



#ASB2017

Friday, September 29<sup>th</sup>

**Check-In: 12:00 – 5:30**

*Patterson Hall Lobby*

**ASB Executive Meeting: 12:00 – 1:30**

*Patterson 320*

**Doctoral & Early Career Consortium 2:30 – 4:30**

*Patterson 320*

Congratulations on a successful dissertation defence! But now what?

**Check-In: 5:30 – 7:30**

*Lightfoot & Wolfville Winery*

**Opening Reception: 5:30 – 7:30**

*Lightfoot & Wolfville Winery*

Saturday, September 30<sup>th</sup>

**ASB Fun Run/Walk: 6:30 – 7:30**

*Athletic Centre*

**Check In: 7:30 – 12:00**

*Patterson 80 Common (Main Floor)*

**Breakfast: 8:00 – 9:00**

*Patterson 80 Common (Main Floor)*

**Session 1: 9: 00 – 10:30**

**Marijuana Legalization Symposium**

**Chair: Paul Seaborn**

*Patterson 206*

**The 'Business' of Development: Intersections of Higher Education and Economic Development in Atlantic Canada (Symposium)**

**Chair: Ryan MacNeil**

*Patterson 207*

**Undergraduate Student Papers (a)**

**Chair: Stephen Maclean**

*Patterson 213*

Investigating Consumers' Perception of NS White Wine Using Projective Mapping

*by Amy Smith and Matthew McSweeney*

NO PAPER

Sensory Marketing: Influencing Consumer Behaviour and Potential for Enhancing the Consumption Experience

*by Andrew Trudel, Donna Sears and Matthew McSweeney*

**SENSORY MARKETING: INFLUENCING CONSUMER BEHAVIOUR AND POTENTIAL FOR ENHANCING THE CONSUMPTION EXPERIENCE**

Over the past decade, consumer response to marketing efforts that stimulate the senses has become a research focus for consumer behaviour scholars. This paper provides a review of the influences of sensory marketing on consumer behaviour, research necessary for advancing the field, and opportunities offered by technological and scientific development.

## **FEMALE SPORT AS A BUSINESS: CONTRIBUTING FACTORS OF FAILURE**

Athletes are studied extensively from psychological and sociological perspectives, but there is a lack of quality content coming from the business perspective. This is particularly so in regards to women in sport. With many attempts to start and sustain professional women's sports leagues in many countries, it is puzzling that there is not more comprehensive research outlining the successes and failures of business models and practices surrounding women's professional sport. This paper attempts to demonstrate that gendering and sexism, the discourse of female sport, and the lack of fan identification and media coverage all contribute to this dearth of insight into women in sport from a business perspective. This paper reviews current findings on professional women's sports leagues through an organizational lens and poses some important questions that need to be considered to further understand this issue.

### **Finance (a)**

**Chair: Shelley MacDougall**

*Patterson 214*

PRESENTATION ONLY: Interpreting the Fama-French Five-Factor Model from Benjamin Graham's Value Investing Perspective

*by Eben Otuteye and Mohammad Siddiqueel*

PRESENTATION ONLY: Does Jump Risk Matter? Evidence from the Canadian Stock Market

*by Dinesh Gajurell*

PRESENTATION ONLY: The Role of Monetary Sector in the Short-Run Macroeconomic Effects of Remittances

*by Muhammed Rashid and Basu Sharma*

Does the Application of Smart Beta Strategies Enhance Portfolio Performance? The Case of Islamic Equity Investments

*by Muhammad Wajid Raza and Dawood Ashraf*

## **DOES THE APPLICATION OF SMART BETA STRATEGIES ENHANCE PORTFOLIO PERFORMANCE? THE CASE OF ISLAMIC EQUITY INVESTMENTS**

Smart beta strategies (SBs) are quite popular in passive investing due to their ability to outperform conventional market capitalization-weighted (MCW) portfolios. This paper investigates the impact of SBs in the case of constrained portfolios such as Shariah-compliant equity portfolios (SCEPs) by adopting three SBs: fundamental-weighting, equal-weighting, and low-risk weighting strategies. The sample consists of equities from a number of geographic markets including the USA, Canada, Australia, Europe, Middle East, Indonesia, and Malaysia for the period January 2003 to December 2016. The empirical findings suggest smart beta SCEPs outperform not only traditional MCW portfolios but also SCEPs following the MCW strategy. Low-risk SBs yield the highest risk-adjusted returns and reduction in the probability of fund redemption across all regions. Higher risk-adjusted returns and lower drawdown as a result of following smart beta strategies highlights the importance of considering alternative portfolio weighting strategies for passive investors. The supremacy of the SBs indicates the value proposition for investors and fund managers alike.

**Embryo & Case**

**Chair: Robert MacDonald**

*Patterson 215*

Forgive Us Our Trespasses: Issues of Individual Member Liability and the Efficacy of Incorporation at the Petitcodiac Baptist Church  
by Robert MacDonald and Sydney Constantine

**FORGIVE US OUR TRESPASSES:**

**ISSUES OF INDIVIDUAL MEMBER LIABILITY AND THE EFFICACY OF INCORPORATION AT THE PETITCODIAC BAPTIST CHURCH**

In early 2016 the leadership board of the Petitcodiac Baptist Church was wrestling with the costs and benefits of not-for-profit incorporation. While some members saw the incorporation of the charitable organization as a reasonable source of legal protection and risk mitigation for its membership, some considered it to be problematic, believing that there should be a complete separation between church and state. Complicating matters was the fact that incorporation would likely necessitate a governance change, and the existence of fragmentary information from the early 1900s suggesting that the church may already be incorporated.

A re-working of a case study presented at ASB in 2016, this case study is intended for upper level undergraduate courses in not for profit management, or that component of a business law course dealing with risk / liability management. Key issues include not for profit risk management and the limitation of member liability in moral ownership organizations. Specific student learning objectives include understanding the distribution of liability within a charitable, faith-based not for profit organization and comparing incorporated and non-incorporated contexts, the comparison of not for profit incorporation with for profit incorporation, consideration of the concerns of moral ownership, and the development of criteria for organizational decision making in such contexts. Theoretical foundations explored in the Instructor's Manual to the case include forms of not for profit organization, congregational polity, and moral ownership.

Deliver Us From Evil: Decision-Making in the Face of Catastrophic Change at the Petitcodiac Baptist Church

*by Robert MacDonald and Heather Steeves*

**DELIVER US FROM EVIL:  
DECISION MAKING IN THE FACE OF CATASTROPHIC CHANGE AT THE  
PETITCODIAC BAPTIST CHURCH**

In July 2016 the Petitcodiac Baptist Church suffered an oil spill that resulted in an estimated 1,400 litres of oil leaking into the ground and pooling beneath the foundation of one part of the church's facility. Faced with a situation where other parties (e.g. the Provincial Department of the Environment) were "calling the shots," the congregation was faced with a difficult decision: save a beloved, 137-year old community landmark at substantial financial cost, or demolish it for considerably less to facilitate remediation.

This case study is intended for upper level undergraduate courses in not for profit management, or that component of strategic management courses dealing with decision-making, crisis management, and capital expenditures. Specific student learning objectives include management in a crisis situation where time and resource constraints are mitigating factors, the balancing of qualitative versus quantitative decision factors in a moral ownership organization, and issues of raising capital in such organizations. Theoretical foundations explored in the Instructor's Manual to the case include capital rationing, ratio analysis for not for profit organizations, and rational decision making.

For Thine Is The Kingdom: The Challenge of Implementing Governance Changes Within a Framework of Moral Ownership at the Petitcodiac Baptist Church  
*by Robert MacDonald and Heather Steeves*

**FOR THINE IS THE KINGDOM:  
THE CHALLENGE OF IMPLEMENTING GOVERNANCE CHANGES WITHIN A  
FRAMEWORK OF MORAL OWNERSHIP AT THE PETITCODIAC BAPTIST  
CHURCH**

In July 2014 the leadership board of the Petitcodiac Baptist Church was looking forward to the end of a multi-year process of reviewing its principal governing document – the church constitution. A number of significant (but considered necessary) changes had been proposed and consultatively brought before the congregation, yet a small but vociferous opposition had been voiced. Faced with a divided membership, the church leaders prepared to bring the changes to the floor at one final meeting with the hope of having them approved without damaging relationships.

This case study is intended for upper level undergraduate courses in not for profit management, or that portion of strategic management courses dealing with governance. Specific student learning objectives include the application of governance principles in a moral ownership context, policy development and application, and conflict mitigation in the context of governance change. Theoretical foundations explored in the Instructor's Manual to the case include congregational polity, governance change management, and board / moral ownership relations.

We Plant, But God's Watering: Business Model Considerations as Codiac Organics Seeks to Grow

by Robert MacDonald and Jeff Bandy

**WE PLANT, BUT GOD'S WATERING:  
BUSINESS MODEL CONSIDERATIONS AS CODIAC ORGANICS SEEKS TO GROW**

Mark Day, a first time entrepreneur in his fifties, was seeking to plan for the growth of his young business, Moncton, NB based Codiac Organics. While he felt that the market had significant potential – as evidenced by a burgeoning demand for organic produce – he was concerned about the scalability of his operation.

This case study is intended for introductory undergraduate courses in management or entrepreneurship. Specific student learning objectives include identifying key aspects of an organization's general and task environments, identifying sources of competitive advantage, assessing the impact of owner values, and analyzing the scalability of an operation. Theoretical foundations explored in the Instructor's Manual to the case include the value chain, VRIO/VRINE analysis, Porter's Five Forces analysis, PESTLE analysis, and scalability.

**Break: 10:30 – 11:00**

**Session 2: 11:00 – 12:15**

**Marijuana Legalization Symposium**

**Chair: Paul Seaborn**

*Patterson 206*

**The 'Business' of Development: Intersections of Higher Education and Economic Development in Atlantic Canada (Symposium)**

**Chair: Ryan MacNeil**

*Patterson 207*

**Undergraduate Student Papers (b)**

**Chair: Stephen Maclean**

*Patterson 213*

Concordance and Discordance in Leadership Development and Organizational Value Alignment  
*by Megan Thompson and Brad Long*

**CONCORANCE AND DISCORDANCE IN LEADERSHIP DEVELOPMENT AND  
ORGANIZATIONAL VALUE ALIGNMENT: A CASE STUDY OF L'ARCHE CANADA'S  
SERVANT LEADERSHIP PROGRAM**

This paper reports on our study of the individual, relational, and organizational experiences of L'Arche organizational members, and how they make sense of these experiences, in reaction to a newly introduced leadership and human resources development program.

Modeling the Determinants of Financial Literacy of University Students  
*by Melissa Gottschall, Meghan Kells and Ken MacAulay*

**MODELING THE DETERMINANTS OF FINANCIAL LITERACY OF  
UNIVERSITY STUDENTS**

This paper explores factors that affect the financial literacy of university students. A survey was administered to 442 university students to capture measures of financial knowledge, financial attitudes and financial behaviours along with several social and demographic factors. Results showed parental income, whether parents owned stocks or not, year of study, faculty enrolled in, and gender all influenced knowledge. Greater financial knowledge and financial attitude scores were found to have a positive influence on financial behaviour scores.

**Gender & Diversity (a)**

**Chair: Kelly Dye**

*Patterson 216*

Intersectionality in a Gendered Profession: Exploring Intersectional Stories of Public Relations Practitioners in Canada

*by Ellen C. Shaffner and Amy Thurlow*

**INTERSECTIONALITY IN A GENDERED PROFESSION:  
EXPLORING INTERSECTIONAL STORIES OF PUBLIC RELATIONS  
PRACTITIONERS IN CANADA**

This paper explores the intersectional experiences of female public relations practitioners. As a profession, public relations is heavily represented by women, however many executive level positions continue to be held by men. Our paper argues that public relations can be understood as a gendered profession, and makes the case that more work is needed exploring gender and diversity in the field. To investigate these issues, we conduct qualitative interviews with female public relations practitioners and apply an intersectionality lens to analyze their experiences working in the profession. We use intersectionality as a way to access the complexity of gendered relations in the field, as well as explore the ways in which gender interacts with other social categories of identity. The results of our analysis indicate that female public relations practitioners have unique intersectional experiences which are a function of their gender, age, race, education, cultural background, physicality, and parent status. These factors interact significantly with their identity as public relations practitioners, and the socially-constructed notion of their profession as feminized to establish public relations as a uniquely gendered space. These results provide insight into enduring, structural barriers that serve to reinforce the gendered nature of the profession, and its ongoing issues with diversity overall. Our paper also demonstrates an application of intersectionality as a tool for analysis, and we contribute to a small, but growing body of literature that uses feminist frameworks to investigate issues of gender and diversity in public relations.

## **FINANCIAL LITERACY OF CHAMA WOMEN’S GROUPS IN RURAL KENYA**

A chama is a cooperative microfinance system practiced by most people in Kenya to pool resources for investment. Studies have shown that most chamas operate under constitutions that guide their daily activities. However, some chamas operate on an honor system, which relies wholly on the honesty of its members. While a chama that operates on the honor system has its merits, it has social and economic implications for the group. These implications include: Lack of clear objectives; lack of binding structures, therefore, exposing the chama investments to risks; unclear guidelines for resolving disputes; inability to engage financial institutions and other businesses as a legal entity.

This study will explore the experiences of 5 women who are members of a chama that operates under the honor system. The study will examine participants’ competencies in financial literacy. Financial literacy is the ability to understand how money works in business and personal life. The study will be guided by the question: What is the financial literacy of chama women’s groups in rural Kenya? I intend to inquire about the women’s challenges and best practices in managing their resources. This study will be conducted in three phases. The first phase will involve a needs assessment to find out participants’ level of knowledge in financial literacy. The second phase will involve training on identified gaps. The third phase will focus on a follow up study on participants’ application of financial literacy. This study will adopt a critical participatory action research methodology (Kemmis, McTaggart, & Nixon, 2014).

Students' Perceptions About Gender and Leadership Attributes  
by S.C. Graham and A.J. MacFarlane

## STUDENTS' PERCEPTIONS ABOUT GENDER AND LEADERSHIP ATTRIBUTES

Business schools are tasked with helping develop the next generation of leaders who are ready and able to tackle the corporate challenges of tomorrow. And while gender disparity among business leaders continues to persist, university business programs should be making contributions to closing the gender gaps by adequately preparing all students for leadership roles. This left us wondering: To what extent do gender stereotypes, biases, attitudes, and behaviors relating to leadership persist among business students. Approximately 120 students at the University of Prince Edward Island (UPEI) participated in this study by completing the study survey. Using a five-point Likert scale, participants were asked to rate 1.) the relative importance of 14 leadership traits; 2.) their own leadership abilities in relation to those same 14 leadership traits; and 3.) the leadership traits of fictitious characters described in written scenarios. Unbeknownst to participants, two versions of each scenario were circulating amongst the surveys. The versions of the scenarios were identical in every aspect except for the names of the characters, which changed to suggest either a male, female, or gender-neutral character. The purpose of this study was to analyze students' perceptions of leadership, and whether those perceptions differed based on the gender of the respondent and/or the gender of the leader being examined.

### **Luncheon & Keynote: 12:15 – 1:30**

#### **Session 3: 1:30 – 2:45**

#### **Understanding the Challenges of Priming for PRME (Principles of Responsible Management Education) Symposium**

**Chair: Cathy Driscoll**

*Patterson 206*

#### **Tidal energy development: Business challenges in a new industry and opportunities for business research (Symposium)**

**Chair: Shelley MacDougall**

*Patterson 207*

#### **Business & Organizational History (a)**

**Chair: Gabrielle Durepos**

*Patterson 213*

PRESENTATION ONLY: Whither Critical Organizational History?

by Gabrielle Durepos, Scott Taylor and Ellen Shaffner

PRESENTATION ONLY: There *Is* An 'I' in Team: Valuing Diversity in Management Training, 1987-1995

*by Kira Lussier*

PRESENTATION ONLY: Planning Profitable Futures: The Introduction of Quantitative Analysis Into American Bank Management Practices

*by Justin Douglas*

## **MIS/Operations Management/Strategy**

**Chair: Hassan Sarhadi**

*Patterson 214*

Business Intelligence Using Google Search: Applications in the Green Energy Sector

*by Adee Athiyaman*

### **BUSINESS INTELLIGENCE USING GOOGLE SEARCH: APPLICATIONS IN THE GREEN ENERGY SECTOR**

This paper highlights marketplace insights for the biomass residential heating industry using data gathered from the Internet. We employ Google's search refinement operators and lesser-known features such as "stemming" to gain market intelligence about biomass home-heating products. The findings include prescriptions for the industry to optimize its marketing efforts.

