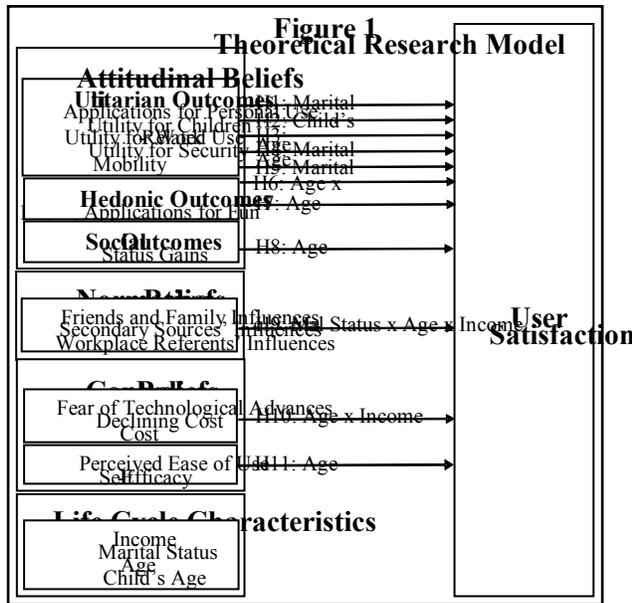
The paper builds on the conduct of hypothetico-deductive scientific research in organizational sciences (see Fillion, 2004) and it is structured as follows: first, the theoretical approach which guides the study is developed; second, the methodology followed to conduct the study is described; finally, the data analysis and the results of the study are presented and discussed.

Theoretical Development

This study is based on the theoretical foundations developed by Venkatesh and Brown (2001) to investigate the factors driving personal computer adoption in American homes as well as those developed by Brown and Venkatesh (2005) to verify the determining factors in intention to adopt a personal computer in household by American people. In fact, Brown and Venkatesh (2005) performed the first quantitative test of the recently developed model of adoption of technology in household (MATH) and they proposed and tested a theoretical extension of MATH integrating some demographic characteristics varying across different life cycle stages as moderating variables. In this study, we tested user satisfaction as dependent variable instead of behavioral intention given the undergraduate and graduate students investigated already own a mobile phone. And we extended the Brown and Venkatesh's model with the addition of three new independent variables in order to verify whether the students are using a mobile phone for a matters of security, mobility, and access to Internet and social media. The resulting theoretical research model is depicted in Figure 1.

Figure 1 shows that Brown and Venkatesh (2005) integrated MATH and Household Life Cycle in the following way. MATH presents five attitudinal beliefs grouped into three sets of outcomes: *utilitarian*, *hedonic*, and *social*. Utilitarian beliefs are most consistent with those found in the workplace and can be divided into beliefs related to *personal use*, *children*, and *work* (we added beliefs related to *security*, *mobility*, and *access to Internet and social media*). The extension of MATH suggested and tested by

Brown and Venkatesh (2005) presents three normative beliefs: *influence of friends and family*, *secondary sources*, and *workplace referents*. As for control beliefs, they are represented in MATH by five factors: *fear of technological advances*, *declining cost*, *cost*, *perceived ease of use*, and *self-efficacy*. And, according to Brown and Venkatesh (2005), integrating MATH with a life cycle view, including *income*, *age*, *child's age*, and *marital status*, allows to provide a richer explanation of household personal computer (PC) adoption (household mobile phone use, in this study) than those provided by MATH alone. Finally, as shown in Figure 1, the dependant variable of the theoretical research model is related to *user satisfaction* (satisfaction in the use of mobile phone by undergraduate and graduate students).



In the remainder of the section, we develop eleven research hypotheses (H1-H11) related to the theoretical research model suggested in Figure 1. It is important here to note that these eleven research hypotheses are adapted from the Brown and Venkatesh (2005) paper. In fact, in the present study, we test the same research hypotheses than Brown and Venkatesh (2005) did in their study and we test three new research hypotheses related to the three new independent variables we added to the research model. Also, we use a different technology (mobile phone instead of personal computer), a different dependent variable (user satisfaction instead of behavioral intention), a different methodology (an in-class randomized survey instead of a nationwide survey with the assistance of a market research firm and an electronics retail store), as well as a different sample (undergraduate and graduate students from four universities of three global countries (Cameroon, Congo, and Canada) instead of American people).

H1: Marital status and age will moderate the relationship between applications for personal use and satisfaction of using a mobile phone at home.

H2: Child's age will moderate the relationship between utility for children and satisfaction of using a mobile phone at home.

H3: Age will moderate the relationship between utility for work-related use and satisfaction of using a mobile phone at home.

H4: Marital status and age will moderate the relationship between utility for security and satisfaction of using a mobile phone at home.

H5: Marital status and age will moderate the relationship between mobility and satisfaction of using a mobile phone at home.

H6: Age and income will moderate the relationship between utility for accessing Internet and social media and satisfaction of using a mobile phone at home.

H7: Age will moderate the relationship between applications for fun and satisfaction of using a mobile phone at home.

H8: Age will moderate the relationship between status gains and satisfaction of using a mobile phone at home.

H9: Age, marital status, and income will moderate the relationship between the normative beliefs ((a) friends and family influences; (b) secondary sources' influences; and (c) workplace referents' influences) and satisfaction of using a mobile phone at home.

H10: Age and income will moderate the relationship between the external control beliefs ((a) fear of technological advances; (b) declining cost; and (c) cost) and satisfaction of using a mobile phone at home.

H11: Age will moderate the relationship between the internal control beliefs ((a) perceived ease of use; and (b) self-efficacy) and satisfaction of using a mobile phone at home.

In the next section of the paper, we describe the methodology followed to conduct the study.

Methodology

This study was designed to gather information on mobile phone adoption decisions from undergraduate and graduate students. Indeed, the focus of the study is on university students who own a mobile phone. So we conducted in-class survey research with undergraduate and graduate students from four universities within three global countries: University of Yaounde I and University of Yaounde II from Yaounde in Cameroon, School of Commerce from Kinshasa in Congo, and University of Moncton from New Brunswick in Canada. In this section, we describe the instrument development and validation, the sample and data collection, as well as the data analysis process.

Instrument Development and Validation

To conduct the study, we used the survey instrument developed and validated by Brown and Venkatesh (2005) to which we added four new scales, the first three measuring other dimensions in satisfaction in the use of mobile phone by people in household, that is, utility for security, mobility, and utility for accessing Internet and social media, and the last one measuring user satisfaction as such. The survey instrument was then translated in French (a large part of the population in Africa is speaking French) and both the French and English versions were evaluated by peers. This review assessed face and content validity (see Straub, 1989). As a result, changes were made to reword items and, in some cases, to drop items that were possibly ambiguous, consistent with Moore and Benbasat's (1991) as well as DeVellis's (2003) recommendations for scale development. Subsequent to this, we distributed the survey instrument to a group of MBA students for evaluation. Once again, minor wording changes were made. Finally, we performed some adjustments to the format and appearance of the instrument, as suggested by both peers and MBA students. As the instrument was already validated by Brown and Venkatesh (2005) and showed to be of a great reliability, that we used the scale developed by Hobbs and Osburn (1989) and validated in their study as well as in several other studies to measure user satisfaction, and that we added only few items to measure the new

variables utility for security, mobility, and utility for accessing Internet and social media, then we have not performed a pilot-test with a small sample. The evaluations by both peers and MBA students were giving us some confidence that we could proceed with a large-scale data collection.

Sample and Data Collection

First, in this study, we chose surveying undergraduate and graduate students over 18 years from University of Yaounde I (French language) and University of Yaounde II (English Language) in Cameroon; School of Commerce (English language) of Kinshasa in Congo; and University of Moncton (French language) of New Brunswick in Canada who own a mobile phone. To do that, in the summer semester of 2017, undergraduate and graduate students from University of Yaounde I and University of Yaounde II in Cameroon have been randomly selected from different business administration courses in order to answer our research survey in-class. And in the fall semester of 2017 and the beginning of the winter semester of 2018, undergraduate and graduate students from the School of Commerce in Congo and the University of Moncton in Canada have also been randomly selected from different business administration courses to answer our survey in-class. The sample in the present study is then a randomized sample, which is largely valued in the scientific world given the high level of generalization of the results got from such a sample. Once a student had the necessary characteristics to answer the survey and was agreeing to answer it, one of the researchers in this study was there to guide him/her to rate each item of the survey on a seven points Likert-type scale (1: strongly disagree... 7: strongly agree). In addition, the student was asked to answer some demographic questions. Finally, it is important here to mention that no incentive has been used in order to try increasing the response rate of the study.

Following this data collection process, 240 students from University of Moncton in Canada answered our survey, 265 students from the School of Commerce in Congo, and 249 students from University of Yaounde I and University of Yaounde II in Cameroon answered our survey. In the whole, 754 students completed our survey. But one survey from University of Moncton in Canada and three surveys from the School of Commerce in Congo have been rejected given they were lacking too much data. So, the final sample of the study consisted of 750 undergraduate and graduate students: 239 from University of Moncton in Canada; 262 from the School of Commerce in Congo; and 249 from University of Yaounde I and University of Yaounde II in Cameroon.

Data Analysis Process

The data analysis of the study was performed using a structural equation modeling software, that is, Partial Least Squares (PLS-Graph 3.0). Using PLS, data have no need to follow a normal distribution and it can easily deal with small samples if the sample is at least 10 times greater than the number of items measuring the variable having the greatest weight in terms of items into the model (Barclay et al., 1995; Fornell & Bookstein, 1982). Recently, some authors (see Goodhue et al., 2012) tried to refute this evidence but, in our view, they did not succeed well. In addition, PLS is appropriate when the objective is a causal predictive test instead of the test of a whole theory (Barclay et al., 1995; Chin, 1998) as it is the case in this study. And, to ensure the stability of the model developed to test the research hypotheses, we used the PLS bootstrap resampling procedure (the interested reader is referred to a more detailed exposition of bootstrapping (see Chin 1998; Chin et al. 2003; Efron & Tibshirani, 1993)) with an iteration of 100 sub-sample extracted from the initial sample (750 undergraduate and graduate students). Some analyses were also performed using the Statistical Package for the Social Sciences software (IBM SPSS Statistics 25). The data analysis and the results follow.

Results

In this section of the paper, the data analysis and the results of the study are presented. We begin to provide

some characteristics of the participants. Then we validate the PLS model developed to test the research hypotheses. Finally, we describe the results got from PLS analyses to test the research hypotheses and we discuss about some implications.

Participants

The participants in this study (undergraduate and graduate students) were relatively young, with a mean of 24.36 years and a standard deviation of 6.25 years. More than half of the participants were male (60%). More than 90% of the participants were single (88%) or married (6.8%). The gross yearly income of the respondents in the study was in the range of \$0 to \$40 000 CAD. Indeed, 88.5% of the respondents were winning between \$0 and \$9 999 CAD, 7.5% were winning between \$10 000 and \$19 999 CAD, 1% were winning between \$20 000 and \$29 999 CAD, and 1.8% were winning between \$30 000 and \$39 999 CAD. As for the level of education, 7.4% of the participants in the study got a high-school diploma, 7% had a college degree, 48.8% completed a baccalaureate, 14.6% got a master, and 2.7% got a doctorate. Only 9.6% of the participants in the study had children. Finally, 30% of the respondents were making about 55 phone calls a week, 8.1% were making about 40 phone calls a week, 12.9% were making about 35 phone calls a week, and 22.8% were making between 15 and 25 phone calls a week.

Validation of the PLS Model to Test Hypotheses

First, to ensure the reliability of a construct or a variable using PLS, we must verify the three following properties: individual item reliability, internal consistency, and discriminant validity (Yoo and Alavi, 2001; see the paper for more details).

To verify individual item reliability, a confirmatory factor analysis (CFA) was performed on independent and dependent variables of the theoretical research model. A single iteration of the CFA was necessary given all loadings of the variables were superior to 0.50 and then none item was withdrawn nor transferred in another variable in which the loading would have been higher. Indeed, in the whole, items had high loadings, which suppose a high level of internal consistency of their corresponding variables. In addition, loadings of each variable were superior to cross-loadings with other variables of the model. Hence the first criterion of discriminant validity was satisfied.

<i>Variable</i>	<i>Mean</i>	<i>SD</i>	<i>Reliability Index</i>
Applications for Personal Use	4.72	2.09	0.75
Utility for Children	4.44	2.72	0.92
Utility for Work-Related Use	4.69	2.24	0.82
Utility for Security	4.87	2.27	0.85
Mobility	4.49	2.12	0.33
Utility for Accessing Internet and Social Media	6.01	1.75	0.85
Applications for Fun	5.50	1.87	0.83
Status Gains	3.69	2.16	0.78
Friends and Family Influences	3.95	2.21	0.92
Secondary Sources' Influences	3.81	2.22	0.85
Workplace Referents' Influences	4.07	2.26	0.86

Fear of Technological Advances	4.20	2.30	0.82
Declining Cost	3.97	2.32	0.85
Cost	5.39	1.86	0.73
Perceived Ease of Use	5.51	1.79	0.80
Self-Efficacy	5.71	1.83	0.83
Income ^a	NA	NA	NA
Marital Status ^a	NA	NA	NA
Age ^b	24.36	6.25	NA
Child's Age ^c	9.76	6.32	NA
User Satisfaction	5.50	1.77	0.86

^aThis variable was coded as a nominal variable. It was measured in terms of non-quantified distinct categories.

^bThis variable was coded as a continuous variable. It was measured using the respondents' birth date.

^cThis variable was coded using the age of the respondents' younger child.

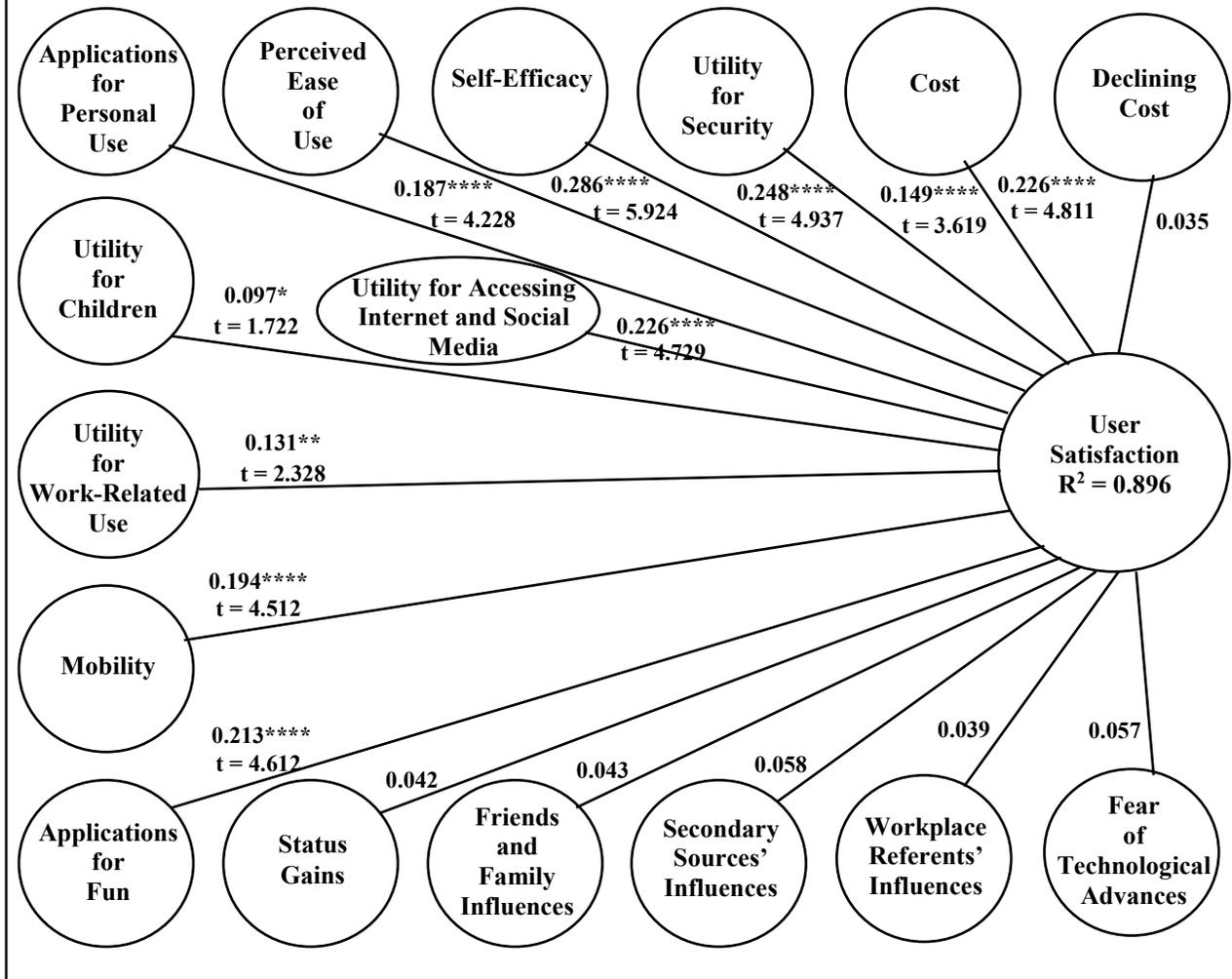
And to get composite reliability indexes and average variance extracted (AVE) in order to satisfy the second criterion of discriminant validity and to verify internal consistency of the variables, we used PLS bootstrap resampling procedure with an iteration of 100 sub-sample extracted from the initial sample (750 undergraduate and graduate students). The results are partially (for a matter of space) presented in Table 2.

PLS analysis indicated that all square roots of AVE were higher than the correlations with other variables of the model. In other words, each variable shares more variance with its measures than it shares with other variables of the model. Consequently, discriminant validity is verified. Finally, as supposed previously, we can see in Table 2 that PLS analysis showed high composite reliability indexes for all variables of the theoretical research model. The variables have therefore a high internal consistency, with composite reliability indexes ranging from 0.73 to 0.92.

Hypothesis Testing

First, to get the significant variables in the study and the percentage of variance explained (R^2 coefficient) by all the variables of the theoretical research model, we developed a PLS model similar to those of Fillion (2005), Fillion and Booto Ekionea (2010), Fillion et al. (2010), Fillion and Booto Ekionea (2016), Limayem and DeSanctis (2000), and Yoo and Alavi (2001). And to ensure the stability of the model, we used the PLS bootstrap resampling procedure with an iteration of 100 sub-sample extracted from the initial sample (750 undergraduate and graduate students). The PLS model is depicted in Figure 2.

Figure 2
PLS Model to Get Significant Variables and Percentage of Variance Explained



*p < 0.05; **p < 0.01; ***p < 0.001 (one-tailed test).

Figure 2 shows that all the independent variables of our theoretical research model, are explaining 89.6% of the variance on the dependant variable user satisfaction. And two-third of these variables are significant, that is, they are determining factors in satisfaction of using a mobile phone by people in household (undergraduate and graduate students). More specifically, the eight more significant variables are cost (t = 4.811, beta = 0.226, p < 0.001), utility for security (t = 3.619, beta = 0.149, p < 0.001), self-efficacy (t = 4.937, beta = 0.248, p < 0.001), perceived ease of use (t = 5.924, beta = 0.286, p < 0.001), applications for personal use (t = 4.228, beta = 0.187, p < 0.001), utility for accessing Internet and social media (t = 4.729, beta = 0.226, p < 0.001), mobility (t = 4.512, beta = 0.194, p < 0.001), and applications for fun (t = 4.612, beta = 0.213, p < 0.001). And two other variables are significant at the levels of 0.01 and 0.05, respectively. These are utility for work-related use (t = 2.328, beta = 0.131, p < 0.01) and utility for children (t = 1.722, beta = 0.097, p < 0.05).

Finally, to measure interaction effect of moderator variables (e.g., the life cycle stage characteristics: income (I), marital status (MS), age (A), and child's age (CA)) in order to verify hypotheses 1 to 11, we used the PLS procedure proposed by Chin et al. (2003) (see the paper for more details). On the other hand, in a review of 26 papers assessing interaction effect of moderator variables published between 1991

and 2000 into information systems (IS) journals, Carte and Russell (2003) found nine errors frequently committed by researchers when they estimate such an effect, and provided solutions (see their paper for more details). So we tried to avoid these nine errors in applying their solutions to test hypotheses 1 to 11. Indeed, among others, in the verification of hypotheses 1 to 11 that follows, interaction effect of a moderator variable is significant if, and only if, the path between the latent variable (the multiplication of items of independent and moderator variables forming interaction effect) and the dependent variable is significant, as well as if the change in R^2 coefficient (the difference between the R^2 calculated before the addition of interaction effect and those calculated after the addition of interaction effect (ΔR^2 , pronounced delta R^2)) is greater than 0.

For a matter of space, given that the test of hypotheses 1 to 11 required the development of several PLS structural equation models (two models per hypothesis or sub-hypothesis, that is, 32 models), we summarize PLS analyses to test each hypothesis and the summaries are presented according to the same divisions as the theoretical research model: *attitudinal beliefs*, *normative beliefs*, and *control beliefs*. And, as for the PLS model developed to get the significant variables in the study and the percentage of variance explained by all the variables of the theoretical research model previously (see Figure 2), for each PLS model developed, we used the PLS bootstrap resampling procedure with an iteration of 100 sub-sample extracted from the initial sample (undergraduate and graduate students) to ensure the stability of the model.

Attitudinal Beliefs

Concerning hypothesis 1 related to the independent variable applications for personal use (APU), the path from the latent variable APU*MS*A to the dependent variable user satisfaction is significant ($t = 2.102$, $\beta = 0.113$, $p < 0.05$) and there is a change in R^2 ($\Delta R^2 = 0.002$). Thus, as we expected, the moderator variables marital status and age have an influence on the relationship between applications for personal use and satisfaction of using a mobile phone by people in household. Also hypothesis 1 is supported. Concerning hypothesis 2 related to the independent variable utility for children (UC). The path from the latent variable UC*CA to the dependent variable user satisfaction is not significant ($t = 0.494$, $\beta = 0.027$) and there is no change in R^2 ($\Delta R^2 = 0$). So, contrary as we formulated in the hypothesis, the moderator variable child's age has not an influence on the relationship between utility for children and satisfaction of using a mobile phone by people in household. As a result, hypothesis 2 is not supported. For hypothesis 3 related to the independent variable utility for work-related use (UWRU), the path from the latent variable UWRU*A to the dependent variable user satisfaction is significant ($t = 2.084$, $\beta = 0.108$, $p < 0.05$) and there is a small change in R^2 ($\Delta R^2 = 0.002$). Then, as we thought, the moderator variable age has an influence on the relationship between utility for work-related use and satisfaction of using a mobile phone by people in household. Hypothesis 3 is therefore supported. The scenario is similar for hypothesis 4 related to the independent variable utility for security (US). The path from the latent variable US*MS*A to the dependant variable user satisfaction is significant ($t = 2.216$, $\beta = 0.124$, $p < 0.05$) and there is a small change in R^2 ($\Delta R^2 = 0.001$). So, as we anticipated, the moderator variables marital status and age have an influence on the relationship between utility for security and satisfaction of using a mobile phone by people in household. Consequently, hypothesis 4 is supported. The scenario is also similar for hypothesis 5 related to the independent variable mobility (M). The path from the latent variable M*MS*A to the dependant variable user satisfaction is significant ($t = 2.730$, $\beta = 0.162$, $p < 0.005$) and there is a change in R^2 ($\Delta R^2 = 0.003$). Thus, as we expected, the moderator variables marital status and age have an influence on the relationship between mobility and satisfaction of using a mobile phone by people in household. As a result, hypothesis 5 is also supported. The scenario is also similar for hypothesis 6 related to the independent variable utility for accessing Internet and social media (UISM). The path from the latent variable UISM*A*I to the dependant variable user satisfaction is significant ($t = 2.140$, $\beta = 0.115$, $p < 0.05$) and there is a small change in R^2 ($\Delta R^2 = 0.001$). So, as we thought, the moderator variables age and income have an influence on the relationship between utility for accessing

Internet and social media and satisfaction of using a mobile phone by people in household. Hypothesis 6 is then also supported. And the scenario is still similar for hypothesis 7 related to the independent variable applications for fun (AF). The path from the latent variable AF*A to the dependent variable user satisfaction is significant ($t = 2.327$, $\beta = 0.130$, $p < 0.01$) and there is a change in R^2 ($\Delta R^2 = 0.006$). Thus, as we anticipated, the moderator variable age has an influence on the relationship between applications for fun and satisfaction of using a mobile phone by people in household. As a result, hypothesis 7 is also supported. But the scenario is different for hypothesis 8 related to the independent variable status gains (SG). The path from the latent variable SG*A to the dependent variable user satisfaction is not significant ($t = 0.228$, $\beta = -0.013$) and there is no change in R^2 ($\Delta R^2 = 0$). Then, contrary to our expectations, the moderator variable age has not an influence on the relationship between status gains and satisfaction of using a mobile phone by people in household. Consequently, hypothesis 8 is not supported.

Normative Beliefs

In the case of hypothesis 9-a related to the independent variable friends and family influences (FFI), the path from the latent variable FFI*MS*A*I to the dependent variable user satisfaction is significant ($t = 2.640$, $\beta = 0.149$, $p < 0.005$) and there is a small change in R^2 ($\Delta R^2 = 0.001$). So, as we expected, the moderator variables marital status, age, and income have an influence on the relationship between friends and family influences and satisfaction of using a mobile phone by people in household. Hypothesis 9-a is then supported. Concerning hypothesis 9-b related to the independent variable secondary sources' influences (SSI), the path from the latent variable SSI*MS*A*I to the dependent variable user satisfaction is not significant ($t = 1.132$, $\beta = -0.073$) but there is a change in R^2 ($\Delta R^2 = 0.003$). Thus, contrary to what we thought, the moderator variables marital status, age, and income have not an influence on the relationship between secondary sources' influences and satisfaction of using a mobile phone by people in household. And hypothesis 9-b is not supported. The scenario is similar for hypothesis 9-c related to the independent variable workplace referents' influences (WRI). The path from the latent variable WRI*MS*A*I to the dependent variable user satisfaction is not significant ($t = 0.409$, $\beta = -0.025$) but there is a small change in R^2 ($\Delta R^2 = 0.001$). Then, contrary to what we formulated in the hypothesis, the moderator variables marital status, age, and income have not an influence on the relationship between workplace referents' influences and satisfaction of using a mobile phone by people in household. Consequently, as hypothesis 9-b, hypothesis 9-c is not supported.

Control Beliefs

Regarding hypothesis 10-a related to the independent variable fear of technological advances (FTA), the path from the latent variable FTA*A*I to the dependent variable user satisfaction is very significant ($t = 2.672$, $\beta = 0.156$, $p < 0.005$) and there is a good change in R^2 ($\Delta R^2 = 0.010$). Thus, as we expected, the moderator variables age and income have an influence on the relationship between fear of technological advances and satisfaction of using a mobile phone by people in household. Hypothesis 10-a is therefore supported. For hypothesis 10-b related to the independent variable declining cost (DC). The path from the latent variable DC*A*I to the dependent variable user satisfaction is not significant ($t = 1.246$, $\beta = -0.076$) but there is a change in R^2 ($\Delta R^2 = 0.003$). So, contrary to what we thought, the moderator variables age and income have not an influence on the relationship between declining cost and satisfaction of using a mobile phone by people in household. Consequently, hypothesis 10-b is not supported. But the scenario is different for hypothesis 10-c related to the independent variable cost (C). The path from the latent variable C*A*I to the dependent variable user satisfaction is very significant ($t = 4.192$, $\beta = 0.181$, $p < 0.001$) and there is a small change in R^2 ($\Delta R^2 = 0.002$). Thus, as we expected, the moderator variables age and income have an influence on the relationship between cost and satisfaction of using a mobile phone by people in household. As a result, hypothesis 10-c is supported. Finally, concerning hypothesis 11-a related to the independent variable perceived ease of use (PEU), the path from the latent variable PEU*A

to the dependent variable user satisfaction is significant ($t = 2.182$, $\beta = -0.116$, $p < 0.05$) and there is a small change in R^2 ($\Delta R^2 = 0.001$). So, as we formulated in the hypothesis, the moderator variable age has an influence on the relationship between perceived ease of use and satisfaction of using a mobile phone by people in household. And hypothesis 11-a is then supported. The scenario is similar regarding hypothesis 11-b related to the independent variable self-efficacy (SE). The path from the latent variable SE*A to the dependent variable user satisfaction is significant ($t = 1.687$, $\beta = -0.096$, $p < 0.05$) and there is a change in R^2 ($\Delta R^2 = 0.002$). Thus, as we thought, the moderator variable age has an influence on the relationship between self-efficacy and satisfaction of using a mobile phone by people in household. Consequently, hypothesis 11-b is also supported.

In summary, eleven hypotheses (including sub-hypotheses) have been supported in our study, that is, H1, H3, H4, H5, H6, H7, H9-a, H10-a, H10-c, H11-a, and H11-b. Thus, the moderator variables (e.g., the household life cycle) age, marital status, and income had several moderating effects in the present study given practically all hypotheses we formulated have been supported. On the other hand, the moderator variable child's age had not a significant moderating effect on the relationship between utility for children and satisfaction of using a mobile phone at home, and the moderator variables age, marital status and income had not a significant moderating effect on the relationship between status gains, secondary sources' influences, workplace referents' influences, and declining cost, and satisfaction of using a mobile phone at home. Hence hypotheses H2, H8, H9-b, H9-c, and H10-b were not supported.

In the next and last section of the paper, we discuss about some implications of the more important results of the study.

Discussion and Conclusions

This last section is devoted to a discussion about the more important findings of the study and some conclusions. And, to support our discussion and conclusions, we provide the reader with a more detailed view of the PLS structural equation model developed to get the significant variables in the study, including the percentage of variance explained by each variable (see Table 3).

<i>Variable</i>	<i>Beta</i>	<i>t</i>	<i>R²</i>
Applications for Personal Use	0.187****	4.228	0.067
Utility for Children	0.097*	1.722	0.011
Utility for Work-Related Use	0.131**	2.328	0.033
Utility for Security	0.149****	3.619	0.043
Mobility	0.194****	4.512	0.072
Utility for Accessing Internet and Social Media	0.226****	4.729	0.120
Applications for Fun	0.213****	4.612	0.087
Status Gains	0.042	0.912	0.010
Friends and Family Influences	0.043	0.968	0.011
Secondary Sources' Influences	0.058	1.173	0.018
Workplace Referents' Influences	0.039	0.989	0.015
Fear of Technological Advances	0.057	1.088	0.021

Declining Cost	0.035	0.792	0.014
Cost	0.226****	4.811	0.098
Perceived Ease of Use	0.286****	5.924	0.157
Self-Efficacy	0.248****	4.937	0.119

*p < 0.05; **p < 0.01; ****p < 0.001 (one-tailed test).

As shown in Table 3 (and Figure 2), the sixteen independent variables examined in this study explained 89.6 percent ($R^2 = 0.896$) of the variance in satisfaction of using a mobile phone by people in household. This percentage of variance explained by the independent variables is very high and it means that we have now practically all the independent variables which are explaining the variance on the dependent variable user satisfaction when the technology investigated is the mobile phone. And we can also see in Table 3 that the ten variables who showed to be significant (see also the significant beta path coefficients in Figure 2), that is, applications for personal use, utility for children, utility for work-related use, utility for security, mobility, utility for accessing Internet and social media, applications for fun, cost, perceived ease of use, and self-efficacy explained alone 80.7 percent of the variance in satisfaction of using a mobile phone by people in household. Thus, these ten variables are assuredly extremely important factors to take into account in future studies on the mobile phone and on the part of mobile phone providers, and more particularly mobility, utility for accessing Internet and social media, applications for fun, cost, perceived ease of use, and self-efficacy which explained alone 65.3 percent of this variance (see Table 3). It is extremely interesting to see here that the three new independent variables we added to the Brown and Venkatesh's (2005) theoretical research model, that is, utility for security, mobility, and utility for accessing Internet and social media, all showed to be very significant ($p < 0.001$) in satisfaction of using a mobile phone by people in household and explained alone 23.5 percent of the variance in satisfaction of using a mobile phone by people in household. Indeed, the present study showed that people are, to some extent, using a mobile phone for a matter of security, mobility (the mobile phone provides them with the possibility to use only this telephone to perform all their personal and professional activities), and access to Internet and social media. So, here are three new important variables that we can add to the integrated research model of MATH and household life cycle characteristics suggested by Brown and Venkatesh (2005) to test in future studies, depending on the technology investigated of course. In addition, these three new variables may be included in the sales marketing plan of mobile phone providers.

In the large-scale study in which Brown and Venkatesh (2005) integrated MATH and some household life cycle characteristics as moderating variables, the integrated model explained 74 percent of the variance in intention to adopt a personal computer for home use of 746 American people, a substantial increase of 24 percent over baseline MATH that explained 50 percent of the variance. In a previous study in which they investigated the intention to buy a mobile phone by people in household, Fillion and Berthelot (2007) used the theoretical research model suggested by Brown and Venkatesh (2005) to which they added the two independent variables utility for security and mobility. And their model explained 50 percent of the variance in intention to buy a mobile phone by 307 Canadian people, and the new variables utility for security and mobility explained 5.6 percent of the variance on the dependant variable behavioral intention. In another previous study in which they investigated the user satisfaction of using a mobile phone by people in household, Fillion and Booto Ekionea (2010) also used the theoretical research model suggested by Brown and Venkatesh (2005) to which they also added the two independent variables utility for security and mobility. And their model explained 50 percent of the variance in satisfaction of using a mobile phone by 327 Canadian people, and the new variables utility for security and mobility explained 10.8 percent of the variance on the dependant variable user satisfaction. In a more recent study in which they investigated the user satisfaction of using a mobile phone by people in household, Fillion and Booto Ekionea (2016) also used the theoretical research model suggested by Brown and Venkatesh (2005) to which they also added the two independent variables utility for security and mobility. And their model explained 49.1 percent of the variance in satisfaction of using a mobile phone by 505 Cameroonian people, and the new variables utility for security and mobility explained 2.4 percent of the variance on the dependant variable user

satisfaction. And, in the present study in which we investigated the user satisfaction of using a mobile phone by people in household, we also used the theoretical research model suggested by Brown and Venkatesh (2005) to which we added the same two independent variables utility for security and mobility, and we added another independent variable, utility for accessing Internet and social media. And our model explained 89.6 percent of the variance in satisfaction of using a mobile phone by 750 undergraduate and graduate students from Canada, Cameroon, and Congo, and the new variables utility for security, mobility, and utility for accessing Internet and social media explained 23.5 percent of the variance on the dependant variable user satisfaction. So, from all of these studies above, we can draw some very important conclusions.

First, we can conclude that the variable user satisfaction is as much appropriate as dependent variable in the theoretical research model suggested by Brown and Venkatesh (2005) than is behavioral intention given the percentage of variance explained is as much higher with user satisfaction than it is with behavioral intention. Second, the country in which the people are investigated seems not to be very important since several studies performed in Africa, Canada, and US, are providing about the same results concerning the percentage of variance explained by the independent variables on behavioral intention or user satisfaction, and the new independent variables integrated by the authors to the research model developed by Brown and Venkatesh (2005) have a relatively similar behavior. Third, it seems that when we investigate students (relatively younger than people in general investigated in the other studies and in several different countries) the theoretical research model developed by Brown and Venkatesh (2005), extended with the three new variables we added to their model, shows a very different behavior given two-third of the variables are significant, our three new variables are all three very significant ($p < 0.001$) and explain 23.5 percent of the variance, and all the independent variables are explaining 89.6 percent of the variance on the dependant variable user satisfaction. The sample investigated becomes then very important. Finally, in the present study, we found several interesting things to help advance knowledge in this new and exciting field of adoption and use of technology in households.

First, we found ten very important variables that seem to be good predictors in satisfaction of using a mobile phone by people in household, and more particularly perceived ease of use and self-efficacy, as well as one of the three new variables we added to the Brown and Venkatesh's (2005) model, utility for accessing Internet and social media (see Table 3). These ten variables are also very important to take into account by mobile phone providers to design new mobile phones still better adapted to people's needs and to perform their sales marketing. Second, we found that people (undergraduate and graduate students) are, to some extent, using a mobile phone for a matter of security, mobility, and access to Internet and social media, given our three new variables utility for security, mobility, and utility for accessing Internet and social media, showed to be very significant (see Table 3). Third, we found that it is as much appropriate to use the dependent variable user satisfaction than the dependent variable behavioral intention in the research model proposed by Brown and Venkatesh (2005), given the percentage of variance explained in intention to adopt a mobile phone for household use is quite similar than those explained in user satisfaction, even higher in user satisfaction in the present study. The dependent variable *use behavior* proposed by Thompson et al. (1991) may also be tested in future studies. Also, we suggest the test of new independent variables that may explain a greater percentage of variance in satisfaction of using a mobile phone by people in household in future studies. To that end, we recommend three new independent variables in the next paragraph. Finally, the results of this study provided the evidence that it is far better to use the household life cycle variables as moderating variables in the research model, as suggested by Brown and Venkatesh (2005), given the percentage of variance explained in intention to adopt a new technology in household by the model tested by these authors was significantly higher, and it is still significantly higher in the present study.

It would be interesting in future studies to add some other new variables to the actual theoretical research model (those suggested by Brown and Venkatesh (2005) augmented with the three new variables tested in several previous studies (see Fillion & Berthelot, 2007; Fillion & Le Dinh, 2008; Fillion & Booto Ekionea,

2010, Fillion & Booto Ekionea, 2016, and the present study), depending on the technology investigated naturally, in order to try to explain still more variance (maybe near from 100%) in satisfaction of using a new technology in household. For example, the variable *attention* may be added in social outcomes (a lot of people, particularly young and old people, are feeling to be alone in our actual stressing world, in which both men and women are working and get very busy, so the mobile phone may be an excellent way to communicate with other people every time and everywhere to get the feeling to be less alone), the variable *social norm* may also be added in social outcomes (who knows, people may be using a mobile phone just to do as everybody!), and the variable *control* may be added in utilitarian outcomes (some people may be using a mobile phone to control other people in their family or others; may be another kind of Big Brother!). It would be also interesting to test the actual theoretical research model in other situations and with other populations.

Regarding the limitations of this study, as pointed out by Brown and Venkatesh (2005), the primary limitation is the reliance on a single informant (in this study, a student which is part of the family). It is possible that other members of the household would have provided different responses concerning the motivations to use a mobile phone at home. Future research in household use of technology should incorporate responses from multiple members of the household to truly assess the nature of household use. A second limitation of the study is that all of the respondents in the study might not have had the same time allowed to answer the survey in each business course and in each of the three countries. Indeed, the professors of each business course in each country and in the three countries might not have allowed the same time to the students selected by the researchers to answer the survey at the beginning of the course. Another limitation of the study is the administration of the survey in-class by different researchers. Some respondents may have differently understood some items of the survey instrument depending on different explanations from the part of the researchers and then provided more or less precise ratings on these items, introducing the possibility of some response bias. But the method we privileged in this study to administer the survey instrument is not an exception to the rule. Each method has its strengths and its limitations.

To conclude, much more research will be needed on the use of technology in households in order to better understand its impacts on people's daily life. The research will allow, among others, at least to minimize, if not to remove, some negative impacts of technology in people's daily life in the future and to develop new technologies still better adapted to people's needs. So we will continue to inquire into this exciting field.

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WHAT SHOULD CANADA EXPORT UNDER THE CETA? AN EXAMINATION OF THE CANADA-EUROPEAN TRADE AGREEMENT FOR THE AIRCRAFT SECTOR⁶

We identify three specific products within the aircraft sectors that offer Canadian exporters the highest potential to export to the European Union under the newly signed Comprehensive Economic and Trade Agreement between Canada and European Union. The results suggest that the trade agreement will enhance the Canadian export potential to the European Union for these products.

Introduction

The economic relationship between Canada and the European Union (EU) has evolved, grown, and deepened over the last 40 years. Canada was one of the first industrialized countries with which the EU established a cooperative framework in 1976. Since then, several sectoral agreements have been concluded and the Comprehensive Economic and Trade Agreement (CETA) was established in 2017. After the signing of Comprehensive Economic and Trade Agreement between Canada and the European Union, 99.6% of prevailing tariffs on Canadian goods entering the EU were eliminated (Government of Canada, 2017a; 2017b; 2018). Out of all the sectors in Canada that can benefit from this agreement, Machinery and Transportation Equipment (M&TE) sector may be the one that benefits the most. M&TE is the biggest sector of the Canadian economy and the sector alone contributes 27% of Canadian GDP. In addition, the EU is the world's largest importer of M&TE, yet the EU received only 1.31% of its M&TE imports from Canada in the past (Statistics Canada, 2018). Therefore, it is important to examine how this newly signed CETA impacts Canadian exports, especially for the M&TE sector. We use several trade indicators in this paper to assess the competitive advantages of the Canadian aircraft sector exports to the EU and make a few recommendations regarding which specific products have the highest price advantages over other countries when exporting to the EU.

We organize the rest of this paper as follows: first, we provide the background of the trade relationship between Canada and the European Union regarding the M&TE sector. Second, we describe the data and trade indicators that we use. Third, we present the results from the trade indicators and identify three specific products with the highest export potential to the EU. In the final section, we state some limitations of this study and make suggestions for future research.

Background

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The Comprehensive Economic and Trade Agreement (CETA) between Canada and the European Union (EU) was signed in October 2017. Under this agreement, almost all tariff lines on industrial products for both sides are fully eliminated. Reductions in duty rates are expected to bring down the costs incurred by Canadian exporters, and thus make goods more competitive in the European market. Tariff elimination is also expected to lead to wider choice and lower prices of Canadian goods for EU consumers. Government reports have shown that the free trade agreement has several impacts on the economy in Canada and in the EU. For example, the study conducted by the European Commission's Directorate-General for Trade has predicted that an annual increase in bilateral exports and imports between the EU and Canada will be at least 8%, representing an additional €12 billion per year (European Commission, 2017a; 2017b). Parliament of Canada (2017) estimates that tariff reduction induced by CETA will increase Canadian export of manufacturing goods by 651 million Canadian dollars and transport equipment by 554 million Canadian dollars to the EU market.

Out of all sectors that benefit from the trade agreement for Canadian companies, Machinery and Transportation Equipment (M&TE) may be the one that benefits the most. The Machinery and Transportation Equipment sector has consistently been one of the most important sectors for productivity and growth of the economy of Canada. The M&TE Sector of Canada is a major contributor to the country's GDP, economic activity, and employment. The production of the machinery and transportation equipment comprises 51% of the total Canadian production, out of which 55% of production is exported. The EU has been the world's largest importer of M&TE for decades and has imported €555.14 billion worth of these goods in 2016, but Canada contributed only 1.31% with €14.98 billion of their M&TE imports. The EU is Canada's second biggest trading partner after the United States. Canada contributed approximately 2% of the EU's global external trade in goods. Canada is the third largest exporter of M&TE to the EU with €14.98 billion, ranked after the United States and China (European Commission, 2006a; European Commission, 2006b; Parliament of Canada, 2017).

The newly signed trade agreement provides great opportunities to the Canadian M&TE industry to take advantage of tariff reductions provided under the CETA and increase its share in the EU imports of these goods. The elimination of almost all tariffs by the EU will not only decrease the price of Canadian goods in the EU but also provide less processing time at the EU's borders. It will make Canadian goods more affordable to the EU consumers and facilitate faster delivery at the destination with a cost advantage. The benefits of CETA are known, yet not all products have the potential to be exported to the EU. In our study, we will identify a few products within the aircraft sector that have the highest potential to export to the European Union.

Methods

We draw most of our inferences on Canada-EU bilateral trade from the reports compiled by Global Affairs Canada (Statistics Canada, 2018). Their reports offer data on key trade and economic indicators between Canada and rest of the world. It also describes transactions between Canada and its main trading partners that capture imports and exports of goods and services, direct investment inflows and outflows, and the current account balance. We collected our trade data from a few databases including Trade Map, the World Trade Organization, and World Fact Book. We then use the trade indicators developed by Mikic and Gilbert (2009) in our analysis. The specific indicators we use are Revealed Comparative Advantage (RCA), Import Penetration Index (IPI), and Trade Intensity Index (TII). We also use Import Forecast, Rank Analysis and Tariff Analysis (Loke, 2013) to identify the specific products expected to gain trade advantage for Canadian exports to the EU under the CETA. These trade indicators have been used by other researchers (Plummer et al., 2010; Gonzalez et al., 2012; Evans et al., 2007; Yue, 2001; Bender & Li, 2002; Ferto & Hubbard, 2002; Leu, Chung & Koh, 1998; Batra & Khan, 2005; Cheong, 2010). Each of the trade indicators (RCA, IPI and TII) has its own

assumptions, usages, and rationales. We explain each of these three indicators below and summarize them in Table 1. We explain our results of Import Forecast, Rank Analysis and Tariff Analysis in our Results Section.

Comparative Advantage index (RCA)

RCA measures a country's export potential. The RCA reveals whether any country is in the process of extending the products in which it has a trade potential, as opposed to situations in which the number of products can be competitively exported (World Bank Group, 2010). Its use is to indicate the comparative advantage of exporting products according to its share in the world market. It can also provide useful information about potential trade prospects with new partners for a product. The RCA is the trade analysis tool that is used to evaluate the comparative advantage of a product. It indicates a country's export potential or traders' need to export. Countries with similar RCA profiles are unlikely to have high bilateral trade intensities unless intra-industry trade is involved. RCA measures, if estimated at high levels of product disaggregation, can focus attention on other nontraditional products that may be successfully exported. RCA is measured as follows:

$$RCA_{ij} = \left(\frac{X_{ij}}{X_{it}} / \frac{\sum X_{wj}}{\sum X_{wt}} \right)$$

where: X_{ij} and X_{wj} are the values of country i 's exports of product j and world exports of product j
 X_{it} and X_{wt} refer to the country i 's total exports and world total exports.

Import Penetration Index (IPI)

The import penetration rate shows to what degree domestic demand (the difference between GDP and net exports) is satisfied by imports. Calculated at the sectoral level, it is termed as self-sufficiency ratio. The index may be used as the basis of specific policy objectives targeting self-sufficiency. It provides an indication of the degree of vulnerability to certain types of external shocks. The ratio of total imports to domestic demand is calculated as a percentage. It ranges from 0 (with no imports) to 100 per cent when all domestic demand is satisfied by imports only (no domestic production and no exports). The IPI is measured as follows:

$$\frac{\sum_s M_{sd}}{GDP_d - \sum_s X_{ds} + \sum_s M_{sd}} \times 100$$

where: d is the country under study
 s is the set of all other countries
 X is total bilateral exports
 M is total bilateral imports
 GDP is gross domestic product of country d .

In words, the numerator is total imports to d , the denominator is the GDP of d less total exports and plus total imports (i.e. total domestic demand).

Trade Intensity Index (TII)

The trade intensity statistic is the ratio of two export shares. The numerator is the share of the destination of interest in the exports of the region under study. The denominator is the share of the destination of interest in the imports of the world as a whole. In other words, the statistic indicates

whether a region exports more (as a percentage) to a given destination than its import from the world. It takes a value between 0 and $+\infty$. Values greater than 1 indicate an ‘intense’ trade relationship. The TII is measured as follows:

$$\frac{\sum_{sd} X_{sd} / \sum_{sw} X_{sw}}{\sum_{wd} X_{wd} / \sum_{wy} X_{wy}}$$

where: s is the set of countries in the source

d is the destination

w and y represent the countries in the world

X is the bilateral flow of total exports

In words, the numerator is the export share of the source region to the destination; the denominator is the import share of the world to the destination.

Table 1 Trade Indicators and Tariff Analysis Definitions

Index	Assumption	Assumption used in the study	Rationale
Revealed Comparative advantage (RCA)	A country can only gain advantage out of signing an FTA if it has an export advantage against competing global suppliers.	Identification of the specific products will require the Canadian firms to possess a comparative advantage towards exporting the products.	If the RCA value is more than 1, it indicates Canada is in an advantageous position to supply the identified product when compared to other global suppliers. This would imply a possibility of trade diversion for EU importers in favor of Canada because of CETA.
Import Penetration Index (IPI)	An exporting country can only gain benefit from its comparative advantage if the importing partner is willing to import.	Even if Canadians have good RCA value, it will only result in trade diversion in favor of Canada if the EU needs the imports.	High IPI index for products in the EU would mean that the EU’s import dependency towards satisfying the domestic demand is higher.
Trade Intensity Index (TII)	An exporting country can only gain advantage of high import dependency if the importing country wishes to import from them.	High RCA for Canada can only take advantage of high IPI for the EU if there is a buying preference held by the EU towards Canadian products.	High TII indicates strong bilateral relations between Canada and the EU and hence indicates positive trade impact for the said product.

Results

The M&TE sector includes six different product codes (HS84, HS85, HS86, HS87, HS88, and HS89) covering items such as vehicles, machinery, electrical equipment, aircraft, ships, and railway. These Harmonized System (HS) codes are the standardized systems of names and numbers that classifies traded product developed by WCO (World Customs Organization). We will use the HS88 product code sector (Aircraft, spacecraft, and parts thereof) as an example to present our empirical results in this paper. The complete analysis for all six product codes under the M&TE sector can be found in the appendixes of the extended study (Soral, 2018). All results are based on the trade information in 2016.

Results of the Comparative Advantage index (RCA) Analysis

We calculated RCA values for all the products under the HS88 product code and assigned their rankings based on their RCA values in Table 2. The high RCA value of the product implies that Canada has a strong potential to export the product to other countries. According to our results, Canada has the highest comparative advantage when exporting for ground flying trainers, followed by undercarriages and helicopters. However, this export strength will only be converted into an export advantage for Canada if there is an import demand for these products in the EU. Hence we check the import penetration index (IPI) of all HS88 products to estimate the dependence of the EU market towards fulfilling its domestic demand.

Table 2 RCA Analysis for HS88 Products

Product Code	Product Label	RCA Ranking	RCA Value
HS880529	Ground flying trainers and parts	1	31.50
HS880320	Undercarriages and parts	2	10.97
HS880211	Helicopters of an unladen weight \leq 2000 kg	3	10.26
HS880230	Aeroplanes and other powered aircraft of an unladen weight > 2000 kg but \leq 15000 kg	4	9.45
HS880212	Helicopters of an unladen weight > 2000 kg	5	2.75
HS880100	Balloons and dirigibles; gliders, hang gliders and other non-powered aircraft	6	2.29
HS880240	Aeroplanes and other powered aircraft of an unladen weight > 15000 kg	7	1.91
HS880310	Propellers and rotors and parts	8	1.41
HS880220	Aeroplanes and other powered aircraft of an unladen weight \leq 2000 kg	9	1.38
HS880330	Parts of aeroplanes or helicopters	10	1.32

Results of the Import Penetration Index (IPI) Analysis

We calculated the IPI value of the HS88 products to estimate if there is a demand and import potential to the EU market. The products with the highest IPI values are presented in Table 3. The higher

IPI value of the product, the greater the EU's import potential from other countries.

Table 3 IPI Analysis for HS88 Products

Product Code	Product Label	IPI Ranking	IPI Value
HS880240	Aeroplanes and other powered aircraft of an unladen weight > 15000 kg	1	1.168
HS880330	Parts of aeroplanes or helicopters	2	0.712
HS880320	Undercarriages and parts thereof, for aircraft	3	0.046
HS880230	Aeroplanes and other powered aircraft of an unladen weight > 2000 kg but ≤ 15000 kg	4	0.045
HS880212	Helicopters of an unladen weight > 2000 kg	5	0.033
HS880390	Parts of aircraft and spacecraft	6	0.028
HS880310	Propellers and rotors and parts	7	0.010
HS880211	Helicopters of an unladen weight ≤ 2000 kg	8	0.004
HS880260	Spacecraft, incl. satellites, and suborbital and spacecraft launch vehicles	9	0.004
HS880529	Ground flying trainers and parts	10	0.002

Results of the Rank Analysis

We weighted RCA and IPI ranking equally and calculated its Combined Ranking in Table 4. We then assigned its Final Ranking based on the Combined Ranking. The lower the Combined Ranking from the RCA Ranking and the IPI Ranking, the lower the Final Ranking. We rearrange the Final Ranking in Table 5. The results indicate that undercarriages (HS880320) and different sizes of aeroplanes (HS880230 and HS880240) carry both good export potential from Canada and import potential by the EU.

Table 4 Rank Analysis for HS88 Products

Product Code	RCA Ranking	IPI Ranking	Combined Ranking	Final Ranking
HS880529	1	10	11	5
HS880320	2	3	5	1
HS880211	3	8	11	5
HS880230	4	4	8	2
HS880212	5	5	10	4
HS880100	6	15	21	10
HS880240	7	1	8	2

HS880310	8	7	15	8
HS880220	9	11	20	9
HS880330	10	2	12	7

Table 5 Final Ranking for HS88 Products

Product Code	Final Ranking
HS880320	1
HS880240	2
HS880230	3
HS880212	4
HS880211	5
HS880529	6
HS880330	7
HS880310	8
HS880390	9
HS880220	10

Results of the Trade Intensity Index (TII)

We chose three products that have the highest Final Ranking from our Rank Analysis to calculate our Trade Intensity Index (TII). These three products (HS880320, HS880230, and HS880240) have the highest trade potential between Canada and the EU. We present our results in Table 6. The values of TII for these three products are greater than 1, which implies that there is an intense trade relationship for the export of such products from Canada to the EU. The values (greater than 1) also mean that Canada has price competitiveness to export these products to the EU.

Table 6 Trade Intensity Index for HS880320, HS880240, and HS880230 (All values are in US Dollars)

Product Code	Per Item Export from Canada	Total Export from Canada	Per Item Import to EU	Total Import to EU	TII	Projected Export to EU from Canada for 2020
HS880320	204,976	2,533,618	2,393,106	105,961,708	3.58	379,657
HS880240	1,486,163	2,533,618	59,411,123	105,961,708	1.05	2,175,100
HS880230	238,991	2,533,618	2,336,252	105,961,708	4.28	334,517

Results of the Import Forecast

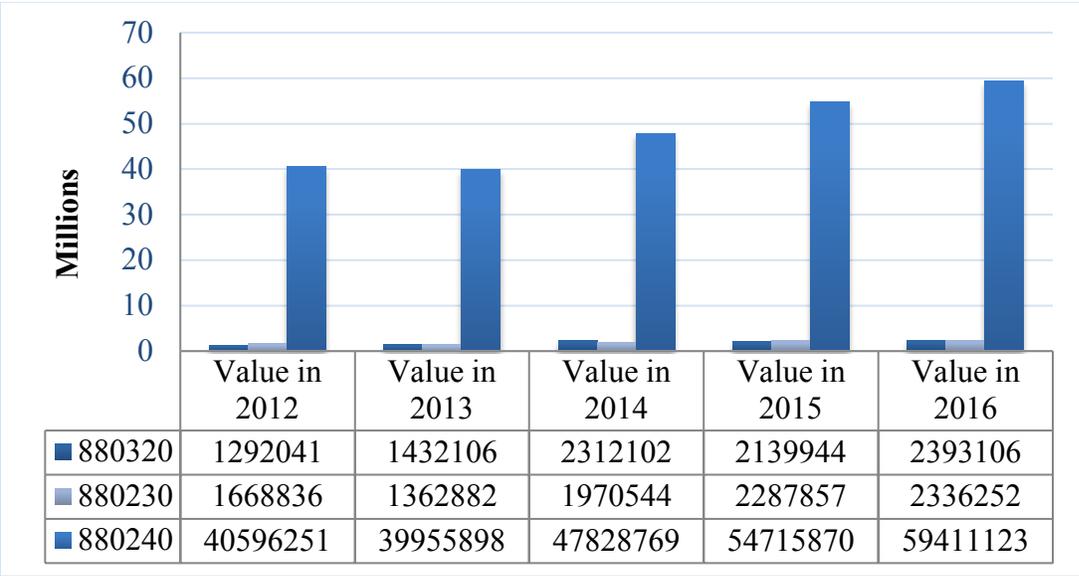
The growth rate of these three products has been calculated as depicted in Table 7 and future projections for the year 2020 have also been calculated. There has been consistent growth of import by the EU over the period from Year 2012 to 2016, as indicated in Figure 1.

Table 7 Import Forecast Analysis for HS880320, HS880240, and HS880230 Products (All values are in US Dollars)

	European Union's (EU 28) imports from world		Projected
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Product Code	Value in 2012	Value in 2013	Value in 2014	Value in 2015	Value in 2016	Growth Rate	Value in 2020
HS880320	1,292,041	1,432,106	2,312,102	2,139,944	2,393,106	16.66	4,432,511
HS880240	40,596,251	39,955,898	47,828,769	54,715,870	59,411,123	9.99	86,952,199
HS880230	1,668,836	1,362,882	1,970,544	2,287,857	2,336,252	8.77	3,270,064

Figure 1 Import of the EU during 2012 – 2016 for HS880320, HS880240, and HS880230 Products (All values are in US Dollars)



Results of the Tariff Analysis

High Trade Intensity Index (TII) can only lead to trade diversion in favor of the exporting country if the importing country witnesses price advantage vis-a-vis existing suppliers. If the difference between World Trade Organization (WTO) Most Favored Nation (MFN) tariff rates and the tariff rates applied to Canadian products is higher, there is a higher chance of trade diversion in favor of Canada. Canada will be able to supply the identified products with the high TII values if Canada’s tariff rate is lower than the existing suppliers of M&TE to the EU.

Our final step of the analysis is to consider competing countries who also export HS88 products to the EU to evaluate Canada’s price competitiveness over other countries. The European Union consists of several country members and each county has its own top trading partners as Canada’s competing countries. In this analysis, we will use countries that import the highest HS880320, HS880240, and HS880230 products and identify their respective trading partners. We present our results in Table 8. Before the implementation of CETA, there was a 2.7% tariff rate on the Canadian HS88 products exporting to Germany and France. With the tariff rate, Canada was one of Germany’s top four trading partners for HS880320 products and one of their top three trading partners for HS880240 products. As for HS880230 product, Canada was one of France’s top two trading partners. When this tariff rate is eliminated, it will give Canada a better price competitiveness over other countries.

Table 8 Tariff Analysis for HS880320, HS880240, and HS880230 (All values are in US Dollars)

Product Code	Projected Export to EU from Canada for 2020	EU country with High Import Value	Top 10 Trading partners	Applicable Tariff	Inference
HS880320	379,657	Germany	France	0	After elimination of tariff rate of 2.7 (MFN rates) it is possible that Canada will have a better share in terms of its Export to the EU.
			US	0.9	
			UK	0	
			Canada	2.7	
			Russia	0.9	
			Brazil	0.9	
			Malta	0	
			Switzerland	0	
			Netherlands	0	
			Denmark	0	
HS880240	2,175,100	Germany	France	0	After elimination of tariff rate of 2.7 (MFN rates) it is possible that Canada will have a better share in terms of its Export to the EU.
			Spain	0	
			Canada	2.7	
			Brazil	1.4	
			US	1.4	
			Switzerland	0	
			South Korea	0	
			UK	0	
			Sweden	0	
			UAE	1.4	
HS880230	334,517	France	US	1.4	After elimination of tariff rate of 2.7 (MFN rates) it is possible that Canada will have a better share in terms of its Export to the EU.
			Canada	2.7	
			Brazil	1.4	
			Luxembourg	0	
			Australia	1.4	
			Austria	0	
			Italy	0	
			Congo	0	
			Indonesia	0	

CONCLUSION

As one of the top ranked importers of Machinery and Transportation Equipment, the EU presents itself as an important trading partner for Canada. Canada has exported only a fraction of the M&TE products that the EU imports. Canada exports about €7.32 billion worth of machinery and transportation equipment to the EU compared to the €555.11 billion that the EU imported in 2016. This low amount that Canada exported to the EU may be due to the tariff added on the M&TE products. After the signing of CETA between Canada and the EU, the tariff was eliminated. This newly signed free trade agreement should provide the Canadian M&TE sector with a better price advantage over other countries when exporting to the EU. We identify three aircraft products (HS88) within the M&TE sector that have the highest potential to export to the EU according to their high growth rates and favorable trade intensities. These three products are undercarriages (HS880320) and different sizes of aeroplanes (HS880230 and HS880240). For undercarriage products (HS880320), Canada was one of Germany's top 4 trading partners in 2016. The other three top trading partners that Germany had either have no tariffs or faced a tariff of only 0.9%, while Canada had 2.7% tariff rates. After CETA, this 2.7% tariff rate that Canada had

is eliminated and it should provide Canada with greater price competitiveness over other countries when exporting to Germany. The same situation applies to different sizes of aeroplanes products (HS880230 and HS880240) as well.

The implementation of CETA will not only increase the volume of M&TE sector exports with price advantages but it will also help to create more job opportunities within Canadian markets. There are some limitations of our study. First, we only analyzed aircraft (HS88) products. The whole analysis of the M&TE sector to the expansion of all sectors will identify all potential products that have the highest export potential from Canada to the EU under the CETA for the future research. Second, we only consider tariffs as a trade barrier in this study. Other economic factors, trade barriers, and non-tariff measures such as exchange rate fluctuation, inflation rate, and regulations are not considered. Third, noneconomic consideration such as politics is beyond the scope of our study.

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FIRST THOUGHTS ON AN EVENT: WHAT DO THEY TELL US? PRELIMINARY FINDINGS FROM A PROJECT ON THE FIRST WORLD WAR

This year marks the end of the centenary of the First World War (FWW/WWI from now on), an historic event that changed the course of history in significant ways. The centenary of the FWW has been marked by special events around the world. This paper focuses how respondents from around the world viewed the FWW *before* the centenary celebrations began; it examines the first thoughts that come to respondents' minds when they think of the FWW and whether these are related to demographic variables (e.g., age, gender) and others such as whether they had visited a FWW site, and their ties to FWW (e.g., emotional connections to the event).

First thoughts or top-of-mind awareness (or TOMA) of a product or service is a topic that is of considerable importance in marketing. TOMA is considered an implicit measure of a consumer's attitudes towards an object and thought to shape his/her future interactions with that object including purchase behaviour (Choi, Liu, & Kim, 2015). Past research indicates that TOMA may be related to age and may also affect intention to purchase a service (Choi, Liu, & Kim, 2015). In the context of tourism, TOMA can be indicative of the strength of association in consumers' memory between unconscious feelings and destinations (Butterfield, Deal, & Kubursi, 1998). Given its links to future purchase behaviour, it is not surprising that a vast amount of marketing effort is usually aimed at creating and maintaining positive top-of-mind awareness of the company's brand. While this concept has been studied in the context of both products and services, we could not find any research that examined the top-of-mind awareness of people to an historic event. This project aims at filling this void in the literature.

The data for this study was collected as part of a large-scale, multi-national, multi-lingual (English, French, Flemish, and German) study during 2012 through an on-line survey. A total of 2490 responses from over 60 countries were received, but there were over 100 responses from just nine countries (Australia, Belgium, Canada, France, Germany, Netherlands, Switzerland, United Kingdom, and United States). This paper is based on the analysis of the first thoughts on FWW of participants from these nine countries. We analyzed a total of 2132 responses to this qualitative question using the qualitative data analytic software MAXQDA. The responses from non-English speaking countries were first translated into English by a professional translator and 55 key themes in responses were identified. These 55 themes were collapsed into 15 categories (peace treaties, mud/trenches, battles, allies, central powers, arts/literature, family, positive emotions, negative emotions, scale of the war, death/destruction, modern war, beginning/end of an era, youth, and miscellaneous items).

The MAXQDA file was then converted into an SPSS file and t-tests were conducted to see whether respondents' first thoughts varied depending variables such as age, gender, education, and whether or not the person had visited a FWW site in the past 5 years, in addition to three other variables: the person's emotional proximity/connection to the FWW (i.e., whether the person had lost a family member in the FWW or whether he/she, his/her parents/grandparents came from a WWI zone), his/her institutional connection to WWI (i.e., whether he/she was part of the armed forces or worked for a FWW-related

organization), or had a knowledge connection to WWI (i.e., whether the person was in an academic field related to the FWW).

Results indicate that the most differences in first thoughts were found between respondents who had some institutional connection or more knowledge about WWI and those who did not, and who were 50 years or older and their younger counterparts. Those who had institutional proximity to the event were less likely than those who did not to mention peace treaties, mud/trenches, family, battles, death/destruction, or any nation belonging to the Central Powers as a first thought; however, they were more likely to mention positive emotions as first thoughts. Similarly, those with knowledge proximity or an academic connection to the FWW were differed in the top of mind awareness of the FWW from those who did not have such a connection: they were less likely to mention peace treaties, any arts/literary work, any Central Powers nation, or that the FWW was a ‘modern’ war, but more likely to mention positive emotions and family connections to the war. Another important variable seems to be whether or not a respondent had actually visited a FWW site in the past 5 years. Those who had done so were more likely to mention family connections (which probably made them visit in the first place), specific battles, and both positive and negative emotions as first thoughts while those who had not visited a WWI site were more likely (than others) to mention peace treaties, Central Power nations, and that it was a ‘modern’ war.

In terms of demographic variables, age seemed to have the greatest impact on first thoughts about WWI. Older respondents (age 50+) were more likely than younger ones (age<50) to mention both positive and negative emotions and family connections as first thoughts while younger respondents were more likely than the 50+ group to mention peace treaties, mud/trenches, nations belonging to the Central Powers group, and that WWI was a ‘modern’ war.

The results also provide some further insights into first thoughts. For example, the most often mentioned first thoughts were mud/trenches, specific battles of WWI, or the scale of the event. were likely to be mentioned by most consumers and hence were not good ways to differentiate between respondents. However, less mentioned first thoughts such as the loss of a family member, nations that fought on the Central Powers side, and positive emotions seem to be helpful in differentiating between respondents.

Further analysis is underway at this point; we hope to use more advanced statistical techniques (e.g., modeling) to examine whether first thoughts (along with demographic and other variables) can be used to predict future visits. Limitations of the study will also be discussed.

THE WOLFFVILLE MAGIC WINERY BUS: A GROUNDED THEORY APPROACH TO UNDERSTANDING THE CONSUMER VIEW OF WINESCAPE

The tourism literature uses two perspectives to understand the wine tourism, the micro approach (an individual winery) and the macro approach (the winery area/region). This study reveals the important role played by tour guides in linking the micro and macro perspectives, creating a social environment and mediating the winery experience.

Background

The Wolfville Magic Winery Bus (WMWB) is a hop-on, hop-off winery tour excursion that is one-of-a-kind in North America (“Discover the Nova Scotia Wineries,” 2018) that operates in Nova Scotia’s Annapolis Valley. Originally created through collaboration with the town of Wolfville and five wineries in close proximity to Wolfville (Sears & Weatherbee, Forthcoming), the WMWB first opened the doors of its classic British double-decker bus to the public in June of 2012 and has seen a significant increase in popularity over the past 6 years (“Wine bus expands season,” 2017). The WMWB idea was first pursued by Pete Luckett and Hanspeter Stutz, two winery owners who brought the idea forward to David Hovell of the Wolfville Business Development Corporation (WBDC) who eventually agreed to participate in the project and become the Operations Manager as a part of his work duties with the WBDC (Sears & Weatherbee, Forthcoming).

The signature double decker bus operates between the months of May and October and travels in a continuous hour-long loop between the five wineries, stopping in downtown Wolfville each time (“Discover the Nova Scotia Wineries,” 2018), which allows for guests to experience each winery at a relaxed pace and customize their tour experience. The WMWB is designed to showcase not only the individual participating wineries, but also the beautiful region and history of Nova Scotia wine country, which is delivered in a fun and educational way by the winery bus tour guide.

The excursion originally included a visit to five different wineries in the Annapolis Valley along with day-long transportation and a professional group tour guide, but shortly after the participating wineries reduced to a total of four. In 2017, the WMWB added an additional winery to the list, making a grand total of five wineries available for visit during the tour (“Wine bus expands season,” 2017). The wineries included in the excursion are Gaspereau Vineyards, L’Acadie Vineyards, Luckett Vineyards, Domaine de Grand Pré and the newest addition, Lightfoot & Wolfville Vineyards (“Wolfville Wineries,” 2018).

Included in the WMWB tour is a complimentary wine sample and a private tour provided by each winery (“Discover the Nova Scotia Wineries,” 2018). The sample and tour can be and are commonly

enjoyed amongst fellow winery bus guests⁷. The WMWB offers a unique experience with an emphasis on learning; about the terroir - a French term for “earth” or “soil” and a key factor in creating standout wines reflective of the region; about the history of the region and its connection with food and; about how the Annapolis Valley and Wolfville area came to be the so called “heart” of Nova Scotia wine country (“Wolfville Magic Winery Bus,” 2017)

The Town of Wolfville has frequently been referred to as the ‘hub’ or ‘heart’ of Nova Scotia wine country across various blogs, news articles and informative websites. This is demonstrated through discourse that is used when referring to the Annapolis Valley wine country, for example the “Good Cheer Trail - Tours,” (2017), a page found on the Tourism Nova Scotia website uses the phrase “The Wolfville Magic Winery Bus – a classic British double-decker – will whisk you away for an incomparable day of tasteful adventure in the heart of Nova Scotia wine country.” Additionally, a globe and mail article titled “In Nova Scotia wine country, tipple a little Tidal Bay,” (2012) uses this phrase “a main street strip of shops and cafés make it (Wolfville) a great base for exploring the heart of Nova Scotia wine country.” to describe where the WMWB will take you throughout the day-long adventure.

Wolfville’s Economic Action Plan, which was published in September 2012, suggests the desire to position Wolfville as the ‘heart’ or ‘hub’ of Nova Scotia wine country by explaining under the subtitle “Strategies and Tactics” that they must “Work with the WANS [Winery Association of Nova Scotia] to showcase Wolfville as centre of Nova Scotia’s Wine Country.” and that “Tours should start and end in Wolfville.” (Wolfville, 2012). (Sears & Weatherbee, Forthcoming) also point out that “nowhere else in the province is there a cluster of wineries that is within a one-hour drive of an urban centre comprising half of the province’s population” both suggesting a possible explanation to why Wolfville and/or the Annapolis Valley are frequently referred to as the heart of Nova Scotia wine country.

