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TABLE OF CONTENTS

Editor's Preface

The Journal of Business Leadership [JBL] is the official journal of the American National Business Hall of Fame [ANBHF]. The ANBHF conducts an active research program with three primary objectives. The first objective is to collect and analyze information regarding the leadership skills of Hall of Fame members. The Hall believes that business success stories are an important part of American history and strives to document and preserve these stories.

The second objective of the research program is to support the research objectives of the associated academic journal, *JBL*, through support of certain areas of business leadership, ethical practices and management academic research.

The third objective is to evaluate the effectiveness of Hall of Fame classroom presentations. Evaluation instruments are developed and administered in classes following Hall of Fame presentations.

In support of the ANBHF mission, *The Journal of Business Leadership* is a multidisciplinary journal of interest to scholars, professionals, students, and practitioners in a broad range of management thinking. The purpose of the journal is to encourage the publication of case studies of business leadership. In keeping with the Hall's longitudinal study, The Ethical Views of Business Leaders, University Faculty and Students in the United States, submissions highlighting ethical leadership practices are encouraged.

JBL offers both peer-reviewed and non-peer-reviewed articles. All peer-reviewed articles must meet the highest and most rigorous standards and are anonymously reviewed by at least two scholars in the field. Non-peer-reviewed materials can be essay, research-in-progress, pilot studies, or commentary on some topic relevant to the field of business leadership. All non-peer-reviewed materials will be reviewed by the Editorial Board for quality and appropriateness, but are not guaranteed publication.

Welcome to this issue of *The Journal of Business Leadership.*

Robyn Hulsart, Ed.D.
Contributing Editor

Dressing for Success: How Does Attire, Social Media and the Law Impact Hiring?

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ABSTRACT

Over the past 100 years, dress codes have gone through several changes. Before 1995, the traditional work attire reflected the IBM standard which included a dark suit, white shirt, and red tie. During the Silicon Valley boom if the 1990's, informal work environments and casual dress spread throughout the country. In recent years, public attitudes shifted away from business casual, reverting towards more formal dress codes. Unfortunately, most young employees do not know what business formal looks like. This paper examines the role that attire, social media and the law have in the hiring, recruiting, retention and culture of the current workforce. An analysis of the law, discussion and suggestions for dressing appropriately during the hiring and recruiting process are included.

INTRODUCTION

Over the last 20 years and largely due to the dot-com era, dress codes were challenged causing a tremendous shift in dress code policies among organizations in various industries (Bliss, 2008). Historically, how people dressed told observers what an individuals job was, what industry you worked in and what you did day to day (Gragg, 2004). Today it is not that simple, dress codes are more complex (Gragg, 2004) and there is tremendous "meshing" among what employees wear from industry to industry.

Through the years, dress code policies evolved (Dale, Bevill, Roach, and Glasgow, 2007) from business formal attire towards business casual and more recently to business conservative dress in the workplace. Unfortunately, many younger workers do not understand anything except for casual work attire (Munoz, 2001; Dale et al, 2007). In addition, it is unlikely that younger generations will accept a more uptight, formal dress code policy because it is foreign to them (Munoz, 2001). Many younger employees simply consider the business suit one more option for dressing in the workplace, but not a requirement nor necessity.

Due to the multitude of potential dress options, for most people the problem lies with deciding what to wear to a job interview or during the first week of work. This uncertainty becomes a huge burden, is stressful, confusing and complex for future employees. There are just too many options, too much uncertainty and too much variation from business to business.

The terms business formal and business casual have different meanings for different people. For some, business casual is a relaxed casual suit, while others interpret it as torn jeans and a washed-out t-shirt. In fact, the old rule…'when in doubt employees should dress more formal, rather than casual' is no longer valid. Many hiring managers claim that a potential candidate is judged on appropriateness of attire and if overdressed might get overlooked because they are viewed as uptight (Gragg, 2004) or not a good "fit" for a relaxed corporate culture.

For decades, researchers have examined the role that appearance plays in the workforce, thus confirming its importance in the workplace. Studies show time and again, that how individuals decide to dress impacts and have consequences to the way that others perceive them (Cullen, 2008). If an individual is dressed inappropriate, it may prevent them from getting hired. The overarching problem is that the average employee may not know what is considered appropriate or acceptable dress in the workplace.

Due to these concerns and for the purpose of this paper, the authors examined business casual, business formal, the law and various uses of social media in the hiring and recruiting process. The intent was to uncover what is considered acceptable or unacceptable dress, how social media profiles are used today from business perspectives and what the law states in order to make recommendations to help the newly emerging workforce.