Optimal Facility Location to Mitigate Product Recall Risks

*by Liufang Yao (PhD candidate) and Kai Huang*

### **OPTIMAL FACILITY LOCATION TO MITIGATE PRODUCT RECALL RISKS**

This paper is motivated by major food product recall events in recent years, especially how the timely and effective response using post-recall management can make a difference. We consider the rare but very influential major product recalls as disruptions to the supply chain and incorporate locating reprocessing centers for the returned products to mitigate expected operational costs. We adopt the closed loop network design framework and assume the location decisions for reprocessing center take place after the product recall events. Our scenario based analysis shows the approach is effective in both absolute and relative measures.

## **GATES CORPORATION: SCANNING FOR COMPETITIVE THREATS**

This case study describes the challenges an established industry leader faces in maintaining its competitive position and the role that environmental scanning can play in the strategic management and innovation processes. It is written from the perspective of Carol Weber, the Director of New Technology and Innovation at Gates Corporation. Gates is a multi-billion-dollar company that is an industry leader in the manufacturing of belts, hoses and other industrial products for the automotive industry and a variety of other industries. Gates has been in existence for over one-hundred years but after many decades of family ownership it is now owned by a private equity firm and faces an uncertain future.

ContiTech—the corporation’s biggest competitor—has acquired numerous manufacturing sites and technologies and released new products in the last few years. Gates also fears disruptive innovation from an unexpected competitor, from having its products become irrelevant due to changes in related industries, or from missing new market opportunities. The wide range of potential threats makes its environmental scanning and competitive analysis particularly challenging. Carol and Gates must determine what threats are most pressing and what strategies can the company employ to mitigate these threats.

## **Communications**

**Chair: Judy Roy**

*Patterson 215*

Exploring the Influence of PR/COMM Function on Practitioners' Perceptions of Organizational Success, Innovation, and Reputation

*by Karen Blotnicky and Amy Thurlow*

### **EXPLORING THE INFLUENCE OF THE PR/COMM FUNCTION ON PRACTITIONERS' PERCEPTIONS OF ORGANIZATIONAL SUCCESS, INNOVATION, AND REPUTATION**

Drawing on survey data gathered from senior public relations officers within Canadian organizations, the goal of this paper is to explore the extent to which the integration of the public relations function in strategic decision-making impacts the achievement of positive organizational outcomes. Three measures of organizational performance were used to investigate these relationships; organizational success, innovativeness, and external reputation.

Gendered Construction of Leaderspeak: A Content Analysis of C-Suite Communication About Sustainability

*by Ellen Crumley, Karen Grandy, Binod Sundararajan, Judy Roy and Elizabeth Tetzlaff*

### **GENDERED CONSTRUCTION OF LEADERSPEAK: A CONTENT ANALYSIS OF C-SUITE COMMUNICATION ABOUT SUSTAINABILITY**

This paper examines the leaderspeak of senior executives to discern the differences in communication styles of female and male leaders. A mixed methods analysis of corporate messages on sustainability and environmental stewardship given by 24 North American business leaders was conducted using interviews of 12 female and 12 male Chief Executive Officers (CEOs) or Chief Sustainability Officers (CSOs). In interviews, sustainability leaders publicly articulate their organizations' sustainable business operations, which were analyzed for linkages to social identity framing theory and gendered speech theory. These linkages were found underscoring the need for well-devised communication approaches in leaderspeak, especially around environmental, social, and governance issues, where stakeholder buy-in is critical.

Content Analysis of the BC Egg Marketing Board Meeting Minutes  
*by Ashley MacDonald*

## **CONTENT ANALYSIS OF THE BC EGG MARKETING BOARD MEETING MINUTES**

A content analysis was conducted using 43,843 words retrieved from the British Columbia's Egg Marketing Board to determine the main issues being discussed by the board from March 2015 until March 2017. It was determined that quota and housing were two of the main issues facing the board.

### **Gender & Diversity (b)**

**Chair: Kelly Dye**

*Patterson 216*

Considering Implications of the Gender Revolution on Workplaces: A Quasi-Systematic Review of the Popular Press Literature

*by Corinne Abraham and Wendy R. Carroll*

## **CONSIDERING IMPLICATIONS OF THE GENDER REVOLUTION ON WORKPLACES: A QUASI-SYSTEMATIC REVIEW OF THE POPULAR PRESS LITERATURE**

In January 2017, women and their allies around the world took to the streets to protest and show solidarity over women's rights. This protest comes two decades after the initial launch of the United Nations (UN) mandate to focus on initiatives relating to the advancement of women and gender equality, revealing both the backlash as a result of progress and the gap in acceptance about progress yet to be made. These recent events call for a reflection on the policy for Gender Equality and Empowerment of Women and the progress to goals initially established. The UN Women's Council developed an action plan called the System Wide Action Plan (SWAP) with goals and targets to guide agencies to reach by 2019. The underlying principles of these goals relies on gender mainstreaming, an assumption that policies will consider and assess in any planned action to result in diversity among all genders. However, the events of the past year have signaled a backlash to progress and further development of these initiatives and goals.

The purpose of this presentation is to provide review of the progress made in SWAP. Using techniques of systematic review, we examine the publications in popular press and academic literature about SWAP and the gender revolution

## **GENDER IN BUSINESS SCHOOLS**

While the gender imbalance in post-secondary education has been erased (and in fact has in many cases been reversed, with female students now being over represented in institutions and programs across the country), a few anomalies remain - including the persistent gender imbalance among some (but not all) university undergraduate business programs notably all located in the Canadian Maritime provinces. At the undergraduate level across Canada, most university level business programs hover around gender parity, with only a few institutions experiencing a full reversal of gender balance at the undergraduate level. There remains, however, a small but significant number of universities in Canada, all located in the Canadian Maritime provinces, that have yet to consistently reach gender balance in their undergraduate business programs and seem to be stuck where other faculties and institutions were in the 1970s and 1980s, at about 40% of enrolled students being female. This paper will describe the current status of gender balance in university level business programs across the country and will highlight those few institutions where an imbalance remains. Particular emphasis (via case study) will be placed on UPEI and the burgeoning research program the business faculty is mounting to both better understand and remedy this problem.

**Break: 2:45 – 3:15**

**Session 4: 3:15 – 4:45**

**Business Education for Sustainability Across Functional Areas, How Could We Do Better? (Symposium)**

**Chair: Edith Callaghan**

*Patterson 206*

**Tidal energy development: Business challenges in a new industry and opportunities for business research (Symposium)**

**Chair: Shelley MacDougall**

*Patterson 207*

**Business & Organizational History (b)**

**Chair: Gabrielle Durepos**

*Patterson 213*

**PRESENTATION ONLY: An American Entrepreneur's Cultural Learning Process**

*by Tianyuan Yu and Albert Mills*

PRESENTATION ONLY: Nancy Maclean and the Problem of Private Power: An Abstract  
*by David Jacobs*

**Management Education**

**Chair: Conor Vibert**

*Patterson 215*

A decade of teaching evidence-based management: initiatives and future directions  
*by Tina Saksida and R. Blake Jelley*

**A DECADE OF TEACHING EVIDENCE-BASED MANAGEMENT:  
INITIATIVES AND FUTURE DIRECTIONS**

Practitioners who apply insights from organizational research to managerial decision-making can make better decisions, yet there remains a disconnect between research, teaching, and practice in management. This paper describes initiatives in the University of Prince Edward Island's Faculty of Business to teach evidence-based management in our undergraduate and Executive MBA programs to help bridge those gaps.

{Full paper in appendix}

Using Business Students to Test a Student Engagement Work Design Model  
*by Leslie J. Wardley, John Nadeau and Charles H. Belanger*

NO PAPER

**Strategy (a)**

**Chair: Alidou Ouedraogo**

*Patterson 216*

PRESENTATION ONLY: Mechanisms of Organizational Path Dependence: Hysteresis, Agency, and Executive Hubris Implicated?  
*by Shamshud Chowdhury and Binod Sundararajan*

PRESENTATION ONLY: Exploring Two Wine Industries With a Framework for Industry Change  
*by Conor Vibert and Marie Ryan*

PRESENTATION ONLY: Corporate Political Activity In Emerging Industries: Familiar Habits or New Practices?

*by Paul Seaborn*

**Reception: 5:00**

*Patterson 80 Common (Main Floor)*

**ASB Awards Dinner: 7:00**

*Patterson 80 Common (Main Floor)*

Sunday, October 1<sup>st</sup>

**Breakfast & AGM: 8:00 – 9:00**

*Patterson 80 Common (Main Floor)*

**Session 5: 9:00 – 10:30**

**HR/IR (a)**

**Chair: Morrie Mendelson**

*Patterson 206*

Organizational Restructuring and Workforce Adjustment Practices: Downsizing choices and the implications for job quality for public sector workers in Ontario and Scotland  
*by Rachelle Pascoe-Deslauriers*

## **ORGANIZATIONAL RESTRUCTURING AND WORKFORCE ADJUSTMENT PRACTICES: DOWNSIZING CHOICES AND THE IMPLICATIONS FOR JOB QUALITY FOR PUBLIC SECTOR WORKERS IN ONTARIO AND SCOTLAND**

This paper interrogates public sector restructuring practices and the implications for job transitions and post-displacement job quality. The research conceptualizes the job transition as a holistic process, from pre-displacement to re-employment, allowing for a more dynamic conceptualization of the actors, processes and structures that influence employment outcomes and crucially, the nature of post-transition employment. It argues that much of the extant debates remain disconnected from, and hence underemphasize, the sequential and cumulative nature of the transition process while also focusing disproportionately on modifying individual behaviour and action. This study explores the intersection and overlap in factors, actions and decisions made by actors in each part of the transition process, the configurations of which can lead to differential access to resources, opportunities and outcomes for affected workers.

PRESENTATION ONLY: A Program Evaluation of Recruitment in the Eastern Zone of the Nova Scotia Health Authority  
*by Seonaid Macneill and Leslie Wardley*

PRESENTATION ONLY: Le Satisfaction Professionnelles des Conseillers en Orientation: Une étude préliminaire  
*by Stephan Chartiers and Gilles Marcoux*

**OB/OT**

**Chair: John Fiset**

*Patterson 213*

PRESENTATION ONLY: The development and initial validation of workplace justice and injustice scales  
*by Camilla Holmvall and Lori Francis*

Examination of job stress and performance controversy in developing economies: An empirical study  
*by Muhammad Jamal and Muhammad Rashid*

**EXAMINATION OF JOB STRESS AND JOB PERFORMANCE CONTROVERSY  
IN DEVELOPING ECONOMIES: AN EMPIRICAL STUDY  
MUHAMMAD JAMAL AND MUHAMMAD RASHID**

This study examines the nature of the relationship of overall job stress, challenge and hindrance stress with job performance and turnover motivation among nurses (N=255) employed by three hospitals in the Gulf States of the Middle East. A structured questionnaire is used to collect data on measures of job stress, turnover intention and social support. Empirically, it is found that job stress, challenge stress and hindrance stress are all related to job performance and turnover motivation. The nature of the relationship between the measures of job stress and performance was primarily a negative linear. Perceived social support moderated more than eighty percent relationships among the measures of job stress and job performance and turnover motivation. The results of the study support the convergence instead of divergence perspective in cross cultural management research.

Niche practice spillover to mainstream markets: How small players changed the mature Ontario wine field

*by Laura Ierfino-Blachford*

### **NICHE PRACTICE SPILLOVER TO MAINSTREAM MARKETS: HOW SMALL PLAYERS CHANGED THE MATURE ONTARIO WINE FIELD<sup>1</sup>**

I explore how small players new practices diffuse and are institutionalized within mature organizational fields. Small players at first use inclusive strategies that complement and thus, not contradict large players' practices. Eventually, small players' strategies used to diffuse their new practices eventually limit the persistence of those new practices.

Virtual work arrangements and employee creativity

*by Jessica Good and Sheryl Chummar*

### **VIRTUAL WORK ARRANGEMENTS AND EMPLOYEE CREATIVITY**

The nature of work has under gone a vast number of changes over the past few decades. In order for employees to better balance work and non-work commitments, employers are promoting virtual work arrangements. However, the impact of virtual work arrangements on individual employee creativity has been largely unexplored. Drawing on Amabile's (1988) Componential Theory of Individual Creativity and Organizational Innovation, this conceptual paper will investigate how support for virtual work arrangements impacts employee creativity. By drawing on relevant creativity theory, this paper proposes a model that suggests organizational support for virtual work will increase employees' perceived job autonomy and scheduling flexibility which, in turn, will have a positive impact on their creativity by affording employees the ability to work where and when they feel most creative. This paper will also investigate how perceived support for virtual work may impact different generations, namely millennials. Finally, this paper identifies how perceived support for creativity will moderate the relationship between perceived job autonomy and employee creativity.

**Accounting (a)**  
**Chair: Ian Feltmate**  
*Patterson 214*

The Determinants of Accounting Information of SMEs in Albania  
*by Mustafa Uç and Ervin Latifi*

### **THE DETERMINANTS OF ACCOUNTING INFORMATION OF SMEs IN ALBANIA**

This study aims to explore why accounting is needed for SMEs in Albania. A survey was conducted to accountants to explore the determinants of accounting information. The research findings suggest a hierarchy that demonstrates the reasons of the accounting information from the most needed to the least.

Impact of Tax on Sugary Drinks on Product Price in New Brunswick  
*by Egbert McGraw and Yves Robichaud*

### **IMPACT OF A TAX ON SUGARY DRINKS ON PRODUCT PRICE IN NEW BRUNSWICK**

A few countries have already adopted a tax on sugar and artificially-sweetened drinks and the object of this paper is to review the impact of a tax on sugary drinks on products prices. This paper shows that the tax on sugary drinks will increase the product price by a substantial amount that could not be absorbed by the industry, and the price increase would need to be passed to the customer. The biggest price increase is on larger size products that are mostly purchased by heavy soft drink users. We may then assume that a tax on sugary drinks will reduce sugary drink consumption having a direct impact on obesity and health care cost. In addition, the tax will be a source of revenue that could be invested in social and health programs.

Financial Institutions in the U.S. and Accounting Standards for Financial Instruments: A Historical Perspective  
*by Carol Pomare*

**FINANCIAL INSTITUTIONS IN THE U.S. AND ACCOUNTING STANDARDS FOR FINANCIAL INSTRUMENTS: A HISTORICAL PERSPECTIVE**

This paper aims at discussing the reliability of financial reporting for financial instruments, as a risk management tool, within a context of financial institutions in the United States (U.S), using a historical accounting perspective. This paper examines the critical steps that improved the reliability of financial reporting for financial instruments as a risk management tool within a context of market frictions and associated volatility. Critical steps are identified in line with three different areas: (i) making financial reporting a risk management tool relevant within a context of market frictions and associated volatility of corporate performance for financial institutions in the U.S.; (ii) identifying negative exemplars of major crisis for financial institutions in the U.S. and providing a historical critique of these major events; and (iii) institutionalizing these negative exemplars by embedding financial instruments into standards setting within a context of market frictions and associated volatility. As a summary, this paper explores the lessons learned and the challenges related to the adoption of different accounting standards for financial instruments alongside the development of the accounting profession within the context of financial institutions in the U.S.

**Marketing (a)**

**Chair: Gordon Fullerton**

*Patterson 215*

Développement durable du tourisme au Nouveau-Brunswick: Appréhender la complexité en identifiant les acteurs et les enjeux

*by Brigitte Prud'homme*

**DÉVELOPPEMENT DURABLE DU TOURISME AU NOUVEAU-BRUNSWICK: APPRÉHENDER LA COMPLEXITÉ EN IDENTIFIANT LES ACTEURS ET LES ENJEUX**

Cette étude exploratoire vise à identifier les enjeux et les acteurs du développement durable du tourisme au NB, province qui offre 5, 500 kilomètres de littoral côtier au tourisme. Cette industrie contribue au PIB et procure des emplois, mais entraîne des impacts négatifs sur les écosystèmes côtiers, montagneux et culturels.

Do CEOs Really Mean What They Say When They Apologize: Politeness and Power in Corporate Apologies

*by Oksana Shkurska and Binod Sundararajan*

### **DO CEOS REALLY MEAN WHAT THEY SAY WHEN THEY APOLOGIZE: POLITENESS AND POWER IN CORPORATE APOLOGIES**

Effective corporate communication is impossible without taking into consideration politeness principles. Lack of politeness strategies or the use of wrong strategies in apology letters, often the first response from the organization when it is faced with a crisis, can lead to message resistance. As a result, the outcomes of the communicative act will not be reached. Though politeness is perceived differently in different cultures, if utilized properly, it has a powerful effect on the communication process regardless of the culture participants come from. This paper focuses on linguistic politeness in apology letters and its effect on the audience. We expand on Brown and Levinson's (1987) politeness theory by introducing the notions of explicit (conventional) and implicit (unconventional) linguistic politeness and put forward three propositions of politeness in apology letters. We argue that implicit politeness creates more trust and therefore has more power over the addressee than explicit politeness.