Shaw (1999) identifies Nova Scotia’s Annapolis Valley in the journal article titled “The Emerging Cool Climate Wine Regions of Eastern Canada” and describes the climate as hostile for growing the traditional grape varieties known as *vitis vinifera*, but also recognizes that careful planning, patience and adaptation to the climate at a micro level can result in high quality wines that are “light and fruity in flavour” (p.79). The *terroir* plays an important role in the quality of various wines and can explain the unique styles of wine that are found in Nova Scotia in particular. At a micro scale, *terroir* is reflected by the combination of the mesoclimates, topographic and geological characteristics, including the soil to create unique styles and flavours of wine (Shaw, 1999). The cool-climate, rich soil and close proximity to the Atlantic Ocean, specifically the Minas Basin, all play roles in how Nova Scotia wines are made and presented.⁸ Nova Scotian wines have high acidity and often reveal light, crisp flavours with prominent hints of minerality².

According to the Nova Scotia Tourism website (“Nova Scotia Wineries,” 2018), there are currently over 18 wineries located across Nova Scotia. Domaine de Grand Pré is recognized as the first commercial vineyard to be planted in Nova Scotia in the year 1969 and is located on the southwestern shore of the Minas Basin (Shaw, 1999). The proximity of the vineyard to the Minas Basin allows for some protection against cold winters and helps the grapes ripen to sufficient standards in the warmer months (Shaw, 1999). Nova Scotia winemakers are known for producing high quality wines such as Traditional Method Sparkling, also known as Champagne-style wines, crisp and aromatic white wines and ice wines, which are starting to

⁷ This knowledge originates from personal experience with the WMWB tour, from working at Lightfoot & Wolfville Vineyards and from observation of guests on the tour, during work hours and at each winery.

⁸ This is personal knowledge acquired from training received while employed at Lightfoot & Wolfville Vineyards located in the Annapolis Valley

be recognized on an international scale (“In Nova Scotia wine country, tipple a little Tidal Bay,” 2012).

The Winescape

It is possible to examine the wine tourism industry using various perspectives or lenses. Wine tourism is described by Hall, Sharples, Cambourne, & Macionis, (2002) as “visitation to vineyards, wineries, wine festivals and wine shows for which grape wine tasting and/or experiencing the attributes of a grape wine region are the prime motivating factors for visitors” (p.3). There are two main types of wine tourism research supported by the literature; these include either studies that are conducted from the viewpoint of wineries, or those that are conducted from the viewpoint of consumers (Bruwer & Gross, 2017). Charters & Ali-Knight, (2002) seek to understand the “motivation and purpose of wine tourists” (p.311) and were able to identify that there are many different and distinct segments of wine tourists, and also confirmed the commonplace view from wineries that these different segments exist. Predominantly, the wine tourism literature focuses on classifying elements of the wine tourism experience from a supply perspective, which only considers the elements that are provided to the consumer during the wine tourism experience. The literature rarely explores the wine tourism experience from the demand perspective, which characterizes elements that consumers are expecting or that they find the most important. This is especially noticeable in the winescape literature.

Quintal, Thomas, & Phau, (2015) explain how the concept of a ‘winescape’ has been derived from servicescape theory which essentially describes and identifies the specific environmental, tangible and intangible factors of a service environment that can be controlled to alter the consumer experience. By using servicescape theory, it is then possible to extend it more specifically to the wine tourism industry, which is also known as the ‘winescape’ (Quintal, et al., 2015).

The ‘winescape’ is described by Bruwer & Gross, (2017) as the “wine region image” (p.498) and is known to have shifted from a typical idea of wine regions with neatly kept vineyards to an increased emphasis on other features of wine regions such as the natural scenery, cultural aspects and leisurely features (Bruwer & Gross, 2017). The ‘winescape’ has historically been viewed from two different perspectives, resulting in a macro-winescape and a micro-winescape (Quintal, et al., 2015).

The macro-winescape considers the whole wine region or route, and the geographical area where the wineries are located, including the landscape and is the most common viewpoint adopted in the wine tourism literature (Quintal, et al., 2015). Quintal, et al., (2015) describes the micro-winescape as an “approach that focuses on the winescape as the environment at a specific winery” (p.597). Essentially, the two approaches attempt to provide separate perspectives to explore how consumers perceive the winescape in terms of either a specific winery (micro) or in terms of the general winery region or route to arrive at the wineries (macro).

Bruwer & Gross, (2017) states that the “microapproach” in theory “conceptualizes the winescape as a second-tier destination (the winery) within a first-tier destination (the wine region)” (p.498) and then goes on to explain that previous studies have found evidence that tourists do not choose the wineries they intend to visit, before choosing the winery destination or geographic area that they will be travelling to, and therefore states that this approach goes against the pre-existing evidence (Bruwer & Gross, 2017). Bruwer & Gross (2017) explain that their use of a macro-winescape scale is to avoid limitations presented in the previous study caused by the use of a micro-winescape scale. A mixed-methods approach is employed by Bruwer & Gross (2017) by conducting three separate analyses. The study conducted by Bruwer & Gross, (2017) acknowledges that there is a lack of wine tourism literature that attempts to conceptualize the winescape, the one exception being the study conducted by Quintal et al., (2015) using a microapproach.

Quintal et al., (2015) utilize a list of winescape attributes that had previously been identified by Thomas, Quintal, and Phau (2010a, 2010b, 2011) which includes the following: “(1) setting; (2) atmospheric; (3) wine quality (4) wine value; (5) wine complementary product; (6) signage; and (7) wine service staff” (p.598) and implemented a self-administered survey to winery guests at four different wineries. The results were then tested using quantitative methods to identify “which attributes most directly influence wine tourist attitude and indirectly influence behavioural intention” (Quintal, et al., 2015 p.604). It is important to note that this list lacks many other possible criteria including the identification of tour guides (e.g. staff who provide educational tours) and the social aspects of attending a winery (e.g. meeting new people or spending time with friends and family). Again, the researchers omit important criteria pertaining to the winescape.

This study observes wine tourism from a consumer perspective, to help understand how the consumer experiences wine tourism in Nova Scotia, and more specifically how they perceive the WMWB as an experience.

Method

Grounded theory is described by Bryman, Bell, Mills & Yue (2011) as an iterative process where theory emerges from the analyzed data. It is difficult to provide a simple definition for grounded theory since there are many different opinions about its use, which stem from the authors and creators of the theory itself. Patton, (2002) states that “grounded theory focuses on the process of generating theory rather than a particular theoretical content” (p.125), which contrasts grounded theory against other common qualitative methods that focus on a specific aspect of the human experience.

To begin explaining the method of grounded theory, it is important to understand that this is a qualitative method, which deviates substantially from typical quantitative work. That being said, the terms used commonly in quantitative research (such as coding) may have different meanings in a qualitative context. The sampling in qualitative research is much less focused on achieving a statistically representative sample, and more focused on discovering the categories and themes to support a theory (Bryman et al., 2011). Bryman et al., (2011) explain the main tools of grounded theory summarized from the works of Glaser and Strauss, and Corbin and Strauss which include theoretical sampling, coding, theoretical saturation, constant comparison, and the three types of coding typically found when using grounded theory. These three types of coding are described as, open coding, axial coding and selective coding. Patton, (2002) also explains that grounded theory puts an emphasis on interplay between the data and the researcher and suggests specific “coding procedures” to keep the process as standardized as possible. Coding used in grounded theory refers to the process of breaking down the data to produce themes and categories which emerge from the data itself (Bryman et al., 2011).

Qualitative data were collected over the period of five years, between 2013 and 2017, from the WMWB tour guests. These data consisted of two qualitative, open-ended questions, which appeared within a survey that was distributed to WMWB participants. Each person who had gone on the WMWB tour was eligible to participate. The questions asked on this survey were, “What was the most memorable part of your experience on the Wolfville Magic Winery Bus tour?” and “What was the most memorable part of your stay in the Town of Wolfville?”. In total, approximately 2,250 responses were collected for each question, making a total of 4,500 responses available for analysis. These data were sorted in an excel spreadsheet according to year and question. Grounded theory was used to analyze these data.

The method in which grounded theory was applied to these specific data is as follows. The data for

each question were analyzed separately. The first 100 entries of data from each year were then analyzed and summarized in the excel spreadsheet. The type of sampling that is typically used in grounded theory is called theoretical sampling (Bryman et al., 2011). Bryman et al., (2011) explain that this method is a process that researchers use to first sample data that may generate a theory during coding, and then seek additional data to further develop the emergent theory. It became apparent after reading the first 100 entries of each year that these data were reaching a saturation point, this can also be referred to as theoretical saturation (Patton, 2002). Data is collected and coded until the point of theoretical saturation, which is described by Bryman et al., (2011) as the point where no new data is emerging or useful in developing the concepts and categories further. This point is clearly marked in the excel spreadsheets. Once the saturation point was reached for each year, the rest of the data was analyzed briefly, and only new or useful information which would further develop the categories was summarized in the excel spreadsheet. Patton (2002) reminds us that grounded theory is not meant to test theory, rather its purpose is to equip researchers with the tools to handle large quantities of raw data and allow them to build theory instead.

Once every entry had been reviewed and summarized according to the method explained above, they were sorted into groups of common themes and categories. This process may also be called coding or constant comparison, where the data was constantly compared and contrasted to each other, to then compile groups of data that most closely fit a common theme. According to Bryman et al., (2011) constant comparison occurs throughout the process of applying grounded theory to data and involves paying constant attention to each category and comparing the data within it to fully understand each distinction, so that the theoretical framework of each category can emerge. This was done on paper, and as each entry was sorted, new themes emerged. The same process was used on both sets of data for each question. Once each entry was extracted and categorized into a common theme, the themes were rewritten on additional paper in a more organized fashion for editing purposes and to account for any misclassifications that may have occurred during the original classification process. Once the good copies had been written by hand, they were typed to allow for easier reading and more presentable data. At the end of this process, the approximate 2,250 data points for each question were condensed into seven pages of categorized data, sorted by the most prominent themes. At this point, the data can easily be analyzed further, and theory may emerge.

After the initial categorization, the excel spreadsheets were revisited to apply a macro-winescape and micro-winescape approach to be able to further conceptualize the data. To do this, each entry was coded according to four different categories which are; WMWB related, micro-winescape related, macro-winescape related and does not fit. This was done by also using a constant comparison approach, and was completed up to the point of saturation, similar to the original data analysis. This was done in order to better understand how the micro-winescape and the macro-winescape is identified in the data, and to develop theory from the data in terms of how it fits with these two perspectives.

In addition to categorizing the data, a concept map of the common themes was sketched to show the relationships between themes found in the data from both survey questions. This will serve as a useful tool when describing how themes are interrelated and gives an additional layer of depth to the analysis. This is known as the axial coding procedure which follows the open coding process according to Bryman et al., (2011).

Data, Results and Discussion

In terms of the micro and macro winescape, the data shows that consumers aboard the WMWB did not consistently experience these two perspectives separately. Many survey responses did not distinguish between attributes found in Quintal et al., (2015) as the micro winescape, nor the attributes found in Bruwer

& Gross, (2017) the macro-winescape. Responses that were frequently noted across participants involved more than one aspect of either winescape perspective and often one related only to the WMWB tour and neither perspective of the winescape. Examples of these include “the busride [*sic*] (learning about the area and the local wineries from the tour guide and seeing the beautiful views)” and longer responses such as:

“Originally a native of Nova Scotia and was not personally aware of the number and quality of the wineries we now have. Really enjoyed the scenery during the ride and the host on the bus was excellent. Interested in seeing the inside workings of the winery at Grande Pre [*sic*] and the knowledge gained at L'Acadie on the natural process.”

These examples show how consumers have not consciously separated the micro and macro winescape while recalling memorable aspects of the day.

The winescape literature has historically attempted to separate the experience of the winescape to either a macro or a micro scale, suggesting that consumers are experiencing the winescape by using only one of these two scales. It is observed in these data that the micro-winescape and macro-winescape are deeply intertwined during the tourist experience and that there are ways of experiencing a winescape that do not separate these two perspectives, but that interlace them together. This means that the literature is not capturing the entire consumer experience by using just the micro-winescape, or the macro-winescape, or even both at the same time; because by acknowledging that these perspectives are deeply intertwined, it allows other important factors or characteristics of the winescape to emerge that have not previously been considered in the literature.

The historical separation of micro and macro in the winescape has created gaps where the concept of tour guides as mediators of the experience and the importance of social interactions have been omitted. The WMWB is an ideal vehicle for intertwining both the macro-winescape and the micro-winescape during the wine tourism experience. The WMWB focuses not only on showcasing and allowing consumers to experience the individual wineries (micro-winescape), but it also focuses on offering a tour of the surrounding geographical area, learning about the history of the landscape and offers amazing views of the scenery, which have all previously been identified as the macro-winescape in the wine tourism literature.

The survey data reveals that tour guides, specifically Jeremy as the WMWB tour guide, are highly noted and important to the overall experience aboard the bus. Not only is Jeremy frequently mentioned in great detail amongst the data, but the bus driver is also mentioned quite often, which means it is likely that the bus driver also plays an important role in the experience of the tour. It is important to also note that consumers aboard the bus often recall very detailed information about how Jeremy or the bus driver mediated their experience aboard the bus. These entries range from answers with few details “Jeremy the tour guide”, “Jeremy, the tour guide, he does an amazing job!” to answers with many details “Besides the great wineries, the bus driver and host/bus tour guide were exceptionally friendly, funny and entertaining, we had so much fun!!” and:

“I went on the tour with co-workers and it was a great way to spend time together outside of [*sic*] work. The day started off amazing with an awesome tour guide (Jerney) [*sic*] and great bus driver. Both had great personalities and the tour guide was able to share great facts about the town of Wolfville as we drove by destination spots. I have lived in the valley my whole life and still discovered new things. My group had a wonderful visit at our first stop at Grande Pre [*sic*] where the host there was full of energy and explained wonderful facts about the winery (I loved finding out how family based they are). We enjoyed a lovely meal sitting outside. I enjoyed the whole experience and I have already recommended the tour to customers (I work in Wolfville).”

According to the data, the guests aboard the bus tend to also recall tour guides who accompanied them

throughout their experiences at each individual winery, similarly they recall specific details about the winery tour guides (names, places of origin, appearance etc.) as shown in this entry “Chloe's presentation at Luckett. She was amazing!” and often consider these people to be the highlight or most memorable part of their winery tour experience. Tour guides have not appeared thus far in the wine tourism literature, although the tourism literature has addressed the role of tour guides specifically.

Arnould & Price, (1993) found in their study titled “River Magic: Extraordinary Experience and the Extended Service Encounter” that tour guides play an important role of creating the narrative of River Rafting experiences from the consumers perspective and that guides “are inducted into the community as friends and team players” (p.42). Arnould & Price, (1993) also explain that “service employees hold special relationships with customers” (p.27) which supports the data from the WMWB survey, explaining that tour guides often create strong bonds and relationships with their tour guests. This survey entry “We stayed on the bus at the first stop and had one on one experiences with Jeremy and Jim from vineyard to vineyard and therefore, had one on one experiences with Katie at L'Acadie and each of the other vineyards” is a good example of the tour guides have created a bond with the guest and can help support the argument that the winescape literature thus far has omitted an important element of the winescape (the tour guides) which plays a large role in how consumers experience wine tourism.

In addition, Arnould & Price, (1993) state that “guides sometimes attempt to facilitate the development of community by leading people through various team-building games over the course of the trip” (p.34), which can be observed from the WMWB data in the form of building community on the bus itself. Many of the data entries observed refer to activities facilitated by the tour guide on the bus such as “The guide on the bus sang songs and was very entertaining” and “Our tour guide singing some songs to the people on the bus”. This activity is often encouraged by the tour guide Jeremy, who attempts to get the bus goers to bond and chant along with each other to various tunes.⁹ This attempt to create a social community aboard the WMWB is therefore interrelated with the idea that the winescape literature has also omitted the important social aspects that often emerge, especially in the context of the WMWB.

The WMWB survey data gives some insight into how consumers experience the day amongst family and friends, and the data shows that being social has a strong connection to how the day is experienced. Arnould & Price, (1993) observed a theme in their study of River Rafting experiences identified as “communitas”. This is explained as “an evolving feeling of communion with friends, family and strangers.” (Arnould & Price, 1993 p.34) Many guests who have contributed to the WMWB survey data tend to mention spending time with other people during the day as a highlight or most memorable aspect of their journey. Examples of these survey entries include: “Our group of friends enjoying each vineyard” and “great group on the bus and tour guide and bus driver were awesome” as well as instances where winery bus guests have met new people from the tour itself “Sampling some wine with a stranger from the bus and comparing notes”. These types of interactions are noted very frequently in the data and allows us to consider the idea that social connections are quite important to wine tourists experiencing the winescape. It must be noted that thus far in the literature concerning the micro and macro winescape, the only mention of the social nature of a winery experience is through the ‘winery service staff’ in Quintal et al., (2015) and similarly a seven-item scale under the label ‘People’ in Bruwer & Gross, (2017) which includes ‘elements of the employees’ as well as ‘locals’ from the winery area. Both of these concepts fail to identify the social aspects of attending a winery or experiencing the winescape such as spending quality time with loved ones (family, friends, significant others) and meeting new people throughout the experience.

A possible reason why the social elements have been omitted can be that these relationships and

⁹ This is knowledge from personal experience from riding on the bus on various occasions, as well as from observing the experiences of others who had previously rode on the WMWB.

experiences do not necessarily fit within the perspective of a micro-winescape or a macro-winescape, and are more often viewed from a demand perspective, whereas the current literature only focuses on the supply perspective. During the coding process, these comments were identified as “Bus Related”, since they do not fit solely as a micro or macro outlook on the winescape. This further confirms that using only a micro or macro perspective, or purely a supply perspective to wine tourism can result in omitting key factors or elements of the winescape that are important to consumers, affect how they experience the wine tourism industry.

Schmitt, Dubé, & Leclerc, (1992) identified in their study titled “Intrusions Into Waiting Lines: Does the Queue Constitute a Social System?” that there exists strong evidence to support that “the queue constitutes a social system” (p.814). It is possible to consider the WMWB to be a type of waiting line to arrive at each winery, as each person who is on the bus understands that they will soon arrive at a new winery, and that they must endure the wait on the bus to be able to arrive at their destination. Therefore, assuming the WMWB is considered to be a type of waiting line, the findings from Schmitt et al., (1992) can be used to help understand the social environment on the bus.

Conclusion

The WMWB allows us to ask some important questions about how it is contributing to the winescape in Nova Scotia, specifically in the Town of Wolfville area in the Annapolis Valley. The WMWB offers a unique opportunity to learn about the winescape, and compare it to pre-existing wine tourism literature, more specifically to the literature that attempts to conceptualize the micro-winescape and macro-winescape. This study is aimed to explore how people experience the WMWB and furthermore how the micro and macro winescape can be used to explain these experiences. After analyzing the data, it is observed that there are two very important themes that emerge from the data that have not been previously conceptualized in the winescape literature, those being; tour guides, as well as the social aspect of the winescape experience. This study identifies these omissions and compares them to other pieces of tourism and management literature which recognize tour guides and social interaction as important elements of tourism experiences.

The data also reveals that there exist other factors that are considered memorable to wine tourists, which are not currently mentioned in the micro or macro winescape or the wine tourism literature. For example, the frequency of dog-friendly establishments was often referred to by respondents as one of their most memorable parts of the town of Wolfville. This calls for further exploration into what wine tourists consider to be memorable during wine tourism experiences.

Limitations and Future Research

There exist some limitations to this study, as it is not generalizable to other contexts, nor is it meant to achieve this status. This is an exploratory study that seeks to better understand the concept of the winescape in the wine tourism literature, and specifically how this can be interpreted in the context of the WMWB. The data was only collected from one experience (WMWB) in one wine region of Nova Scotia (Wolfville). Although, it is still likely that wine tourists do not consciously separate the micro-winescape and the macro-winescape scales during the course of their experiences. Further research in different wine regions and contexts is needed to better understand how the winescape is determined from a consumer or demand perspective.

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MOTIVATIONAL DYNAMICS: UNDERSTANDING THE PERCEPTIONS OF SELF AND OTHERS IN THE CANADIAN LODGING INDUSTRY

This study explores the motivations of Canadian hotel employees by measuring self-reported rankings of preferred job rewards using the Ten Factor Model. Responses were compared specifically between job levels, as well as against perceived reward preferences of both peer and management groups. Results showed that job reward preferences varied by job level, from line employees to executives. Management groups demonstrated a keen insight of the rewards most valuable to their frontline employees; however, while peer groups seemed to understand the ordered preferences of job rewards, numerous misinterpretations of weighted value appeared.

Introduction

The hospitality field is a highly interpersonal industry which relies heavily on people to produce goods, provide services, and create experiences while customers value (Kusluvan et al., 2010). Yet, this industry faces multiple human resource challenges, including lower than average compensation (Hinkin & Tracey, 2000) with working hours that are inconsistent and varied (Kusluvan & Kusluvan, 2000), contributing to high turnover rates (Chikwe, 2009) and a current labour demand that exceeds available supply (CTRI, 2016). Owners and operators have stated that one of their most pressing issues is finding and keeping highly talented, motivated workers (Murray et al., 2017), as this talent is vital to running successful, profitable hospitality businesses (Curtis, Upchurch, & Severt, 2009).

To address these important operational issues currently facing the hospitality field, this research seeks to capture up-to-date information about employee motivation within the Canadian lodging industry by looking specifically at the preferred job rewards identified directly by hotel workers. Earlier work has provided snapshots of reward preferences within the hospitality sectors of the United States (Simons & Enz, 1995), China (Fisher & Yuan, 1995; Wong, Sui, & Tsang, 1999), and the Caribbean (Charles & Marshall, 1992), as well as outside the hospitality field (Silverthorne, 1992; Mohibbifar et al. 2014). Yet, much of this work is quite dated and, as such, unreflective of more modern pressures and issues faced by workers. Additionally, few studies have been conducted in North America and none have focused exclusively on the Canadian hospitality labour market. While prior research has built on Kovach's work (1987) to surface espoused job reward preferences of employees at certain times and within concentrated regions, it has failed to further explore potential gaps in understanding between employees and supervisors in regards employee motivation. Understanding the motives of employees and their preferred rewards should have a positive influence on job satisfaction and tenure of workers.

This study fills some contextual gaps in time and culture by measuring the preferred job rewards of Canadian hotel workers in 2016. As well, it explores how well the perceptions held by both managers and peers about job rewards valuable to frontline staff align with ranking of rewards made by line employees. As an iterative examination, this study attempts to address the following research questions:

1. What are the preferred job rewards of workers within the Canadian lodging industry?
2. Are workers at different levels within the organization motivated by the same job rewards?
3. Do managers at all levels understand which job rewards are most valued by their employees?
4. Is there are difference between how employees self-report their preferred job rewards and how they perceive those same job rewards are valued by their peer groups?

Literature Review

Motivation

Understanding what drives someone to exert effort and maximize their talent as part of an organization's workforce has been a long-studied topic. It continues to be explored and remains a salient topic of research because it is based around variabilities in human choice, feelings, perceptions, experiences and context. Early work in scientific management (Taylor, 1911) sought to discover the best ways to maximize workers' outputs by measuring time and physical actions. The underlying belief was that productivity would decline if workers were provided freedom about what to do, when, and how (Harrington, 1999). In this perspective, the role of managers was to direct and control workers, and not to consider their personal preferences and volition about work (Drucker, 1992). Workers were seen to be naturally lazy with little ambition to work without external pressures and oversight, more commonly called 'Theory X' (McGregor, 1960). However, a second view emerged in counterpoint, called 'Theory Y' (McGregor, 1960) which held that workers were driven internally to satisfy unmet needs of relative value to them.

The idea of an individual seeking to satiate unmet needs, exerting their volition, and making these choices within context began appearing throughout motivational research. Maslow's framework (1943) of unmet needs is a common example of a motivational heuristic, with human needs roughly organized into five categories: physical, safety, social, esteem, and self-actualization. Others have adapted his model into something slightly more compact; one example is the reduction of categories down to three, including existence, relationship, and growth needs (Alderfer, 1972; Mullins, 2002). Exploring the ubiquitous nature of hierarchies and interpersonal influence in organized work has also allowed the ideas of power and control to be brought forward as another need category (McClelland, 1965). As well, it has been found that fulfilling certain workplace factors, such as opportunities for learning and providing interesting work, can increase overall job satisfaction, while meeting other factors, such as maintaining good working conditions and paying appropriate wages, can reduce job dissatisfaction (Herzberg, 1968). Job satisfaction and motivation research has also focused on intrinsic factors found in job enrichment (Hackman & Oldham, 1980), with positive responses coming from workers when their work offers them strong meaning, provides them with greater responsibility, and allows them to see the positive impacts their efforts have on other people and the organization (Gagné & Deci, 2005).

The quest to better understanding motives and preferred job rewards in the hospitality industry can be seen in the ongoing, sector-specific research. Employee motivation has been strongly linked to how an employee perceives the quality of their work and their overall job satisfaction (Wildes & Parks, 2005). When hospitality workers feel personally fulfilled and have valuable needs satisfied, there is a corresponding increase in employee retention (Milman, 2002). The value of meeting the needs of workers is clearly quite high as 'people cannot be motivated to do something if there is nothing in it for them' (Zopiatis & Constanti, 2007:137). Consistent among motivational theories is the influence that context (Simon & Enz, 1995) and situational constraints (Christensen Hughes, 1999) play on shifting what is valued by workers in a particular moment in time (Maslow, 1943; McClelland, 1965). As such, it is very importance for managers to understand, in the context of their own business operations, the preferred needs and rewards valued by their employees.

Three assumptions appear consistently around employee motivation (Wiley, 1997). First, how well an employee performs their work is mixture of a) the person doing the work, b) the task they are completing, and c) the situational constraints faced in the moment, also called context (Kovach, 1987; Christensen Hughes, 1999). Second, the motives and rewards that inspire someone to perform do not necessarily flow linearly or hierarchically, but instead move more contextually and fluidly (Upchurch et al., 2010), with the most prepotent needs (Maslow, 1943) for that individual surfacing as the most important to be satisfied in the moment. For example, foodservice workers have expressed preferences towards higher pay and job security (Wildes, 2008) while employee in the attractions sector show a preference for appreciation and doing interesting work (Wildes & Parks, 2005). Third, motivation enacts behavior which in turn impacts performance, such as providing excellent customer service (Zeithaml & Bitner, 2000). Managers who possess an understanding of the preferred motivators have better chances to engage their

workforce, tapping into the willingness and volition of employees to behave in certain ways and ultimately influence job performance.

Ten Factor Model

Looking at the job rewards preferred by employees as an extension of their motivational preferences is well established in multiple industries, cultures, and time periods (Murray, 2018). Following the end of World War II, the Labor Relations Institute (LRI) studied job reward preferences of industrial workers in New York (Hersey & Blanchard, 1969) to better understand the internal drivers of workers during this growth in the United States economy. Forty years later (Kovach, 1987), the same methodology and measurement tool, now known as the Ten Factor Model, was replicated with the purpose of surfacing differences and similarities in employee motivations over time (Table 1). The context of time clearly had some effect on the results, although it was only one of multiple contextual changes at play.

Several studies came forward around this time, all exploring the difference in preferred job rewards in context. One large project focused on the context of culture, focusing on shifts in motivational preferences between industrial workers in China, Russia, and the United States (Silverthorne, 1992). The Ten Factor Model has also been applied across the context of industry, with numerous applications made across the hospitality sector in China (Wong, Siu, & Tsang, 1997), the Caribbean (Charles & Marshall, 1992; DiPietro, Kline, & Nierop, 2014), and the United States (Simons & Enz, 1995), all highlighting differences in job reward preferences. Each study attempted to uncover what employees valued from their own perspective, taking on the methodological perspective expressed by Simons & Enz: “if you really want to facilitate the motivation of a particular individual... ask them what they want’ (1995, p.27).

Table 1	1946	1987	1992			1992	1995	1999	2014
Ten Factor Model: Prior Studies	LRI	Kovach	Silverthorne			Charles & Marshall	Simons & Enz	Wong, Siu, & Twang	DiPietro et al.
	USA	USA	USA	Russia	China	Caribbean	North America	China	Caribbean
Full appreciation of work done	1	2	1	7	4	3	6	6	1
Good wages	2	5	5	10	2	1	1	3	7
Good working conditions	3	7	6	9	7	2	4	5	10
Job security	4	4	3	6	1	7	2	4	4
Growth in the organization	5	6	4	1	3	5	3	1	2
Interesting work	6	1	2	3	5	4	5	7	6
Feeling of being in on things	7	3	7	2	8	6	8	8	5

Personal loyalty to employees	8	8	8	4	9	8	7	2	8
Tactful discipline	9	9	9	5	10	10	9	9	3
Sympathetic help with problems	10	10	10	8	6	9	10	10	9

Perceptions of Self and Others

Prior research has also revealed a series of challenges surrounding understanding others and the biases that may influence how we perceive the actions and preferences of those around us, even in close relationships such as peer-to-peer connections and work colleagues. For example, Baer, Stacy, and Larimer (1991) found that post-secondary students estimated their peer groups consumed significantly higher volumes of alcohol compared to their own personal consumptions, seemingly exaggerating the negative behaviors of others close to them while simultaneously minimizing their own actions. Interpretations of these results infer that the self-reports of respondents may reflect a bias for perception management purposes. However, respondents were confident that their understanding of others was accurate. This was further surfaced by Pronin, Kruger, and Savitsky (2001) who showed perceptual biases between groups, demonstrating that that people believed their knowledge of others, including close friends, to be much better than those same people knew them. Markus, Smith, and Moreland (1985) noted that several biases can impact perceptions simultaneously, including the false consensus effect, wherein people may often assume that others think and feel the same way they themselves do. These multiple biases may lead to unintended but poor management decisions when supervisors and operators assume to understand the needs and desires of their workforce.

This was showcased by Kovach (1987) who, using the Ten Factor Model, asked 1000 industrial workers to rank their preferred job rewards, followed by 100 supervisors who were asked to rank the same job rewards as they believed would be most important to their subordinates. Results from that study revealed that supervisors failed to accurately understand the motives of their workers. While employees ranked interesting work, appreciation, and feeling in on things at work as their top three rewards respectively, supervisors believed that the top three job rewards preferred by their workers were good wages, job security, and opportunities for promotion and growth within the organization. As Kovach noted in his discussion, “Managers seem to operate under a self-reference system; they rank rewards as they would want them for themselves and assume that their employees would subscribe to the same rewards” (1987, p.62). Revisiting this comparison between self-ranking and the perceptual ranking by others warrants attention after almost 30 years.

Past work and gaps

Earlier studies have applied the Ten Factor Model to uncover job rewards valued by lodging employees in various geographic locations, such as the United States (Simon & Enz, 1995), China (Fisher & Yuan, 1995; Wong, Sui, & Tsang, 1999), and the Caribbean (Charles & Marshall, 1992), as well as workers in different industries (Silverthorne, 1992; Mohibbifar et al. 2014). Yet, most of this research is quite dated and none has been conducted with Canada, a unique context within North America. Additionally, much of the prior research surrounding the preferred job rewards of employees have been, understandably, captured solely from the perspective of employees. Frontline employees are the face of a business to the customer and are arguably the single most important group of people who can express an organizations brand, value proposition, and message. Researchers have sought to understand what was of value to those frontline, with the goal of increasing practical outcomes for industry operators. However, the question remains, do others have an accurate understanding into the desires and preferences of frontline workers? Do supervisors and managers have insight into the motives of their employees? Do peers at the front even perceive the drivers of their coworkers to be the same as their own? An iterative examination of preferred

job rewards through the lenses of those working in the hospitality industry, from frontline workers through to executive managers, should shed valuable insight into these research questions.

Methodology

As part of a larger research initiative on employee perceptions of human resource matters within the hospitality industry, the data from this study was collected from multiple sources through the Canadian lodging sector in 2016. Twelve branded hotel properties from across the country formed the initial population group, from which the random sample method was applied to connect with employees at those properties. At each location, invitations to participate in an online survey through Qualtrics were sent out by either the General Manager or Director of Human Resources through their internal email distribution system. Results from these 12 properties yielded 204 engagements, with a net result of 191 usable surveys after a 3% listwise deletion due to incomplete responses. An additional 224 surveys were collected using random selection through panel data services, screening specifically only for people who were currently working in the Canadian lodging industry and had not previously responded to the questionnaire. The total sample for this study was 415.

For this research project, respondents were asked to provide demographic information which included gender, age range, position level within the company, length of service, employment status (full time versus part time), as well as levels of income and education. For this study, position level within the company (line employee, supervisor, manager, executive) was the primary determinant for both differences in collection and analysis. Each respondent was asked to forced rank ten job rewards twice; higher ranked items represented rewards more preferred while lower items were less preferred. Line employees first completed this ranking of rewards based on their personal preferences within their current job; they were then asked to re-rank rewards based on how they believed their peers at the same job level would answer. All other managers, from supervisors to executives, were asked to rank their personal preferred job rewards first; their second request was to prioritize the job rewards based on how they believed line employees working for them would answer.

Results

The first research question sought to uncover the motivations of those working in the Canadian lodging industry. When comparing expressed job reward preferences aggregated across all four employee job levels, three motivators were identified in the top positions. In order, these were good wages, working conditions, and job security. Paired t-tests comparing mean rankings revealed that the top ranked reward of good wages differed significantly from the second ranked reward of working conditions ($t(414) = -1.95, p < 0.10$), while working conditions and the third reward of job security ($t(414) = -3.459, p < 0.001$) also showed significant differences. The third, fourth, and fifth rewards of job security, opportunities for promotion and growth, and interesting work grouped together as a cluster, only showing demonstrating significant differences after the sixth preference, appreciation for work done ($t(414) = -2.582, p < 0.010$). The second research question focused on any potential differences in job reward preferences between workers at different job level. Within groups (Table 2), the overall top five rewards remained the same for the aggregated as for supervisors, managers, and executive members, although each level demonstrated a unique ranking structure and weighted mean values within their top ranked items. Supervisors most closely reflected with overall results, showing the same ranking order with the only change in order showing between working conditions and job security, the second and third ranked rewards respectively. Managers maintained a consistent top two with overall results, identifying good wages and working conditions in those positions. However, for managers, job security dropped to the fifth ranking, while opportunities for promotion and interesting work both moved ahead in rank. Executive members revealed the most diverse reordering of the top five rewards. For this group, interesting work and working conditions ranked first and second respectively, with opportunities for growth and job security filling in the next two ranking positions. Good wages landed in the fifth ranked position, showing a large departure from the orders of both other level groups and overall rankings. For line employees, rankings diverged from the overall results beyond the third ranking. Matching the aggregate results, good wages, working conditions, and job security composed the top three ranked rewards respectively. However, neither opportunities for promotion nor interesting work were included in this groups top five. The fourth ranking

reward was instead appreciation for work done, while the fifth was supervisor's loyalty towards employees.

Between groups, seven of the ten preferred job rewards demonstrated significant differences, determined using one-way ANOVA between groups with Tamhane's T2 post hoc test (Table 2). Good wages ranked first for all groups yet showed significant differences between groups ($F(3,411)=5.584$, $p=0.001$), with the value of wages ranking higher in value for line employees (3.49 ± 2.4 , $p=0.013$), supervisors (3.36 ± 2.3 , $p=0.013$) and managers (3.48 ± 2.3 , $p=0.018$) over executives (5.13 ± 3.0). Job security rankings fluctuated across job levels, showing significant differences between groups ($F(3,411)=22.811$, $p=0.027$), with supervisors valuing security in the employment (3.79 ± 2.54 , $p=0.025$) more highly than front line workers (4.81 ± 2.76). The differences for promotion and growth opportunities ($F(3,411)=5.508$, $p=0.001$) centered exclusively on the higher ranking by managerial employees (4.12 ± 2.6 , $p=0.001$) over line employees (5.4 ± 2.9). Interesting work shifted dramatically in importance, with significant differences ($F(3,411) = 10.797$, $p=0.000$) appearing from lower to higher job levels. Interesting work was significantly lower for line employees (5.55 ± 2.84 , $p=0.00$), supervisors (5.08 ± 2.59 , $p=0.000$), and management workers (4.54 ± 2.63 , $p=0.009$) compared to executive members (3.03 ± 2.40); additionally, management workers valued interesting work significantly higher than line employees ($p=0.016$). With an overall seventh place ranking, the desire for supervisor's loyalty towards employees still showed significant differences between groups ($F(3,411) = 6.336$, $p=0.000$). This reward was significantly less desirable by both supervisors (6.23 ± 2.40 , $p=0.013$) and management workers (6.27 ± 2.27 , $P=0.001$) when compared to line employees (5.22 ± 2.31) who ranked this much higher in value. Two other job rewards, having a feeling of being 'in' on things at work and receiving sympathetic help with personal problems, both showed some significant differences between groups; however, as both rewards were consistently ranked in the bottom three of ten, those differences have not been further explained.

Table 2 Results by Job Level	Line employee		Supervisory		Managerial		Executive		Overall	
	N=200		N=75		N=100		N=40		N=415	
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
Good wages**	3.49	1	3.36	1	3.48	1	5.13	5	3.62	1
Good working conditions	3.80	2	4.04	3	4.04	2	4.40	2	3.96	2
Job security**	4.81	3	3.79	2	4.61	5	5.10	4	4.60	3
Promotion and growth within the organization**	5.40	6	4.64	4	4.12	3	4.45	3	4.86	4
Interesting work**	5.55	7	5.08	5	4.54	4	3.03	1	4.98	5
Appreciation and praise for the work you have done	5.00	4	5.20	6	5.17	6	5.35	6	5.11	6
Supervisor's loyalty towards employees**	5.22	5	6.23	7	6.27	7	6.08	8	5.74	7
Feeling of being 'in' on things at work**	7.23	9	6.92	8	6.99	8	5.60	7	6.96	8
Sympathetic help with personal problems**	6.90	8	7.75	9	7.72	9	7.85	9	7.34	9
Tactful discipline	7.62	10	8.00	10	8.06	10	8.03	10	7.83	10

**Job rewards demonstrating statistically significant differences btw groups at $p < 0.05$

The third research question focused on whether managers across levels (supervisors, managerial workers, and executives) had a clear understanding of the job rewards preferred by their front-line employees. Significant differences between line employees self-reported preferences and managements report on what they believed was of value to their employees was determined through one-way ANOVA testing, using Tamhane's T2 post hoc test, containing the examination of differences to those between line employees and the three levels of management. Comparing the job rewards preferred by line employee to the perceptions of what they prefer as expressed by each level of management only revealed three significant differences (Table 3). The value to line employees for opportunity for promotion and growth within their organization (5.40 ± 2.89 , $p=0.041$) was shown to be significantly higher than the perceptions held by supervisors (6.49 ± 2.95) of line employees. When compared to how managerial workers perceived the value of interesting work to line employees (6.46 ± 2.66 , $p=0.049$), it was revealed that line employees held this reward in significantly higher regard (5.55 ± 2.84). However, executives perceived interesting work to be mildly significantly more important (4.39 ± 2.31 , $p=0.085$) than expressed by line employees. All other comparisons between the self-reported value of job rewards by line employees and the perceptions of value to them made by managers at various levels should no significant difference. In summary, the comparisons of management perceptions of reward preferences against what line employee stated they preferred only showed one significant different for each of the three levels of management, and those differences only appears at rewards ranked at sixth or lower.

The final research question is this study looked to unpack whether there is an alignment between the job rewards that line employees state have value to themselves and those they perceived to be of value to their peer group. Results highlight four rewards that demonstrate significant differences at $p<0.05$ and two additional rewards which show a significant difference at $p<0.10$ (Table 4). Although ranked first in both ranking processes, results for good wages showed a mildly significant difference in value importance ($F(1,390)=3.809$, $p=0.052$). Line employees perceived that good wages were more strongly valued by their peer group (3.02 ± 2.44) than it was when they only considered themselves (3.49 ± 2.42). The significant difference in scores for good working conditions ($F(1,390)=6.253$, $p=0.013$) demonstrated that line employees believed working conditions to be of greater value to themselves (3.80 ± 2.53) than how their perception of the value to their peers (4.42 ± 2.39) with a large enough shift between mean scores to alter the ranking levels of the job reward between the two measured categories.

Table 3 Comparison of LE values with Mgmt perceptions	Line employee (LE) N=200		Supervisor perception of LE N=73		Line employee (LE) N=200		Management perception of LE N=91		Line employee (LE) N=200		Executive perception of LE N=38	
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
	Good wages	3.49	1	3.11	1	3.49	1	3.00	1	3.49	1	4.08
Good working conditions	3.80	2	4.52	2	3.80	2	4.10	2	3.80	2	4.47	4
Job security	4.81	3	5.08	5	4.81	3	4.33	3	4.81	3	5.21	5
Appreciation for work done	5.00	4	4.77	4	5.00	4	4.91	4	5.00	4	4.29	2
Supervisor's loyalty	5.22	5	4.73	3	5.22	5	5.93	6	5.22	5	5.63	6
Promotion and growth	5.40**	6	6.49**	8	5.40	6	5.77	5	5.40	6	5.66	7
Interesting work	5.55	7	5.77	6	5.55**	7	6.46**	8	5.55*	7	4.39*	3
Help with problems	6.90	8	6.47	7	6.90	8	6.16	7	6.90	8	6.39	8
Feeling of being 'in'	7.23	9	6.81	9	7.23	9	6.46	8	7.23	9	6.92	9
Tactful discipline	7.62	10	7.26	10	7.62	10	7.86	10	7.62	10	7.95	10

**Significant differences btw groups at $p<0.05$; *Significant differences btw groups at $p<0.10$

There was a mildly significant difference for the job reward of appreciation for work done ($F(1,390)=3.591, p=0.059$), showing that line employees more greatly valued appreciation and praise (5.00 ± 2.35) than they believe to be the case for the colleagues (5.47 ± 2.55). There was a significant difference found for the reward of interesting work ($F(1,390)=9.314, p=0.002$). Line employees ranked this as the seventh most valuable job reward to them and of much greater value (5.55 ± 2.84) than they believe it to be for their peer group (6.40 ± 2.68) which was instead ranked ninth. Significant differences were found between with two additional job rewards: sympathetic help with personal problems ($F(1,309)=3.965, p=0.047$) and feeling 'in' on things at work ($F(1,390)=13.842, p=0.000$). For these rewards, line employees perceived their peers to value help with personal problems (6.39 ± 2.54) and feeling 'in' (6.21 ± 2.81) more than line employees valued these two rewards respectively ($6.90 \pm 2.52; 7.23 \pm 2.60$). This data appears to show that line employees had twice as many instances of significant differences between the rewards they perceived to be important to their peers versus their own self-ranking than when the perceptions of value made by the three levels of management were compared against line employee self-rankings.

Discussion

Motivational preferences for Canadian lodging workers in 2016 show some unique overall characteristics and, through these results, the value of re-examining reward preferences becomes clear. As an aggregate of all responses, good wages were the most preferred job reward across job levels, indicating that workers were, at this specific context of time and location, seeking to fulfil money as the most preferred and/or unmet of all needs. The most recent study of job rewards examining Caribbean hotel workers (DiPietro et al., 2014) had money in the 7th overall position and appreciation for good work sitting in the top-ranking slot. Wages has been highly ranked in studies back in the 1990's (Table 1) and has returned to that position in 2016. Working conditions, in the 2nd ranked position, has only been ranked this high once before and within the top 5 ranked rewards only approximately half of the times since the original work by the LRI in 1946. Job security surfaced in the third position, and reward that has consistently been ranked in the top five rewards. Money, decent conditions of work and security of employment surface as the most valuable rewards, indicating that hotel workers overall appear to be most interested in lower level needs. In Maslow's hierarchy of needs, these would fall in the lower categories of physiological and safety, while viewing them through Alderfer's ERG framework, existence needs are being highlighted as unmet and most valued for satisfaction.

When workers are viewed by their job levels, certain similarities remain across motivational drivers; however, the intensity of value for certain job rewards shows movement (Table 2). Good wages, for example, are ranked as the top desired job reward for line employees, supervisors and managers, but for executives, it is ranked fifth with a significant different in mean ranking score from the lower three levels. As executives have the highest wages among the four job levels, their lower ranking of good wages as a valuable reward demonstrates the idea that once a need is satiated, the value of that need is reduced and/or removed. This revaluing of rewards appears numerous times. Managers and executives tend to rank job security

lower in than

much value line

Table 4 Comparison of LE values with peer group perceptions	Line employees - perception of self		Line employees - perception of peers	
	N=200		N=192	
	Mean	Rank	Mean	Rank
Good wages*	3.49	1	3.02	1
Good working conditions**	3.80	2	4.42	3
Job security	4.81	3	4.33	2
Appreciation and praise for the work you have done**	5.00	4	5.47	4
Supervisor's loyalty towards employees	5.22	5	5.49	5
Promotion and growth within the organization	5.40	6	5.79	6
Interesting work**	5.55	7	6.40	9
Sympathetic help with personal problems**	6.90	8	6.39	8
Feeling of being 'in' on things at work**	7.23	9	6.21	7
Tactful discipline	7.62	10	7.49	10

**Significant differences btw groups at $p < 0.05$; *Significant differences btw groups at $p < 0.10$

employees and supervisors, perhaps signaling that the upper level managers believe they already possess a certain amount of security or have such a level of transferrable skills that they are less concerned with job stability. Conversely, line employees and supervisors are two groups that earn comparably lower wages and possess relatively few transferrable skills, thereby increasing the value of job security to them. However, executives place the greatest value on interesting work. Perhaps this is because other, more basic needs, have already been adequately satisfied. As their salaries are already quite healthy, they have a relatively comfortable sense of job security, and their opportunities for promotions within the organization are somewhat limited with their high management position, executives appear to seek interesting work as motivation. The ranking of interesting work continues to significantly drop for each subsequent job level, reinforcing the prepotent nature of motivational needs; Although line employees might think it is nice to have interesting work, they place significantly more value in the rewards of pay, working conditions, and job security, as these items have yet to be satisfied sufficiently. This highlights not only what job rewards are preferred by level within the organization, but that as people are situated at different levels, how they value certain rewards shift within context. Understanding this contextual influence might help people to appreciate differences, but there is a question as to whether or not employees can properly perceive and interpret what others might see as important.

When asked which job rewards they believed were most important to line employees within their organization, managers at all levels showed a surprisingly keen awareness of their frontline workforce (Table 3). Although a few small ranking differences did appear between ranked motivators as made by line employees when compared to the perceptions of those same workers by managers, there were no differences in means for any of the top five job rewards. Managers at all levels appeared to demonstrate insight, an encouraging revelation for the relationship between reporting groups. Only three differences were identified. Supervisors believed that employees would place less weight on the value of opportunities for promotion and growth; management perceived interesting work to be of lesser value to line employees, yet executive members inferred interesting work would be of greater value to frontline staff.

It is fascinating to note that the perceptual rankings of the line employee rewards made by either supervisors or managers appeared to be swayed somewhat by their own relative positions on reward values. Supervisors appreciated promotion and growth opportunities much higher for themselves but classified this reward much lower when evaluating it through the eyes of their employees, much as managers personally valued interesting work higher for themselves than they believed employees would value this reward. Only executives seemed to infuse some of their own value ratings into their evaluation of frontline staff in the form of interesting work. Yet, overall, the alignment of management perceptions of valuable rewards to those expressed by line workers was exceedingly strong as showed little job level perception bias. Perhaps this can be accounted for by the ongoing labour shortages and high turnover levels faced for numerous years by operators. The pressures to retain workers may well be increasing their attunement to the needs of their workers, forcing them to pay better attention, showing greater empathy and richer understanding for others.

With such close overlap between the needs of line employees and the perceptions of their management group, it is reasonable to posit that similar overlaps should exist between people within the same job level. One would think that the overlap between how line employees rank their personal reward preferences with their perceptions of reward values for other line employees would be as close, if not closer, than the alignment between the frontline workers and the management group. However, results show a somewhat larger gap predominantly in the intensity of values on job rewards (Table 4). The ranking order of motivations for line employee self-reports and their perceptions of peer preferences remain identical for the top six rewards. However, three reward categories show difference concentrations. Line employees perceive good wages to have greater value intensity for their peers but believe their peers value both good working conditions and appreciation for good work less than they do themselves. Although the ranking orders are consistent, the significant variations in numerous mean level values indicate that some perceptual biases could be influencing reporting between out-groups (Pronin et al, 2001). As such, it appears that managers should feel confident in their own assessments of employee

motivational preferences at the moment. Although they should still take on the advice of asking employees direct what they want and prefer (Simons & Enz, 1995), it would be wise to not ask those employees to generalize about the preferences of their peer group to avoid the pitfalls of a false consensus effect.

Limitations

The results from this study are insightful in multiple ways. However, they are similar to previous studies in the context-specific nature of the data. The data represents a moment in time within the Canadian lodging industry, limited to interpretations at this time and in this space. The quest to make broader, more generalizable statements of employee motivation cannot be made, nor are they sought out. This limitation is one of the fundamental aspects of this study, that motivations shift based on situational constraints. As one set of needs are satisfied, other unmet needs surface in the quest to be met. Additionally, research in the study did draw on multiple data sources. Some responses came from selected hotels through Canada, while others were collected through screened panel data. The data collected blends industry respondent data across regions and hotel categories but could benefit from a larger sample size across job levels. However, there remains a larger enough data set to draw some conclusions about preferred job rewards at this place and point in time. Future research will strive to expand the data set and continue to showcase the shifting natures of employee motivation while exploring the accuracy of others about what line workers desire.

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Alternative Asset Holdings by US Pension Funds Since the 2008 Financial Crisis

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Working Paper

Abstract

Since the financial crisis of 2008, the percentage of alternative asset holdings by institutional investors has increased dramatically. The current study utilizes the Public Plans Database to analyze both the drivers and impacts of this increased allocation to alternative assets on US pension funds. The results indicate that there has been a significant divergence in the asset mixes of US pension funds since the 2008 financial crisis, with the largest adaptors of alternatives now holding one-third of their funds in these assets. Regression analysis shows that Funded Ratio and Actuarially Assumed Rate of Return are both negatively related to the adaptation of alternatives. Finally, the naïve simulation analysis shows that, despite the argued motivation for the adaptation of alternatives by market research, those funds that adapted the highest level of alternatives would have actually performed worse during the 2008 financial crisis than those funds that made only modest allocation changes since that time.

Introduction

The adaptation of alternative assets by institutional investors has received significant attention in literature in the last decade, driven in large part by the significant market correction and resulting asset allocation revisions coming out of the financial crisis of 2008. In their Global Alternatives Survey 2017¹⁰, Towers Watson reports that global alternative assets under management (AUM) as of December 31, 2016 was \$6.5 tln¹¹, up over three-fold from \$2.0 tln in 2009. In addition, pension funds make up by far the largest investor type, holding approximately one-third of global alternative AUM.

A number of studies have examined the fund characteristics that result in pension funds allocating capital to specific alternative asset classes, with particular attention being paid to hedge fund allocations. For instance, Bouvatier and Rigot (2013) find that allocation by US and Canadian pension funds to hedge funds is undertaken by large sophisticated funds with diverse asset class holdings. Interestingly, the authors find that while it is beneficial for funds to invest in hedge funds, the benefit is mainly a result of a decision to invest in these assets rather than the size of the allocation or the hedge fund investment returns. Jackwerth and Slavutskaya (2016) find that adding hedge funds not only adds to average pension fund performance for their sample of UK pension funds, but hedge funds themselves add more benefit than other alternative asset classes.

Andonov et al. (2014) document significant differences in real estate holdings for global pension funds, with large funds managing real estate portfolios in-house and generating higher returns than their smaller counterparts. The authors concluded that the difference in performance between large and small funds is driven by the larger funds being more easily able to invest in real estate internationally and at lower costs while smaller funds rely on external managers or funds of funds. Similarly, Boido and Fasano (2009) document that commodities are negatively correlated with traditional asset classes, lending further support for the diversification benefit of these assets for portfolios.

The current research adds to the body of literature concerning the asset allocations of pension funds by examining the factors that influence the adaptation of alternative assets by US pension plans. One arguably positive outcome of the 2008 financial crisis is that it highlighted the importance of diversification within an investment portfolio (Fraser-Sampson (2011)). In investors' search for diversification, alternative assets have increased in popularity, with industry proponents including Seychuk and Sjogren (2017) of MacKenzie Investments advocating that in the absence of alternative investments "today's investors are faced with a potential return shortfall that comes with elevated volatility". They further say that there are three factors that represent the benefits of alternatives: potentially lower volatility, higher returns and enhanced diversification. The current study offers a direct test of 1. How and what factors have led to the evolution of US pension fund allocations since the financial crisis of 2008 and 2. What is the potential impact of any changes in allocation on the protection of funds from significant downside events.

¹⁰ <https://www.willistowerswatson.com/en-CA/insights/2017/07/Global-Alternatives-Survey-2017>

¹¹ All figures are in US dollars unless otherwise stated.

Data and Methodology

The current study utilizes the Public Plans Data (PPD) as offered by the Center for Retirement Research at Boston College, in partnership with the Center for State and Local Government Excellence and the National Association of State Retirement Administrators. The database covers fund level information from 2001 through 2017 for 180 plans representing 95 percent of state/local members in the United States.

The current study utilizes the full PPD database, eliminating any fund years that do not contain complete information utilized in the study as well as those funds that have less than five years of sample data. The resulting summary statistics are presented Table 1 below.

Table 1: Summary Statistics by Fiscal Year-End

Fiscal Year	# of Plans	AUM	Funded Ratio	Return Assump. (%)	Asset Mix (%)				
					Equities	Fixed Income	Real Estate	Alternative Assets	Cash & Other
2001	122	14.3	1.01	8.06	55.6	33.8	4.3	2.6	3.7
2002	129	13.0	0.94	8.06	53.9	34.9	4.6	2.8	3.8
2003	134	12.9	0.89	8.03	55.8	32.3	4.3	3.0	4.6
2004	140	14.3	0.87	7.99	59.4	29.2	4.0	3.3	4.1
2005	145	15.4	0.85	7.98	59.8	28.5	4.4	3.8	3.5
2006	147	16.3	0.85	7.96	58.7	28.2	4.8	5.0	3.3
2007	151	18.2	0.86	7.94	58.1	26.6	5.2	6.2	3.9
2008	152	16.5	0.83	7.93	52.8	28.3	6.2	8.8	3.9
2009	155	13.1	0.77	7.91	51.2	28.4	5.7	10.1	4.6
2010	155	14.5	0.75	7.87	50.6	27.5	5.4	11.7	4.8
2011	155	16.5	0.74	7.81	51.1	25.1	5.8	12.8	5.2
2012	154	16.6	0.72	7.76	49.6	24.7	6.3	15.2	4.2
2013	150	17.3	0.72	7.71	50.7	22.8	6.2	15.8	4.5
2014	153	20.3	0.73	7.67	50.9	21.8	6.1	16.4	4.8
2015	154	20.3	0.74	7.63	48.8	22.4	6.5	17.4	4.9
2016	155	19.9	0.73	7.52	47.6	22.2	6.6	18.3	5.3
2017	89	20.4	0.70	7.38	48.5	21.3	5.6	19.1	5.5
Average	143.5	16.5	0.81	7.84	53.1	26.9	5.4	10.1	4.4

The final sample size, after removing those funds with missing or insufficient information, averages 143.5 funds per year, ranging from a low of 89 in 2017 to a high of 155 in multiple years. In total, there are 2,440 fund year observations in the resulting sample.

The first observation that can be made from Table 1 is the significant reduction in AUM during the years 2008 and 2009, with average AUM falling by nearly 30% from \$18.2 bln in 2007 to \$13.1 bln in 2009. This result is unsurprising given the sharp decline in financial markets accompanying the financial crisis of 2008. Mirroring equity markets in general, average AUM recovered in a relatively short period of time and currently sits significantly higher than the 2009 lows at \$20.4 bln in 2017. What is related and interesting, however, is the pattern in Funded Ratio.

Funded Ratio shows year-over-year (YoY) decline in nearly every year of the sample, resulting in a decrease from 1.01 in 2001 to 0.70 in 2017. This is despite the fact that average AUM in the sample is significantly higher in 2017 (\$20.4 bln) compared with 2001 (\$14.3 bln). A significant driver of the declining Funded Ratio is a near monotonic decrease in the average Actuarially Assumed Rates of Return over the sample period.¹²

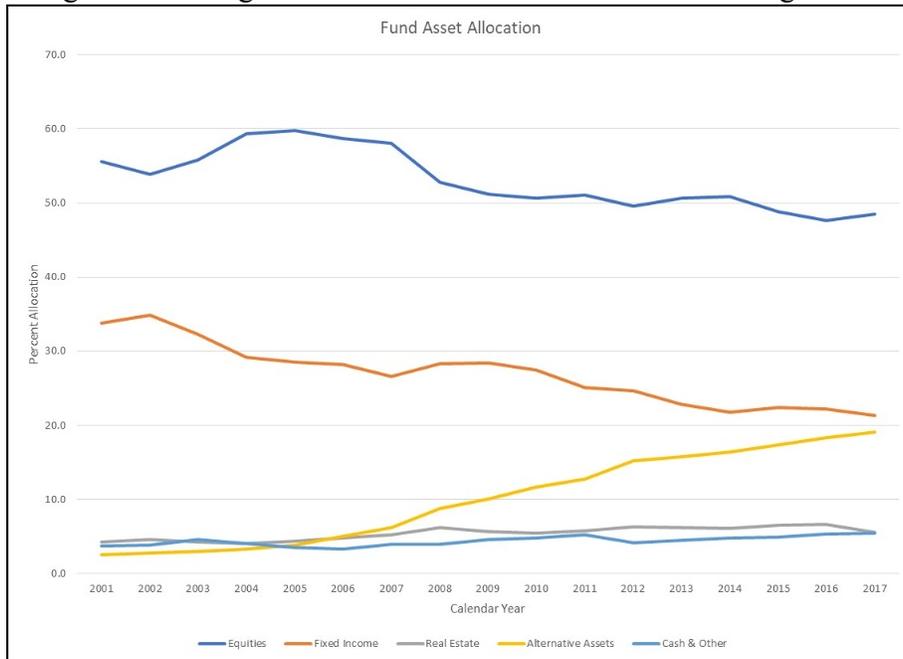
Of particular interest to the current study, it can be seen from Table 1 that plans have significantly increased their holdings of alternative assets since the financial crisis of 2008.¹³ Specifically, the percentage of alternative assets in the average asset allocation has tripled in value since 2007 (from 6.2% of AUM in 2007 to 19.1% in 2017). Figure 1 presents a graphical representation of the evolution of asset allocations over the sample period.

¹² Funded Ratio and Actuarially Assumed Rate of Return are negatively related, very similar to the relationship between bond price and yield.

¹³ PPD classification of alternative assets includes hedge funds, private equity, commodities and 'other alternatives'.

Figure 1 shows a significant increase in the rate of adaptation of alternative assets post the 2008 financial crisis. This increase in alternatives is fueled by a decline in allocations to both equities and fixed income asset classes, with alternative assets on pace to replace fixed income as the second largest fund holdings in the near future. What’s interesting, however, is the continued significant holdings of equities in the average fund. One of the main motivations of the adaptation of alternative assets following the financial crisis was to reduce overall portfolio volatility (Seychuk and Sjogren (2017)). However, on the surface, it appears that funds have in large part simply replaced fixed income assets with alternatives. This is interesting as it has been historically documented that fixed income and equity asset classes are negatively correlated, meaning that such a replacement strategy could actual impede diversification rather than strengthen it. This issue will be addressed in the Results Section of the current paper.

Figure 1: Average Fund Asset Allocation from 2001 through 2017



Statistical testing in the current study will utilize a number of variables of interest, starting with the depended variable under consideration. ‘AA’ represents in the below outlined methodology the percentage of fund AUM invested in alternative assets. The underlying objective of the current study is two-fold: 1. The study is an attempt to determine the drivers of alternative asset adaptation by pension funds and 2. To determine if funds are more or less susceptible to market shocks after their recent asset allocation changes than they would be prior to the asset allocation changes. In order to address these two objectives, the methodology employed in the current study is three-fold:

- i. Comparative analysis of the characteristics of the funds prior to and following the increased adaptation of alternative assets following the financial crisis;
- ii. Random effects panel regression analysis to determine the drivers of alternative asset adaptation over the full sample period as well as the 2009 – 2016 post financial crisis period;
- iii. Naïve simulation analysis to determine the impact of asset allocation changes on fund performance during a hypothetical financial crisis (namely, a repeat of the 2008 financial crisis).

Results

Comparative Analysis

The objective of the simple comparative analysis is to determine if there are any significant differences in fund characteristics both prior to and following the period of increased alternative asset adaptation. In order to accomplish this, funds are divided into quartiles based on their rate of adaptation of alternative assets between 2009 and 2016, with the resulting characteristics presented in Table 2 below. For example, Quartile 1 in Table 2 represents those funds that have the lowest rate of adaption, relative to their 2009 alternative asset holdings, over the period of 2009 to 2016.

Panel A of Table 2 represents the characteristics of each quartile at the start of the period of the post financial crisis period (namely, 2009). What is interesting from this panel is there are no material differences in the fund characteristics between the funds that would subsequently become the highest adaptors of alternative assets (Quartile 4) and those that would become the lowest adaptors (Quartile 1). The highest adaptors have a slightly below average AUM and a slightly higher Actuarially Assumed Rate of Return and Funded Ratio, but these differences are not economically or statistically significant. Looking specifically at the asset mix, it is not surprising that those funds that had the highest rate of adaption began the period with the lowest initial holdings of alternatives, and vice versa. However, these initial differences in holdings fail to explain the significant change in holdings observed in Panel B.

Panels B and C of Table 2 represent, respectively, the 2016 fund characteristics and the change in characteristics over the 2009 to 2016 sample period. The average change in alternative asset holdings over the period was +8.2 percentage points, but there is a strong divergence amongst the four quartiles, with Quartile 4 funds increasing their alternative asset holdings by 23.9 percentage points in their asset mix while Quartile 1 funds actually reduced their alternative asset holdings by 2.9 percentage points.

Table 2: Fund Characteristics by Rate of Adaptation Quartiles

Panel A: Fund Characteristics as of 2009 Fiscal Year End										
Quartile	# of Plans	AUM	Funded Ratio	Return Assump. (%)	Asset Mix (%)					Age (Years)
					Equities	Fixed Income	Real Estate	Alternative Assets	Cash & Other	
1 (Lowest Adoption)	40	13.4	0.78	7.85	50.1	26.1	4.7	12.1	7.0	66.0
2	38	11.1	0.82	7.92	51.6	29.1	5.9	11.6	1.8	62.0
3	39	15.9	0.72	7.88	52.5	29.9	5.4	7.3	4.9	59.6
Combined 2 & 3	77	13.5	0.77	7.90	52.1	29.5	5.7	9.4	3.3	60.8
4 (Highest Adoption)	38	12.1	0.79	8.00	50.6	28.4	7.0	9.4	4.6	63.3
Total	155	13.1	0.77	7.91	51.2	28.4	5.7	10.1	4.6	62.8

Panel B: Fund Characteristics as of 2016 Fiscal Year End										
Quartile	# of Plans	AUM	Funded Ratio	Return Assump. (%)	Asset Mix (%)					Age (Years)
					Equities	Fixed Income	Real Estate	Alternative Assets	Cash & Other	
1 (Lowest Adoption)	40	20.7	0.74	7.57	52.1	23.8	6.1	9.2	8.8	73.0
2	38	17.4	0.76	7.59	50.1	23.6	7.4	14.5	4.4	69.0
3	39	24.6	0.69	7.47	49.0	22.3	8.2	16.7	3.8	66.6
Combined 2 & 3	77	21.1	0.73	7.53	49.6	23.0	7.8	15.6	4.0	67.8
4 (Highest Adoption)	38	16.8	0.71	7.47	38.8	19.2	4.6	33.3	4.1	70.3
Total	155	19.9	0.73	7.52	47.6	22.2	6.6	18.3	5.3	69.8

Panel C: Change in Fund Characteristics between 2009 and 2016										
Quartile	# of Plans	AUM	Funded Ratio	Return Assump. (%)	Asset Mix (%)					Age (Years)
					Equities	Fixed Income	Real Estate	Alternative Assets	Cash & Other	
1 (Lowest Adoption)	--	7.3	-0.04	-0.28	2.0	-2.3	1.4	-2.9	1.8	7.0
2	--	6.3	-0.06	-0.33	-1.5	-5.5	1.5	2.9	2.6	7.0
3	--	8.7	-0.03	-0.41	-3.5	-7.6	2.8	9.4	-1.1	7.0
Combined 2 & 3	--	7.6	-0.04	-0.37	-2.5	-6.5	2.1	6.2	0.7	7.0
4 (Highest Adoption)	--	4.7	-0.08	-0.53	-11.8	-9.2	-2.4	23.9	-0.5	7.0
Total	--	6.8	-0.04	-0.39	-3.6	-6.2	0.9	8.2	0.7	7.0

The resulting portfolios show that the Quartile 4 funds now hold one-third of their portfolio in alternative assets, significantly above the holdings of the average fund (18.3%). In addition, while there is no material difference in asset mixes in 2009, there are now much more heterogeneous asset mixes amongst the quartiles. Specifically, Quartile 4 funds hold significantly less of all other reported asset classes, in particular equity, than their peers. It's also worth noting that this quartile of funds had a significantly lower appreciation of assets over the sample period as well as the largest decline in Funded Ratio and Actuarially Assumed Rate of Return.

Figure 2: Quartile Asset Allocation Comparison Comparison

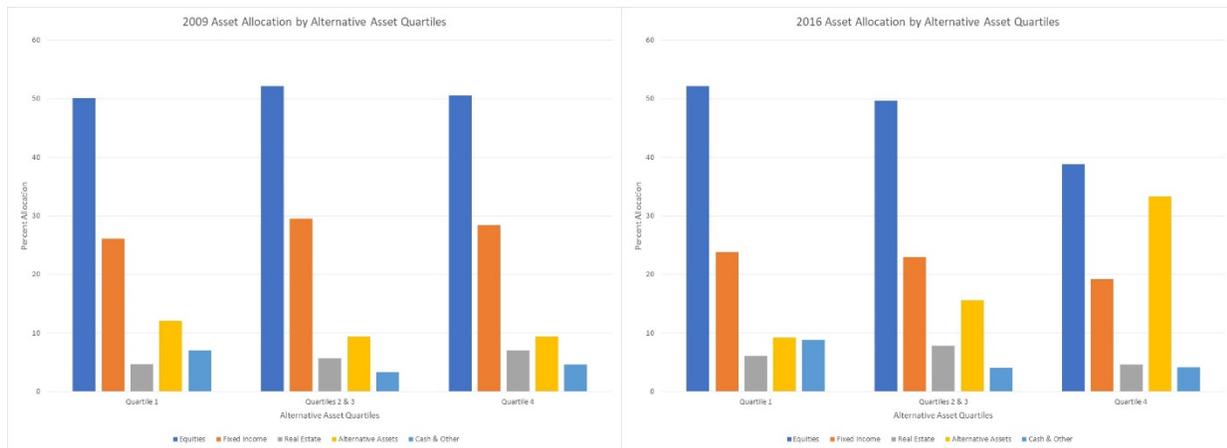


Figure 2 above provides a graphical representation of the change in allocations from 2009 to 2016. As can be seen, Quartile 1 funds have undergone at best modest asset allocation changes since the financial crisis, while Quartile 4 funds have made significant allocation changes through the reduction of both equity and fixed income securities coupled with a significant allocation increase to alternative assets.

Regression Analysis

Figure 2 demonstrates a significant divergence in fund asset allocations over the period of 2009 to 2016. During this time, most funds reduced equity and fixed income holdings while increasing holdings of real estate and alternative assets. To gain more insight into the drivers of these changes, the following OLS regression is

performed:

$$(1) AA_{i,t} = \alpha + \beta_{Size} Size_{i,t} + \beta_{Funded} Funded_{i,t} + \beta_{RA} ReturnAssumption_{i,t} + \beta_{Age} Age_{i,t} \\ + \beta_{Return} 1YrReturn_{i,t} + \beta_{SP} SP_t + \beta_{Bond} Bond_t + \beta_{RE} RE_t + \beta_{Alternative} Alternative_t \\ + \beta_{Cash} Cash_{i,t} + \varepsilon_{i,t}$$

where:

- $AA_{i,t}$ represents the percentage of alternative assets in fund i's asset mix at time t
- $Size_{i,t}$ represents the assets under management in USD billions of fund i at time t
- $Funded_{i,t}$ represents the Funded Ratio of fund i at time t
- $ReturnAssumption_{i,t}$ represents the Actuarially Assumed Rate of Return for fund i at time t
- $Age_{i,t}$ represents the age of fund i at time t
- $1YrReturn_{i,t}$ represents the 1-year return of fund i at fiscal yearend t
- SP_t represents the 1-year return of the S&P 500 Composite Total Return Index as of fiscal year-end t
- $Bond_t$ represents the 1-year return of the S&P 500 Bond Total Return Index as of fiscal year-end t
- RE_t represents the 1-year return of the Vanguard Real Estate Total Return Index (USD) as of fiscal year-end t
- $Alternative_t$ represents the 1-year return of a synthetic index consisting of 50% HFRI Composite Fund of Funds Total Return Index and 50% S&P Listed Private Equity Total Return Index as of fiscal year-end t
- $Cash_t$ represents the 1-year return of the US Dollar 3 Month Deposit Total Return Index as of fiscal year-end t

All fund related information was obtained from the PPD database while the market proxy returns were obtained from Thomson Reuters Eikon.

The index returns in the above model are used to control for any impact that underlying market conditions may have on the rate of adaptation of alternative assets. The above model was run for the full sample period of 2001 through 2017 as well as the subsample period of 2009 through 2016 under the parameters of an unbalanced random effects panel regression.¹⁴ The results for both regression results for the two sample periods are presented in Table 3 below.

¹⁴ Regression (1) was also run under the parameters of an unbalanced fixed effects panel regression, producing highly consistent results as those reported in Table 3.

Table 3: Regression Results

Variable	Full Sample Period (2001 to 2017)			Subsample Period (2009 to 2016)		
	Coefficient	Standard Error	p-Value	Coefficient	Standard Error	p-Value
α	0.3907	0.051	0.000	0.4827	0.0713	0.000
Size	0.0003	0.0001	0.045	0.0001	0.0002	0.777
Funded	-0.1229	0.0155	0.000	-0.0279	0.0284	0.326
RtnAss	-4.0188	0.5675	0.000	-4.3337	0.7830	0.000
Age	0.0022	0.0003	0.000	0.0009	0.0004	0.035
1YrRtn	-0.4563	0.0413	0.000	-0.1628	0.0528	0.002
SP500	0.3956	0.0334	0.000	0.052	0.0496	0.294
Bond	0.0469	0.035	0.180	-0.1107	0.0616	0.072
RE	-0.0292	0.0118	0.013	-0.0165	0.0144	0.251
Alternative	-0.0634	0.0233	0.007	0.0045	0.0304	0.884
Cash	-0.7265	0.1095	0.000	-4.398	0.6064	0.000
Observations	2,440			1,231		
R ² :						
within	0.4358			0.1976		
between	0.0083			0.0098		
overall	0.1164			0.0092		

Over the full sample period, the model has a reasonable fit given the fit of traditional financial models. The within panel R² for the full sample period is 0.4358 but falls to 0.1976 during the post-financial crisis subsample period. Overall, R² is a reasonable 0.1164 for the full sample period but falls significantly to just 0.0092 for the subsample period.