BEAUTY AND APPEARANCE FACTS

Appearance has always been important in the workplace because it is the first thing a customer is exposed to from an organizational perspective. Strong, positive first impressions are crucial where as negative impressions are nearly impossible to overcome (Gragg, 2004). Individuals or potential customers may like or dislike an organization based on the way employees representing the business appear or look. Unfortunately, a multitude of stereotypes are based on the way that someone looks or on their first impressions. Because of this, individuals spend massive amounts of money on cosmetics and beauty supplies to enhance the way they look, in the hope of being accepted or instilling a positive first impression.

It was recently reported that the Britons spend an estimated 38 million (Euros) on beauty pills or aids to enhance their appearance; an increase of over 130% since 2002 (Parsons, 2007). This trend is driven by an ageing society that is increasingly concerned about health and appearance. It is estimated that Britons will spend nearly 63 million euros on appearance enhancing products by 2012 (Parsons, 2007). This helps supports the notion that age is unattractive, negatively impacts appearance and should be avoided at all costs, by using cosmetics and aids to enhance looks. In another study, females that were interviewed stated that they use age controlling techniques because their job requires it or they dislike the physical changes that come with aging (Singer, 2008). It is evident through reports such as this, that the manner in which individuals present themselves is not only important personally, but professionally.

WHY APPEARANCE MATTERS IN LABOR MARKETS

Numerous qualitative and quantitative scholars confirm that appearance matters in the workplace. A survey of 1,125 Korean workers in Chungchoeng Province found that 78.8 percent admitted that they were treated differently in promotions and employment because of their appearance (Si-soo, 2008). Another study found that 85 percent of employers believed that body art would hinder a job candidate’s success (Chai, 2008). One third of Australian respondents were worried that their employers would think that they look too old for their jobs (Pountney, 2008). Ninety- two percent of employers in a survey admitted that a candidate’s appearance during the interview influenced their decisions and that the more attractive candidates got the jobs (Attractive candidates have an edge over their bosses, 2008).

Dress codes and appearance are more important in some industries particularly sales, banking, restaurants, pharmaceutical and insurance and less important in entertainment and technology (Gardner, 2007) and ophthalmology (Bendix, 2008). Many ad agencies hire on the basis of appearance (Yong, 2007). Interestingly, appearance biases are less apparent in managerial positions compared to sales (Reuters, 2008).

Obesity has been the most extensively researched appearance variable with respect to employment. A review of 25 years of research on weight biases concluded that obesity has severe implications for careers at the application and evaluation stages with the effect decreasing for promotions (Reuters, 2008). The bias also decreases with longer tenure at an organization. Conversely, Roehling (1999) concluded that overweight individuals experience discrimination in every aspect of their employment and non work lives (quoted in Brochu, Gawronski and Esses 2011). The stereotypes for overweight individuals are that they are lazy, sloppy, untidy, not disciplined and will have more health problems (Reuters, 2008). This reinforces the weight bias and hiring practices for many organizations.

THEORETICAL AND CONCEPTUAL BASIS FOR THIS RESEARCH

The theoretical and conceptual basis for this paper is that such beliefs about appearance occur quickly, efficiently, effectively, and affect all employment aspects from hiring to promotions. For example, appearance beliefs such as those towards the overweight flow from stigma and prejudices that are used to stereotype, label, and categorize them. This causes people to enact behaviors based on those preconceived belief sets. The concepts of stigmas, stigmatization, and prejudice were coined by Goffman (1963) in his book *Stigma: Notes on the management of spoiled identity.* Stigmas are beliefs that taint, label, and categorize other individuals into devalued categories (Goffman, 1963, Brochu et al 2011). Today's sociologists identify four categories of prejudices: old-fashioned, modern, Brochu's (2011) unnamed version, and aversive (Dovidio and Gaertner, 2000).

The sociologists' examples of old-fashioned prejudice included stereotypes about race (racism) and gender (Swim, Aikin, Hall and Hunter, 1995) and stereotypes of the mentally ill - that they may be violent (Corrigan, 2004). Swim et al (1995) explain aversive prejudice that is held by individuals "…while rejecting old-fashioned discrimination and stereotypes, may believe that discrimination against women is a thing of the past, feel antagonistic toward women who are making political and economic demands, and feel resentment about special favors for women… "(p.2000).