Trust and Customer Retention in Cellular Telephone Services

*by Gordon Fullerton*

### **TRUST AND CUSTOMER RETENTION IN CELLULAR TELEPHONE SERVICES**

Trust is viewed as one of the central constructs in service relationships (Morgan and Hunt, 1994). Trust is intertwined with both our understanding of solid buyer-supplier relationships and our understanding of service quality. Trust is a complicated construct in that contains two dimensions. The first relates to consumer perceptions about whether or not the firm (relational partner, service provider) acts in the customer's best interests. The second relates to whether or not the firm is reliable in performing services for the customer. Customers may perceive that a firm does well on both dimensions, one dimension but not the other or perceive that it delivers poor performance on both dimensions. The interesting and previously uninvestigated question is how these two aspects of trust reinforce or interact with each other in terms of their impacts on customer retention.

OMG That's so #WHITEGIRL: Preliminary Findings on Brand Aversion  
by Lydia Phillip and Rosemary Polegato

**OMG THAT'S SO #WHITEGIRL:  
PRELIMINARY FINDINGS ON BRAND AVERSION**

Understanding brand aversion may be as important, or even more important, than understanding brand loyalty. This study examines consumers' self-identity with a dissociative reference group and how that relationship may lead to brand aversion, negative emotions, and brand avoidance behaviours.

**Entrepreneurship**  
**Chair: Ryan MacNeil**  
*Patterson 216*

You Got What I Need: Does Entrepreneurial Needs Satisfaction Predict Psychological Strain?  
by Stephanie Gilbert

**YOU GOT WHAT I NEED: DOES ENTREPRENEURIAL NEEDS SATISFACTION  
PREDICT PSYCHOLOGICAL STRAIN?**

Entrepreneurial stress and strain are under-researched phenomena, and as such, little is known about the role of stress in influencing entrepreneurial outcomes. Psychological strain may lead to withdrawal behaviours, feelings of dissatisfaction, or lower motivation (Boswell et al., 2004) that detract from performance. Psychological needs theory (e.g., Baard, 2002) describes three basic psychological needs that, when satisfied, leads to optimal motivation and well-being. These needs are competence (feeling a sense of mastery in a domain), relatedness (feeling a sense of belonging to a group or part of something greater than oneself), and autonomy (feeling a sense of choice and flexibility; Baard, 2002). I hypothesize that the satisfaction of these three psychological needs will lead to reduced psychological strain. Preliminary regression results of a small sample of entrepreneurs ( $N = 69$ ) suggest that, controlling for gender, satisfaction of the needs for competence and relatedness related to significantly lower psychological strain, while satisfaction of the need for autonomy was unrelated to psychological strain. Interestingly, female entrepreneurs felt significantly greater psychological strain than male entrepreneurs. This study lies at the intersection of occupational health psychology and entrepreneurship. Findings may inform future research on entrepreneurial well-being and suggest practical strategies towards helping entrepreneurs to promote and protect their own well-being. Further findings, implications and future research directions will be discussed.

Determinants of Innovation diffusion in a B2B context – bases of a conceptual model  
*by Izold Guihur*

## **DETERMINANTS OF INNOVATION DIFFUSION IN A B2B CONTEXT – BASES OF A CONCEPTUAL MODEL**

The Innovation diffusion process has been known to be complex and the pitfall of many innovations. It is indeed the critical point where innovations are confronted to the market, which contains adopters who are more or less keen to try the innovation and to contribute to its further development. The diffusion process often ends with mixed results.

Although much research has examined the diffusion of innovation in a business to consumer (B2C) context, the process has been far less studied in a business to business (B2B) one. A better knowledge of the B2B context is essential, however, for the science- and technology-driven innovations since they generally occupy an upstream position in value chains. This means a diffusion process from B2B with tremendous efforts in showing the innovation's potential applications, and in helping the adopters to incorporate the innovation in their own product design. Furthermore, the buying process in B2B endeavours is more likely to increase the uncertainty of an already complex process, hence contributing to the probabilities of innovation failure.

Training Practitioners, Not Consultants: A Holistic Approach to Learning About Small Business Ownership/Management  
*by Ryan MacNeill and Britanie Wentzell*

## **TRAINING PRACTITIONERS, NOT CONSULTANTS: A PARTNERSHIP APPROACH TO LEARNING ABOUT SMALL BUSINESS OWNERSHIP/MANAGEMENT**

It has become common for business schools to provide consulting-style courses for senior undergraduate and graduate students. However, we argue that a semester of “consulting” practice is not what future small business managers need. Instead, we have been developing an approach that positions small business management as a practice that can be learned in partnership with others. We will discuss the three-year evolution of our approach, framing our pedagogical work as design science research. We advance the notion of “reciprocity” in business school service learning programs, advance the concept of “embedded librarianship” for information literacy, and extend the conversation about design thinking in entrepreneurship education.

**Strategy (b)**

**Chair: Alidou Ouedraogo**

*Patterson 207*

Dear Reader: A Comparative Control Group Study of CEO Letters to Shareholders  
*by Mark Fuller*

**DEAR READER:  
A COMPARATIVE CONTROL GROUP STUDY OF CEO LETTERS TO  
STAKEHOLDERS**

This paper examines corporate social responsibility (CSR) reporting with a focus on communications from management. It examines letters from the board chair, CEO and/or senior CSR lead in order to gain a deeper understanding of how firms disclose their past performance and whether firms noted for the CSR reporting disclose their information in meaningfully different ways compared to other firms. Using a comparative analysis between treatment and control groups, we explore whether there is a difference in reporting approaches between a sample of highly regarded CSR reporters vis-à-vis firms recognized for their high profitability. Our findings suggest CSR-recognized firms discuss sustainability issues in greater depth but without much meaningful difference in quality. We offer a hypothesis to explain this situation, discussing both the theoretical and the practical implications.

PRESENTATION ONLY: An NK Model of Network Search  
*by Bill Foster*

**Break: 10:30 – 11:00**

*Patterson 80 Common (Main Floor)*

**Session 6: 11:00 – 12:15**

**HR/IR (b)**

**Chair: Morrie Mendelson**

*Patterson 206*

Planning for Retirement: The Influence of Workplace Stress, Pension, and Work Arrangements  
*by Dannie Brown, Tabatha Thibault, E. Kevin Kelloway and Amy Warren*

**PLANNING FOR RETIREMENT: THE INFLUENCE OF WORKPLACE STRESS,  
PENSION, AND WORK ARRANGEMENTS**

This study examined the influence stress, having a workplace pension, and work arrangements have on an individual's planned retirement date. Using a logistic regression, we found that having a workplace pension predicted whether or not individuals have an age in mind in which they plan to retire from their current job, such that those with a pension had a specific age in mind.

Bridging the Macro-Micro Divide in Industrial Relations: Practices, Routines, and Institutions  
*by Bui Peterson*

**BRIDGING THE MACRO-MICRO DIVIDE IN INDUSTRIAL RELATIONS: PRACTICES,  
ROUTINES, AND INSTITUTIONS**

In this paper, I propose practice theory as a lens to bridge the micro-macro level divide in negotiation research that results from the silos between different fields of research. I argue that a focus on practice will provide a more contextualized understanding of how conflict is resolved and negotiated.

PRESENTATION ONLY: The Process of Conducting Interdisciplinary Yoga Research  
*by Leslie Wardley, Marcia Ostashewski, Bettina Callary and Odette Griscti*

**Business & Organizational History (c)**

**Chair: Gabrielle Durepos**

*Patterson 213*

PRESENTATION ONLY: By the Time Taylor Rationalized the Shop Floor Cook had Already  
Rationalized The World: The 'Goods' Bias of Management History  
*by Terrance Weatherbee and Donna Sears*

PRESENTATION ONLY: Multiplicity in Meritocracy  
*by Keshav Krishnamurty*

**Accounting (b)**  
**Chair: Ian Feltmate**  
*Patterson 214*

The Unification of the Canadian Accounting Profession: The Future Outlook of the Disciplinary Process in Ontario  
*by Derek Hayes and Leslie Wardley*

**THE UNIFICATION OF THE CANADIAN ACCOUNTING PROFESSION: THE  
FUTURE OUTLOOK OF THE DISCIPLINARY PROCESS IN ONTARIO**

Canada has recently seen the unification of the three accounting bodies into the Chartered Professional Accountant (CPA). Moving to one body nationally and provincially is not simple, it requires hours of negotiation and compromise. Their basic goals were similar; protecting the public by acting in their interest; to develop highly qualified professionals and promoting ethical behavior as stated in their bylaws and professional codes of ethics (that includes disciplinary processes). They had different stakeholder groups and different ways in achieving these goals and objectives, complicated further in Ontario, only the CA's (now the CPA-CA's) had the right to audit financial statements. This paper will explore the research question, "what will the future disciplinary process look like as we move forward on a unified basis?" This study will compare the disciplinary process of the former CAs; CMA's and CGA's to report similarities, differences and potential areas of conflict as we move forward. It will also use their disciplinary notices posted and retained in a database made available to the public through the Chartered Professional Accountant of Ontario (CPAO).

Self-Governance: An Acceptable Disciplinary Process in the Accounting Industry?  
*by Derek Hayes and Leslie Wardley & Valorie Leonard*

## **THE FUTURE OF THE SELF-GOVERNANCE DISCIPLINARY PROCESS IN THE ACCOUNTING INDUSTRY**

Society today publically trades corporate stocks and bonds; the accounting profession plays a crucial role in protecting citizens from the harms that financial crime causes. Accordingly, the accounting industry adheres to a strict code of ethics, and has a disciplinary process. Canada has recently seen the unification of the three accounting bodies into the Chartered Professional Accountant (CPA). Although CPA's must adhere to generally accepted accounting principles and auditing standards, their governance is still an area of concern to Canadians. Self-governance seems like the only structure for the industry to monitor accountant's behavior given the particular set of skills necessary to audit accountant behavior. There are conflicting views as to which structures allow more crime to take place. The consequences must be clearly defined and outweigh the benefits received by many financial criminals. This paper will explore financial crimes in the accounting industry from a sociological standpoint, discuss potential factors that have contributed to the ability of these instances occurring, compare the penalties of "white" to "street" collar crime', and discuss proposed ways to better moderate the accounting industry.

Better Government Through Embarrassment? A Discussion Paper on Research Challenges  
Posed By A Culture of Secrecy in the Government of NB  
*by Brent White*

**BETTER GOVERNMENT THROUGH EMBARRASSMENT?**  
**A DISCUSSION PAPER ON RESEARCH CHALLENGES POSED BY A CULTURE OF  
SECRECY IN THE GOVERNMENT OF NB**

A basic assumption of the Westminster model of democracy is that legislative debates are both open and transcribed. And indeed, in most of Canada, this is the case. This discussion paper examines the unusual outlier of New Brunswick, where transcripts of the meetings of the Legislative Assembly or its Standing Committees are unavailable, creating problems for citizens, researchers, and anyone interested in general questions of accountability.

**Marketing (b)**  
**Chair: Wenxia Guo**  
*Patterson 215*

A Closer Look at Shopping Stressors - Why Are They Stressful?  
*by Elaine MacNeil and Peter MacIntyre*

**A CLOSER LOOK AT SHOPPING STRESSORS-WHY ARE THEY STRESSFUL?**

Shopping stressors are stressful but why they are stressful has not been explored. This gap must be addressed because consumers' coping behaviour affects retailers as well as consumers. This exploratory research shows consumers appraise negative consequences for their time, money, physical, psychological and social wellbeing because of shopping stressors.

Sentiment Analysis: A Dynamic Tool for Marketing Research  
*by Abhishek Dwivedi, Hsin-Chen Len and Patrick F. Bruning*

### **SENTIMENT ANALYSIS: A DYNAMIC TOOL FOR MARKET RESEARCH**

In this literature review, we provide an overview of sentiment analysis in the context of business, government, and social science research. Several tools and methods are discussed to help apply the technique and methods of sentiment analysis to real-life problems.

Which Way is More Innovative? Cultural Influence on Originality and Appropriateness  
*by Wenxia Guo*

### **WHICH WAY IS MORE INNOVATIVE? CULTURAL INFLUENCE ON ORIGINALITY AND APPROPRIATENESS**

This research attempts to examine the cultural influence on creativity. The current research proposes concrete versus abstract thinking as potential differentiators of cross-cultural creativity. In other words, it is expected that individual mind-set which is more associated with abstract thinking may easily lead to creativity which is more related to originality or novelty, whereas collective mind-set which is more associated with concrete thinking may likely result in creativity which is more related to appropriateness.

#### **Finance (b)**

**Chair: Shelley MacDougall**

*Patterson 216*

PRESENTATION ONLY: The Drop in Implied Cost of Capital Prior to 2008 Financial Crisis: Canada and the United States

*by Ian Glew and Ashrafee Hossain*

Household Portfolio Allocation in the EU  
by Andrew Davis and Jiseob Kim

### **HOUSEHOLD PORTFOLIO ALLOCATION IN THE EU**

We exploit the Eurosystem Household Finance and Consumption Survey to analyze household portfolio choices across the EU. Largely, the basic patterns of household portfolio allocation amongst the participating countries mirror those found in the US, for example in the U-shaped life-cycle profile of the share of the household portfolio comprised of ‘riskier’ assets. We find that there is significant across-country heterogeneity in risky asset shares, and show that country-specific factors including the provision of social insurance and the fiscal strength of government as measured by the price of default insurance predict household asset allocation choices, something that cannot be observed in the US-centric household portfolio literature. Finally, we examine whether several US-data results on household portfolio allocation hold in this European dataset.

An Empirical Evaluation of the Determinants of Executive Perks at S&P 500 Firms  
by Andrew Carrothers and Jiseob Kim

### **AN EMPIRICAL EVALUATION OF THE DETERMINANTS OF EXECUTIVE PERKS AT S&P 500 FIRMS**

This paper provides a comprehensive analysis of the determinants of executive perks at S&P 500 firms using manually collected panel data. CEOs receive perks more frequently and at higher levels than other named executive officers (NEOs). In general, S&P 500 firms with larger growth opportunities, realized growth, stock returns, and return on assets are less *likely* to provide perks and provide lower levels of perks when they do. Firms with powerful CEOs are more likely to provide perks. Firm size and executive monetary compensation are the most influential determinants of the *value* of perks. Overall, tenure and gender do not impact the likelihood or value of perk compensation at S&P 500 companies.

{Full paper in Appendix }

## APPENDIX – FULL PAPERS

ASB 2017  
Wolfville, NS

Tina Saksida  
R. Blake Jelley  
Faculty of Business  
University of Prince Edward Island

### **A DECADE OF TEACHING EVIDENCE-BASED MANAGEMENT: INITIATIVES AND FUTURE DIRECTIONS**

Practitioners who apply insights from organizational research to managerial decision-making can make better decisions, yet there remains a disconnect between research, teaching, and practice in management. This paper describes initiatives in the University of Prince Edward Island’s Faculty of Business to teach evidence-based management in our undergraduate and Executive MBA programs to help bridge those gaps.

#### **Introduction**

Managers make decisions that affect the performance and well-being of organizations and the people who work within them. Systematic research can improve managerial decision-making, but significant gaps exist between management research and practice (Burke & Rau, 2010; Rousseau, 2012; Rynes, Rousseau, & Barends, 2014). According to Rousseau and McCarthy (2007, p. 99), “the absence of a critical mass of evidence-based managers today translates into both poorer outcomes for organizations and into pressures to conform to more ad hoc approaches. An entire generation of evidence-based managers may be needed before organizations make wide use of scientific evidence in their decisions.”

Evidence-based management (EBMgt) is “a way of thinking” (Briner, Denyer, & Rousseau, 2009, p. 24; Pfeffer, 2007, p. 12) about organizational decisions systematically, combined with a focus on using knowledge of human behaviour to inform the design of management practices (Pfeffer, 2007). EBMgt has the potential to improve the productivity and effectiveness of organizations along with the well-being of organizations’ members (Pfeffer & Sutton, 2007; Rousseau, 2006), yet there exist numerous barriers to its widespread adoption in practice (Briner & Rousseau, 2011). One key barrier, and the focus of the present paper, is an acute dearth of evidence-based management education (e.g., Charlier, Brown, & Rynes, 2011). Increasingly, there have been calls for a profound shift in management education to help support a movement toward a more evidence-based approach to the management of organizations (e.g., Rousseau, 2012; Rousseau & McCarthy, 2007; Rynes et al., 2014). Greater links between research and teaching may help narrow the research-practice gap (Burke & Rau, 2010; Rousseau, 2012; Rousseau & McCarthy, 2007).