Looking at the potential explanatory variables of interest, we see that Actuarially Assumed Rate of Return is statistically significant and negative in both panels, indicating that funds with a lower rate of return assumption will tend to hold a higher portion of alternative assets in their asset mix. A similar negative statistically significant relationship is found for one-year fund return while the relationship between age and alternative asset holdings is positive, indicating that older funds tend to hold a higher percentage of alternative assets.

For the full sample period, fund size is statistically and positively related to alternative asset holdings. This relationship is anticipated given economies of scales and various barriers to entry (in particular investment size) for many alternative asset classes. Funded Ratio is statistically negatively related to alternative asset holdings for the full sample period, indicating that *ceteris paribus* a decline in funded status is accompanied by an increase in alternative asset holdings. Given that a large portion of the funding for an increase in alternative assets comes from higher return equities, this result is again as anticipated. However, an interesting observation from this result is that poorer performing funds, as measured by their Funded Ratio, hold a lower allocation to alternative assets. This suggests that these funds are willing to accept increased volatility by holding a higher allocation to equities in order to close their funding shortfall rather than favoring reduced volatility to limit further decline in their Funded Ratio.

For robustness, Regression (1) was performed with calendar year dummy variables replacing the index returns as the control variables for underlying market conditions. The unreported results of this regression were largely consistent with those presented in Table 3 above.

Simulated Returns

In addition to studying the drivers of adaptation of alternative assets, the current study also aims to examine the impact of such changes on the downside risk of funds. In order to accomplish this, the current study simulates

the hypothetical performance of Quartiles 1 through 4 funds given a repeat of the 2008 financial crisis.

In order to simulate the performance of the fund quartiles, the current study applies the monthly index performance for the asset classes of interest for the six-month period of October 2008 through March 2009, inclusive. This period is chosen as it represents arguably the height of the financial crisis and encompasses the most significant period of market volatility.

Repetition of the performance of funds during the 2008 financial crisis is not ideal as it entails a number of assumptions. First and foremost, by measuring fund protection against one specific event we are assuming that his specific event is exactly repeatable, the probability of which is zero. In addition, the simulation assumes that index returns represent a measure of asset class performance for the average fund. Again, this is a strong assumption as it fails to address security selection at the fund level. Finally, the simulation must address, amongst other things, the issue of fund rebalancing. The results presented below offer two rebalancing methods: perfect monthly rebalancing and no rebalancing over the six-month period. In short, while the simulated returns reported below are not perfect, they do however allow for general conclusions to be drawn concerning the changing asset mixes of funds since 2009.

Table 4 below shows the resulting simulated returns based on asset class weights for the four quartiles as found in Table 2 above. For example, Quartile 1 funds have a six-month simulated return, based on their 2009 asset mix as found in Table 2, of -32.21%. Replacing the 2009 asset mix with the 2016 asset mix for these same funds and assuming monthly rebalancing, the resulting simulated return is -32.45%, a difference of 25 basis points. The conclusion is thus that these same funds would have performed 25 basis points worse during the height of the financial crisis with their 2016 asset mix than they would have with their 2009 asset mix.

Table 4: Simulated Returns for 2009 and 2016 Asset Allocations

Quartile	Monthly Rebalancing			No Rebalancing		
	2009 Simulated Return	2016 Simulated Return	Difference	2009 Simulated Return	2016 Simulated Return	Difference
1 (Lowest Adoption)	-32.21%	-32.45%	-0.25%	-9.10%	-9.36%	-0.26%
2	-33.59%	-34.96%	-1.37%	-9.74%	-10.02%	-0.28%
3	-31.62%	-35.97%	-4.35%	-9.25%	-10.28%	-1.03%
<i>Combined 2 & 3</i>	<i>-32.64%</i>	<i>-35.49%</i>	<i>-2.85%</i>	<i>-9.50%</i>	<i>-10.16%</i>	<i>-0.66%</i>
4 (Highest Adoption)	-32.71%	-36.97%	-4.26%	-9.53%	-9.51%	0.02%
Total	-32.50%	-35.09%	-2.58%	-9.39%	-9.80%	-0.41%

Table 4 provides a number of interesting conclusions related to the downside protection of funds as a result of their changing asset mix. The first observation is that nearly universally across the table, under both rebalancing assumptions, funds are more worse off with the 2016 asset mixes than with the 2009 asset mixes. Overall, the average fund is between 0.41% and 2.58% worse off given its asset allocation changes depending on the rebalancing assumption employed. An even more pertinent result to the current study is that the most unfavorable change in performance is for funds that were the largest adaptors of alternative assets, with Quartile 3 and 4 funds performing in general significantly worse than the two other quartiles regardless of the rebalancing assumption employed.

In order to examine more closely the drivers behind the significant change in performance for the largest adaptors of alternative assets, attribution analysis under the assumption of perfect monthly rebalancing for each quartile of funds is found in Table 5 below.

Table 5: Attribution Analysis

Quartile	Attribution Analysis					Total
	Equities	Fixed Income	Real Estate	Alternative Assets	Cash & Other	
1 (Lowest Adoption)	-0.25%	-0.63%	-0.43%	0.46%	0.60%	-0.25%
2	0.16%	-1.59%	-0.43%	-0.42%	0.91%	-1.37%
3	0.45%	-2.04%	-0.87%	-1.53%	-0.36%	-4.35%
Combined 2 & 3	0.30%	-1.81%	-0.63%	-0.95%	0.24%	-2.85%
4 (Highest Adoption)	1.39%	-2.57%	0.72%	-3.63%	-0.17%	-4.26%
Total	0.43%	-1.72%	-0.27%	-1.26%	0.24%	-2.58%

Focusing on the underperformance of Quartile 3 and 4 funds, we see that both quartiles benefit from their reduction in allocation to equities over the 2009 to 2016 period, with Quartile 4 funds benefiting nearly 140 basis points from their underweighting of poor performing equities. The positive attribution associated with equities, however, is easily trumped by the underperformance associated with the funds changing allocations to fixed income and alternative assets. Significant reductions in fixed income holdings cost each of Quartiles 3 and 4 funds in excess of 200 basis points in relative performance, indicating that the shift out of fixed income securities cost these funds in excess of 2% in performance relative to 2009 holdings. Compounding the problem of underperformance associated with fixed income securities is the fact that a large portion of the reduced allocation in fixed income securities appears to have been placed in alternative assets, which themselves performed poorly over the six-month period of interest. Thus, increased allocation to alternative assets resulted in negative attribution of 153 basis points and 36 basis points for Quartiles 3 and 4 funds, respectively. While these simulation results are naïve and less than ideal, they lend support for the fact that the reallocation of funds post the 2008 financial crisis may actually hinder fund performance during extreme market downturns.

Conclusion

The rate of adaptation of alternative assets by US pension funds has increased significantly since the financial recession of 2008, with the average fund nearly doubling its holdings in this relatively short period of time. Regression analysis shows that Funded Ratio and Actuarially Assumed Rate of Return both play a statistically and economically significant role in this adaption over the full sample period of 2001 to 2017.

The general motivation for the increased adaptation of alternatives by both retail and institutional investors is linked to increased diversification and lower portfolio volatility. However, the current study shows that the asset allocation changes implemented since 2009 have not only hindered fund growth and Funded Ratio over this time but may have actually deteriorated downside protection as measured by the simulation of index returns during the height of the 2008 financial crisis.

The current study offers an interesting perspective on the usefulness of alternative assets in an investment portfolio. And while the study's focus is very narrow, its general conclusions lead to a number of potential areas of further research, the most predominate being an examination of the general cost of alternative assets (namely the lost return associated with reallocating from equity securities) relevant to the perceived versus actual benefits (namely increased diversification and reduced volatility). This is a particularly pertinent topic as the recent flow of funds into alternatives has increased demand for investment alternatives and as such has negatively impacted their performance (Alternative Investments 2020 (2015)).

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CHANGING ATTITUDES TOWARD EXECUTIVE PERQUISITES: INDICATIONS FROM TARP

This paper examines what happened to Chief Executive Officer (CEO) monetary and nonmonetary compensation at Standard & Poors (S&P) 500 firms in the years surrounding the 2008 financial crisis and in the context of the Troubled Asset Relief Program (TARP) legislation. We use novel data on executive perks at S&P 500 firms from 2006 to 2012. Overall, the results are consistent with lasting impact on nonmonetary compensation and temporary impact on monetary compensation.-

Introduction

The financial crisis and TARP legislation provide an interesting opportunity to evaluate what happened to CEO compensation during this period of uncertainty. We investigate the extent to which financial crisis and governance intervention changed corporate compensation practices by examining time trends in both monetary compensation (wage) and nonmonetary compensation (perquisites or perks). There is pervasive blame for the crisis on excessive risk-taking by executives at financial institutions — the common argument being the structure of compensation plans incited these executives to embrace risks (Kirkpatrick, 2009). It has long been a practice of compensation committees of company boards of directors to structure pay packages with the express purpose of minimizing agency conflict by aligning interests of top executives and shareholders (Faulkender and Yang, 2010). Yet, it is these very compensation plans that became the subject of heated criticism. Calls for reform of executive compensation are widespread in academic, political, and public circles, and are coincident with a dramatic increase in executive compensation since the 1980s (e.g., Murphy, 1999, and Hall and Murphy, 2003).

Compensation at firms that received government support (TARP firms) was markedly different from that at firms that did not (nonTARP firms) in the years surrounding the financial crisis. The financial crisis had a much greater impact on CEO compensation at TARP firms, and the effects lingered. The magnitude and persistence of perk reductions at TARP firms suggest that this change has a degree of permanence.

On October 3, 2008, the Emergency Economic Stabilization Act (EESA) established the Troubled Assets Relief Program (TARP) as the US Government's effort to calm panic in the financial sector and, by extension, the overall economy. TARP contained initiatives that fell into six different categories. Under the *Executive Compensation Program*, TARP recipients became subject to executive compensation restrictions while they had outstanding TARP obligations. The TARP legislation included compensation restrictions because of political and public concern about using taxpayer money to bailout firms that had excessive compensation schemes. For example, Andrews and Bajaj (2009) quote President Obama, "For top executives to award themselves these kinds of compensation packages in the midst of this economic crisis is not only in bad taste — it's a bad strategy — and I will not tolerate it as President. We're going to be demanding some restraint in

exchange for federal aid – so that when firms seek new federal dollars, we won't find them up to the same old tricks.” Government support acted as a trigger to expand the debate on CEO pay because the legislation made support contingent on compensation restrictions.

This paper makes the following contributions. First, we extend the literature on executive compensation by investigating what happened to CEO wage and perks at S&P 500 firms in the years surrounding the 2008 financial crisis. While there is a large literature investigating the determinants of executive compensation and the rapid and large increase in CEO pay over the past 40 years (e.g., Gabaix and Landier, 2008, Murphy and Zabojnik, 2007, Lazear, 2003, and Hall and Murphy, 2003), there has been little inquiry into the impact of financial crisis and government intervention on monetary and nonmonetary compensation. Second, we contribute to the discussion of perks as excess by presenting results obtained from a novel data set of perk compensation at S&P 500 firms. The two arguments related to the prevalence of executive perks are agency theory in which perks are the result of weak corporate governance that allows CEOs to divert corporate resources for personal gain (e.g., Jensen and Meckling, 1976, and Bebchuk and Fried, 2004) and the optimal contracting hypothesis which argues that perks could be a cost effective way to enhance executive productivity and should be part of optimal executive compensation packages (e.g., Fama, 1980, Rosen, 1986, Henderson and Spindler, 2005). The availability of data is a constraint when studying perk compensation. Execucomp does not provide detailed perk information and the existing literature on perks relies on limited data. Our results come from manually collected information on executive perks from public disclosures contained in the proxy statements that S&P 500 companies filed with the SEC between January 1, 2007 and December 31, 2013.

Perks behaved differently than wage during this period. Amongst S&P 500 firms, those that received government support through TARP had higher executive wages and perks prior to the crisis. Overall in subsequent years, the wage gap narrowed and perk gap reversed. Our results cast doubt on the ability of TARP legislation to effect meaningful, lasting compensation reform.

Background

Legislation

The US Department of the Treasury website is the primary source for details in this section (TARP Programs, 2016). TARP was the Treasury Department’s response to restore liquidity and calm as the US stock market rapidly deteriorated in the wake of the bankruptcy of investment bank Lehman Brothers. TARP initiatives fell into six different categories: Bank Investment Programs, Investment in AIG, Auto Industry, Executive Compensation, Credit Market Programs, and Housing. The purpose of Bank Investment Programs was to stabilize the US banking system during the financial crisis and was, by far, the largest of the TARP initiatives in terms of public funding. Because of the enormous risk to the financial system posed by credit default swap positions held by American International Group, the US Treasury Department created the distinct initiative, Investment in AIG. Auto Industry involved major equity investments in General Motors and Chrysler because of the risk to the overall economy and the potential harm to a wide cross section of citizens that would result from the collapse of domestic automobile manufacturing.

Table 1 provides a summary of S&P 500 firms that received government support under TARP. In total, thirty-four S&P 500 firms (mostly finance and insurance companies) received TARP funding. While more than half are commercial banks, the group is not homogenous and also includes federal and federally-sponsored credit agencies, personal credit institutions, finance lessors, finance services, security brokers and dealers, investment advisors, life insurers, fire, marine, and casualty insurers, and automobile manufacturers.

Sample Firms Receiving Government Support Under the Troubled Asset Relief Program (TARP)

The data source for this table is publicly available information from the U.S. Department of the Treasury (TARP Reports, 2014). All values are USD millions.

Company Name	Funding Received	Date Received	Payment Status	Date Repaid	Profit to US Government
American Express Co	\$3,389	9-Jan-09	Full	9-Jun-09	\$414.4
American International Group	\$67,800	25-Nov-08	Full	14-Dec-12	\$5,030.0
Bank of America Corp	\$45,000	28-Oct-08	Full	9-Dec-09	\$4,570.0
Bank of New York Mellon Corp	\$3,000	28-Oct-08	Full	9-Jun-09	\$231.4
BB&T Corp	\$3,134	14-Nov-08	Full	9-Jun-09	\$159.7
Blackrock Inc	\$1,580	2-Oct-09	Full	18-Oct-12	\$436.0
Capital One Financial Corp	\$3,555	14-Nov-08	Full	9-Jun-09	\$251.7
CIT Group Inc	\$2,330	31-Dec-08	None		\$0.0
Citigroup Inc	\$45,000	28-Oct-08	Full	6-Dec-10	\$13,400.0
Comerica Inc	\$2,250	14-Nov-08	Full	17-Mar-10	\$322.0
Discover Financial Services Inc	\$1,225	13-Mar-09	Full	21-Apr-10	\$239.7
Fannie Mae	\$116,100	31-Mar-09	Partial		\$0.0
Fifth Third Bancorp	\$3,408	31-Dec-08	Full	2-Feb-11	\$593.4
First Horizon National Corp	\$867	14-Nov-08	Full	22-Dec-10	\$170.9
General Motors	\$50,700	29-Dec-08	Partial		\$0.0
Goldman Sachs Group Inc	\$10,000	28-Oct-08	Full	9-Jun-09	\$1,420.0
Hartford Financial Services	\$3,400	26-Jun-09	Full	31-Mar-10	\$814.4
Huntington Bancshares	\$1,398	14-Nov-08	Full	22-Dec-10	\$196.3
Invesco Ltd	\$16,000	30-Sep-09	Full	29-Mar-12	\$576.8
JPMorgan Chase & Co	\$25,000	28-Oct-08	Full	6-Jun-09	\$1,730.0
Keycorp	\$2,500	14-Nov-08	Full	30-Mar-11	\$367.2
Lincoln National Corp	\$950	10-Jul-09	Full	30-Jun-10	\$259.9
M & T Bank Corp	\$600	23-Dec-08	Full	17-Aug-12	\$100.5
Marshall & Ilsley Corp	\$1,715	14-Nov-08	Full	5-Jul-11	\$229.8
Morgan Stanley	\$10,000	28-Oct-08	Full	9-Jun-09	\$1,270.0
Northern Trust Corp	\$1,576	14-Nov-08	Full	9-Jun-09	\$133.6
PNC Financial Services Group Inc	\$7,579	31-Dec-08	Full	10-Feb-10	\$741.3
Regions Financial Corp	\$3,500	14-Nov-08	Full	4-Apr-12	\$638.1
State Street Corp	\$2,000	28-Oct-08	Full	9-Jun-09	\$123.6
Suntrust Banks Inc	\$4,850	14-Nov-08	Full	30-Mar-11	\$527.3
Synovus Financial Corp	\$968	19-Dec-08	Full	26-Jul-13	\$223.0

Company Name	Funding Received	Date Received	Payment Status	Date Repaid	Profit to US Government
U S Bancorp	\$6,599	14-Nov-08	Full	9-Jun-09	\$334.2
Wells Fargo & Co	\$25,000	28-Oct-08	Full	23-Dec-09	\$2,280.0
Zions Bancorporation	\$1,400	14-Nov-08	Full	26-Sep-12	\$253.0

Under the Executive Compensation Program, all TARP recipients became subject to restrictions on executive compensation while they had outstanding obligations under TARP. In the initial 2008 legislation, EESA specified executive compensation standards for certain TARP participants that prohibited new golden parachute agreements in the event of involuntary termination and limited golden parachutes to 300% of average taxable compensation of past five years, reduced the IRS tax deductibility limit from \$1,000,000 to \$500,000, placed “limits on compensation that exclude incentives for senior executive officers of a financial institution to take unnecessary and excessive risks that threaten the value of the financial institution” (H.R. 1424 — 110th Congress: Emergency Economic Stabilization Act of 2008, p. 13), and established “a provision for the recovery by the financial institution of any bonus or incentive compensation paid to a senior executive officer based on statements of earnings, gains, or other criteria that are later proven to be materially inaccurate” (H.R. 1424 — 110th Congress: Emergency Economic Stabilization Act of 2008, p. 13) which significantly expanded clawbacks introduced in the Sarbanes-Oxley legislation of 2002. In the wake of public outrage of 2009 bonus payments, the American Recovery and Reinvestment Act of 2009 strengthened the restrictions on executive compensation at firms that had outstanding TARP obligations. The legislation particularly targeted compensation contracts that included:

- a) significant cash bonuses with pay-off based on performance, since these payouts were rarely clawed back when performance subsequently fell
- b) provisions for annual sale of stocks and options, since large net cash withdrawals in the years preceding the crash were consistent with an incentive for short-term performance manipulation to maximize the amount withdrawn
- c) option grants since the asymmetrical payoff of options encourage risk-taking behavior.

Compensation restrictions associated with TARP included: bonuses limited to 33% of total compensation (payable in restricted stock only) subject to clawback provisions; prohibition of severance and change in control payments for named executive officers; enhanced disclosure of perks in the context of a requirement for firms to adopt a luxury expenditure policy; prohibition of tax gross-ups; annual non-binding “say on pay” shareholder vote; and independent compensation committees (Core and Guay, 2010).

Data and Results

Data

The source of data on executive compensation originates with public disclosures contained in proxy statements that S&P 500 companies filed with the Securities and Exchange Commission (SEC) between January 1, 2007 and December 31, 2013 available from the SEC Edgar database (EDGAR|Company Filings, 2014). These proxy statements were all subject to the SEC disclosure rules that came into effect on December 15, 2006. The SEC specifies the elements of executive compensation that companies must report in separate columns (designated by lower case letters) in the summary compensation table of the proxy statement: (c) *salary*, (d) *bonus*, (e) *stock awards*, (f) *option awards*, (g) *non-equity incentive plan compensation*, (h) *change in pension value and nonqualified deferred compensation earnings*, (i) *all other compensation*, and (j) *total*. The SEC defines *all other compensation* as executive compensation not otherwise included in columns (c) through (h), and specifies two categories of *all other compensation*: *perquisites and other personal benefits* and *additional all other compensation*.

The first category, *perquisites and other personal benefits*, includes, but is not limited to, club memberships,

financial or tax advice, personal travel, personal use of company property, housing, relocation and other living expenses, security, and discounts on company products or services (SEC Release No. 33-8732A, p.77). This category represents nonmonetary compensation. We manually collected compensation information in the summary compensation table and detailed information for *perquisites and other personal benefits* for CEOs at S&P 500 companies, and then supplemented this hand collected data with company financial statement information from Compustat. The final merged dataset has 3,529 observations on 964 CEOs from 624 firms. The number of firms exceeds 500 because of changes to the composition of the S&P 500 over time. We winsorize all variables at the top and bottom one percent.

We define *wage* as the sum of salary, bonus, stock awards, option awards, non-equity incentive plan compensation, and change in pension value and nonqualified deferred compensation earnings reported in SEC proxy filings. This is our benchmark measure of total monetary compensation. We define *perks* as the amount reported as perquisites and other personal benefits — this is the measure of nonmonetary compensation.

Results

We define *TARP firms* as the 34 sample firms that received TARP funding at some time during the sample period and *nonTARP firms* as S&P 500 firms that did not receive government support through TARP. Table 2 presents summary statistics of firm characteristics for TARP and nonTARP firms as indicated. Given that the sample pool is the S&P 500, the firms in the data set are large and profitable. Compared to nonTARP firms, TARP firms are larger (i.e., sales of \$31.5 billion vs. \$15.1 billion, total assets of \$296.5 billion vs. \$28.7 billion, and number of employees of 59,241 vs. 39,765), with higher free cash flows, \$4.9 billion vs. \$1.2 billion, and better governance, E index of 2.4 vs. 2.7. However, TARP firms are less profitable, with return on equity of 13.1% vs. 14.0% and return on assets of 0.9% vs. 5.8%, and lower growth, with sales growth of 4.8% vs. 6.9% and market-to-book ratio of 1.4 vs. 3.2. Although all of the firm characteristics are right skewed, the respective lower median values demonstrate the same patterns as the means.

Table 2
Summary Statistics of Firm Characteristics

This table summarizes sample firm characteristic statistics. The sample includes S&P 500 firms between January 1, 2006 and December 31, 2013. Columns present data for TARP firms (that received government support through the Troubled Asset Relief Program, TARP), nonTARP firms (that did not receive government support through TARP) as indicated. *Market Value* is book value of debt plus market value of equity. *Return on Assets* is net income divided by total assets. *Return on Equity* is net income divided by total equity. *Stock Return* is year end share price plus all per share dividend payments during the year all divided by prior year end share price. *Market to Book Ratio* is market value of equity divided by book value of equity. *Free Cash Flow* is net income plus depreciation & amortization plus interest after tax minus the increase in working capital minus capital expenditures. *E Index* is the entrenchment index (governance) defined in Bebchuk, Cohen, and Ferrel (2009).

	TARP Firms			nonTARP Firms		
	Obs	Mean (Median)	Std Dev	Obs	Mean (Median)	Std Dev
Employees	289	59,241 (26,467)	81,792	4326	39,765 (16,800)	61,557
Net Sales (\$millions)	289	31,474 (10,314)	42,023	4326	15,081 (6,674)	23,623
Total Assets (\$millions)	289	296,532 (153,337)	306,850	4326	28,703 (10,164)	74,122
Market Value (\$millions)	289	155,385	218,216	4326	29,342	59,246

		(44,325)		(12,605)		
Return on Assets	289	0.9%	5.5%	4326	5.8%	7.5%
		(0.9%)			(5.5%)	
Return on Equity	289	13.1%	39.0%	4326	14.0%	38.2%
		(9.3%)			(14.3%)	
Sales Growth	289	4.8%	23.1%	4326	6.9%	18.3%
		(2.0%)			(5.7%)	
Stock Return	289	7.5%	44.6%	4326	11.0%	40.0%
		(10.6%)			(9.7%)	
Market to Book Ratio	289	1.4	1.0	4326	3.2	3.9
		(1.2)			(2.4)	
Free Cash Flow (\$millions)	289	4,909	7,452	4326	1,183	3,106
		(1,598)			(430)	
E Index	205	1.9	1.5	3239	2.7	1.5
		(2)			(3)	

Table 3 summarizes wage information for CEOs at TARP and nonTARP firms in the years surrounding the financial crisis. Compared to nonTARP firms, CEO wages are higher at TARP firms prior to the financial crisis. TARP firm CEO wages demonstrate a pronounced decrease during the years surrounding the financial crisis. For example, mean (median) wage decreases from \$15.9 million (\$17.0 million) in 2006 to \$6.3 million (\$5.1 million) in 2009 — 39.7% (29.9%) of 2006 levels — before rebounding to \$11.1 million (\$10.5 million) in 2012 — 70.2% (62.8%) of 2006 levels. In contrast, nonTARP firm CEO wage decreases modestly during the crises before reaching new highs. For example, mean (median) CEO wage goes from \$9.4 million (\$7.7 million) in 2006 to \$9.2 million (\$7.6 million) in 2008 — 98.2% (98.0%) of pre-crisis levels — then to \$10.6 million (\$9.1 million) in 2012 — 113% (119%) of pre-crisis levels.

Table 3
Summary Wage Information for S&P 500 CEOs

This table presents summary statistics for CEO wage (\$000s) at S&P 500 companies as disclosed in SEC filings between January 1, 2006 and December 31, 2013. Columns present data for CEOs at TARP firms (that received TARP funding at some time during the sample period) and nonTARP firms (that did not receive government support through TARP) as indicated.

Year	TARP Firms		nonTARP Firms	
	Mean (Median)	Std Dev	Mean (Median)	Std Dev
2006	15,855 (16,966)	9,551	9,417 (7,719)	6,832
2007	11,956 (10,156)	9,195	9,724 (7,918)	6,871
2008	7,356 (5,097)	6,937	9,248 (7,563)	6,318
2009	6,297	5,396	9,274	6,092

	(5,065)		(7,991)	
2010	9,972 (10,148)	6,252	10,192 (8,884)	6,417
2011	11,010 (9,559)	5,886	10,521 (9,129)	6,601
2012	11,136 (10,533)	6,121	10,596 (9,149)	6,407

Table 4 summarizes CEO perks at TARP and nonTARP firms. Compared to nonTARP firms, perks are higher at TARP firms prior to the financial crisis. Overall, TARP firm perks decrease substantially by 2009 and remain at lower levels over the remaining period. For example, mean (median) CEO perks at TARP firms decrease from \$149,064 (\$67,207) in 2006 to \$74,254 (\$27,812) in 2009 to \$76,346 (\$26,422) in 2012 — 51.2% (39.3%) of 2006 levels. At nonTARP firms, CEO perks decrease (modestly) over the sample period; mean (median) perks are \$89,886 (\$32,760) in 2006 and \$84,756 (\$29,585) in 2012 — 94.3% (90.3%) of 2006 levels. Despite being a small proportion of executive compensation (typically less than 1% of wage), perks may foster behaviors that make them psychologically important to executives (e.g., Hirsch, 1976, and Rajan and Wulf, 2006) or to shareholders, politicians, and the public in general. We are expressly interested why the behavior of this small, but unique, form of compensation is different from wage.

Table 4
Summary Perk Information for S&P 500 CEOs

This table presents summary statistics for CEO perks at S&P 500 companies as disclosed in SEC filings between January 1, 2006 and December 31, 2013. Columns present data for CEOs at TARP firms (that that received TARP funding at some time during the sample period) and nonTARP firms (that did not receive government support through TARP) firms as indicated.

Year	TARP Firms		nonTARP Firms	
	Mean (Median)	Std Dev	Mean (Median)	Std Dev
2006	149,064 (67,207)	158,091	89,886 (32,760)	127,633
2007	121,797 (47,822)	146,505	87,004 (30,369)	128,461
2008	118,017 (63,194)	127,772	93,066 (34,742)	131,712
2009	74,254 (27,812)	106,317	87,791 (37,870)	117,470
2010	79,642 (24,390)	129,386	85,257 (32,791)	120,497
2011	75,463 (27,701)	117,786	87,811 (33,528)	125,292
2012	76,346 (26,422)	115,009	84,756 (29,585)	124,506

To confirm that the changes in CEO perks and wages are statistically significant, Table 5 presents regression results for CEO compensation based on the following equation:

$Ln(Compensation_{it}) = \alpha_c + \mathbf{W}'\beta_c + u_j^c + \varepsilon_{it}^c$, where the dependent variable, is the natural logarithm of CEO i 's compensation in year t and compensation is either wage (columns 1 and 2) or perks (columns 3 and 4). u_j^c is industry j 's fixed effect based on 3 digit SIC code. \mathbf{W} is a vector of year dummy variables for 2007 to 2012. β_1 to β_6 represent the differences in CEO compensation at firms in 2007 to 2012, respectively, compared to 2006. In the wage regression of column (1), the significant positive and increasing β coefficients for the 2010 to 2012 dummies (significant at the 1% level) confirm overall increasing wage at nonTARP firms. Given that the sample average nonTARP CEO 2006 wage was \$9.42 million, the 2010 (2012) dummy coefficient of 0.181 (0.228) suggest that 2010 (2012) nonTARP average CEO wage increased to \$11.3 million (\$11.8 million) — a 19.8% (25.6%) increase over 2006 levels. In contrast, CEO wage at TARP firms decreased significantly prior to the implementation of TARP in response to the financial crisis, and did not recover toward 2006 levels until 2011. In the wage regression of column (2), the significant negative and large coefficients for the 2007 to 2010 dummies, confirm large wage decreases at TARP firms in the years surrounding the financial crisis. Given that the sample average TARP CEO 2006 wage was \$15.9 million, the 2008 (2009) dummy coefficient of -1.040 (-1.276) suggest that 2008 (2009) TARP average CEO wage decreased to \$5.6 million (\$4.4 million) — i.e., to 35.3% (27.9%) of 2006 levels. The coefficients for 2011 and 2012 are also negative, but not significant, indicating a return to 2006 levels by 2011.

In the perk regression of column (3), the significant positive coefficients for the 2009, 2010, and 2012 dummies indicate higher levels of perks at nonTARP firms during those years — there is no indication of a particular trend. In contrast, CEO perks at TARP firms decreased significantly starting in 2009 and remained at very low levels compared to 2006 for the remainder of the sample period. In the perks regression of column (4), the significant negative and large coefficients for the 2009 to 2012 dummies, confirm large and lasting decreases in perks at TARP firms. Given that the sample average TARP CEO 2006 perks were \$149,064, the 2009 (2012) dummy coefficient of -2.024 (-2.946) suggest that 2009 (2012) TARP average CEO perks decreased to \$19,695 (\$7,833) — i.e., to 13.2% (5.3%) of 2006 levels.

Table 5

Changes in CEO Compensation at S&P 500 Firms in the Years Surrounding the Financial Crisis

This table reports the changes in CEO wage and perk compensation over time. The dependent variable in columns 1&2 (3&4) is CEO logarithmic wage (perks). The coefficients for the year dummy variables indicate the level of CEO wage or perks in that year relative to 2006. All regressions control for industry fixed effects. Cluster-robust standard errors are in parentheses with clustering at firm level. ***, **, * indicate significance level at 1%, 5% and 10% level respectively.

	(1) nonTARP Ln (Wage _t)	(2) TARP Ln (Wage _t)	(3) nonTARP Ln (Perk _t)	(4) TARP Ln (Perk _t)
2007 Dummy	0.046 (0.050)	-0.664** (0.273)	-0.019 (0.285)	-0.762 (0.906)
2008 Dummy	0.041 (0.050)	-1.040*** (0.277)	0.297 (0.288)	-0.885 (0.921)
2009 Dummy	0.051 (0.051)	-1.276*** (0.280)	0.798*** (0.293)	-2.024** (0.929)
2010 Dummy	0.181*** (0.049)	-0.607** (0.275)	0.556** (0.282)	-3.244*** (0.915)
2011 Dummy	0.193*** (0.049)	-0.307 (0.275)	0.412 (0.283)	-3.535*** (0.915)
2012 Dummy	0.228***	-0.311	0.628**	-2.946***

	(0.051)	(0.275)	(0.294)	(0.915)
Constant	16.150***	16.113***	12.642***	6.198***
	(0.778)	(0.521)	(4.449)	(1.731)
Industry Fixed Effects	Y	Y	Y	Y
Observations	3,415	227	3,415	227
R-squared	0.236	0.154	0.197	0.238

Examples of the Changing Attitudes Toward Executive Perks

To illustrate the changing attitudes towards perks in an environment of increased public scrutiny, we summarize how perk programs evolved at two sample firms — General Motors and Wells Fargo. The details come directly from the compensation discussion and analysis and notes to the summary compensation table included in SEC filed proxy statements.

Perks at General Motors

Regarding perks and other personal benefits, the 2006 General Motors proxy statement states (General Motors Corporation SEC Schedule 14A, Definitive Proxy Statement for 2006, p. 27):

“A limited number of additional benefits are provided for executives as part of the total compensation package because we believe that it is customary to provide these benefits or otherwise in our interest to do so. The compensation associated with these programs is included in *All Other Compensation*.”

The attitude toward perks is that they are an expected element of overall compensation, but have the potential to provide value to the firm as well as to the executive. Although described as limited, GM had the following (generous) perk policies (General Motors Corporation SEC Schedule 14A, Definitive Proxy Statement for 2006, p. 28-29):

“Corporate Aircraft — With the approval of the Chairman and CEO, the Corporation’s aircraft may be used by members of the Senior Leadership Group for business purposes. This provides for a more efficient use of their time given the greater possibility of direct flights and improved flight times than are available commercially. It also provides a more secure traveling environment where sensitive GM business issues may be discussed and enhances personal safety. A spouse may accompany the executive on the aircraft when the executive is traveling for business purposes and imputed income is assessed to the executive with taxes thereon reimbursed by the Corporation if the spouse’s participation is required for business purposes. The Executive Compensation Committee annually reviews all corporate aircraft usage by the Named Executive Officers. As part of a comprehensive security study, certain Named Executive Officers are encouraged to use the corporate aircraft for personal travel....

Security Systems and Services — As part of the Corporation’s comprehensive security study, residential security systems and services have been implemented for Messrs. Wagoner, Henderson, Lutz, Gottschalk, and Devine.

Executive Company Vehicle Program — The Corporation maintains a program that provides all executives, including the Named Executive Officers, with a GM vehicle of their choice. This program is not mandatory. Executives electing to participate in the program are asked to evaluate the vehicles they drive, thus providing feedback about our products. Participants are required to pay a monthly administration fee of \$150 and are charged with imputed income based on the value of the vehicle they choose to drive. Executives are reimbursed for taxes on this income, subject to a maximum vehicle value.

Beyond this maximum amount, taxes assessed on imputed income are the responsibility of the executive. In addition, participants are also required to purchase or lease at least one GM vehicle every four years...

Executive Health Evaluation — The Corporation provides a routine medical exam for all U.S. executives which we believe is in the best interests of the organization in that executives are able to contribute to their maximum potential, and unanticipated medical concerns are minimized by early detection and prevention.

Financial Counseling — The Corporation provides a taxable allowance to all senior U.S. executives for financial counseling and estate planning services. This program does not include tax preparation services.

GM Matching Contributions Program — All active GM employees in the U.S. may participate in a matching contributions program to accredited four-year colleges, universities, and community colleges in which all eligible contributions are matched on a dollar-for-dollar basis up to \$5,000 annually.”

By 2010, the treatment of and attitude toward executive perks at General Motors was very different (General Motors Corporation SEC Schedule 14A, Definitive Proxy Statement for 2010, p. 33, 34, and 38).

“The Special Master¹⁵ determined that no more than \$25,000 in total “other” compensation and perquisites may be provided to NEOs, absent exceptional circumstances for good cause shown. Payments related to expatriate assignments are not included in this total.... The Special Master and TARP regulations require additional limitations which cause our programs to exclude what market-based surveys indicate are competitive practices....

Luxury Expense Policy

As required by TARP regulations, we have adopted a luxury expense policy and posted it on our website www.gm.com/investors, under “Corporate Governance” and then “General Motors Expense Policy”. The policy’s governing principles establish expectations for every business expense, embodying the integrity and values that promote the best interests of the enterprise. Luxury or excessive expenditures are not reimbursable by GM under the policy. Such expenditures may include, but are not limited to expenditures on entertainment or events, office and facility renovations, aviation, transportation services, or other activities or events that are not reasonable expenditures for staff development, performance incentives, or other similar measures conducted in the ordinary course of business operations.... We do not maintain any private passenger aircraft or any interest in such aircraft, or private passenger aircraft leases.”

We also note that the 2011 policies with respect to perquisites and other personal benefits were almost identical to those in 2010. In response to the directives of the Special Master, GM cut perks to what it considered to be below-competitive levels. Not only did GM stop personal use of corporate aircraft, they eliminated the jets altogether. Auto industry executives encountered severe public and political backlash for using corporate jets to travel to Congressional hearings on November 19, 2008 seeking government bailout funds to prevent collapse in the US auto sector (e.g., Schwartz, 2008).

The shift in attitudes toward perks had a large impact on perk consumption at GM. In 2006, CEO G.R. (Rick) Wagoner Jr. received perks valued at \$361,058 consisting of personal use of company aircraft (\$51,941), security (\$284,523)¹⁶, and other (\$24,594), including company vehicle program, executive health evaluations, financial

¹⁵ The Secretary of the Treasury established the Office of the Special Master to monitor and regulate executive compensation at firms receiving exceptional assistance under TARP.

¹⁶ The costs include installation and monitoring of security systems and staffing expenses for personal protection (including chauffeured vehicles for business-related functions).

counseling and estate planning services. In 2010 (2011), CEO Daniel F. Akerson received \$17,264 (\$23,809) in perks, consisting of \$6,740 (\$276) for security and \$10,524 (\$23,533) under the executive company vehicle program and for car and driver services. Between 2006 and 2010 (2011), CEO perks decreased by 95% (93%).

Perks at Wells Fargo

As a second example, we highlight the changes in perk paying practices at Wells Fargo. Regarding perks and other compensation (Wells Fargo and Company SEC Schedule 14A, Definitive Proxy Statement for 2006, p. 50):

“Perquisites are intentionally limited and may include a car allowance, paid parking, financial planning, social club dues, home security systems, and benefits under a Relocation Program for team members who relocate at our request. In lieu of a car allowance, under our security policy for our Chairman and CEO, we provide a car and driver to Mr. Kovacevich that he uses primarily for business and occasionally for commuting from his home to his office or to outside events. Providing this service allows Mr. Kovacevich while in transit to work safely and have confidential telephone conversations undisturbed, and thus provides a benefit to the Company that more than offsets the relatively modest incremental cost for his non-business use of a car and driver over the past year.”

In 2006, the attitude projected toward perks is that they are limited (although nontrivial) and reflect a cost of doing business (e.g., relocation at company request), or provide common value (e.g., the firm benefits from increased CEO productivity and safety related to car and driver services). The 2010 proxy statement indicates that the level of restraint at Wells Fargo had increased — the firm had eliminated most perks. Note, however, that the company continued to provide car and driver services because of the perceived benefit (Wells Fargo and Company SEC Schedule 14A, Definitive Proxy Statement for 2010, p. 71).

“The HRC¹⁷ has intentionally limited perquisites to executive officers and in 2010 continued to reduce or eliminate almost all executive perquisite programs. We have eliminated executive perquisites providing for relocation-related home purchase expenses and reimbursements for financial planning services, automobile allowance, club dues, parking, and home security systems. For security or business convenience, we provide a car and driver to Mr. Stumpf,... primarily for business travel and occasionally for commuting.”

In 2006, CEO Richard M. Kovacevich (COO John G. Stumpf) received total perks of \$64,969 (\$104,499) consisting of \$47,506 (\$47,776) for security systems at their primary and second homes, \$0 (\$27,000) for relocation expenses, and \$17,463 (\$29,723) for other perks, including financial planning, car allowance, parking, social club dues, and car and driver services. In 2010, CEO John G. Stumpf received \$13,831 in perks, consisting of financial planning, home security, and car and driver services. Stumpf’s 2010 perks were 79% less than 2006 CEO perks, and 87% less than his own 2006 perks. From a 2006 self-described attitude of restraint, Wells Fargo became much more frugal by 2010. Moreover, the company committed to further reductions in perks beyond 2010 (Wells Fargo and Company SEC Schedule 14A, Definitive Proxy Statement for 2010, p. 77) — “the Company terminated the executive financial planning program and reimbursement of home security expenses.”

Conclusions

The financial crisis and TARP legislation provide an interesting opportunity to evaluate what happened to executive compensation at S&P 500 firms during this period. Compensation practices at TARP and nonTARP

¹⁷ Human Resources Committee

firms were markedly different in the years surrounding the financial crisis, and CEO wage and perks behaved differently. The financial crisis had a much greater impact on CEO compensation at TARP firms, and the effects lingered. By the end of the crisis, the wage and perk gap between TARP and nonTARP firms narrowed (reversed). The magnitude and persistence of perk reductions at TARP firms suggest that this change has a degree of permanence.

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L'ADOPTION DE LA NOUVELLE RÉFORME DE L'ACTE UNIFORME RELATIF AU DROIT COMPTABLE ET À L'INFORMATION FINANCIÈRE FACE AUX NORMES IFRS : MIMÉTISME OU RÉALISME ?

Le passage d'une culture comptable plan OCAM¹⁸ à un système comptable doté d'un cadre conceptuel inspiré des normes comptables internationales est une avancée notoire dans les économies de l'Afrique sub-saharienne. Les anciens systèmes comptables utilisés dans les Etats membres ne répondaient plus aux exigences des besoins en informations de plus en plus diversifiés des utilisateurs des états financiers. L'acte uniforme portant organisation et harmonisation des comptabilités des entreprises adopté dans le cadre du traité de l'OHADA¹⁹ auquel on a annexé le système comptable OHADA (SYSCOHADA) a eu l'avantage de moderniser le système d'information comptable des entreprises africaines des Etats – parties et de l'adapter aux évolutions de l'environnement économique, financier et juridique. Toutefois, la problématique relative à la convergence du référentiel OHADA aux IFRS mérite d'être examinée. Les réflexions s'inscrivant sur les conséquences d'une telle expérience sont au cœur de cette recherche. Enfin notre analyse aussi bien qu'elle soit théorique, s'interroge si cette expérience serait-elle un éventuel comportement mimétique ou réaliste de la part des décideurs de l'espace OHADA.

Mots clés : *normalisation comptable, OHADA, IFRS, mimétisme*

INTRODUCTION

L'Organisation pour l'Harmonisation en Afrique du Droit des Affaires (OHADA) est née du traité de l'harmonisation du droit des affaires en Afrique signé le 17 octobre 1993 à Port-Louis (Ile Maurice). Ce traité a été révisé à Québec au Canada le 17 octobre 2008. L'OHADA est née suite à une volonté des États à créer un espace économique et juridique favorable au développement des affaires. L'idée maitresse était d'« harmoniser » ou plus mieux « d'unifier » le droit des affaires des différents Etats. Selon Paillusseau (2004), l'unification s'opère par deux moyens essentiellement : l'adoption et la promulgation d'« Actes Uniformes » et l'institution d'une Cours Commune de Justice et d'Arbitrage. Plusieurs domaines du droit des affaires sont concernés par les actes uniformes. A ce jour 9 actes uniformes ont été soit adoptés, soit révisés. Les domaines d'activité concernés sont les suivants²⁰ : le droit commercial, le droit des sociétés commerciales et du groupement d'intérêt économique, le droit des sûretés, les procédures simplifiées de recouvrement et des voies d'exécution, les procédures collectives d'apurement du passif, le droit de l'arbitrage, l'organisation et harmonisation de la

¹⁸. OCAM. Organisation Commune Africaine et Malgache (1966) puis Organisation Commune Africaine et Mauricienne (1968).

¹⁹ OHADA : Organisation pour l'Harmonisation en Afrique du Droit des Affaires

²⁰ Pour tous les détails relatifs à l'objet de chaque acte, bien vouloir consulter le site internet : <http://www.ohada.org/index.php/fr/actes-uniformes-de-l-ohada>.

comptabilité des entreprises²¹, les contrats de transport de marchandises par route, les sociétés coopératives. L'OHADA compte actuellement 17 pays membres classés par ordre alphabétique : Bénin, Burkina Faso, Cameroun, Congo (Brazzaville), Côte d'Ivoire, Gabon, Guinée Conakry, Guinée Bissau, Guinée Équatoriale, Mali, Niger, République Démocratique du Congo, République Centrafricaine, Sénégal, Tchad, Togo, Union des Comores. Ces différents pays sont organisés en zones économiques : l'Union Économique et monétaire de l'Afrique de l'Ouest (UEMOA), la Communauté des États de l'Afrique de l'ouest (CDEAO) et la Communauté des États de l'Afrique Centrale (CEMAC). Par ailleurs, l'acte uniforme relatif au droit comptable et à l'information financière et adopté le 26 janvier 2017 à Brazzaville au Congo vient ainsi succéder à l'acte uniforme portant organisation et harmonisation des comptabilités des entreprises en vigueur depuis le 1^{er} janvier 2001 pour les comptes personnels des entreprises et, le 1^{er} janvier 2002 pour les comptes consolidés et les comptes combinés.

En revanche, les différentes instances susmentionnées fonctionnent selon la particularité de chaque espace économique. L'objectif de l'OHADA est de créer un ensemble de règles applicables sur l'ensemble du continent africain. Il convient de mentionner également que les décisions des Actes uniformes sont applicables directement par tous les États membres²². Cependant, certaines limites relatives à l'application de ces directives peuvent être constatées. Il revient à chaque pays de contextualiser l'analyse et l'application des textes. Toujours selon Paillusseau (2004), les Actes Uniformes entrent en vigueur 90 jours après leur adoption. Ils sont aussi opposables 30 jours après leur publication au journal officiel OHADA. Les actes uniformes sont adoptés en trois temps forts : la rédaction, les avis et l'adoption définitive. Une fois adoptés définitivement, ces actes peuvent faire l'objet d'une modification ultérieure pour plusieurs raisons (Degos et Kadouamaï, 2017) : l'amélioration des structures informelles, l'évaluation des structures, la satisfaction des pays en voie de développement. Ainsi, Avec l'internationalisation des grandes places financières, l'entreprise peut désormais lever des fonds sur plusieurs marchés (Walton, 2008). Les enjeux de l'harmonisation comptable internationale sont avant tout financiers (Wyatt, 1992). L'investisseur potentiel doit avoir accès aux données en rapport avec l'entreprise émettrice de nationalité étrangère. Ding et al. (2005) ont souligné en ce sens l'adoption progressive par les entreprises de l'Europe continentale et celles de l'Asie, des normes comptables internationales, dans le but de concurrencer leurs homologues britanniques ou américaines sur les marchés de capitaux. Toutefois, Walton (2008) souligne le rôle important joué par la Banque mondiale pour la promotion des normes comptables internationales dans les pays de l'Asie du Sud et plus largement, dans les pays en voie de développement (PVD).

Au plan international, la coexistence de plusieurs référentiels comptables assortie d'un rôle prééminent des marchés financiers et donc d'un besoin de lisibilité internationale des comptes par les investisseurs, a rendu nécessaire une harmonisation des normes internationales. Cette harmonisation s'est traduite par des transformations essentielles portant sur le processus de normalisation comptable et les normes elles-mêmes. Quelques années après l'entrée en vigueur du référentiel comptable OHADA, et l'adoption par l'Europe des normes IFRS, il semble opportun de s'interroger sur un certain nombre de préoccupations qui sous-tendent notre problématique. Y'a-t-il une pertinence quant à la convergence du système comptable OHADA aux IFRS ? Doit-on tenir compte des réalités environnementales et culturelles des pays membres avant de se lancer dans une telle expérience ? Quelles pourraient être les conséquences de cette mouvance de la nouvelle réforme de l'acte uniforme OHADA révisé après son entrée en vigueur prévue en janvier 2019 face aux IFRS ? S'agit-il d'un comportement mimétique de la part des autorités de l'espace OHADA ou d'une réalité des faits ? Autant d'interrogations qui méritent d'être examinées.

Ainsi, la présente recherche ne vise pas une analyse empirique des conséquences après l'entrée en vigueur de l'acte uniforme révisé. Il résulte simplement des réflexions théoriques de nature académique. Ces réflexions

²¹ Cet acte a été actualisé en janvier 2017 sous la nouvelle appellation « Acte uniforme relatif au droit comptable et à l'information financière ».

²² Cette affirmation doit néanmoins être tempérée car certaines mesures prises par OHADA ne sont pas toujours applicables par les États. Nous prenons pour illustration la date d'arrêtés des états financiers. L'article 23 de l'AURDCIF stipule que : « Les états financiers annuels sont arrêtés au plus tard dans quatre mois qui suivent la date de clôture de l'exercice. La date d'arrêtés doit être mentionnée dans toute transaction des états financiers ». Au Cameroun, les entreprises doivent déposer les Déclarations Statiques et Fiscales au plus tard le 15 mars N ; ce qui est en contradiction avec l'article 23 susmentionné.

s'inscrivent dans la dimension anticipative et proactive de la mise en œuvre d'une telle expérience aussi enrichissante qu'elle peut l'être.

La problématique de la normalisation comptable internationale dans le contexte des pays d'Afrique subsaharienne.

La normalisation comptable internationale est une étape dans la vie des affaires et cela pose d'énormes difficultés dans son harmonisation avec les systèmes comptables des pays en voie de développement (PVD). Toutefois, les récents scandales financiers en Europe et aux Etats-Unis sont venus renforcer ce besoin d'harmoniser et d'améliorer l'information financière des agents économiques. L'affaire d'une des plus grandes entreprises américaines Enron de par sa capitalisation boursière en est une illustration parfaite. Née en 1985 de la fusion d'Houston Natural Gaz et de Internoth of Omaha, Enron était l'une des plus grandes entreprises mondiales. Elle était, selon ses comptes falsifiés, un groupe avec un chiffre d'affaires de 139 milliards de dollars. Les dirigeants (K. Lay, J. Skilling) créèrent en interne plus de 3 000 sociétés *offshores* localisées dont les sièges sociaux étaient installés dans les [îles Caïmans](#), les [Bermudes](#) ou les [Bahamas](#), faisant passer ces sociétés pour leurs fournisseurs, ils pouvaient contrôler les prix de l'énergie. Tout ceci avec l'aide des cabinets d'Arthur Andersen, Citigroup, JP Morgan. Le 31 octobre 2001, la SEC (Securities Exchange Commission) ouvre une enquête, et c'est seulement à partir du 2 décembre de la même année que les preuves des fraudes sont établies²³. La multinationale se déclare en faillite, le cours de l'action chute de 90 dollars à 1 dollar. Cette faillite entraînera dans son sillage celle du cabinet Arthur Andersen et d'autres complices. Depuis, les pouvoirs publics se sont attachés à renforcer la qualité de la communication financière, afin de rétablir la confiance du public, des épargnants et des investisseurs. Ce mouvement s'est traduit par l'adoption d'un ensemble de texte dont l'objectif commun est l'amélioration de la sécurité financière avec l'adoption de la loi sur la sécurité financière en Europe (Degos, 2003), la loi Sarbanne Oxley aux Etats-Unis et l'application en 2005 des normes comptables internationales plus exhaustives telles que les IFRS (International Financial Reporting Standard) dénommées jusqu'en 2001 IAS (International Accounting Standards). Les normes comptables internationales tendent beaucoup plus vers la satisfaction des besoins internes ; la prédominance des marchés financiers s'affirme dans cette tendance.

Par ailleurs, la commission européenne a annoncé en juin 2000, l'arrêt d'une normalisation comptable purement européenne et l'adhésion au référentiel comptable de l'IASB. Cette option devait permettre la création d'un marché financier européen performant et liquide (Deloitte et Touch, 2002). L'impératif africain face à ce nouveau contexte européen semble évident. Tout ceci pose un problème important aux PVD en général qui ne disposent pas encore de marché financier de grande taille et où la comptabilité est encore embryonnaire. Il est évident qu'aujourd'hui, se pose la problématique de l'utilité des normes internationales aux PVD en général et en Afrique en particulier. Le problème de l'harmonisation des normes comptables africaines (en particulier les normes OHADA) est évident. Et, l'évidence à cette problématique comme le signale Feudjo (2010) est qu'aucun pays du monde actuel ne peut échapper à la logique de l'interconnexion des marchés. Par ailleurs, les grandes entreprises en Afrique dans leurs différentes options stratégiques de croissance, ont ou auront des besoins à exprimer auprès des investisseurs sur les grandes places financières du monde. Elles devront présenter à ces derniers des documents comptables et des informations financières intégrés. L'adaptation des normes internationales, la prise en compte d'autres dimensions de la comptabilité dans les PVD (informations de gestion, informations fiscales, adaptation au secteur informel...) sont des thèmes sur lesquels les experts africains devraient focaliser leur réflexion pour définir la comptabilité qui leur servira dans le futur. Selon le guide comptable du Système Comptable Ouest Africain SYSCOA (UEMOA, 1997), les normes anglo-saxonnes privilégient l'information de nature boursière et dans laquelle les états financiers sont conçus comme instrument de transparence d'un capitalisme boursier.

²³ Les malversations attribuées aux dirigeants d'Enron, aboutiront à 6 chefs d'accusation pour Kenneth Lay, fondateur ancien consultant de McKinsey et PDG (mort avant sa condamnation) et 28 chefs d'accusation pour Jeffrey Skilling, PDG (condamné à 24 ans et 4 mois de prison).

Quelle pertinence des normes comptables internationales pour les pays en voie de développement (PVD) ?

De nombreuses études se sont penchées sur la problématique relative à la pertinence des normes internationales aux PVD (Sy et Tinker, 2013 ; Samuel et Oliga, 1982 ; Belkaoui, 1988 ; Larson, 1993 ; Chamica, 2000). Nos propres investigations théoriques nous permettent de constater que l'opinion selon laquelle il serait tant que les économies africaines adoptent les normes comptables internationales (IFRS) est plutôt controversée. Bien que certains chercheurs démontrent ou ont démontré que l'harmonisation comptable internationale faciliterait les transactions commerciales et favoriserait le niveau de développement économique des PVD, il en demeure que plusieurs chercheurs restent dubitatifs quant à la réussite d'une telle expérience. Par exemple, Larson (1993), a mené une étude dans un échantillon constitué de 35 PVD (tous les pays africains). Suite à cette étude, l'auteur dresse un classement en trois catégories :

- Tout d'abord, les pays ayant choisi d'adopter les normes IAS sans modification,
- Les pays les ayant adoptés avec modification et enfin,
- Les pays n'ayant pas adopté ces normes.

Au terme de cette étude menée par Larson, les résultats démontrent que les normes IFRS pourraient être un moyen de développer la croissance économique des pays ayant adopté les normes IFRS avec modification (les pays de la deuxième catégorie) afin de refléter leurs conditions environnementales et locales. Toutefois, ces résultats s'alignent dans la continuité des travaux de Cains (1990) car, celui-ci affirme et note que, les normes comptables internationales ne sauraient être pertinentes pour ceux des pays qui les adoptent sans modification, c'est à dire qui ne tiennent pas compte de leur environnement culturel et économique. Par ailleurs, Hassan (1998) a réalisé une étude dans 35 PVD en vue de percevoir la perception des experts comptables en ce qui a trait aux principales caractéristiques d'un système comptable pertinent pour ces pays. Les résultats de son étude montrent une certaine préférence des experts comptables pour un système comptable uniforme. Pour ces experts comptables, les PVD ont besoin d'un système comptable simplifié et répondant aux besoins des planificateurs nationaux et des investisseurs nationaux (Hassan, 1998). Enfin, ces nombreuses études empiriques nous permettent d'affirmer que les normes IFRS seraient certainement plus adaptées à répondre aux besoins des économies développées et non aux besoins de celles des PVD. Pour Sy et Tinker (2014), les économies africaines ne sont pas faites pour les IFRS car, selon ces auteurs, ces normes bénéficieraient plus aux entreprises multinationales qu'aux PME beaucoup plus fréquentes dans les PVD.

L'itinéraire de la réforme comptable et de la normalisation : un chemin laborieux et épineux

La réforme comptable et l'information financière dans l'espace OHADA s'inscrit dans la dynamique de la mondialisation des économies. Comme l'indique Colasse (2011), lorsque le cadre comptable devient déstabilisateur, il faut penser à le reformer. Dans ce cas de figure, la déstabilisation de l'entreprise peut être assimilée à une irruption volcanique ou à l'explosion d'une centrale nucléaire. L'Afrique, on le sait, est un continent mal parti et toujours en retard. Lorsqu'on observe les mouvances comptables et financières mondiales, force est de constater que l'Afrique en général et singulièrement l'Afrique noire accuse un retard incroyable en terme d'innovation et d'adaptation. D'après Feudjo (2010), le système comptable africain a toujours été le reflet de leur histoire politique et économique. Dans les années ayant précédé la seconde guerre mondiale, on a enregistré les premiers axes de normalisation comptable. Cette normalisation a donné lieu au premier plan comptable français datant de 1945. Dans les années 70, les pays étaient regroupés au sein de l'OCAM (Organisation Commune Africaine et Malgache). Le plan comptable OCAM a ainsi vu le jour. Il était composé de nombreuses versions comme en témoignent dans leurs écrits Gouadain et Wade (2002). Plus récemment dans les années 1995, les pays membres de l'OHADA se sont engagés dans un nouvel effort de normalisation. C'est ainsi que l'UEMOA a mis en place un nouveau Système Comptable Ouest Africain (SYSCOA) qui est entré en vigueur en 1998. L'acte uniforme portant organisation et harmonisation des comptabilités des entreprises a été adopté à Yaoundé- Cameroun le 24 mars 2000. Le système comptable OHADA quant à lui est entré en vigueur le 1^{er} janvier 2001 pour les comptes individuels et 1^{er} janvier 2002 pour les comptes combinés.

Selon Govoei (2006-2007), l'acte uniforme portant organisation et harmonisation des entreprises visait deux objectifs majeurs : le remplacement de nombreux référentiels comptables dans les États membre (de façon à aboutir à une homogénéisation de l'information financière et comptable), l'unicité des états financiers.

Le tableau 1 résume le chemin parcouru jusqu'à nos jours et les jours ultérieurs :

Tableau 1 : Évolution des textes de la normalisation comptable

Dates	Activités
30 janvier 1970	Adoption officielle du plan comptable OCAM
24 mars 2000	Adoption de l'acte uniforme portant organisation et harmonisation des comptabilités des entreprises (AUOHCE)
26/01/2017	Adoption de l'acte uniforme relatif au droit comptable et à l'information financière des entreprises (AUDCIF).
1 ^{er} janvier 2018	Entrée en vigueur de l'acte uniforme relatif au droit comptable et à l'information financière des entreprises (AUDCIF) pour les comptes personnels des entités.
1 ^{er} janvier 2019	Entrée en vigueur de l'acte uniforme relatif au droit comptable et à l'information financière des entreprises (AUDCIF) pour les comptes consolidés, les comptes combinés et les états financiers selon la norme IFRS.

Source : Synthèse faite à partir de la littérature comptable.

Ces difficultés ne sont pas propres aux pays africains, lorsqu'on va au-delà des frontières, on peut constater avec Colasse (2009) que *l'International Accounting Standard Committee* (IASB) a connu les mêmes difficultés d'adaptation et d'application des normes. Ce cadre était plus destructeur que créateur de valeur ajoutée. C'est pour cette raison qu'il a été ajusté et révisé pour s'arrimer aux nouvelles données de l'économie mondiale. La normalisation comptable française a aussi fait l'objet de nombreuses réformes. Colasse et Standish (1998) ont identifié quatre temps forts de la normalisation comptable française : le temps de la reconstruction et de la naissance (1946-1957), le temps de la modernisation et de l'ouverture (1958-1973), le temps des fluctuations économiques et de l'apogée (1974-1983), le temps de la mondialisation et de mise à l'épreuve (à partir de 1984).

La normalisation comptable : entre urgence et prudence

La normalisation est appréhendée comme l'établissement de règles (normes) communes dans le double but d'harmoniser et d'améliorer les pratiques comptables. Selon Gouadain et Wade (2002), elle vise à imposer aux entreprises et organisations l'obligation d'établir sur les mêmes bases leurs comptabilités, de façon à présenter des états comptables comparables. L'idée recherchée est de rendre les systèmes comptables uniformes et harmonisés. Dans la même perspective et comme l'indique Kamdem (2004), la normalisation vise à pratiquer les systèmes comptables uniformes, rendre fiables les informations fournies par les entreprises, donner une image fidèle du patrimoine, faire de la comptabilité un outil de gestion des entreprises, encourager les entreprises à tenir une comptabilité. Pour Colasse (2009), la normalisation a pour but de faire appliquer les mêmes normes par les entreprises du monde entier.

La comptabilité est un système de représentation de l'entreprise. Selon Grenier et Bonnebouche (2004), la représentation désigne à la fois l'action de représenter et le résultat de cette représentation. Dans l'action de représentation comme dans la représentation théâtrale par exemple, il faut faire intervenir un auteur et un ou plusieurs acteurs ou spectateurs. L'information comptable a pour objectif de renseigner les investisseurs sur la santé financière de l'entreprise et les possibilités d'investissement. L'asymétrie de l'information entre les acteurs de la chaîne de l'information financière et comptable peut créer ce que Colasse (2011) appelle « crise intellectuelle de normalisation ». Ainsi dans la vision juridique de l'entreprise, la comptabilité intervient pour enregistrer les contrats relatifs aux échanges économiques, fournir une image fidèle des comptes et rendre compte aux différentes parties prenantes (à savoir les détenteurs d'action et les détenteurs d'enjeux). La normalisation vise à imposer un ensemble de règles comptables strictes à appliquer. Il s'agit aussi de standardiser les règles comptables pour uniformiser les pratiques. En matière de normalisation, les modèles dits « Anglo-saxons » sont des modèles de référence. Quelques traits caractérisent le cadre conceptuel Anglo-saxon (Ngantchou, 2011) : un modèle tourné vers le marché, l'existence d'un cadre comptable conceptuel (*Conceptual accounting framework*) et enfin son modèle d'évaluation. Lorsque deux entreprises se trouvent dans deux espaces économiques ayant des normes comptables différentes, la difficulté d'une communication financière efficace s'observe rapidement. Il est important de réviser à un moment donné les textes organiques qui fondent l'information financière et comptable. Mais la prise en compte du contexte dans lequel la modification s'opère est importante. Si nous prenons l'exemple de l'espace économique OHADA, on peut constater que les entreprises n'ont pas encore

intégré dans leur système de gestion la notion de transparence. C'est pour cette raison que les normalisateurs doivent avancer avec prudence car une révision hâtive peut être contreproductive.

Spécificité de l'acte uniforme relatif au droit comptable et à l'information financière (AUDCIF)

Les motifs de la révision

L'acte uniforme relatif au droit comptable a déjà fait l'objet de nombreuses révisions et modifications. Degos et Soulemanou (2017) estiment que le changement peut être incrémental-volontaire, radical-volontaire, radical-imposé ou incrémental-imposé. Trois raisons peuvent être avancées pour justifier les différentes réformes : l'harmonisation des états financiers, l'amélioration de la qualité de l'information comptable et financière, l'arrimage aux normes comptables internationales.

L'harmonisation des états financiers

Avec la mondialisation, le langage comptable doit être commun (Gérard, 2005). D'après Hoarau (1995, p. 76), l'harmonisation internationale peut être définie comme « *un processus politique visant à réduire les différences de pratiques comptables à travers le monde afin d'accroître leur compatibilité et leur comparabilité* ». Elle vise à long terme à unifier les pratiques comptables nationales ou à réduire la diversité des pratiques comptables afin de les rendre plus comparables. On pourra aussi dire, en reprenant Colasse (2002) que l'harmonisation est également un moyen d'améliorer la transparence des marchés financiers en permettant aux investisseurs de comparer les états financiers de groupes de nationalités différentes. L'objectif visé par l'harmonisation c'est la comparabilité des états financiers.

Les états financiers résument *grosso modo* l'activité comptable dans une entreprise. Ces états financiers doivent être lisibles par tous les acteurs de la chaîne d'information comptable. L'objectif central de l'information comptable et financière est d'être utile à la prise de décision des investisseurs. Les pays anglo-saxons et européens ont compris très tôt l'importance de la normalisation et de l'harmonisation des états financiers, tel n'était pas le cas des pays de l'espace OHADA. La multiplicité des bases conceptuelles, l'inégalité des niveaux de développement économique et les pesanteurs culturelles peuvent être des freins susceptibles de ralentir la marche vers l'harmonisation des états financiers dans l'espace économique OHADA.

L'amélioration de la qualité de l'information financière

L'entreprise est une réalité complexe aux multiples représentations. Ainsi pour analyser les aspects de l'entreprise utiles pour la compréhension de son système d'information comptable et sa comptabilité, il est possible d'avoir deux points de vue : l'observateur externe à l'entreprise et l'observateur interne à l'entreprise (Grenier et Bonnebouche, 2004). L'amélioration de la qualité de l'information va intéresser les *stakeholders* et les *shareholders*. L'une des finalités de la comptabilité est de fournir des informations financières répondant aux différents utilisateurs. L'harmonisation dans ce cas peut avoir pour effet d'améliorer le système d'information comptable de l'entreprise. L'article 14 de l'AUDCIF (2017) précise que : « *L'organisation comptable mise en place doit satisfaire aux exigences de régularité et de sécurité pour assurer l'authenticité des écritures de façon à ce que la comptabilité puisse servir à la fois d'instrument de mesure des droits et obligations des partenaires de l'entité, d'instrument de preuve, d'information des tiers et de gestion* ». Pour Beau et Pigé (2007), l'information comptable peut être perçue comme processus de gouvernance et de contrôle. La qualité de l'information comptable et financière peut se résumer à la recherche de « l'image fidèle » qui est la finalité de la comptabilité. Selon le journal officiel OHADA (2017, p.177), l'image fidèle « *est présumée résulter de l'application de bonne foi des règles et des procédures du système comptable OHADA en fonction de la connaissance que les responsables des comptes doivent normalement avoir de la réalité et de l'importance des opérations, des événements et des situations* ». Lorsque les comptes sont réguliers et sincères, l'objectif de l'image fidèle est atteint.

Une des causes des conflits d'agence (Jensen et Meckling, 1976) dans les entreprises résulte de la qualité de l'information comptable. Une information comptable erronée peut créer une divergence de vue (ou une asymétrie) entre les parties prenantes et est susceptible de déclencher un conflit d'intérêt.

L'arrimage aux normes comptables internationales

Les pays industrialisés ont vite compris qu'il fallait former des coalitions pour s'adapter aux standards internationaux pris de l'avance sur les pays africains en général et sur les pays de l'Afrique Centrale. Les normes internationales d'informations financières (en abrégé normes IFSR, *International Financial Reporting Standards*) sont des normes publiées par l'IASB (*International Accounting Standards Board*) qui, selon

Ngantchou (2011), apparaissent du point de vue des principes et des faits, comme un vecteur du modèle anglo-saxon. Les modèles anglo-saxons sont des modèles d'information pertinents et efficaces. S'arrimer aux normes internationales c'est connaître et partager les meilleures pratiques (le *benchmarking* informationnel). C'est aussi faire partie d'un réseau comptable et financier avec tous les avantages (et bien entendu tous les inconvénients) que le choix impose. Selon Beau et Pigé (2007), les normes comptables internationales (IFRS) ont été adoptées par la commission européenne. Son application a été effective à partir du 1^{er} janvier 2005 pour les entreprises cotées établissant les comptes combinés. Les normes comptables internationales ont été créées pour assurer la transparence des comptes des entreprises cotées et répondent à trois grands principes : **l'exhaustivité, la comparabilité et la neutralité.**

En s'arrimant aux normes comptables internationales, les entreprises de l'espace OHADA vont probablement se conformer aux bonnes pratiques afin de tirer les différents avantages qu'offre cette ouverture.

Le référentiel comptable OHADA : une possible convergence vers les IFRS ?

Depuis l'entrée en vigueur du système comptable pour l'harmonisation du droit des affaires en Afrique (SYCOHADA) le 1^{er} janvier 2001 pour les comptes personnels des entreprises et le 1^{er} janvier 2002 pour les comptes consolidés et les comptes combinés, les institutions OHADA ont, comme le signalent Nguema et Klustsch (2010) un problème de gouvernance. Compte tenu des difficultés auxquelles sont confrontées les autorités en charge de la normalisation comptable OHADA, difficultés liées notamment à la gouvernance, on peut se demander s'il serait temps pour que le référentiel comptable OHADA puisse converger vers les normes comptables internationales d'informations financières (IFRS). En regardant l'expérience de l'Europe continentale, on peut mettre en doute la réussite d'une telle expérience. Il faut tout de même noter que depuis la mise en place du SYSCOHADA, il n'a jamais existé ce que nous pouvons appeler un organisme de régulation en charge de la surveillance du bon fonctionnement et de la réussite du référentiel OHADA à l'instar du Conseil national de la comptabilité en France (CNC) devenu Autorité de Normalisation Comptable (ANC) ou encore du conseil des normes comptables (CNC) au Canada. Toutefois, ce n'est qu'en décembre 2008 que le règlement instituant une commission de normalisation comptable (CNC-OHADA) auprès du secrétariat permanent a été adopté par le conseil des Ministres de l'OHADA. Ainsi, l'article 3 (cité par Nguema et Klustsch, 2010) du règlement stipule que : « *la CNC-OHADA est un organisme consultatif et de proposition de normalisation comptable ayant pour objet d'assister l'OHADA dans l'interprétation, l'harmonisation et l'actualisation des normes comptables dans les Etats parties ; la CNC-OHADA assure la coordination et la synthèse des recherches théoriques et méthodologiques relatives à la normalisation et à l'application des règles comptables ; la CNC-OHADA, sur invitation du secrétariat permanent, a pour fonction l'élaboration de tout projet de réforme des règles comptables* ». En regardant l'expérience de l'Europe continentale quant au passage aux normes comptables internationales et des difficultés auxquelles celle-ci a été confrontée, on peut douter d'une telle aventure dans les deux espaces économiques en Afrique sub-saharienne francophone que sont l'UEMOA²⁴ et la CEMAC²⁵. Toutefois, compte tenu du fait que l'acte comptable OHADA offre une bonne comparabilité des états financiers d'un pays à l'autre, d'un secteur à l'autre, il semble à notre avis primordial de tenter cette expérience au sein de ces deux espaces économiques UEMOA-CEMAC. S'il est reconnu que les IFRS doivent avant tout s'appliquer aux sociétés cotées, une telle expérience mérite d'être tentée car l'émergence des marchés de capitaux bien qu'embryonnaire depuis l'an 2000 ne cesse de se développer notamment avec la Bourse Régionale des Valeurs Mobilières (BRVM) en Côte d'Ivoire dont le siège se trouve à Abidjan, la Bourse des Valeurs Mobilières de l'Afrique Centrale (BVMAC) dont le siège se trouve au Gabon (Libreville) et enfin Douala Stock Exchange au Cameroun. Les huit principes comptables retenus par le système comptable OHADA font l'unanimité dans les normes comptables internationales. Afin d'argumenter notre pensée, nous nous appuyons sur Colasse B. (2009) qui cite trois exemples démontrant la nécessité d'une éventuelle convergence du référentiel comptable OHADA vers les normes IFRS. Ces exemples sont les suivants :

- la mise en convergence des critères d'évaluation et surtout de leur domaine d'application. Selon cet auteur, la solution du SYSCOHADA apparaît bien adaptée au cas des PME ; la juste valeur ne s'applique qu'aux immobilisations corporelles (terrains, immeubles, etc.) et seulement dans le cadre d'une réévaluation agréée par

²⁴ UEMOA : Union Economique et Monétaire Ouest Africaine

²⁵ CEMAC : Communauté Economique et Monétaire de l'Afrique Centrale.

l'autorité compétente, une autorité locale « *les cas d'application de la juste valeur prévus par les IFRS sont plus difficiles à mettre en œuvre par les PME : titres de placement, créances et dettes libellées en devises, actifs biologiques* ».