Brochu and her colleagues'(2011) created a new category that includes individuals who may believe that "negative evaluations of disadvantaged social groups is okay" (p 433) but believe that the subject group is not disadvantaged and therefore is prejudiced towards them. Perhaps the best support for this new version is the finding that individuals will experience more prejudice towards overweight individuals with a high calorie beverage in their hands as opposed to overweight individuals with a low calorie beverage (Brochue et al, 2011).

Dovidio and Gaertner (2000) explain aversive discriminators as those individuals who may support egalitarian efforts, may believe themselves to be non discriminatory but consciously or subconsciously harbor negative feelings about the other group. In their study respondents selected a black candidate for a job where the individual was clearly the better qualified (because it would not conflict with their self views that they are egalitarian) but would choose the white candidate where the job descriptions were ambiguous or not clearly defined (Dovidio and Gaertner, 2000). Such discrimination is more subtle and less easily recognizable but still affects others' views of other individuals' employability.

Application of these theories to Appearance Discrimination

Corrigan (2004) explains that stigmas and prejudices create stereotypes that are efficient processes that quickly collect information about others and effectively lead to overt or covert discrimination. The above theories including Corrigan's findings (2004) that first impressions occur quickly, effectively and efficiently (from that individual's perspective) and are used to sort, label, and categorize others. Employer based prejudices based on appearance, impact the employment process from hiring to promotions and thus career, educational, and income potentials.

The Case for Individual Appearance Management

Because employers hold a myriad of beliefs and prejudices that they bring to the workplace, employees must be concerned with appearance. How an individual looks or dresses clearly affects whether or not they are hired. Since the current civil rights laws (explained below) do not eliminate more subtle forms of discrimination, appearance is extremely important to one's career. Just as corporations are now working to monitor, maintain, build corporate reputations (Cravens, Oliver, Ramamoorti, 2003) individuals should actively manage their appearance.

The authors suggest that individuals engage in what is termed Individual Appearance Management as part of their personal career planning.

APPEARANCE DISCRIMINATON AND THE CIVIL RIGHTS ACTS

Overview

Appearance discrimination is not covered in any of the Federal civil rights laws, thus leaving employers to act on their beliefs and forcing employees to manage their appearance. In most cases employers are allowed to discriminate on the basis of appearance unless they trigger one of the discriminator factors (race, sex, religion, age, disability, color, national origin and national ancestry). The following takes each of the discriminatory factors and explains the appearance cases lost by employers. Based on past case law, in general appearance discrimination is not covered and is generally legal. However, rising discussions from scholars are advocating amendments to statutes to include appearance.

Gender Based Discrimination

Because sex discrimination is one of the original factors, the EEOC has vigorously attacked "old-fashioned discrimination." An example is the $50 million settlement by Abercrombie and Fitch for its restrictive hiring practices and policies that limited minority and female applications and promotions (EEOC agrees to Landmark Resolution of Discrimination Case against Abercrombie & Fitch, 2004). The employer's error was its system wide discrimination which was verified by statistically examining hiring and promotion data.

In another case the employee won where the employer explained an employment decision by referring to a female as "not hot enough "(Yanowitz v. L'Oreal, 2005).

Appearance discrimination using gender is increasingly difficult after the ruling in Jespersen v. Harrah (2006). The court upheld the employer's dress code that disallowed males from having long hair or piercings. Women **were required to have** longer hair and wear makeup. On the surface, the dress code policy clearly differentiated between the genders but was defended by the court as being equal in its burden on the genders. Therefore employers can implement dress codes based on their community concepts of feminine and masculine as "long as the burden between the sexes is equal" (Jespersen v. Harrah, 2006). Almost any rational dress code would be accepted if it met the equal burden test, made common sense, and was consistent with community or industry dress standards. For example the courts upheld the termination of a female employee for wearing revealing clothing (Schmitz v. ING Securities, Futures, and Options, Inc. 1999).

The Americans with Disabilities Act (ADA)

The ADA protects individuals with congenital or accidental appearance issues but not those self inflicted such as piercings or tattoos. The EEOC vigorously purses the former as exemplified in EEOC v. R.P.H. Management (2003) where the McDonald's franchisee refused to allow an employee with a facial port wine stain from being promoted from the back into a managerial position at the counter. Similarly, another employer lost a case to an employee with a cleft palate (EEOC v. W.H. Braum, Inc., 2004). However, self inflicted tattoos and piercings do not meet the definition of a disability and are not covered in the law, this making it legal to discriminate against them.