Some institutions (e.g., Cranfield, Carnegie Mellon, Case Western Reserve, University of Lausanne) have started offering courses that advance management students' skills in accessing, producing, and using research findings as part of the managerial decision-making process (Briner et al., 2009; Briner & Walshe, 2014; Dietz et al., 2014; Jelley, Carroll, & Rousseau, 2012), but these efforts are in their infancy compared to, for example, the teaching of concepts advocated by famous “gurus” (Graen, 2009). Consequently, there is a need for EBMgt educators to reflect on and share their teaching methods and encourage others to adopt, refine, test, and debate ideas for fostering EBMgt.

In this paper, we describe initiatives in the University of Prince Edward Island’s (UPEI) Faculty of Business that are intended to promote an EBMgt “mind- and skill-set that can transfer to an applied setting” (Gamble & Jelley, 2014, p. 437) in our undergraduate and Executive MBA (EMBA) students. We first provide a general overview of the practice and teaching of evidence-based management, followed by a detailed description of the EBMgt education efforts spearheaded by the authors of this paper and others at the UPEI Faculty of Business. We conclude with reflections on our experience with teaching EBMgt and a discussion of future directions.

### **Evidence-Based Management**

An evidence-based approach to managing organizations involves considering critically principles derived through formal research, local data, ethics and stakeholder concerns, and practitioner judgment to enhance the quality of organizational decisions and practices (Barends, Rousseau, & Briner, 2014; Briner et al., 2009; Rousseau, 2012). This approach to managerial decision-making is not yet common in organizations (Briner & Rousseau, 2011; Pfeffer & Sutton, 2006). According to Pfeffer and Sutton (2006), most practitioners instead rely on “obsolete knowledge, personal experience, specialist skills, hype, dogma, and mindless mimicry of top performers” (p. 67) to make decisions – methods at odds with an evidence-based approach to managerial practice.

The benefits of applying principles derived from organizational research to managerial practice have been espoused for decades (Briner et al., 2009) and demonstrated empirically through, for example, specific interventions designed to improve productivity (Pritchard, Harrell, DiazGranados, & Guzman, 2008). Nevertheless, there remains a profound disconnect between research, teaching, and practice in management (Burke & Rau, 2010; Rousseau, 2012; Rynes, Rousseau, & Barends, 2014). In recent years, there has been a concerted effort among some of the world’s most influential management scholars to promote EBMgt as a concept (e.g., Briner et al., 2009; Pfeffer & Sutton, 2006; Rousseau, 2006, 2012; Rynes et al., 2014) and “translate” academic knowledge for managers (e.g., Latham, 2009; Locke, 2009). Based on the increased volume of literature using EBMgt terminology (Reay, Berta, & Kohn, 2009), it appears the EBMgt movement is gaining strength among academics. However, managers and future managers must be the focus for implementing EBMgt, as the movement’s ultimate success lies with them (Briner et al., 2009; Rousseau, 2012).

Helping managers adopt an EBMgt perspective and narrowing the research-practice gap will not be easy. Management is not a profession with a well-defined body of knowledge or entry-to-practice standards. Even among managers with a relevant graduate degree, management education may be an acute obstacle.

Management students, including MBAs, are usually not taught how to access, interpret, or use research evidence to inform decision-making and practice (Briner & Walshe, 2014; Charlier et al., 2011; Graen, 2009; Rousseau, 2006, 2012; Rousseau & McCarthy, 2007). For instance, a review of over 800 course syllabi from 333 MBA programs found that research evidence in general, and EBMgt in particular, were not featured prominently: only a few courses directly mentioned EBMgt, while a more liberal operationalization of EBMgt, which included EBMgt-related terms like “research” or “evidence,” was featured in about 25% of core MBA courses (Charlier et al., 2011). Even when EBMgt is covered, educators who adopt an evidence-based approach can encounter resistance from students, particularly when their beliefs and assumptions are challenged (Jelley et al., 2012).

Instilling an appreciation for principles derived from formal research and developing students’ critical thinking skills are crucial to effective EBMgt education. We have been involved with such an EBMgt approach to management education in the UPEI undergraduate business program and EMBA program. Our initiatives include courses in research methods and EBMgt, EBMgt-themed case competitions, (appropriately scaled) systematic literature reviews, skill-building library workshops, and more. These efforts are described in more detail in the sections that follow.

### **EBMgt Education at UPEI**

At the UPEI Faculty of Business, we have worked over the past decade to integrate EBMgt education into our undergraduate and graduate programs. This process has occurred in three stages. EBMgt was first incorporated into our EMBA program, which launched in 2008. Inspired by Denise Rousseau’s 2005 Presidential Address to the Academy of Management, where she advocated for EBMgt and called on educators to help bridge the research-practice gap (Rousseau, 2006), two faculty members with extensive training in the scientist-practitioner model spearheaded this EBMgt initiative. Since the program’s early days, EBMgt has been explicitly and extensively integrated into the EMBA orientation session and two core courses (described in more detail below), though students have certainly had additional opportunities to hone and apply their EBMgt knowledge and skills in other EMBA courses.

The second stage of incorporating EBMgt into our business education occurred as part of curriculum changes to our Bachelor of Business Administration (BBA) program that came into effect in 2014. In the fall of 2012, the UPEI Faculty of Business began a review of its undergraduate curriculum driven by desires to offer students opportunities to pursue different interest streams and more closely match the core curriculum with competencies required of managers in practice. In their study assessing the alignment of MBA curricula from 373 business schools with competencies required for managerial work, Rubin and Dierdorff (2009) used a competency model derived from data provided by 8,633 managers across 52 occupations. They found that competencies deemed most important by incumbent managers were given the least coverage in MBA programs. Specifically, *managing human capital* and *managing decision-making processes* competencies were rated highest in relevance by practitioners, yet were the most underrepresented in MBA curricula. The UPEI curriculum review team determined that Rubin and Dierdorff’s findings applied to our BBA program. Of particular note here is the decision-making dimension, which includes one’s ability to access and appraise the quality of information and which may be covered by courses on decision-making models, statistics, or research methods (Rubin & Dierdorff, 2009). The curriculum review team found some relevant courses in the old BBA curriculum (e.g., statistics, a research

project course) but also uncovered deficiencies, particularly with regard to research methods and managerial decision-making. This gap, coupled with favourable experience with EBMgt education in the EMBA program, resulted in the addition of a required second-year course in research methods and EBMgt in the new undergraduate curriculum.

Most recently, we have bolstered our EBMgt educational efforts in the EMBA program by adding an EMBA Capstone Course as an alternative to the existing Signature Project. Offered for the first time in the winter of 2017, the new Capstone Course explicitly incorporates EBMgt into all components of the course, including EBMgt case competitions and a scaled-down version of a systematic literature review. With this newest addition, EBMgt has truly become the central theme of our EMBA program. In the sections that follow, we provide detailed descriptions of the Capstone Course and our other undergraduate and graduate EBMgt course offerings.

### **EBMgt Education for Undergraduates**

With the BBA curriculum change, the authors of this paper were tasked with developing an undergraduate course that would provide business students with a comprehensive introduction to EBMgt and research methods. This required second-year course, titled Research and Evidence-Based Management (henceforth U-RM), was first offered in the fall of 2015. In addition to exposing students to the fundamentals of the research process, the course also equips them with basic EBMgt knowledge and skills. This latter component sets our course apart from most introductory research methods courses, with our course expressly linking research methods knowledge to improved managerial decision-making.

The U-RM course advances students' EBMgt knowledge and skills in several ways. First, we introduce students to the three elements of the research trinity: research design, measurement, and analysis (Kline, 2009; Pedzahur & Schmelkin, 1991). We cover both quantitative and qualitative approaches to research as well as specific design options, data collection methods, and analytic procedures in a conceptual (vs. computational) manner. Literature searching and question formulation are also featured. Such methodological knowledge supports the "pull" approach to EBMgt (Barends, 2012), which is focused on teaching students how to search for, appraise, and apply research evidence. This is distinct from yet complementary to the "push" approach to teaching EBMgt (Jelley & Carroll, 2012), where students learn about core management theories and principles derived from formal research. In line with the pull approach, our research methods course teaches students how to conduct, consume, and use research, thereby equipping them with skills that are essential to becoming an EBMgt practitioner. Linking research methods content to the EBMgt framework and managerial decision-making is designed to foster students' perceptions that research methods knowledge is relevant to their business education (Jelley et al., 2012). In turn, knowledge of research methods should help students think more deeply about and better articulate concerns (and complements) pertaining to research findings they encounter in organizations and life in general.

Second, we employ an innovative approach that promotes our students' understanding of EBMgt and its four components (i.e., formal research, local data, ethics and stakeholder concerns, and practitioner judgment) and allows them to practice applying their EBMgt knowledge to real-world scenarios using business cases. Specifically, we have adapted and integrated ideas from Dietz et al. (2014) and Gamble and

Jelley (2014) to design a course-based EBMgt case competition. In preparation for the case competition at the end of the course, we use the *Rocket Cycles* case by Dietz and colleagues (used with permission from case authors; see Dietz et al., 2014) as a “running” case that we return to periodically throughout the course. The primary objective of using this case is to teach the students about the importance of collecting local (organizational) data to inform managerial decision-making. We use the case most heavily during our lectures on research design, measurement, and data collection. Typically, students are asked to form groups and spend 15-20 minutes applying a particular research methods topic to the *Rocket Cycles* case, followed by an instructor-led plenary session. We have found this to be an effective way to advance our students’ critical thinking skills by challenging their assumptions and asking them to consider alternatives.

The culmination of our U-RM course is the EBMgt case competition, which is structured as follows. We assign students into groups of 4-5 members and ask them to analyze a short case written by the authors of this paper and inspired by published field research. All groups have to prepare a written report using the same case. The case competition instructions and grading rubric clearly outline how the case analysis requires the students to critically reflect on the four elements of EBMgt put forth by Briner et al. (2009). The top three teams, based on the instructor’s evaluation of the written reports, are then invited to present their analyses and recommendations to a panel of judges in the final round of the competition. For their additional efforts to prepare for and participate in the presentation session, finalists receive extra marks on their group project. While different from how cases are used in conventional business case competitions (see Gamble & Jelley, 2014, for a brief description), we argue that having students start with a practical problem conveyed through a case and asking them to apply EBMgt’s versatile framework to examine the issues can better prepare them for evidence-based practice. We further elaborate on this point below.

The case method, which is a discussion-based teaching method where students analyze concrete situations and provide business solutions and recommendations, has been used in business schools for over 100 years and has become a nearly ubiquitous approach to management education (Mesny, 2013). With its focus on the particular over the general, the case method may at first glance appear incompatible with an EBMgt approach to business education. However, Gamble and Jelley (2014) proposed that cases can be used to promote an appreciation for EBMgt, arguing that “evidence-based general principles can inform (not dictate) complex, contextualized management decisions” (p. 435). Proponents of EBMgt have suggested learning interventions where (adapted) business cases can be used to support the development of an EBMgt mind- and skill-set in students (Gamble & Jelley, 2014; Goodman & O’Brien, 2012; Rousseau & McCarthy, 2007). We also recognize that most students enrolled in an introductory methods course would find it intimidating, if not daunting, to identify a topic and adequately refine a research question to examine in the time available to them. The case approach helps focus student learning on methodological issues without placing upon them excessive cognitive demands that can impede learning among novices (see Goodman & O’Brien, 2012). An existing fourth-year research course required in the BBA program provides a venue for students to explore their research interests and engage more fully in the research process (e.g., data collection and analysis).

We have modeled our competition after Gamble and Jelley’s (2014) recommendations for an EBMgt case competition and Dietz et al.’s (2014) approach to EBMgt education that focuses on producing local evidence. Gamble and Jelley (2014) advocated for an EBMgt competition that explicitly incorporates the four elements of EBMgt by featuring cases where “protagonists explicitly considered evidence – both local data and formal research – along with ethical considerations, stakeholder concerns, and reflections on their own expertise” (p. 437), but this information is “deliberately incomplete” (p. 438) to encourage students to conduct further research and reflect on the quality of the evidence. We have combined this approach with

Dietz et al.'s (2014) suggestions by requiring our students to include a research proposal for producing local evidence as part of their case recommendations. Dietz et al. (2014) approach EBMgt teaching with a narrower focus on local experimentation in order to instill in their students an appreciation for the complexity of EBMgt, make EBMgt more tangible through practice, and help students develop causal reasoning skills. We hope to do the same by adapting their approach.

Our EBMgt case competition takes our students through a similar problem-solving cycle as the one described by Dietz et al. (2014) and modeled after problem-based learning in medicine (Barrows, 1996). First, our students are asked to define the problem in the case and formulate an answerable research question. Second, they are required to search for and identify quality research evidence relevant to the case. To promote our students' skills in this domain, we typically situate the assigned case within a mature body of literature that contains ample high quality but sometimes conflicting or nuanced evidence (e.g., goal setting). In addition, earlier in the semester, U-RM students spend one full class with a resident librarian who teaches them how to search for relevant academic literature. Third, as part of their recommendations, our students need to propose a study to produce local evidence intended to inform the case protagonist's decision-making. Dietz et al. (2014) include further steps in their problem-solving cycle where students actually get to implement their study, collect and analyze data, and propose solutions to the case problem(s).

The structure, pacing, and introductory nature of our semester-long U-RM course prevent us from incorporating local evidence as fully into our course curriculum. Nevertheless, by having students develop a short research proposal as part of their recommendations, including the details of their study design and measurement, we are able to convey the importance of and challenges inherent in gathering local (organizational) evidence using methods that produce causally interpretable data. Students practice articulating problems and research questions while considering whether and how to apply methodological options they learned throughout the term to the case at hand. Through the top-teams' presentations, the class comes to realize that the research process involves both rigour and creativity since no two proposals are identical. Incidentally, we deliberately restrict the presentations and panel interrogations to relatively high-performing groups on the written submission. This is partly to differentiate this research methods course from others wherein all student groups present. It also permits our judges to ask more challenging questions without seeming to be unreasonable and gives stronger student teams a better development opportunity (that generally seems to be appreciated) while serving as an eye-opener for audience members.

### **EBMgt Education for Working Professionals**

In a recent EMBA orientation session for the incoming cohort, an EMBA alumna said about her experience in the program, "I would regularly take the material learned on Friday and apply it at work on Monday." This ability to immediately transfer newly acquired knowledge into the workplace is perhaps the major difference between our undergraduate and EMBA students, making EBMgt a more obvious fit for the latter group. Our EMBA students are mid-level career managers, entrepreneurs, or high-potential future leaders from varied educational and work backgrounds. On average, students have approximately 14 years of work experience. While the range of different backgrounds can create challenges for educators, it also presents us with a unique opportunity to have a widespread positive impact on managerial decision-making in a multitude of industries locally and beyond. It also provides students with a range of insights based on their colleagues' diverse experiences.

**Orientation.** Incoming students begin the program with an EMBA orientation. One of its core sessions, typically delivered by the authors of this paper, provides an introduction to EBMgt, including coverage of the basic principles outlined by Barends et al. (2014) and an in-class activity adapted from Briner and Rousseau (2011) where students use the four elements of EBMgt to identify questions pertinent to “diagnosing” an absenteeism problem. We also use an abbreviated version of the human resource management (HRM) content quiz from Rynes, Colbert, and Brown (2002) to highlight the disconnect between management research and practice. Our students tend to struggle with the quiz, but by framing their lack of evidence-based HRM knowledge as a dissemination failure by academics and within the context of Rynes et al.’s (2002) findings of widespread knowledge deficiencies among practicing professionals, we are able to demonstrate gaps in knowledge about practice-related management principles in a non-threatening way that mitigates potential reactions of defensiveness (Jelley et al., 2012). In addition, as part of orientation, students attend a library workshop where a resident librarian exposes them to UPEI’s library resources, academic literature searching, citation practices (with a particular focus on APA style), and the writing-enhancement platform Grammarly.

**Starting the program.** Within weeks of the EMBA orientation, students are again introduced to EBMgt in their first course in the program – Managing People and Organizations (henceforth EMBA-MPO). While this course focuses primarily on the push approach to EBMgt by advancing students’ knowledge of HRM and organizational behaviour topics, it also provides valuable opportunities for students to develop skills associated with the pull approach to EBMgt. Specifically, two course assignments involve a Critically Appraised Topic (CAT), which is a “quick and succinct assessment of what is known (and not known) in the scientific literature about an intervention or practical issue by using a systematic methodology to search and critically appraise primary studies” (Barends, Rousseau, & Briner, 2017a, p. 3). Compared to a systematic literature review, a CAT requires a less comprehensive literature search and is more limited in overall breadth and depth (Barends et al., 2017a), making it a better fit for our students at this stage of the program. In EMBA-MPO, students first produce an individual “mini-CAT,” focusing on only one academic article, and later conduct a more comprehensive CAT as a group project. This work promotes their skills in formulating answerable research questions, searching for relevant literature, appraising the quality of evidence, and synthesizing findings and their practical implications, which are considered essential to becoming an evidence-based manager (Barends et al., 2014). Therefore, while principally a management-content course, this course is instrumental in laying the foundation for students to find research relevant to their practice-related challenges and interests.