- la présentation, du compte de résultat et le tableau des soldes caractéristiques de gestion prévu par le SYCOHADA peut apparaître bien lourde mais elle est le grand mérite, à la différence de celle du compte de résultat des IFRS/PME, de répondre à la demande d'informations d'utilisateurs multiples et en particuliers de dirigeants de PME souvent dépourvus de comptabilité de gestion. Ce deuxième exemple peut bien servir de source d'inspiration pour le normalisateur international qu'est l'IASB.
- Enfin, le Tableau Financier des Ressources et des Emplois (TAFIRE) est un document complexe. Il serait ainsi nécessaire de confronter les deux documents afin d'en comparer les avantages et les inconvénients respectifs, toujours par référence aux besoins d'information d'utilisateurs multiples.

En dépit de ce qui vient d'être évoqué, un certain nombre d'éléments peuvent être des freins à une éventuelle convergence du référentiel comptable OHADA vers les normes IFRS (Avelé et Dégos, 2014). Tout d'abord, les normes comptables sont assez complexes et, cette complexité bien que fondée sur des principes, nécessite de recourir à ce que Nguema et Klustsch (2010) appellent le « jugement » du préparateur de comptes qui s'avère mal adapté aux petites et moyennes entreprises (PME). La publication en juillet 2009 de la norme IFRS PME a un peu, comme le signale Colasse B. (2009), tempéré ce jugement ; mais le référentiel OHADA offre, du point de vue des PME, de nombreux avantages dont pourraient s'inspirer les normes IFRS PME. Toutefois, les normes IFRS parfois imprécises avec de nombreuses options sont en perpétuelle évolution. Un autre frein qu'il convient de signaler ici est la mise à jour tous les trois ans des normes IFRS PME. Ainsi, un tel changement du référentiel comptable OHADA entraînerait sans doute des coûts financiers importants alors même que l'espace OHADA a déjà supporté les coûts aussi importants lors du passage du plan OCAM au SYSCOHADA en 1998 pour les pays de l'UEMOA et en 2001 pour ceux de la CEMAC.

Difficultés et Conséquences éventuelles d'une telle expérience dans l'espace OHADA

Si l'on se réfère aux difficultés rencontrées dans la plupart des pays ayant tenté le passage du référentiel national aux normes IFRS, la question que l'on peut se poser est celle de savoir quelles peuvent être les difficultés d'application liées à la complexité de ces normes et les conséquences associées à une telle expérience dans l'espace économique OHADA. Quand on sait que l'espace OHADA ne dispose pas à notre connaissance d'un marché financier suffisamment « costaud » et « transparent », il y a lieu de s'interroger sur la réussite d'une telle expérience. Si les normes IFRS ont doté les entreprises européennes d'un langage commun, les utilisateurs en étaient mécontents et réclamaient une amélioration. Même en Europe, les IFRS ont toujours eu leurs détracteurs. Dès 2005, elles étaient déjà critiquées, car trop conceptuelles. Elles accordaient plus d'importance aux investisseurs qu'aux émetteurs et puis, elles tardaient à être rédigées. À partir du second semestre 2007, il y avait eu la crise financière et surtout le débat qu'elles ont provoqué sur le recours excessif à la juste valeur pour la comptabilisation des instruments financiers. Les IFRS pourraient-elles constituer un référentiel de qualité répondant aux besoins de l'économie dans l'espace OHADA ? Pour répondre à cette question, nous pouvons évoquer trois caractéristiques du dispositif IFRS : tout d'abord, les normes IFRS constituent un pilier financier organisé sans discipline et sans normes de *reporting*. Aussi, les IFRS répondent-elles aux besoins de transparence, de qualité de l'information financière fournie aux marchés financiers et aux apporteurs de capitaux ; elles répondent également à la nécessité d'une protection des investisseurs et contribuent de ce fait à l'attractivité du marché financier. Enfin, les IFRS constituent un référentiel complet, actualisé en réponse à la crise financière : en effet, le référentiel normatif traite de façon claire la quasi-totalité des sujets économiques importants. Il a été mis à jour à la suite de la crise financière de 2008, pour répondre aux préconisations du G20 et du forum de stabilité financière, en apportant les compléments ou amendement aux normes qui avaient été jugées insuffisamment rigoureuses ou trop complexes. Suite aux derniers scandales financiers du début des années 2000 en Europe et aux États-Unis (Enron, WorldCom, Parmalat...), les pouvoirs publics se sont attachés à renforcer la qualité de la communication financière afin de rétablir la confiance du public, des épargnants et des investisseurs (Avelé et Edimo, 2015). Cet important mouvement s'est traduit par l'adoption d'un ensemble de textes dont l'objectif commun était l'amélioration de la sécurité financière. L'année 2005 a ainsi vu l'application des normes

IFRS (International Financial Reporting Standard en français *normes internationales d'information financière (IFRS)*), dénommée jusqu'en 2001 normes IAS pour International Accounting Standard existant depuis 1973, destinées à toutes les entreprises faisant appel public à l'épargne. L'adoption et l'application des normes comptables internationales au sein de l'Union européenne sont régies par le règlement (CE) 1606/2002 du 19 juillet 2002 et, qui définit notamment les critères d'application d'une norme. Le règlement européen du 19 juillet 2002, en imposant aux entreprises faisant appel public à l'épargne de présenter leurs comptes consolidés selon les IFRS, vise principalement à garantir une meilleure transparence comptable. En effet, la présentation des comptes de ces entreprises selon des normes harmonisées en facilitera la compréhension et surtout la comparaison à l'échelon européen.

Face à cette complexité des normes IFRS, nous sommes persuadés que le changement de référentiel comptable suite au nouvel Acte uniforme relatif au droit comptable et à l'information financière (AUDCIF) et, entrant en vigueur le 1^{er} janvier 2018 pour les comptes personnels des entités, et le 1^{er} janvier 2019 pour les comptes consolidés, les comptes combinés et les états financiers produits en normes IFRS va transformer le fonctionnement des marchés financiers, des entreprises et des économies mais aussi l'élaboration des états financiers.

Au regard de ce qui vient d'être dit, on peut se poser la question suivante : est-ce un comportement mimétique ou un simple fait réaliste des autorités de l'espace économique OHADA en ce qui a trait au basculement « précoce » aux normes IFRS ?

Cette question mérite d'être examinée. Nous l'avons déjà évoqué, l'espace économique OHADA ne dispose pas d'un marché financier suffisamment « costaud » et « transparent ». En plus, les marchés financiers actuels sont dits émergents ou plutôt embryonnaires et, on peut alors constater que ces derniers se trouvent dans un contexte qui ne leur permet pas d'avoir les mêmes performances que leurs homologues des pays occidentaux car, l'administration, fléaux sociaux et certaines caractéristiques leur sont propres (volatilité des cours, illiquidité, faible capitalisation boursière...) constituent les principaux obstacles à leur efficacité. On peut aussi noter de nombreuses opérations d'initiés qui sont inévitables. Aussi, ces opérations ne sont pas le plus souvent réglementées dans le but d'éviter les asymétries d'informations assez présentes dans les marchés émergents d'Afrique. Avant de revenir sur les questions relatives à l'efficacité des marchés financiers, il semble opportun d'évoquer l'argument qui a été mis en avant en faveur de l'adoption des normes IFRS. Initialement, l'adoption des normes IFRS concerne principalement la réduction de l'asymétrie d'information entre les dirigeants et les parties prenantes (Christensen, 2012). Sur le plan opérationnel, l'adoption des IFRS serait souhaitable en raison du nombre limité d'options qu'elles proposent, réduisant par là-même les choix discrétionnaires des dirigeants. De nombreuses études empiriques ont constaté une amélioration de la qualité comptable des états financiers induite par l'adoption des normes IFRS (Barth et al, 2008), aussi bien pour des entreprises « volontaires » dans une période pré-IFRS, que pour des entreprises « contraintes » dans une période post-IFRS (Chen et al, 2010). Aussi, d'après Leuz et Verrecchia (2000), l'amélioration de la qualité de l'information comptable permet de réduire le coût du capital et d'augmenter la liquidité des actions. En revanche, Ahmed et al. (2013), indiquent dans leur méta-analyse que la qualité des prévisions des analystes financiers s'est sensiblement accrue avec l'adoption obligatoire du référentiel comptable international. Par ailleurs, certaines études démontrent des résultats assez mitigés sur les « bienfaits » des normes IFRS que leur application ait été « volontaire » ou « obligatoire » tout en mettant en évidence une augmentation des honoraires d'audit (De George et al. 2013). L'adoption des normes IFRS obéirait à une logique de conformité (Christensen et al, 2008). Leur adoption dépendrait donc largement des facteurs contingents et conduit Brown (2011), à se demander quels sont les véritables bénéfices des IFRS. Ainsi, Daske et al. (2013) mettent en évidence que seules les entreprises souhaitant « sincèrement » adopter les normes IFRS de manière volontaire bénéficient d'un impact favorable sur le coût du capital et la liquidité des actions. Les auteurs distinguent ainsi les adoptants « sincères » et ceux qui ont fait un choix plus opportuniste, pour bénéficier du « label » IFRS.

Nous appuyant sur les résultats des recherches ci-dessus évoquées, nous pensons qu'il aurait été judicieux pour les décideurs de l'espace économique OHADA de laisser les entreprises faisant appel public à l'épargne ou encore cotées sur les marchés boursiers émergents dans les deux sous-régions économiques (CEMAC et UEMOA) un libre choix et non une obligation en ce qui a trait à l'adoption des normes IFRS. Une telle expérience à notre avis aurait sans doute nécessité un recours au « benchmarking » (une action continue de comparaison d'un processus, produit, service avec une activité similaire réputée la meilleure afin de fixer des objectifs et des

actions d'amélioration ambitieux mais réalistes, pour devenir et rester le meilleur des meilleurs en un temps raisonnable). Avec la panoplie des problèmes auxquels sont confrontés les marchés émergents d'Afrique, problèmes le plus souvent liés à leur inefficience, on peut se demander si les normes IFRS répondraient-elles réellement aux attentes majeures des professionnels du chiffre et des acteurs économiques. Parmi ces attentes, on peut citer : le maintien, aux côtés du système normal, du système minimal de trésorerie réaménagé afin d'offrir la possibilité de tenir une comptabilité simplifiée en droits constatés et l'abandon corrélatif du système intermédiaire que constituait le système allégé ; le relèvement substantiel du montant du chiffre d'affaires en deçà duquel les petites entités économiques sont éligibles au système minimal de trésorerie ; la reconnaissance clairement exprimée de la spécificité du système comptable des secteurs réglementés tout en réaffirmant que ces secteurs restent soumis au droit comptable OHADA ; l'obligation faite aux entités inscrites à une bourse des valeurs ou faisant appel public à l'épargne, de produire à l'intention des marchés financiers et autres instances de réglementation sectorielle, des états financiers en normes IFRS, en sus de leurs états financiers individuels en normes SYSCOHADA ou selon le référentiel comptable spécifique à leurs activités ; enfin, la conservation de dispositions transitoires pour permettre un passage efficient vers le nouveau référentiel.

Nous insistons sur ces points pour plusieurs raisons ; tout d'abord, en nous appuyant sur la définition de l'efficience des marchés financiers selon laquelle, un marché est dit efficient si les cours reflètent instantanément l'ensemble des informations disponibles, c'est-à-dire les conséquences des événements passés, présents et les anticipations sur les événements futurs (Fama, 1970). Il admet plusieurs hypothèses pour une efficience totale du marché financier : les coûts de transaction (les commissions et les taxes doivent être nulles), la gratuité et la disponibilité des informations pour l'ensemble des investisseurs, les investisseurs doivent maximiser l'utilité espérée de leur richesse et, enfin, les investisseurs doivent être dans une situation de concurrence. Si on retient que les normes comptables internationales concernent avant tout les grands groupes cotés et, le fait que les marchés financiers des deux sous-régions enregistrent très peu de sociétés inscrites, il y a encore là un autre point sur lequel l'on peut s'interroger sur le réel fondement du basculement aux normes IFRS. Nous pensons que le référentiel SYSCOHADA est bien adapté aux réalités économiques et même politiques des états membres. En d'autres termes, les marchés financiers en Afrique sub-saharienne sont jeunes et possèdent les caractéristiques des marchés pré-émergents. Il s'agit souvent des marchés risqués, d'une part à cause de la volatilité importante des cours et, d'autre part à cause de la moindre fiabilité des informations et du manque de transparence. L'excès de volatilité provient généralement de l'insuffisance de liquidité et de la faible capitalisation du marché. En effet, sur ces marchés, les échanges concernent souvent quelques titres et seules quelques sociétés y dominent. Par ailleurs, les marchés émergents sont soumis à des contraintes réglementaires plus importantes que leurs homologues des pays développés et très peu de sociétés étrangères y sont cotés. Ils sont donc peu ouverts et mal intégrés au niveau international et même national. Or, pour que de tels marchés financiers puissent attirer le maximum d'investisseurs possibles et compte tenu de leur étroitesse tant par l'effectif des sociétés cotées et des investisseurs qui s'y intéressent que par le volume de transaction, ces marchés doivent être organisés de façon à maximiser leur efficience afin de limiter les asymétries d'information et les risques de sélection adverse pouvant nuire à leur bon fonctionnement et assurer ainsi leur crédibilité vis-à-vis des investisseurs internationaux.

A notre avis, l'adoption des normes IFRS doit nécessairement refléter la qualité des marchés financiers (nombre de sociétés inscrites, l'importante capitalisation boursière, la transparence etc...). Compte tenu de l'exigüité et de la faible liquidité des marchés nationaux de valeurs mobilières, une intégration sous forme de bourses régionales conduites de façon professionnelle apparaît inévitable. Tandis que l'Union économique et monétaire ouest africaine (UEMOA) a déjà fait le pas en ce sens avec la création de la Bourse régionale d'Abidjan, une telle coopération serait avantageuse dans l'espace économique de l'Afrique centrale au lieu de chercher à se doter d'un marché boursier pour chaque pays comme c'est le cas avec la création de Douala Stock Exchange au Cameroun et de la bourse de valeur mobilières de l'Afrique centrale (BVMAC) à Libreville au Gabon. Nous dirons même une coopération pour l'ensemble des pays membre de l'OHADA serait encore beaucoup plus salutaire. Le manque de liquidité et des systèmes faibles de règlement et de compensation, le manque de technologie de pointe pour les transactions, la faible capitalisation boursière, le faible nombre de sociétés inscrites dans ces marchés financiers dans l'espace OHADA devrait les amener à réfléchir sur une éventuelle coopération supra régionale si les décideurs veulent attirer aussi bien les investisseurs nationaux qu'internationaux. Ainsi, comme l'a montré l'exemple de l'accord de coopération conclu entre la Bourse du Caire et celle de Madrid, il existe des marges considérables de coopération entre les continents La Bourse de Tunis coopère, elle aussi plus

étroitement avec des experts parisiens des marchés de capitaux en vue d'augmenter sa liquidité et son attrait. Des modèles analogues seraient envisageables avec des pays anglophones (Ghana et Nigeria) en liaison avec la bourse de Londres. Une telle expérience serait aussi importante pour les marchés boursiers de l'espace OHADA.

L'enjeu principal de l'adoption des normes comptables internationales est de protéger les investisseurs (considérés comme étant les principaux utilisateurs des informations financières publiées) et de préserver la confiance des marchés financiers. À ce titre, les préparateurs des états financiers sont donc passés de l'application des normes basées sur la primauté de la vision juridique des entreprises, à un corpus de normes qui privilégie la vision économique. Avec l'introduction de la notion de juste valeur et l'utilisation fréquente de l'actualisation financière lors de l'évaluation des actifs et des passifs, les préparateurs des états financiers sont confrontés aux domaines économique et financier.

L'évaluation à la juste valeur versus évaluation au coût historique en comptabilité

L'évaluation à la juste valeur s'oppose au principe de prudence qui est l'un des principes fondamentaux du droit comptable français (Colasse, 2000) et, par lequel on comptabilise les pertes éventuelles mais pas les profits potentiels. Ce principe de prudence nous renvoie à la comptabilisation aux coûts historiques qui permet selon Casta (2000) d'intégrer le plus simplement l'incertitude dans les modèles comptables. L'évaluation au coût historique consiste à enregistrer les entrées de bien dans le patrimoine de l'entreprise à leur coût d'acquisition, coût historique, sans modification ultérieure même si la valeur réelle change ensuite (Simon, Obert, et Casta, 2000), ce qui présente un caractère certain et vérifiable. On retrouve cette convention dans le PCG français ainsi que dans les 4^{ème} et 7^{ème} directives européennes mais pratiquement pas dans les normes IFRS. Apparue pour la première fois en 1953 dans les textes de l'Accounting Research Bulletin relatif aux réévaluations des bilans, la notion de juste valeur fut ensuite introduite par l'IASB en 1998 pour l'évaluation des instruments financiers (IAS 39, développée sur environ 300 pages) et répond ainsi à une logique d'évolution comptable. ***La juste valeur est donc considérée comme étant la pierre angulaire du référentiel IFRS.*** Ces normes sont « principes based » c'est-à-dire qu'elles énoncent des principes généraux, ce qui n'est pas sans rappeler les US GAAP dont elles se sont largement inspirées. *A l'origine, les normalisateurs avaient plusieurs objectifs :*

- *Tout d'abord, limiter la créativité comptable dont on a connu les dérives à la fin des années 90, jusqu'aux scandales Enron et ou Vivendi du début des années 2000 ;*
- *Ensuite, permettre une meilleure comparabilité des comptes des sociétés faisant appel public à l'épargne et faciliter l'accès de ces entreprises aux marchés financiers ;*
- *Enfin restaurer la confiance des épargnants et des investisseurs en améliorant la communication financière.*

La juste valeur a été et demeure l'un des sujets les plus controversés depuis l'application des normes IFRS en 2005 en Europe (Avelé et Nyengué, 2015). Toutefois, nous avons constaté une certaine légèreté de prise en compte des paramètres aussi positifs que négatifs de cette notion de juste valeur dans l'espace OHADA en lien avec l'entrée en vigueur du nouvel Acte uniforme relatif au droit comptable et à l'information financière prévue au 1^{er} janvier 2019. Ainsi, dans les principes généraux du guide d'application des IFRS-espace OHADA (cf. chapitre 2, section 7, p.20-21), pouvons-nous lire que la juste valeur est ainsi « *le prix qui serait reçu pour la vente d'un actif ou payé lors du transfert d'un passif dans une transaction normale, réalisée entre intervenant de marché, à la date de l'évaluation.* ». Aussi, la juste valeur doit être estimée sur la base des hypothèses et caractéristiques qui seraient retenues par les intervenants de marché. Par ailleurs, la transaction doit avoir lieu sur le marché principal, c'est-à-dire celui ayant les volumes et le niveau d'activités les plus élevées pour un actif ou un passif donné. Ce marché doit être déterminé en prenant en compte chaque actif évalué et en se positionnant du point de vue de l'entité ou à défaut sur le marché le plus avantageux, c'est-à-dire celui qui maximise le prix de vente d'un actif ou qui minimise le prix de transfert d'un passif, après la prise en compte des coûts de transaction et des coûts de transport. Par contre, sont exclus pour la détermination de la juste valeur, les coûts de transport pour acheminer un actif jusqu'au marché principal (ou jusqu'au marché le plus avantageux). Ces coûts sont pris en compte à la fois pour le calcul de son prix de vente dans le cadre de la détermination du marché le plus avantageux et pour la détermination de la juste valeur. En ce qui concerne les techniques d'évaluation, celles-ci doivent maximiser l'utilisation de données observables sur le marché. Elles sont par ailleurs, classées selon une hiérarchie à trois niveaux (par ordre décroissant de priorité). Dans le premier niveau, le prix est coté (sans ajustement) sur un marché actif (un marché actif est un marché sur lequel ont lieu des transactions sur l'actif ou le passif selon une fréquence et un volume suffisants pour fournir de façon continue de l'information

sur le prix) pour un instrument identique ; par ailleurs, l'évaluation utilisant uniquement des données observables sur un marché actif pour un instrument similaire est accordé au deuxième niveau ; et enfin, le troisième niveau utilise principalement des données non observables.

Les conséquences de la mise en œuvre d'un tel concept dans l'espace OHADA peuvent à notre avis s'avérer néfastes. Aussi, l'espace OHADA est en majorité constitué des petites et moyennes entreprises (PME). Or, ces PME sont depuis longtemps ancrées dans une culture d'évaluation basée sur le coût historique. Notons tout de même que l'évaluation au coût historique a l'avantage qu'il se veut simple car il permet d'établir avec certitude le coût d'acquisition d'un bien par l'entreprise ; il se veut également économique dans la mesure où l'on ne doit pas procéder dans le temps à des modifications du prix sur la valeur inscrite au bilan (état de la situation financière). En revanche, le problème de l'évaluation au coût historique est que, lorsque la valeur de marché ou la valeur d'usage des immobilisations inscrites au bilan évolue, alors cette valeur est parfois en décalage par rapport à son coût historique ; ainsi, l'évaluation de la valeur économique de l'entreprise est faussée. Par exemple, une entité achète un bien incorporel dans une zone non commerciale en 1990 au coût de 150 000\$. En 2018, si on suppose que cette zone est devenue assez commerciale et que la valeur dudit bien est désormais évalué à 750 000\$ sur le marché, dans la comptabilité la valeur du bien en vertu du principe comptable du coût historique restera à 150 000\$ car, c'est le prix auquel l'entreprise l'a acheté.

Bien que chaque modèle d'évaluation comporte des avantages et des inconvénients, nous sommes persuadés que l'évaluation au coût historique est bien « adapté et approprié » au contexte de l'espace OHADA compte tenu des spécificités environnementales, économiques et culturelles. Rappelons une fois de plus ici que les IFRS sont avant tout une affaire des grands groupes cotés. Bien qu'en Europe, les grands groupes ont eu l'obligation d'appliquer les normes IAS/IFRS depuis 2005 pour l'établissement des comptes consolidés, on peut noter qu'au-delà des changements survenus jusqu'ici, la notion la plus discutée et voire controversée au sein du référentiel international est la juste valeur. Celle-ci est l'application pratique du principe de « *substance over form* » donnant la primauté à la valeur économique sur la valeur patrimoniale. L'introduction de la juste valeur remet en question le principe de l'évaluation au coût historique. Là où la juste valeur fait apparaître la valeur potentielle de vente, le coût historique maintient au bilan la valeur d'acquisition du bien diminuée des amortissements. Les états financiers selon les normes IAS/IFRS ont été les premiers établis en 2005 en Europe. Le premier constat qui a été fait est qu'aucun groupe n'a réévalué globalement l'intégralité des immobilisations. En effet, cette méthode n'a été appliquée qu'à certains types d'actifs (terrains, constructions et immeubles).

Même dans l'environnement IFRS à l'échelle internationale, l'observation des premiers états financiers en IFRS permet de voir que la méthode de la juste valeur n'a pas encore convaincu les praticiens. En effet, en ce qui concerne l'évaluation des immobilisations, le coût historique reste la méthode de référence. Cette résistance de l'approche patrimoniale peut s'expliquer par la difficulté et les coûts de mise en place de l'évaluation économique (Avelé et Dégos, 2014).

Conséquences de l'évaluation à la juste valeur sur les états financiers

L'utilisation avec exigence de la juste valeur en tant que modèle d'évaluation comptable n'a pas été accompagnée d'une réflexion parallèle sur son incidence sur la présentation des comptes eux-mêmes. Elle semble, selon Bernheim et al. (1999), plus constituer une réponse rapide à une inquiétude née de l'usage en croissance exponentielle d'instruments financiers non enregistrés dans les comptes (les produits dérivés) et aux risques y afférant que l'aboutissement d'une réflexion plus fondamentale sur les avantages et les inconvénients d'un tel nouveau modèle comptable. Toutefois, l'existence de ce qui a été appelé le « joint Working Group », créé à l'initiative des normalisateurs américains, australiens, britanniques, canadiens et de l'IASC, auxquels on a adjoint la participation de représentants d'autres pays (Allemagne, France, Japon...), et chargé de réfléchir à un projet à plus long terme sur l'application généralisée de la juste valeur. On pourrait dire, d'une part, que ceux qui sont à l'initiative d'imposer, dès à présent, la juste valeur comme base d'évaluation de tout ou partie des instruments financiers reconnaissent implicitement qu'ils ne sont pas sûrs de la validité de leur modèle, d'autre part que leur décision a été prise avant que toute la problématique soit posée et résolue (Bernheim et al, 1999). Ainsi, selon Jaudeau (1998), dans un modèle de juste valeur, la conception du compte de résultat doit être totalement repensée. Cela n'a pas été fait aujourd'hui et l'on se doit de poser la question de la lecture qui pourra être faite des comptes de résultat sous leur format ancien et donc de leur compréhension. En revanche, selon Willis (1998), l'application extensive de la juste valeur à l'ensemble des actifs et passifs du bilan entraîne deux conséquences majeures

corrélées entre elles : l'abandon du critère de réalisation et la perte du fondement des transactions pour le compte de résultat. Ces deux conséquences concernent le compte de résultat. L'évaluation à la juste valeur se fonde sur une conception selon laquelle un actif est cédé et un passif réglé en permanence. Par ailleurs, le remplacement du modèle du coût historique par celui de l'évaluation à la juste valeur est implicitement accepté par des normalisateurs importants le FASB et l'IASC. Critiquer cette tendance correspond pour certains à la défense d'une conception archaïque de la comptabilité, à un combat d'arrière-garde et à une prise de position doctrinale non innovante et ne reflétant pas l'évolution du monde économique et financier qui nous entoure (Bernheim et al, 1999). Pour (Hoarau et Teller, 2007), les partisans d'une innovation et d'une remise en question constante des Principes dogmes et conventions quels qu'ils soient, de manière non seulement à s'adapter au mieux à la réalité mais surtout à anticiper sur son évolution, considèrent que :

- tout produit nouveau doit être testé et éprouvé avant d'être imposé au marché ;
- ses avantages, ses inconvénients, ses risques, son coût doivent être préalablement déterminés et analysés de manière exhaustive et objective ;
- son acceptation par tous ses utilisateurs potentiels et par tous ceux qui seront directement ou indirectement concernés par son utilisation doit faire également l'objet d'un consensus préalable.

Pour Bernheim et al. (1999), toutes ces conditions ne paraissent pas réunies en ce qui concerne la juste valeur. Sa fiabilité, son objectivité, sa neutralité ne sont pas des qualités certaines qui peuvent lui être attribuées et qui sont pourtant reconnues comme indispensables en matière comptable. Les conséquences de la juste valeur sur la gestion des entreprises sont telles que nombre de dirigeants d'entreprise et autres utilisateurs d'états financiers ne l'acceptent pas comme outil de gestion et de reporting financier. Ses implications sur la signification des états financiers actuelle et traditionnelle n'ont pas été analysées en profondeur (Burlaud et Colasse, 2010).

Conclusion

L'objectif de cet article était d'attirer l'attention de toutes les parties prenantes (Investisseurs, entreprises, états, universitaires etc...) sur les changements apportés par la révision de l'acte uniforme OHADA sur l'information comptable et financière. Adopté le 26 janvier 2017 à Brazzaville au Congo, l'Acte uniforme relatif au droit comptable et à l'information financière (AUDCIF), vient succéder à l'Acte uniforme portant organisation et harmonisation des comptabilités des entreprises en vigueur depuis le 1^{er} janvier 2001 pour les comptes personnels des entreprises et, le 1^{er} janvier 2002 pour les comptes consolidés et les comptes combinés. Cet acte est entré en vigueur le 1^{er} janvier 2018 pour les comptes personnels des entités et, entrera en vigueur le 1^{er} janvier 2019 pour les comptes consolidés, les comptes combinés et les états financiers produits en normes IFRS. Adopté en substitution à l'acte uniforme du 24 mars 2000 portant organisation et harmonisation des comptabilités des entreprises, le nouvel Acte uniforme relatif droit comptable et à l'information financière (AUDCIF) est un corpus juridique rénové auquel est annexé le SYSCOHADA révisé. On peut donc dire que la réglementation comptable de l'espace OHADA est en train de migrer définitivement vers les normes internationales IFRS. Les normes comptables internationales sont en gestation dans l'espace économique OHADA depuis la mise en application des normes IAS/IFRS en Europe en 2005. À notre avis, cette convergence du référentiel OHADA aux IFRS est en même une opportunité et un risque. C'est une opportunité parce que les pays industrialisés sont passés par la réforme de la réglementation comptable et financière pour se développer. C'est en même temps un risque lorsqu'on constate que, dans l'espace économique OHADA, le tissu économique est majoritairement constitué des PME. Un autre risque réside au niveau de la culture de l'image fidèle des comptes. Les entreprises de cet espace économique n'ont pas la culture de la transparence, mais la culture du « maquillage des comptes ». C'est ainsi que globalement et sans doute, la plupart de ces entreprises élaborent chaque année trois bilans : un bilan pour le fisc, un bilan pour la banque et un bilan pour les actionnaires. Le bilan fiscal est généralement déficitaire, le bilan bancaire présente toujours un résultat positif, le bilan des actionnaires reflète la véritable image fidèle de l'entreprise. Les changements apportés sont encore méconnus par la grande majorité des entreprises qui sont supposés les appliquer. Il est donc urgent pour les différents pays de l'espace économique OHADA d'organiser des campagnes de sensibilisation des entreprises sur les avantages et des inconvénients qu'elles peuvent tirer de l'arrimage aux normes comptables internationales. Ces risques identifiés ne doivent pas freiner le processus de normalisation, au contraire les autorités des pays concernés doivent savoir que le chemin de la normalisation et de l'harmonisation est encore long et parsemé d'obstacles. Compte tenu du tissu économique de l'espace

OHADA constitué en majorité des marchés boursiers « embryonnaires » et surtout des PME, nous prôtons toujours pour un retour à l'évaluation au coût historique des actifs et des passifs. Par ailleurs, nous pensons que l'espace OHADA gagnerait davantage à harmoniser ses normes comptables qu'à chercher plutôt à les normaliser à l'échelle des IFRS. Aussi, préférons-nous le terme « harmonisation » qui, à notre avis constitue toujours un socle pertinent et efficace de comparaison entre les différentes économies et un référentiel pour les investisseurs de l'espace OHADA. Avec beaucoup plus d'audace, nous irons même jusqu'à dire que l'Afrique gagnerait en créant un espace économique commun ou tout au moins dans l'espace OHADA. Le comportement mimétique observé ici et là n'est pas en soi une mauvaise chose mais, nous croyons qu'il eut été préférable de procéder d'abord au « benchmarking » avant toute tentative d'une telle expérience. Une fois que l'Afrique se saurait organisée autour d'un espace économique commun et aurait mis en place un marché financier commun et unique (une forme de régionalisation de marchés) tout en développant une supra coopération avec leurs homologues des pays développés, nous sommes persuadés, sans nécessairement être pessimistes que cette « volonté anticipée » accordée à la convergence aux normes IFRS aurait sans doute un succès à long terme.

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Accounting and Accountability in Workfare Programs

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Accounting and Accountability in Workfare Programs

I. Introduction

With global economic swings, aging populations, poverty, political instability and international migration, social services has become a dominant sector in national economies (Broadbent & Guthrie, 2007), battling economic, political and social challenges as well as diverse welfare ideologies. Social services programs draw on different economic, historical, socio-political and institutional settings and relationships that have remained fairly insulated from academic accounting inquiry. Current research in the field is strongly focused on developed world models and traditional accounting areas such as budgeting, governance, new public management (Hood, 1995; Broadbent & Guthrie, 1992) and devolution (Thomas & Davies, 2005; Llewellyn, 1998a, b; Smyth, 2017). Research on developing nations emphasizes developmental themes related to non-governmental organizations (NGO's), program implementation, accountability, development (Unerman & O'Dwyer, 2006; Davison, 2007; Ebrahim, 2003) and diffusion of western accounting practices (Neu, Gomez, Leon & Zepeda, 2002). At a time of significant change, not much is known about comparative frames of transnational reference (Broadbent & Guthrie, 2007), the organization and socio-cultural contextuality, the complexity and nature of the domain that produce and sustain dramatically different program structures and accounting regimes, especially in developing nations.

Many developed countries such as the U.S and Australia (DSS, 2015) have undergone or are currently undergoing welfare reform to address changing social and economic conditions. Developing nations, on the other hand, continue to implement programs battling poverty related issues, with increasing presence from transnational agencies such as the World Bank, USAID and local non-governmental organizations (NGO's). Even similar types of businesses can operate differently under different national contexts (Spence, 2017, p. 84). An assumption of the traditional technical-rational outlook from developed nation models on research into developing nation's public sector has produced a literature of strong critique of their accounting and financial management systems (Dean, 1989; Blondal, 1988; Rahaman & Lawrence, 2001). These critiques are not only are widely spread out in research fields but are also limited in their efforts to connect to alternate and underlying social, politico-economic (Broadbent & Guthrie, 2007; Abdul-Rahaman, Gallhofer, Haslam & Lawrence, 1997) phenomenon that deeply impact the implementation of programs and its accounting and financial systems in developing nations settings (Alawattage & Wickramasinghe, 2008; Alawattage, Hopper, 2007 & Wickramasinghe, 2008).

This paper is a comparative study of national workfare programs from an empirical accounting perspective, informed by the works of Bourdieu. The site of investigation includes four fundamentally different models run in the welfare states countries of United States of America (US), United Kingdom (UK) and non-welfare developing nations of South Africa (SA) and Liberia-World Bank (WB). The focus of this paper is a contextual analysis of these four programs and how such context impacts the programs the subsequent enlistment of accounting and accountability systems and practices. How social services operate in different contexts can be explored through charting the accumulation of forms of capitals by key players. The paper focuses on a type of social services program known as "Workfare" or Work-for-Welfare, made popular by developed nations but versatile with a global audience. Though research on emerging economies is now garnering increased interest (Van Helden & Uddin, 2016), the thesis of existing mainstream research streams in the field of social services do not hold on a global level and neither have they been enlisted to inform or shed light on non-developed welfare models.

Drawing on archival data, this paper enlists Bourdieu to highlight the structure, underlying welfare logics, distribution of capitals and forms of dominant power valued in each workfare program model. The theoretical

premise is that aside from the technical elements, accounting and accountability practices and processes enlisted and operated by actors in these fields are dynamic upon these underlying social, political and cultural elements, which are essential to understanding how programs work in these settings. Such analysis provides an understanding of the network of social relations in the field while also being the canvas on which struggles for limited resources and powers can be reflected (Bourdieu, 1990).

The study highlights the argument that traditional western economic capital models cannot be used to understand the types and accumulation of capitals in developing nation contexts (Lombardi, 2016). This translates into the corollary that developing nations do not follow developed world (Spence, Zhu, Endo & Matsubara, 2017, p.82) models of capital distributions and “rules of the game” (Bourdieu). Developing nation models, comparatively and in line with intrinsic factors, showcase more diffused delivery networks that allow a closer integration with local governance and citizens than traditional welfare state models. This paper suggests that, in turn, such contexts and diffused frameworks can offer a higher potential for micro level focus on accounting, accountability and participation.

<https://www.dss.gov.au/publications-articles/corporate-publications/annual-reports/dss-annual-report-2016-17>

Public sector to public services: 20 years of “contextual” accounting research

II. Conceptualizing Social Services – Bourdieu

The larger interrelation between governance and accounting has been explored by extant social accounting literature (Miller, 1990, Miller and O’Leary, 1987; Chau, 1995) where it is seen to play central and sometimes discursive roles in the shaping of public administrative practices and the governing of the economic life (Miller & Rose, 1990, 1994, Miller & O’Leary, 1987; Miller, 1990; Burchell, et al., 1980) of citizens. It is identified in a range of strategic (Ahrens & Chapman, 2002), enabling (Burchell, Clubb, Hopwood & Hughes, 1980; Baxter & Chua, 2003), affectant (Bodekar & Chua, 2013), communicative (Lavoie, 1987), distancing (Robson, 1992) and empowerment (Lombardi, 2016) functions.

Developments like NPM have created movement in state-accounting relationships where accounting has played an important role in articulating government reforms (Adhikari, Kuruppu & Matilal, 2013; Laegreid and Christensen, 2013; Hood, 1995). These concepts have been theorized by papers such as Miller & O’Leary (1987) that look at historical construction of standard costing and budgeting as a calculative practice enlisted to govern employees; Miller (1990) focuses on the “programmatically” use of accounting by the government. Among others, the “Governmentality” and “Disciplinary Power” literature drawing on Foucault is similarly situated – with accounting seen as a government technology aiding in the transfer of its vision and governance from a distance (Armstrong, 1994). Called “technologies of governance” (Neu & Graham, 2006), “calculative practices” (Miller, 1998), “managing by numbers” (Townley, 1995), financialization (Llewellyn, 1998b) and “accountingization” (Power & Laughlin, 1992, p.133), the new wave of “alternative” accounting sees itself as “a conscious social practice that can enable individuals to perceive their activity and its purpose collectively” (Bryer, 2011, p. 479).

The public sector and social services sector reforms have accompanied a shift in traditional top-down formal governance and limited accountability systems to make way for larger roles for the private and non-profit sectors. Today we see modern governments under considerable stress to delegate and decentralize, bringing changes and challenges for accounting and accountability systems (Potter, 2002). Such arrangements have created many inter-level and multi-organizational models of cooperation-collaboration between the state, the private sector, non-governmental organizations (NGO’s) and the civil sector (citizens) where the state has played the role of “initiators or instigators” in cooperative initiatives (Ansell & Gash, 2007, p. 547). The resultant rise in the role of NGO’s in developed nations and transnational agencies such as the World Bank and NGO’s in developing nations has spawned an separate stream of literature focusing on external funding and NGO connected matters such as performance management and accountability (Ebrahim, 2003).

Current literature in social services includes studies such as Llewellyn (1998) that focuses on front line social

workers and costing of services in U.K.; Graham (2010) focuses on the elderly or retirement income system in Canada and the use of accounting technologies, while Smyth (2017) looks at accountability in the arena of social housing in U.K. There is also a body of academic literature from the 1990's that focuses solely on costing and budgeting in the National Health Services (NHS) in the UK (Broadbent, 1992; Preston, Cooper & Coombs, 1992; Lapsley, 1994). But social services is still a nascent field and there is a geographical dominance of Australian and UK research (Broadbent & Guthrie, 2007) focusing on developed country economic (Broadbent & Guthrie, 2007) and cultural models (Pina & Torres, 2003) with few studies focus on developing nations. Himick (2009) is one of the few studies that look at developing national contexts, exploring Chilean pension reform and the instrumental role of accounting.

A growing number of studies in developing nation settings explore public sector reforms (Kuruppa, Adhikari, Gunarathnam & XX, 2016), Alawattage & Wickramasinghe, 2008; Alawattage, Hopper, 2007 & Wickramasinghe, 2008; Alawattage & Wickramasinghe, 2004; Adhikari, Kuruppa & Matilal, 2013) through the lens of these newer models, arrangements and stakeholders. The LDC, in specific, have also seen an extraordinary rise in research connected to the role of the transnational agencies such as the World Bank and USAID and collaborations with local NGO's. However, not many papers explore welfare and welfare reform from an accounting perspective.

Social services and workfare programs are still evolving in terms of design and implementation with newer definitions of welfare as a conditional social contract between unemployed citizens and the welfare state (GAO, 1984, p.1-3; Handler, 2003, p.230). Broadbent & Guthrie (2007, p. xx) outline the importance of engaging in critical debates about social services and exploring underlying assumptions and taken for granted definitions. A program formulated at the federal/provincial level draws from a specific national/provincial vision of welfare and elements such as institutional, historical and socio-political settings, resources and definitions of citizenship (Matten & Crane, 2005, p. 170). In transnational settings, accounting is an important technology but there can be significant differences between its intended and actual use (Broadbent & Guthrie, 2007, p.130). These differences can be structural, procedural or implementational and can be connected to the nature of the welfare field and welfare ideologies in these countries. This gives rise to our first research question.

RQ1: What are the underlying welfare logics of these programs fields and are can they be connected to the overall design and structure of welfare programs (If I cannot tease out habitus – singular or plural, why not stick to logic and capitals?).

As this study is concerned with transnational comparisons, the study draws on Bourdieu to do a “field analysis” (Swartz, 1997, p. 120) – exploring welfare ideologies and logic and the structure and functioning of specific models of workfare programs as a social field that defines operational definitions, decisions and positions and affects the particular enlistment of accounting.

Bourdieu's field (Bourdieu & Wacquant, 1992, p. 97) is essentially a constructed, structured, networked space that can be seen to be organized around its own distinctive logic, players, internal relations and field of forces (Bourdieu & Wacquant, 1992, p. 127), held together by specific internal rules, values and protocols (habitus) that are quite independent in their workings but at the same time also dependent on a system of power relations that is positional, structurally defining and transformative (Bourdieu & Wacquant, 1996; Bourdieu & Wacquant, 1992, p. 117). This logic includes the ideologies, values, history and the ontology that forms the bedrock of the functioning of a field. It influences the relationship between players, the rules by which the players play, the underlying “feel of the game” that can affect the lot of the players as well as the overall structure and functioning of the field.

A national workfare system is very akin to what is considered a “field” by Bourdieu (Bourdieu, 1992). Each nation-program or field encompasses a dramatically different blend of welfare logic and ideologies that impact program design, orientation and goals and player positioning that produce distinct structures of welfare, program implementation and distribution of capital reflected in their budgetary and funding structures; inter-level relationships and flow of information; and frameworks of accountability. Within this system the field, capital

and habitus are bound to each other - Field containing the structures and elements, the habitus making sense, giving rules and meaning to the field (Bourdieu & Wacquant, p. 126) and the positioning and combination of capitals creating players with certain advantages (Emirbayer & Williams, 2005, p. 691). Implicit is the understanding that there is a connection between logics, habitus and the design and structure of these programs. How the social services sector operates in different contexts can be charted through a study of field setup, field logic and the accumulation of specific capitals.

Field logic is also deeply connected to the notion of habitus. Bourdieu's habitus represents multiple elements of internalized conditioning, sense making logics, tacit and taken for granted meanings, definitions and practices (Neu et al. 2002, p. 275) that reproduce themselves while also accounting for sustained tastes, preferences and dispositions (Bourdieu & Wacquant, 1992, p. 131). Habitus is acquired and can represent not only individual capacity but also collective conditioning. Looking at various national systems through the eyes of Bourdieu's habitus, each is a system of internal understandings that contributes to a certain social reproduction of welfare and grounds the strategy and the form of accountability sought. The habitus in tandem with field logic, history and structure can contribute to normative values such as liberty, legality, legitimacy, equity and social justice that have been found to be a strong influence in the articulation of social welfare and the standards of accountability in public governance (Haque, 2000, p. 610).

Programs in fast developing and less-developed countries present different roles for accounting processes and a different set of challenges to accountability structures in both governments and NGO's (Ebrahim, 2003, Potter, 2002). Bourdieu's capitals also allow a study of alternate, non-economic forms of power - social, cultural and symbolic, and the conversion of one form of capital into another, both at the macro and micro levels, which is especially pertinent for workfare programs in non-developed countries. For a transnational analysis of different welfare programs and also towards our argument that developing nations cannot be understood solely through the economic capital model lens of Anglo-American models, it is important to investigate the distribution and collection of powers or capitals, and which capitals are symbolically valued in each of these fields. This leads us to the second research question analyzed in this study.

RQ2: What forms of major forms of capitals/Symbolic capitals accumulated/valued in these geographical sub-fields - models? Is accounting a symbolic capital?

The role of social and organizational contexts in accounting practices as well as the role of accounting in implementing new authority structures in organizations are not new research concepts (Abernethy & Vagnoni, 2004; Lapsley & Pallot, 2000; Covalleski, Dirsmith & Samuel, 1996). Here accounting is both a reflection of environmental and cultural resources and constraints (Meyer, 1986; Pfeffer & Salancik, 1978; Meyer et al., 1978) and an embedded non-neutral practice that could serve specific interests, assigning and legitimizing authority and power (Covalleski & Dirsmith, 1986, 1988) while also contributing to the creation of a social and political reality (Chua, 1986). The political theory aspect of accounting research recognizes that powerful coalitions, within and outside organizations, can have the power to manipulate accounting and MIS (Covalleski & Dirsmith, 1986; Abernethy & Vagnoni, 2004, p. 208). Studies like Rahaman & Lawrence (2001) further explore public sector accounting in developing countries through three different lenses of technical-rational perspective, socio-historical perspective and socio-economic perspective. By extension, budgeting rules, financial and management control systems and accountability practices can also be specific to organizational, national and cultural contexts, affecting form, function, behavior and outcomes (Zald, 1986, p. 328).

Bourdieu's arrangement of field, structure, internalized dispositions and active preferences is centered on the distribution and positionality of powers or capitals – “A capital does not exist and function except in relation to a field” (Bourdieu & Wacquant, 1992, p. 101). These capitals are a source of authority and accumulated power and they situate players in a field – connecting capitals to both the relational and the positional. Forms and quantities of capitals can be specific to fields and the interplay of dominant and symbolic capitals with other

capitals (Pinxten & Lievens, 2014, p. 1097) provides a basis to understand the field structure and functioning. Though positions are objective within a field, they must be analyzed in terms of the distinctive profiles of capital associated with them” (Emirbayer & Williams, 2005, p.691). The interaction between individual/player formal and informal powers, choice and action coupled with a constraining social structure is the setting for Bourdieu’s notion of “game playing” in each field. This paper furthers the argument that all forms of power do not necessarily flow from the formal and developing nation settings should be understood in the light of these factors.

In “The forms of Capital” (1986), Bourdieu outlines three major types of capital - economic capital that comes from access to money and assets convertible to money; social capital, which comes from social relationships, group memberships, networks and influence. Social capital has the potential to be converted into economic and cultural capital. Cultural capital has come to be interpreted in a variety of ways including educational qualifications and culturally accepted ways of practice (Lamont & Lareau, 1988, p. 153, 155). Bourdieu also symbolic capital to this group, a composite capital created through transmission from other capitals on becoming legitimate (Everett, 2002, p. 63). To have one or more of these capitals is to have the resources and power to implement, profit, and influence or make decisions.

Following the conceptualization of the field and research questions, the remainder of the paper is structured as follows. The following section provides a method section and field formation. The paper then outlines trends and challenges as well as a background of social services of the four countries before moving on to the analysis section, which forms the bulk of the analysis presented by this study. The paper concludes with a discussion on Bourdieu’s field and capitals.

III. Method

With the high level of decentralization and devolution in the Workfare field, this paper takes an open-ended view of accounting as a broader socio-economic technology (Graham & Neu, 2003, p. 452) that essentially aids in the “taking of account” in these welfare systems. In this expression, accounting as a domain of action and structured communication, includes not only traditional budgeting, financial and data systems but also accountability technologies like performance measurement (Chenhall & Langfield-Smith, 1988; Otley, 1999, 2003; Otley & Fakiolas, 2000; Neu et al., 2002), administrative information systems and citizen participation, some of which are specific to NPM. In line with Christensen & Skaerbaek (2007), we define accounting and accountability innovation as not only change in technique but also a change or widening in an audience. The study uses archival data from various government websites including financial and regulatory documents, accounting and accountability reports as well as audit and other such documents that provided a window into internal accounting systems and processes of these programs.

Though each workfare program reflects elements unique to national needs and institutional settings as well as similarities to other such programs, this paper engages with four specific program-nations that are thought to be representative of broad program types. Our study includes two developed welfare-state nations – the US (including countries like Canada and Australia) follows a model considered liberal under Esping-Anderson (1990) where the state provides limited support for a focused under privileged group of citizens (the poor and unemployed). Countries like Denmark and Finland grant universal access to benefits and services based on citizenship. The UK and its newer Workfare program (The Work Program) draws on features from both Europe and Australia and can be considered comparatively more inclusive and less time-bound in nature than the US model.

The other half of this study group includes two countries that are developing, non-welfare states with smaller, multiple workfare programs - South Africa’s Expanded Public Works Programme (EPWP) that is federally funded and managed; and Liberia’s Cash for Work Temporary Employment Program (CfWTEP) that is funded

by the World Bank and run by a national Non-Profit Organization (NGO). However each represents a welfare program where the state plays a part – providing economic support for unemployed citizens in return for work and other requirements. Selection of these countries and programs is based on both the type of program and features representing structural, institutional, historical and socio-political differences as well as availability of public data. In exploring the funding, budgeting and accountability processes in these programs, this study contributes to accounting research by opening a new social domain and under-represented geographical locations to research communication and shedding a comparative light on the role and workings of accounting processes and innovations within these programs.

IV. Social Services - Field Formation

“Government is a *problematizing* activity: it poses the obligations of rulers in terms of the problems they seek to address. The ideals of government are intrinsically linked to the problems around which it circulates, the failings it seeks to rectify, the ills it seeks to cure” (Rose & Miller, 2010, p.275)

Social services programs have an immense impact not only on the socio-economic life of citizens but also the local and national economies. The First phase of South Africa’s Extended Public Works program (EPWP), for example, achieved 1 million work opportunities in SA a year before target (Government of South Africa, 2010). The second phase aimed to reduce unemployment by half in 2014 (Government of South Africa, 2010). In the UK, with one of the highest percentages of long-term unemployment and youths living in workless households in Europe (DWP, the Work Program), welfare costs the state approximately £12.7 billion a year (NAO, 2007). So much so that in 2016, Prime Minister Theresa May’s government lowered the benefit cap by upto £6,000. At this time, more than 1 million individuals had to meet certain conditions such as evidence of looking for work to claim government benefits (Syal, 2016). A study undertaken to find if the Department for Work and Pensions (DWP) was “achieving value for money from its administration of benefit sanctions” (NAO, 2016), conveys much about the struggle between a ballooning social issues in many developed countries and its translation into a government’s financial performance and perspective on public funds spent on social services. A similar conversation also happened in the Australian Social services before the introduction of its welfare reform in 2013.

Before the welfare reforms swept in, the social services sector in the developed world was considered to be highly hierarchical and prescriptive (Llewellyn 1998, p. 302) but also less conditional and exclusive. The U.S. introduced the welfare reform act in 1996. Pre-1996, welfare was largely a one-way cash payments in the form of monthly benefits to the poor – regardless of their personal circumstances and ability to work. Australia commissioned a review of its social services in December 2013, towards a system that was “sustainable, effective and coherent” (DSS, 2015, p.5). More importantly, it is also emerging as a system, like the U.S., that would be oriented towards providing conditional support and encouraging citizens to get back into the workforce. This further highlights not only the shift in social-economic conditions and welfare logic in these countries but also the growing need they feel to manage public spending.

In the UK, the 1942 Beveridge report, based on the work of two Liberal economists, John Maynard Keynes and William Beveridge, was the blueprint used to offer the British electorate a welfare state with “cradle to grave” care in 1945. At the end of World War-II and British citizens were looking towards a brighter future with an end to austerity measures. The report offered radical social change and detailed a system of social insurance that covered each citizen regardless of their income (The Guardian, Match 14, 2001)²⁶. The United States is said to have started a limited welfare state in the 1930’s based on the work of American sociologist, Lester Frank Ward at the time of the Great Depression. In 1935 President Roosevelt introduced the New Deal laid the groundwork

²⁶<https://www.theguardian.com/politics/2001/mar/14/past.education>

to provide for the young, the sick and the old. An OCED (2011) report puts the US as the second largest social spender in the world²⁷, second only to France²⁸. Even though the US was one of the only developed nations to not provide universal healthcare for all citizens, its social service system works different, spends differently and delivers differently.

Liberia and South Africa are both non-welfare developing nations in Africa. Liberia did not have any system of social support before 1975. Its largest social program today is its social insurance and pension for the retired (old age) and disability based on its 1980 social security law. This safety net is earned through being employed in the public or private sector. South Africa's Department of Social Development, as it is called today was established in 1937, which provided some basic regulation and subsidies for social welfare programs. However a 1997 white paper (CITATION??) argued that such services were low on the priority list as well as being lacking resources.

Trends and challenges

New Public Management and Devolution - The delivery of social and welfare services in welfare states and beyond forms a part of the broader NPM movement of the 1980's (Hood, 1995; Parker & Gould, 1999). NPM and its particular conception of accountability reconstructed public governance - away from unitary governing (Lapsley & Pallot, 2000), centralized bureaucracy, secretive budgeting and conservative, formalized administrative decision-making systems (Krafchik, 2005) and towards private sector practices of cost efficiency, effectiveness, productivity and competition. NPM introduced structural and organizational transformations in governance and management accounting practices with a downwards push, creating a complicated multi-layered structure where local provincial governments have higher authority and responsibilities for design, implementation and accounting decisions for social welfare programs, which is devolution. With NPM processes of budgeting, economic quantification and responsive financial management have become specifically highlighted in the public sector (Mayston, 1998; Wildavasky, 1986). Accounting mechanisms like audits, financial management systems, data systems, management accounting and budgeting systems (Humphery, Miller & Scapens, 1993; Broadbent & Guthrie, 2008) have thus come to be valuable aids in the creation a new accountable public focus on performance measures (Lapsley, 1999, p. 201) and improved financial accountability (Hoque & Moll, 2001) that is closer to the private sector approach (Sanderson, 2001, p.298). Within the arena of social services in developed countries, NPM has contributed to significant changes in types of social programs, agencies that deliver such services and forms in which such delivery is affected in the 21st century (Parker & Gould, 1999).

Welfare Reform, Decentralization and Distributive governance—The welfare sector with its traditional governance largely associated with top down consultative arrangements, direct stakeholders, top heavy power and decision-making, has seen its own set of structural reforms. Increase in number and complexity of government agencies and modern distributed governance as a culture offer various kinds of collaborative or co-operative partnerships, associated with the government's practical need to work across organizations. Though often used interchangeable with devolution, decentralization is a more implementation based, redistribution of tasks but not decision power and authority. Decentralization has also contributed to the rearrangement of organizational structures and change in functional and management responsibilities. It is also debatably associated with ideas of "making the government more responsive and efficient" and creating a more distributed role for power (Bardhan, 2002, p.185; Faguet, 2004).

With previous bureaucracies not suited to the new process and result-based needs of Workfare programs, many devolved state level governments have decentralized the implementation of programs to municipal and non-governmental agencies, creating operational challenges connected with program delivery and data collection. Within Welfare and Workfare, collaboration or its lack thereof (Sandfort, 1999, p.315-316) is largely associated

²⁷<https://www.forbes.com/sites/microsoft365/2018/04/04/teaming-up-for-the-next-big-thing-with-an-app-that-unlocks-creativity-video/#bfldd4ebdcb5>

²⁸<https://www.forbes.com/sites/timworstall/2015/04/02/the-us-has-the-worlds-second-largest-social-welfare-system/#5c62dcd67dfb>

with implementation - between the government and frontline providers (NGO's, Contractors); and the government and citizens (citizen participation). However decentralization issues have also increased interest in collaboration at the governmental inter-organizational and inter-agency level in order to create better workfare solutions (Hudson, 1987). Current policy and government literature offers many governance models with varying levels of decentralization and collaboration between players. Literature on service-oriented architecture in public governance (Niemann et al., 2009) looks at the federated collaboration model, which visualizes collaboration between a "centralized government board" (Marks, 2008) and a government departmental, business unit or division. Other collaborative models explore the process of in-practice collaboration in the management of teams, data, technology and innovations in a variety of industries. The model below, adapted from Dawes & Eglene (2004), is one of the few that looks at the factors shaping collaboration in public services sector:

Third Party Agents – As outlined by a 2011 OCED report, governments no longer have a monopoly on authority and resources (pp. 20) and governance is made more effective through more inclusive of multiple participants. In concert, many newer formats of welfare and workfare programs, as we see in these four models, have emerged with smaller governmental roles and a larger presence for NGO's in welfare delivery. With the inclusion of these new stakeholders and calls for more accountability, we see a rising interest in NGO accountability in public debates in non-developed countries (Ebrahim, 2003; Awio et al., 2007) and mechanisms of control and coordination that can manage a more dispersed system in developed countries (Parker & Gould, 1999; Cordery et al., 2010). Though non-governmental service providers are a part of each of the systems explored in this paper, the manner of their enlistment varies significantly. At the national level, various institutional factors and welfare strategies have contributed to governments selecting diverse roles for non-profit and for-profit service providers (DWP, 2008). Workfare delivery formats both influence and are impacted upon by these choices, in turn also impacting the level of accountability; accountability structures and mechanisms enlisted; and finally the space created for collaboration and co-action.

In countries like Liberia, NGO's have evolved as primary service providers of Workfare programs because their extensive delivery network at the local level cannot be replicated by state agencies (LACE, 2008). Primary NGO's such as LACE enlist local, smaller NGO's and have an independent, nested delivery structure and accountability system. They are also prime providers of financial, accounting, and implementation data to the government and WB, key to keeping account of program progress and accountability at the federal/World Bank level. As a contrasting example UK has devolved service provision to NGO's, both non-profit and for-profit, while retaining strong result accountability, data collection and financial control at the central level (DWP, 2008). NGO's are contracted and accountability is a requirement for successful payment. A deeper study of these national choices and role of third-party agents can provide further insights into how diverse systems are structured and the level of current and potential collaboration between agencies on one side and between agencies and citizens on the other.

Movement towards electronic management information systems (MIS) - Increased need for delivering sustainable social services has also increased the need for frequent assessment of fund utilization, delivery and governance models and delivery outcomes. With higher need for coordination, data sharing, and assessment, integration and case management, MIS systems offer real time analytics and reporting, improved record management, increased security and confidentiality²⁹ to deliver satisfactory and sustainable social services - governments in US may be moving away from traditional paper-based systems towards electronic MIS or Client management systems. Use of such MIS in countries such as UK and Australia as an external resource has been criticized for impairing decision-making and judgement of social workers away from their base priorities (Gillingham, 2016, p. 357) - concluding that these systems present "substantial obstacles to good practice" (Munro, 2010, p. 114; Gillingham, 2016)

Higher levels of visible poverty and corruption in LDC's - Developing and fast developing nations can have growing economies coupled with higher levels of visible poverty and corruption (Olken & Pande, 2012). The lack of a social safety net and government support in these economies has led to an increased presence of international funds and organizations such as the United Nations World Food Program, United States Department

²⁹ <https://www.gevityinc.com/perspectives/social-services/government-and-social-service-agencies>

of Agriculture (USDA) and long running programs such as Action against Hunger. These transnational organizations work with a range of ground level local and national non-governmental organizations to deliver aid and support programs. The resultant challenges in implementation, transparency and accountability have spurred a new literature

Research into developing countries must take into account the difference between official distribution of positions, powers and capitals and prevalence of unofficial players and unsanctioned powers that are latent but powerful in their own sub-fields. Workfare programs tend to be functionally shaped - the arrangement and powers held and accounting and accountability processes and mechanisms draw upon dramatically different arrangements of power, resources and information. The level, space for participation and power distribution by various stakeholders in these arrangement is an expression of a larger organizational vision and specific implementational and contextual factors and settings. Increased international interest in the measurement of corruption has fueled research and events such as the 1998 OCED Anti-Bribery convention and the 2007 launch of the World Bank's Engagement on Governance and Anticorruption (GAC) strategy – with growing information about the resultant costs and factors that can bring corruption down (Olken & Pande, 2012). High levels of corruption also mean that accounting, governance and accountability structures and processes face a specific and different set of challenges in social services programs running in developing nations.

Workfare programs and Field logic

Workfare programs have proven to be very flexible in both form and function. They fulfil a variety of purposes in developed and developing nations. Workfare or “Work-for-Welfare” represents a type of non-entitlement welfare program where citizens receive state support and benefits conditional on mandatory economic participation in the shape of paid work, job search and study or training (Saunders, 2005). In many developed countries it has replaced traditional social services support for the unemployed. In developing and underdeveloped countries, without a security net for the unprotected, workfare programs have come to fill a variety of purposes – crisis cash & food, income, employment, skill development and building public infrastructure, reflecting a variety of structures, strategies and institutional arrangements. Some are called “cash-for-work” or “conditional cash exchange” programs funded by International aid organizations like the WorldBank while others are “Public Works”, short and long term programs funded by the central/federal government that aim towards building local assets and infrastructure. However, all programs have in common that financial support comes in return for, usually, work. On the other side of the spectrum are non-developed Workfare models of Liberia and South Africa (SA).

The developing nations of Liberia and SA focus on programs to battle more extensive levels of poverty with comparatively limited public resources and issues including lack of governance and implementation infrastructure, political will and corruption. Liberia offers a developing world funding model where the program is funded externally by the World Bank (WB) as a loan (LACE, 2008). Its workfare program is structured as a Conditional Cash Transfer (CCT) program which has an added layer of governance from the lender, the World Bank (WB). CCT's are versatile safety net programs that provide cash transfers conditional on recipients meeting certain requirements. Enlisted in developing countries such as Brazil, Ecuador, Columbia, Bangladesh and Cambodia, these programs fulfil a range of short and long term objectives and can be implemented at the local, regional or national level. For example, CCT programs in Sub Saharan countries focus on orphans of the HIV/AIDS epidemic, in Chile and Turkey on impoverished and socially excluded families, and in Bangladesh and Cambodia on gender disparities in education (World Bank, 2009).

SA's Expanded Public Works Programme (EPWP), is a workfare program structured as a Public Works Programs (PWP) or an Employment Guarantee Scheme (EGS). Similar to the Mahatma Gandhi National Rural Employment Guarantee Program (MGNREGS) in India, these types of social safety net programs, marked as “anti-poverty initiatives” (Zimmerman, 2014), can be found in both developing nations such as South Africa and Ethiopia, developed nations such as the United States of America and EU countries such as Hungary, Austria, Poland and Slovakia (European Commission, 2013). They are funded and implemented by the national, regional

and local governments and provide guaranteed familial income to certain strata of households in return for work on selected public works. This provides economic support for poor households while building national infrastructure to economically develop certain regions.

Exploring social services as a field, different sets of field logics and dynamic can be identified in developed and developing nations. Each workfare vision is based on the “mentality” (Foucault) of welfare in the country and contributes to the strategies and technologies used to implement these programs. We see that welfare state countries, by definition, are nations where the state takes varying level of responsibility for the social and economic well-being of citizens unable to care for themselves, usually funded through public funds. Welfare programs tend to represent a one sided financial and non-financial assistance given to the poor, the old and vulnerable citizens. Social security and associated pensions are received by individuals who contributed to it during their working years. Welfare states are countries that have the supporting governance, administrative and financial structures and public policies to deliver social services programs and typically expend a significant level of national resources towards their delivery. Social services can include a range of programs and benefits such as healthcare, unemployment benefits and welfare.

Regardless of form or shape, most developed, industrialized countries provide some type of a social safety net for the vulnerable and demonstrate the logic of welfare or “welfare logic”. This logic defines the role of the government and also drives the aims and purpose of implemented programs. However, even within developed countries the vision or the welfare logic and its implementation can differ significantly. The goals of the US workfare and welfare programs are to support vulnerable citizens but currently the focus in such support (training and assistance in job search) is to provide them with the tools to rejoin the workforce. Even between neighbouring countries of Canada and the U.S., there is a wide variation in type and coverage of programs. The UK, in comparison, has a dramatically different focus – universal care for all citizens regardless of age, status and income. And we have also seen countries such as the U.S. and Australia display significant shifts and changes in their welfare goals and government-citizens relationship models through their welfare reform.

Developing nations are largely non-welfare states with a comparative lower level of resources and higher level of poverty. In such non-welfare states, it is common for citizens to have no safety nets and the governance-citizen relationship do not include providing social and economic support to its citizens. The government plays a major/significant role in the allocation of resources and the main goal of welfare programs (Adhikari, Kuruppu & Matilal, 2013) is the alleviation of poverty. An increasing trend, social service or developmental programs in non-developed nations are dominated by transnational agencies such as World Bank, USAID and local Non-Governmental Organizations (NGO’s) through what can be identified as a “Developmental logic”. This logic is based on their mission to promote development in third world or developing nations (Stiglitz, 1999). Both accounting research and developing nation research in this field remain very limited.

Players and Capitals

Different social services and workfare fields and sub-fields can embody different forms and amounts of positional power and capital - the larger players are similar for most workfare and social services programs. These include the federal, provincial/state, local governance, NGO’s, civil society, citizens, local contractors and in some developing nations, international aid organizations, evolving around its own structure, “rules of the game” and capitals.

- Federal/Central governments – Workfare programs in US, UK and SA are funded and implemented by the government. The US has the highest level of downward devolvement within these countries. Various programs responsibilities have been devolved to provincial governments, municipal governments as well as non-governmental organizations. The UK has outward devolvement in program implementation to outside contractors. SA’s model has participation from local governance in not only implementation but also funding. Liberia is an outlier here with international funding and implementation by a national NGO that enlists micro NGO’s for program implementation. Economic capital or the power to provide funding

and ask for reporting and performance indicators in return for such funding is significant at the macro level.

- Provincial/State (Intermediate) governance – the role and powers held by intermediate governance levels varies from program model to model. In countries like the US, provincial governments have significant rights in deciding which programs to fund and the magnitude of such funding. Provincial governments also have extensive control and reporting responsibilities to the federal government, especially in the area of performance management indicators. In the UK and Liberia, local governments have both limited roles and powers.
- Local Governance – Local governance includes municipal, city and village based governance. In SA's model, both intermediate and local governance has a role to play in funding and implementation. The Liberian program is funded internationally and implemented through a national NGO that recruits local NGO's to deliver the workfare program. So, local and intermediate governance do not have a significant level of economic capital.
- Third sector and non-governmental organizations – This could include NGO's CBO's, contractors and civil society organizations – Level of economic capital depends on the level on inclusion in the program models. With the change in delivery models of programs around the world, NGO's have some economic capital in most nations. However, higher than that is the level of social capital they possess. This capital comes from their social networks at the ground level, language and cultural understanding and information of the micro level as well as the trust, cooperation and access they have earned or can earn.
- World Bank/USAid

Each of these contexts utilizes a range of accounting processes and mechanisms to design, implement and control workfare programs. However, aside from organizational authority and power, individual power can also be drawn from and connected to localized fields and spheres of influence (Abernethy & Vagnoni, 2004, p. 207). Accounting and financial management systems and practices in developing nation public sectors are deeply impacted by underlying socio-political and economic factors that influence the overall power distribution and the efficiency and functioning of administrative and accounting systems and practices (Rahaman and Lawrence, 2001; Abdul-Rahaman, Gallhofer, Haslam & Lawrence, 1997). The field connects to the organization of workfare programs, the field logic and habitus connect to welfare logic and national preferences for workfare arrangements and active capitals in each model reflect how powerful players shape the field, forms of resources are deemed legitimate and valued and the resultant program design, implementation as well as accounting and accountability processes.

Budgeting and Funding processes

With the state as a key player with the vision, the public management of welfare programs in welfare and non-welfare states is constituted and structured around the relationship between the state, citizens and delivery intermediaries (Peillon, 1998, p. 215). Resources are limited and as these fields of social services and welfare delivery evolve, the demanding of account and accounting processes provides one way of structuring this network of social relations and providing the canvas on which struggles for resources and power take place (Bourdieu, 1990). Budgeting activity, performance measures and disbursement of public funds creates structures, processes and routines that bind all the players together.

The base welfare logic of developmental or welfare state is fairly settled in terms of historical choices and governance structures, especially for welfare states, even though political governance can change. However, governments still focus on certain elemental cornerstones that carry through political changes. This in turn provides comparative information on the workfare logic, program structure and setup, and roles, responsibilities and powers held by actors, specifically in with the program budgeting and funding systems.

Welfare logic and federal-provincial priorities have shifted and changed over the last few decades to shape the nature and extent of services delivered. Some models like the US allow for higher levels of access and collaboration within government agencies, through the sharing funding, budgeting and accountability power and economic capital with intermediate and local governments. Others like the UK allow for larger roles for external contractors. Here accounting in its numerical, rationalization and controllable function helps to create more policy, planning and implementation participative spaces. Other models like Liberia utilize collaborative accounting mechanisms to invite a wider number of players into workfare programs.

The shape of the budgeting and funding processes reflect economic power as well overall agency goals and objectives through its planning and control function. However, the degree of participation by other players, roles authorized and power of account enjoyed varies from model to model. Modern governance and welfare reform allow budgets to be diffused and devolved both vertically and horizontally, translating into a relaxation of traditional prescriptive top-down rules, more autonomy in budget spending and “multiple sources of access to the budget” (Llewellyn, 1998, p. 302). Devolved budgeting is one of the mechanisms reflective of such reform, passing traditional federal role of state and local budget decisions on to state and local governments. It has been adopted by some public sector agencies in countries like UK (For more information, please read Mayston, 1998).