Religion and Appearance

Employers cannot discriminate on the basis of religion, are required to attempt a religious accommodation if requested, and have a minimal burden in terms of costs or effort to accommodate an employee. The individual does not necessarily have to belong to an organized religion but membership in mainstream religions helps their cases. For example, membership in the KKK (Swarzentruber v. Gunite, 2000) or the Church of Body Modification did not qualify. Most religious discrimination cases by police officers and firefighters claiming racial bases for their tattoos are rejected by the state's requirements for public safety and security (Riggs v. City of Fort Worth, 2002; Montoya v. Gisto, 2002; Foster v. Maryland State Police, 2010).

The only religious discrimination case that an employer lost involved a member of the Kemetic religion who successfully convinced the court that his belief to display his small wrist tattoos were required by his religion (EEOC v. Red Robin Gourmet Burgers, 2005). The employer's suggested accommodation was to cover his tattoos while at work.

However, this ruling is rare and is limited to very few employees because they have a large burden of proof. This burden includes evidence that the belief is sincere, is strongly held, and that the accommodation to cover the body art at work outweighs the employer's desire for uniformity, professionalism, and or security. All the employer has to do is to attempt an accommodation which consists of the requirement to cover the body art at work.

The Future of the Civil Rights Laws

Numerous scholars criticize the current laws as contradictory, incomplete, and unable to attack the more subtle forms of discrimination including appearance (lookism in the legal literature) (Bandsuch, 2009a, 2009b, 2009c; Gonzalez, 2003; Rhode, 2009; Danaher, 2010; Ramachandran, 2006: Herald, 2007; Pizer, 2007; & Gross, 2008). Legal scholars particularly suggest that appearance be added to the statues to eliminate appearance discrimination. However, it is doubtful that any such amendment would be made given the current legal environment. This lack of legal protection makes it more important for individuals to manage their appearance. However, a problem exists because employees lack clarity on their understanding of business casual attire.

DRESS CODES AND ATTIRE:

What is Business Casual?

When business casual first emerged in the mid 1990's, it came to corporate America in the form of casual Fridays. In the beginning, it seemed like a fabulous idea to allow a casual dress day at work for many employees and employers (Gragg, 2004). However, over time this relaxed attitude towards Friday dress evolved (Entzminger, 2005) and changed. During the early 2000's, casual Friday dress quickly became casual dress all-week-long (Spitznagel, 2010; Compton, 2007) with business casual becoming the new dress code norm. Today, we realize that these less formal and relaxed dress-code rules provide low clarity, and guidance about what can or cannot be worn (Gragg, 2004). In addition, there is little clarity about what is considered appropriate casual business attire in the workplace.

As of 2001, more than three fourths of USA businesses allow some form of business casual in the workplace (Munoz, 2001). A recent 2007 study, found that nearly forty percent of all employees regularly wore business casual attire throughout the work week (Spitznagel, 2010).

However, nearly 30% of business executives believe that business casual attire has morphed beyond acceptable limits (Munoz, 2001). As a result of this attitude and due to the overall belief that employees are abusing casual dress code policies, employers are fighting back.

Before the invention of business casual, most employees in the business industry, including bankers, sales staff, marketing staff, office personnel and executives wore coordinated formal business suits (Gragg, 2004; Dale, Bevill, Roach, and Glasgow, 2007). Historically, business formal was the norm and defined as a three-piece suit (Entzminger, 2005) or a matching fabric suit (Gragg, 2004).

However, in today's business world, many employers shifted towards business casual dress codes bringing with it mass confusion. Business casual might be interpreted as mean nice slacks, a dress, a blazer, nice pants, dark jean trousers, a sports jacket, coordinated separate pieces, at-the-knee skirts and boots, a fitted skirt, a short-sleeve polo shirt, etc. There are many varieties and interpretations as far as casual dress is concerned and little guidance is provided to employees. In fact, if an employee looks for guidance or for a definition of business casual in their employee handbook it is often not found (Cullen, 2008; Entzminger, 2005).

More recently, businesses are starting to include long, detailed lists (Gragg, 2004) of what is considered appropriate to wear to work because employees are abusing (Munoz, 2001) or misinterpreting the definition of business casual. Clarifications are being provided in the hope of alleviating employee confusion of what to wear while on the job. Companies have started to limit the number of days during the week that business casual attire is permitted. A recent 2010 study found that one third of employers allowed business casual daily, compared to more than fifty percent in 2002 (Cullen, 2008; Spitznagel, 2010). Another study found that the number of businesses allowed to dress casually daily dropped from 50% in 2004, to nearly forty percent in 2007. Many businesses are turning to image consultants or professional dress consultants to help them with their image and branding, including employee appearance (Entzminger, 2005; Spitznagel, 2010).