**Research methods.** The EMBA-MPO course described above is immediately followed by Business Research Methods (henceforth EMBA-RM), an introductory research methods course where students learn how to design and interpret research. By extensively incorporating EBMgt into several components of the course, we hope to instill in our students an appreciation for the complexity of research and the essential role it plays in evidence-based practice. As Jelley et al. (2012, p. 342) noted previously, “the EBMgt perspective seems to make research-methods content (reasonably) palatable to pragmatic students, and the research-methods content provides more of the knowledge and skill required to move students beyond a basic awareness of EBMgt.” While the structure and short (six-week) duration of the course do not permit our students to see a research project through from start to finish, the course nevertheless provides ample practice opportunities to help them further hone their EBMgt skills toward becoming proficient consumers and producers of research. For instance, students attend an advanced literature search workshop at the UPEI library as part of this course. We elaborate on other notable course components below.

For one of the course assignments, students are required to conduct a scaled-down Rapid Evidence Assessment (REA), building on the skills acquired through the two CAT assignments in EMBA-MPO. Like a CAT, an REA includes an assessment of the current state of the literature on a particular topic by employing systematic methods to search for and appraise evidence (Barends, Rousseau, & Briner, 2017b). In order to be quick and manageable (or “rapid”), an REA also makes concessions with regard to the thoroughness of the search. However, unlike a CAT, an REA is more involved, as it requires that the search for relevant literature is conducted by two individuals independently of each other, the search process is clearly documented in the form of a flow chart, and the included studies are evaluated for their methodological quality (Barends et al., 2017b). In EMBA-RM, students are put into pairs and tasked with conducting an REA on a topic of their choice using only meta-analyses or systematic literature reviews. With this limit on the type of studies included and our students’ emerging familiarity with research methods, this assignment is only an approximation of what an REA should be. However, similar to Briner and Walshe’s (2014) approach, it meets our goal of providing training in general skills required to conduct systematic reviews. The EMBA-RM course accomplishes this by allowing students to further hone their literature search and evidence appraisal skills and, more broadly, highlighting the importance of a systematic approach to literature reviews for evidence-based practice (Briner et al., 2009; Briner & Walshe, 2014).

Another course component that is intended to promote EBMgt skills is the online questionnaire assignment. Utilizing a widely-used online survey development tool (SurveyMonkey), the course instructor first guides the students through the process of developing an online questionnaire step-by-step. For their assignment, students then have to come up with a research question on a management topic of their choice, find validated scales tapping into the relevant constructs, and develop a short online questionnaire consisting of an informed consent page, main research questions, demographic questions, and a concluding (thank-you) page. While fairly limited in scope, this exercise includes important lessons on research ethics and measurement and promotes students’ ability to produce local evidence using a tool that is readily available for use in applied settings.

Like the U-RM course, EMBA-RM also concludes with an EBMgt case competition. The competition is structured similarly to the one in the undergraduate program, except that the case itself provides fewer details on the relevant body of academic research, requiring EMBA students to conduct more extensive literature searches. Due to the smaller class size, all groups present in the in-class competition, regardless of their performance on the written component of the assignment. Moreover, EMBA students have more advanced mental models about management (Jelley et al., 2012), so we hold them to a higher standard both in terms of their performance on the written report and presentation and the difficulty of the questions posed by the competition judging panel. This course serves two main functions. First, drawing on Gamble and Jelley (2014) and Dietz et al. (2014), it helps students develop their evidence search and appraisal, local experimentation, and critical thinking skills by requiring them to apply the EBMgt perspective to practical problems. Second, it serves as a preliminary look at what students can expect in the EMBA Capstone Course at the end of the program.

**Completing the program.** Our EMBA students now have the option to finish the program either by completing the traditional Signature Project or the new EMBA Capstone Course, first offered in the winter of 2017. Both options are designed to have students apply and further refine the knowledge and EBMgt skills acquired in the program’s core courses. Most students now opt for the Capstone Course, but the Signature Project remains a good choice for those who have a keen interest in a particular topic and wish to work on a sizeable project independently, under the supervision of a faculty advisor. The Signature

Project can take three forms: academic business research, business plan, or consulting-type project. Of the three, academic business research requires students to draw most heavily on their research and EBMgt skills. While some students have conducted primary research for their projects, a single-coder variant of the systematic literature review, which is a more exhaustive and methodologically rigorous approach to locating, appraising, and synthesizing evidence than a CAT or an REA (Barends et al., 2017a; Briner & Walshe, 2014), has been a particularly popular choice. This is encouraging for two reasons. First, by requiring comprehensive literature searches, careful synthesis and appraisal of evidence, and thoughtful consideration of practical implications, systematic reviews are excellent tools for students to demonstrate their EBMgt skills. Second, systematic reviews are an essential (but often missing) part of a practitioner's ability to engage in evidence-based practice. As Briner et al. (2009, p. 20) pointed out, "As few of these [systematic reviews] currently exist in management or organization studies, even practitioners who wanted to could not fully practice EBMgt." Our students' efforts in this regard thus contribute to the advancement of EBMgt as a field.

The EMBA Capstone Course is a course-based alternative to the Signature Project. It builds on our experience with EBMgt case competitions and variants of the systematic literature review (i.e., CAT and REA) in other EMBA courses, resulting in an intensive and challenging course that explicitly integrates EBMgt into all course components. Students are required to complete three EBMgt projects, spaced out evenly over the semester. One project is a CAT where students need to narrow down a broad management topic to an answerable question and critically appraise relevant findings from formal research. The remaining two projects are EBMgt case competitions. Like in U-RM and EMBA-RM, the Capstone Course case competitions follow Gamble and Jelley (2014) by requiring students to critically reflect on the four elements of EBMgt (i.e., formal research, local data, ethics and stakeholder concerns, and practitioner judgment) as part of their case analysis and make evidence-based recommendations. Moreover, for one of the competitions, the case recommendations need to include a research proposal for producing local evidence, in line with Dietz et al.'s (2014) approach to teaching EBMgt. However, the Capstone Course case competitions differ from previous competitions in that students compete individually, the projects are more involved and cover a wider range of business topics, and the cases used are existing business cases which are longer and more complex than the ones used in U-RM and EMBA-RM. In the first offering of the course, the cases were drawn primarily from the fields of management, finance, and strategy, to align with the two course instructors' areas of expertise and provide good coverage of core business areas.

We decided to offer the Capstone Course as an alternative to the Signature Project to facilitate timely completion of the program in a way that is well-aligned with our program's learning objectives, particularly the development of an EBMgt mind- and skill-set in our students. Based on preliminary feedback and our observations, we have been successful in advancing the major objectives of this course, which include proficiency in searching for and appraising evidence and in developing persuasive, evidence-based recommendations, while also making the new Capstone Course an engaging and enjoyable highlight of the program.

## Reflections on Teaching EBMgt

In this section, we synthesize our EBMgt educational initiatives by reflecting on how the courses described above appear to facilitate our students' knowledge of and appreciation for the four elements of EBMgt put forth by Briner et al. (2009).

### Formal Research

Our efforts centre heavily on this component of EBMgt. All of the initiatives described in the preceding section, but particularly EMBA-MPO, EMBA-RM, and the Capstone Course, strongly emphasize the importance of evidence search and appraisal skills. We go to great lengths to help our students develop these skills through library literature search workshops, course assignments (e.g., CAT, REA, EBMgt case competitions), and research methods knowledge required to evaluate the methodological quality of studies. As Rousseau (2012, p. 5) stated previously, "Knowing how to obtain and use scientific evidence and reliable business knowledge helps practitioners respond effectively to the uncertainty they face everyday in organizations." Accordingly, by teaching our students how to access and apply research evidence, we hope to equip them with the skills they will need to make informed decisions in the workplace.

Our EBMgt courses provide our students with the skills needed to acquire and critically assess information. Beyond these skills linked to the pull approach to EBMgt, evidence-based practitioners should possess basic knowledge of research in their area of practice (Rousseau, 2012). This is where our undergraduate and EMBA offerings as a whole play a key role. While we cannot claim that all our colleagues share our interest in evidence-based education, we can say with some degree of confidence that the majority of our undergraduate and EMBA courses effectively employ the push approach to education to advance students' knowledge of relevant theories and research findings in a particular business domain. We further posit that our EBMgt efforts in the BBA and EMBA courses described herein create a demand for evidence-based content among our students. After taking our course(s), it is not uncommon for us to hear that students actively challenge assumptions and look for evidence derived from formal research in their other courses.

### Local Data

This EBMgt component refers to the local context within which managerial decision-making takes place. Local data can refer to various organizational metrics for assessing the financial health of the organization or other factors, including employee perceptions and attitudes, that impact organizational performance (Barends et al., 2014; Rousseau, 2012). While other core business courses in our undergraduate and EMBA programs equip students with the skills to identify relevant organizational data and transform them into useful business information (Rousseau, 2012), our efforts in this area focus primarily on our students' ability to produce local evidence or partner with researchers in that endeavour. Our research methods courses, in particular, introduce our students to the basics of research design, measurement, and analysis and help them develop causal reasoning skills. They are then asked to apply this knowledge in our EBMgt case competitions in U-RM, EMBA-RM, and the EMBA Capstone Course. Following Dietz et al. (2014), we believe that requiring our students to propose studies intended to produce local data is a meaningful endeavour, as "producing local evidence is a managerially useful complement to existing evidence when

the latter is not sufficiently relevant to the problem at hand, lacks causal interpretability, or cannot be locally applied” (p. 400). Our approach to teaching EBMgt thus encourages students to become savvy consumers *and* producers of research (Dietz et al., 2014; Jelley et al., 2012).

## **Ethics and Stakeholder Concerns**

Practicing ethical decision-making involves paying attention to the interests of stakeholders impacted by the decision or organizational action (Rousseau, 2012). The EMBA-MPO course includes content relevant to moral reasoning and action planning. In addition to discussing the importance of exploring the ethical implications of managerial decisions in-class, we explicitly incorporate this element of EBMgt into our case competitions. As part of their case analysis in U-RM, EMBA-RM, and the EMBA Capstone Course, our students are required to consider the perspectives of all stakeholders affected by the decision and critically reflect on any moral, legal, or values-based concerns related to the case.

We complement the above lessons on ethical decision-making with a discussion of research ethics. Specifically, in U-RM and EMBA-RM, we introduce our students to the basic principles of research ethics, drawing on the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans* (TCPS 2; Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, & Social Sciences and Humanities Research Council of Canada, 2014) and other relevant materials. Students are expected to apply these principles when proposing a study to produce local evidence as part of their EBMgt case competition and when developing their online questionnaire assignment in EMBA-RM. Moreover, we require students whose Signature Projects involve data collection from human participants to complete the *TCPS 2 Tutorial Course on Research Ethics*, regardless of whether they intend to publish their research or not, as a pre-requisite to the submission of their ethics protocol. Taken together, our intent is to emphasize practitioners’ professional obligation to engage in fair, ethical, and responsible decision-making (Rousseau, 2012).

## **Practitioner Judgment**

Management is about making organizational decisions. An evidence-based approach to management requires developing one’s ability to make reflective, thoughtful judgments (Rousseau, 2012). There is no one component of our educational efforts that exclusively focuses on this element of EBMgt. Instead, all our EBMgt offerings are intended to develop our students’ judgment to be more conscious, thoughtful, and reflective. Through lectures, activities, class discussions, and assignments, we teach our students to be aware of their decision-making processes and biases and to carefully reflect on but not overvalue their own experience. We are particularly focused on developing our students’ critical thinking, which refers to “the ability to engage in purposeful, self-regulatory judgment” (Abrami et al., 2008, p. 1102). In essence, EBMgt combines critical thinking with using the best available research evidence and business knowledge (Rousseau & Barends, 2011), which highlights how central critical thinking is to evidence-based practice. Our EBMgt courses, particularly U-RM and EMBA-RM, promote critical thinking by encouraging students to actively devote attention to their thinking, question and test assumptions, explore alternatives, and be thorough in their analysis of practical matters (Rousseau, 2012).

## Future Directions

Based on student feedback and our classroom observations, our EBMgt educational efforts seem promising. For instance, we regularly observe students in our U-RM course asking more thoughtful and informed questions and exhibit better critical thinking skills during classroom exercises and discussions as the course progresses. Moreover, in exit surveys, our EMBA graduates repeatedly cite their newly acquired knowledge of EBMgt principles as the highlight of the program. However, the quality of this evidence is limited, and we have not yet studied the effectiveness of our approach in a systematic manner. It was in reflecting upon ways to assess the “impact” of our EBMgt approach to management education that the need for appropriate measures became clear.

Inventories for assessing evidence-based approaches to education exist in other fields, such as medicine (see Shaneyfelt et al., 2006) and social work (e.g., Rubin & Parrish, 2010), but not, to our knowledge, in management. With no validated measure of the EBMgt mindset currently in existence, we are limited in our ability to conduct formative and summative evaluations of our EBMgt educational efforts. Nevertheless, drawing from evidence-based practice inventories in social work and mental health (i.e., Aarons et al., 2010; Rubin & Parrish, 2010), preliminary consideration suggests that the EBMgt mindset may consist of a constellation of mental concepts like awareness of, attitudes toward, confidence in using, and intentions to apply an EBMgt perspective. Some of these concepts have strong theoretical and measurement foundations, which would potentially allow us to use existing scales to assess students’ improvement in skills or cognitive beliefs that contribute to an EBMgt mindset.

One example would be to adapt a validated self-efficacy scale (see Bandura, 1986, 1997, 2006; Lee & Bobko, 1994) to measure students’ confidence in using EBMgt. Perceived self-efficacy refers to “beliefs in one’s capabilities to organize and execute the courses of action required to produce given attainments” (Bandura, 1997, p. 3) and is considered to be a major mechanism of human agency (Bandura, 2001). It relates positively to various aspects of work-related performance in numerous contexts (Stajkovic & Luthans, 1998), including managerial performance (e.g., Wood, Bandura, & Bailey, 1990). Assessing our students’ confidence in using EBMgt in an applied setting (i.e., their EBMgt self-efficacy) would be a meaningful way to gauge the effectiveness of our approach to EBMgt education. This is further supported by meta-analytic findings by Sitzmann, Brown, Casper, Ely, and Zimmerman (2008) who recommended that post-training self-efficacy be assessed in end-of-training surveys because it is the best affective predictor of cognitive learning outcomes, both immediate and delayed.

Another potentially fruitful approach would be to assess our students’ improvement in their critical thinking skills as a result of taking our course(s). As outlined earlier, critical thinking is essential to EBMgt (Rousseau, 2012). Instructional interventions intended to promote students’ critical thinking skills have shown promising results in the past, especially when critical thinking objectives are explicitly incorporated into the course curriculum (Abrami et al., 2008). One way in which researchers have assessed critical thinking is by having study participants evaluate claims or scenarios that suffer from a lack of scientific evidence or overreliance on anecdotal evidence, causal claims derived from correlational data, biased samples, and other methodological flaws (Lawson, 1999). The authors of this paper conduct a pre- and post-test assessment of our students’ critical thinking skills, employing an adapted version of an existing “evaluating claims” critical thinking measure (see Adam & Manson, 2014; Lawson, 1999), as a teaching

tool in our U-RM course. Obtaining ethics approval to also use that strategy for research purposes is a promising future direction.

Measuring students' EBMgt self-efficacy and critical thinking are two examples of how educators could potentially evaluate the effectiveness of their EBMgt efforts. This approach is incomplete, however, as the objective should be the development of a measurement tool that meets rigorous psychometric standards and fully taps into the EBMgt mind- and skill-set. We anticipate that such an inventory would be used widely by educators to evaluate and refine their EBMgt efforts, and by academics to examine how an EBMgt mindset impacts (or relates to) organizational performance and other outcomes. Ultimately, though, the success of the EBMgt movement lies with practitioners (Rousseau, 2012). We expect that the development of an EBMgt inventory would support efforts to further the effective management of organizations by encouraging managers to make use of systematic organizational research processes and findings.

### **Conclusion**

The present paper described the authors' and our colleagues' efforts to advance EBMgt education in the UPEI Faculty of Business. The courses described herein are intended to equip students with a thorough understanding of EBMgt principles and critical thinking and research skills that should translate to better decision-making in the workplace. We hope that our experience encourages other management educators to develop EBMgt curricula and thereby contribute to the narrowing of the research-practice gap. We note, however, that while our approach to EBMgt education has received positive feedback from students and colleagues, our efforts to systematically study its effectiveness have been hindered by a lack of validated measurement tools tapping into the EBMgt mindset. We thus hope to further inspire academics to engage in scholarly activity that addresses this gap. A psychometrically sound EBMgt inventory would answer the call for more rigorous evaluation of EBMgt education (e.g., Jelley et al., 2012) and could ultimately have significant benefits for EBMgt's three critical constituencies: academics, educators, and practitioners (Rousseau, 2012).