Both the US and UK have developed implementation and financial systems that are formal in nature. In the US workfare model, the major budgeting/funding actors are the federal and state governments. Federal government, through the TANF reform, has devolved social assistance programs to state governments, and provides funding through a federal block grant package that allows recipient states decision making economic and symbolic powers with a high level of autonomy and “minimal federal control and direction” (DHHS, comparison of prior law and PWORA; DHHS, 2008). Under this system the funding and budgeting structure is decentralized in a tiered fashion where the annual DHHS and state financial budgets are two separate activity documents representing specific welfare objectives through fund allocations and performance measures (DHHS, 2008). The US workfare model, as detailed in government and audit documents, requires matching funding participation from all states. A detailed look at state-wise contribution to TANF’s maintenance of effort (MOE) for 2011 can be found on the DHHS website³⁰. Further detailed information on these elements can be found on DHHS website through its annual reports to the U.S. Congress³¹.

In direct contrast, UK, also a developed world but more on the lines of the Europe-Australia model is devolved outwards instead of the traditional US top-down devolvement (DWP, The Work Program). The UK welfare budget system is highly centralized and Workfare policy and targets are determined at the top with comparatively little non-central participation and access (NAO, 2010; NAO, 2009). It’s Portfolio and Resource Management (PPM) is a commercial workfare delivery tool with a *market place* for workfare services providers including private and third sector that compete with each other (DWP, The Work Program; DWP, 2008). The PPM recruits long term “Prime Contractors” (PC’s) on contract, who deliver services directly or recruit, manage and are responsible for a supply-chain of smaller service providers (DWP, 2008; Armstrong et al., 2011). In its new workfare program “The Work Program”, UK also has the PC’s shoulder the financial risk by having them invest their own funds to run the program up to the standards expected by the government (DWP, 2012a). Contracted payments are delivered to PC upon meeting federal contractual requirements satisfactory. This funding flows from the central government through the government service-support departments to the PC’s, which is where the government involvement in the supply chain ends. The PC’s disperse payments to PC contracted sub-

contractors, suppliers and NGO's (DWP, 2008)

As is with such programs, usually the borrowing country such as Liberia approaches the WB for a specific program bid and provides technical, economic and sociopolitical details. The WB has its own internal process of approval and if a program is approved, the borrowing country is responsible for the outlined program (World Bank)³². Funding is transferred and usually delivered through government-affiliated agencies and non-profit organizations. Liberia's Cash for Work Temporary Employment Program (CfWTEP) is primarily delivered by Liberia Agency for Community Empowerment (LACE), a non-governmental organization which is known for its extensive national network and established relationships (Andrews et al, 2011). Overall budgets prepared by LACE are then approved by the central government and sent to the WB, which also maintains its own separate financial records. Funding flows straight from the WB to LACE and then to LACE contracted local level partners (LACE, 2008)³³. LACE partners with local NGO's and Community based organizations (CBO's), involving them in financial planning and implementations of sub-programs.

The funding structure for South Africa's (SA) EPWP is very different not only from the other three models but also previous such programs in SA that had special funds and budgeting systems at the federal level (Government of South Africa, EPWP reports). Specific governance issues in inter-governmental fiscal arrangements and implementation issues (provincial work implemented by municipal levels) (Phillips, 2004) lead to the creation of a new funding strategy where EPWP funds are allocated through a *decentralized* budget allocation system. This funding comes together through the budgets of line function departments in provinces and municipalities that include social sector funds and environmental department budgets (Government of South Africa, EPWP Institutional arrangements; Phillips, 2004, p.8). Hence though the federal government has the economic power through its funding, these departments share power and symbolic capital which comes from their role of approving such appropriations. Additional funding into the program is created through the federal government increasing the overall finances to provincial and municipal governments (Lieuw-Kie-Song, 2009). This has created a particularly intensive cross-structure in budgeting and payment processes that has shaped the program implementation.

Economic capital through the function of funding and budgeting mechanisms one of dominant capitals in this field, especially in case of developed world models of US (Federal and provincial governments) and UK (Federal government) where the federal government holds significant levels of financial power. This strength comes not only from having power to disburse public funds but from have funding requirements and the power to demand an account of resources expended. In Bourdieusian terms, economic capital is the symbolic capital in fields where the program structures, distribution of powers and mechanisms of account are fairly formal and settled.

Economic capital is strong in the developing world models but there are other strong and dominant sources of capital and power. SA, with its decentralized budget shares economic power with various levels of governance contributing to program. However, the level of powers and reporting enjoyed by non-federal levels are very different and higher than those in US/UK models. In Liberia, economic capital is strong but not dominant. Social capital is just as strong and manifests as physical access, access to ground level partners, the network to deliver programs and ability to track funds spent. Though the WB makes a decision to fund a program, it is LACE that has the ability to partner with local NGO to implement the program. It builds budgets and also maintains financial records that the WB would not otherwise be able to duplicate. A measure of social and symbolic capital is also held by the local NGO's through which programs are implemented.

Program Implementation, Reporting and Control

The variety in program design and implementation means reporting and accountability also differ in form and function involving internal, cross agency and local governance reporting and accountability. There is also cross

sector accountability involving multiple non-governmental layers of stakeholders including local community implementation partners, local contractors and NGO's.

The British model for Workfare is more inclusive, more centralized and in comparison is less devolved than the US. This devolvement in both these countries reflects as an implementational choice. Developing nations like Liberia and SA, with higher levels of poverty and corruption, may not have devolvement as a strong choice as federal and provincial governments may not have the resources, reach, network and support to implement the program individually.

Reporting and control are deeply connected to economic power, flow of funds and lines of accountability. Financial and data reporting requirements create power of account for the federal governments and agencies, allowing them to govern from a distance (Foucault, 1978; Miller & Rose, 1995) while contributing to the institutionalization of workfare and social services program formats. These requirements, mechanisms and processes build macro information systems that structure the day-to-day activities of the program and its players (Habitus) at a macro, meso and micro level. They contribute to building how a field functions. By setting or changing the rules of the game, reporting and control processes shape what is possible (Graham & Neu, 2003; Neu, 2006) and define what is measured and governed in the social interaction between players holding the program accountable to its goals. These requirements form the basis of the powers enjoyed by local governments and NGO's, based on their ability to demand such an account (Bourdieu).

For Liberia's LACE which is funded by the World Bank, the program is built around program monitoring and measuring effectiveness, especially at the micro level, which a funder like WB may require. The local banking infrastructure is very rudimentary and local implementing partners (IPs) are responsible for not only implementation but also maintaining regular logs and submit bi-weekly monitoring reports to ensure actual workers are being fairly selected and paid for. LACE has additional data collected responsibilities at the local, regional and federal level and it provides monthly financial management reports (FMRs) as well as more frequent quarterly financial and performance reports to the Liberia's national government and the WB Board of Directors (WB-LACE, 2008). Its Monitoring and Evaluation (M&E) system focuses on demographics (number of youth and women employed); payment disbursement system (distribution system; on time; payment verification); and market impact (local market price changes) (WB-LACE, 2008). Performance measures and program effectiveness in developing programs is largely measured through individuals served and days of employment created (WB-LACE, 2008). In line with research on practice diffusion by international organizations such as the WB (Neu et al., 2002; Neu et al., 2006), the WB has made some best practices recommendations for its CCT programs (WB - Latin Am, 2011, p.1) that have contributed to the creation of accountabilities and efficiencies at the sub-national level. These include accountability in administration and service delivery, clear lines of authority and accountability between local and national departments; cash-flow monitoring and control systems that guard against fraud and manipulation. LACE also has strong social and cultural capital from its implementation skill and experience, access to citizens at the micro level and the reputation and trust it has built, essentially building from its economic and social capital (Throsby, 1999, p.3).

The U.S Workfare model is designed around two specific mechanisms of interest – Performance measures and conformance/control (Goddard, 2005). The US's workfare program was implemented earlier than the other three countries. Based on the documentary evidence of DHHS and state level detailed requirements, chain of reporting and control as well as progress reports available on government websites, the US workfare accountability infrastructure seems comparatively more established than the UK, where the Work Program is newer and evolving; and South Africa and Liberia where systemic issues create a different set of challenges for reporting and accountability. Performance measures hold the states accountable to the federal government through state level participation rates. Reports such as Klerman et al. (2001), prepared for the California Department of Social Services, give us an idea of the larger state-county role in the planning and implementation of programs in the US, as well as in accounting and data creation. The ACF constructs financial and data reporting formats (Form ACF-196) for quarterly and annual reporting by states in areas like countable work activities, hours engaged in work, work-eligible individuals; internal controls and other data used in calculating the work participation rates (DHHS, TANF Financial Data; DHHS, TANF Program Instructions). At the County and municipal level, client

outcome or outcome accountability seem more process than outcome based and program success factors are largely oriented towards conformance to federal and state requirements. State level performances are linked to the county level through federal requirements such as participation rate standards as well as financial reporting (DHHS, 2011). Counties submit three data reports each month (W2W 30, WTW 25; STAT 45) to the state and federal level (Child & family policy institute of California – Client Outcomes). The state collates such information from the county level and passes it on to the federal government and ACF (California Department of Social Services, Outcomes; DHHS, 2011).

In contrast, UK's contractual structure is fashioned largely at the central level with limited collaboration with other levels. The workfare program is built around its supply chain (DWP, Merlin) that included Prime Providers, DWP Contract Managers (CMs), Jobcentre Plus Third Party Provision Managers (TPPMs), as well subcontracted provider organizations (Hudson et al., 2010). The accountability system is based on creating clear responsibilities for Prime Providers, financial incentives based on performance measures, while giving them financial and operational flexibility to innovate, and implement programs to meet these performance requirements (DWP, 2008). The DWP does not guarantee number of participants and financial risk is borne by Prime and sub-contractors (Work and Pensions Committee, 2011). A large part of the data produced by the DWP for publication is collected administratively through the Prime Providers. The DWP maintains a Management Information system (MIS) through which it monitors and controls Prime Provider outcomes and measures it against contractual targets (Hudson et al, 2010). It receives Provider Performance Reviews Reports on a regular basis and has informal meetings with providers. Contract Managers (CM) of each area work and get direct data reports from each Prime Provider which are to be cross-checked against the Provider Level Management Information (PLMI) data from DWP (Hudson et al, 2010).

South Africa's Institutional arrangements focus on monitoring and analysis which involves national and provincial lead sector departments and is coordinated by department of Environmental affairs at the macro level (Government of South Africa, Environmental & Culture Sector). At the micro level, ground-level consulting engineers maintain and submit monthly reports including contractor information regarding program budget, actual project expenditure, demographics, jobs created, minimum day-wage earned, number of individuals hired and number of individuals trained (Government of South Africa, 2010). Researchers, reporting to an interdepartmental monitoring and evaluation (M&E) committee further conduct cross sectional and longitudinal analysis to gauge poverty impact and impact analysis (Government of South Africa, 2005, p.7). The higher level monitoring, control and accountability systems are largely based on two parameters – Implementing efficiency, which evaluates implementation and participation of public bodies; and program effectiveness, which compares program performance to program objectives of employment opportunities, skill and training, quality of Public Works (www.epwp.gov.za).

The program Project Plan (PP) is a key document in the EPWP to in the Public Works Department which specifies the budget, work opportunities and jobs created and is converted to Key Performance Indicators (KPI) to measure the performance of program projects. KPI'S include project budgets, work opportunities created, person-days of employment; expenditure retained in local communities, and project daily rates (epwp.gov.za; DPTE, 2004)³⁴. The program is divided into sectors and lead by the coordinating department in each such sector. Overall coordination, implementation, monitoring and evaluation are the responsibility of the Department of Public Works (DPW) (www.epwp.gov.za/). Coordinating Committees for the sectors of social, environment and infrastructure meet monthly while provincial "steering committees" meet at the local level (Phillips, 2004, p.9). Each sector's coordinating department constructs and defends plans, then implements the programs against guidelines and finally produces sector-wise reports for DPW. Additional detailed information regarding these indicators and arrangements can be found in the government's latest EPWP five year report (Government of South Africa, 2010) and in other government documents relating to KPI's, monitoring systems, policies and

departmental roles³⁵.

Performance measurement and outcomes

Collaboration and Community Driven Development Programs

Community Driven Development (CDD) Programs are targeted towards specific sections in largely developing countries by the government and organizations such as WB. CDD is “an approach that gives control over planning decisions and investment resources to community groups and local governments” (IBRD/World Bank, 2006, p.6). These programs may or may not be implemented by Community-Based Organizations (CBOs) or civil society. CBO’s are a kind of non-profit organization but a smaller scale, made up of local citizens, serving specific neighborhoods. Important differences between CBO’s and NGO’s is that they are made up of members of the same community or those with common interests but offer more accessibility. These organizations can be formal or informal and could include youth and women’s groups, farmers and shopkeepers association and forest groups.

At the local and county level, Liberia’s CfWTEP is a Community Driven Development Program (CDD) that is handled by the CBO’s as the Liberian government views citizen involvement as an important element in the success of the overall program. This means LACE has operationalized a system where communities have the power to make decisions and implement local projects. The CBO’s in tandem with the local community are responsible for identification, coordination, implementation and financial management connected to sub-projects. Project Management Committee or PMCs, nominated by the community manage the project implementation while Community Facilitators (CFs) provide support through the project identification, application, supervision and monitoring process at the local level (LACE, 2008, p.10). The CBO’s and local citizens are given financial and operational ownership through a contribution of 10% labor and local materials (LACE, 2008, p.2). The CfWTEP Project Manager reports to the Executive Director, but works closely with the CCD Project Managers and with Director’s of administration, Procurement and Finance Departments of LACE (LACE, 2008). Similarly but on smaller scale, the South African program, managed by the federal government, has the states and municipal levels involved in innovation and the overall implementation of programs. However, it is the NGO’s and CBO’s that have ground level powers to contribute to the prioritization and management of projects as well as selection of workers (Government of South Africa, Roles and Responsibilities of Institutions involved in the EPWP)

In this format, citizens and citizen-based organizations have control over resources that the government has mapped out for them, which enhances inclusiveness, demand-responsiveness and autonomy at the local level. Implementing them gives citizens the power to participate and shape such programs. This creates an arena for institutional reform in these local communities, empowers them, and helps them develop sustained capacities to plan, implement and account for such programs. It may also be more efficient and effective in the use of public financing (World Bank, 2002). In addition, citizens participate in their own governance and development at a collective level, leading to more upward and downward financial and operational accountability. Such accountability mechanisms are the hallmark of Workfare’s new systems of governance that has decentralized and devolved down to the ground level.

The LDC’s of South Africa and Liberia, have comparatively, extremely diffused delivery networks that are more closely integrated with local governance and citizen levels than traditional welfare states. This creates a more sustained focus on local accountability, innovation and participation- in accounting and through accounting, at the municipal, city and citizen levels. Unlike traditional welfare views where less developed countries (LDC’s) are assumed to be working towards developed world models (Davis, 2001, p.84), LDC models potentially offer a much higher capacity for collaborative accounting mechanisms that empower local governance, grass root organizations and civil society that, in turn,

could impact the future shape and potential role for accounting in such settings.

DISCUSSION

The US model sees more activity at the state department levels and allows for greater funding and budgeting autonomy to state and local governments. The program is focused on reducing individuals on welfare and therefore gives local level government the power and responsibility to not only implement but also design and construct related accounts. However, with tight top control, the accountability structures are more procedural in nature and deeply connect municipal and city governance with budget priorities at the state-to-federal level (DHHS, 2011; Child & family policy institute of California – Client Outcomes). The UK model does not comparatively allow much non-central access in many areas (DWP-The Work Program). Liberia's LACE network places it closer to grass-root organizations and citizens in terms of budgeting needs because accessing the micro level requires that level of connection for the program to function well. In comparison SA budgeting system also involves micro level participation but this budget participation is from municipal departments and governments who have a say in how funding is allocated.

Accountability in the UK systems happens through contractual performance of NGO's where the government outlines the value of a contract instead of keeping track of funds spent. Such a structure would likely not work for the US model where provinces have a higher level of political autonomy in governance and income which extends to Workfare programs. The developed world models that rely on technology and internet to create records would not work for developing nations with poor infrastructure, higher levels of corruption and lower capability for monitoring and control. Some of these examples showcase economic capital as largely held by the federal government and international aid agencies like the World Bank at the macro level but developing world models are not built on economic capitals. The social, cultural and administrative environment conditions are deeply required if program funding has any hope of reaching beneficiaries. This reflects the strong presence of social and cultural capitals in terms of distribution and access held by agents at the micro level in developing nations.

Field, logics, habitus and structure of welfare programs

With allowances made for the higher level of corruption and lack of technology and coordination between ground level agencies in non-developed countries (WB-Lat Am; OCED, 2010), the arrangements of players and program delivery; budgeting and funding; and information, reporting and accountability systems as seen in our exploration, are influenced by the contextual evolution of fields, witnessed through the field structure, logic, habitus and historical contexts. The influence of these elements extends to definitions of welfare, role of government and institutional issues; and conscious government strategy that directs program aim, structure and delivery, role of players and the distribution of positional powers. Both traditional and innovative accounting processes and mechanisms have come to play an important role in making such arrangements possible (Neu, Everett & Rahman, 2009).

The structure and construction of these programs can be connected to the habitus of these program-fields, reflected in the macro government visions of welfare and workfare and national level cultural and social mentality that affect the macro, intermediate and micro level distribution of financial power, involvement and collaboration capacity for other players (Lamont & Lareau, 1988).

Within these four models, the US seems to exhibit the most struggle as it moves from an existing Habitus of unconditional welfare support towards conditional, limited support. Liberia and SA are going the motions to establish an accumulated habitus connected to social services and welfare programs. However, higher financial autonomy to provincial governments is not new to the American political system. The UK is also seeing change but the change is in the refining of the workfare model, where it has been making changes to its delivery mechanism, to refocus on its earlier ideal (Habitus) of universal welfare, while making financial and accounting systems centralized. However, recent developments show that large numbers of citizens on welfare and various

social programs are putting a strain on public funding and other resources and the current government has made efforts to reduce such welfare payout (NAO, 2016). So, both these developed models have enlisted different logics to change program budgeting and funding with an aim to reduce overall spending.

Distribution of Capitals and symbolic capitals – Can accounting and oversight be a symbolic capital

The capitals held by various players are connected to the structural position held by them in a field grants them such rights and powers. Through the eyes of Bourdieu's capitals, economic power usually held by federal and central governments strongly influences spaces for player participation where the U.K government, for example, does not allow other workfare players to have a major role in its budgeting processes and funding systems. The power held by the autonomous South African government in designing its own internal control systems may seem higher than the Liberian government that is subject to the funding and reporting input of its funding agency, the World Bank. However, the Liberian NGO, LACE, is solely responsible for program implementation and comparatively enjoys a high level of social and symbolic capital.

For the US model, the main players in the US Social services system are the federal and state governments, followed by municipal government and NGO's. Financial reporting and service parameters focus on the state governments though there is a wide variation in state-level performances (Child and Family Policy Institute of California, Overview of Calworks; California Department of Social Services, 2009; 2011). The US Budget flows up and funding flows down from federal to state level, is augmented there and then flows to county and municipal levels that implement the programs with the aid of NGO's (DHHS, 2008)³⁶. State funding is dependent on meeting federal requirements like citizen-participation, but government and NGO reports demonstrate that states budgets can and do follow state-level priorities to determine state specific program features, fund allocation and spending priorities (Kerstetter & Podschun, 2011; California Legislative Analyst's Office, 2011). Creation of budget, reports and other such accounts in response to federal requirements involves accounting not only in the quantification of performance and management by numbers (Townley, 1995) but also allows governance and control from a distance (Robson, 1992). So economic capital is strongly held by the federal government and so is the symbolic capital, through the right to ask for an account – both financial and result-based. However the state governments have their own share of symbolic capital and it is invested through their influence on the budget that flows up and also from various program and financial elements that shape the level and type of services and the recipient profile.

Liberia's field setup is interesting because power and capital is shared by many players – federal government enjoys symbolic capital stemming from overall coordination and approval, WB enjoys economic capital stemming from its funding; and LACE enjoys social capital because it has the extended local network, physical proximity, community recognition and trust at the grass-root levels in addition to financial control. The UK model is highly focused on result delivery from the PC's (DWP, The Work Program; Armstrong et al., 2011) which is contractually connected to their centralized funding. South Africa and Liberia, on the other hand with their poorer economies have formulated very different strategies for Workfare based on what the nations habitus and what the citizens can receive. Both countries rely on diffused delivery networks incorporating higher levels of financial participation and collaboration with other players. Though this cannot be necessarily said to translate into program success, it does provide a financial framework that draws from involve multiple players, internal and external, in an effort to increase program capital. South Africa, focused on expanding its Public works programs, has a higher degree of financial participation from local level governance, relying on its ground level employees and line departments for financial implementation, recording and accountability, sharing its economic-symbolic capital. Liberia's program, on the other hand, is focused on shorter term relief where an NGO LACE answers to both the government and the World Bank but has major control over the financial implementation of the program.

The US's devolved governance would not have worked for Liberia as its welfare logic, resources, governance

and power structure are different – a higher number of individuals and families needing help, inadequate financial resources, infrastructure and governance structures to support traditional US style devolved governance. Neither is its federal government equipped to implement a UK style centralized model. Instead an organization such as LACE has gathered substantial symbolic capital in this setting and his symbolic capital is a mix of economic and social capital. In the UK, availing of healthcare and other social services was not based on level of income as it is in the US. Due to their welfare habitus, ideology and goals, a central funding structure and related public policies were created to towards a welfare structure that allowed monitoring at the federal level.

Conclusion

This study explores this state-accounting relationship by shedding some light on how these Workfare fields are set up and the different roles of the government and accounting mechanisms in social welfare expressed in the objectives of these varied programs. The core investigation centers on the comparative role of accounting and accountability in Workfare programs in welfare and non-welfare states that represent developed and less-developed countries (LDC). The goal is to increase our understanding how these specific contexts, institutional arrangements and logics translate into diverse systems of governance and accounting (Miller & Rose, 1990; Preston, Chua & Neu, 1997; Goddard, 2004, p. 543). As the field evolves, how welfare programs structure, operate and deliver in different contexts can be charted through the distribution and accumulation of power through various forms of capitals and the demanding and provision of accounts. Investigation of such pluralistic ideologies can help us better understanding crises coming from newer socio-economic realities (Brown, Dillard & Hopper, 2015).

This study sought to answer two principle research questions. Firstly, what are the field logics of these programs and how does these logics influence the design, structure and functioning of these comparative welfare programs. The answer to that can be found in exploring the field with Bourdieu's field logic, habitus and capitals in each of these program clusters. Habitus cannot completely account for historical and institutional choices. However, these fields give us an opportunity to observe welfare models and accounting as it intersects with other organization processes in enabling, strategic central and non-central roles to fulfill intended and unintended objectives (Burchell et al., 1980). This mobilization constructs a certain form of visibility (Miller & O'Leary, 1997), flow of information and patterns of interactions and influence (Dillard & Ruchala, 2005, p. 609) that is specific to each system – and through which accounting impacts organizational and social systems and is shaped back in return.

There is a stark difference in social services and welfare goals and the citizen-government relationship in developed welfare countries and developing nations. In this study, we explore representative “fields” (Bourdieu) comprised of these four programs, encompass a dramatically different blend of program orientation, design and implementation. The study explores the structure of each field, the historical elements, major players, trends and challenges and welfare logic and field-logic, government decisions such as positional powers, reporting relationships between players - arrangement of players and relationships produces significant differences in what these welfare programs set out to accomplish. The analysis supports that this difference in history, field and welfare logic is reflected in the decisions taken, operation of these model-structures and in the program structure, relationships and positional powers are set up. This in turn is reflected in their budgetary and funding structures; inter-level relationships; flows of information; and the construction of accountability.

Following the welfare state logic, social services and workfare programs and practices in the developed world models can be seen to be designed around various NPM influenced combinations – traditional centralized and decentralized organizations and governance (Waterhouse & Tiessen, 1978), centralized and decentralized funding and budgeting systems (Tooley & Guthrie, 2007); decentralized and devolved implementation; and finally, centralized, decentralized and devolved accountability systems (Ezzamel, Hyndman, Johnsen, et al, 2007). Workfare programs in developing nations follow developmental logic to combat widespread poverty and weaker administrative systems. As a result, the functional devolvement and decentralization seen in SA and Liberia different strongly from that of the US and UK.

Our second question is connected to the distribution of capitals and symbolic capital valued in these geographical fields and welfare models. A key argument is that the symbolic capital dominant in the developed nation welfare models is insufficient to understand developing nation contexts. The analysis does not contend that economic capital does not have influence in developing nation contexts or that social capital does not have a role in developed nation's contexts. It instead explores the levels of powers and the types of capitals enjoyed by players in each field in terms of budgeting, funding, reporting and control and the source of such positional powers. The analysis reflects the primacy of economic capital in developed nation models. In both nations, the federal governments are the main funders and the associated power of reporting and account creates centralized financial and performance accountability. In the US, provincial government also hold economic capital and power to make decisions regarding welfare program and program spend. In developing nation models like SA and Liberia, access and experience in implementing the programs and the further development of the administrative structure, geographical reach and on-the-ground networks have created a strong space for a dominant social and cultural capital held by agencies such as LACE in Liberia and meso and micro governance levels in South Africa. Though economic capital and power is still dominant, social and cultural capital hold considerable sway in the program implementation.

Notes

1. http://www.acf.hhs.gov/programs/ofa/data/2011fin/table_c2a.pdf
2. Detailed TANF financial data (2011) can be found here - http://www.acf.hhs.gov/programs/ofa/data/2011fin/tanf_2011_index.html
3. <http://www.acf.hhs.gov/programs/ofa/data-reports/index.htm#annualreport>
4. More information of WB CCT programs can be found in this report - <http://siteresources.worldbank.org/SOCIALPROTECTION/Resources/SP-Discussion-papers/Safety-Nets-DP/0603.pdf>
5. Detailed information about the World Bank CCT program Approval cycle can be found here: http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/0_contentMDK:20120731~menuPK:5068121~pagePK:41367~piPK:51533~theSitePK:40941_00.html
6. More information on the World Bank process of approval in CCT programs can be found in this OCED report on Liberia - <http://www.oecd.org/derec/ec/47233695.pdf>
7. www.joburg-archive.co.za/planning/2005/epwp_28-09-2004.doc
8. <http://www.epwp.gov.za/index.asp?c=Downloads>

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CAN EFFICIENCY AND EQUALITY HAVE BOTH?³⁷

—Based on The Micro-Enterprise Income Liquidity and Performance

This paper extends the theory of income liquidity to the study of listed companies, shows the relationship between pay gap, income liquidity and enterprise performance, and improves the classical tournament model. This paper tries to analyze how equity (income liquidity as proxy variable) affects enterprise performance under the theoretical framework of efficiency wages, so as to provide policy suggestions for enterprises to achieve both efficiency and equity.

Introduction

Efficiency and equality is a long-lasting topic, into which a large number of studies in-depth have been conducted. Based on different theories and perspectives, different conclusions have been drawn. Modern company theory holds that the most effective way to solve the principal-agent problem is to provide a tournament-style differential salary scheme to encourage employees to work hard, while behavior theory holds that the pay gap does not necessarily lead to the improvement of efficiency. It holds that when the pay gap gradually widens to the degree that employees feel not treated fairly, it will lead to depression and internal resistance in employees, reducing work efficiency and infringing social welfare. Therefore, how to design a salary system which considers both equality and efficiency is a difficult problem for any organization.

A lot of theoretical research and practical experience have tried to provide solutions. Yan Yanyang and Jinpeng (2014) introduced the equality preference of both principal and agent in the traditional principal-agent model, and discussed the optimal compensation mechanism for the senior executives in state-owned enterprise under this framework. They believed that the impacts of equality preference on the optimal compensation incentive were different when the task objectives are different, and government departments should adopt the combination of both salary incentives and implicit incentives to promote the realization of task objectives¹. Siegeld (2005) and Li Shaolong (2012) classified the pay differences of top management teams into vertical pay differences and horizontal pay differences, and found that different types of pay gaps have different impact on corporate performance². He Wei and Long Lirong

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(2011) also found that employees are not sensitive to their actual wage levels, but more sensitive to wage disparities within the department. Therefore, the design of the pay system should consider the impact of internal and external pay disparities on efficiency^[1]. Zhang Yongjun (2014) pointed out that employees not only pay attention to the fairness of the amount of pay, but also pay attention to the fairness of the pay assessment^[1]. Meier and Spector (2013) even think that the pressure of performance assessment will lead to employees' counter-productive behavior^[1]. Schumpeter (1955), Friedman (1962) and other scholars have extended their perceptions of one-stage equity to multiple periods, arguing that as long as opportunities are equal, even if wealth distribution is extremely uneven in a single period, employees work well because everyone has the possibility of becoming rich, and income mobility will reconcile wealth distribution in all periods^[1]. Finally, the wealth of each social member will return to the average.

Subsequently, on this basis, a large number of scholars have done in-depth study of income liquidity, and discussed the definition of income liquidity, its measurement methods and its role of reducing pay gap. The so-called income liquidity, that is, the change of income level or income position within a certain amount of time, is an important indicator to measure the fairness of social welfare and income distribution (Yan Binjian et al., 2014)^[1]. Buchinsky, Hunt (1999) and Hungerford (2011) conducted empirical analysis respectively, using data from the 1980s to 1990s and found that income liquidity can significantly reduce income inequality in a long term^[1]. Wang Haigang (2005), Quan Heng(2005), Yin Heng (2006), Zhang Qi (2007) and other scholars have repeated the above-mentioned studies with data from China, demonstrating that the positive effect of income liquidity on restraining income disparity is also effective in China^{[1][2][3]}. The theory of income liquidity provides a new perspective for us to solve the agency problem: when the social income liquidity is high, the workers will have a higher expectation of their future income. Even if the current pay gap is very large, workers will choose to tolerate and cooperate, and tend to gain the expected future high income by increasing their input, thus promoting the performance of enterprises. Income mobility provides an almost perfect reconciliation mechanism: it can not only give full play to the effectiveness of the pay gap, but also effectively alleviate the negative consequences of the pay gap. In other words, increasing social income liquidity is the lubricant that reconciles the relationship between income inequality and economic growth.

The main contributions of this study are as follows: Firstly, we try to verify the contribution of income liquidity to solving agency problems. Most of the existing literature focuses on the contribution of income mobility to social equity, trying to demonstrate the correlation between income mobility and income gap, and paying little attention to the impact of income mobility on corporate performance and economic growth. By improving the traditional tournament model and introducing the income liquidity function as a constraint, this paper verifies the logical relationship between the salary gap, income liquidity and enterprise performance. Secondly, this paper extends the study of income liquidity from urban and rural areas to listed companies. It is no longer confined to the liquidity of wealth stock, but focuses on the impact of relative position changes of wealth flow on corporate performance. This is a useful supplement to relevant theories and literatures.

Hypothesis and mathematical model

The traditional tournament theory holds that the ranking of top executives' marginal outputs is much easier to observe than the ranking of top executives' marginal outputs themselves, so in order to reduce the cost of monitoring, companies should pay as much as possible for the top executives in order to induce them to work harder and ultimately improve their performance. That is, pay and performance are not closely related, but the pay gap will have a positive impact on performance. Lizear and Rosen (1981) point out that in a classic tournament model consisting of A and B , employees are rewarded by performance ranking $(W1, W2)$ ^[1]. Employees' performance Q depends on the level of effort u , $C(u)$ represents the effort cost of employees when they reach u . Each competitor maximizes his own

investment on the premise that his opponent maximizes his investment. Assuming that his winning probability in the performance competition is P , Nash's solution is: $(W_1 - W_2)\partial P / \partial u_i = C'(u)$. If $w_d = W_1 - W_2$, $w_d * \partial P / \partial u_i = C'(u)$. That is to say, the investment of employees will increase with the expansion of pay gap. However, Chen Ding and Zhang Shun (2010) argue that people's psychological activities vary greatly, and the pay gap can be both a catalyst to motivate employees to work hard and a stumbling block to staff cooperation¹¹. Therefore, they improved the classical tournament model with behavioral theory and introduced the variable (s) of employee "internal friction" behavior to measure the efficiency loss caused by the lack of equality. In order to win the competition, it is possible that employees may undermine their opponents, affecting the efficiency of the competitors, and reducing their work input from the original u to $u-s$. Moreover, the effect of such destruction will become stronger as the pay gap increases, as it is shown in $\partial s / \partial w_d > 0$, $\partial^2 s / \partial w_d^2 > 0$. Assuming that the main expenditure of a firm is on labor, the performance I of the firm can be the difference between all outputs and all paid salaries paid, as it is shown in

$$I = \sum q_i^s - \sum W_i = \sum (u_i - s_i + e_i) - \sum W_i \quad (1)$$

In the function above, e is a random disturbance. Enterprises set the best pay gap to balance between the influence of "incentive" and "internal friction", achieving the best performance. So, the first-order condition is: $\partial I / \partial w_d = \partial u / \partial w_d = \partial s / \partial w_d$ and the second-order condition is: $\partial^2 u / \partial w_d^2 < \partial^2 s / \partial w_d^2$. It shows that the trend of internal friction behavior is stronger than incentive behavior when the pay gap expands further. Therefore, due to the existence of "internal friction", the relationship of pay gap and enterprise performance is a reverse U curve.

The model above only focuses on the impact of single-period pay gap on employee behavior and corporate performance. If the liquidity of wealth over multi-period is considered, the behavior pattern of employees will change. As Chen Ding and Zhang Shun (2010) mentioned above, employee's internal friction behavior is due to the "unfair perception" caused by the pay gap, but when the social income is fully mobile, the unequal distribution of social wealth caused by the pay gap will be completely offset in the future, so employees will no longer be concerned in the single-term pay gap and he corresponding internal friction behavior will also decrease. To clarify the concept of income mobility in the distribution of social wealth, let's assume a two-stage income model consisting of two people, with $F(D)$ representing the degree of inequality in the distribution of social wealth. Let's assume that income in the first stage is $(0, W)$ and if the social income is fully flowing, it is $(W, 0)$ in the second stage. Although the income distribution seems extremely uneven in the first stage, over a long term the income of each person becomes $w/2$ and the social wealth is more equally distributed. In a real economy, it is difficult to have a complete and free flow of social income. The degree of equalization of social wealth distribution $F(D)$ will depend on the ratio between the wage gap in each stage and the income liquidity because of those factors as the difference of initial wealth accumulation, the restriction of household registration system and social security system on labor migration, the difference of human capital quality among workers and the transfer payment by the government. When the increase of salary gap exceeds the increase of income liquidity, the inequity of social wealth distribution increases. Otherwise, the degree of social inequity will be alleviated. Therefore, we construct the following functions:

$$w(wd_1, wd_2, \dots, wd_t) / g(m_1, m_2, \dots, m_t) = F(D) \quad (2)$$

In the function above, M represents the degree of income liquidity while $g(m)$ is the density function of social income liquidity. Because of the complexity of economic environment, income liquidity and pay gap may not change in the same magnitude, so $g(m)$ reflects the impact of income liquidity on social inequality; D represents the degree of social wealth distribution inequality. Once pay

gap and income mobility in each period are determined, D is constant. According to the study above, the employees conduct destructive behavior because they feel that the income distribution is unfair, so destructive behavior s is a function of $F(D)$. Considering the constraints of equation (2), we have the partial derivative of I to M in equation (1) as in the following:

$$\partial I / \partial m = D * g'(m) * [\partial u / \partial wd - \partial s / \partial wd] \quad (3)$$

$$\partial^2 I / \partial M \partial WD = D * f'(M) * (\partial^2 U / \partial WD^2 - \partial^2 S / \partial WD^2) \quad (4)$$

Compared with the first-order condition of Formula (3) and Formula (1), we find that income liquidity has no effect on the optimal pay gap, but it will magnify the effect of the pay gap on enterprise performance by $D * f'(M)$ multiple. In other words, income liquidity has a moderating effect on the correlation between pay gap and corporate performance. Assuming that other conditions remain unchanged, and the fair distribution of the whole society is determined only by two factors: pay gap and income liquidity, there are four possible collocations: higher pay gap and higher income liquidity, higher pay gap and lower income liquidity, lower pay gap and higher income liquidity, lower pay gap and lower income liquidity. When the pay gap is high and the income liquidity is low, it's more possible for the employees to carry out intense destructive behavior out of jealousy, and consequently more difficult for them to break the established situation and achieve high-income dream, even if they work hard. In this case, employees will lose interest, the enterprise will lose vitality, and its performance will deteriorate. When the wage gap is low, no matter whether income liquidity is high or low, social wealth tends to be more evenly distributed, but the damage of the "big pot rice" effect on efficiency has been repeatedly confirmed by a large number of data and studies. Therefore, only when the social distribution is more liquid, with the pay gap reaching the optimum, can we achieve the best effect that the tournament-style pay scheme plays a greater role. To sum it up, we put forward the hypothesis 1:

H1: With other conditions unchanged, income liquidity will strengthen the correlation between pay gap and corporate performance.

Research design

Sample and data

Relevant data of Chinese listed companies from 2006 to 2016 were selected from CSMAR database of GuoTaan, Meanwhile, the following omissions were made: (1) eliminate data with incomplete information such as salary, financial performance and corporate governance; (2) exclude the company data of large anomalies in production and operation such as ST and *ST. (3) eliminate the data of salary of 0 and the data of the executive compensation lower than the average compensation for employees in their company, and do the winsorize of 1%. After the above treatment, 5,060 observation values in total were obtained from 460 listed companies. The samples were distributed in 31 provinces, municipalities and autonomous regions, except Hong Kong, Macao and Taiwan, and covered 15 industries in the industry classification of the CSRC.

Variables

salary gap. This paper focuses on the pay gap at the internal and external levels of the enterprise. The internal pay gap refers to the pay gap between the group of senior executives and the group of employees, while the external pay gap reflects the average level of each group within the enterprise and the corresponding group in the industry. This paper draws on the research of Biajak et al. (2008) and Zhang liping et al. (2013) to construct the variable of salary gap in the following ways^[1]:

Internal salary gap of enterprises, recorded as D1:

$D1 = \log(\text{average annual compensation of the top three executives} - \text{average annual compensation of employees in the same company})$

External salary gap of employees, recorded as D2:

$D2 = \log(\text{annual average salary of employees of a company} - \text{annual average salary of employees in the same industry})$

external pay gap of senior executives, recorded as D3:

$D3 = \log(\text{annual average senior executive compensation of a company} - \text{annual average senior executive compensation of the same industry})$

corporate Performance. Earnings per share (EPS) and operating income per share (INCP) were used for measurement. The following is the specific calculation method:

EPS = current net profit of common shareholders/weighted average of ordinary shares issued in the current period

INCP = net operating income for the current period/weighted average of common stock for the current period

Income liquidity. As for the concept of income liquidity, many scholars have made deep thinking, defined it from different dimensions, and developed the measurement index technology of income liquidity according to different definition methods, which roughly includes the following three categories. The first category concerns the income stickiness during the continuous period, that is, the income correlation between the previous period and the next period stronger, the income liquidity poorer. The second category is to investigate the changes of individual income position during the continuous period. In other words, the income of the object will be ranked from high to low. If the ranking of individual income in the current period is changed relative to that in the previous period, it means that social wealth flows between different individuals, the more the location changes, the mobile the income will be stronger. However, many scholars have questioned this measurement method, believing that the increase of total income will bring about the improvement of social welfare even if the position of income ranking does not change. Therefore, the third measurement method is to compare the changes of the absolute amount of individual income in the two periods. This paper intends to use the latter two ways to measure income liquidity. First, we used the methods of King (1983) and wang zheng (2016) to measure the liquidity by the absolute value of the change in the ranking position of different annual incomes of the subjects, which was denoted as *Mobility_CR*. Secondly, according to Fields and OK (1999), lei xin and Chen ji yong (2012), the change of individual income amount in different periods is taken as the measurement standard of income mobility, denoted as *Mobility_CQ*. This paper focuses on the two groups of senior executives and employees in the enterprise, respectively calculating their income mobility according to the above methods. The income mobility of senior executives is recorded as *Mobility_CR_ceo*, *Mobility_CQ_ceo*, and that of employees is recorded as *Mobility_CR_w* and *Mobility_CQ_w*.

Control variable. In order to verify the effect of income mobility on the balance of pay gap and describe the effect of income mobility on pay performance, we refer to the previous research literature to select as many control variables as possible. It can be divided into two categories, one is the variables that reflect the characteristics of the enterprise and the macro environment, including the corporate size (recorded as *Size*), ownership (recorded as *OS*), corporate governance level (recorded as *CG*), industry differences, regional differences, time differences, and so on; The other is the variables that reflect the individual characteristics of employees and the level of macroeconomic development, such as education (recorded as *Edu*), marketization index (recorded as *MI*), national price index (recorded as *NPI*) and so on.

Model

First, verify whether the income liquidity do have the restrain effect on pay gap in the sample of listed companies, so the following model is constructed:

$$D_{it} = \alpha + \beta * Mobility_{it} + \gamma * Control_{it} + \varepsilon \quad (M1)$$

Model M1 represents the pay gap within the company i in the t phase, including the pay gap between internal executives and employees, and the pay gap between executives(employees) and their counterparts in the same industry. $Mobility_{it}$ represents income mobility of the corresponding group i from the $t-1$ th to the t th period. $Control$ represents the control variable, It includes the education level of company executives and chairman of the supervisory board, the proportion of employees with bachelor degree or above, and the national price index. On the basis of verifying the restrain effect of income liquidity on pay gap, we further verify the moderating effect of income liquidity on the correlation between pay gap and business performance. According to the logical reasoning mentioned above, income liquidity will strengthen the impact of pay gap on corporate performance. Accordingly, we build the following models:

$$Performance_{it} = \alpha + \beta_1 S + \beta_2 S^2 + \beta_3 * Mobility * S + \beta_4 * Mobility + \beta_5 * Control + \varepsilon \quad (M2)$$

In Model M2, $Performance_{it}$ represents the performance of Company i in the period t , which is measured by EPS and INCP respectively. $Control$ is selected as a variable as most of the literature generally recognized, to measure those dimensions such as enterprise size, ownership nature, corporate governance level, industry differences, geographical differences, time differences. The emphasis is placed on the sign direction of β_3 and β_4 and the significance of these two multiplicative terms.

Empirical Analysis

Descriptive statistics

Table 1. Descriptive statistics for the main variables

Variables	Obs	Mean	variance	minimum	maximum
S1	5060	455222	605246	-505276	9556325
S2	5060	0.0002	67492	-161440	670626
S3	5060	-0.0028	523604	-3681025	9008090
Mob_CR_ceo	5060	40.2712	49.7761	0	406
Mob_CR_work	5060	38.1597	53.1175	0	456
INCP	5060	3.6642	2.7442	-4.6400	58.0276
EPS	5060	0.2954	0.6702	-4.2197	14.5800
CG	5060	32.4678	83.8807	-37.1329	860.5620
OS	5060	0.3540	0.4782	0	1
Size	5060	22.1983	1.4265	15.4177	29.4131
NPI	5060	102.5861	1.8373	100.3942	106.7000
MI	5060	7.4393	1.9393	-0.300	10.9200
Edu_dir	5060	17.5765	2.0820	6	24
Edu_sup	5058	16.6026	1.6551	12	22
Edu_worker	5060	0.1857	0.1936	0	1.7068
Gender_dir	5060	0.9545	0.2083	0	1
Gender_sup	5060	0.8308	0.3749	0	1

As shown in table 1, the average pay gap between senior executives and employees in the sample companies is ¥455222, the maximum value has reached ¥9556325, and the minimum value is ¥500000, indicating that the salary gap exists objectively within the company and is in a large amount. Meanwhile, on the basis of the horizontal comparison of the industry, the mean value of the external pay gap between executives and employees is close to 0, with the variance being 523604 and 67492. The coefficients of variation are the largest of all variables, indicating that even in the same industry, the compensation of the same executives (or employees) is also greatly different. According to the descriptive statistics of income liquidity variables, it is found that the average ranking change of executive compensation is 40.2712, the change rate is about 8.75% relative to the cross-section data (a total of 460 companies), the maximum ranking change is 406, and the minimum change position is 0. This should be the huge fluctuation of salary brought by the stock compensation plan. The ranking change of employee compensation is similar to that of executives. The average ranking change of employee compensation is 38.1597. The change rate relative to the cross-sectional data (a total of 460 companies) is about 8.29%, and the maximum ranking change is 456, the smallest change is 0. Executives and employees both change significantly in income mobility.

The average ownership property is 0.3540, indicating that 35.4% of the sample companies are ultimately controlled by state-owned enterprises; the average proportion of companies with bachelor's degree or above is 0.1857, the coefficient of variation is 1.0425; the average EPS is 0.2954, the coefficient of variation is 2.2688. the average corporate governance level is 32.4678, the coefficient of variation is 2.5835, the maximum value is 860.5620, the minimum value is - 37.1329; The mean size of the company is 22.1983, the coefficient of variation is 0.0643. Comparatively speaking, the size of the sample company and the employee's academic structure are similar, They are all old listed companies in the A-share market and have a duration of more than 11 years. However, there are still some differences in profitability and corporate governance among companies.

In addition, the average value of NPI is 102.5861 and it growing over time. The average value of the marketization index is 7.4393, the variance is 1.9393, the maximum value is 10.92, the minimum value is - 0.3, indicating that there are differences in the degree of marketization; The average education of the company's chairman is 17.58 years, and the chairman of the supervisory board is 16.6072. The proportion of men in the two positions is 95.45 % and 83.08 % respectively. It can be seen that the male with higher education in listed companies is the main part of senior management.

Table 2. Revenue Conversion Matrix for Employees and Executives

Year	Executives (2016)					Employees (2016)				
	I	II	III	IV	V	I	II	III	IV	V
2006										
I	53%	15%	14%	17%	0%	54%	22%	7%	10%	8%
II	25%	46%	11%	14%	4%	17%	50%	17%	12%	3%
III	11%	25%	41%	18%	4%	3%	26%	48%	17%	5%
IV	7%	15%	23%	39%	16%	5%	11%	22%	46%	16%
V	1%	7%	14%	24%	54%	3%	13%	12%	16%	55%

Results for the Restrain Effect of Income Liquidity on Pay Gap Balance

Table 3 shows the relationship between the internal and external pay gaps and the income mobility of listed companies. The regression model M1 shows that income mobility measured by the change in income is significantly negatively related to the pay gap between executives and employees within the company. The variables *Mobility_ceo* and *Mobility_work* have the same coefficients of -0.0008 and are

significant at 1 %. Therefore, each ranking change for either executive or employee will reduce internal pay gap by ¥484³⁸. At the same time, We found that the internal pay gap is affected by many factors, such as the director and supervisor's education, gender, the national commodity price index and so on. From the regression results, the male chairman is more aggressive and prefers the higher internal pay gap. The longer the education period of the directors and supervisors, the greater the internal pay gap, but the influence of the supervisors on the internal pay gap is not significant. In addition, with the increase in *NPI* across the country, the salary level of senior executives and employees will also rise. But it is clear that the gains are unequal, and executive pay rises are significantly higher than employee pay rises, so that when the *NPI* rises by one unit, the pay gap will widen by \$24,936.

Regression model M2 shows that the correlation coefficient between employee income liquidity and its external salary gap is significantly negative at 1%, but the impact of executive income liquidity on employee external pay gap is not significant. Neither is the *gender*, *edu_dir* and *edu_sup* which means that instead of counting on a well educated boss, it is better to upgrade your skills and education. The empirical results show that the higher the proportion of employees with a bachelor's degree or above, the easier for employees to get better salary. In addition, the chairman of the male supervisory board has a significant positive effect on the external salary gap of employees, and the degree of regional marketization will significantly reduce the employees' external pay gap . That is to say, when the degree of marketization for a region is high, the information is relatively transparent, the movement of personnel is easier, and employees will realize the growth of personal wealth through job-hopping. Therefore, when the degree of marketization in the region gradually increases, the pay gap between employees in the same industry will gradually shrink.

The result for M3 shows that both the executives and the employees' income mobility have a significant restrain effect on the executives' external pay gap . The external pay gap will be reduced by about ¥652 for each change in executive income rank, and the change in the employee's income rank will also bring about a pay gap reduction of ¥666. At the same time, we also found that the more highly educated male chairman, the more likely to provide higher salary, but the male supervisor tends to reduce the internal and external pay gaps (see models M1 and M3). The degree of *MI* in the region and *NPI* have no significant impact on the external pay gap of executives. It means that the executive labor market is a seller's market, there is no large number of competitors and thus can not effectively restrain the external pay gap of executives.

In order to eliminate the influence of individual differences and make the conclusion robust, we carried out a fixed effect model regression. The fifth to seventh columns of Table 3 show the regression results of the robustness test. It is found that the coefficient conformity and significance of the core variables in the models M4, M5, and M6 are almost consistent with the regression model. Therefore, we believe that the restrain effect of income liquidity on the pay gap is also applicable in the sample of listed companies.

Table3. Results for the Restrain Effect of Income Liquidity on Pay Gap Balance

Variables	Regression Test			Robust Test		
	S1 (M1)	S2 (M2)	S3 (M3)	S1 (M4)	S2 (M5)	S3 (M6)
Obs	5060	5060	5060	5060	5060	5060
Edu_dir	0.0583*** (0.0144)	0.0066 (0.0156)	0.0651*** (0.0166)	0.0373** (0.0177)	0.0184 (0.0203)	0.0358* (0.0201)

³⁸ Since the variables whose data absolute value is too large are standardized when performing model regression, the calculated change data is $0.0008 \times 1 \times 605246 = 484$ yuan. The calculation of the number of changes in other pay gaps is the same.

Edu_sup	0.0861*** (0.0157)	0.0149 (0.0169)	0.0982*** (0.0180)	0.0332* (0.0194)	0.0009 (0.0222)	0.0264 (0.0220)
Gender_dir	-0.1491** (0.0589)	0.0526 (0.0635)	-0.1737*** (0.0676)	0.0381* (0.0706)	0.1257 (0.0811)	0.0391 (0.0801)
Gender_sup	0.0242 (0.0321)	0.1502*** (0.0346)	0.0548 (0.0369)	-0.0608* (0.0346)	0.0059* (0.0403)	-0.0576 (0.0392)
Mob_ceo	-0.0008*** (0.0002)	-0.0002 (0.0003)	-0.0010*** (0.0003)	-0.0004** (0.0002)	0.0002 (0.0002)	-0.0004* (0.0002)
Mob_work	-0.0008*** (0.0002)	-0.0010*** (0.0002)	-0.0011*** (0.0003)	-0.0004** (0.0002)	-0.0002* (0.0002)	-0.0004** (0.0002)
Edu_work	0.0617 (0.0537)	1.5327*** (0.0579)	0.2760*** (0.0616)	0.0191 (0.0510)	1.2169*** (0.0602)	0.1855*** (0.0578)
NPI	0.0412*** (0.0160)	-0.0226 (0.0172)	-0.0038 (0.0183)	-0.4681*** (0.0247)	0.1157 (0.0298)	0.0265 (0.0280)
MI	0.0311 (0.0492)	-0.0988* (0.0530)	0.0110 (0.0565)	0.0303 (0.0347)	-0.0966** (0.0419)	0.0103 (0.0393)
Constant	-5.6174*** (1.6823)	1.5733 (1.8136)	-0.2101*** (1.9308)	47.2265*** (2.5874)	-12.5951*** (3.0966)	-2.8955 (2.9269)
Province	control	control	control	control	control	control
Industry	control	control	control	control	control	control
Year	control	control	control	control	control	control
Adj R ²	0.3146	0.2033	0.0971	—	—	—

Note: Standard errors are indicated in parentheses. ***, **, and * indicate the level of significance of 1%, 5%, and 10%, respectively. The table below is the same.

The moderating effect of income liquidity on the correlation between pay gap and enterprise performance

In order to show more clearly the relationship among income liquidity, pay gap and enterprise performance, a regression test is conducted with the method of gradually introducing core variables. Firstly, we introduce all kinds of pay gap and income liquidity variables into the model M2, and focus on the coefficient symbols and significance of these two variables. Then we introduce the multiplicative terms of income liquidity and pay gap to test the moderating effect of income mobility on the correlation between pay gap and enterprise performance. The first column of Table 4 shows the regression result when the multiplicative terms is not introduced. It is obvious that neither the income liquidity of senior executives nor the income liquidity of employees has a significant impact on the performance of the enterprise, while the internal pay gap between the senior executives and employees has a reversed U-shaped relationship with enterprise performance as described in the theoretical model above. Similarly, senior executives' external pay gap also presents a reversed U-shaped relationship with enterprise performance. that it's not advisable that the salary incentive for executives be higher, but better be kept within an optimal range. In contrast, the external pay gap and the square coefficient of employees are positive, indicating that the higher the average salary of employees in the same industry, the more conducive it is to the formation of group cohesiveness when employees have a sense of satisfaction and exceptionally value their job, resulting in accelerating improvement of enterprise performance. The results of different coefficients in executives and employees also show that there may be excessive incentives in the group of executives, while employees are always in the effective incentive range of "relative hunger and thirst".

The second column of Table 4 shows that the fitness of model M2 has slightly improved after the multiplier was introduced. The external pay gap of employees is positively related to enterprise performance, but the square is not significant. The internal pay gap and the external pay gap of executives are still reversed U-shaped with enterprise performance. Therefore, overall, the existence of income liquidity does not change the way pay gap affects enterprise performance. Six multiplicative items were

introduced after the income liquidity of executives and employees was interactive multiplied with the three types of pay gaps. It can be seen that the three multiplicative items containing the income liquidity of executives were significantly positive when below the level of 10%. When executives' income liquidity shifts by one position and the internal pay gap expands by one unit, corporate performance will increase by 0.49%. Similarly, when both the income liquidity of senior executives and the gap between the external pay of senior executives (employees) increase at the same time, enterprise performance will increase by 0.01% (0.02%). It shows the positive moderating effect of promoting executive income liquidity on the correlation between pay gap and enterprise performance. The rationale is that when the internal and external pay gap is relatively high, to increase the turnover of senior executives means that senior executives are in a competitive talent market where there is a risk of being replaced at any time. In order to maintain their positions, senior executives will continue to increase their efforts, thus bringing performance improvement to the enterprise. The hypothesis is partly verified. Three multiplicative items including employee income liquidity are not significant, which shows that income liquidity of employees has no significant impact on the interaction of pay gap and enterprise performance. The third, fourth and fifth columns of Table 4 were tested for robustness by means of fixed effect models and substituted variables respectively and the result is that the symbolic direction and significance of the results were almost the same as those of the first and second columns of Table 4.

Table 4. The moderating effect of income liquidity

Variable	Regression Test		Robust Test			
	EPS	EPS	Fixed-Effect	Fixed-Effect	INCP	INCP
Obs	5060	5060	5060	5060	5060	5060
CG	0.0004*** (0.0001)	0.0004*** (0.0001)	0.0003** (0.0001)	-0.0003** (0.0001)	0.0009* (0.0005)	-0.0009* (0.0005)
Size	0.0771*** (0.0085)	0.0762*** (0.0085)	0.0912*** (0.0132)	0.0906*** (0.0132)	0.6934*** (0.0331)	0.6818*** (0.0331)
S1	0.3617*** (0.0674)	0.2536*** (0.0974)	0.3205*** (0.0543)	0.2162** (0.0892)	1.0060*** (0.2630)	0.7981* (0.4565)
S12	-0.0300*** (0.0033)	-0.0019* (0.0169)	-0.0021*** (0.0031)	-0.0001* (0.0010)	-0.0823*** (0.0129)	-0.0001* (0.0001)
S2	0.0952*** (0.0163)	0.0810*** (0.0180)	0.0707*** (0.0169)	0.0646*** (0.0178)	0.2495*** (0.0636)	0.2448*** (0.0701)
S22	0.0062** (0.0030)	-0.0041 (0.0035)	-0.0034* (0.0028)	-0.0034 (0.0032)	-0.0141 (0.0119)	-0.0210 (0.0135)
S3	0.0939* (0.0567)	0.0031 (0.0844)	0.1024** (0.0434)	0.0243 (0.0645)	0.3192 (0.2214)	0.0415 (0.3278)
S32	-0.0061** (0.0027)	-0.0269** (0.0130)	-0.0059** (0.0026)	-0.0157* (0.0104)	-0.0120* (0.0105)	-0.0201* (0.0512)
Mob_work	0.0065 (0.0027)	0.0090 (0.0098)	0.0083 (0.0075)	0.0078 (0.0091)	-0.0193 (0.0377)	-0.0461 (0.0449)
Mob_ceo	0.0079 (0.0094)	0.0066 (0.0094)	0.0209 (0.0073)	0.0299 (0.0080)	-0.0806 (0.0366)	-0.0224 (0.0398)
S1*Mob_ceo		0.0490* (0.0293)		0.0273* (0.0226)		0.0497* (0.1148)

S2*Mob_ceo		0.0002* (0.0002)		0.0085*** (0.0029)		0.0026*** (0.0009)
S3*Mob_ceo		0.0001* (0.0001)		0.0004** (0.0002)		0.0542*** (0.0144)
S1*Mob_work		-0.0025 (0.0083)		-0.0042 (0.0073)		-0.1171 (0.0318)
S2*Mob_work		-0.0001 (0.0001)		-0.0001 (0.0001)		-0.0011 (0.0007)
S3*Mob_work		-0.0003 (0.0002)		-0.0001 (0.0019)		0.0080 (0.0092)
Constant	-1.1553*** (0.2189)	-1.2545*** (0.2283)		-1.5024*** (0.3896)	-11.0237** * (0.8530)	-11.0249*** (0.9002)
Province	control	control	control	control	control	control
Industry	control	control	control	control	control	control
Year	control	control	control	control	control	control
Adj R ²	0.2267	0.2282	—	—	0.2916	0.2959

Further analysis: analysis based on ownership of different companies

Based on China's unique institutional background, we consider the impact of different corporate ownership on the conclusions. We divide the sample into two parts: state-owned enterprises and non-state-owned enterprises, and still uses EPS as the dependent variable to carry out model regression. The first and second columns of Table 5 show that a total of 1576 samples were from state-owned enterprises and 3,493 samples were from non-state-owned enterprises. In the regression results of state-owned enterprise samples, the impact of the pay gap on corporate performance still keeps a U-shaped relationship significantly. But only the coefficient symbol of S3*Mob_ceo is significantly positive, and the other five multiplicative terms are not significant. In contrast, the regression results of non-state-owned enterprises show that four of the six intercourse are significant. When the income of the executives of non-state-owned enterprises changes by one unit, and the internal compensation gap increases by one unit, the performance of the enterprise will increase by 6.43%. If the external compensation gap of the executives and the external salary gap of the employees also increase by one unit, the enterprise Performance will increase by 2.36% and 0.4% respectively. The coefficients of these three intercourse variables are higher than those of state-owned enterprises. It shows that the moderation effect of income liquidity on non-state-owned enterprises is more significant than that of non-state-owned enterprises. However, it is worth noting that state-owned enterprises are not fully market-oriented due to more administrative interventions. Especially since the issuance of the 2009 Salary Limit Act, the salary of state-owned enterprise executives has been greatly affected. Is the multiplicative term not significant because of the impact of the Salary Limit Act? In order to verify the problem, We divided the sample into two parts with the dividing line in 2009. The third and fourth columns of Table 5 show the regression results. It shows that the income mobility of executives does have some moderate effect on the correlation between S1 as well as S3 and business performance before year 2009. However, after 2009, all the intercourse are no longer significant. That is the Salary Limit Act not only limits the income of executives, but also reduces the liquidity of executives and it reduces competition of state-owned enterprise executives in disguise, which is very unfavorable to the of corporate performance.

Table 5. Result for Further analysis

	State-owned enterprise	Non-state-owned enterprise	Before year 2009	After year 2009

Obs	1567	3493	1015	552
CG	-0.0002*(0.0001)	-0.0005**(0.0002)	-0.0001(0.0002)	-0.0003(0.0003)
Size	0.0528***(0.0109)	0.0871***(0.0116)	0.0499***(0.0155)	0.0478***(0.0150)
S1	0.2791*(0.1572)	0.2016(0.1755)	0.5034(0.3568)	0.4142(0.3114)
S1 ²	0.0001(0.0001)	0.0001(0.0001)	0.0001(0.0001)	0.0001**(0.0001)
S2	0.0647***(0.0250)	0.0916***(0.0249)	0.0762*(0.0436)	0.0513(0.0394)
S2 ²	0.0105**(0.0047)	-0.0032(0.0047)	-0.0163**(0.0064)	-0.0010(0.0072)
S3	0.0362(0.1149)	0.0340(0.1250)	-0.0097(0.2563)	-0.0308(0.2123)
S3 ²	-0.0213*(0.0152)	0.0310(0.0239)	0.0225(0.0301)	-0.0165(0.0346)
Mob_work	0.0118(0.0136)	0.0213(0.0166)	0.0696***(0.0205)	-0.0283(0.0193)
Mob_ceo	0.0271**(0.0114)	0.0247(0.0159)	0.0176(0.0157)	0.0149(0.0178)
S1*Mob_ceo	0.0525(0.0345)	0.0643*(0.0517)	0.0078*(0.0766)	0.1050(0.0811)
S2*Mob_ceo	0.0003(0.0002)	0.0040***(0.0004)	-0.0003(0.0007)	-0.0001(0.0003)
S3*Mob_ceo	0.0072**(0.0035)	0.0236***(0.0080)	0.0002**(0.0083)	0.0066(0.0056)
S1*Mob_work	-0.0067(0.0112)	-0.0078(0.0119)	0.0547(0.0233)	-0.0041(0.0144)
S2*Mob_work	0.0001(0.0002)	-0.0083*(0.0047)	0.0004(0.0003)	0.0001(0.0004)
S3*Mob_work	0.0006(0.0027)	-0.0001(0.0002)	-0.0192(0.0065)	-0.0006(0.0042)
Constant	-0.8078***(0.2968)	-1.4589***(0.3270)	-0.7972**(0.4539)	1.4998*(1.0790)
Province	control	control	control	control
Industry	control	control	control	control
Year	control	control	control	control
Adj R ²	0.2413	0.2827	0.2881	0.2663

Conclusion

This paper introduces the concept of income liquidity into the classical tournament model, and explores how income liquidity, a variable reflecting equity, affects enterprise performance under the framework of efficiency wage theory. Firstly, the paper finds that the income liquidity does not change the best choice of pay gap in a company, but moderates the correlation between pay gap and enterprise performance. In order to further verify this conclusion, this paper takes executives and employees from listed companies in China from 2001 to 2011 as the research objects, and by dividing the pay gap into internal pay gap, external executive pay gap and external employee pay gap, the paper examines the correlation between the three types of pay gap and enterprise performance, as well as the moderating effects of income liquidity on pay gap among executives and employees respectively.

First, there are differences in the effect that pay gaps have on enterprise performance. The pay gap between executives and employees has a reversed U-shaped relationship with enterprise performance. When the real pay gap is smaller than the optimal pay gap, the incentive effect exceeds the internal friction among employees, and the enterprise performance improves; when the pay gap exceeds the optimal pay gap, the incentive effect is smaller than the internal friction effect, and the enterprise performance decreases. The external pay gap has a positive accelerating effect on enterprise performance. When employees are offered a salary higher than the average in the same industry, enterprise performance will be accelerated by S2². Executives' external pay gap has a reversed U-shaped relationship with enterprise performance, which proves that it is not necessary to always pay executives higher salary. This conclusion implies that there may be a phenomenon of "excessive incentives" among executives of listed companies in China.

Secondly, income liquidity has a significant moderating effect on the correlation between pay gap and enterprise performance. The empirical results above show that when the income liquidity and pay gap of executives increase at the same time, it will bring about an additional increase in enterprise performance, a fact consistent with the derivation of mathematical models. Income liquidity does not change the way pay gap affects corporate performance, but it will strengthen the impact of pay gap on enterprise performance. When the income of executives and employees is higher than the average level, the positive increase in executives' income liquidity will double the increase of enterprise performance, while the improvement of employee's income liquidity has no such effect.

Third, the degree of responsiveness to income liquidity varies among different types of enterprises. The descriptive statistical analysis of income liquidity shows that the state-owned enterprises have a poorer income liquidity than the non-state-owned enterprises, regardless of executives or ordinary employees. This is consistent with the conception that "state-owned enterprises are more stable". In China, the threshold for potential workers to enter different enterprises varies. Relatively speaking, the welfare benefits of state-owned enterprises and the job satisfaction are higher than those of non-state-owned enterprises. As a result, employees of state-owned enterprises rarely move to non-state-owned enterprises, and it is difficult for employees of non-state-owned to enter state-owned enterprises, resulting in poor liquidity in employees of state-owned enterprises in China. Therefore, the income liquidity of executives and employees in state-owned enterprises will bring higher marginal returns than in non-state-owned enterprises. The empirical study shows that income liquidity has a more significant moderating effect in state-owned enterprises than in non-state-owned enterprises. Therefore, removing the threshold restrictions between different enterprises and eliminating the hidden obstacles in employment mechanism of state-owned enterprises and public institutions are important to enhance income liquidity, to promote enterprise performance, and to realize the both equity and efficiency.

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THE RELATIONSHIP BETWEEN CORPORATE GOVERNANCE AND DIVIDEND PAYOUTS IN CANADA³⁹

This paper studies the relationship between corporate governance and dividend policy in Canada. We find that corporate governance is positively related to the size of the dividend paid for dividend paying companies. We do not, however, find support for a relationship between corporate governance and the propensity to pay a dividend.

Introduction

A number of studies have examined the relationship between corporate governance and dividend policy (for example, Jiraporn et al (2011), and Chang et al (2017)). In these studies, corporate governance and dividends are seen as mechanisms to reduce agency costs arising from the free cash flow problem (Jensen, 1986). The argument is that, to the extent that there is excess cash available, management can use/waste the cash on transactions/perks that benefit their interests at the expense of the shareholders' interests. Two possible solutions to this problem exist. The first solution is to reduce the cash available to managers for consumption/waste. This is most easily accomplished by paying the cash directly to shareholders (dividends). The second solution is to monitor management decisions. This monitoring should improve the quality of management decisions and, as a result, reduce the consumption/waste of corporate resources by management. Management can be monitored by a number of different parties: financial analysts, holders of company debt, and shareholders (through the board of directors) being the more important sources.

Our interest for this study is the relationship between the monitoring exercised by existing shareholders (i.e., corporate governance) and dividends. Both of these decisions, the quality of governance exercised over management and the decision to pay a dividend, are decisions made by the same body representing the shareholders, that is, the board of directors. Because both decisions are made explicitly by the board, we are interested in exploring how they interact. More specifically, does the level of corporate governance impact dividend policy?

LaPorta et al (2000) have proposed two hypotheses (outcome and substitution) to explain how the level of governance may interact with dividend decisions. Under the outcome hypothesis, firms subject to a stronger governance environment are more likely to pay higher dividends. Higher corporate governance would mean that management is less likely to consume/waste the cash resources and therefore the excess cash will be returned to shareholders via dividends. In our study, the implication would be that firms whose boards exhibit greater corporate governance should pay higher dividends.

Under the substitution hypothesis, LaPorta et al (2000) view dividends as a substitute for a strong governance environment. Under this view, firms with weaker corporate governance reduce agency costs by paying higher dividends. Dividends are effective at reducing agency costs because they represent a credible signal to the market. They are costly to pay due to either the potential lost investment opportunities or the high costs of externally financing these investment opportunities (Jiraporn et al, 2011, Borokhovich et al,

³⁹ We wish to acknowledge the helpful comments of Dr. Shantanu Dutta, University of Ottawa in the development of this paper.

2005). Further they also effectively pre-commit the firm to continue to pay them in the future because of the high costs associated with dividend cuts (John and Knayzeva, 2006). All else equal, firms with low corporate governance should be more likely to pay greater dividends to reduce agency costs whereas firms with high corporate governance should be less likely to pay dividends given that they are costly to pay.

Our results are consistent with the outcome hypothesis. Similar to Jiraporn et al (2011), for dividend paying firms, we find evidence that firms with higher levels of corporate governance have higher dividend payout ratios. These firms have the capacity to pay dividends and they have corporate governance structures in place to represent the interests of existing shareholders. The effectiveness or strength of these structures directly and positively influences dividend payout ratios.

Unlike Jiraporn et al (2011), we do not find evidence that the propensity to pay a dividend is related to corporate governance. We argue that this is not surprising for two reasons. First, the decision to pay a dividend is heavily influenced by factors other than corporate governance such as a firm's strategy and/or investment opportunities. Second, the nature of the non-dividend paying firms is that on average they had negative retained earnings and experienced negative earnings. Many of these firms were incapable of paying a dividend. Cash balances in many of these firms are likely the result of financing efforts in the debt and equity markets. The need to go to the market will impose its own discipline on management. Thus we conclude that dividend nonpayers can have completely different governance dynamics.⁴⁰

Our paper makes two contributions. First we provide additional empirical evidence of the importance of corporate governance to dividend policy. This builds on the recent work supporting the outcome hypothesis by authors such as Jiraporn et al (2011) and Chang et al (2017). Second, we extend recent Canadian studies by Adjaoud and Ben-Amar (2010) and Chang and Dutta (2012). We are the first Canadian study to examine this issue using both a comprehensive measure of corporate governance and a sample that includes small and large Canadian firms in the same study.

The remainder of the paper proceeds as follows. Section 2 reviews the relevant empirical literature and Section 3 describes the variables used in the study and the sources of data. Section 4 presents the empirical results of our study and Section 5 concludes the study.

Literature Review

Using an agency theory perspective, a number of studies have examined the relation between firm-specific corporate governance and dividend policy. These studies have found evidence to support both the substitution and outcome hypotheses as developed by Laporta et al (2000). Earlier work by Jiraporn and Ning (2006), John and Knayzeva (2006), Officer (2006) and Aivazian, Booth and Cleary (2003) found evidence supporting the substitution hypothesis. More recently, Jiraporn et al (2011) and Chang et al (2017) found evidence supporting the outcome hypothesis.

In Canada, Adjaoud and Ben-Amar (2010) and Chang and Dutta (2012) have examined the relation between corporate governance and dividend policy. Adjaoud and Ben-Amar (2010) found evidence of a positive relation between corporate governance and dividend policy, consistent with the outcome hypothesis. Similar to Jiraporn et al (2011), Adjaoud and Ben-Amar (2010) used a comprehensive measure of corporate governance to avoid the problems of associated with using only a few items to assess corporate governance. Unfortunately, the use of this measure restricted their sample to only the largest companies in Canada. Adjaoud and Ben-Amar (2010) also included both dividend payers and nonpayers together in their analysis. In contrast, Jiraporn et al (2011) analyzed separately the decision to pay a dividend (i.e., propensity to pay) from the decision of how much to pay (i.e., size of the dividend).