Due to misinterpretations or because the 'new' business casual dress codes are ineffective for various businesses, some organizations are reverting back to business formal attire

(Entzminger, 2005). Over time businesses, such as banks or law firms, found that upholding a professional image at the highest level (Entzminger, 2005) was imperative for the company. For certain organization, formal dress is an easy and great way to present a professional appearance to customers, while casual dress can send the wrong message (Entzminger, 2005). In fact some companies, such as Lehman Bros., have reverted to their business formal dress code which includes mandatory daily-suits to be worn (Cullen, 2008).

Other organizations elect to retain their business casual dress-codes because it gives the appearance that employees are just like or equal (Entzminger, 2005) to their customers. Research shows that customers prefer to conduct business with organizations that mirror them (Entzminger, 2005) instead of alienating them with uptight or stifling attire. Dress is one way to foster relationship building among customers and employees (Entzminger, 2005). Customers are more relaxed if they believe they can relate to employees, thus allowing for relationships to develop long-term.

In addition, relaxed dress codes have the benefit of increasing corporate morale especially when weather changes occur (Entzminger, 2005). Organizations such as IBM, have thrown out their famous business formal dress code (Cullen, 2008), embracing business casual or business conservative attire throughout the week because employees like it. Furthermore, during hot or humid summer months, or during winter months many employees look forward to dressing down to remain comfortable or practical when confronted with various weather changes. Ultimately, the decision to require employees to dress formal, business casual or business conservative is up to the specific business. If a company elects to allow business casual throughout the week, a clear definition of business casual should be provided to the workforce to prevent misinterpretation. A recent study found that nearly ninety percent of workers could not explain the difference between business formal, business casual and relaxed casual (Spitznagel, 2010). If employees cannot define the difference between these three types of dress, how can they be expected to dress appropriately?

In general, business casual is commonly defined as khakis, oxford shirt and blazer, dark dress jeans or jean trousers, dress pants, nice polo shirt, mid-calf skirt, nice separate coordinating pieces, dress and blazer (unbuttoned), pencil skirts, short/long sleeve button down without a tie, at-the-knee length skirt and a nice cardigan for Fridays (Gragg, 2004). Business formal is defined as a three piece suit (Entzminger, 2005), or a suit constructed from matching material.

Why are Dress Codes Important for Businesses?

Formal and informal dress codes have a variety of benefits depending on the type of business, the industry the company works in and the type of customers an organization wants to attract. Formal dress codes are appropriate when the product/service the company is selling is serious, such as investing customer's money. Relaxed casual dress is appropriate for employees that interact with customers on a day-to-day basis, have physically demanding work or where relationship building is necessary, such as a bank tellers, grocery store clerks, software engineers or retail sales personnel. Perhaps the most important thing to remember is that dress codes can help boost morale, turn-away customers, improve company image or give the wrong impression to clients, employees or future employers (Entzminger, 2005).

With the above in mind, it is important for all organization to have clearly written dress code policies, including a definition of business formal and business casual requirements. This is simply to alleviate possible confusion, misinterpretation and abuse of business dress code policies (Munoz, 2001). In addition, corporations must understand that the brand and image of the business are reflected in how employees dress or present themselves to clients. Thus, corporate dress codes should further the brand of the business and not detract from it (Entzminger, 2005).

Why are First Impressions Important?

First impressions are tied to a multitude of factors, including social media profiles, how an individual dresses or talks, how an individual presents themselves and their personal work experience and education. First impressions are critical because once they are formed they are extremely difficult to change (Gragg, 2004). An individual may be hired or not hired because of how they look and appear. How an individual dresses projects their self image, how they behave and how respectful they are (Compton, 2007) will either enhance or detract from what they are saying. When an interviewee dresses for an interview they signify what they value, who they are, what they believe in, what is important or not important and will either reinforce a positive self image or not (Compton, 2007). It is imperative to remember that professionalism begins during the interview stage. Once an interview is over, a candidate will rarely get a second chance to make a positive impression

Dressing for Success RECOMMENDATIONS:

Before you go into a job interview, it is advisable to investigate your future employer to see what others are wearing. Use social media sites such as LinkedIn, Jogsaw, Ryze and other networking tools to inquire about the corporate culture (Varelas, 2009). Invite current employees to join your social network and inquire about the company dress code policy. If these are unavailable, call the Human Resource Department to inquire about what to wear during an interview. In addition, be sure to take time to review the corporate website or visit the corporate building to observe what people are wearing (Gragg, 2004; Varelas, 2009). Lastly, approach your business wardrobe like a formal presentation and ask yourself if you are well put-together or are projecting the image you want to project (Compton, 2007). For more information, please see Table 1.