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## **AN EMPIRICAL EVALUATION OF THE DETERMINANTS OF EXECUTIVE PERKS AT S&P 500 FIRMS**

This paper provides a comprehensive analysis of the determinants of executive perks at S&P 500 firms using manually collected panel data. CEOs receive perks more frequently and at higher levels than other named executive officers (NEOs). In general, S&P 500 firms with larger growth opportunities, realized growth, stock returns, and return on assets are less *likely* to provide perks and provide lower levels of perks when they do. Firms with powerful CEOs are more likely to provide perks. Firm size and executive monetary compensation are the most influential determinants of the *value* of perks. Overall, tenure and gender do not impact the likelihood or value of perk compensation at S&P 500 companies.

### **Introduction**

Compensation for corporate executives has risen much faster than that of average workers over the past forty years (e.g., Hall & Murphy, 2003, and Murphy & Zbojnik, 2004). Controversy over the increasing concentration of wealth and power caused by pay disparity has fostered increased scrutiny of executive compensation. Executive pay packages often include nonmonetary compensation, alternatively called perks or perquisites. These are exclusive benefits provided to top executives but not to other employees at large. Typical perks include limousine services, company automobiles, club memberships, relocation benefits, cost of living allowances, corporate aircraft, legal fees, financial services, and security. Generally, there is a negative public perception regarding perks — their exclusivity and luxury make them even more controversial than monetary compensation. Nonetheless, executive perks remain widespread.

There are two primary rationales for the prevalent use of executive perks. Optimal contracting posits that perk compensation may be an effective method of enhancing executive productivity and satisfaction — perks should be part of optimal executive compensation packages (e.g., Fama, 1980). In contrast, agency theory states that perks are the result of weak corporate governance that enables executives to redirect corporate resources for personal gain (e.g., Jensen & Meckling, 1976, and Bebchuk & Fried, 2004). Consistent with perks being an indication of weak corporate governance, Yermack (2004) finds that the disclosure of executives' personal use of corporate jets leads to lower equity returns, and Grinstein, Weinbaum, and Yehuda (2010) confirm the punitive market reaction to the first-time disclosure of perks and find that perks may reflect managerial excess that reduces shareholder value. In contrast, Rajan and Wulf (2006) find that firms are more likely to offer perks in situations in which perks enhance CEO productivity. The underlying suggestion is that some types of perks have the potential to provide common value for both the firm and the executive.

These opposing schools of thought provide insight into the existence of perks. However, not much is known about the determinants of executive perks. One of the limiting factors in investigating perks is data availability — standard research data such as Execucomp does not contain detailed executive perk compensation information. Existing studies rely on the information of one particular type of perk (e.g.,

Yermack, 2004, and Rajan & Wulf, 2006) or small random samples or survey data (e.g., Grinstein, Weinbaum, & Yehuda, 2010). In short, the empirical evidence about perks is limited and mixed.

The primary contribution of this paper is that it provides the first comprehensive investigation of the determinants of the *likelihood* and *value* of executive perks at S&P (Standard and Poors) 500 firms using extended manually-collected panel data first introduced in Carrothers, Han, and Qiu (2012)<sup>2</sup>. This topic is important because perks are widespread and, increasingly, a matter of concern for regulators, policy makers, and shareholders.<sup>3</sup> By understanding the determinants of perks, we can better evaluate the position of perks along the agency/optimal-contracting continuum. Given that perks represent a small portion of overall executive compensation, what factors influence firms' decisions to include perks in pay packages despite the political and public backlash over perceived excess? First, executives may prefer perks to an equivalent value of incremental salary. For example, perks could signal the relative position of an executive in a company through their exclusivity and prestige (e.g., Hirsch, 1976 and Rajan & Wulf, 2006), or perks may offer tax advantages or represent a form of stealth benefits through which executives can hide compensation from scrutiny (Bebchuk and Fried, 2004). Second, it may be beneficial for optimal contracting firms to provide perks if economies of scale make perks more cost effective than monetary compensation. For example, financial advisers, lawyers, and car services can be shared by multiple executives. In contrast, firms would rationally avoid perks if they create a negative perception amongst investors or magnify agency costs within the firm. For example, a company-provided club membership could divert an executive from working and the negative reaction of investors to the disclosure of personal use of company aircraft, as documented in Yermack (2004), suggests that negative perception of perks by investors could result in significantly higher costs of equity.

To examine the determinants of perks, I created a panel database of executive perk compensation at S&P 500 companies taking advantage of changes in SEC (Security and Exchange Commission) reporting requirements — the SEC required adherence to the new rules for all proxy statement filings after December 15, 2006. Under the old 1992 rules, firms did not have to disclose perks at all if the aggregate value of perks given to an executive was less than \$50,000. Further, the old rules did not require firms to itemize the costs of any individual perks that were less than 25% of the overall total perk value. The new 2006 rules lowered the \$50,000 threshold to \$10,000 and required that every individual perk item be identified. Additionally, any perks valued at greater than \$25,000 or 10% of the aggregate perk value must be separately quantified (SEC Release No. 33-8732A). All proxy statements for fiscal years 2006 and beyond provide meaningful and consistent data that enables the analysis of the determinants of executive perks. I manually collected information for named executive officer (NEO) 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 — depending on a company's chosen month for fiscal year end, sample firms' fiscal years are from 2006 to 2013. To the best of my knowledge, this data provides the most comprehensive NEO perks information to date at S&P 500 companies.

Firms are more likely to pay perks to CEOs, in particular, and to top executives with higher wages, in general. Firms with higher current year stock return and prior year return on assets, realized growth, and growth opportunities are less likely to pay perks. Firm performance measures such as return on equity and free cash flow return, and manager attributes such as tenure and gender do not have a significant impact on the *likelihood* of S&P 500 firms paying perks. Firm size, monetary compensation, and being CEO are the most influential determinants of the value of perks. Prior year market-to-book ratio, stock return, prior year ROA, and prior year sales growth have statistically significant and economically meaningful *negative*

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<sup>2</sup> The extended dataset has twice the number of observations as the original.

<sup>3</sup> For example, in *The New York Times* "Scrutiny of bankers' perks will grow, too" on February 5, 2009, E. Dash calls "for greater corporate review of excessive or luxury items for executives" and gives examples of large dollar perks provided by firms that accepted government bail-out money during the financial crisis.

impact. The results confirm that perks are not substitutes for monetary compensation and that larger firms reward top executives (particularly CEOs) with higher levels of perks. The determinants of perks depend on executive rank (e.g., CEOs versus other NEOs). For CEOs, firm size and monetary compensation are the primary explanatory factors. The firm-size result confirms that the well-established (optimal contracting) relationship between CEO monetary compensation and firm size (e.g., Gabaix & Landier, 2008) also applies to CEO perks. However, for other NEOs, monetary compensation, not firm size, is the most important factor determining perks. The results for CEOs and other NEOs differ in other important ways. Although for both groups, stock return and ROA have significant negative impacts (i.e., higher stock returns and ROA are associated with lower perk payouts), for other NEOs only, growth opportunities and realized growth have a moderating effect on perk compensation. The rest of the paper proceeds as follows. Section 2 provides empirical evidence. Section 3 summarizes and concludes.

## Empirical Evidence

### Data

The data source for perks is the SEC Edgar database — specifically public disclosures in proxy statements filed by S&P 500 companies between January 1, 2007 and December 31, 2013. Appendix A is a sample of the summary compensation table prescribed by current SEC regulations. The SEC defines named executive officers (NEOs) as CEO, CFO (chief financial officer), and the other top three highest paid officers of the company, and requires publicly traded companies to disclose compensation for named officers in annual proxy statements. Occasionally, firms choose to include compensation for more than five executives. The summary compensation table prescribes the elements of executive compensation that companies must report in separate columns (designated by lower case letters): 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*. *All other compensation* is executive compensation not otherwise included in columns (c) through (h) — there are two categories of *all other compensation*: *perquisites and other personal benefits* and *additional all other compensation*.

There is no formal definition of *perquisites and other personal benefits*, but the SEC provides guidance.<sup>4</sup> *Perquisites and other personal benefits* include, but are 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). *Additional all other compensation*, includes severance or any payment related to a change of control, company contributions to vested or unvested pension plans, the value of any company-paid insurance premiums, amounts reimbursed during the fiscal year for the payment of taxes (gross-ups), the value of discount on acquired company shares, the value of any dividends or other earnings paid on stock or option awards when the dividends or earnings were not factored into the grant date fair value, director or other fees, commissions, any other miscellaneous cash payment (SEC Release No. 33-8732A, p.79).

The SEC does not specify how companies must report the breakdown of *all other compensation*. Depending on the firm, the detailed information is either summarized in a separate table or in the footnotes

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<sup>4</sup> In Release No. 33-8732A the SEC expresses concern “that sole reliance on a bright line definition in our rules might provide an incentive to characterize perquisites or personal benefits in ways that would attempt to circumvent the bright lines.... An item is not a perquisite or personal benefit if it is integrally and directly related to the performance of the executive’s duties. Otherwise, an item is a perquisite or personal benefit if it confers a direct or indirect benefit that has a personal aspect, without regard to whether it may be provided for some business reason or for the convenience of the company, unless it is generally available on a non-discriminatory basis to all employees.”

to the summary compensation table. I supplemented the executive compensation information available in Execucomp with manually-collected detailed information for *all other compensation* for executives at S&P 500 companies from the proxy statements, company financial statement information from Compustat, and company governance provisions from Risk Metrics. The final merged dataset has 20,071 observations on 5884 named executive officers from 621 firms. The number of firms exceeds 500 because of changes to the composition of the S&P 500 over time. I winsorize all variables at the top and bottom one percent. See Appendix B for detailed definitions of variables used in this study.

Table 1 provides summary statistics of firm (Panel A) and manager (Panel B) characteristics for the data set. Given that the sample pool is the S&P 500, the firms in the sample are large and profitable. Mean (median) market value<sup>5</sup>, annual sales, total assets and number of employees are \$36.5 (\$13.6) billion, \$16.9 (\$7.3) billion, \$47.0 (\$12.0) billion, and 42,250 (18,000), respectively. Mean (median) return on equity and return on assets are 12.8% (13.8%) and 5.1% (5.1%). In terms of growth opportunities, realized growth, and market returns, the mean (median) market-to-book ratio, sales growth, and stock return are 2.9 (2.2), 6.3% (5.3%), and 8.9% (8.1%). The average E Index<sup>6</sup> is 2.6 out of a maximum of six. S&P 500 sample firms span 156 industry sectors defined by three-digit SIC (standard industry classification) code.

Table 1  
**Summary statistics of firm and manager characteristics**

The table provides summary statistics of firm (Panel A) and manager (Panel B) characteristics. The sample includes S&P 500 firms between January 1, 2006 and December 31, 2013. In Panel B, compensation data is from summary compensation tables of SEC filed proxy statements. *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* (i.e., all elements in the summary compensation table excluding *all other compensation*). *Perks* is the amount reported as *perquisites and other personal benefits*. CEO Premium is the ratio of CEO wage to average wage for all NEOs (named executive officers). See Appendix B for a summary of variable definition.

Panel A — Firm Characteristics					
	Mean	Std	P25	Median	P75
Employees	42250	64991	6850	18000	44879
Net Sales (\$millions)	16875	26607	3427	7339	15835
Total Assets (\$millions)	46961	134170	5108	11951	31421
Market Value (\$millions)	36507	83170	7291	13607	28843
Market to Book Ratio	2.9	3.8	1.4	2.2	3.6
Stock Return	8.9%	43.2%	-15.4%	8.1%	27.3%
Return on Assets	5.1%	7.7%	1.8%	5.1%	9.1%
Return on Equity	12.8%	39.2%	6.8%	13.8%	21.7%
Free Cash Flow (\$millions)	1432	3704	69	483	1316
Sales Growth	6.3%	19.3%	-2.6%	5.3%	13.3%
E Index	2.6	1.5	2	3	4

  

Panel B — Manager Characteristics					
	Mean	Std	P25	Median	P75
<i>All NEOs</i>					
CEO Dummy	0.183	0.387	0	0	0
Gender Dummy	0.075	0.264	0	0	0
Tenure (years)	12.6	8.1	7.1	10.5	14.5
CEO Premium	2.1	0.7	1.8	2.2	2.5

<sup>5</sup> Firm market value = market value of equity plus book value of debt

<sup>6</sup> Entrenchment Governance Index in which lower values reflect better governance – see Bebchuk, Cohen and Ferrell (2009).

Perks (\$thousands)	51	117	12	12	41
Salary (\$thousands)	634	340	413	550	788
Wage (\$thousands)	4704	4947	1728	3026	5645
<i>CEOs only</i>					
Perks (\$thousands)	104	166	2	37	126
Salary (\$thousands)	1033	370	834	1000	1201
Wage (\$thousands)	9886	6627	5153	8334	12855
<i>NEOs excl. CEOs</i>					
Perks (\$thousands)	39	99	0	10	32
Salary (\$thousands)	545	259	394	500	648
Wage (\$thousands)	3541	3567	1570	2551	4205

Panel B shows that 18.3% of the sample are CEOs and 7.5% are female. I define wage as all elements in the summary compensation table excluding *all other compensation*. This is a useful measure of monetary compensation because it excludes the distorting impact of one-time very large payouts related to severance or retirement. I define perks as the amount reported as *perquisites and other personal benefits*. Perks are much smaller than salary (monetary compensation not at risk) and wage (overall monetary compensation). For CEOs, mean (median) perks as a percent of salary and wage are 10.1%<sup>7</sup> (3.7%) and 1.1% (0.4%), respectively. For other NEOs, mean (median) perks as a percent of salary and wage are 7.2% (2.0%) and 1.1% (0.8%). Mean (median) NEO tenure is 12.6 (10.5) years. Mean (median) CEO premium<sup>8</sup> is 2.1 (2.2). There is considerable right skewness in the following firm and manager characteristics: firm size, market return, growth opportunities, free cash flow, perks, salary, and wage.

### Details of Perks at S&P 500 Firms

Firms choose their own descriptions of perks when disclosing compensation under the category *perquisites and other personal benefits* because the SEC does not provide specific groupings for individual perk items. For example, firms describe car service alternatively as ground transportation, car and driver, limousine, and chauffeur. Therefore, I exercise discretion in grouping perks with different descriptions but with common meaning. In Table 2, I consolidate more than sixty perk descriptions into the twenty specific perk items. For example, “relocation expenses” consist of five separate items (travel assistance, moving expenses, temporary accommodation, cash lump sum in lieu of incidentals, and realtor, legal, and other closing costs) because all are associated with reimbursement for a job-related move. Note that “other perks” consist of company disclosed miscellaneous or other perks plus other not-easily-classifiable descriptions. In the literature, there are examples of other approaches to consolidating perks. Rajan and Wulf (2006) use a database of 15 perk items based on the responses of approximately 300 companies between 1986 and 1999 to a survey conducted by a well-known U.S. based compensation consultant. The consultant chose the perk items on the survey. Grinstein, Weinbaum, and Yehuda (2010) compile a perk database based on 2007 and 2008 SEC filings for a random sample of small, medium, and large firms that includes 130 large market-capitalization firms. They document 30 descriptions of perks consolidated into ten main perk items, including tax gross-ups<sup>9</sup>. To my knowledge, the perk compensation evaluated herein is the most comprehensive perk database in existence for large market capitalization firms based on consistent, stringent compensation disclosure rules.

Table 2 summarizes *all other compensation* for CEOs and other NEOs for fiscal years 2006 to 2013. Almost all executives receive some form of all other compensation (98.3% of CEOs and 97.6% of other

<sup>7</sup> \$104/\$1,033 = 10.1%

<sup>8</sup> CEO premium is a measure of CEO power and equals CEO wage divided by average NEO wage.

<sup>9</sup> The SEC specifically classifies tax gross-ups as an item in *additional all other compensation* instead of an item in *perquisite and other personal benefit*. As such, my definition of total perks does not include tax gross-up.

NEOs, at average values of \$332,132 and \$202,917, respectively). The percentage of CEOs (other NEOs) receiving *additional all other compensation* is 95.8% (95.3%). On average, CEOs (other NEOs) receive *additional all other compensation* worth \$222,757 (\$162,745).

Table 2  
**Summary statistics of perks provided in S&P 500 firms**

The table presents summary statistics for perk benefits provided by S&P 500 firms as detailed in SEC filed proxy statements between January 1, 2006 and December 31, 2013. The SEC classifies “*all other compensation*” into two main categories “*perquisites and other personal benefits*” and “*additional all other compensation*”. We further classify perks reported under “*perquisites and other personal benefits*” into 20 main perk items. For each item, the amounts are in \$ thousands and Freq is the percentage of firms disclosing a dollar value for the item.