Chang and Dutta (2012), in contrast to Adjaoud and Ben-Amar (2010), found evidence of a negative relation between corporate governance and dividend policy. Their finding is consistent with earlier studies and is not particularly surprising given that they did not use a comprehensive measure of corporate governance (like Adjaoud and Ben-Amar (2010) and Jiraporn et al (2011)). Their corporate governance measure

⁴⁰ In fact, traditional corporate governance as exercised by the board of directors may be lower for these firms. Monitoring by other parties (debt holders, potential new equity holders) may mean not as many resources have to be invested in monitoring by the board. Thus the fact that corporate governance is on average lower for non-dividend payers does not necessarily mean that the level of monitoring is lower.

however allowed them to study small, medium and large companies, a much larger range than Adjaoud and Ben-Amar (2010) could. Chang and Dutta (2012) also restricted their sample to only dividend paying companies and therefore ignored the ‘decision to pay a dividend’ decision.

LaPorta et al (2000) originally proposed the outcome and the substitution hypotheses to explain how the level of governance may interact with dividend decisions. Recent studies in Canada have found evidence consistent with both hypotheses. The purpose of this paper is to extend this work by examining the decision to pay a dividend separately from the decision of how much to pay using a cross-section of different sized companies and a comprehensive measure of corporate governance.

We argue that the amount of the dividend paid will be influenced by the level of corporate governance exerted by the board of directors of the firm. Given that evidence has been found to support both the substitution and the outcome hypotheses, we propose to test the following null hypothesis:

H1: The amount of the dividend paid by a company is unrelated to its level of corporate governance.

We also argue that the decision to pay a dividend is very different from the decision of how much to pay. The decision to pay a dividend tends to be a permanent decision that, once made, is very difficult to reverse. As noted earlier, dividends are costly due to potential lost investment opportunities or the high costs of externally financing these investment opportunities. Further most firms continue to pay dividends once instituted because of the high costs associated with dividend cuts. In summary, the decision to pay a dividend is likely more heavily influenced by factors such as the firm’s strategy and/or investment opportunities and likely less so by the level of its ongoing corporate governance. As such, we suspect that the current level of corporate governance may be a secondary factor in the decision to pay a dividend. We therefore propose to test the following null hypothesis:

H2: The decision to pay a dividend is unrelated to its level of corporate governance.

Data

The financial data for this study is retrieved from Stock Guide. All publicly listed firms that traded on the TSX in the period 2003 to 2007 are included except for utilities (Stock Guide industry groups 71 to 73) and financials (Stock Guide industry groups 91 to 94). This results in the coverage of approximately 650 companies per year in the period.

CORPORATE GOVERNANCE

Corporate governance is determined using a 20 item index based on NP58-201 guidelines that we label “CG-rank”. The details of its construction can be found in MacAulay et al (2009) but essentially one point is assigned if a firm complies with one of the 20 recommended guidelines in the index. This ranking covers roughly 500 companies per year after eliminating financials and utilities in the 2003 to 2007 period.

DIVIDENDS

This study analyzes separately the decision to pay a dividend (i.e., propensity to pay) from the decision of how much to pay (i.e., size of the dividend). To analyze the decision to pay a dividend, we created a dummy variable that was assigned a value of 1 if the common dividend reported in the Stock Guide database was positive and assigned a value of 0 otherwise. To analyze whether the amount of the dividend is related to the level of corporate governance, we used the common dividend paid deflated by total assets as reported in the Stock Guide database as our measure of dividends.

DESCRIPTIVE STATISTICS

The descriptive statistics for key firm characteristics can be found in Table 1. These characteristics are further broken into dividend payers and nonpayers in Table 2. As can be seen from Table 2, dividend payers are larger, more levered and more profitable than dividend nonpayers. Dividend nonpayers are characterized by greater research and development expenditures, greater capital expenditures and negative retained earnings. This is in agreement with the literature; higher capital expenditures and higher research and development expenditures are consistent with dividend nonpayers having greater investment opportunities. Thus it appears that nonpayers do not pay dividends because either the costs are too high (costs associated with lost investment opportunities or externally financing investment opportunities) and/or they are incapable of legally paying dividends (because retained earnings are negative). Finally it should be noted that dividend payers have less cash and higher corporate governance rankings than

nonpayers. These findings are all consistent with Jiraporn et al (2011).

Further we note that although the average cash balance for non-dividend payers is greater, on average they had negative retained earnings and negative earnings (see Table 2). Many of these firms would be incapable of paying a dividend and therefore there could be no interaction between the level of corporate governance and the decision to pay a dividend.

(Insert Table 1 Here)

(Insert Table 2 Here)

Results

We first examine whether corporate governance is related to the decision to pay a dividend. To do so, we test the following general logistic regression model.

$$\text{Dividend Decision} = \alpha + \beta \text{ Corporate Governance} + \sum \delta_i (\text{Control Variables}) + \varepsilon$$

A model consistent with Jiraporn et al (2011) is used first to examine the relationship between corporate governance and the dividend decision. More specifically the model is of the following form:

$$\text{DivDec} = \alpha + \beta_1 \times \text{CG-rank} + \beta_2 \times \text{Size} + \beta_3 \times \text{Leverage} + \beta_4 \times \text{Profitability} + \beta_5 \times \text{CapExpRatio} + \beta_6 \times \text{R\&DExpRatio} + \beta_7 \times \text{TaxRatio} + \beta_8 \times \text{CashHoldings} + \beta_9 \times \text{RetainedEarnings} + \beta_{10} \times \text{RepurchaseDummy} + \beta_{11-14} \times \text{YearDummies} + \beta_{15-21} \times \text{IndustryDummies} + \varepsilon$$

where:

DivDec =	Dividend Decision, a dummy variable that is assigned a value of 1 if the firm pays a dividend during the year, and 0 otherwise.
CG-rank =	The governance score obtained from hand collecting compliance with NP58-201 guidelines from company filings in SEDAR. The score can range from 0 to 20.
Size=	Ln of total assets. ⁴¹
Leverage=	Ln of Debt ratio. It is calculated as (Longterm Debt + current portion) divided by (bank loans + short and long debt + total equity).
Profitability=	Ln of net profit margin. Net profit margin is (net income - minority interest) divided by revenue and multiplied by 100.
CapitalExpRatio=	Ln of the ratio of capital expenditures to total assets.
R\&DExpRatio=	Ln of the ratio of research, development, exploration expenses to total assets.
TaxRatio=	Ln of the ratio of income tax to total assets.
CashHoldings=	Ln of the ratio of the cash position, (cash + marketable securities) to net total assets (total assets less cash+market securities).
RetainedEarnings=	Ln of the ratio of retained earnings to total equity.
RepurchaseDummy=	Dummy variable assigned a value of 1 if the change in capital stock for a firm is negative.
YearDummies=	Dummy variables assigned a value of 1 for years 2003, 2004, 2005 and 2006. The year 2007 is the base case.
IndustryDummies=	Dummy variables assigned a value of 1 for industry groupings by stock guide. The following categories were used. Energy was Industry20 (included stock guide industries 21 to 27), Industrials was Industry30 (included stock guide industries 31 to 47), Consumer Discretionary was Industry50 (included stock guide industries 51 to 59), Consumer Staple was Industry60 (included stock guide industries 61 to 69), Telecommunications services was Industry75 (included stock guide industries 76 to 79), Information Technology was Industry80 (included stock guide industries 81 to 89), Healthcare was Industry95 (included stock guide industries 96 to 99). Materials, Industry10 (included stock guide industries 11 to 19) was the base case. Utilities (stock guide industries 71

⁴¹ We also note that nature of our sample (many small firms) resulted in outliers and skewed distributions for the financial variables used. We transformed all our financial variables using the natural logarithm and further we trimmed the top and bottom 1% of all observations (unless it was censored).

to 73) and Financials (stock guide industries 91 to 94) were excluded from the study.

The model above controls for variables identified in previous studies as potentially affecting dividend policy. We include controls for standard variables such as size, leverage and profitability for similar reasons to those used in Jiraporn et al (2011) and Adjaoud and Ben-Amar (2010). We expect larger firms and more profitable firms to be more likely to pay dividends while we expect more levered firms to be less likely to pay dividends. We also include the variables for capital expenditures and R&D expenditures to act as proxies for growth opportunities and investment opportunities respectively (Jiraporn et al, 2011). We expect both to be negatively related to the propensity to pay dividends for reasons mentioned earlier. In addition, to be comparable to Jiraporn et al (2011) we also include variables to account for the tax efficiency of dividends and the amount of cash but we make no prediction as to the relationship with dividend policy.

Importantly for our sample, we include a variable (RetainedEarnings) to capture the amount of earned capital to contributed capital. This variable is especially important for our study because we include many smaller companies in our sample that are not typically studied. Many of these smaller companies are start-ups or exploration companies that are not yet profitable. They often need to go to the equity market to raise the cash to fund their operations. As such, they are characterized by negative retained earnings and are therefore not legally able to pay dividends.⁴² We suspect that this variable will have a strong positive relationship to the decision to pay a dividend.

Finally we also include a variable to estimate the impact of stock repurchases. Stock Guide did not have a variable to identify stock repurchases. The database did have a variable that captures the changes to capital stock. It is the sum of the common shares and preferred shares that were issued or repurchased. We created a dummy variable and assigned a value of 1 if the change in capital stock for a firm is negative. We expect this variable to be positively related to the decision to pay a dividend. Many companies will use stock repurchases as a way to return cash to shareholders without committing to the return of the cash on an ongoing basis. Thus we expect that it will be part of a firm's dividend decision and therefore it will be mostly firms that are already paying cash dividends that repurchase stock.

The results of the panel data logistic regression can be found in Table 3. Because of uncertainty as to the accuracy of our repurchase dummy, we report on two models. Model 1 reports the results without the repurchase dummy in the analysis and Model 2 reports the results with the repurchase dummy included. The results for both models are virtually identical. Size and leverage are important factors related to the decision to pay a dividend, as predicted, but corporate governance is not. Further, the capital expense variable and the retained earnings variable are both significant. These findings are consistent with our argument that corporate governance may not be a significant determinant of the decision to pay a dividend. It appears that firms with greater growth opportunities (as proxied by the capital expenditure ratio) are less likely to pay a dividend. Further, it appears that firms with less retained earnings are less likely to pay a dividend, and given the nature of our sample, it is likely that they are unable to pay a dividend because these firms have negative retained earnings. As such, these findings are consistent with our argument that the decision to pay a dividend is heavily influenced by factors such as the firm's strategy and/or investment opportunities. Further, the legal ability to pay a dividend also appears to be a significant determinant.

(Insert Table 3 Here)

We also examine whether corporate governance is related to the size of the dividend paid. To do so, we test the following general regression model.

$$\text{Dividend Size} = \alpha + \beta \text{ Corporate Governance} + \sum \delta_i (\text{Control Variables}) + \varepsilon$$

A model consistent with Jiraporn et al (2011) is used initially to examine the relationship between corporate governance and the size of the dividend. More specifically the model is of the following form:

$$\text{DivSize} = \alpha + \beta_1 \times \text{CG-rank} + \beta_2 \times \text{Size} + \beta_3 \times \text{Leverage} + \beta_4 \times \text{Profitability} + \beta_5 \times \text{CapExpRatio} +$$

⁴² In fact, the average of retained earnings to total equity for our entire sample was negative (-1.93) which is considerably less than in Jiraporn et al (2011) which was +0.12. For dividend nonpayers, it was -2.82 versus -.39 for Jiraporn et al.

$$\beta_6 \times R\&D\text{ExpRatio} + \beta_7 \times \text{TaxRatio} + \beta_8 \times \text{CashHoldings} + \beta_9 \times \text{RetainedEarnings} + \beta_{10} \times \text{RepurchaseDummy} + \beta_{11-14} \times \text{YearDummies} + \beta_{15-21} \times \text{IndustryDummies} + \varepsilon$$

where:

DivSize = Ln of the common dividend paid deflated by total assets.
 Other variables = Same as the variables used in the previous model.

The results of the panel data regression can be found in Table 4. The corporate governance variable (CG-rank) is significant and positively related to the size of the dividend paid for both Model 1 and Model 2. Thus, it appears that better governed firms pay larger dividends, consistent with the outcome hypothesis. This finding is inconsistent with earlier work by Jiraporn and Ning (2006), John and Knyazeva (2006), Officer (2006) and, in Canada, Chang and Dutta (2012). This is not particularly surprising because many of the earlier studies did not use a comprehensive measure of corporate governance. Our study, using a comprehensive measure of corporate governance, finds evidence consistent with more recent studies that also used comprehensive measures of governance (see for example Jiraporn et al (2011), Chang et al (2014) and, in Canada, Adjaoud and Ben-Amar (2010)).

(Insert Table 4 Here)

ROBUSTNESS CHECK – ENDOGENEITY

The issue of reverse causality is a possible problem for this study. Potentially, dividends could impact the level of corporate governance. To control for endogeneity, we identify an instrumental variable and use a two-stage least squares approach. Consistent with previous studies (John and Knyazeva, 2006; Jiraporn et al, 2011), the instrumental variable used is industry level corporate governance. It is argued that industry level corporate governance should be related to a firm's corporate governance but not related to the firm's dividend decision. The results of both stages of the regression are reported in Table 5.

(Insert Table 5 here)

In the stage one regression, industry median CG-rank is positively and significantly related to the corporate governance variable CG-rank. This stage therefore provides strong evidence that industry-level governance influences firm level governance. In the stage two regression, the variable "predicted CG-rank" is used in place of the original measure of corporate governance, CG-rank. Consistent with our original findings, the variable "predicted CG-rank" is found to be significantly and positively related to the size of the dividend payout. Thus it is unlikely that reverse causality is an issue.

Another potential problem is that both the size of the dividend and the level of corporate governance could be determined simultaneously. We repeated our analysis in Table 4 using a fixed-effects regression. The coefficient on the corporate governance variable, CG-rank, remained positive and significant ($t=2.78$, $p=0.006$). Thus it is unlikely that simultaneity is an issue.

Conclusion

In this paper, we study the relationship between corporate governance and dividend policy in Canada. Our paper makes two contributions. First we provide additional empirical evidence supporting the outcome hypothesis on the role of corporate governance with respect to dividend policy. We find that for dividend paying companies, corporate governance is positively related to the size of the dividend paid. This finding is consistent with recent work by Jiraporn et al (2011) and Chang et al (2017). Second, we extend recent Canadian studies by Adjaoud and Ben-Amar (2010) and Chang and Dutta (2012). We are the first Canadian study to examine both dividend payers and nonpayers using a comprehensive measure of corporate governance and using a sample that includes both large and small Canadian firms.

Our results differ from previous studies in that we do not find support for a relationship between corporate governance and the propensity to pay a dividend. We argue that this is not surprising given the nature of our sample. We are one of a few studies to include small firms in this type of study of dividend policy. These small firms are characterized by greater investment opportunities and therefore it is costly for them to pay dividends. Further, many of these firms have negative retained earnings and are therefore incapable

of paying dividends. As such, we conclude that dividend nonpayers may have completely different governance dynamics than larger more established firms.

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Table 1: Descriptive Statistics

The descriptive statistics for key firm characteristics are shown in this table. All data is obtained from the Stock Guide database. Leverage is calculated as LTD+current portion divided by bank loans+short and long debt+total equity. Profitability is net income-minority interest divided by revenue and multiplied by 100. Capital Exp Ratio is the ratio of capital expenditures to total assets. R&D Ratio is the ratio of research development exploration to total assets. Tax Ratio is the ratio of income tax to total assets. Retained Earnings is the ratio of retained earnings to total equity. Cash Holdings is the ratio of the cash position (cash+market sec) to net total assets (total assets less cash+market sec). CG-rank is the governance score obtained from hand collecting compliance with NP58-201 guidelines from company filings in SEDAR.

	Obs	Mean	Median	S.D.	25th	75th
<i>Financial</i>						
Revenue	3239	1,218	93.66	3,570	19.3	600.7
Total Assets	3255	1,595	166.58	4,677	47.5	755.3
Leverage	3217	0.2159	0.1700	0.21	0.02	0.35
Profitability	2940	-0.2494	0.0304	1.19	-0.07	0.09
Capital Exp Ratio	3241	0.0924	0.0470	0.12	0.02	0.11
R&D Ratio	3255	0.0446	0.0188	0.13	0	0.02
Tax Ratio	3128	0.0134	0.0073	0.04	0	0.03
Retained Earnings	3255	-1.9272	0.0475	21.02	-0.7	0.46
Cash Holdings	2478	0.6619	0.1177	4.35	0.02	0.42
<i>Governance</i>						
CG-rank	2540	13.03	13.0000	4.13	10	16

Table 2: Dividend Payers versus Dividend Nonpayers

The descriptive statistics for dividend payers and nonpayers are shown in this table. All data is obtained from the Stock Guide database. Leverage is calculated as LTD+current portion divided by bank loans+short and long debt+total equity. Profitability is net income-minority interest divided by revenue and multiplied by 100. Capital Exp Ratio is the ratio of capital expenditures to total assets. R&D Ratio is the ratio of research development exploration to total assets. Tax Ratio is the ratio of income tax to total assets. Retained Earnings is the ratio of retained earnings to total equity. Cash Holdings is the ratio of the cash position (cash+market sec) to net total assets (total assets less cash+market sec). CG-rank is the governance score obtained from hand collecting compliance with NP58-201 guidelines from company filings in SEDAR.

	Dividend nonpayers		Dividend Payers		Difference	
	Obs	Mean	Obs	Mean	t-stat	
<i>Financial</i>						
Revenue	2365	334.4	874	3608.3	-16.07	***
Total Assets	2381	477.2	874	4641.6	-15.5	***
Leverage	2352	0.1989	865	0.262	-7.87	***
Profitability	2068	-0.3922	872	0.0895	-15.39	***
Capital Exp Ratio	2370	0.1017	871	0.0673	10.29	***
R&D Ratio	2381	0.0587	874	0.0059	16.65	***
Tax Ratio	2254	0.0066	874	0.0311	-16.2	***
Retained Earnings	2381	-2.8245	874	0.5174	-6.65	***
Cash Holdings	1840	0.8283	638	0.0156	3.24	***
<i>Governance</i>						
CG-rank	1849	12.77	691	13.72	-5.24	***

(* p<.05, ** p<.01, *** p<.001)

Table 3: Impact of Corporate Governance on the Propensity to Pay Dividends

The panel data logistic regression results on the decision to pay a cash dividend⁴³ are shown in this table. CG-rank is the governance score obtained from hand collecting compliance with NP58-201 guidelines from company filings in SEDAR. All financial data is obtained from the Stock Guide database. Size is total assets. Leverage is LTD + current portion divided by bank loans + short and long debt + total equity. Profitability is net income-minority interest divided by revenue and multiplied by 100. Capital Exp Ratio is the ratio of capital expenditures to total assets. R&D Exp Ratio is the ratio of research development exploration to total assets. Tax Ratio is the ratio of income tax to total assets. Cash Holdings is the ratio of the cash position (cash + marketable securities) to net total assets (total assets less cash+market sec). Retained Earnings is the ratio of retained earnings to total equity. Repurchase Dummy is a variable assigned a value of 1 if the change in capital stock for a firm is negative. Model 1 contains the results of the regression excluding the repurchase dummy. Model 2 contains the results of the regression including the repurchase dummy. Model 3, consistent with LaPorta et al (2000), excludes any firms that reported a loss in the year or that had dividends larger than total revenues.

Variables	Model 1		Model 2		Model 3	
	Coeff	z-stat	Coeff	z-stat	Coeff	z-stat
Intercept	-313.477	-6.52	-308.716	-6.32	-365.26	-3.44
CG-rank	0.0143	0.20	0.0037	0.05	-0.0779	-0.78
Size	2.2205	6.16	2.1883	6.01	3.0016	6.42
Leverage	-11.4617	-2.49	-11.4749	-2.47	-13.441	-2.05
Profitability	16.953	1.19	17.295	1.19	4.6753	0.12
Capital Exp Ratio	-25.2989	-2.78	-25.1121	-2.73	-37.174	-3.10
R&D Exp Ratio	18.1091	0.85	19.314	0.9	-29.435	-0.52
Tax Ratio	15.0214	0.74	14.0254	0.68	22.132	0.70
Cash Holdings	-0.8484	-0.37	-0.7476	-0.32	0.7389	0.22
Retained Earnings	30.1550	8.15	29.5641	7.91	42.670	7.77
Repurchase Dummy	-	-	0.8648	1.58	0.8747	1.19
Ind / Year Dummy	yes		yes		yes	
Wald Chi2 (21)	106.90	***	102.97	***	112.25	***
N	1803		1798		1169	

(* p<.05, ** p<.01, *** p<.001)

Table 4: Impact of Corporate Governance on the Size of the Dividend

The panel data regression results for dividend payers only are shown in this table. Corporate governance and other control variables are regressed on the amount of the cash dividend. CG-rank is the governance score obtained from hand collecting compliance with NP58-201 guidelines from company filings in SEDAR. All financial data is obtained from the Stock Guide database. Size is total assets. Leverage is

⁴³ In addition to cash dividends, companies return cash to shareholders through share repurchases. Share repurchases however do not have the same level of commitment associated with them as cash dividends and as such are not likely to be viewed as effective a pre-commitment as cash dividends. Despite this, we attempted to determine if the propensity to pay any type of dividend (cash or repurchase) would be impacted by corporate governance. Stock Guide did not directly disclose share repurchases in the 2003 to 2007 period. They did however disclose the changes to capital stock. This variable included the value of all shares (common and preferred) issued or repurchased. To approximate cases where repurchases may have occurred, we deemed any cases where the changes in capital stock was less than zero to have been a year when the company repurchased its stock. The dependent variable for the logistic regression was recorded as 1 if a cash dividend or repurchase occurred in the year and zero otherwise. The resulting regression (n=1803) yielded qualitatively similar results to the regression for cash dividends. The corporate governance variable was not significant (coefficient was -0.0031, z-stat was -0.08).

LTD + current portion divided by bank loans + short and long debt + total equity. Profitability is net income-minority interest divided by revenue and multiplied by 100. Capital Exp Ratio is the ratio of capital expenditures to total assets. R&D Exp Ratio is the ratio of research development exploration to total assets. Tax Ratio is the ratio of income tax to total assets. Cash Holdings is the ratio of the cash position (cash + marketable securities) to net total assets (total assets less cash+market sec). Retained Earnings is the ratio of retained earnings to total equity. Repurchase Dummy is a variable assigned a value of 1 if the change in capital stock for a firm is negative. Model 1 includes all firms that paid a cash dividend. Model 2, consistent with LaPorta et al (2000), excludes any firms that reported a loss in the year or that had dividends larger than total revenues.

Variables	Model 1			Model 2		
	Coefficient	t stat		Coefficient	t stat	
Intercept	0.5513	6.75	***	0.5158	3.61	***
CG-rank	0.0004	3.03	**	0.0004	3.05	**
Size	-0.0026	-6.03	***	-0.0027	-5.87	**
Leverage	-0.0043	-0.57		-0.0049	-0.61	
Profitability	0.0435	1.49		0.0591	0.99	
Capital Exp Ratio	0.0283	1.56		0.0253	1.29	
R&D Exp Ratio	0.0736	1.46		0.0293	0.46	
Tax Ratio	0.1031	2.83	**	0.0981	2.31	*
Cash Holdings	0.0015	0.34		0.0018	0.38	
Retained Earnings	-0.014	-2.58	**	-0.0086	-1.39	
Repurchase Dummy	0.0005	0.57		0.0002	0.22	
Year/Industry Dummy	yes			yes		
Pseudo R2	0.2053			0.1787		
Wald Chi2 (21)	117.84	***		95.87	***	
N	513			465		

(* p<.05, ** p<.01, *** p<.001)

Table 5: Endogeneity Tests (2SLS) Impact of the Size of the Dividend on Corporate Governance

The panel data regression results for dividend payers only are shown in this table. The dependent variable in Stage 1 is CG-rank and the dependent variable in Stage 2 is the amount of the cash dividend divided by total assets. CG-rank is the governance score obtained from hand collecting compliance with NP58-201 guidelines from company filings in SEDAR. All financial data is obtained from the Stock Guide database. Size is total assets. Leverage is LTD + current portion divided by bank loans + short and long debt + total equity. Profitability is net income-minority interest divided by revenue and multiply by 100). Capital Exp Ratio is the ratio of capital expenditures to total assets. R&D Exp Ratio is the ratio of research development exploration to total assets. Tax Ratio is the ratio of income tax to total assets. Cash Holdings is the ratio of the cash position (cash + marketable securities) to net total assets (total assets less cash+market sec). Retained Earnings is the ratio of retained earnings to total equity. Repurchase Dummy is a variable assigned a value of 1 if the change in capital stock for a firm is negative.

Dependent Variable	Stage 1			Stage 2		
	CG-rank			Div/TA		
Variables	Coefficient	z stat		Coefficient	z stat	
Intercept	5.4931	.21		0.5520	7.07	***
Industry median CG-rank	0.4894	7.23	***			
Predicted CG-rank				0.0021	5.08	***
Size	0.7774	6.01	***	-0.0039	-7.35	***
Leverage	-2.2128	-0.90		0.0013	0.18	
Profitability	4.6697	0.49		0.0447	1.56	
Capital Exp Ratio	5.6920	1.05		0.0279	1.64	
R&D Exp Ratio	-3.8586	-0.26		0.0509	1.13	
Tax Ratio	1.3076	0.12		0.0987	2.78	**
Cash Holdings	0.7069	0.52		-0.0003	-0.07	
Retained Earnings	-2.5579	-1.53		-0.0129	-2.59	**
Repurchase Dummy	0.4802	1.82		-0.0005	-0.59	
R2	0.2711			0.1952		
Wald Chi2 (21)	122.15	***		109.55	***	
N	523			542		

(* p<.05, ** p<.01, *** p<.001)

A third wave for entrepreneurship research: Mending the split between causation and effectuation through complexity

Abstract

In this paper we propose that the theoretical framework for understanding entrepreneurship of Effectuation as developed in Sarasvathy (2001) can be reframed as a subset of complexity management as proposed by Nason (2017). Doing so has five main advantages. Firstly, it places effectuation as part of the well-developed theory of complexity science. This in turn allows for a refinement of the concepts of effectuation as they are reframed in the language of the more widely studied concepts of complexity science. Secondly, it separates the false dichotomy between causation and effectuation and recasts it into complementary complicated and complex systems whose selection for appropriateness depends on the specific underlying context or system of the entrepreneurial venture. Thirdly, it expands the applicability of the concept of effectuation beyond the purview of the entrepreneur into general management regardless of the scope, scale or development of the business organization in question. Fourthly, it changes the discussion of the criticisms of effectuation by showing many criticisms are based on incorrect methodologies for examining complex systems and non-reductionist systems. Finally, the recasting of effectuation as a subset of complexity management, helps to reinforce that complexity is a valid concept to expand from the social sciences where it is well accepted into the business literature where the study of complexity is in many ways still in its nascent stages.

Introduction

The purpose of this paper is to illustrate the parallels and then reframe the Theory of Effectuation as proposed by Sarasvathy (2001) as a specific case of the complexity management framework as proposed by Nason (2017). Doing so produces several advances. To begin, it places effectuation as part of the well-developed theories and tactics developed for the study of complex systems. Secondly it expands the usefulness of effectuation beyond entrepreneurship into general management. In essence, it shows that the concepts of effectuation and complexity science are applicable in appropriate business situations well beyond those faced by the entrepreneur. Thirdly it illustrates that there is not a dichotomy between causation and effectuation for entrepreneurship, but instead that the two can be seen as complementary systems whose appropriateness is context and situation specific. This changes the dialogue and the debate from causation versus effectuation to causation and/or effectuation which in turn produces more useful frameworks for the entrepreneur to exploit successfully. This leads to the fourth benefit of this paper in that it shows that many of the criticisms of effectuation are ill-founded when effectuation is placed as a subset of complexity. The final benefit is that it is an illustration of the usefulness of complexity science as a discipline to apply to business studies. Complexity science is already an accepted discipline in the natural, computation, as well as the social sciences. It is time that business theorists started to expand their understanding and incorporation of complexity into business applications.

Sarasvathy (2001) developed the model of effectuation to explain the observed characteristics and techniques of successful entrepreneurs. In particular, effectuation was developed as a theory that was in sharp contrast to causation. Sarasvathy (2001) argues that "causation rests on a logic of prediction, effectuation on the logic of control (2001, p. 243)." Under traditional theories of entrepreneurship entrepreneurs operate by way of causation, they select an effect (outcome) and then develop the means (resources) to produce that effect. However, in contrast, Sarasvathy (2001) observes in a sample of entrepreneurs that they select from a set of possible effects based on the means at hand. Thus, instead of starting with the goal in mind and developing the means to achieve that goal as put forward by a causation

framework, entrepreneurs instead examine their existing means and choose from the plausible outcomes available to them. Furthermore, Sarasvathy (2001) argues that for entrepreneurs, given the nature of their task, and given the inability to accurately predict in an entrepreneurial venture, that it is not reasonable to argue for a 'logic of control'.

Sarasvathy provides definitions for causation and effectuation as follows: "Causation processes take a particular effect as given and focus on selecting between means to create that affect. Effectuation processes take a set of means as given and focus on selecting between possible effects that can be created with that set of means (2001, p. 245)."

In contrasting causation and effectuation (Table 1 Sarasvathy (2001)), the author notes that causation is "static, linear and independent environments (p.251)", while effectuation evokes "explicit assumptions of dynamic, non-linear and ecological environments (p.251)". Furthermore, selection criteria in causation is based on expected return, while in effectuation it is "affordable loss or acceptable risk (p.251)".

In these ways, the model of effectuation is shown in stark contrast to causation. The respective theories are mutually exclusive and thus in theoretical competition with each other. This in turn has developed an extensive literature of debate between those who are proponents of each of the respective theories of entrepreneurship (cf. Arend, Sarooghi, & Burkemper, 2015; Baron, 2009; Chiles, Bluedorn, & Gupta, 2007; Perry, Chandler, & Markova, 2012)..

To begin to reconcile the views, we reframe and amend effectuation theory to fit into the complexity management framework proposed by Nason (2017). Complexity arises when there are agents (e.g. entrepreneurs, customers, suppliers, competitors, substitutes, regulators, and investors), who can interact (e.g. market competition, conventional communication, through other agents), who can learn from such interactions and who can adapt (e.g. change strategies or tactics). When these characteristics are present, a property called emergence develops. Emergence is a characteristic property of complex systems in which patterns of outcomes can be observed, but such patterns are completely unpredictable, and furthermore are completely unreproducible. Generally, emergence produces outcomes that are non-linear and highly dynamic. Emergence is a holistic effect in that the patterns that are developed are more than the sum of their parts, and furthermore cannot be accurately studied in a reductionist manner. Maguire (2011) provides an introduction to the extensive literature on complexity and management, while Goldstein (2011) reviews the literature of emergence in the context of managerial situations.

As an example of a complex system, consider the stock market. In a stock market there are a group of agents (shareholders), who interact (through trading, through direct communication or through media communication (including social media), through observing stock prices and the trades of others), who learn, and who adapt (change trading strategies and opinions, trade securities as a result of adaptation). The stock market exhibits clear patterns but has complete randomness and unpredictability which is manifested by the well-known efficient markets hypothesis (Malkiel & Fama, 1970).

In contrast to a complex system, a complicated system is one that functions based on a set of non-robust rules or laws. For instance, most physical systems behave based on the laws of Newtonian Physics. Once one knows the rules of a complicated system, the outcomes are completely known, and completely reproducible. An example of a complicated system Westley et al. (2006) provides is getting an astronaut to the international space station and back. Getting an astronaut to the international space station requires one to follow the well-known laws of physics. Assuming that the known laws of physics are obeyed, then there is a high probability of successfully getting an astronaut to the space station and back. There is no mystery or guesswork involved.

There are clear parallels between thinking of causation as a theory for entrepreneurship and complicated systems for mechanical systems. However, it is prudent to ask whether entrepreneurship should be considered more as a complicated system, with well-known rules and laws that lead to completely predictable and reproducible outcomes, or as a complex system that exhibits emergence and unknowable and potentially surprising future outcomes.

To adapt effectuation to a complexity framework, and to illustrate how it is consistent with being a theory that is a special case of complexity, there are three essential adjustments needed; emergence, not uncertainty as the distinguishing variable; adaptability, not control as the response to emergence or uncertainty; and retention of adaptability (or retention of flexibility), rather than avoidable loss as a principle.

Emergence, Not Uncertainty

Allowing that it is emergence, not uncertainty, which is the distinguishing variable is a key element in the adoption of the complexity framework. Emergence retains the unpredictable element of entrepreneurship, but importantly and explicitly acknowledges the role of the agents that collectively create the emergent system in the contextual environment in which the entrepreneur operates.

Emergence is more than the sum of the actions and interactions of the individual agents. Based on this, complexity, and the property of emergence requires a holistic approach to analysis rather than the reductionist approach of causation. It can be argued that emergence is the property that makes prediction of entrepreneurial prediction so difficult, as evidenced by the failure rate of entrepreneurial ventures (Davis, Haltiwanger, & Schuh, 1998; Lerner & Malmendier, 2013; Shane, 2008). Conversely, emergence is the means by which certain products or fads become viral successes and other successful products or industries fade away.

With emergence as the distinguishing variable, networks, or the ability to connect with emergent markets, become the important limiting factors instead of resources. The factors of production are only needed as a final element of production that conceptually could be outsourced. The success of the Apple iPhone could be seen as a prime example of the ability to build networks of fans for Apple products and the design of Apple's products, that is totally separated from the production of said products which is almost all done by third party suppliers.

In our connected marketplace, with highly liquid and functional global supply chains, the means of production are almost always easily gained for a successful idea. Thus, the means of production are not limiting resources. It is the ability to get a product, idea, or concept to successfully connect and create a desirable emergence that is key. The successful emergence depends on how well the product, idea or concept can build positive networks and connections and the flexibility of the entrepreneur to adapt to the change market conditions that are the result of the emergence. This concept fundamentally changes the causation versus effectuation debate and creates a paradigm shift in consideration of the factors of success behind entrepreneurial success.

Adaptability, Not Control as Response to Emergence

Sarasvathy (2001) argues for 'Logic of Control', while complexity would suggest that adaptability is a more appropriate response to the existence of emergence. With emergence, the entrepreneur is part of a system, and as a consequence, and by definition, part of the emergence. As such, the entrepreneur has little to no ability for controlling the system. Emergence is a non-reductionist effect that cannot be explained by being broken down to its most fundamental level. Any individual agent, including the entrepreneur, has only a limited extent of control. Furthermore, even that limited extent of control is unknowable *a priori*

and unpredictable in its effect on eventual outcomes. The best an entrepreneur can hope for is to `nudge` an emergent situation, or to act as a catalyst. The entrepreneur can try an idea through validation experiments in the market and then adjusting to how the market reacts. It is not the entrepreneur controlling the market, but instead it is the entrepreneur continually adapting and responding and thus in effect allowing the market to control them. Of course deciding to act, and thus implicitly deciding to become part of the entrepreneurial emergence is a valuable activity in its own right and not to be dismissed or diminished. In part this is evidence of the veracity of the famous Woody Allen quip that “If ninety percent of success is showing up, the other ten percent depends what you are showing up for. (Weintraub, 2008)”

Given the characteristics of complex emergence, adaptability of the entrepreneur is a more reliable and effective response. Adaptability means being able to sense the patterns forming and react in a positive manner to emerging patterns rather than trying to control them. Adaptability means learning and changing. It is the try, learn, adapt approach of Nason (2017), but it is also akin to the Starting Lean concept of Ries (2011). In Starting Lean, the objective of the entrepreneur is to develop a minimally viable product, test it, learn from market reaction, and then adapt accordingly. The cycle is repeated as often as necessary to develop a fully viable product. With the Starting Lean methodology, the entrepreneur is relying on the interaction of the market with their product to let them develop a product that emerges as successful. It is an example of the entrepreneur adapting and working with the will (emergence) of the market and recognizing that they have limited control over the market’s emergence. The only control the entrepreneur has is a control of their response to the market’s response which is nothing more than their adaptability.

Causation, by contrast, implicitly assumes that there is an existence of laws of business which control outcomes. In the model of causation, the entrepreneur gets to pick the outcomes, and thus it is only selecting the correct set of immutable controls, (which are assumed to be known and reproducible) and the required (and presumed known) inputs to produce the desired outcomes. The theory of causation assumes that entrepreneurship is a complicated system. It assumes a set of known laws that produce reproducible outcomes.

By contrast, with complexity, the factors of success, and the means required are generally not known. Furthermore, the definition of success is also an unknown. Few entrepreneurs will stop production once their most optimistic sales goals have been met. Additionally, success often comes as a by-product of expectations rather than as a result of expectations, yet again, few entrepreneurs will reject success on such terms.

Retention of Adaptability Rather than Affordable Loss

Sarasvathy (2001) conjectures that “Affordable Loss” is another key principle of effectuation. In a complexity framework, we put forward that Adaptability and the Retention of Adaptability is the more relevant key principle. The only element that the entrepreneur can control in the presence of complexity and emergence is their adaptability. We thus argue that entrepreneurs act as if they are examining affordable losses or (somewhat equivalently), acceptable risks as a proxy for retention of adaptability, or (somewhat equivalently), acceptable rigidity.

Consistent with the “try, learn, adapt” approach, adaptability appears to be a key trait of successful entrepreneurs. The importance of adaptability contrasts sharply with the deterministic and linear assumptions of causation.

A summary of the key changes to effectuation that are required to frame it as a complexity theory are shown in Table 1, which mirrors Table 1 on Sarasvathy (2001).

Insert Table 1

Nason (2017) argues that the key elements for acting in the presence of complexity are: (1) to realize which type of system – complicated or complex – that one is in the presence of, (2) assuming it is complex to think, “manage, not solve”, (3) to practice a “try, learn, adapt approach”, and (4) to embrace complexity and complexity thinking. Many of these elements are consistent with the observations of Sarasvathy (2001) when she examined her data set of entrepreneurs and their entrepreneurial mindsets and actions.

Illustrating that Sarasvathy’s (2001) effectuation theory can be seen as a specific instance complexity theory allows the adaptation of complexity models and theories that have been developed in a variety of fields including biology, climatology, mathematics, physics and computer science to be applied to entrepreneurship. This allows for a rich literature of concepts and ideas to accelerate the understanding of entrepreneurship.

Complexity and Complicated

The literature has pitted effectuation versus causation as one or the other must be correct, but not both. This is a very narrow and probably limiting way of examining the situation. In the physical and natural sciences, complexity and complicated naturally coexist as complimentary paradigms, rather than as competing paradigms. It is a matter of the characteristics of the system or issue under question as to whether it should be examined under a reductionist complicated framework, or a holistic complexity framework. Nason (2017) provides a decision framework for ascertaining under which paradigm a situation should be studied that depends on; whether success is a priori definable; whether the factors of success are a priori known; and finally whether exactness is required, or equivalently whether the factors of success are robust.

For an entrepreneurial situation, there will be times when it should be examined under a complicated paradigm (causation), or a complexity paradigm (of which effectuation may be considered a subset). It depends on the context of the situation, and the nature of the underlying agents and their types of connections and their ability to learn and adapt. Generally, the nature of business involves humans interacting, and since interacting humans almost always comprise a complex system, it can be argued that generally entrepreneurship will be complex, and the factors of success will be successfully managing complexity.

Conclusions and Concepts for Further Exploration

In this paper we have shown that Sarasvathy’s (2001) effectuation theory for entrepreneurship is a special case of complexity. We have shown that with a reframing of some of Sarasvathy’s (2001) observational outcomes when she examined the actions of a field study of entrepreneurs, that her results are completely consistent with concluding that entrepreneurship is frequently a complexity management exercise, rather than management based on causation. The changes required for understanding effectuation as a subset of complexity that we propose are; replacing uncertainty with the concept of emergence; considering adaptability, rather than control as the response to emergence (uncertainty); introducing retention of adaptability as a replacement for affordable loss.

Reframing effectuation theory as a subset of complexity has five main advantages that we briefly touched on in this study and are worthy of further exploration and research. These advantages are: Firstly, it places effectuation as part of the well-developed theory of complexity science. This in turn allows for a refinement of the concepts of effectuation as they are reframed in the language of the more widely studied concepts of complexity science. Secondly, it separates the false dichotomy between causation and effectuation and recasts it into complementary complicated and complex systems whose selection for appropriateness depends on the specific underlying context or system of the entrepreneurial venture.

Thirdly, it expands the applicability of the concept of effectuation beyond the purview of the entrepreneur into general management regardless of the scope, scale or development of the business organization in question. Fourthly, it changes the discussion of the criticisms of effectuation by showing many criticisms are based on incorrect methodologies for examining complex systems and non-reductionist systems. Finally, the recasting of effectuation as a subset of complexity management, helps to reinforce that complexity is a valid concept to expand from the social sciences where it is well accepted into the business literature where the study of complexity is in many ways still in its nascent stages.

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Table 1: Comparison of Effectuation and Complexity Theory

Categories of Differentiation	Effectuation (Sarasvarthy 2001)	Complexity Process
Givens	Only some means or tools are given	Only some means and tools are known
Decision making	Help choose between possible effects that can be created with given means	Help choose between possible effects that are plausible in the moment. Possible effects are likely to change
Selection criteria	Based on affordable loss or acceptable risk. Actor dependent: Given specific means, choice of effect is driven by characteristics of the actor and his or her ability to discover and use contingencies	Based on adaptability Actors (plural) dependent. It is not the individual actor, but the community of actors. It is the ability of the entrepreneur to adapt to the community of actors that is relevant
Competence employed	Excellent at exploiting contingencies	Experimentation, learning, adaptability (try, learn, adapt)
Context of relevance	More ubiquitous in human action	Social systems, including business systems and economic systems

		Explicit acknowledgement of dynamic, non-linear, sociological environments
Nature of unknowns	Focus on the controllable aspects of an unpredictable future	Focus on adaptability to an unpredictable future
Underlying logic	To the extent we can control future, we do not need to predict it	To the extent that we can adapt to the future, we do not need to predict it
Outcomes	New markets created through alliances and other cooperative strategies	New markets created through emergence

Emergence of women's entrepreneurship in local development processes: What are the key factors to consider in rural areas?

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Abstract

The article aims to clarify the factors that promote women's micro-enterprises in a rural local development context. Specifically, the study examines the impact of entrepreneurial capacities, environmental support and the implementation of a planning strategy that promotes women's participation in the emergence of female entrepreneurial dynamics. The results show that entrepreneurial capacities strongly stimulate the emergence of female entrepreneurial dynamics in a rural local development context. Community support and gender mainstreaming also promote women's participation in the local development process.

Keywords: Women entrepreneurship - Local development - Rural environment - Territory

JEL: L26; P25

Introduction

In spite of remarkable economic successes in developing countries, poverty remains a serious phenomenon that is accentuating in rural areas and tends to be more pronounced in male-female disparities (World Bank, 2016). To counter the social consequences of poverty, many women develop small and micro-enterprises that are precarious and that generate little income (La Porta & Shleifer, 2014; Mead & Liedholm, 1998). In parallel with these individual or collective initiatives, many developing countries have

reinforced the decentralization and local development policies since the 2000s, intended to reduce territorial inequalities and increase the population's involvement in strategic choices concerning their territorial development. One of the missions of these policies is to foster income-generating activities and jobs. However, it seems that these policies have not yet stimulated real dynamics of local development via the creation of income-generating activities and employment, particularly in rural areas (Honorati & Cho, 2013; Banque africaine de développement, 2017; Severino & Hajdenberg, 2016). The objective of this paper is to shed light on the factors that foster the emergence of women's microentreprises in a local development process in rural Ivory Coast within a territorial development perspective. In the Ivory Coast, research on female entrepreneurship is done mainly in urban and peri-urban agglomerations. As a result, data on rural entrepreneurs is scant. Nor is there sufficient data on the factors to consider in the implementation of the local development process to nurture women's entrepreneurship in rural areas. Entrepreneurship is a dynamic and multifaceted phenomenon. Entrepreneurial practices are forged by the social contexts surrounding their emergence (Defourny & Develtere, 2007; Szirmai, Naudé, & Goedhuys, 2013; Nnadozie, 2002). Thus, entrepreneurial practices derive their development characteristics from their social context. Research on women's entrepreneurship in a context of implementation of a local development process in a rural setting is thus highly relevant.

This article reports two main types of results. First, we show that three factors are necessary and must be combined to promote women's entrepreneurship in a local

development process in a rural setting: entrepreneurial competencies, an area that incubates women's entrepreneurship, and the implementation of a planning strategy that favors women's participation. Second, the article underlines the important role of competencies in women's participation in local development processes. Accordingly, the more women feel competent, the more they will participate in local development processes and create an area that incubates their microenterprises through economic interest groups (EIG).

The remainder of the article is structured as follows. Section 2 presents the literature review. Section 3 describes the conceptual framework and the research methodology. Section 4 presents the results. Section 5 discusses the results. Section 6 concludes the article and identifies avenues of future research.

2. Literature review

Several entrepreneurial models highlight factors that promote entrepreneurship in a given setting. Shapero (1975) defines four dimensions of the entrepreneurial event: displacement, propensity to act, credibility of the act and the availability of resources. This model of the entrepreneurial event rests on the following variables: the environment, the actor and the business created. More recent models focus on the actor's ability to detect a business opportunity and transform it into a business project (Bygrave & Hofer, 1991; Gartner, 1995; Gartner, Carter & Hills, 2003). These models reflect process-based approaches to entrepreneurship. This field mainly studies the emergence process of an organizational structure and places detection of a business opportunity upstream of the four dimensions of Shapero's (1975) entrepreneurial event.

Studies by Lacasse (1988) and Hernandez (1997) found that the female entrepreneurial event also results from the dimensions defined by Shapero (1975). Four types of factors facilitate the emergence of women's entrepreneurship: situational, sociological, psychological and economic. This model thus highlights individual and environmental factors that influence the entrepreneurial spirit of the potential female entrepreneur. In addition, inequalities have been observed between males and females regarding entrepreneurship. These inequalities are explained by the fact that the values and attributes of entrepreneurship (risk-taking, adventurous spirit, performance-based orientation, etc.) are usually associated with men. Researchers have also demonstrated that the differences between men and women notably manifested in the identification of business opportunities. However, these studies integrate "women" only as a "sex" variable without really considering their experience. It is consequently worth investigating the role of gender⁴⁴ reputations in the creation of economic and social realities (Lee Downs, 2005). The gender approach to entrepreneurship lets us expand the interpretation of the classic process-based approaches to entrepreneurship (Ahl, 2004, 2006; Ahl & Nelson, 2010, Gunnerud, 1997).

Brush, De Bruin and Welter (2009) used a gender approach to analyze women's entrepreneurship. They assert that detrimental stereotypes, prejudices and mentalities cause social discrimination against women and hinder their entrepreneurial process.

⁴⁴Vinet (2008) affirms that the British feminist sociologist Anne Oakley defined sex as biological and gender as cultural as early as 1972. However, this term was generalized only toward the late 1980s. "Gender" refers to the socially constructed roles of males and females. Today, the concept of "gender" is used to analyze power relations between men and women.

The authors recommend that public policies that encourage women to become entrepreneurs be adopted to combat these prejudices and other outmoded values. The authors thus propose an analytical framework of women's entrepreneurship based on the one that Bates, Jackson and Johnson (2007) developed to analyze entrepreneurs' environment. An important finding by Brush, De Bruin and Welter (2009) is that a set of social expectations and cultural norms orient women's entrepreneurial process. This finding notably highlights the importance of the social context in the emergence of women's entrepreneurship.

Recent research on regional and local entrepreneurship focuses on contextual aspects to explain the relationship between localization and new business creation (Müller, 2016; Schölin, Ohlsson, & Broomé, 2017). These studies emphasize the role of contextual conditions such as education, culture, social support systems, technology and the presence of human capital and expertise in the development of entrepreneurship (Farny et al., 2016; Müller, 2013; Pe'er, Vertinsky, & Keil, 2016; Huggins, Prokop, & Thompson, 2017). However, these studies of regional entrepreneurship do not shed sufficient light on the role of processional aspects such as gender, which may influence local entrepreneurs (Müller, 2016). Generally, the authors are much more interested in territorial inequalities than gender inequalities. Few studies of regional entrepreneurship combine these two forms of inequalities as a research problem (Trettin & Welter, 2011). However, it is increasingly relevant to combine territorial inequalities and gender inequalities because many studies show that persistent inequalities between males and females have a negative effect on development and that their amplification

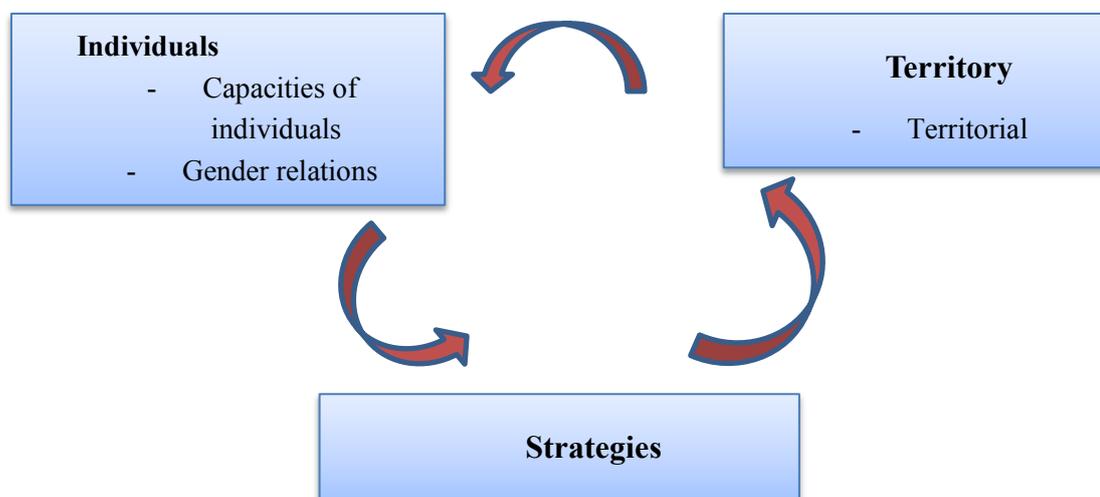
is slowing global economic growth dramatically. These persistent inequalities also impede territories from pursuing their strategic development priorities and weaken their organizational capacities overall (OECD, 2014). This phenomenon is even more pronounced in rural areas. Therefore, even if the literature now contains several examples of successful promotion of rural entrepreneurship (Naudé & Nagler 2017), scant research has examined this type of entrepreneurship, and even fewer studies have investigated women's entrepreneurship in a rural setting. It is therefore urgent to conduct research on rural entrepreneurship in order to produce knowledge that contributes to improving living conditions in rural areas (Korsgaard, Müller, & Wittorff Tanvig, 2015; Müller, 2013; North & Smallbone, 2006).

Research on rural entrepreneurship has adopted a territorial approach to entrepreneurship. For example, Prévost's (1993) model primarily considers local initiatives according to a vision of territorial development. It identifies two major axes along which local populations can transform their territory into an entrepreneurship incubator: territorial planning and the implementation of organizational structures. When combining a territorial approach to entrepreneurship with a gender approach, it is useful to add the dimensions of the models described above (Shapero 1975 and Brush, De Bruin & Welter 2009) to the axes of Prévost's model, notably the individual dimension with its capacities and gender relations components. From the literature review, we thus retain three dimensions that foster women's entrepreneurship in a local development process in a rural setting: individuals, the territory and land-planning strategies.

3. Conceptual and methodological framework

The scientific approach of this study consists of two main phases: a theoretical phase and an empirical phase. In the theoretical phase, scientific works were explored to compile an inventory of models of entrepreneurship emergence. Based on the analysis of the models retained, we defined three dimensions of the conceptual analytical framework that are: individuals, the territory and strategies (see Figure 1). This preliminary analytical framework guided our formulation of the data collection instruments.

Figure 1: Formulation of a preliminary conceptual framework



Source: The authors

In the empirical phase of the research, we refined the dimensions of this conceptual analytical framework within an inductive and deductive method. This phase unfolded mainly in the territorial community of Daloa in the central-western region of the Ivory

Coast; specifically in the three rural districts⁴⁵ of the sub-prefecture of Gadouan:

Bidiahouan, Gadouan and Zaliouhouan.

To gather the empirical data, we visited the Ivory Coast from July 5, 2015 to December 15, 2015. There we conducted interviews, performed documentary research and analyze the data obtained. To carry out our empirical investigations, we began by designing an organization plan for the data collection. After arriving in the Ivory Coast, our first step was to contact key resources to introduce ourselves and the research project. We thus aimed to enlist the cooperation of these individuals.⁴⁶ First we met with our “focal point” at the General division of decentralization and local development (DGDDL), to present our research objectives. This meeting took place in the DGDDL offices in Abidjan. The general director of the DGDDL formally agreed to support us in this data collection, on the division’s behalf, which is why we call him our “focal point.” We then contacted the directors of various technical departments and ministries to inform them of our intention to gather documentary data in their department as part of this research project. We also travelled to the sub-prefecture of Gadouan to make initial contact before the actual data collection began. Overall, the data were collected in several phases in the city of Abidjan and in the sub-prefecture of Gadouan. Most of the interviews were conducted in Gadouan over a two-month period, from October to

⁴⁵ In the Ivory Coast, a *pays rural* (rural district) is an administrative unit made up of a set of villages (three to five on average) that comprises a central village surrounded by satellite villages. Central villages are development hubs that host socioeconomic facilities and infrastructure such as schools, health services, and the market, used by the entire population of the rural district.

⁴⁶ We had contacted most of these people by telephone before meeting them in the field to present the research project and enlist their cooperation.

November 2015.

The phenomenon studied in the three rural districts of the subprefecture of Gadouan is the emergence of women's entrepreneurship following the implementation of the local development process known as "local participating planning." This local development process was initiated in the three rural districts with support from the National rural development agency (ANADER), in partnership with the National terroirs and rural facilities management program (PNGTER) of the Ivory Coast. Local participating planning is a "territorial project" for these three rural districts. We consequently adopted a territorial approach for this research project. Several authors (Anadon et al., 1990; Masson et al., 1989) have shown that regarding rural territories, women feel even more concerned about the future of their territory than men do because they are more affected by a shortage of infrastructures and by difficulties with economic integration in their daily life. This is why we combined our territorial approach with a gender approach and a capacity-based approach to better understand gender inequalities that affect women within local development processes.

By alternating between deduction and induction, this research produces constructed knowledge resulting from the interaction between the theory and the empirical data. We thus adopt a constructivist research perspective. Further, the empirical investigation suggests a process of qualitative data collection. Eisenhardt (1989) argues that the case study is relevant because it enriches the process of building a study object. Consequently, we adopted the case study strategy to enrich the conceptual framework of the preliminary analysis. The choice of the case study strategy is also justified by the

fact that we wanted to perform an in-depth analysis that can link the problem studied to its context. Given that three sites were investigated, our case study involves a comparison of these sites (the three rural districts of the sub-prefecture of Gadouan). The case study involving intersite comparisons was adapted by D'Amboise (1996) based on the work of Yin (1984) and Eisenhardt (1989). The flexibility of this intersite comparison strategy allows constant alternation between theory, data collection and data analysis. Researchers can thus adjust the investigation based on their preliminary analyses.

The data were collected with three types of instruments: documentary research, individual interviews and group interviews (focus groups). Interviews were semi-structured. We formed one focus group per rural district with 12 women who had participated in the local development process. We thus obtained a total of 36 women for our sample. We conducted seven semi-structured interviews with women in this sample who carried out entrepreneurial activities. These interviews were intended to clarify aspects raised in the focus groups. We also interviewed 16 support officers in order to triangulate the information obtained from the women. The data corpus obtained was analyzed using the content analysis method. In the focus groups, we used causality diagrams or problem trees. The problem trees facilitate subjects' participation in the process of building of the research object. Another characteristic of problem trees is that they generate key messages that correspond to coding units, which simplify the grouping of concepts into categories. We then grouped the key messages according to the three broad dimensions of our conceptual framework of analysis. These three

dimensions were enriched and reformulated throughout the research process. The dimensions are: local planning that favors women’s participation (strategy), entrepreneurial competencies (individuals) and an area that incubates entrepreneurship (territory). We then performed a comparative analysis of these dimensions for each rural district to obtain the results for all of the rural districts.

4. Factors that favor the emergence of women’s entrepreneurship in a rural setting

The results of our investigations are presented along three dimensions in (see table 1) that provide the structure for the factors that foster the emergence of women’s entrepreneurship in a local development process in a rural setting: a planning strategy that favors women’s participation, female entrepreneurial competencies and an area that incubates women’s entrepreneurship.

Table 1: The three dimensions of emergence of women’s entrepreneurship in a rural setting

Components	Emergence factors
Dimension I- A planning strategy that favors women’s participation	
- Conduct of the process according to a gender approach	- Mobilization of women during planning sessions - Definition of microprojects by women - Consideration of women’s microprojects in development plans
- Ownership of the process by women	- Women’s abilities to lead the planning process independently - Women’s abilities to mobilize to carry out development actions
Dimension II- Women’s entrepreneurial competencies	
- Entrepreneurial opportunity	- Ability to identify business opportunities - Ability to manage one’s work

- Organizational emergence	- Ability to formulate a business mission - Ability to create and manage a business network
Dimension III- Area that incubates women's entrepreneurship	
- Financing structures - Research and development structures - Economic interest groups (EIG)	- Existence of local financing structures - Financial support for women's microenterprises - Existence of local research and development structures related to women's microenterprises - Technical support for women's microenterprises - Existence of economic interest groups - Degree of cooperation and learning within EIGs

Source: The authors

4.1. A planning strategy that favors women's participation

The interviews suggest that a planning strategy that favors women's participation should be implemented according to a gender approach, which would allow women to own it. Accordingly, the following factors that favor the emergence of women's entrepreneurship emerged from the data analysis: mobilization of women during planning sessions, definition of microprojects by women, consideration of women's microprojects in development plans, women's abilities to lead the planning process independently, and women's abilities to mobilize to carry out development actions (see table 1). The factors "mobilization of women during planning sessions" and "women's abilities to lead the planning process independently" were cited most often. They are thus the triggers of women's entrepreneurial event during the local planning process in the rural area.

The results in table 2 show that women are little motivated to engage in the participating planning and local development process in their village. However, women present at the different steps of the process could define income-generating

micro-projects. Focus group participants noted that projects defined by women were not considered in the search for financing. Further, women did not acquire the abilities to own the local participating planning process such that they could lead it themselves or mobilize to carry out other local development actions. Disagreements among the women and the lack of credibility of the presidents of women's groups are the factors that explain why the woman did not own this process.

Table 2: Results of the analysis of planning that favors women's participation

	Factors	Results
Planning that favors women's participation	Mobilization of women during planning sessions	Low attendance rate of women at local participating planning sessions Women's attendance rate decreases with each step of the local participating planning process
	Definition of microprojects by women	Women demonstrate a great interest in the step of defining microprojects during local participating planning sessions Women define the largest number of income-generating microprojects
	Consideration of women's microprojects in LDPs	More men's microprojects than women's microprojects are considered in LDP.
	Women's abilities to lead the planning process independently	Women have not acquired the ability to lead the planning process independently
	Women's ability to mobilize to carry out development actions	Women have insufficient leadership skills to mobilize on their own for development actions.

Source: The authors

This analysis indicates that developing the requisite credibility for local leadership is instrumental to bring about a collective change. Indeed, the structure that mobilizes local stakeholders must convince the women that their contribution to the process is relevant. These resources are development officers and the village chief (and his office). One development support officer that we interviewed explained that they must work on the "demarcation between political sensitivity and the economic interest...reduce this

political sensitivity relative to the economic interest.” In the current context of the Ivory Coast, we find this suggestion very pertinent. The focus group participants also claimed that: “male politicians divide us.” The support officer even referred to problematic “social cohesion.”⁴⁷ Specifically,

...when [the women] are in a group, there are still subgroups and these subgroups form according to their sensitivity, and that’s what kills the group. This social cohesion poses a problem. They form a group so as not to be categorized as a rebel who does not want to participate in a group. But they very quickly create subgroups of 3 to 4 people and suspicion arises. When suspicion arises there is a fracture, a dislocation of the group, and this is what we experience. Also sometimes the women want projects by emulation; these projects are doomed to failure. And after, suspicions, stories of fetishism surface, there you go! It’s a profound aspect (Excerpt from interview 2 with support officer 1).

Given that community ties are one of the fundamental elements of social cohesion, their erosion evidently negatively influences social cohesion. To restore this cohesion, the stakeholders must consider the aspirations of everyone involved, and enlist the participation of all of the segments of the population (women and men) in development processes. Improving individuals’ living conditions, particularly their economic outlooks, is necessary to restore social cohesion. This involves reducing regional disparities in basic infrastructures and promoting organizations such as women’s economic interest groups that support the values of cooperation.

Collectively, the women are well aware of the need for change. However, weakening social ties in women’s groups are preventing them from participating in collective

⁴⁷ “Social cohesion is defined as the state of proper functioning of society in which solidarity between individuals and the collective consciousness is expressed” (our translation of Émile Durkheim (1897), *De la division du travail social*. Paris: Les Presses universitaires de France)

actions like local development planning. This phenomenon supports Velt's (2015) assertion that "effectiveness is relational" and Vernières' (2009) claim that the intensity and nature of the relationships among diverse actors are essential. These arguments are highly applicable to community ties. Mahieu (1989) advances that a community is materialized by a network of vertical and horizontal relationships that individuals must assume. Vertical relationships follow the main characteristics of the lineage system (patriarchy, matriarchy, etc.), whereas horizontal relationships are mutual aid relations that are consistent with age classes or community groups. In the case of the sub-prefecture of Gadouan, the women generally have familial ties with one another and form community groups to help each other. This is why the real causes of disagreements are difficult to manage. The following factors currently undermine women's will to mobilize for development actions: bad experiences with development officers, disagreements within groups and lack of leadership. The actions of the series of support agencies in the sub-prefecture of Gadouan have not improved women's condition. The women sometimes feel like they are "wasting their time. One respondent argued that "we want things to change but no one can help us. The ANADER people have come here; they always do the same thing and nothing changes" (Excerpt 2 from focus group discussions in Gadouan).

The social structure of traditional society of the sub-prefecture of Gadouan marginalizes the women. Women do not have the right to speak deliberately in public. As a result, they internalize a type of "inferiority complex" that reduces their participation when they are asked to speak during various steps of local participating planning. As one

support officer explains:

Concerning specifically the women you are studying, first, it is the sociological problem. Because when we do diagnoses, the first thing we notice, and it is striking, is simply see how the women are sitting: it indicates that women in rural areas are pleased with the position they occupy...you don't see a woman who will personally commit to sitting at the front. That is to say in rural areas when there is a meeting they must sit in the back... (Excerpt from interview with support officer 2).

Therefore, we can conclude that if women do not manage to “take their place” in the local development process, it is not because the process does not consider gender aspects. Rather, women are “embedded” in a system of values and norms at the social level that deters them from taking the initiative to carry out development actions. According to the support officers, correcting this situation would require long-term awareness-raising. In fact, local participating planning was part of a three-year national support program (2005 to 2007). This program was then extended for three more years (2008 to 2010). Local development plans (LDP) of the three rural districts of the sub-prefecture of Gadouan were updated in 2008, and the various projects were renewed for three more years (2008 to 2010). The support officers explained that the three-year programming of local participating planning was insufficient to allow populations, especially women, to own this process. In other words, this duration did not allow support officers to enable populations to maintain the process without external support. The three structural elements at play are the duration of initiatives, failure to honor promises and a lack of financial resources.

4.2. Women's entrepreneurial competencies

In the local development process of Gadouan, implementation of a planning strategy

that favors women’s participation to foster the female entrepreneurial event also entails development of women’s entrepreneurial competencies. The data analysis indicates that when women perceive an entrepreneurial opportunity, they try to create an organizational structure in the form of a microenterprise. To do so, they must develop the following abilities: to identify business opportunities, to manage work, to formulate a business vision and to create and manage a business network (see table 1). The focus group discussions suggest that rural women have a “natural ability” to form groups and work in networks. This natural ability thus suggests that the female entrepreneurial competencies dimension is pivotal to the emergence of women’s microenterprises. The results obtained in table 3 indicate that overall, the emergence factors of the female entrepreneurial competencies dimension have not been fulfilled in the local participating planning process, for all three rural districts we studied.

Table 3: Results of the analysis of women’s entrepreneurial competencies

	Factors	Results
Women’s entrepreneurial competencies	Ability to identify business opportunities	Weak motivation among women to identify business opportunities
		Lack of female leadership
		Social expectations and cultural norms inhibit women’s will to identify business opportunities
		Tools of the local participating planning process are not mastered by the women
	Ability to manage work	A high illiteracy rate among women (39% for our target group) complicates their use of management tools
		Several difficulties impede women’s teamwork
	Ability to formulate a business vision	Women have a clear vision of why they create a business. Even if they operate mainly in the informal sector, the outcome of their action is to contribute to improving their living conditions.
	Ability to create and manage a business network	Women create their networks through economic interest groups. Yet the functioning of these groups is hampered by misunderstandings, lack of confidence, disputes, and manipulation by male politicians.

Source: The authors

For the factor Ability to identify business opportunities, women in all three focus groups claimed that they lack motivation and leadership to identify business opportunities. They consequently did not apply the tools given to them during the implementation of the local participating planning process. In addition, the women reported that social expectations and cultural norms inhibited their will to identify business opportunities. For the factor Ability to manage work, a high illiteracy rate prevents the women from managing work well, especially work in groups.

Concerning the factor Ability to formulate a business vision, the women have a clear vision of why they create microenterprises. Even if they operate mainly in the “informal” sector, the outcome of their action is that it contributes to improving their living conditions. Lastly, for Ability to create and manage a business network, the women create their networks through economic interest groups. Yet the functioning of these economic interest groups is hindered by misunderstandings, lack of confidence, disputes, manipulation by male politicians, and other difficulties.

An in-depth analysis of the results of the emergence factors of the female entrepreneurial competencies dimension suggests that if the factors of this dimension were not satisfied during local participating planning for the three rural districts, it is not because the women lack entrepreneurial competencies. They have built these competencies through networks. They have also acquired them during the implementation of local participating planning. Analysis of the female entrepreneurial competencies dimension shows that habits and customs, culture and men caused sapped the Gadouan women’s motivation to apply their abilities to identify business

opportunities. In addition, a lack of leadership prevents these women from taking the initiative, formulating a business vision and making plans for the future. Misunderstandings exist in work groups and other economic interest groups. This does not favor good management of income-generating activities and of business networks. Women's illiteracy also prevents them from successfully engaging in income-generating activities. Accordingly, Assié-Lumumba (1996) and Touré-Diabaté (2010) point out that the introduction of school into traditional Ivorian society created a disadvantage for women, and that despite new knowledge acquired at school, Ivorian women remain in the traditional role of spouse and mother, and cannot explore new possibilities. The combined effects of traditional society and the colonial system ultimately gave women a sense of frustration, domination and inferiority. Women's resulting new representation of themselves does not favor their social integration in a rural setting. Their mentality thus paralyzes their sense of initiative; they no longer act in their own interest. Today, Ivorian women, and African women in general, act in the interest of their household, whose stability they are supposed to ensure, even in modern society (Assié-Lumumba, 1996). In addition, the cultural approach to women's entrepreneurship states that cultural and social factors maintain stereotypes and generate gender differences to the detriment of women in the entrepreneurial approach (Eagly et. al, 1995). Amrhar (2001) contends that women entrepreneurs do not respond passively to the discrimination they experience in their social group. Social and economic structures define the image and role of women in society. Women entrepreneurs redefine this image by working on the mentality of those in their social

circle. However, we noticed that women have remained passive regarding the discrimination that prevents them from applying their entrepreneurial competencies. The competency approach (Sen, 2003; Nussbaum, 2008) can explain why focus group participants could not transform their potential abilities into real abilities to acquire entrepreneurial competencies. The main causes are a set of social and cultural constraints.

4.3. Area that incubates women's entrepreneurship

The area that incubates women's entrepreneurship is the third dimension of the emergence factors issuing from our investigations. These emergence factors of entrepreneurship refer to the existence and effective functioning of various local structures. Focus group data indicate that these factors are mainly the financing structures of women's microenterprises, research and development, and economic interest groups. Cooperation and learning occur primarily within EIG (see table 1). The women have clearly recognized the importance of the degree of trust and cooperation in their economic interest groups. They have formed EIG based on their trust in one another. Working together also lets them learn from each other. They can thus improve their practices and engage in new activities.

In Table 4, the results concerning the emergence factors of the dimension area that incubates women's entrepreneurship indicate that there are no financing structures or research and development structures for women's microenterprises in the three rural districts. The women thus lacked technical and financial support to create and manage microenterprises at the institutional level.

Table 4: Results of the analysis for area that incubates entrepreneurship dimension

	Emergence factors	Results
Area that incubates women's entrepreneurship	Existence of local financing structures for women's microenterprises	No local structures dedicated mainly to financing women's microenterprises in the sub-prefecture of Gadouan
	Financial support for women's microenterprises	Women micro-entrepreneurs have no institutional financial support
	Existence of local research and development structures for women's microenterprises	No local structures dedicated primarily to research on women's microenterprises in the sub-prefecture of Gadouan
	Technical support for women's microenterprises	Women micro-entrepreneurs have no institutional technical support
	Existence of economic interest groups	EIGs exist in the sub-prefecture of Gadouan. Seven economic interest groups were noted in 2004 by the ANADER officers
	Degree of cooperation and learning in economic interest groups	Cooperation between women favors learning in EIG. Yet difficulties in managing economic interest groups hinder cooperation and learning.

Source: The authors

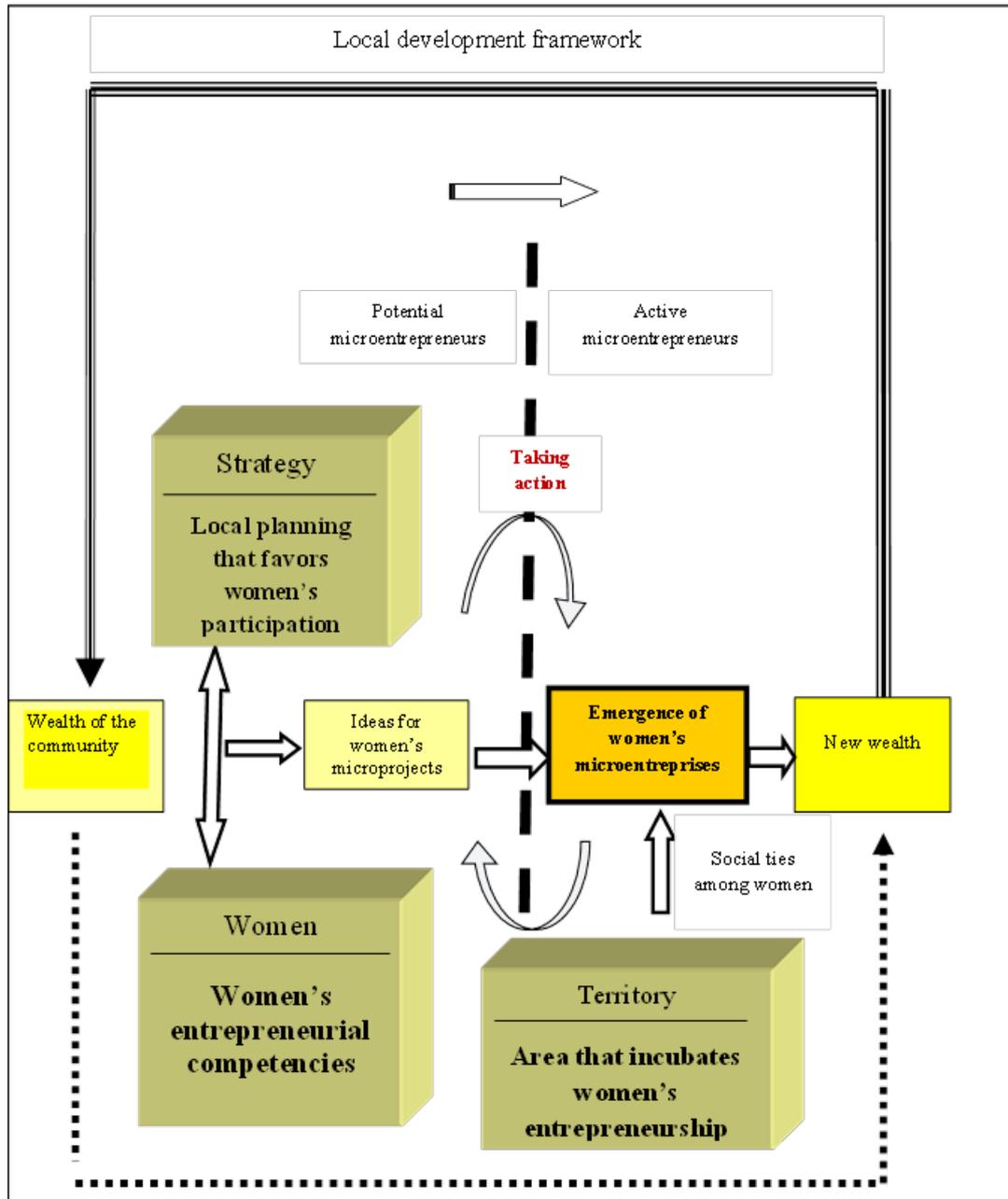
For all three of the rural districts we studied, an area that incubates women's entrepreneurship is limited to the presence of economic interest groups.

It is mainly within EIG that the women of the three rural districts find the financial and technical support they need. Management difficulties within EIG impede cooperation and learning. Local development initiatives in the Ivory Coast are generally funded based on contractual procedures between the state, local communities and international donors. Therefore, within the local participating planning initiated by the Ivorian National agency to support rural development (ANADER), financial support is provided mainly by the National territorial management program (PNGTER), which, with help from the World Bank, finances micro-projects planned according to a participating

approach. For this financing, populations that are project “leaders” are asked to make a financial contribution through a share (5% of financial participation for social projects and 10% for economic projects). To be granted financing from the PNGTER, micro-projects integrated in a local development plan (LDP) must be approved by a sub-prefectural accreditation committee (CSPA). In the rural district of Bidiahouan, the woman-led microproject “installation of a food processing unit” could not be executed because the women could not pay their share of 880,000 FCFA (about \$1,760). Therefore, for the women of the three rural districts of the sub-prefecture of Gadouan, the dimension area that incubates women’s entrepreneurship is limited to the presence of economic interest groups. It is generally within these groups that the women find the technical and financial support they need to carry out their income-generating activities. However, these groups sometimes dissolve due to disagreements among the members. These results highlight the characteristics of rural Ivory Coast: under equipment of infrastructures, dependence on community groups and personalization of social relations that facilitate mutual aid and cooperation. In this sense, Blanc (1997:8) states that “the more belonging to the network constitutes a specific resource that cannot be found elsewhere, the more people tend to conform to the general interest.” In addition, given that the small size of the agglomeration favors the interpenetration of different social fields like the family and economic activities, paternalistic management of economic activities may ensue. Indeed, this was observed in the women’s economic interest groups in the sub-prefecture of Gadouan, where loans from tontines (rotating saving) are not always repaid. This creates disagreements that impede the effectiveness

of the groups. The results of our field investigations are presented in figure 2 in the form of a schematic representation. This figure underscores the results obtained from the observations, interviews and analyses of our empirical data.

Figure 2: Emergence factors of women's entrepreneurship in a rural setting



Source: The authors

Figure 2 suggests that, to foster and develop women's microenterprises, local planning should be implemented that favors women's participation to encourage women to own the local development process. Women's involvement in all steps of the planning process would allow them to develop entrepreneurial competencies. They would thus be better equipped to participate in the local planning process (e.g. by providing feedback). Their involvement in the process could contribute ideas for microprojects that take concrete form in women's microenterprises. The development of women's microenterprises effectively enriches the community's wealth. However, to achieve this impact, women's microenterprises must be able to evolve in an incubator territory of women's entrepreneurship, that is a territory that supports women's microenterprises financially and technically.

5. Discussion

In this section, we explain our research results according to three main approaches: gender and development, the capacities approach and the territorial approach to entrepreneurship.

5.1. Gender and development approach

Feminists have put forth the gender and development (GAD) approach to account for women's subordination in development projects. This approach attributes the subordination of women to the sexual division of labor, in other words the subordination of the sphere of reproduction to that of production (Degrave & Bähr Caballero, 2006). This approach is borne out by our findings because if the women of

the sub-prefecture of Gadouan do not mobilize enough for development actions, and their micro-projects are not sufficiently considered in development plans, it is because they live in a patriarchal society that is male-dominated and that differentiates male and female roles. The GAD approach thus proposes to transform gender relations to ensure women's full participation in development projects. However, several years after the introduction of the concept of gender in development policies, gender relations have not really transformed. In fact, authors like Degraeve and Bähr Caballero (2006) suggest that we should seek another way to integrate women in development. Note here that gender relations refer to hierarchical, hence vertical, relations. Several authors explain that the division of labor plays an important role in maintaining social ties. Social ties are construed here as horizontal relations that allow the sharing of information, knowledge and abilities.

5.2. Territorial approach to entrepreneurship

The territorial approach to entrepreneurship states that interactions between individuals and structures generate collective productive dynamics. Our research shows that in the case of the sub-prefecture of Gadouan, it is within economic interest groups (EIG) that women form the type of relationship that generates collective productive dynamics. One of the micro-entrepreneurs interviewed mentioned that "I myself have trained other women to be able to prepare the "chapalo" (the local maize bier) for sale. At first, I was the only one doing this activity. But with the women I trained we are now nearly a dozen who do this."

5.3. Capacity-based approach

The analysis of the research results shows that women in the three rural districts of Gadouan have acquired “potential entrepreneurial competencies” thanks to local participating planning tools, but these competencies could not be transformed into “real entrepreneurial competencies.” The women thus identified a set of social, economic and cultural constraints that hinder this transformation: customs and traditions, lack of local opportunities, illiteracy, etc. The capacity-based approach indeed explains that social, cultural and economic constraints influence individuals’ freedom of choice. In addition, the cultural approach to women’s entrepreneurship asserts that cultural and social factors maintain stereotypes and generate gender differences that create a disadvantage for women in the entrepreneurial process (Eagly et al, 1995 and Amrhar, 2001). In this respect, Assié-Lumumba, (1996) and Touré-Diabaté (2010) contend that cultural and social factors constrain Ivorian women to their traditional role of spouse and mother, and prevent them from exploring new entrepreneurial possibilities to alleviate their poverty. In fact, the capacity-based approach emphasizes people, and strives to empower them to make the life choices that they want for themselves and others.

5.4. Generalization

The question here is whether the problem that has aroused from this research and the interpretations we have made of our results are equally applicable to any rural territory. Let us recall that our study consisted of a case study. Leplat (2002) argues that the case study has dual goals. First, to solve the singular problem that the case deals with and second, to use of the study of the case to the constitution of an organized corpus of

constitution of knowledge that may facilitate the study other cases. Therefore, the use of the knowledge produced by a case to study other cases is part of a process of generalization. This allows the research to constitute or enrich a body of knowledge transmissible and useful for the study of other cases. The results of our research could serve as a basis for further studies on the same phenomenon and if confirmed could be considered valid for all the women of the rural territories who implement a process of local development. In this respect, the results of our research contribute to the understanding of the role of women in the emergence of entrepreneurship in the processes of local development in rural areas. Female entrepreneurship thus becomes a factor of local development. The factors of the emergence of female entrepreneurship that have been updated in the conceptual framework of this research could then be used to construct a theoretical object linked to the emergence of entrepreneurship in the processes of local development in rural areas.

6. Conclusion

After completing this research on the emergence factors of women's entrepreneurship, we can conclude that within a local development process in a rural setting, emergence factors are structured around three main dimensions: local planning that favors women's participation, women's entrepreneurial competencies and an incubator setting for women's entrepreneurship. These dimensions should be combined to foster women's entrepreneurship in local development processes in rural areas in the current context of the decentralization policy that promotes local development in the Ivory

Coast. In the sub-prefecture of Gadouan, we have seen that women are not effectively involved in all steps of local participating planning; their entrepreneurial competencies remain in the “potential capacity” state and their setting does not offer them the technical and financial support they need to create income-generating activities. It is generally within their economic interest groups that women find such support. However, the weakening of social ties in economic interest groups hinders the development of women’s income-generating activities. Indeed, the territorial approach to entrepreneurship asserts that it is the link between businesses and institutions, situated within a territorial production system, that can generate collective productive dynamics. This is why it is important to reinforce social ties in women’s economic interest groups to make them a truly effective instrument that can capture the linkages between economic dynamics (woman-driven) and the territory. These economic interest groups may then become a new instrument for effective integration of women in local development in rural areas.

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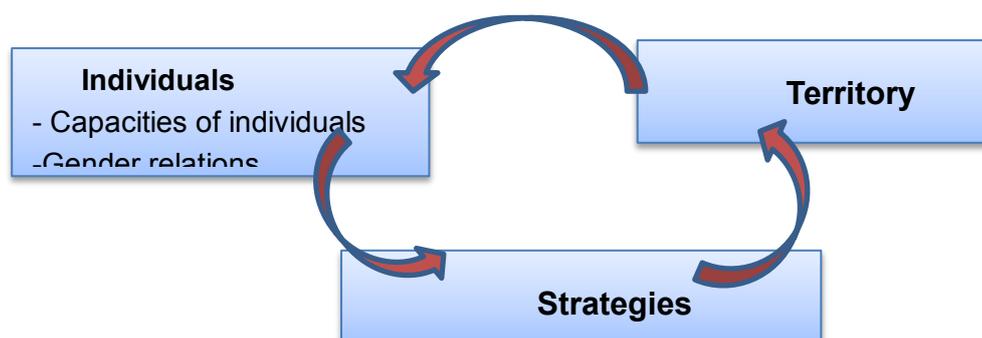
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Appendices

Figure 1: Formulation of a preliminary conceptual framework



Source: The authors

Table 1: The three dimensions of emergence of women's entrepreneurship in a rural setting

Components	Emergence factors
Dimension I- A planning strategy that favors women's participation	
- Conduct of the process according to a gender approach	- Mobilization of women during planning sessions - Definition of microprojects by women - Consideration of women's microprojects in development plans
- Ownership of the process by women	- Women's abilities to lead the planning process independently - Women's abilities to mobilize to carry out development actions
Dimension II- Women's entrepreneurial competencies	
- Entrepreneurial opportunity	- Ability to identify business opportunities - Ability to manage one's work
- Organizational emergence	- Ability to formulate a business mission - Ability to create and manage a business network
Dimension III- Area that incubates women's entrepreneurship	
- Financing structures	- Existence of local financing structures - Financial support for women's microenterprises
- Research and development structures	- Existence of local research and development structures related to women's microenterprises
- Economic interest groups (EIG)	- Technical support for women's microenterprises - Existence of economic interest groups - Degree of cooperation and learning within EIGs

Source: The authors

Table 2: Results of the analysis of planning that favors women's participation

	Factors	Results
Planning that favors women's participation	Mobilization of women during planning sessions	Low attendance rate of women at local participating planning sessions
		Women's attendance rate decreases with each step of the local participating planning process
	Definition of microprojects by women	Women demonstrate a great interest in the step of defining microprojects during local participating planning sessions
		Women define the largest number of income-generating microprojects
	Consideration of women's microprojects in LDPs	More men's microprojects than women's microprojects are considered in LDP.
	Women's abilities to lead the planning process independently	Women have not acquired the ability to lead the planning process independently
Women's ability to mobilize to carry out development actions	Women have insufficient leadership skills to mobilize on their own for development actions.	

Source: The authors

Table 3: Results of the analysis of women's entrepreneurial competencies

	Factors	Results
Women's entrepreneurial competencies	Ability to identify business opportunities	Weak motivation among women to identify business opportunities
		Lack of female leadership
		Social expectations and cultural norms inhibit women's will to identify business opportunities
		Tools of the local participating planning process are not mastered by the women
	Ability to manage work	A high illiteracy rate among women (39% for our target group) complicates their use of management tools
		Several difficulties impede women's teamwork
	Ability to formulate a business vision	Women have a clear vision of why they create a business. Even if they operate mainly in the informal sector, the outcome of their action is to contribute to improving their living conditions.
Ability to create and manage a business network	Women create their networks through economic interest groups. Yet the functioning of these groups is hampered by misunderstandings, lack of confidence, disputes, and manipulation by male politicians.	

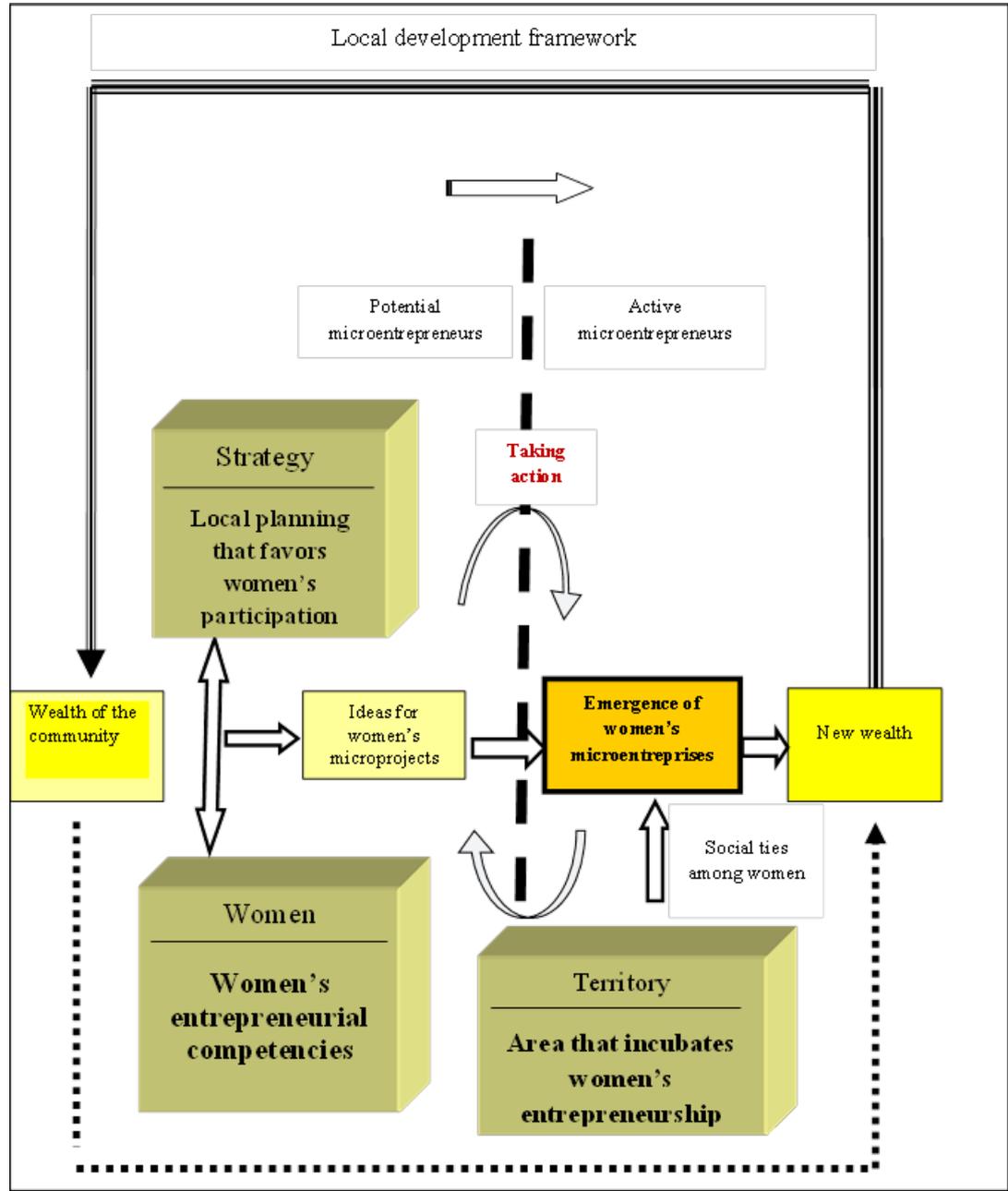
Source: The authors

Table 4: Results of the analysis for area that incubates entrepreneurship dimension

	Emergence factors	Results
Area that incubates women's entrepreneurship	Existence of local financing structures for women's microenterprises	No local structures dedicated mainly to financing women's microenterprises in the sub-prefecture of Gadouan
	Financial support for women's microenterprises	Women micro-entrepreneurs have no institutional financial support
	Existence of local research and development structures for women's microenterprises	No local structures dedicated primarily to research on women's microenterprises in the sub-prefecture of Gadouan
	Technical support for women's microenterprises	Women micro-entrepreneurs have no institutional technical support
	Existence of economic interest groups	EIGs exist in the sub-prefecture of Gadouan. Seven economic interest groups were noted in 2004 by the ANADER officers
	Degree of cooperation and learning in economic interest groups	Cooperation between women favors learning in EIG. Yet difficulties in managing economic interest groups hinder cooperation and learning.

Source: The authors

Figure 2: Emergence factors of women’s entrepreneurship in a rural setting



Source: The authors

EMPLOYEE RESOURCE GROUPS IN THE WORKPLACE:
THEIR PREVALENCE, COMPOSITION, AND
CONCERNS⁴⁸

Employee resource groups (ERGs) in the U.S. are voluntary employee-led groups that are created to act as a resource for both employees and the organization and to foster a more inclusive and diverse work environment. These originated with the Black Caucus group at Xerox and have since spread to encompass a wide range of groups representing diverse social identities (Scully, 2009). ERGs can serve as a form of intrafirm employee voice (Freeman & Rogers, 1999) for employees belonging to different demographics and life stages. Our 3 purposes in this paper are to investigate the prevalence, composition, and nature of ERGs, because they are a phenomenon of broad interest for research on inclusion and voice. Further study – and debate about ERG efficacy as a representation form – can proceed meaningfully once this empirical baseline is established. Future exploration of ERGs beyond the U.S., in both multinational and domestic organizations, will also widen the lens of collective voice mechanisms.

Employee voice and ERGs

The willing contribution of employee efforts in the workplace as well as the continued legitimation of employer authority hinges on the perception that the conditions of work for employees, in terms of pay, work allocation, promotion, and other factors are essentially fair (Greenberg, 1990; Weber, 1946). Employees are likely to exercise their “voice,” and of most interest some form of collective voice, in response to conditions perceived as unfair (Hirschmann, 1970).

Collective voice was historically provided through unions in the U.S., until union density in the U.S. dropped markedly, from 30% in 1970 to 23% in 1980 to 16% in 1988 to 11.5% in 1993⁴⁹. These figures dropped further. In 2008, looking at the top 50 companies in the Fortune 100, only 5 reported having a majority of their employees covered by a collective bargaining agreement - AT&T, Ford, General Motors, Kroger, and UPS. Another 4 had 11%

⁴⁸ The authors give special thanks to Shaobo Hu for her role in data collection

⁴⁹ Data obtained from the OECD website at <https://stats.oecd.org/Index.aspx?DataSetCode=TUD>
extracted 06 September 2018

or more covered: Verizon (40%), Boeing (36%), General Electric (15%), and Costco (11%).(Scully, Krishnamurthy, & Carberry, 2018)

“Our major claim is that the decline of private sector unionism in the U.S. and lack of an alternative formal mechanism for collective voice has created a representation gap in firms that is harmful to the nation’s economic progress and social well-being. We show that most American workers, and some leading business analysts and managers, favor new forms of intrafirm representation.
(Freeman & Rogers, 1999)

Employee Resource Groups (ERGs), also called Employee Affinity Groups, Employee Caucuses, Business Resource Groups, Employee Forums or less commonly Employee Networks, are one form of intrafirm employee voice. ERGs are formally established communities of employees within a corporation organized around common identities, interests, circumstances or goals to facilitate a more inclusive work environment and foster equal opportunities within an organization(Hyde, 1993; Scully & Segal, 2002; Welbourne, Rolf, & Schlachter, 2015). They are voluntary, employee-led groups that may have between a few members to a few thousand.

ERGs had their origins in the American Civil Rights Movement, with one of the first prominent roles being taken by Xerox (Douglas, 2008; Scully, 2009), with a number of affinity groups forming around race and gender in the 1970s and 1980s (Arnold, 2006). The issues during the rise of early ERGs were classic workplace equity issues: work allocation, pay, opportunity, and fairness. Following the implementation of new legislation, there was concern to hire and promote women and people of color, particularly African Americans, in a transparent and equitable way. These issues were pertinent in organization studies as part of “bringing the firms back in” to the study of economic stratification(Baron & Bielby, 1980). Wage equality was often center stage.

Contemporary ERGs tend to tackle collective concerns about the workplace opportunity structure as well as other more individualistic issues, for instance career paths to leadership. They also focus on reaching outside ERG boundaries andcelebrating cultural diversity. Social identity based employee groups may track political activism and legislation on the dimensions of race, ethnicity, gender, LGBTQ, religion, disability, age – any of the dimensions protected by the Equal Employment Opportunity Commission. The consideration of the Employment Non-Discrimination Act by the U.S. Congress in 1999 sparked attention to LGBTQ rights in the workplace. The legislation did not pass, but the simultaneous rise of LGBTQ ERGs sustained the issue inside organizations. Issues of belonging and stigma were tackled by newly forming ERGs on the dimensions of sexual orientation, religion, and disability.

ERGs have been featured within the organization literature – in terms of promoting careers(Friedman, Kane, & Cornfield, 1998; Wilson, 2012), at the intersection of organizations and social movements(Creed, Scully, & Austin, 2002; Scully & Segal, 2002) and in terms of their role in diversity management practices(Welbourne & MacLaughlin, 2013). Their prominence comes during a period when unionized jobs grow increasingly displaced, with a parallel decline in union membership and participation (Friedman & Craig, 2004; Hyde, 1993). ERGs operate outside the realm of collective bargaining laws and have a different composition than unions, raising questions about their efficacy for

collective representation (Briscoe & Safford, 2010). The labor movement was historically focused more on wages than on social identities and inclusion, although recent union successes have relied on building bridges across a diverse workforce (Kurtz, 2002).

There is debate about whether ERGs provide discursive cover, opportunity structures, and resources that permit employees to pursue “radical” changes from inside their companies (Scully & Segal, 2002) or serve a “cooling out” function that binds people from marginalized groups more fully to corporate strategy and distracts attention away from what were once the economic imperatives of unions (Briscoe & Safford, 2010; Heckscher & Carré, 2006). It is possible that ERGs function as both, with challenges for tempered radicalism (Meyerson & Scully, 1995) and passive revolution (Morton, 2010) lying in the border spaces of at once provoking change and fitting in.

There are several questions about the nature of ERGs that form the starting point for our investigation. Have ERGs proliferated as an infirm representation form? What social identity groups are using the ERG form, and are new and intersectional social identity groups arising? This “rainbow coalition” of groups may have synergies as well as tensions among them, but who is in the rainbow? (Scully, 2009) Further, what kinds of themes are explicitly touted when companies make their ERGs publicly visible?

These questions set the stage for digging further into the efficacy of ERGs as vehicles for collective voice and for change to remedy perceived unfairness regarding work conditions and the legitimacy of the employment relationship. While these larger questions anchor the significance of studying ERGs, the debate is an interpretive matter that is difficult to settle. And the antecedent questions for any effort to “change your company from the inside out” – questions of what, who, when, how – are important to establish first regarding ERGs (Davis & White, 2015).

Research Questions

Our 3 purposes in this paper are to investigate the prevalence, composition, and nature of ERGs, because they are a phenomenon of broader interest. Further study – and debate about ERG efficacy as a representation form – can proceed meaningfully once this empirical baseline is established.

1. What is the prevalence of ERGs in corporations?
2. What social identity groups are represented among ERGs?
3. What are the concerns of ERGs – what are their missions and discursive themes?

Data Collection

We use the Fortune 100 as our sample, because they have long been tracked to understand union density, and they are an important place to look for alternative forms of employee representation. The Fortune 100 companies are influential models. The appearance (or not) of ERGs across the Fortune 100 speaks to their legitimacy as a form of employee representation, as well as their likely adoption across the economy. We scan the website of each company listed in the 2015 Fortune 100 for evidence of the existence, composition, and nature of ERGs.

This method is appropriate because:

- Companies are likely to tout ERGs on their website as a recruitment and/or public relations tool.

- These companies have the resources to maintain their websites as accurate reflections of corporate image, values, and activities.

There are some potential concerns with this method. We might incur Type 1 (false negative) or Type 2 (false positive) results from website scans, that is:

Type 1: ERGs exist but are not touted on the website

Type 2: ERGs are touted on the website but are dormant

However, a Fortune 100 company’s willingness to tout ERGs on a website gives a good starting measure of their prevalence. The potential errors do not compromise our first order investigation of ERGs’ existence and visibility as a new form of employee representation.

Data Analysis

To answer the first two research questions, on prevalence and composition, we created a data sheet with all the types of ERGs found for each Fortune 100 company, with 0/1 indicators in each cell.

To address the third research question, about the concerns and thematic content of the ERGs, we captured all the text that was included on all the websites to create a composite text file, which we analyzed with NVivo. Thus, we are treating the domain of ERGs as one discursive space, with themes of varying type and occurrence. Using NVivo, we coded across 17 nodes with 533 references in total, with the coded text covering 57% of the textual content across all the websites

Our starting themes, shown in Table 1, for the NVivo analysis came from an industry conference on best practices for ERGs held in October 2016(Dr. Robert Rodriguez Advisors, 2018) (Rodriquez). We coded for four themes on the “dashboard” used by a consulting company specializing in ERGs: Career, Commerce, Community, and Culture. To these, we added two of interest to our employee representation investigation: Change and Collective Action. While we did expect that the latter two might be less prevalent, were interested to detect any prose that indicated concerns for issues like advocacy, social movement linkages, and policy changes.

Table 1
Employee Resource Groups – Coding Sheet for Themes

Main Theme	Subcodes
Career	Opportunity/Advancement
	Equality/Fairness
	Leadership/Development
	Networking
Commerce	Talent Retention
	Assisting Corporate Strategy/Objectives/Mission /Success
Culture	Multicultural Celebration
	Support/Connection
Community	Inclusion
	Volunteer Projects/Outreach
	CSR Reporting
Collective Action	Advocacy
	Social Movement Participation
	Awareness/Education
Change	Policy Change
	Social Cause Funding

Findings

Prevalence

We found that 74% of Fortune 100 companies have one or more ERGs, This finding shows a significant extent of the influential Fortune 100 implementing ERGs.

We were interested in how the 74 were differentiated from the other 26. Were particular industries more likely to have ERGs? We turned to a finer-grained analysis of the Standard Industrial Code (SIC) numbers for the industries in the Fortune 100. See Table 2 for our findings on ERGs by industry.

Table 2
Employee Resource Groups by industry

Companies with ERGs	Companies without ERGs
TOTAL - 74	
Aerospace	
2	1
Automotive	
2	0
Aviation	
2	1
Banking, Financial	
18	2
Chemicals	
2	0
Conglomerate	
5	2
Courier	
2	0
Food and Beverages	
4	2
Healthcare and Pharmaceuticals	
11	3
Heavy Equipment	
2	0
Household and Personal Care	
1	0
Information Technology	
6	2
Mass Media/Entertainment	
2	1
Oil and Gas	
4	8
Retail	
8	4
Telecommunications	
3	0

In the industries with the SIC code 2911 – corresponding to Petroleum Refining – only one of five companies (ExxonMobil) had ERGs. Neither of the companies corresponding to SIC code 4922, gas pipelines, had ERGs. The industries with SIC code numbers beginning with 50 and 51 – corresponding to wholesale trade in Durable and Nondurable Goods – were devoid of ERGs, with the exception of Archer Daniels Midland with its single ERG

for women. These wholesalers dealt in fields including Computing and Electronic Parts (Ingram Micro), Healthcare and Pharmaceuticals (Amerisource Bergen), Food and Beverage Distribution (Sysco, Archer Daniels Midland, CHS) and Petroleum Products (World Fuel Services). To interpret these patterns, we offer two factors. Business-to-business (B2B) transacting companies appear to have fewer ERGs. Inasmuch as ERGs paint a positive reputation for a company in an era in which diversity and inclusion are widely touted as values, that may be less of a consideration for B2B companies that are not courting the wider public... In addition, some of the traditional energy, construction, or wholesale companies that do not have ERGs are among those few that retain an active union presence. Future research could examine more closely whether ERGs and unions operate as substitutes, as Freeman and Rogers (1999) suggested.

Composition

We explored which social identity groups, including those explicitly protected by equal opportunity law and those that we discovered and logged during our study, have formed ERGs. We find representation of all the social identity groups protected under employment non-discrimination law, as shown in Table 3.

Table 3
Representation of historically excluded groups

Groups (alphabetically by social identity group)	# of companies with 1 or more ERGs for this group
African American	64
Asian American	62
Disabled	47
Elder Employees	5
Hispanic American	62
LGBTQ	70
Native American	17
Religious	10
Women	70

We also find three additional social identities represented, whose membership is broad and intersectional across other social identities, as shown in Table 4. These groups are of particular interest in that they are explicitly “intersectional” – inviting and drawing membership from across the identities in the above table.

Table 4
Representation by additional social identity groups

Groups (alphabetically by social identity group)	# of companies with one or more ERGs for this group
Caregivers, Working Parents	26
Veterans	62
Young Employees/Millennials	26

Concerns

To provide a flavor for the textual analysis, we share some of the mission statements and language that appear on ERG websites as well as how each passage was coded. From the available data, ERGs are prevalent and varied in the 2015 Fortune 100 companies, and they often have explicit “Mission Statements”. Sample mission statements include –

- **Intel:** “Intel strives to provide an environment where employees from diverse backgrounds are valued, respected, challenged, acknowledged, and rewarded so they can achieve their potential and fulfill their career aspirations...”
- **Fannie Mae:** “Ten different Employee Resource Groups—including African American, LGBT, Indians in the U.S., Christian, Young Professionals, and Muslim—offer employees of all backgrounds and interests a chance to connect, learn, and grow as we support Fannie Mae's important work.”
- **Lockheed Martin:** “Lockheed Martin offers Leadership Forums, Employee Resources Groups and Employee Networks to support employees and promote a diverse and inclusive environment.”

Mission statements may vary – using the subcodes in Table 1, we see that the statements fall in different categories depending on the emphasis of the ERG in question. For instance –

“Our mission is to facilitate personal growth and professional advancement of employees of Asian origin, and raise awareness of Asian cultures to enhance effectiveness when working with employees of Asian origin or with business partners in Asia.” (Subcode: Opportunity/ Advancement)

“Whether you want to share your cultural heritage, develop your leadership skills, have a positive impact in the community or gain significant exposure to our company leaders, the Hispanic Forum offers ample opportunities to do this and so much more. We proudly foster an environment of functional excellence, performance, meritocracy and inclusiveness. Our leadership team and members work together demonstrating GE’s strong commitment to diversity.” (Subcode: Leadership/ Development)

“To counter the stereotypes and misinformation surrounding Islam and Muslims, PEACE fosters an environment of awareness, understanding and education through lunch-and-learns, informational booths and participation in community activities.” (Subcode: Awareness/ Education)

From our thematic coding analysis, we found that the career themes strongly predominated followed by commerce themes, as shown in Table 5. Themes regarding collective action and change were few, but not absent. In particular, awareness and education appear. These issues are fundamental for more newly arising ERGs making a case for their consideration as a group and alerting others to their issues and needs.

Table 5
Themes that appear in ERG website discourse

Main Theme	Subcodes	Occurrence
Career	Opportunity/Advancement	75
	Equality/Fairness	14
	Leadership/Development	54

	Networking	29
Commerce	Talent Retention	45
	Assisting Corporate Strategy/Objectives/Mission /Success	98
Culture	Multicultural Celebration	18
	Support/Connection	38
Community	Inclusion	48
	Volunteer Projects/Outreach	34
	CSR Reporting	0
Collective Action	Advocacy	23
	Social Movement Participation	1
	Awareness/Education	40
Change	Policy Change	7
	Social Cause Funding	0
	Small Wins	1

We were interested in how these themes might vary across the different ERGs. Using the matrix function in NVivo, we cross-tabulated the themes and eight of the ERG groups. From this analysis, we observe the following patterns.

- Development and Leadership is the most recurrent theme for African American, Asian, Latino, Women’s, and Young/Millennial ERGs.
- Inclusion is most prominent for LGBTQ ERGs, followed by Equality / Fairness and Advocacy.
- Awareness is most prominent for Disability ERGs.
- Support and Community appears most for Veterans ERGs.

From these patterns, we propose that the groups formed in the 1970s and 1980s at the height of the civil rights movement and the implementation of new Equal Employment Opportunity laws in the U.S. – specifically, the African American, Asian, Latino, and women’s groups – have tackled many of the initial wage and opportunity equality problems. What is now termed “second generation discrimination” has made these problems more subtle than in the early days of lobbying for “equal pay for equal work.” Abundant scholarship considers the culturally embedded practices and unconscious biases that cause inequities along these social identity dimensions to persist. Having done some of the early lobbying to get their place at the table, these groups are now focused on getting representation at the top. Leadership development is a priority, for the ERGs, and sometimes also for organizations that want to demonstrate good numbers. Interestingly, one of the newer groups, the young/millennial group, also has a career advancement focus, reflecting a spirit of individualism rather than collective action. In contrast, groups based on the LGBTQ, disability, and veterans social identities are newer to emerge and appear still to be legitimating their inclusion. Thus, their focus is on belonging, awareness, and support. These patterns open up directions for future research.

Discussion and Directions for Future Research

In summary, this paper provides a straightforward sketch of our early findings from a probe

into the prevalence, composition, and concerns of ERGs. We are continuing our analyses and interpretations. the findings thus far, we are able to assess the following :

1) Prominence: ERGs are prominent on the Fortune 100 landscape, with 74% of Fortune 100 companies having 1 or more ERGs and on average.

2) Composition: New intersectional social identities – Caregivers, Veterans, and Young/Millennials – are now in the mix, along with the EEOC protected groups, and warrant further study.

3) Concerns – Mission and nature: When asking the question, “Are ERGs a form of intrafirm employee representation?” we observe that the formal, website-located discourse is quite corporate for all ERGs. The older and experienced ERGs are focusing on ascending to leadership. The newer groups are legitimating their inclusion and building awareness of what their groups need in order to be equitably part of the opportunity structure, particularly providing information regarding often hidden dimensions of social identity.

Overall, these data lead us to question whether a more radical edge is hard for ERGs to sustain once the founding goals of awareness and inclusion are attained, and leaves us to explore if there is a consistent drift toward individualistic careerism.

Given the decline of unions, we do not yet have data clear understanding of whether ERGs, in focusing on advancement and careers, are poised to pursue the wage goals once pursued by U.S. unions and consider this a viable open area for future research. We also note, significantly, the obvious absence of class as a social identity dimension among ERGs, in contrast to unions. ERGs have also demonstrated a level of alignment with corporate strategy. More research is necessary to discover whether this type of discourse serves as a clever cover that ERG members can use to pursue more radical goals, or a mechanism by which management coopts ERGs to careerist (and thereby more conformist) concerns or a mixture of both.

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**“YOU ARE JUST A TEMP”
INTERSECTIONAL EXPERIENCES OF TEMPORARY HELP AGENCY
WORKERS
IN NOVA SCOTIA**

This paper examines the intersectional experiences of temporary help agency workers. Temporary help agency work is overrepresented by women and individuals occupying multiple marginalized categories of identity, such as race. I interview eight individuals about their experiences as temporary help agency workers, using an intersectional lens to better understand the complexity of their experiences as they relate to categories of identity. I use critical discourse analysis to analyze their interviews and find that consistent themes emerge related to insecurity and precariousness, as well as competence and professionalism. These themes are explored in the context of intersectional identities. This analysis provides insight into a marginalized population of workers who are understudied in current organizational research.

Introduction

For several decades, one of the prevailing narratives surrounding work has been that the nature of employment is changing. Indeed, since at least the 1980s, there has been a significant shift in the standard employment relationship in North America, with temporary and short-term contract work increasingly making up more of employment (Parker, 1994). Across Canada, as many as 13 percent of workers are employed in a form of temporary work (Statistics Canada, n.d.b). Temporary work as defined by Statistics Canada is characterized as having “a predetermined end date, or will end as soon as a specified project is completed” (Statistics Canada, n.d.b). In Nova Scotia, it is estimated that as many as 15.2 percent of individuals are engaged in some type of temporary work, which includes seasonal work, term or contract positions, casual positions, and work done through a temporary help agency (Statistics Canada, n.d.b). Organizations in the private sector and public sector are both increasingly relying on various forms of temporary workers in Canada, which is reflected by an overall trend that indicates the ongoing elimination of permanent, full-time work in favour of part time and/or temporary positions (Statistics Canada, n.d.b). Additionally, women and non-white populations, including immigrants and other more vulnerable groups in our society are heavily overrepresented in temporary work, and temporary help agency positions (Fuller & Vosko, 2008; Vosko, 2000). For this reason, it is likely to be individuals already marginalized in society who find themselves in these types of precarious work positions. It is clear then that the work

experiences of those engaged in temporary forms of work are important to study.

This paper focuses on the sector of the Nova Scotian population engaged in temporary work through a temporary help agency (THA). Although significant academic research concerned with THA workers was conducted across North America throughout the eighties and nineties (Henson, 1996; Henson & Rogers, 2001; Parker, 1994; Rogers, 1995; Rogers & Henson, 1997), there has been relatively little recent research on this subject. Recent media attention to THA workers in Ontario has resulted in several studies and reforms to employment laws in that province (Grant, 2013), however the experiences of THA workers in Nova Scotia remain obscure. The province faces continued pressures to adapt and innovate as unemployment, low labour market participation rates, and a decreasing population continue to impact the fiscal and social health of the region (Ivany, 2014). As more and more of the population are forced into temporary positions on account of these conditions, it is important to understand and study the heterogeneous experiences of individuals who are now increasingly engaged in non-standard employment relationships (Vosko, 2000; Vosko & Clark, 2009). This is particularly important in light of the understanding that these individuals are more likely to be those already most vulnerable to social issues such as poverty and discrimination.

With the goal of understanding the varied experiences of temporary workers, and THA workers specifically, this paper focuses on the lived experiences of individuals who are, or have in the past, been engaged in THA work. Using in-depth, semi-structured interviews with eight individuals, this paper considers how the social identifiers of the participants contribute to intersectional experiences as THA workers, and attempts to unveil how eight women in Nova Scotia make sense both of their roles as THA workers and also of the varied impacts of this work upon them. Using an intersectional lens, I examine how individuals negotiate identity and their THA positions and experiences. I analyze the interviews using critical discourse analysis to examine issues of power, privilege and marginalization, and the ways participants highlight intersectional identity factors in the recounting of their THA work experiences. There are, then, several aims to this paper: 1) to provide voice and privilege to a sector of the labour market that is often invisible and unheard, in academic research, but also legally, socially, and specifically at work; 2) to add to mainstream academic research on intersectionality among this sector of the labour force (Fuller & Vosko, 2008); and, 3) to provide a nuanced, qualitative analysis of the experiences of those individuals in a labour market sector that is becoming increasingly relied upon in Nova Scotia, as well as across Canada, and globally.

This paper will begin with a comprehensive review of the relevant THA research, and a review of intersectionality. I will then review the methodology, explaining the choice of critical discourse analysis (CDA) and providing an overview of my interview method. Following this, I will fully discuss the key points that arise from my CDA, and the connection with intersectional issues of identity, concluding with a discussion concerning overall outcomes of the research, as well as limitations and suggestions for future research.

Theoretical Background

Historical Roots of THAs

Early versions of THAs were private employment agencies that charged fees to individuals, usually immigrants, to help them procure jobs with employers (Peck, 2000). These sorts of private employment agencies, were often run by immigrants and for other immigrants, and known as ‘padrones’ (Hatton, 2008; Peck, 2000). These padrones were most common in the late nineteenth and early twentieth century in the US, and to some degree in Canada as well (Vosko, 2000). The ‘modern’ THA was born post-World War Two. Kelly Services and Manpower Inc., which both continue to dominate the employment services sector today, were founded in the US in 1946 and 1948, respectively (Adler, 1999). Although both organizations faced pushback from the US government over whether they were in fact, a type of padrone, or private employment agency, the organizations were able to establish their distinct position through legal battles, ultimately showing in the 1950s that they were employers in their own rights, thus removing them from the heavy regulations that then existed for private employment agencies (Hatton, 2008; Parker, 1994). From the 1960s onwards, THAs and their unique type of non-standard employment relationship became more and more popular, providing women to do office clerical work for organizations who needed to cover unexpected staffing bumps or vacations and illnesses (Adler, 1999; Hatton, 2008; Moore, 1965; Vosko, 2000). Although THAs also worked with men and provided day and temporary labour to industrial sites, their focus was largely on advertising their clerical services to avoid attracting unnecessary ire from powerful unions in the US (Hatton, 2008). As a result, THAs became well known for their role in providing temporary, often female, clerical workers to largely white-collar organizations, in both the US and Canada. By the early nineties, there were almost 1.5 million people in the US employed with THAs (Parker, 1994). This sector of the workforce had grown in Canada as well, and has continued to do so, with the employment services industry growing 31% between 2001 and 2015 (Statistics Canada, n.d.a).

Precariousness, Alienation & Gender Issues in THAs

Concurrent with the rise of THA employment has been the development of a body of academic research investigating the sector. Researchers have evaluated the role of the THA worker in society (Moore, 1965) and the changing work environment (Parker, 1994). There has been research supporting the use of THA workers as a part of strategic management – THA workers are seen as a means to control labour costs more effectively, and a means of achieving important competitive advantage, when studied from a managerial point of view (Drucker, 2001; Moore, 1965). Moving the perspective to the experiences of THA workers, a body of qualitative, ethnographic research from the US addressed the precariousness and alienation aspects of THA work, as well as issues of gender, discrimination and harassment at work (Henson, 1996; Henson & Rogers, 2001; Rogers, 1995; Rogers, 2000; Rogers & Henson, 1997). Findings from these studies indicate that THA workers experience alienation from others in their roles, have trouble making sense of their identities at work, and are likely to be treated badly or even discriminatorily. The lens for much of this work is gender, with aspects of feminization and masculinization being explored through qualitative accounts (Henson & Rogers, 2001; Rogers & Henson, 1997). Further to these qualitative studies, Adler (1999) and Hatton (2008) use

archival sources to provide historical analyses of the THA industry in order to explore how the gendered, or feminized nature of the sector developed, as well as what the gendered nature has come to mean for men and women working as THA workers.

Key findings of research on THAs include that the work is under-regulated (Hatton, 2008; Parker, 1994), that THA workers experience a great deal of uncertainty, precariousness and a lack of congruence in their work, which can lead to decreased job performance and negative mental and physical health outcomes (Lewchuk, Clarke & de Wolff, 2011; Parker, 1994; Rogers, 1995), and that gender issues and discrimination based on gender, race, and even work status are ongoing problems that THA workers can expect to face in the workplace (Henson, 1996; Henson & Rogers, 2001; Rogers, 1995; Rogers, 2000; Rogers & Henson, 1997). Research specific to a Canadian context is somewhat limited, however Vosko (2000) provides an in-depth overview of the THA industry in this country, focusing on the rise of the industry, as well as issues of gender, approaching the topic from a perspective somewhat informed by Marxist political theories.

Intersectionality

Intersectionality is a complex term that has been highly contested in recent research (Collins & Bilge, 2016; Mercer, Paludi, Helms Mills & Mills, 2015). What it means and how it is used varies depending on the field and type of research that it is applied to, but broadly speaking, the term refers to the need for recognition that an individual's identity can be straddling any number of different social categories, and that the processes of power, privilege or marginalization experienced by an individual is complex because of their inhabitancy of multiple 'intersections' of categories (Crenshaw, 1989; 1993; Levine-Rasky, 2011; Yuval-Davis, 2006). Intersectionality focuses on marginalized populations and discrimination, which are impacted by socially-constructed identity categories, such as race, gender, age, ethnicity, etc. (Collins & Bilge, 2016). Crenshaw (1993), gives the example of African American women in the American justice system experiencing discrimination on multiple fronts and in multiple ways, because of the specific combination of their gender, race, class, age, family status, and education (Crenshaw, 1989; 1993). Feminist research has adapted this notion of discrimination being intersectional-based in its advancement of 'intersectional feminism', which involves research that acknowledges the complexity of identity characteristics in the experience of marginalization across all parts of the research process (Lykke, 2010). This interest in intersectional research has been, in part, a response to the criticism that mainstream feminism serves white women, while ignoring or downplaying the unique and complex experiences of other minorities (Brah & Phoenix, 2004).

In management and organization studies literature, intersectionality has continued to be contested (Mercer et al., 2015). There is debate as to whether it is a theory, a method, or a lens or research perspective, as well as what sort of value applying intersectional perspectives to management research can have (McCall, 2005; Mercer et al., 2015). Certainly, intersectionality is best aligned with qualitative research, and to date, much of the intersectionality research in management has been applied in the post-positivist realm (Hearn & Collinson, 2006; Mercer et

al., 2015; Paludi & Helms Mills, 2013).

Keeping this intersectional approach in mind, existing research indicates that those who are employed as THA workers are more likely to be women, visible minorities and/or immigrants (Fuller & Vosko, 2008; Longhurst, 2014; Parker, 1994; Rogers, 1995; Vosko, 2000; Vosko & Clark, 2009). This means that those individuals in our societies who are the least privileged across multiple intersections are the most likely to be engaged in and pursuing THA work, which research indicates is an incredibly precarious type of employment. Longhurst (2014) highlights that in British Columbia, THA workers are likely to be on or below the poverty line, with median incomes of under \$10,000 CAD. In a quantitative study, Fuller & Vosko (2008) uncover pay differentials across different social groups in Canada, finding that those who inhabit traditionally marginalized intersections of gender, race, and immigrant and education status, can expect to earn less than those occupying different or fewer intersections when engaged in various forms of temporary work. This study highlights that, quantitatively, those who experience marginalization across multiple, categorical intersections are those who are the most likely to struggle with finding a standard employment relationship (Fuller & Vosko, 2008), and thus may find themselves in unfortunate and ongoing positions of poverty or precariousness (Longhurst, 2014). Not only is it important to research this sector of the labour force for this reason, but existing research has been limited in its theoretical consideration of these complex issues. The heterogeneity of temporary work has been acknowledged, as well as the varied experiences of those engaged in THA work (Fuller & Vosko, 2008), however these varied experiences have not been explored according to a research lens that explores and captures this variety in the way that intersectionality does.

In recognition of the fact that intersectionality is a fluid and contested term, open to many interpretations and application, I purport that my use of intersectionality is not a method, nor a theory per se, but rather a theoretical lens. I use intersectionality as the primary theoretical position in this paper to further a consideration of identity that includes and emphasizes the socially-constructed notions of gender, race, class, etc. I use the lens of intersectionality to consider the intersections that the THA workers whom I interview inhabit. This focus is a central tenet of intersectionality which is well-aligned with my interest in unveiling the experiences of individuals in the THA sector (McCall, 2005; Levine-Rasky, 2011). I also use intersectionality to focus on processes of privilege and marginalization, asking not only who is privileged/marginalized, but also *how* do the processes of privilege/marginalization play out in relation to the inhabitation of various intersections. Additionally, a major focus of intersectionality is allowing the unique voices of individuals to be heard and validated. This means that I focus on the lived experiences of individuals and the meaning they give these experiences as a result of their intersectional positions, versus focusing on the categorization of individuals by role or identifier (McCall, 2005).

Methodology

Participant Details

This research is grounded in interviews conducted with eight women who have been employed with THAs. I sourced the interviews using convenience and snowball sampling methods (Bryman, Bell, Mills & Yue, 2011). I used my network to identify individuals who would qualify, and also asked my participants to share the study with their networks, if they felt comfortable to do so. I also contacted several THAs in hopes they would share the invitation to participate, however the agencies that I connected with were not willing to do this. As such, it was relatively challenging to find participants. This may also have been impacted by the fact that I was unable to provide incentives to my participants due to the current scope of the research. That said, Glaser & Strauss (1967) indicate that theoretical saturation can be expected at 8-12 interviews when using a grounded theory approach. Like grounded theory, feminist research is similarly focused on saturation versus sample size. With eight interviews, I found participants consistently raising very similar themes, despite their unique situations and the broad diversity of their experiences with THAs.

The participants I interviewed were all women, but they represented a diverse range of ages, races, nationalities, and backgrounds⁵⁰. In age, the participants ranged from age 23-55, and represented a mix of Caucasian, black, and indigenous race, as well as multiple nationalities, including Canadian, Kenyan, and Nigerian. One participant had experienced just one placement, while another drew on a background of seven THA placements. Education levels ranged from high school to master's level degrees, and the participants held family statuses of single, common-law and married. Three participants had children. Together the participants represented a collective almost twenty years' experience doing THA work. Table 1 below provides an overview of each (anonymized) participant and their relevant demographic characteristics.

Table 1

Participant Name	Gender	Age	Race	Nationality	Education	Marital Status	Earning Status	Children	# of Placements
Anne	Woman	50	Caucasian	Canadian	College	Single	Independent	No	4-5
Jill	Woman	25	African	Nigerian	Undergraduate Degree	Single	Independent	No	2-3
Katya	Woman	30	Caucasian	Canadian	Undergraduate Degree	Single	Independent	Yes	2-3
Luna	Woman	25	African	Kenyan	Graduate Degree	Single	Independent	No	8-10
Mary	Woman	45	Caucasian	Canadian	High School	Single	Independent	Yes	4-5
Noelle	Woman	55	Caucasian	Canadian	High School	Common-law	Breadwinner	No	2-3
Rita	Woman	30	Metis/Caucasian	Canadian	Undergraduate Degree	Common-law	Breadwinner	No	1
Sue	Woman	33	Caucasian	Canadian	College	Married	Breadwinner	Yes	2-3

⁵⁰ Some identifying details have been modified in order to ensure the anonymity of participants.

Interviews

Because of my desire to focus on the lived experience of my participants in this study, I chose a semi-structured interview method. According to Bryman et al. (2011), the semi-structured method can help access richness and depth, while simultaneously retaining focus on the key research concerns. I contend that this method is congruent with my research lens of intersectionality, which focuses on uncovering rich detail and experience, while also providing the structure required to ensure focus on THA work experiences. Each interview was scheduled to last approximately one hour, with the goal of getting in-depth responses to the interview questions. As a result, some interviews lasted 40 minutes, while others stretched to 75 or 80 minutes long. The questions I developed focused on three key areas: 1) the individual's background and experience with THA work; 2) their broad social identifiers, personal identities, and how these two aspects of the self were constructed in relation to THA work; and 3) the positive and negative aspects of the THA work. From these three main areas, I was able to glean information about the participants' experiences working for THAs, as well as details of their placements and the types of work experiences they had, as well as information about how they perceived or described themselves. Additionally, more detailed questions about the pros and cons of THA work allowed for experiences to surface about THA work that revealed personal and professional challenges, struggles, and successes as the participants negotiated their roles in temporary work environments. The interviews thus revealed a wealth of rich detail related to each individual's experience and their identity.

Critical Discourse Analysis

Following each interview, I made notes on the themes that arose, and transcribed the audio-recording as soon as possible. One advantage of transcribing myself besides the cost-savings was that it gave me a chance to hear the interview again, thus further stimulating my own thoughts and reflections on the material, an important tenet of feminist-based research. Once all the interviews were complete and transcribed, I printed each transcription and evaluated the interviews using critical discourse analysis (CDA). CDA is a method of analysis often used in feminist research, and in particular, feminist poststructuralist research (Phillips & Hardy, 2002). That said, it is congruent with my use of intersectionality as a lens due to its focus on language and power in relation to privilege and marginalization (Keenoy, Oswick & Grant, 1997; Mumby & Stohl, 1991). In my analysis, I focus on how participants' use language to discuss their experiences in the context of their THA work experience. As THA workers are known to experience precariousness, stigmatization and alienation in their THA work roles, this method is an aligned way of exploring the ways in which individuals construct ideas about their role, their position in the context of power, and how their perceptions and ideas about THA work are structured and constructed through language (Phillips & Hardy, 2002). This emphasis on language is helpful for focusing on the participants' intersectional positions impact the experiences of privilege and marginalization of participants at work.

To conduct the CDA, I read each interview several times, making notes on key themes that emerged. I paid close attention to the language used by individuals to speak about themselves and their experience, and sought to highlight where an individual's categories of social identity seemed to impact their experience, whether this was overtly stated or constructed less overtly through the language used. I then compared answers to each question side by side, in order to understand how individuals answered questions in similar or different ways, and paid attention to the individual intersectional positions that may have been influencing those responses. I will discuss the findings of this fully in the next section.

Findings

Several key themes emerged as a result of the CDA. These themes can be divided into two broad categories: issues related to insecurity and precariousness, and issues related to competence and perception. In this section, I will discuss these broad themes, and attempt to surface the intersectional aspects at play through the language and description used by participants.

Insecurity and Precariousness

Invariably, each of the participants highlighted THA work as insecure. Insecurity was discussed in many different ways, manifesting as concerns about the future, not knowing when a placement would be ending, not knowing when the next placement would be starting, having fear about being able to pay bills, and feeling alienated, unstable, and unsettled. Based on existing literature focused on the difficulty of THA work (Henson, 1996; Parker, 1994; Rogers, 2000; Vosko, 2000), I expected to hear about these sorts of challenges. However, the ways in which these challenges related to insecurity manifest are varied in manner and significance for each participant, depending on their situation. For example, Katya, a single mother pursuing post-secondary education while seeking THA work was primarily concerned about money, while Luna, a master's level graduate with no dependents felt most insecure about her prospects to find work in her field. That said, these descriptions of insecurity are often moderated by language that offsets the negative, allowing the participants to acknowledge difficulties without appearing to be totally negative about THA work overall. For example, Anne, a 50 year old, university-educated white woman emphasizes the constant risk she felt when employed in temporary work: "anything that is temporary...it's just not stable. There is no stability to it. So it is risk...I mean, you are always worrying. So that can really be at the forefront of your mind". Anne describes how her constant worry about getting placements impacted her life balance, noting that "temporary work...it plays on your mind. It is so exhausting, because you are just not sure of your future". As a single woman, Anne supports herself independently, and her insecurity when she was engaged in THA work was focused on the constant hustle to ensure she had steady work in the temporary realm. However, to counteract her feelings of insecurity, Anne also brings up how she would feel like a hero at times, bringing her particular set of skills to businesses when they were in need. She oscillates between conveying the difficulty while also trying to construct meaning for that insecurity, stating:

...in some ways you are treated almost not like a real employee. But in other ways you are treated like a hero...So it's a weird dynamic that way. But it can be positive. But like I say it can be very stressful too.

Anne struggles with the insecurity aspects, and mediates that struggle with a focus on the positive aspects she can identify, such as the hero status she describes.

Rita, a 27 year old woman who is currently the breadwinner in a long-term relationship brings up similar fears, emphasizing that the insecurity of THA work did not let her plan for the future. Rita, who is currently working on completing a university degree, draws great pride from her ability to support herself, and found the insecurity a struggle when she was thrust into a position of the breadwinner:

There's a lot of risk that you're not employed by anybody essentially, and you could be let go at any time, the person you're covering for could come back. That was tough...because my partner right now isn't working either...I needed that security.

To construct her ways of coping with the insecurity, Rita then draws on her mental toughness and highlights that she has a lot of perseverance, which helped her survive months of uncertainty surrounding whether or not her placement would become permanent. She admitted "There was a point where I was like I definitely have to find something else, because it's not worth [the stress]". For Rita, her constant concern about the instability of the job is constructed around her ability to be mentally strong and tough. She also emphasizes the fact that she enjoyed the job, stating "...I feel like I'm well-suited [for the position]....I was enjoying the job...enjoying the people I worked with and seeing it could be long term". In addition to her perceived toughness, she relies on her positive experiences and a belief about her suitability for the job to moderate her significant concerns about the insecurity of the job becoming permanent.

Noelle, a 55 year old Caucasian female, turned to THA work after being downsized from a job she held and loved for almost 25 years. As someone whose self-worth was closely entwined with her job, she experienced the precariousness of THA work in a different way, noting that her savings allowed her pick and choose some of her placements. However, she too felt concerned about the uncertain environment of working for a THA, noting that she wanted a permanent position and became concerned working in longer-term placements without getting a permanent contract.

It's a very unsure future when you are temp because you just never know when it is going to end, you never know how long you are going to be there...it leaves you feeling a little isolated and actually quite afraid, you know, how am I going to do this?

Noelle highlights feelings of fear and inadequacy, which emphasize how the mental aspects of dealing with ongoing THA work can impact upon an individual. Noelle, like Rita, is the breadwinner in her long-term relationship, and despite significant savings, felt a great deal of fear because of her age and single-job career. Her experience of the insecurity of THA work is then constructed around her doubts about her ability to succeed in a new workplace and new career, while she is less concerned with immediate financial demands. Having found success and a permanent placement at the time of the interview, Noelle relied on the positive final outcome to construct the insecurity in a more positive light, emphasizing that the struggles of THA work had been worth it for her in the end.

Sue, a married mother of two children, relates the insecurity in a succinct way, stating that the best thing about THA work was when it ended. For Sue, the short-term placements she was finding were for very dull work, and she was unable to find longer-term placements. Finding out she was pregnant made the insecurity even more of a challenge, as she hoped to land a full-time position in order to access benefits like health care and maternity leave. Despite her negative experience overall with THA work, Sue still credits it with helping her fill a gap in her employment history, finding a way to be positive about an otherwise negative time in her life.

Mary, a young single mother, came to THA work when she struggled to find full-time work after having two children and being on government assistance. She credits her THA work with helping her enter the workforce, but notes that it was difficult “knowing that it wasn’t secure” and that she couldn’t get comfortable at a placement. She worried about the lack of benefits and not having paid time off, stating that at times it was a lot of juggling to handle her placements and her children. Again, like Rita and Noelle, Mary finds herself in the position of being the breadwinner and supporting dependents, which exacerbated fears about the insecurity of THA work. However, Mary reflected that she had a drive to better herself and work in professional environments, goals which allowed her to moderate the insecurity she felt about THA work. Although she acknowledges the precariousness and difficulties, she also credits THA work as a first step towards the achievement of those goals, which allows her to somewhat minimize some of the more challenging aspects of THA work, retrospectively.

In all of these examples from participants, it is possible to see how their specific combinations of social categorizations (race, age, family status, education, etc.) may have influenced their individual experiences of precariousness. While insecurity is a prevailing theme among the participants, intersectional aspects influence how that insecurity is constructed and made sense of. As a single woman, Anne suffers from fear of whether she will be able to support herself alone with temporary work. Rita’s pride about making money and accruing as little debt as possible, as well as being the breadwinner, led to frustration and uncertainty as to whether her placement was worth the low pay in the hopes that it would convert to a higher-paying permanent position over time. Noelle’s doubts about her ability to find full-time work after being downsized, in addition to being a financial support for her family, led her to feel isolated and afraid. Sue’s pregnancy put more pressure on her to find steady work which would

hopefully lead to full-time employment, while, as a single mother, Mary had to struggle with feelings of insecurity and discomfort as she temped for three years before finding a permanent position. It seems then that marital status, motherhood status, age and one's earning position (i.e. breadwinner status) may impact the ways in which THA work feels insecure. To Anne, the insecurity is based off of her going-it-alone, or her marital status. For Rita, she felt frustrated, hoping she wasn't making a bad decision by not moving on to other opportunities, but staying at a very low wage long-term, a difficult choice considering her earning position. Noelle felt personal insecurities as well as insecurity about whether her placements would become permanent and allow her the stability she had in her prior career, reflecting issues related to age and earning position. Sue's concern about her pregnancy and finding full time work relates to issues with motherhood status, while Mary's marital and motherhood status as a single mother impacted her choices and feelings of security.

As discussed, research indicates that women and non-white minorities are engaged in THA work at disproportionate rates (Parker, 1994; Rogers, 2000; Vosko, 2000). We also know that women and non-white minorities are considered to have less privilege in our society overall, and are more likely to experience marginalization in their employment relationships, whether that marginalization occurs directly in the form of harassment, or indirectly, in the form of systemic or subtle actions or situations. While the women I spoke to did not speak about feeling marginalized in terms of experiencing direct discrimination, the CDA reveals aspects of marginalization connected with the precariousness of THA work. A number of the participants engaged in THA work because it was the only option for them at the time. Identity aspects such as marital status, earning position, or age made working a necessity, and THA work was often the only opportunity to gain work in the short term. However, in taking on this type of employment, participants were then positioned in a precarious place, finding themselves unsure about the duration of work, working for a wage they felt did not reflect their skills or abilities, and continually concerned about finding permanent work in the long-term. Many were underpaid and underemployed, and had difficulty accessing opportunities commensurate with their abilities. Additionally, the lack of benefits, such as sick time and vacation, put pressure on participants not to get sick, pregnant, or have family problems – while also placing vacations or downtime out of reach for many. All of these factors combined contribute to marginalization.

When considering the complex social positions of the participants, it is possible to see how the THA work contributed to ongoing concerns about money, the future, and health for women already engaged with issues that relegate them to a less privileged place in society on account of their age, class, education levels, marital status, motherhood status, breadwinner status, and ultimately, gender. While participants made sense of the type of work through considering themselves lucky to have any job, there is no doubt that the pressures and difficulties placed on these women when their identity factors and the precariousness of THA work is taken into account are immense. THA work is a gamble – all participants emphasized its riskiness, and the struggle is rationalized when individuals are subsequently hired into full-time positions. However, the struggle related by participants is the evidence of marginalization. This is not to say that if these women had been white men, they would have automatically received full-time jobs, but rather that the unique identities held by these women, combined with the nature of

THA work, means that they faced issues which contributed to making it more difficult in the short and long-term to access a standard employment relationship, and the privileges of wage, stability, and benefits that ensue as a result. The precariousness of THA work should not be taken as a factor alone, but rather a factor that is exacerbated based on the identity circumstances of individuals, with a recognition that those who occupy identity-based intersections traditionally associated with less privilege in our society are likely to experience this precariousness in heterogeneous ways.

Perception & Competence

Another broad theme that arose out of the CDA of the participant interviews centres around how individuals felt they were perceived by others in their THA work, together with their own construction of a discourse centred on competency. I contend that these two aspects are connected, with competency being constructed as a discourse in response to feelings about how they were perceived by others in their THA roles. Participants provided indication that they felt uncomfortable, invisible, ignored, or inadequate in their roles, but also emphasized their work ethic, professionalism, and ability to do a good job as important to their identities. It seems then that work identities are constructed to, in part, moderate the perception or judgement felt when engaged in THA work.

Participants shared unique stories about how they felt they were perceived, but within all these stories were feelings related to those listed above, of being uncomfortable, invisible, ignored or inadequate. These were juxtaposed with discourse about competence. For example, Jill, a 25-year-old immigrant from Nigeria, with a bachelor's degree, emphasizes that it was important to her that she did a good job on her work assignments, explaining:

I go out of my way to make sure something is done properly...I really want to own it, and I want to own the process...I will put in hard work and make sure I'm pleasant to be around, because I want to be sure that overall it will be a good result.

However, Jill also talks about the unpleasant experience of being encouraged that she would get full-time work from a placement, a promise which never manifested. She explains her discouragement when she wasn't considered for full-time work: "...the decision makers, I found they almost had the feeling of you came in, do your work, then you can leave. They had that kind of mindset, not interested in a long-term relationship type of thing." Jill describes this experience bleeding into other placements, saying "I remembered the whole chop-shop business....I knew now I had to watch out for my back", emphasizing that she had understood she was possibly invisible to decision-makers. She discusses the pain of not being successful in getting full-time work from her placements, saying:

It's painful because [you're gone] suddenly and sometimes you don't know whether it's because maybe...well the truth is

there is someone...who is supposed to be permanent and they haven't chosen you. Then it's like maybe I'm not working hard enough, why would they not pick me and put me in that position...it takes a kick at you because it's like okay, I'm not even able to get this job that I've been training in for a while, in a way, so....yeah it kind of makes it heavy on you.

Jill's feelings of hurt are strong in what she shared about this experience, and her feelings of uncertainty and insecurity about her skills and abilities, and how she was perceived certainly impacted her confidence levels. However, throughout the interview, she emphasized how important it is to her to do a good job and be positive, returning time and again to these themes. Her own feelings of competence are important to her, in light of having an experience which made her question her level of success.

A number of other participants echoed similar themes in their interviews. Katya, a 30-year-old single mother working on a second bachelor's degree, indicates that she often felt invisible at her work, juxtaposing this against the notion that at least she was doing a good job. "I felt...at least they weren't noticing me because I wasn't doing good enough...I could take some pride in that they didn't have to speak to me because I wasn't good enough or something." Like Jill, Katya draws on a discourse of competence to account for the fact that she felt invisible at a placement.

Mary, another single mother, discusses similar themes in her interview, describing herself as: "...very loyal, and I believe in honesty and doing all things honestly. I don't get involved in a lot of chit-chat, I like to come to work, do my job." Mary draws on her professionalism, stating that when she was doing THA, she felt insecure because of her young age and wanted to be seen for doing her job. For Mary, professionalism and constructing herself as a professional helped her achieve her long-term career goals and allowed her to believe she was more than 'just a temp', despite at times feeling invisible or that people perceived her as low-skilled.

...I think people looked at me [as low-skilled]...they looked at me like I was a temp...they wouldn't teach me anything beyond what I was supposed to do...it was kind of like, not drone-like, but here's what's expected of you, and you are just a temp.

This feeling seems to have motivated Mary to pursue her career goals and helped contribute to her feeling of professionalism overall.

Luna, a 25 year old immigrant from Kenya with a master's level education also draws on themes of competence, emphasizing that it was important to her to do a good job and make a difference, and that she focused on providing a level of excellence in her THA placements. However, Luna also relates struggles about how she was perceived, in particular related to her non-anglicized

name, sharing a story about an individual who advised her to change her name to something less foreign so that she would have a better shot at getting called in for full-time work. Luna is deeply connected to her name as a part of her identity, and felt put down when individuals at her placements wouldn't try to say her name because it sounded foreign.

...if it's an agency I'm going in to work for or anywhere, if I tell people my name and they're not even willing to try to say it...I kind of feel like...for somebody to feel like they're not even going to try it because it sounds different, for me, that just kind of feels like some sort of violence on the part of my identity because it's like my name doesn't matter.

Luna also speaks of experiences related to how she was perceived based on her race and nationality, although she emphasizes it never bothered her.

I never took offense to people saying that I don't have an African accent...but I would get that a lot...all these questions that made me a little bit offended in terms of what type of house did you live in and are you from the village...I think it's just questions because people don't know...but it does really think about how people perceive you, and those who aren't asking the questions and are just thinking certain things...

Luna's uncertainty of how she was being perceived based on identity factors, such as race and even her name certainly seem to contribute to a need to remind herself of her value, as she counters these aspects with a focus on her education level and intelligence. "...at least after my graduate degree I don't think anybody looked at me and felt like I was going to be there for a really long time..." Luna focuses on her education in order to counter the perception that others may have had of her based on other aspects of her identity.

It is possible to see from all these examples that the participants interviewed feel the weight of being perceived as 'just a temp'. In response, they seem to construct a discourse of competence that allows them to remain confident or feel more worthy, even retrospectively (after receiving full-time work). The perceptions felt by participants are related to their position in THA placements, but also seem to be related to issues of race, nationality (i.e. foreignness of a name), perceived education level by superiors and co-workers, perceived work experience by others, and issues of age. These are all intersectional factors. It is possible to understand how an individual such as Luna, who occupies intersections of gender, race, nationality, immigrant status, and education status – and as a THA worker, employment status – has to construct a discourse of competence in order to cope with the perceptions on her from others in the workplace. Similarly, Jill, who struggled with being promised full-time work which never manifested, occupies an intersection of gender, race, nationality, immigrant status, education status and employment status as well that means she must deal with marginalization from others in terms of their perceptions. Again, this marginalization may not manifest as direct

discriminatory statements or experiences, but rather as an experience of being perceived by others in a certain way because of the inhabitancy of these multiple and complex intersections as an individual. The participants do not experience perceptions upon them simply because of their status as THA workers, but instead, that employment status is one of any number of complex identity factors that combine to impact other individuals' perception of the participants. This intersectional consideration is an important way to assess the experiences of THA workers, because it indicates not only that others may perceive THA workers a certain way based on their employment status, but also that this perception is impacted by other complex identity factors, which may potentially lead to further marginalization of THA workers in their workplaces. While all of the individuals I spoke with had achieved full-time employment at the time of the interviews, the extant literature emphasizes how over-represented women and non-white minorities are in THA work (Fuller & Vosko, 2008; Parker, 1994; Rogers, 2000; Vosko, 2000). In order to fully examine the experiences of individuals engaged in this type of work, and the factors that may combine to keep them in these non-standard employment relationships, it seems important to use an intersectional lens.