	CEOs only (N=3679)			Top Executives Excluding CEOs (N=16392)		
	Freq	Mean	Std	Freq	Mean	Std
Total All Other Compensation	98.3%	332.1	580.2	97.6%	202.9	527.1
<b>Main Categories</b>						
<i>Perquisites &amp; Other Personal Benefits</i>	76.2%	116.2	132.4	62.9%	37.4	61.9
<i>Additional All Other Compensation</i>	95.8%	222.8	525.2	95.3%	162.7	493.8
<b>Main Perquisite Items Under Perquisites &amp; Other Personal Benefits</b>						
Personal Use Of Aircraft	36.3%	139.8	136.3	10.0%	64.8	101.7
Relocation Expenses	3.7%	155.7	239.9	6.5%	152.3	271.3
Personal Use Of Automobile	19.2%	20.3	15.4	17.3%	16.2	11.4
Security	12.0%	160.3	331.7	3.6%	32.2	112.2
Financial Services	24.1%	17.3	16.4	21.9%	10.7	9.8
Club Memberships	7.4%	12.0	16.2	5.3%	7.5	11.2
Reimbursement for Unused Vacation	1.8%	52.5	62.0	2.3%	40.9	50.1
Personal Services/Use Of Assets	2.7%	30.1	44.7	1.8%	18.3	41.4
Car Service ( Car And Driver)	8.2%	54.1	59.8	2.9%	54.5	65.7
Tickets And Entertainment	0.3%	36.9	53.9	0.3%	7.3	9.9
Personal Meal	0.4%	11.9	15.7	0.3%	8.1	15.2
Personal Travel	4.4%	16.7	23.8	3.4%	9.6	14.0
Professional Association Dues	0.2%	41.6	54.2	0.2%	18.5	24.3
Perquisite Cash Allowance	5.9%	40.2	23.8	5.6%	27.2	15.6
Legal Fees	2.0%	37.2	53.0	0.6%	37.8	72.2
Parking	1.9%	3.0	1.7	2.2%	3.2	2.0
Cost Of Living Allowance	2.7%	112.9	146.8	3.6%	185.1	275.6
Charitable Gift Matching	6.1%	29.2	38.9	4.4%	15.4	24.4
Medical/Health	12.2%	6.1	10.3	10.5%	5.6	9.9
Other Perquisites	26.2%	24.3	26.0	24.4%	17.0	20.4

CEOs receive *perquisites and other personal benefits* more frequently and at higher levels, on average, than do other NEOs (76.2% compared to 62.9% and \$116,240 compared to \$37,389 respectively). The most

common perks for CEOs are personal use of aircraft (36.3%), other perks (26.2%), financial services (24.1%), personal use of automobile (19.2%), and medical/health (12.2%). The most valuable perks for CEOs are security (\$160,317), relocation expenses (\$155,653), personal use of aircraft (\$139,808), cost of living allowances (\$112,946), and car service (\$54,060). The most common perks for other NEOs are other perks (24.4%), financial services (21.9%), personal use of automobile (17.3%), medical/health (10.5%), and personal use of aircraft (10.0%). The most valuable perks for named executives other than CEO are cost of living allowances (\$185,104), relocation expenses (\$152,297), personal use of aircraft (\$64,800), car service (\$54,499), and reimbursement for unused vacation (\$40,894).

Note that for CEOs, security is the sixth most common perk but the most expensive on average and with a maximum annual value of \$1.7 million. Personal use of aircraft is a good example of a truly exclusive perk in that CEOs receive it far more frequently than other NEOs, and at a higher dollar value. Chauffeur services are also exclusive, even among executives; CEOs are almost three times as likely as the other NEOs to benefit from the services of a car and driver. Overall, the results indicate that, although the use of perks as a form of executive compensation is widespread across S&P 500 companies, there is large variation in value and scope of perks offered to executives of different rank.

### **The Determinants of Perks at S&P 500 Firms**

The literature investigates how managerial characteristics (such as gender, job tenure, and managerial power) and firm characteristics (such as size, profitability, stock price, and governance) and affect executive (usually CEO) compensation (e.g., Rose & Shepard, 1997, Lazear, 2003, Murphy & Zabochnik, 2007, and Core, Guay & Larcker, 2008). I use this literature to identify potential determinants of perks and test for statistical significance and economic impact as explanatory variables in regression analyses evaluating the *likelihood* and *value* of perk compensation for NEOs at S&P 500 firms. There is widespread consensus that firm size is the most important determinant of CEO pay. Larger firms typically have more complex operations and entice more talented executives with higher levels of compensation (e.g., Murphy, 1999, Core, Holthausen, & Larcker, 1999, and Rose & Shepard, 1997). Prior research uses alternative measures for firm size including sales, total assets, number of employees, and market capitalization. Gabaix & Landier (2008) suggest that market value is a better measure of firm size — compared to other measures of firm size, the market value of a firm (i.e., sum of book value of debt and market value of equity) offers the highest predictive power in regressions with total compensation as the dependent variable and firm size as the single explanatory variable. I choose this measure of firm size. As a robustness check, I also used number of employees, total sales, and total assets as alternative proxies for firm size and find no meaningful impact on the conclusions of the results. Smith and Watts (1992) find that firms with large growth opportunities attract and retain talented executives with higher levels of compensation and reward them for achieving growth — I use market-to-book ratio and sales growth as proxies for growth opportunities and actual growth, respectively. Core, Holthausen, and Larcker (1999) argue that agency theory predicts that executive compensation is increasing in firm performance — I proxy firm performance with accounting measures return on assets, return on equity, and free cash flow return. Murphy (1999) finds the impact of firm characteristics such as firm performance, growth, growth opportunities, and stock returns on executive monetary compensation can be mechanical (e.g., high levels of certain firm characteristics inherently increase the value of bonus, stock awards, and non-equity incentive plans) or reward for performance (e.g., salary increases based on exceeding performance targets). I expect the impact (if any) of such firm characteristics on perks to be reward-based not mechanical. That is, perk awards do not automatically increase in value with improving firm performance, but firms may provide more perks as recognition for past performance results.

Larcker, Ormazabal, and Taylor (2011) test two theories of governance and executive pay. The managerial power view of governance (e.g., Bebchuk & Fried, 2004) suggests higher levels of governance entrenchment provisions are associated with managerial rent extraction, and predicts that broad government

actions that reduce executive pay, increase proxy access, and ban governance provisions are value enhancing. The optimal contracting view of governance (e.g., Fama, 1980) suggests that observed governance choices are the result of value-maximizing contracts between shareholders and management, and predicts that broad government actions that regulate such governance choices are value destroying. Bebchuk, Cohen and Ferrell (2009) base the E (entrenchment) Index on six governance provisions: staggered boards, limits to shareholder bylaw amendments, poison pills, golden parachutes, and supermajority requirements for mergers and charter amendments, assigning one point for each provision. The E Index is a proxy for the balance of power between shareholders and managers — increasing index values shift power to executives (suggesting poor governance). Bebchuk, Cohen and Ferrell (2009) find that the E Index is effective in explaining reduced firm valuation and negative abnormal returns associated with poor governance. Since data to calculate the E Index is readily available from Risk Metrics, I use it as the proxy for governance.

In terms of managerial characteristics, studies of executive compensation often use indicator variables for gender and being CEO. Moreover, powerful executives, particularly CEOs, may exert influence over the firm's compensation committee. Bebchuk, Martijn Cremers, & Peyer (2011) define CEO pay slice, CPS, as CEO total compensation divided by the sum of total compensation for the top five highest paid executives at a firm, and suggest that more powerful CEOs typically take a higher CEO pay slice. For this analysis, one disadvantage of CPS is that regressions would lose observations when the summary compensation table includes fewer or more than five named executives. To mitigate this problem, I define an alternative measure of CEO power, *CEO premium*, that is similar in spirit to CPS. *CEO premium* equals CEO wage divided by the average wage of all NEOs reported in the summary compensation table. The regressions also use tenure as a proxy executive power and influence.

The Spearman's rank correlation coefficients between wage and perks are 0.3729 and 0.2353 for CEOs and other NEOs respectively, both significant at the 1% level, indicating that, in general, perks are not substitutes for wage at S&P 500 firms. While the literature has shown that CEO pay is increasing in firm size, this relationship does not necessarily extend to other NEOs. Noting the significant, positive correlation between wage and perks, I am interested in evaluating the interaction between firm size, wage, and perks and whether the separate impacts of firm size and wage on perks is different for CEOs and other NEOs. The regressions use wage as a managerial attribute that potentially impacts perks.

To summarize, the following are the independent variables used in subsequent regression analyses — note the use of logarithmic transformation on some explanatory variables to mitigate the impact of right skewness in the sample distribution. Appendix B provides further details on all variables.

#### Firm Attributes

Firm size — prior year  $\ln(\text{market value})$

Growth opportunities — prior year market-to-book ratio

Market Performance — prior and current year stock return

Firm Performance — prior and current year return on assets (ROA) and return on equity (ROE), and prior year free cash flow return

Realized growth — prior year sales growth

Governance — E Index

#### Manager Attributes

Monetary compensation — current year  $\ln(\text{wage})$

Power — CEO indicator variable, tenure, and CEO premium

Gender — Gender indicator variable

Table 3 presents the correlation matrices. Panel A (Panel B) summarizes the correlation between perks and the firm (manager) attributes. Column 1 shows that perks are significantly and positively (negatively) correlated with firm size, market performance, governance, monetary compensation, tenure, being CEO, and CEO premium (growth opportunities, firm performance, and realized growth). Perks are not significantly correlated with return on equity and gender. The balance of the columns shows the cross-correlation between attributes. Given the large number of observations, it is not surprising that most of the coefficients are statistically significant. The largest magnitude coefficient is 0.5818 (between ROA and Free Cash Flow Return) — there is no indication that very high correlation between attributes will cause multicollinearity problems in subsequent regression analyses used to conduct more rigorous examination of the determinants of executive perks.

Table 3  
Correlation matrices

This table presents a summary of correlation coefficients for variables used in subsequent regression analysis. Panel A presents results for firm characteristics: Ln(Market Value), Market-to-book Ratio, Stock Return, Return on Assets, Return on Equity, Free Cash Flow Return, Sales Growth, and E Index. Panel B presents results for manager characteristics: Ln(Wage), Ln(Tenure), CEO indicator, Female indicator, and CEO Premium. See Appendix B for definitions. \*\*\*, \*\*, \* indicate significance level at 1%, 5% and 10% level respectively.

Panel A - Correlation Matrix: Firm Attributes (N = 19136)

ID	Variable	1	2	3	4	5	6	7	8	9
1	Ln (Perks)	1								
2	Ln (Market Value)	0.0614***	1							
3	Market-to-book Ratio	-0.0313***	0.0213***	1						
4	Stock Return	0.0155**	0.0079	0.1266***	1					
5	Return on Assets	-0.0402***	0.127	0.2502***	0.1394***	1				
6	Return on Equity	-0.0070	0.0604***	0.4766***	0.0807***	0.4215***	1			
7	Free Cash Flow Return	-0.0221***	0.0050	0.1252***	0.0593***	0.5818***	0.2606***	1		
8	Sales Growth	-0.0628***	0.0456***	0.1159***	0.0212***	0.2551***	0.0792***	0.0526***	1	
9	E Index	0.0349***	-0.2087***	-0.0352***	0.0773***	-0.0690***	-0.0639***	-0.0755***	-0.0522***	1

Panel B - Correlation Matrix: Manager Attributes (N = 20071)

ID	Variable	1	2	3	4	5	6
1	Ln(Perks)	1					
2	Ln(Wage)	0.2250***	1				
3	Ln(Tenure)	0.0573***	0.1669***	1			
4	CEO	0.14736***	0.4387***	0.2609***	1		
5	Female	-0.0179	-0.0512***	-0.0467***	-0.0796***	1	
6	CEO Premium	0.0488***	-0.0283***	-0.0604***	-0.0131*	0.0316***	1

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Given the heterogeneity of perk paying practices across S&P 500 firm demonstrated in Table 2, I first examine what factors influence the likelihood of a firm providing perks to its NEOs. Table 4 presents the marginal effects of three probit regressions indicated by columns (1) — all NEOs, (2) — CEOs only, and (3) – NEOs excluding CEOs. This table reports the impact of firm and manager attributes on the probability of the NEO receiving perks. All regressions control for year and industry (3 digit SIC code) fixed effects. The dependent variable,  $Y_{it}$ , is equal to 1 if executive  $i$  receives perks in year  $t$ . The explanatory variables are as described above — see Appendix B for full definitions. The main effect probit model is  $\Phi^{-1}(p_i) = x_i'\beta = \sum_i x_i\beta_i$ , where  $\Phi^{-1}(\cdot)$  is the inverse of the cumulative normal distribution function. Marginal effects represent the change in probability of being a target for a very small change in one

independent variable, holding all others fixed. Since marginal effects are the derivative of  $p_i$ <sup>10</sup> with respect to each independent variable, the value of marginal effects depends on the values of all of the independent variables. The marginal effect of the  $j^{\text{th}}$  element in  $x'_i$  in the probit model is equal to  $\phi(x'_i\beta) \cdot b_j$  where  $\phi(x'_i\beta)$  is the density function of the standard normal distribution evaluated at  $x'_i\beta$ , and  $b_j$  is the estimated regression coefficient for  $j^{\text{th}}$  element in  $x'_i$ . The regression (1) results for all NEOs shows that monetary compensation, growth opportunities, firm and market performance, realized growth, executive power, and governance all have a significant impact on the likelihood of firms compensating executives with perks. The regression coefficients for Ln(Wage<sub>*t*</sub>), the CEO indicator, and CEO Premium are *positive* and significant, the coefficients for Market-to-Book Ratio<sub>*t-1*</sub>, Stock Return<sub>*t*</sub>, Return on Assets<sub>*t-1*</sub>, Sales Growth<sub>*t-1*</sub>, E Index are *negative* and significant. Defining  $\Delta$  probability as the change in the likelihood of the NEO receiving perks for a one standard deviation increase in the level of a given explanatory variable (holding all others at their mean values), we find that the statistically significant regression results are economically meaningful as well. Table 4 shows that the predicted probability (at means) of an NEO receiving perks is 69.6%. The  $\Delta$  probabilities for logarithmic monetary compensation, logarithmic firm size, and CEO premium are 5.6%<sup>11</sup>, 2.2%, and 1.9%, respectively. Being CEO increases the likelihood of receiving perks by a full 7.3%. Higher levels of prior period market-to-book ratio, stock return, prior period ROA, and prior period sales growth *decrease* the chance of receiving perks. The  $\Delta$  probabilities are -2.0%, -2.0%, -0.2%, and -1.5%, respectively.

Table 4  
**Probit analysis of perk compensation at S&P 500 firms from 2007 to 2013**

The dependent variable is equal to 1 if the executive receives perks. Regression (1) includes all NEOs (named executive officers), (2) includes CEOs only, and (3) includes NEOs other than CEOs. The explanatory variables are Ln(Wage<sub>*t*</sub>), Ln(Market Value<sub>*t-1*</sub>), Market-to-book Ratio<sub>*t-1*</sub>, Stock Return<sub>*t*</sub>, Stock Return<sub>*t-1*</sub>, Return on Assets<sub>*t*</sub>, Return on Assets<sub>*t-1*</sub>, Return on Equity<sub>*t*</sub>, Return on Equity<sub>*t-1*</sub>, Free Cash Flow Return<sub>*t-1*</sub>, Sales Growth<sub>*t-1*</sub>, Ln(Tenure<sub>*t*</sub>), CEO indicator, Female indicator<sub>*t*</sub>, CEO Premium<sub>*t*</sub>, and E Index<sub>*t*</sub> (see Appendix B for definitions). Subscripts *t* and *t-1* indicate current and prior year. All regressions control for firm and year fixed effects. Cluster-robust cluster standard errors are in parentheses with clustering at firm level. \*\*\*, \*\*, \* indicate significance level at 1%, 5% and 10% level respectively.