Conclusions

This paper strives to address a gap in the existing literature on THA workers by examining their experiences using an intersectional lens. While prior research has addressed gender issues faced by this group, this paper uses intersectionality to explore the experiences of THA workers in more depth. This is an important topic to study because of the ongoing overrepresentation of women and non-white minorities in THA work in Canada, and the understanding that social categories such as gender, race, immigrant status, and education status, can impact individuals in complex ways. That said, research specific to THA workers has been minimal in recent years, and there is a noticeable lack of research in this area in the Canadian context. Part of my motivation for this study is to draw attention to this understudied sector of the population.

This study also contributes to understanding of the experiences of THA workers, particularly in Canada. Importantly, it has shown that the ways in which individuals deal with the insecurity and precariousness of their THA employment situation is mediated by intersectional factors, such as age, marital status, motherhood status, earning status, and gender. It also provides insight into the ways in which individuals cope with the marginalized position of their employment status in society, suggesting that individuals rely on narratives of competence and professionalism in order to deal with marginalizing perceptions from others. I argue that the experiences of the participants indicate that these perceptions from others relate not only to their employment status as THA workers, but also to intersectional factors, such as gender, race, age, nationality, and education level. The use of an intersectional lens has then provided new information and understanding about the difficulties faced by THA workers as a result of their complex and often vulnerable positions as minorities across multiple categories.

While a central tenet of intersectional research is a focus on the lived experiences of individuals, versus overall generalizability, the scope of this paper means there are several limitations to consider. First, I was only able to interview eight participants. While these interviews provided

much rich detail, it would be helpful to conduct further interviews in the future. It would also be helpful to interview men, as well as women in future research, in order to examine how intersectional factors for men impact their experiences with THA work. Although men are employed in this type of work less so than women, Henson & Rogers (2001) would argue that the gendered nature of THA work means men may suffer marginalization at work as well. Additionally, as temporary work of all sorts continues to rise and make up more and more of our labour market in Nova Scotia and Canada, applying an intersectional lens to research on other types of temporary work could reveal interesting and unexpected insights. More research in this vein would be helpful as we strive to understand the complexity, impact, and consequences of an increasing reliance on various forms of temporary work in our society.

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CANADIAN PLURISM AN INSTITUTIONAL LOGIC IN CJAS

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The Administrative Sciences Association of Canada (ASAC) is comprised of management educators and practitioners interested in advancing Canadian management scholarship, teaching and practice. It has been challenged by a weak definition of one of its core institutional logics, Canadian, but has balanced it with a seemingly incompatible logic of international relevance. The Canadian Journal of Administrative Science (CJAS), part of the ASAC model, is ideal example of Canadian organizing in practice. Through a discourse analysis of CJAS editorials and Canadian articles, I propose these logics should not be viewed as incompatible, they demonstrate an acceptance of plurality in Canadian management.

Introduction

The Administrative Sciences Association of Canada (ASAC) is an organization comprised of educators and practitioners who are interested in advancing management scholarship, teaching and practice in in Canada (www.asac.ca/MissionStrategies). Since ASAC emerged as a collaborative project of Business School Deans from across the country, almost 50 years ago, the central purpose of the association is to support Canadian scholars to develop within administrative professions by creating a network of collegial relationships in the field (Austin, 1998). It was part of the early responses of Deans to meet the demand in Canada for more educated and people who were prepared to operate in the rapidly changing industrial economies (Austin, 2000b). An integral part of the purpose of ASAC is also the desire to be recognized as an academic institution that is a source of top-tier academic business research in Canada (McLaren & Mills, 2013). This drive to establish an interdisciplinary institution uniquely informed by a Canadian-based business body of knowledge in the 1960's was a demonstration of an emergent set of Canadian nationalist discourses. The three main discourses of the era included maintaining historical ties to commonwealth ideals, defining the new Canadian mosaic, and demonstrating socially active citizenship (Pashby, 2014). The Deans had collectively agreed that the legitimacy of business as a scholarly field in Canada had to improve if they were going to successfully compete against American schools for the attention of leading Canadian scholars who were moving south of the boarder to learn and teach (Austin, 1998; Boothman, 2000). Supporting the development of Canadian scholars and gaining international recognition for Canadian scholarship continue to be of great importance to ASAC members. These two objectives have emerged as two defining institutional logics within the organization despite the lack of clarity concerning the meaning and use of the term Canadian.(McLaren & Mills, 2013).

Institutional logics have become a key term in institutional theory generally (Greenwood, 2017; Thornton & Ocasio, 2013) and a fundamental concept of institutional pluralism (Kraatz & Block, 2013, 2017). Institutional logics provide behavioural guidelines for social actors within organization but multiple discrete logics within organizations often conflict and create tension as they compete for priority (Thornton & Ocasio, 2013). ASAC has responded to the two logics by focusing activities in two key organizational events: (1) the annual conference and (2) supporting the publication of the Canadian Journal of Administrative Science (CJAS). ASAC's annual conference is a signature event that provides a venue that encourages collegial dialogue around research through paper presentations and the publication of conference proceedings. The ASAC conference also requires members to participate in the organization in multiple ways as division chairs and reviewers, it therefore creates development opportunities for members at all stages of their career. CJAS compliments the efforts of ASAC by making space for and encouraging the publication of research that concerns and informs the Canadian business field. CJAS editorial teams also strive establish CJAS as an outlet for publication of high quality research to maintain a perception of legitimacy within the field of administrative science internationally (McLaren & Mills, 2013). Though both

the conference and the journal accept a wide array of interdisciplinary topics from international audiences, the nationalist Canadian identity maintains a central position. Research on topics of interest to Canadian scholars and business practitioners are strongly encouraged. Those in formal positions of influence at ASAC and CJAS repeatedly present the two missions as not only compatible but essential to the organizational purposes (M. R. Brooks, Fooladi, & Rosson, 2005; Fooladi, 2000; Hackett, 2006c; Sexty, 2008). However, for some members, the two logics are at odds with one another; the local Canadian mission is somehow believed to conflict with their ability to achieve international top-tier academic recognition (Austin, 1998; McLaren & Mills, 2013). ASAC's institutional logics represent the debates that commonly occur within the Canadian Academy about the history and meaning of the multicultural identity (Wong & Guo, 2011); they also represent the nationalist discourse that continues to be present within most other Canadian institutions and society about the problematic "Canadian" identity (Driedger, 2011; Leung, 2015; Lévesque, 2011; Stein, 2007; Winter, 2015). McLaren and Mills (2013) propose these commonly held notions within ASAC reflect a Canadian inferiority complex that creates tension when held up against the individual commitment to an nationalist identity that in many respects doesn't exist. In this way, the ASAC discourse represents the Canadian challenge of reinforcing an ambiguous National Canadian identity (Adams, 2006, 2009; Jedwab, 2008; Winter, 2015), that Canadian governments have been attempting to (re)create as multicultural so as to re-affirm Canada as an independent of European State (Pashby, 2014).

This paper builds on the notion introduced by McLaren and Mills (2013) that briefly alluded to the problem of the ambiguous Canadian nationalist identity for ASAC and "Canadian organizations" generally. It extends their work by considering the construction of the Canadian identity within CJAS. I review CJAS literature for portrayals of the Canadian identity logic adopting an institutional perspective that adheres to a notion that institutions are rationalized myths (Royston et al 2008, Introduction, p 8). I will consider how has the association enacted the Canadian identity using elements of institutionalism, which is based in an understanding of the world that is constructed through social action of participants (Deephouse, Bundy, Tost, & Suchman, 2017; Kraatz & Block, 2013, 2017). Acknowledging that organizational identity is socially constructed, the process of creating ASAC as a Canadian organization reflects the broader Canadian identity discourses and the influence of the Canadian regulatory fields (Hinings, Logue, & Zietsma, 2017). For example the networks of federal and provincial organizations that provide political oversight and maintain administrative standards for Canadians and Canadian organizations (Fleras & Elliott, 2003; Stein, 2007). Therefore, ASAC and CJAS are ideal cases through which to consider the field level pressures of national identity on Canadian organizations because it has been unapologetically promoting and encouraging the study of Canadian organizations and Canadian issues for decades. The process of academic publication has a significant normative influence in the field of social science, which includes management studies (Bedeian, 2004; Harley & Acord, 2011; Miller, Taylor, & Bedeian, 2011). Therefore, this discourse analysis primarily focuses on the journal publications because articles published in CJAS provide an indication of the type of information and research that was of interest to member reviewers at the time of printing after being subjected to significant influence from field level norms (Moizer, 2009). The purpose of this study is to uncover prevailing attributes of the Canadian identity constructed within CJAS so that we can better articulate the strategic value Canadian perspectives add to the management field. In addition to shedding some light on these issues, it may also help Canadian scholars and organizations, who are struggling with the inconsistent expression of a Canadian nationalist identity within society. Finally, research related to national identities in Canada may also be of interest to those who research globalization, post colonialism, and public policy.

ASAC – by Canadians for/of Canadians – Institutional foundations

Canada as a nation has a complex institutional history which merits further consideration beyond the scope of this paper. It was initially socially constructed as a federation of British colonies in a territory commonly referred to today as North America. The histories of Canada, and Canadian business, refer to complicated series of treaty negotiations, industrial development, political conflict, and social invention that span two centuries, more when you accept the influence of pre-contact trade and exchange in modern means of

organizing (Brown, Tulk, & Doucette, 2016). However, the modern commonly accepted concept of Canada as an independent state and multicultural society depends on an interpretation of Canada as a sociological fact as well as ideological and political prescriptions of the nation state (Dewing, 2009). Canadian multiculturalism recognizes and attempts to incorporate a wide range of linguistic diversity (primarily French and English), shared regional and territorial characteristics, and various other displays of cultural heritage which influence what are broadly, but vaguely, understood as Canadian values (Adams, 2006, 2009, 2017). They developed in relation to the Canadian constitution post World War II (Foster, Helms Mills, & Mills, 2014) as part the nation building process of establishing and normalizing a shared identity for Canadians that was described as “multi-cultural” society (Dewing, 2009; Fleras, 2015; Stein, 2007; Winter, 2015). These sociological discourses have immediate influence on Canadian academic and organizational fields and therefore are of greatest interest for the purposes of this analysis which strives to identify the extent of their influence in the sub-field of Canadian Management and Organization Studies (MOS).

As a project of ASAC, CJAS has adopted the Canadian identity with a fundamental purpose of supporting Canadian administrative scholarship. Like Canada ASAC, and by extension CJAS, has chosen to reinforce an institutional identity that represents diverse cultures and histories, described by Canadians as multiculturalism (Canada, 1988; Dewing, 2009; Fleras, 2015). ASAC was first established as a project of the Association of Business School Deans with the intention of adding more legitimacy to Canadian business scholars. It was, and is, guided by Canadian societal norms, (Hinings et al., 2017), including the organizational structure, which was heavily influenced by the governance structures and systems through which business school deans had been trained, primarily in the US (Austin, 1998; Boothman, 2000). With respect to the Canadian field of business education, ASAC was looking to gain normative legitimacy by focusing on Canadian issues and regulatory legitimacy, as a Canadian scholarly organization that must adhere to formalized rules of Canada. The process of gaining and maintaining regulatory legitimacy involved the establishment of and organizational membership structure that met national academic regulatory criteria set by governance systems in the Canadian field which influenced ASAC’s ability to receive funding and support from the Canadian government directly via the Social Sciences and Humanities Research Council (SSHRC) and indirectly via members affiliated with federally supported institutions (Austin, 1998). To achieve normative legitimacy in the Canadian academic and business fields, ASAC established an elaborate system of organizational processes to encourage scholars to present and publish research relevant to Canadian organizations. The annual ASAC conference developed as a nice place to network with local colleagues, present ideas, and receive constructive feedback. The ASAC membership network also administratively supports CJAS and ideally ASAC conference material would eventually be published in CJAS, further legitimizing the Canadian system. However, for some members submitting a high-quality paper to be published in CJAS is seen as a lost opportunity if it might be accepted somewhere more prestigious. Therefore, while ASAC is seen as a friendly place to develop and network with peers locally, it is not always seen as a place to make a strategic career building presentation of work.

After sixty years of development, being Canadian and understanding Canadian issues still matters to ASAC members and the association’s mission continues to focus on Canadian business issues and supporting Canadian scholars. “Canadian business” is a central institutional logic but it is also a problematic one that is often discussed and debated at conferences, among executive, among divisions, and CJAS (Austin, 1998; V. Baba, 2016; McLaren & Mills, 2013; Ng & Rumens, 2017). I will argue the way in which ASAC has continued to organize for 60 years and adapt to complex Canadian identity logics is exactly what makes it Canadian in the first place. I will show the response to logics evident in CJAS publications, present a Canadian discourse that supports plurality, complexity, and collaboration. The editors, authors, ASAC members, and others who read the journal are influenced by the normalization of research approaches that are localized, plural, and complex, as well as the portrayals of Canadian identity as multi-cultural (regional, French and English) operating in a mixed market economic model. The research adds to the body of work that explores the theoretical relationship between political public policy and Canadian forms of organizing (McLaren & Mills, 2015).

Organizational Institutionalism – ASAC’s Past

Studies of ASAC have used elements of institutional theories to consider and explain how it has emerged in the past 60 years (Austin, 1998; McLaren & Mills, 2013). For example, Austin (1998, 2000b) applied theories of institutional isomorphism to describe the evolution and changing nature of ASAC as a professional association. She demonstrated that organizations like ASAC are influenced by international business norms at the field level and that Canadian management values are determined outside of the country because the association needed to meet international (American) standards to gain legitimacy. McLaren and Mills (2013), also applying elements of institutional theory, later used institutional logics and organizational legitimacy to consider the plurality ASAC. They demonstrated that although ASAC has struggled to achieve a desired level of academic legitimacy internationally, the value of its Canadian identity has always been recognized by members who support its core mission to encourage Canadian business scholars. However, it was noted that without a comparison to the United States, a single nationalist Canadian identity may not exist (McLaren & Mills, 2013). This study draws on prior literature in which theories of institutionalism have been used to consider the legitimacy of the association and its identity (Austin, 1998; McLaren & Mills, 2013).

Organizational Institutionalism

Organizational institutionalism has developed as a field of study in recent years. The areas of study included within its scope have extended into various dimensions such as legitimacy (Alajoutsijärvi, Juusola, & Siltaoja, 2015; Deephouse et al., 2017; Hinings et al., 2017; McKee, Mills, & Weatherbee, 2005), governance (Hinings et al., 2017; Kraatz & Block, 2017), and change (Boxenbaum & Jonsson, 2017; McKee et al., 2005; Ocasio, Loewenstein, & Nigam, 2015; Pache & Santos, 2013; Smets, Morris, & Greenwood, 2012; Wedlin & Sahlin, 2017). These concepts are interrelated aspects of a more complex understanding of organizational institutionalism which acknowledges that governments influence organizations directly and indirectly at a societal level (Hinings et al., 2017; Kraatz & Block, 2017). Organizational institutionalism also creates space to consider plurality by accepting that multiple fields simultaneously influence organizations and that actors within organizations prioritize various demands differently (Kraatz & Block, 2013, 2017). Plurality should be of particular interest in the context of Canadian organizations, like ASAC, whose organizational identity is connected to a nationalist identity that has consistently been described as multi-cultural by federal governments (Canada, 1988; Dewing, 2009; Guo & Wong, 2015b).

Multiculturalism has been accepted by the Canadian populous as a demonstration of a set of shared social values, such that Canadians can be described as morally liberal minded, accepting of diversity, and socially conscious of ethics (Adams, 2006, 2009, 2017). Canadian organizations who hope to maintain legitimacy in the Canadian field must operate in ways that adhere to legitimate this logic. Studies in institutionalism are informative because they consider the various ways organizations tend to respond to conflicting logics in order to maintain field level legitimacy in multiple fields (Greenwood, Raynard, Kodeih, Micelotta, & Lounsbury, 2011; Kodeih & Greenwood, 2014; Raffaelli & Glynn, 2014).

Institutional Pluralism

The framework Kraatz and Block (2017) provide to explain institutional pluralism encompasses three fundamental assumptions: reality is isomorphic (legitimacy), institutions are socially constructed symbols that change over time, and they are influenced by society at a field level (governance). Institutional pluralism has been defined as the situation in which organizations enact multiple institutionally given identities and mythologies that legitimate identities (Yu, 2013). It recognizes that governance (Kodeih & Greenwood, 2014) and values (Kraatz and Block, 2017) are underexplored dimensions of institutionalism. Institutional pluralism is like institutional complexity (Greenwood et al., 2011; Kodeih & Greenwood, 2014) and institutional hybridity (Pache & Santos, 2013; Santos, Pache, & Birkholz, 2015) because it recognizes the role of multiple and often competing institutional logics. It also acknowledges the dynamic and interrelated nature of individual identity and field level governance structures which influence of

processes required to attain and maintain sociopolitical legitimacy. In this essay, Canada is not understood not as a “nation-state actor” (Scott, 2017, p. 862); instead, it is a conceptual tool referred to as an organizational field, a “collection of interdependent organizations sharing broad cultural frames and common relational system or network of interactions” (Scott, 2017). By extension, the notion of Canadian identity is also socially constructed by Canadian citizens. Therefore, Canadian identity logics at ASAC are the result of “bringing institutional and identity logics into conversation together” (Glynn, 2017) where institutional logics are the socially constructed ‘rules of the game’ that define appropriate behaviour (Kodeih & Greenwood, 2014; Ocasio, Thornton, & Lounsbury, 2017) within the fields of Canadian business and business school scholarship.

Other studies discussed how ASAC gained evaluative (pragmatic and moral) legitimacy and cognitive legitimacy (McLaren & Mills, 2013). Cognitive legitimacy in this case focuses on adherence to collectively valued purposes and goals (Deephouse et al., 2017), also referred as informal legitimacy (Hinings et al, 2017). The cognitive legitimacy of ASAC is demonstrated by high levels of participation at the annual conference and ongoing membership from scholars and practitioners from the field of administration in Canada. Another applicable dimension of legitimacy is formal (Hinings et al, 2017) which includes regulatory or sociopolitical legitimacy (Deephouse et al., 2017). Evidence of ASAC’s formal legitimacy is demonstrated by the continued funding it received from national bodies and business schools that sponsor the annual conference. Although legitimacy of ASAC has been considered in depth, the means through which it has been socially constructed as a symbol of Canadian management scholarship and how the association has adapted over time in response to field level pressures from society require further exploration.

Methodology

The primary activities of ASAC relate to either organizing the annual conference or supporting the publication of CJAS. The annual conference is an important part of ASAC’s maintaining legitimacy among members, providing a place to network and discuss common areas of interest (Austin, 1998; McLaren & Mills, 2013). Supporting CJAS has also been an important part of gaining and maintaining legitimacy in the field of business studies internationally. Acknowledging that organizational identity is socially constructed, the process of academic publication has a significant normative influence in the field of social science, which includes management studies. The ways in which the academic business school logic is enacted by the organizers to create a journal that is of interest to academics and ASAC members is informative. Therefore, this discourse analysis primarily focuses on the journal publications because articles published in CJAS provide an indication of the type of information and research that was of interest to member reviewers at the time of printing after being subjected to significant influence from field level norms (Miller et al., 2011; Moizer, 2009).

Method of Discourse Analysis

The published issues of CJAS are a form of organizational archive and thus a means of accessing discourses of the past (Rowlinson, Hassard, & Decker, 2014; Rowlinson & Hassard, 2013). They are also a source for information from the past that can be used to create plausible history-as-sensemaking process for ASAC via CJAS (Suddaby & Foster, 2017). As “the” Canadian association that focuses exclusively on administrative scholarship, CJAS in many ways is the publicly available face of ASAC. I suggest that those who choose to be publish their work in CJAS rather than elsewhere are more committed to the Canadian identity project because the do so despite the perceived academic risk. The published content of CJAS provides a primary source of data in the case of ASAC in two forms. First the published peer reviewed articles, which are subject to significant influence from the field before being presented. These articles have contributed to ASAC’s ability to achieve legitimacy within the academic business school logic and increased the legitimacy of Canadian academics in the academic field (McLaren & Mills, 2013). However, CJAS does not publish exclusively Canadian cases or Canadian authors. To maintain legitimacy in the academic field they deliberately encourage publication from a variety of sources and on a variety of topics.

In contrast, CJAS editorial teams have significant influence on what research is made public and how it is presented (Harley & Acord, 2011; Moizer, 2009). Editors are responsible for ensuring the balance between logics in CJAS published material, therefore their discourses are informative, because they have a position of influence and power. They are also slightly less constrained by the norms of the academic field and review process. The processes enacted within their editorial support teams determine what is deemed “Canadian” management scholarship, or at least what was popular among Canadian management scholars. Papers may be “Desk rejected” because they do not meet the mandate of CJAS (Hackett 2007 (2))

I reviewed all editorials from 1991 (1984 was the first year) through 2017. Every issue did not have an editorial. A sample of articles that referenced Canada or Canadian as a subject term was reviewed considering the context in which Canada and Canadian was presented within them. Introductions to special issues were also considered along with award winning essays and special features.

Analysis

Although CJAS does not publish exclusively Canadian issues, the articles written about Canada and published in CJAS present a view of Canadian business scholarship that fits with the mission of ASAC. Published articles meet criteria set by CJAS which means they are high quality conceptual and empirical papers in the variety of business disciplines supported by ASAC divisions (Anonymous, 2007, 2008; “Area Profile,” 2016; Oh, 2015). The work published tends to be multi-disciplinary and interdisciplinary work written in English, primarily, and French (<http://cjas-rca.ca/about-cjas/>). Therefore, what is published in CJAS is reflective of a network of contributors, who together collaboratively within a broadly defined field to create and legitimize the notion of Canadian business scholarship that is interesting and worthy of discussion. What has been submitted to be reviewed or what was rejected is not accessible, but the resulting output of the editorial review process must be deemed the highest quality of all that was submitted. In this context editors have a unique position because they have more access to understand what is submitted overall and are able to present their perspectives in their editorials. They reflect on the state of the journal, their agency in enacting the mission, and the challenges and opportunities, which they see.

CJAS Articles

Published peer reviewed articles are subject to significant influence from field level norms. What is published and how it is written are considerably influenced by reviewers before being shared. Work is submitted and read, but in the majority of the cases are rejected (Moizer, 2009). Rejection isn’t necessarily a commentary on the quality of the idea but the whole package, how an idea is put together and presented (V. V. Baba, 2016). CJAS had a rejection rate of 70% in 2017 (Laroche, 2017). Editors often point out the value of maintaining an internationally competitive acceptance rate (V. Baba, 2016; Hackett, 2006a, 2009a; Jalilvand, 1999). Acceptance and publication in CJAS represent what is deemed worthy by a network of informed and critical reviewers from the Canadian field of business management and administration. The outcome of their review, recommendation, is a result of comparing what they review with their perception of the CJAS purpose, to maintain a level of legitimacy within the Canadian field and international academic field (Elliott, 2013; McKee et al., 2005).

A database search was completed of CJAS articles available through the EBSCO Host Business Source Premier as the portal, which include articles from 1997 through 2017. Searching the key text “Canad*” as a subject term returned over 150 results, more than half of all the CJAS publications. The way Canada is presented in the articles varies from one article to the next the position of the authors tending towards one of four perspectives. The articles provide Canadian context by considering case studies of organizations operating in Canada. In this situation, the organizations are assumed to be Canadian by virtue of their location and the legal, environmental, and local societal influences (Burke, 1998; Scales, Kelloway, & Francis, 2014; Thun & Kelloway, 2011). A second common approach is to treat Canadians demographically, sorting and organizing people residing in Canada as using different common traits or apparent physical or social identifiers. The common traits used by those in the field of marketing include

language, age, region of residence, ethnicity, or an occupational area (Adler & Graham, 1987; Laroche, Tomiuk, Bergeron, & Barbaro-Forleo, 2002; Latham & Millman, 1997; Partridge & Nolan, 2005). A third position considers the structure and macro level influence of Canadian industries and the implications of public policy on the economy. In this situation Canada is a unique context defined by the legal structures and macro level influence of public policy on organizations associated with Canadians (Carlson & Nolan, 2005; Davis, 2003; Lightstone & Driscoll, 2008; Marche & McNiven, 2003; McNiven, 2006; Serenko, Cocosila, & Turel, 2008). A final common group of articles is concerned with business school organizing within the Canadian academic field (Austin, 1998; Chen & Liu, 2012; Elliott, 2013; Erkut, 2002a; Finch et al., 2016; McKee et al., 2005; McLaren & Mills, 2013; Mesny, Pinget, & Mailhot, 2016; Mills, Weatherbee, & Colwell, 2006). This fourth body of work presents a view of the academic field from the inside by including case studies and research projects that highlight the interaction effects of the other three areas that are of personal professional interest to ASAC members. They illuminate the influence of public policy, demographics, and international standards on academic institutions. These articles will be considered in greater depth because they are most relevant to the topic of Canadian administrative knowledge creation and the context for ASAC and CJAS.

CJAS the Business School Logic presented by articles

The Canadian academic management field is influenced not only by the legal organizational structures of business schools, and imposed accreditation structures (Coleman, Wright, & Tolliver, 1994; McKee et al., 2005; Mills et al., 2006) but also funding agencies, and increasingly industry partners who support research (Mesny et al., 2016). The multiple field level logics must be navigated by leaders, who set the vision. The logics are also enacted socially by ASAC members who establish field level standards of practice as they organize and attend conferences, review conference presentations and article submissions, and present and refine their research efforts to conform to the expectations presented by their peers. Canadian business scholarship continues to be operationally dependant on local social networks, such as Deans in Canadian business schools, funding agencies, and increasingly industry partners who support research (Mesny et al., 2016), but they are not all in Canada.

The articles that consider the influence of public policy on achieving legitimacy in the academic field discuss that CJAS is positioned in an internationally regulated industry that is at the mercy of dominantly American standards (Austin, 1998; McKee et al., 2005; McLaren & Mills, 2013). When Erkut (2002a) attempted to measure the impact of Canadian researchers in the field of management studies, his study briefly introduced, via the pages of CJAS, the ongoing debate about the importance of scholarships metrics (Coleman et al., 1994). It raised many insightful questions about what constitutes valuable contributions in the field and what constitutes the field itself. Though the study was not highly cited initially, it has since been cited as a method for considering impact (Serenko et al., 2008). At the time, the study revealed something about Canadian management values and the social construction of impact metrics noting “Canadian Academics publish quite a few papers in Canadian journals, but they do not cite many papers published in Canadian journals.” (Erkut, 2002a, p. 103). It summarizes a common discourse at ASAC which presents the influence of US systems in Canadian field level logics. In order to remain competitive in the international academic industry, Canadian schools have tended to adopt (and adapt) American structures and standards (Austin, 1998; Boothman, 2000; Coleman et al., 1994, 1994; McKee et al., 2005) which uncritically reflect values and contexts of the US (McLaren & Mills, 2015). Likewise, Canadian academics have tended to strive for recognition, through publication in journals based in the US, again accepting that the standard of academic rigour and value can be proved by conforming to academic norms of the US (Elliott, 2013; McKee et al., 2005). The immediate response to Erkut’s (2002) study from the CJAS editorial team was to invite Business School Deans from across the country to respond to the study. The invitation process was an attempt to engage CJAS readers with diverse perspectives from across the country. The responses also generated a discussion that demonstrated the uniqueness of the complex plurality of the Canadian academic business field (V. V. Baba, 2002; Erkut, 2002b).

CJAS the Business School Logic presented by Editorials

Inviting and publishing responses to articles is just one example of the unique and influential position Editors hold in journals (Bedeian, 2004; Moizer, 2009). Editors shape the direction of the journal in the long term; and ideally narrate via editorials a story of progress and achievement (V. Baba, 2012). Reoccurring topics in CJAS editorials include reflections on impact (V. Baba, 2015b; Hackett, 2006a, 2008a; Jalilvand, 1999); increasing international representation (Hackett, 2008b; Jalilvand, 1999); the value of supporting and encouraging new scholars through the ASAC conference (Hackett, 2006b, 2009b); finding new ways of promoting Canadian interdisciplinary management studies (V. Baba, 2015a; M. Brooks & Fooladi, 2003); and the desire to produce research with academic and practical value (V. Baba, 2014; Fooladi, 2000). Amidst these topics, two themes emerge. First, editors find ways to reinforce the value Canadian business identity by inserting content into the journal in ways that do not require blind peer review. For example, they present perspectives of business field by conducting practitioner interviews (M. R. Brooks & Fooladi, 2005). They may also include the key note addresses from conferences (d'Aquino, 2007; Hinings, 2006), invite commentary from business school deans (V. V. Baba & Toulouse, 2002; Erkut, 2002b), or present special editorial essays (V. V. Baba, 2016; Ghauri & Park, 2017). They create space for ideas that may not fit the mainstream academic logic by publishing calling for special issues (V. Baba, 2013b; Fooladi, 2000; Tae Hoon Oum & Chunyan Yu, 2005), or printing special features (Davis, 2003; Montazemi, 2009; Tae Hoon Oum & Chunyan Yu, 2005). Second, the editor's role is to translate and promote the value of ASAC, and CJAS as a publication venue for high quality academic research. Editors do this by awarding best paper awards (Armstrong-Stassen & Schlosser, 2008; Chen & Liu, 2012; Scales et al., 2014) or encouraging certain organizational values by interpreting metrics. For example, in the 25th anniversary edition of CJAS, Hackett (2008) noted it was a milestone year due to the significant changes in strategic direction, branding, quality, and new paths for the journal.

Editors have been keenly focused on the topics of quality and impact and tie metrics to the goal of the publication to make valuable contributions to the field. The metrics that editors have used to represent the influence of CJAS include those that are most common in the field of academic publishing - submission rates, rejection rates, citation counts, and impact factors (Hackett, 2007, 1). According to those numbers, the influence of CJAS is growing and CJAS is increasingly being seen as a source of quality, international, and interdisciplinary research (Laroche, 2017). Despite repeated efforts and “nudging papers in a direction of greater relevance to the profession” (V. Baba, 2013b), it seems CJAS editors continually struggle to convince ASAC members and readers to actively support their vision of interdisciplinary research in Canada by submitting their findings to CJAS (V. Baba, 2016; M. Brooks & Fooladi, 2003). Canadian business scholars must respond to editorials or engage in the editorial process (Moizer, 2009). They must “send...papers, agree to serve as reviewers, speak highly of the journal among colleagues, and take ownership of this superb journal” (Hackett, 2007a).

Combing evidence: Reflection of Canada through CJAS

There is value in the organizational lesson experiences by CJAS to meet the ASAC goals. Like management scholars internationally, Canadians are concerned with the challenge of defining value for multiple networks and stakeholders (Finch et al., 2016), but the true uniqueness of Canadians and Canadian organizations is the way they respond to and manage diversity. Regional representation requires constant change and deliberate effort to make space for alternative perspectives, and is often presented as dichotomous, urban and rural, English and French, and professional and academic (Hackett, 2006a). ASAC has expanded and changed since the initial cooperative efforts 60 years ago (Sexty, 2006), but the values have not. The current mission “to advance scholarship, teaching and practice in the administrative sciences in Canada by facilitating a collegial, inclusive and vibrant community for the rigorous exchange of ideas in our two official languages (“Mission Strategies,” 2018)” is reflective of the initial intent of the deans. ASAC is a collectivist professional organization in which change is the result of consensus building and takes several years to achieve (Austin, 1998).

Throughout the papers that have been written about ASAC, and about Canadian business scholarship, Canada refers to a locale or is positioned in relation to the US. The Canadian modifier is used to identify either a school's or researcher's location "in" Canada or they are uncritically presented as alternative to American but with incomplete consideration of aspects attributable to unique "Canadian" contexts. This way of understanding Canada within CJAS and ASAC is too limiting. In response to organizational pluralism, the membership at ASAC could have prioritized activity differently, articulate an identity construct with clarity, and position ASAC more clearly within the field academic business schools internationally. Yet, the lack of clarity around the Canadian identity did not stop ASAC from being Canadian in practice. The goal of ASAC and CJAS was to contribute new ideas to the academic field and create something for people who share common spaces, histories, and political contexts. The perceived conflict between Canadian issues and international relevance did not result in fracture as predicted by institutional theory (McLaren & Mills, 2013). They have been balancing multiple logics the academic and Canadian. Editors of CJAS actively solicit paper submissions that consider Canadian contexts (V. Baba, 2013b; Hackett, 2006a). However, it seems there is limited response to their requests. Members, in choosing to present a Canadian identity logic that is in tension with the logic of top tier academic status continue to socially construct tension.

Discussion

Editorials in CJAS demonstrate that editors accept the Canadian multidisciplinary logic and the plurality of the field, and they try to encourage it (V. Baba, 2013a; Hackett, 2006a). Editorial teams at CJAS deliberately continue to accept and encourage article submissions in both French and English despite normalizing pressure from publishers to publish exclusively in English and the additional expense associated with translation (Hackett, 2006a, 2007a). Editors also consistently request interdisciplinary and theoretical work, efforts that encourage CJAS readers to consider lessons from a variety of subject matter areas (V. Baba, 2013b; Hackett, 2007b), often through calls for special issues (M. Brooks & Fooladi, 2003; Fooladi, 2000, p. 2; Jalilvand, 1999). It is also common to see articles in CJAS that demonstrate Canadian based partnerships that integrate diverse regional perspectives as research topics as well as in project organizing structures (Finch et al., 2016). The development of and ongoing adaptiveness of ASAC as an organization recognizing CJAS as a fundamental component of change in a dynamic Canadian/International environment has defied predictions of theories of institutional plurality (McLaren and Mills, 2013). They have multiple goals to meet high quality standards of the academic field, to create knowledge by presenting interesting interdisciplinary work, and to be Canadian. Their calls for submissions do not present these three logics as contradictory or competing, they can be complementary. CJAS publications demonstrate the uniqueness of the Canadian multicultural logic when they make a deliberate effort to include opinions from across Canada (Austin, 1998, 2000a; Finch et al., 2016), move the annual conference to different locations (Austin, 1998; McLaren & Mills, 2013), and include research written in French (Hackett, 2007a, p. 200). Unquestioningly there is a desire to understand Canada and Canadian contexts, and to adhere to the social rules of Canada, by focusing on how do Canadian laws, policies, and socio-cultural norms influence business management and business research. The assumption must be accepted that there is clarity around what it is to be Canadian.

Canada is a nation of local communities with unique value in localized contributions. ASAC is an organization that was established around an idea, and ideal, a vision or a belief that there is something unique and different about Canadian organizing. I have tried to show that the CJAS network, editors, authors, and readers, , similarly reflect their understanding of a Canadian identity that recognizes the value and necessity of plurality and complexity. They have repeatedly explained that business in Canada is different from business in other places because government policy, regional boundaries, and local cultures (community contexts) influence how organizations operate. The uniqueness lies in the approach to organizing, the deliberate efforts to include diverse regions and languages (a Canadian model), recognition of group effort required to pull it off, acknowledgement of individuals who work particularly hard, and the effort to adapt through innovation attempts to see what sticks.

I proposed CJAS as an ideal example of Canadian organizing in practice. It has been challenged by a weak definition of one of its core logics, Canadian, but refused to sacrifice it for the sake of legitimacy (Kraatz & Block, 2017; Pache & Santos, 2010). Instead organizational members have repeatedly chosen to negotiate a balance between two seemingly incompatible logics, international relevance while maintaining a focus on Canadian contexts. The analysis of CJAS revealed that editors and those who study theories of Canadian management present Canadian discourses of plurality, complexity, and bi-lingual (English and French) often interchangeably presented as interdisciplinary research. I have provided an argument that these logics should not be viewed as incompatible, they may be able to co-exist and maintain what appears to be a truce (Nicolini et al., 2016). Alternatively, I suggest the organizers consider the position of CJAS and ASAC within the field, and the potential to change the discourses that have been constructed around the two logics (Pache & Santos, 2013; Santos et al., 2015; Smets et al., 2012; Yu, 2013), by focusing on the existing plurality within the Canadian management field.

Canadian society is a prime example of a society that critiques American standards but also seems unable to provide an alternative that significantly rejects its influence. Values are embedded in the organizational structures that arrived with colonial societal frameworks. Although many Canadian organizational models appear to mimic other dominant models of Europe and later America, they have differed in subtle yet potentially instrumental ways. Incremental change occurs over extended periods of time and Canada is emerging as something different, something alternative by building on Canadian policies and political structures that demonstrate a uniquely Canadian approach to organizing. The perhaps subtle differences between Canadian compromise approaches have resulted in increasingly diverse shared societal values, over time they have created alternatives that have been difficult to articulate. They are related to a shared logic, governance system, and acceptance of plurality. They are evident in ASAC but may require some digging.

The discourses considered indicate that Canadian management scholarship operates in a context that demands plurality, and the ASAC/CJAS network does not require a single determining identity construct. It is not a stretch to describe the dominant Canadian identity logic present in ASAC as multicultural, complex, plural or innovative. In many ways they have already done so. There is opportunity in reframing Canadian this way too. There is space to deliberately strategize to strengthen identity of innovation, interdisciplinary, and interagency uniqueness of Canada and position ASAC as a potential venue where critical de-colonial theories can be discussed, challenging Canadian identity logic while providing an alternative to the standard American managerialist practice globally. Multiplicity and plurality provide a new way of socially organizing without relying on the outdated structures of the past (Leung, 2015), it is a discourse Canadians have been silently managing for a long time.

Implications for Canadian Identity

The Canadian government has been actively reconstructing a nationalist Canadian identity around the concept of multiculturalism since the 1960's. However, does Canada need a single consistent point of reference? The processes required to achieve legitimacy in the Canadian field involve navigating and adapting to plurality. The ASAC case demonstrates a practical example the kind of "generative process" (Yu, 2013) required to respond to ever more plural and complex international business environments (Kymlicka, 2007). An inconsistent Canadian identity can create challenges for Canadian organizations and those who study them. It also creates opportunities to learn about managing cultural diversity and bring value to Canadian organizations by understanding diversity needs (McLaren & Mills, 2015). They cannot achieve that kind of legitimacy without acknowledging and engaging with the history of Canada and the way "Canadian" is constructed and reified in organizations, especially those who self-identify as Canadian.

Canadian identity

A multicultural identity has emerged within Canadian society (Adams, 2017; Guo & Wong, 2015b; Stein, 2007) and that identity has influenced ASAC, whose identity was formed to recognize the influence of local context in business studies, specifically Canadian. There are many valid critiques of

multiculturalism, it can be divisive, marginalizing, a hoax, and hegemonic (Guo & Wong, 2015a). There is also potential for it to be unifying, inclusive, hybridizing, or catalytic, offering counter-hegemony (Fleras & Elliott, 2003). There are strong advocates on both sides of the debate, but it seems people in Canada are prepared to debate, consider, respond, and find compromise and are becoming increasingly more willing to do so (Adams, 2017). It has become the uniquely Canadian way, but it is still finding its way. I encourage business scholars in Canada to engage in this debate, it is not going away.

Recent publications concerning the sociology of Canada have concluded that multiculturalism has become synonymous with the Canadian identity (Adams, 2006, 2009, 2017; Guo & Wong, 2015b; Stein, 2007). It is problematic because the dominant understanding of culture refers to cultural practices - religious symbols, language, national heritage, music and dance- which does not consider the deeper more fundamental influence of values (Kraatz & Block, 2017). Meanwhile, many of the current public policy and legal structures of Canada have been built upon colonial nationalist ideologies and outdated conceptions that no longer represent the values of most Canadians (Stein, 2007). They are inadequate to respond to the rapidly changing global experiences. In order to move beyond the surface meaning of culture as outward displays of diverse histories and relationships with nations, Fleras (2011, 2015) proposes movement towards a post-Canada. He suggests that, "Multicultural governance models for managing complex diversities rarely resonate with meaning or relevance." (Fleras, 2015, p. 327) Therefore, a pluralist post-Canada would be a leader in the management of complex diversities and multiversal communities of stakeholders. If he is correct, this Canada is also good thing for ASAC.

The question of how Canadian identity influences management knowledge in Canadian schools has been raised by others (McLaren & Mills, 2013, 2015). They have advocated for research and theory building that helps develop management body of knowledge that considers Canadian contexts. The goal of this paper is to consider how ASAC, an explicitly Canadian association, reflects what is Canadian and socially creates it as a discourse in the field. I propose CJAS as an ideal example of Canadian organizing in practice. It has been challenged by a weak definition of one of its core logics, Canadian, but refused to sacrifice it for the sake of legitimacy (Kraatz & Block, 2017; Pache & Santos, 2010). Instead organizational members have repeatedly chosen to negotiate a balance between two seemingly incompatible logics, international relevance while maintaining a focus on Canadian contexts. Through the analysis of CJAS, which focused on the discourse presented by editors and those who study theories of Canadian management, I have provided an argument that these logics should not be viewed as incompatible. Although they may be able to co-exist and maintain what appears to be a truce (Nicolini et al., 2016) or CJAS and ASAC can focus on deliberately changing the discourses that have been constructed around the two logics (Pache & Santos, 2013; Santos et al., 2015; Smets et al., 2012; Yu, 2013), positioning Canadian management as a field of plurality.

Conclusion

Kraatz and Block (2017) explain that pluralism is different than multiplicity. I think it is a critical premise to the argument that Canadians are exceedingly not satisfied with multiplicity and are moving toward more pluralistic ways of operating and will require governance structures that can adapt and accommodate this way of operating in a complex world. To be Canadian management scholar is to recognize the influence of context, and the value of considering alternative ways of operating to create better, more innovative and interesting, managers. ASAC has always been a plural. It has been ahead of its time in what is becoming a new normal for Canada and a world heading toward a model of postNational multiplicity (Fleras, 2015). The Canadian management identity is not problem but an example of pluralistic global futures that are not confined to cultures of ethnicity, or geography, or singular dominant identity constructs. Instead pluralistic institutions like ASAC that are adaptive to changing environments are valuable, though not normative, because complexity is a global concern. CJAS is positioned and has evolved to tackle the emergent future of the digital world of online communities, social media, globalized, big data, and sharing economies. (Laroche, 2017)

Finally, I also encourage the continued critical investigation of historical political discourses in Canada. I propose that Canadian business managers are more open and considerate of diversity and

multiplicity. However, I have not considered what has been neglected, ignored, or deliberately written out of the history. It was beyond the scope of this paper to problematize the ongoing influence of unethical political policy that was strategically designed to support the eradication of Indians, the First Peoples of Canada. Although, there has been an increased awareness and tendency for public servants and Canadian authors to recognize “Three founding peoples/cultures/nations,” English, French, and Indigenous. It is not enough to acknowledge the First Nations as the third founding nation of Canada and continue operating the status quo. It does not consider the residual impact of dominance of assimilation policies prior to 1971 (Dewing, 2009) or the impact of the past actions on relationships and organizing in Canadian society today. There is a federal archive of royal commissions, federal public apologies, and crown court rulings that demonstrate the power and ongoing influence of public policy on organizations and business in Canada that challenge multicultural values of Canadians.

“The ongoing need to seek a way to eliminate the injustices and unfair treatment toward [those communities] must be met, along with the need to find a means to coexist in a way that is mutually honourable and respectful for all citizens of Canada, Aboriginal and non-Aboriginal alike (Iacobucci, 2007, p. xi).”

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ORGANIZATIONAL HISTORICIZING: THE NEED FOR THE NEW TO BE OLD

This paper investigates processes of *organizational historicizing* as undertaken by Nova Scotia wineries. Results suggest that wineries engage in intentional construction of rhetorical histories and the projection of a ‘sense of the past’ using a combination of rhetorical, symbolic, and material elements at both the firm and product levels.

Introduction

Perhaps for no other product in history is *history* so critical as “wine cannot escape its past because the past has been used to provide its market position” (Charters, 2006, p. 44).

The potential importance of the past and its expression in some form of historical representation is a growing area of research within management and organizational studies (Clark & Rowlinson, 2004; Godfrey, Hassard, O’Connor, Rowlinson, & Ruef, 2016; Weatherbee, Durepos, Mills, & Helms Mills, 2012). One emergent stream of study in this area is focussed on how firms use their own past as a symbolic resource to effect competitive advantage in the present (Suddaby & Foster, 2017; Suddaby, Foster, & Quinn Trank, 2010). Research has found that management and organizational interpretations and representations of a firm’s past are ubiquitous; found throughout all levels of organizational life. For example, various forms of representation are being used (and consumed) at the micro-level by individuals in their workplaces (Rowlinson & Hassard, 1993), across institutional fields (Beverland, 2005; De Clercq & Voronov, 2009), and within the broader socio-political environments of global markets (Foster, Suddaby, Minkus, & Wiebe, 2011; Suddaby et al., 2010; Voronov, De Clercq, & Hinings, 2013).

Collectively, we have learned that organizations and brands as varied as Cadbury (Rowlinson & Hassard, 1993), Tim Hortons (Foster et al., 2011), Colt Firearms (Poor, Novicevic, Humphreys, & Popoola, 2016), Hudson’s Bay Company (A. Smith & Simeone, 2017), Carlsberg (Hatch & Schultz, 2017), Jack Daniels (Holt, 2006), Absolut Vodka (Hamilton, 2001; Ooi, 2002), and many less prominent ones (Oertel & Thommes, 2015) have all engaged in acts of organizational historicizing (Hatch & Schultz, 2017). Through various intentional and deliberate acts of remembering and forgetting selected elements of their firms’ pasts, these organizations have all engaged in the construction of representations of the past. Constructed histories which they then use as “persuasive strategy[ies] to manage [their] key stakeholders” (Suddaby et al., 2010, p. 157).

Hindsight informs us that all of these firms had successfully historicized their organizations/brands by leveraging the past as resources for various institutional, organizational, and marketing activities in pursuit of superior competitive performance (Suddaby & Greenwood, 2004). However, all the work undertaken to study and understand the relationship(s) between these organizations and their pasts; the purposes to which their historical representations were put, and the various processes through which they

managed the strategic utility of their use of history, were conducted in organizations which already possessed a past. Each of these organizations had a deep and rich source of persons, activities, and events which could be historicized for organizational purposes in the present. But what if the circumstances were otherwise? What if a firm had little or no past at all? What if the organization was a new entrant in a field where the past was institutionally valorized?

As all organizations and their firm-level or corporate brand have a beginning (i.e. at some point they must literally have no past to speak of), this begs several interesting questions concerning the how, when, or why of organizational historicizing. How 'old' must an organization be before it has accumulated a past of sufficient depth that it can be drawn upon to serve any strategic utility in the present? When and why do organizations first start to construct or deploy rhetorical histories? Does this vary by the type or form of organization? Are there different types or forms of history used for different purposes?

We believe that these questions point to important yet unstudied aspects of organizational historicizing and so our aim in this paper is to start the process of exploring them. Given the nascent and investigative nature of this research, our goal will necessarily be somewhat constrained in its remit. That is, we first must ask if new firms construct or project any 'sense of the past' at all? And if so, why, and what resources do they draw upon in the absence of organizational resources from the past?

In the next sections we detail our research approach and the method we employed to reach our conclusions. Following this we provide a brief chronology and sketch of the historical trajectory of our research site; the grape and wine sector in the Province of Nova Scotia, Canada. We then present our observations on the activities of organizational historicizing undertaken by new wineries. Using two wineries as illustrative examples we show how, even in the absence of an organizational past, they have each constructed and projected a 'sense of pastness' to external stakeholders. We then discuss how the symbolic and material representations of the past the wineries have constructed are used to accrue legitimacy and authenticity with external stakeholders. Finally, we close the paper with some considerations for moving the area of organizational historicizing forward.

Methods

Research Context

Our empirical context is the emergence of a commercial grape and wine sector in the Province of Nova Scotia. A development that has taken place over the last two decades. The rapidity of these developments and the very recent origins of wineries in Nova Scotia has meant that unlike other wine regions of the country Nova Scotia has no domestically embedded cultural traditions associated with winemaking and wine consumption. The region does, however, have a distinctive socio-economic and cultural tradition of alcohol consumption other than wine.

Reports would suggest that Nova Scotia's wine industry commenced over 400 years ago, when Louis Hébert first planted grapes at Bear River in 1611 (Kelly, 2011) and then again a few years later, when the then-governor of Acadia, Isaac de Razilly planted vines needed for sacramental winemaking in Fort-Sté-Marie-de-Grace (now LaHave) (Ripmeester, Mackintosh, & Fullerton, 2013). While records indicate that the Acadian settlers regularly planted 'the vine' as a matter of their agricultural tradition, and while it is highly likely that those grapes were made into wine for home and sacramental use, the Acadian Deportation and Le Grand Dérangement saw the loss of any records or evidence of this which renders this logic speculative only.

What surviving historical records do show, however, is that table grapes such as the Black Hamburg, Isabella, Hartford Prolific, Diana, Concord, and Delaware varieties were grown by the English settlers who followed the Acadians. These grapes thrived in both the Annapolis Valley and along the South Shore of the province. During the mid-1800s this produce was often shipped to New England where their quality regularly garnered them prizes at agricultural fairs. There is some evidence that various fruits were used to make house-hold farm wine (Various, 2018) but nothing which indicates any commercial activity in wine making from grapes until a century later.

Formal scientific study of the potential for grape growing commenced in 1913 at the Federal Agricultural Research Station in Kentville. Experiments in grape planting would be conducted at various locations around the province up until 1971 when Agriculture Canada researchers reported that it was not viable to grow commercial levels of wine grapes in the province (Bishop, Craig, & MacEachern, 1970). However, undaunted by such reports, entrepreneurs like the Jost family planted grape vines in 1978 in Malagash, followed a year later by the planting of other vineyards in Grand Pré by Roger Dial and David Morse, and in Windsor by the Corkum family (Naugler, Murray, & Wright, 2004). These grape plantings were for the expressed purpose of growing grapes for wine making.

While wine made in Ontario was trucked by tanker to a commercial bottling plant located in Truro since the 1960's, the first listing of a Nova Scotia produced wine in the Nova Scotia Liquor Corporation (then Commission) retail system was a 1980 vintage Baco Noir from Grand Pré Wines Ltd (Cattell, 2013). In the ensuing years new wineries opened, and acreage planted under vine increased exponentially. Industry associations for both Grape Growers (1982) and Wineries (2002) have been formed and recently Nova Scotia has been institutionally recognized as one of Canada's four grape and wine growing regions. Published in March 2013, the report on The Economic Impact of the Wine and Grape Industry in Canada 2011 (www.canadianvintners.com), included Nova Scotia for the first time. In the last two decades Nova Scotia has gone from one to over twenty wineries who produce at small but successful commercial levels. Socio-economically this has been a significant achievement given the prior economic history and cultural habits surrounding alcohol production and consumption in the province.

Drinking has always been an integral part of North America colonial culture since Europeans first arrived on the continent. It has been argued that "much of Canada was actually built upon a foundation of Jamaican rum and local whiskey" (Warsh, 1993, p. 3). Perhaps nowhere in the country more so than on the eastern coast of the continent and specifically in the settling of the Maritime Provinces. It was here where the challenges of hard work required by a developing economy based upon resource extraction; fish, coal and lumber, combined with long coastlines, many seaports, and an intemperate climate, there developed a culture which had an exceptional "love of spirits" (Warsh, 1993, p. 13). Whether, directly from England, Scotland, Wales or Ireland, or indirectly from the many loyalists traveling northwards to escape from the revolting colonies of America, alcohol consumption is a cultural inheritance (Ritchie, 2009).

For several hundred years, the importation of spirits; first from Europe and then from the United States and the Caribbean, meant that the Maritime Provinces grew and sustained themselves on alcohol; earning notoriety for having the heaviest drinkers in the country (Morrison & Moriera, 1988). The extensive consumption of alcohol remained a dominant social practice until the mid 1800's when Nova Scotia saw the blossoming of the temperance movement. Ultimately, the temperance organizations' pursuit of restricting alcohol resulted in prohibition and later the imposed state control of alcohol sales and consumption throughout the province. These newly introduced laws and norms concerning drinking in public were the most restrictive in all of Canada as the temperance societies had gained significant political and symbolic power (Davis, 1990).

This 'dry' period in the province's history lasted until a liberalization period following the end of World War II. After the war, with the increasing move away from a natural resource-based economy, and the rapid industrialization of Nova Scotia, several breweries and distilleries opened within the province; a welcomed addition and expansion of the governments tax base and revenue generation (Marquis, 2003). Government was now firmly in monopolistic control of provincial alcohol production, sales, and consumption. Thus, the historical trajectory and cultural tradition of alcohol consumption in the province has meant that the emergence of the field of wine-making occurred in the absence of any local socio-cultural traditions. On a global basis the institutional norms of fine winemaking remain largely European in character.

In Europe, the socio-economic status of wine and the practices around its consumption have evolved over several hundreds of years. In this, the 'Old World' of wine, wine is considered an integral part of the daily routine of eating (i.e., wine is normatively consumed with lunch and with dinner). So, while the Old World has a historically rooted and well-developed wine culture where wine is part of every day life (Hussain, Cholette, & Castaldi, 2008; D. Smith & Mitry, 2007), the relative youth of grape growing and wine making in the 'New World' (e.g., North America, Australia, New Zealand, South America) means that the cultural positioning of wine is not as strongly linked to the habits of daily life. So, in Nova Scotia, as in much of the New World, wine is largely treated as a commodity beverage without any deeply institutionalized norms concerning its consumption and use (Caroline, Gary, & Mike, 2010). Consequently, the institutional environment for Nova Scotian wineries draws upon the institutional character of fine wine-making as dominated by European sensibilities and traditions.

Research Approach

We chose a multiple case study (Eisenhardt, 1989) approach for three reasons. First, the use of case studies is an appropriate and effective way to approach areas of research that are still exploratory and which lack any previous empirical study (Yin, 1989, 1994). Second, we were interested in understanding the social realities of the participants as constructed through their actions and experiences (Crabtree & Miller, 1999) within a specific field where a firm's history is institutionally prized. Surfacing these types of understanding is best accessed using a qualitative and comparative approach (Miles & Huberman, 1994). Finally, our phenomenon of interest (organizational historicizing by wineries) and the context within which these activities take place (the institutionalization of a Nova Scotian wine-making field) are heavily entwined (Yin, 2003). That is, the collective nature of the socio-political, economic, and cultural conditions of the emergence of the grape and wine sector within Nova Scotia are being brought into existence in part by the very processes of organizational historicizing that are taking place within the wineries.

The relatively rapid rise of the grape and wine sector and the recursive nature of the field's relationship with wineries meant that we needed to explore both firm and field levels. At the micro (firm) level, each winery represents a singular case within a field-level or regional context. The grape and wine sector also represents a case at the macro (field) level. Nova Scotia is the most recent of four wine regions in Canada and, as the youngest, it is still emerging as a cool-climate wine region. Hence, to understand the actions and activities of the wineries, we also needed to attend to the macro context of the Nova Scotian field. Especially as it varies greatly from the three other developed wine regions in the country (Quebec, Ontario, and British Columbia) due to Nova Scotia's own unique historical and cultural relationship with wine. This variation influenced the formation of the field and the evolution of the wineries which in turn impacts the emerging field and so on.

Data Collection

The data used for this study were purposively selected (Yin, 2014) from a larger collection of data

gathered on the grape and wine sector in Nova Scotia over a period of several years: 2010 through 2018. Sources of field level data included publications of grape and wine topics in local media, reports and sectoral publications (wine business press); government documents such as legislative discussions (e.g., Hansard); government announcements and ministerial reports. These data were used to build a field level picture of the socio-political and economic context within which wineries in Nova Scotia came to be. At the micro level data were collected from individual winery websites and marketing materials associated with wineries and their wines (e.g., Nova Scotia Liquor Corporation magazines and flyers, newspaper advertisements, etc.). Finally, direct observations were made through site visits to wineries and in-depth interviews. Interviews were conducted with winery owners, winemakers, tasting room staff, guides and tour operators. Taken together, this allowed us to assemble an archive at the sector or macro scale and to create case portfolios on individual Nova Scotia wineries using data collected from multiple sources.

Data Analysis

From our archive, we selected all data expressed/used by the wineries in any of their online, product, or physical manifestations that made either explicit or implicit reference to the past. The data were then descriptively coded (Miles & Huberman, 1994) as instances of rhetorical (e.g., textual representations, online or physical); symbolic (e.g., logos, brands, and symbols), artefactual (e.g., winery architecture, antique wine barrels, etc.); or material practices (e.g., the materiality of the process of winemaking). As we found that many winery practices combined the rhetorical and symbolic with material elements (e.g., stylistics of product labels and packaging, or when highlighting traditional methods of winemaking which involves specific material practices) the data were further re-categorized into instances of rhetoric, materialization (symbolic + material+ practice) and artefacts. The results of the application of this coding structure for two illustrative wineries are presented in Table 1.

Findings/Discussion

We first present some general and summary conclusions drawn from our observations and analysis of the processes of organizational historicizing. Following this we discuss how organizational historicizing is a response to institutional and market pressures. Pressures which force new wineries into a state of tension by seeking conformity within the field (Stinchcombe, 1965) while simultaneously expecting differentiation within the market (Leitch & Motion, 2007).

Historicizing in Wineries

We found that most wineries in Nova Scotia have - and are - engaging in organizational historicizing activities. The outcomes of this are usually made manifest in two different forms. The first is primarily rhetorical in form. Most wineries construct an explicit past that is then presented to external audiences as a 'history.' While the amount of information varied, the normative presentation was typically found on a winery's website entitled explicitly as 'Our History' or less formally as 'About Us.' This information was usually also displayed at the winery itself. Shorter versions or separate historical elements - such as founding dates - were displayed or printed on various other winery marketing materials (e.g., rack cards), or on product packaging (e.g., the back labels of their products).

The second form centered on processes of materialization and artefacts. In this presentation most wineries actively work at constructing and projecting an aesthetically based 'sense of the past' to their customers and visitors. This projection is enacted in four ways: (1) through the design and articulation of the physical architectural attributes of the winery itself; (2) using selected artefacts and objects as

decoration; (3) in the display of the material practices and production activities of fine winemaking; (4) and finally, through their choices of product design and stylistics.

Institutional Pressures and Historicizing Responses

New organizations are subject to various pressures and challenges that existing organizations do not face and so are subject to a greater chance of failure (Freeman, Carroll, & Hannan, 1983). Firms normatively expend significant effort to mitigate two dominant risks faced by new organizations. Institutional risks or what has been described as the 'liability of newness' (Stinchcombe, 1965), and the urgent requisite for generating firm-level awareness in the market (Balmer, 2001). In the case of the former, new organizations face field-level pressures to conform to dominant norms, while the latter acts as an imperative for new organizations to simultaneously face market pressures to stand-out (Leitch & Motion, 2007). Each of these pressures and the corresponding response by our illustrative wineries are discussed below.

To be accepted into an institutional field, new organizations must demonstrate that they belong (Suchman, 1995). So new firms must rapidly learn how to be accepted as a legitimate actors by both the other actors in the field (i.e., competitors, regulators, industry associations) and their own external stakeholders (e.g., suppliers, customers) (Stinchcombe, 1965; Suddaby & Greenwood, 2004). The criteria for legitimacy - the accepted normative organizational forms and functions which need to be met and demonstrated by new entrants - are derived from the dominant institutional logics within the field (Suddaby & Greenwood, 2004).

Rhetoric which calls upon broader higher order societal logics may be seen as symbolic institutional work (Suddaby & Greenwood, 2004) and in the absence of a field-level past of fine winemaking *and* any firm-level past, new wineries engage in this form of institutional work by aligning their actions and activities to the European-derived logic of fine winemaking (Voronov et al., 2013). They do this by invoking the imagery and practices associated with European norms of place and terroir, wine quality and standards, grape variety, and the practices of traditional methods of grape growing and production (Hills, Voronov, & Hinings, 2013). To offset the lack of a firm-level past in a field where vintage, age, and duration are valued, wineries link the pasts of organizational elements (i.e., their location and sense of place, their founders/owners/managers histories, their practices) to either fine winemaking logics or to other logics that are related or resonant with grape growing and winemaking (e.g., agriculture and farming).

Winery histories serve as legitimating accounts (Creed, Scully, & Austin, 2002), or signals that they meet field criterion for membership. These become a form of story telling (Lounsbury & Glynn, 2001) which symbolically signifies adherence to the expected forms, functions, and behaviours (Meyer & Rowan, 1977; Meyer & Scott, 1983). Organizational historicizing which reflects the traditions and practices associated with fine winemaking and wine thus serves to attenuate the liability of newness for wineries as it increases the chances of survival through field acceptance, access to needed resources, and a recognized market presence (Singh, Tucker, & House, 1986).

Market Pressures and Historicizing Response

While new organizations must conform to gain institutional acceptance, new firms also need to rapidly differentiate their offerings from those of others in the field in order to gain market awareness (Blombäck & Brunninge, 2009; Parmentier, Fischer, & Reuber, 2013). This differentiation must occur at two levels: the level of the firm and at the product or service level (Balmer, 1995, 2001). For reasons that are specific to the nature of wineries in the province's regulated market, organizational historicizing can be found at each of these levels in both symbolic and material forms.

At the product level, domestically produced wine must either be purchased at a Nova Scotia Liquor Corporation outlet or directly from the wineries. We have seen how wineries historicize their products by incorporating references to the past expressed through rhetorical, symbolic and material design elements. All these product design aspects are intended to signal Nova Scotia winery products as being authentically fine wine. However, because European winemaking has a long and storied history, Nova Scotia wineries are not only under intense institutional pressure to meet an exacting set of norms and expectations of what wineries ‘do’ and ‘make’ (e.g., fine winemaking practices and standards of quality), but also, the pressure of market expectations in how wineries should ‘look’ and ‘feel’. That is, the aesthetics of fine winemaking must also be found at the winery itself. For market purposes, the winery is synonymous with the firm.

The physical aesthetics of offices and work spaces, the design of products, as well as marketing materials and service activities reflect organizational culture, identity, and values (Olins, 1991; Ottensmeyer, 1996; Schmitt & Simonson, 1997). In this respect, symbols and artefacts in organizational spaces are forms of aesthetic codes (Gagliardi, 2005). They are also mechanisms used to differentiate the organization from other like organizations. Through historicizing processes wineries brand themselves through their historical aesthetic. By making the organization distinctive in its appearance and style they can invoke emotional responses in their visitors and customers (Olins, 1991). By projecting a ‘sense of the past’ wineries make themselves resonant with notions of vintage, age, and duration associated with market expectations of authenticity; i.e., of the ‘look’ and ‘feel’ of a *real* winery.

Contributions

Due to the nature of both the research site (an emerging cool-climate wine region), and the organizational subjects (new wineries who are operating in a still developing institutional field), this study is very much context-dependent research (Flyvbjerg, 2006). So, our observations may not apply in other contexts. For example, it is unlikely that new technology start-ups, whose strategy for field entry is to break with the past, will engage in similar forms of organizational historicizing.

However, there are still some elements of our findings that are relevant to the wider phenomenon of organizational historicizing. Particularly when speaking to the creation of organizational history(ies) in new organizations and how these contribute to a ‘sense of the past’ for external audiences. Our findings show that the use of organizational historicizing is not only a device that can be used to signal institutional legitimacy, it is also a process through which new wineries simultaneously construct and attempt to project a sense of organizational authenticity to their external audiences. In this sense, organizational historicizing also simultaneously fulfills the market requisite for firm-level or corporate branding.

We also found that organizational historicizing is not limited to the use of rhetorical history or symbolic representation. Our findings show that rhetoric and symbolism are often imbricated with physical objects to generate a sense of ‘pastness’ and to signal authenticity of institutional forms. By the piecing together symbolic and material resources which the wineries found readily available in their environments (Baker & Nelson, 2005; Tolbert, David, & Sine, 2011), they expressed their history in a form of *linguistic materiality* (Shankar & Cavanaugh, 2017). A sense of historicity expressed in accounts created through entrepreneurial acts of intertextual bricolage (Levi-Strauss, 1967). Finally, we note that for these new organizations the history work involved in the crafting of an organizational past was an emergent, ongoing, and enactive process as both the firm and the field they were embedded in co-evolved.

Table 1

Organizational Historicizing		Linkage to and Projection of a Sense of the Past in Lightfoot & Wolfville Established 2017
Rhetorical	Place or <i>terroir</i>	<p>“We believe being present on our land means recognizing the living memory of its past inhabitants”</p> <p>“Our main estate has been in Michael’s family for generations – working the land is in our blood.”</p> <p>“The Lightfoot name goes back eight generations in Wolfville”</p> <p>“We’ve also found evidence of earlier history on both our sites, including Acadian and Planter artifacts and even an Acadian-era house foundation where our current winemaking facility stands.”</p>
Materialization	Brand mark (logo)	<p>Complex brand mark with thoroughly explained historical elements such as the fleur-du-lis (described as: “Homage to France & Acadia) and Scottish thistle (described as: “from our ancestry”)</p>
	Wines & winemaking	<p>Wines are given traditional French names such as <i>Ancienne</i></p> <p>Describes “classic winemaking” following in the fine wine-making tradition and information on the website connects the Lightfoot surname (explaining its meaning) to the organization’s approach to fine winemaking and an “enlightened approach to both the agricultural and artisanal parts of our work”, “Our focus on classic vinifera”</p> <p>“our winemaking is about a return from modern, large-scale methods to classic, hands-on viticulture and oenology: 100 percent hand-harvesting, traditional basket press production, indigenous wild yeast fermentations, and fine French oak barriques for aging.”</p> <p>Old World notions of fine wine: “Burgundian-inspired”, “German-styled”, “Traditional method prestige cuvee”</p> <p>“The most diverse portfolio of European vinifera in Atlantic Canada”</p>

	Packaging choices	Labels have traditional artwork and fonts that harken to Old World stylistics Tidal Bay has screw cap, rest of product closures are mostly cork, though the sparkling wine has a typical <i>cage et l'oiseau</i> following in the French tradition, traditional 750 ml style bottles
	Architecture of winery	Huge heritage-style timber frame building invoking notions of Nova Scotia's rural and agricultural farm-style barn settings Lit with vintage-style chandeliers and accented with wine barrels
Artefacts		Highlights that Acadian and Planter artefacts and an Acadian-era house foundation have been found on the property

Organizational Historicizing		Linkage to and Projection of a Sense of the Past in Lockett Vineyards Established 2010
Rhetorical	Place or terroir	Connects the winery to the Province of Nova Scotia, even when the 'connection' is tenuous Describes the winemaker (who is from Ontario) as "Nova Scotian at heart" and Executive Chef as having "Nova Scotia roots"
Materialization	Brand mark (logo)	Clean and simple with LV and the ubiquitous British phone box that symbolizes Pete Lockett's British heritage; "wines worth phoning home about"
	Wines & winemaking	Combination of blends with quirky names (ex. Black Cab, Buried Red, Phone Box Fizz) and a few single-varietal wines No Traditional Method Sparkling, but several wines aged in oak
	Packaging choices	Modern-looking labels with non-standard combination of upper and lowercase text, sometimes san-serif fonts
		Some screw caps, some cork Table wines in traditional 750 ml bottles, dessert/ice wine in 200 ml bottles (traditional for that wine style)
	Architecture of winery	Steel, cement and plate glass Photographs of Pete Lockett's personal story adorn one whole wall – including a picture of young Pete in his sister's bathing suit

		Wall of vintage/antique bricks salvaged by Pete that is painted with the winery logo in a way that harkens to old brick warehouses (consistent with Pete’s last retail venture in nearby Wolfville and previously in Halifax)
		Memorabilia (such as an exotic and intricate wooden door hanging on the wall) – collected during Pete’s international culinary and wine travels
		Vintage British phone box in the vineyard – which becomes a prop for a story about Pete’s childhood in the UK and a word-of-mouth marketing tool that offers visitors a free phone call anywhere in North America
Artefacts		Stone unearthed during the excavation process for the winery has been used as a feature for the barrel-room chandelier Vintage corkscrew display

Conclusion

The recent globalization of wine markets has meant that new or younger wineries must emulate and adapt to strongly sedimented global (mostly European-derived) traditions of fine wine-making consistent with the developments in other wine regions in Canada (Hills et al., 2013). Nova Scotia wineries needed to adopt institutional logic where quality, method, and authenticity were the necessary perceptions which needed to be generated in order for them to be legitimated as a 'real' winery making 'real' wine. All of these institutional pressures have been at work in the more developed wine regions in the country for several decades (Voronov et al., 2013). Ontario (Tefler, 2001) and British Columbia (Getz & Brown, 2006) had over a century of history with winemaking before they needed to adapt to new institutional logics of fine winemaking. But these logics are new to Nova Scotia and this region has never had any history nor tradition of fine wine making. The absence of a winemaking past has meant that from the very beginning Nova Scotia wineries actively engaged in various degrees of institutional work through organizational historicizing (Hatch & Schultz, 2017).

However, rhetorical history (Suddaby et al., 2010) was only one element of the historicizing process. Winery histories were not limited to the use of linguistic cues of the past; i.e., textual representations, or symbolic aspects of branding (Foster et al., 2011) to signal legitimacy. Nova Scotia wineries also incorporated historical material(s) and objects to construct and project a 'sense of the past'; one designed to signal themselves as authentic. This form of historicizing was an intertextual binding of both rhetorical symbolism and material/objects which simultaneously enacted both a sense of the organizational past-in-the-present as well the organizational brand. While history has immense potential and utility in the present for older organizations and their brands (Zundel, Holt, & Popp, 2016) for new organizations in a sector where legitimacy and authenticity is premised on notions of vintage (i.e., duration and tradition), organizational historicizing seems essential an essential response to both institutional and market pressures.

Given the relatively unique nature of the grape and wine sector in comparison to other industries; combined with a lack of empirical study on organizational historicizing in new or younger firms, this study represents only first tentative step. Going forward we need to widen the research to look at other industries and organizational forms (e.g., manufacturing or service firms) and other ways that organizational pasts are used in the market. We must also widen our institutional view, moving beyond rhetoric and symbolism to incorporate materialization and material practices used by organizations seeking legitimacy and authenticity in the market.

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