	(1) All NEOs	(2) CEOs Only	(3) NEOs excl CEOs
	Marginal Effects	Marginal Effects	Marginal Effects
Ln (Wage <sub><i>t</i></sub> )	0.0614*** (0.0092)	0.0725*** (0.0195)	0.0651*** (0.0099)
Ln (Market Value <sub><i>t-1</i></sub> )	0.0193 (0.0141)	0.0373** (0.0164)	0.0140 (0.0152)
Market-to-book Ratio <sub><i>t-1</i></sub>	-0.0055* (0.0029)	-0.0040 (0.0037)	-0.0058* (0.0030)
Stock Return <sub><i>t</i></sub>	-0.0460** (0.0192)	-0.0411* (0.0236)	-0.0485** (0.0201)
Stock Return <sub><i>t-1</i></sub>	-0.0185 (0.0177)	-0.0187 (0.0214)	-0.0195 (0.0187)
Return on Assets <sub><i>t</i></sub>	-0.1223 (0.1306)	-0.3053* (0.1663)	-0.0812 (0.1349)
Return on Assets <sub><i>t-1</i></sub>	-0.2917* (0.1549)	-0.2330 (0.1996)	-0.3008* (0.1608)
Return on Equity <sub><i>t</i></sub>	-0.0158 (0.0206)	-0.0157 (0.0235)	-0.0175 (0.0217)
Return on Equity <sub><i>t-1</i></sub>	-0.0072 (0.0301)	-0.0263 (0.0423)	-0.0045 (0.0304)
Free Cash Flow Return <sub><i>t-1</i></sub>	0.0658	0.1000	0.0593

<sup>10</sup>  $p_i = \text{Prob}(Y_i = 1) = \Phi(x'_i\beta)$

<sup>11</sup> For example, an NEO with Ln(Wage<sub>*t*</sub>) that is one standard deviation above the mean value has a probability of receiving perks of 69.6% + 5.6% = 75.2%.

	(0.0892)	(0.1093)	(0.0963)
Sales Growth <sub>t-1</sub>	-0.0736*	-0.0402	-0.0807*
	(0.0394)	(0.0470)	(0.0415)
Ln(Tenure <sub>t</sub> )	0.0008	-0.0235	0.0124
	(0.0111)	(0.0280)	(0.0131)
CEO	0.0746***		
	(0.0160)		
Female	-0.0274	0.0799	-0.0351
	(0.0205)	(0.0511)	(0.0219)
CEO Premium	0.0281**	0.0040	0.0314**
	(0.0140)	(0.0237)	(0.0148)
E (Entrenchment) Governance Index	-0.0175*	-0.0133	-0.0189*
	(0.0105)	(0.0117)	(0.0110)
Year Fixed Effects	Y	Y	Y
Industry Fixed Effects	Y	Y	Y
Observations	18.403	3.034	14.968
Pseudo R-squared	0.1422	0.1537	0.1349
Observed Probability	66.9%	74.2%	64.8%
Predicted Probability at Means	69.6%	77.9%	66.8%

Robust standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

The results show that NEOs who earn higher monetary compensation are more likely to receive perks. Firms that have higher demonstrated growth, growth opportunities, stock market returns, or ROA are *less* likely to provide perks; this result may signal that better managed firms may be less likely to use perks or, conversely, that stagnant firms are more susceptible to the agency issue of excess perk consumption. CEOs are more likely to receive perks than other NEOs. However, when CEOs receives a larger share of the total NEO monetary compensation, all NEOs are more likely to receive perks. For example, powerful CEOs could exert more influence over firms' compensation committee decisions over discretionary compensation such as perks, and thereby increase the likelihood that all NEOs receive perks.

The results for regression 2 (CEOs only) show that wage, firm size, stock returns, and ROA are the significant explanatory variables (at the 1%, 5%, 10%, and 10% levels, respectively). The predicted probability (at means) of an S&P 500 CEO receiving perks is 77.9%. The  $\Delta$  probabilities for logarithmic wage and firm size, stock returns, and ROA are 6.3%, 4.0%, -1.8%, and -2.4%. The results for regression 3 (NEOs excluding CEOs) show that the significant explanatory variables are wage, market-to-book ratio, stock return, prior period ROA, prior period sales growth, CEO premium, and E Index. The predicted probability (at means) of other NEOs receiving perks is 64.8%. Higher levels of logarithmic wage and CEO premium increase the likelihood of other NEOs receiving perks — the  $\Delta$  probabilities are 6.0% and 2.1%. Conversely, higher market-to-book ratio, stock return, prior period ROA, prior period sales growth, CEO premium, and E Index decrease the likelihood of other NEOs receiving perks — the  $\Delta$  probabilities are -2.1%, -2.1%, -0.6%, -1.6%, and -2.7%.

A key insight is that the important factors determining the probability of receiving perks are different for CEOs and other NEOs. For CEOs, both firm size and monetary compensation are the most important factors affecting the likelihood of receiving perks with stock returns and ROA having a moderating effect. In contrast, for other NEOs, wage and CEO premium are the dominant factors leading to higher perk compensation, with market-to-book ratio, stock return, prior period ROA, and prior period sales growth acting as moderators. For other NEOs, firm size is not a significant explanatory variable. Also note that many of the traditional compensation determinants are not important factors impacting the likelihood of receiving perks; return on equity, cash flow return, tenure, and gender are not significant in any of the regressions.

Having established the firm and manager attributes that affect the *likelihood* of receiving perks, we now investigate the determinants of the *value* of executive perks by estimating the following regression model:

$$\ln(\text{Perks}_{it}) = \alpha + \mathbf{X}'_{it-1}\beta + u_j + v_t + \varepsilon_{it}$$

where  $\ln(\text{Perks}_{it})$  is the natural logarithm of NEO  $i$ 's perks compensation in year  $t$ . The regression is conditional on firms paying perks.  $\mathbf{X}$  is a vector including the same explanatory variables for firm and manager attributes used in the probit regressions.  $u_j$  is industry  $j$ 's fixed effect.  $v_t$  is year  $t$ 's fixed effect. Table 5 presents the results for three regressions in which the dependent variables are  $\ln(\text{Perks}_{it})$  for (1) all NEOs, (2) CEOs only, and (3) NEOs excluding CEOs. Regression (1) shows that monetary compensation, firm size, and being CEO all have a statistically significant and economically meaningful *positive* impact on the level of executive perks. Prior year market-to-book ratio, stock return, prior year ROA, and prior year sales growth have statistically significant and economically meaningful *negative* impact. A 1% higher level of wage (firm size) is associated with a 0.77% (0.31%) higher level of perks. Being CEO almost triples compensation<sup>12</sup>. A 0.01 higher level of prior year market-to-book ratio, stock return, prior year ROA, and prior year sales growth are associated with a 0.06%, 0.49%, 3.78%, 0.79% *lower* level of perks. The results confirm that perks are not substitutes for monetary compensation, and that larger firms reward top executives (particularly CEOs) with higher levels of perks. Return on equity, free cash flow return, tenure, gender, CEO premium, and E index do not have a significant impact on the level of perk compensation for named executive officers.

Regressions (2) and (3) allow us to compare differences in the determinants of perks for CEOs and other NEOs. We see that firm size is an important determinant of CEO perks (i.e., the regression coefficient is significant at the 1% level and large). A 1% higher level of prior year firm size is associated with a 0.62% higher level of perks for CEOs. However, firm size is not associated with a significant impact on perk compensation for other NEOs. Sales growth is associated with a negative impact on NEOs other than the CEO. Gender does not impact CEO perk compensation, but being female is associated with lower levels of perks for named executives other than CEO.

In regression (2), both ROA and lagged ROA have significant (1% and 5% levels respectively) *negative* relationship with perks. A 0.01 higher level of ROA (lagged ROA) is associated with a 4.39% (4.15%) lower level of CEO perks. Stock return has a more muted impact. None of the other explanatory variables have a significant impact on CEO perks. In regression (3), we see that monetary compensation (significant at the 1% level) is the dominant *positive* explanatory factor for perks for other NEOs — a 1% higher wage level translates to 0.79% higher perks. Growth opportunities, market and firm performance, and realized growth are firm attributes that are significant and are *negatively* related to other NEO perks. A 0.01 higher level of market-to-book ratio, stock return free, ROA, and sales growth is associated with a 0.06%, 0.51%, 3.61%, and 0.83% lower level of perks for other NEOs.

Once again we see that the determinants that affect the level of executive perks are different for CEOs and other NEOs. For CEOs, firm size is important. Supporting the optimal contracting view of executive compensation, many studies (e.g., Murphy & Zbojnik, 2007, Tervio, 2008, Gabaix & Landier, 2008 and Edmans, Gabaix & Landier, 2009) examine CEOs with different levels of managerial talent matching with firms in a competitive matching model. These models have CEOs compensated by wage without perks. In a compensation environment that includes perks, it is reasonable to expect CEOs to competitively bargain both the wage and perk components of their compensation packages. The results in Table 5 confirm that the well-established relationship between CEO monetary compensation and firm size also applies to CEO perks — for CEOs, competitive matching results in contracts in which firm size is an important factor determining both wage and perks. However, for other NEOs, monetary compensation, not firm size, is the most important factor determining perks — firms negotiate optimal compensation packages with other

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<sup>12</sup> $\left(e^{1.0092 - \frac{0.1711^2}{2}} - 1\right) \times 100 = 170.3\%$

NEOs (that include both wage and perks) in which perks are, primarily, an increasing function of wage. Firm size is not a statistically significant factor.

Table 5

**The determinants of executive perks**

This table reports the determinants of named executive officer (NEO) perks estimated from the following equation:

$$\ln(\text{Perks}_{it}) = \alpha + \mathbf{X}'_{it-1}\beta + u_j + v_t + \varepsilon_{it}$$

where  $\ln(\text{Perks}_{it})$  is the natural logarithm of NEO  $i$ 's perks compensation in year  $t$ .  $\text{Perks}$  is the amount reported in the category *perquisites and other personal benefits* of SEC filed proxy statements.  $\mathbf{X}_{it-1}$  are explanatory variables including  $\ln(\text{Wage}_{it})$ ,  $\ln(\text{Market Value}_{it-1})$ ,  $\text{Market-to-book Ratio}_{t-1}$ ,  $\text{Stock Return}_t$ ,  $\text{Stock Return}_{t-1}$ ,  $\text{Return on Assets}_t$ ,  $\text{Return on Assets}_{t-1}$ ,  $\text{Return on Equity}_t$ ,  $\text{Return on Equity}_{t-1}$ ,  $\text{Free Cash Flow Return}_{t-1}$ ,  $\text{Sales Growth}_{t-1}$ ,  $\ln(\text{Tenure}_t)$ ,  $\text{CEO}$ ,  $\text{Female}$ ,  $\text{CEO Premium}$ , and  $\text{E Governance Index}$ . The subscripts  $t$  and  $t-1$  indicate current and prior fiscal year respectively. The detail definition of these variables are provided in Appendix B.  $u_j$  is industry  $j$ 's fixed effect.  $v_t$  is year  $t$ 's fixed effect. Cluster-robust standard errors are in parentheses with clustering at firm level. \*\*\*, \*\*, \* indicate significance level at 1%, 5% and 10% level respectively.

	(1) All NEOs	(2) CEOs Only	(3) NEOs excl CEOs
$\ln(\text{Wage}_t)$	0.7709*** (0.0951)	1.0059*** (0.2220)	0.7933*** (0.0945)
$\ln(\text{Market Value}_{t-1})$	0.3069** (0.1305)	0.6177*** (0.1794)	0.2126 (0.1378)
$\text{Market-to-book Ratio}_{t-1}$	-0.0587** (0.0276)	-0.0628 (0.0412)	-0.0563** (0.0272)
$\text{Stock Return}_t$	-0.4873*** (0.1769)	-0.4287* (0.2261)	-0.5108*** (0.1810)
$\text{Stock Return}_{t-1}$	-0.2083 (0.1604)	-0.2678 (0.2005)	-0.2009 (0.1660)
$\text{Return on Assets}_t$	-1.6509 (1.1542)	-4.3874*** (1.6212)	-1.0334 (1.1781)
$\text{Return on Assets}_{t-1}$	-3.7722** (1.5289)	-4.1500* (2.2815)	-3.6122** (1.5178)
$\text{Return on Equity}_t$	-0.0917 (0.1789)	-0.0107 (0.2315)	-0.1129 (0.1823)
$\text{Return on Equity}_{t-1}$	0.1073 (0.2899)	0.0206 (0.4550)	0.1150 (0.2803)
$\text{Free Cash Flow Return}_{t-1}$	0.6298 (0.8523)	1.0442 (1.2233)	0.5197 (0.8868)
$\text{Sales Growth}_{t-1}$	-0.7903** (0.3836)	-0.6064 (0.4991)	-0.8294** (0.3964)
$\ln(\text{Tenure}_t)$	0.1045 (0.1051)	-0.1889 (0.2945)	0.1824 (0.1196)
$\text{CEO}$	1.0092*** (0.1711)		
$\text{Female}$	-0.2826 (0.1849)	0.4584 (0.5248)	-0.3223* (0.1938)
$\text{CEO Premium}$	0.2144 (0.1354)	-0.0213 (0.2350)	0.2275 (0.1397)
$\text{E Index}$	-0.1443 (0.0944)	-0.1090 (0.1149)	-0.1533 (0.0984)
$\text{Constant}$	-9.6161*** (1.9467)	-20.5744*** (2.9442)	-9.6410*** (2.1647)
$\text{Year Fixed Effects}$	Y	Y	Y
$\text{Industry Fixed Effects}$	Y	Y	Y
$\text{Observations}$	18,873	3,465	15,408
$\text{R-squared}$	0.206	0.255	0.1929

Robust standard errors in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

The results for CEOs and other NEOs differ in other important ways. Although for both groups, stock return and ROA have significant negative impacts (i.e., higher stock returns and ROA are associated with lower perk payouts), for other NEOs only, growth opportunities and realized growth have a moderating effect on perk compensation. In general, female NEOs who are not CEOs receive lower perk compensation than male other NEOs. Note that tenure, CEO power, and governance do not have an impact on perk compensation.

## Conclusions

This paper provides a comprehensive analysis of the determinants of executive perks at S&P 500 firms using new manually collected panel data. Despite widespread use of perks by S&P 500 companies, there is large variation in value and scope of perks offered to executives of different rank. CEOs receive perks more frequently and in larger amounts than other named executives. The determinants that affect the likelihood and value of executive perks are different for CEOs and other NEOs. Overall, the most important factors affecting perk compensation are wages and firm size. Many traditional determinants of monetary compensation are not important factors for perks.

There are two primary arguments for the prevalence of executive perks — agency theory (i.e., perks are the result of weak corporate governance that allows top executives to divert corporate resources for personal gain) and optimal contracting (i.e., perks are part of optimal executive compensation packages because they are a cost-effective way to enhance executive satisfaction and productivity). Recognizing that perks are heterogeneous, it is quite possible for perks, in general, to reflect optimal contracting and, yet, suggest agency conflicts in particular instances. Consistent with agency predictions, we find that stagnant firms and firms with powerful CEOs are more likely to provide perks.

The unique nature of different perk items and the difficulty in collecting perk information have limited the research on perks. An interesting future research question is to understand, from the executive's perspective, the difference between perks and wage, which will provide further insight regarding the cross-sectional variation in executive compensation packages.

**Appendix A: Sample Summary Compensation Table<sup>13</sup>**

Name and Principal Position (a)	Year (b)	Salary (\$) (c)	Bonus (\$) (d)	Stock Awards (\$) (e)	Option Awards (\$) (f)	Non-Equity Incentive Plan Compensation (\$) (g)	Change in Pension Value and Nonqualified Deferred Compensation Earnings (\$) (h)	All Other Compensation (\$) (i)	Total (\$) (j)
PEO <sup>1</sup>									
PFO <sup>2</sup>									
A									
B									
C									

<sup>1</sup> Refers to principal executive officer  
<sup>2</sup> Refers to principal financial officer

<sup>13</sup> See: [http://www.sec.gov/news/press/2006/2006-123\\_table.pdf](http://www.sec.gov/news/press/2006/2006-123_table.pdf) |

## Appendix B: Definition of Variables

Variable Name	Variable Definition
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### *Firm Level Variables*

E Index	a measure of corporate governance (entrenchment) as defined in (Bebchuk, Cohen, and Ferrell, 2009) in which lower values correspond to higher levels of corporate governance
Employees	number of employees
Free Cash Flow	net income plus depreciation & amortization plus interest after tax minus the increase in net working capital minus capital expenditures
Free Cash Flow Return	free cash flow divided by total assets
Market-to-book Ratio	fiscal year-end share price times common shares outstanding divided by book value of equity
Market Value	book value of debt plus market value of equity
Return on Assets (ROA)	net income divided by prior year total assets
Return on Equity (ROE)	net income divided by prior year book value of equity
Sales Growth	increase in sales over prior year divided by prior year sales
Stock Return	fiscal year-end price plus all per share dividend payments during the fiscal year all divided by prior fiscal year-end share price

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### *Manager Level Variables*

CEO	indicator variable equal to 1 if the executive is CEO
CEO Premium	a measure of CEO power equal to CEO wage divided by mean NEO (named executive officer) wage
Female	indicator variable equal to 1 if the executive is female
Perks	the sum of personal use of aircraft, relocation expenses, personal use of automobile, security, financial services, club memberships, reimbursement for unused vacation, personal services/use of assets, car service (car and driver), tickets and entertainment, personal meals, personal travel, professional association dues, perk cash allowance, legal fees, parking, cost of living allowance, charitable gift matching, medical/health, and other perks

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