Table 1: Tips for Dressing for Success for Men and Women

- Make sure you have:
    - Clean and polished dress shoes
    - Dress similar to how others dress in the organization
        - Call HRM to inquire how an interviewee should dress
    - Well-groomed hairstyle
    - Cleaned and trimmed fingernails
    - Minimal cologne or perfume
    - No visible body piercing beyond conservative ear piercings
    - No visible tattoos (until you know formal dress code policy)
    - Well-brushed teeth and fresh breath
    - No gum, candy, or other objects in your mouth
    - Keep color of clothing muted and understated
    - Avoid anything that could distract the interviewer
    - The focus should be on **YOU** -- not on your clothes

What Not to Wear?

It is crucial to remember that it is not advisable to wear flop-flops, light colored jeans, tight clothing such as pants/jeans/shirts, see-through shirts, anything overtly sexy, anything that can be worn out at night or while 'bar-hopping', anything that exposes your underwear, anything that exposes cleavage, ripped or worn-out t-shirts/pants, no shorts or short skirts, or anything that is distracting, or disrespectful. The bottom-line: how someone dresses in the workplace has consequences for the business and for the individual (Cullen, 2008). An individual's dress code can prevent them from being hired and can even get them dismissed from their job (Cullen, 2008). Remember, generally speaking an employer has the legal right to regulate how workers look, as far as dress and appearance while on the job (Cullen, 2008).

What is Social Media?

As if deciding how to dress is not enough, there is always the question of social media usage and what is appropriate for the workplace. Social media is defined as an interactive media that includes social networks such as Face book, Twitter, LinkedIn, and Yahoo! Groups; blogs; and video websites such as YouTube, online forums and discussion boards such as Google Groups; and online publications (Hunt 2010; Segal, 2011). Social media has become a popular venue for companies to search for applicants, search for information about job candidates, post job openings, share information about the company, or use as part of their background searches. In fact, companies are beginning to hire full timer recruiters that are dedicated to researching on social media websites (Light 2011). There is a high probability that job applicants will find a job posting on Face book will fill out an application and move into the interview process (Hunt, 2010). Today, future employees looking for employment will use social media websites to find job vacancies, to obtain information about a company, and to gather information about hiring managers and interviewers.

A survey of 2,500 employers conducted by CareerBuilder indicates 35% of the responding employers use social media to promote their company (Hunt, 2010). Of these employers, 21% report using social media to recruit and research potential employees and 18% use social media to promote their employment brands (Hunt, 2010). A different CareerBuilder survey of 2,600 hiring managers found that 45% of the respondents report using social networking sites to search for applicants and 35% stated they elected to not hire a job applicant because of information found on social networking sites (Stamper, 2010). Seventy percent of companies responding to a Cross-Tab Marketing Service study stated that job candidates were rejected because of information posted on a social media website (Adenle 2011; Hill, 2010). In 2009, a Jump Start Social Media study reported that 75% of hiring managers use LinkedIn to research job applicants prior to making an offer, 48% use Face book , and 26% use Twitter (Gildea 2009).In 2011, Face book became the most popular social media site with over 2.6 million monthly users (Light, 2011).

How has social media helped/hindered the hiring process/recruiting process?

Often hiring managers visit social media websites to learn about job candidates. In fact, either job candidates invite hiring managers to view their social profiles or hiring managers purposely seek out social media profiles to verify information contained in a job applicant's resume or application.

Candidates have filed law suits against companies if they believe they were rejected for a job based on information and content posted on a social media website (Cook, 2008; Stamper, 2010). Social media profiles often contain information about a job candidate's protected class – such as religious beliefs, age, race, gender, sexual orientation, disability, military status, etc. – that would not be available on a traditional application (Dickenson Employment 2010). Employers need to develop policies to identify when social media information should be used and who in the company should review these social media sites.

It is suggested that use of social media profile information should be used after the initial screening process to diminish the argument that a job candidate was screened out due to protected class reasons (Segal, 2011). Employers need to ensure that all job candidates undergo the same social media review during the screening and hiring process (Segal, 2011). Early on, employers should disclose their recruiting/hiring processes that include social media profile reviews (Cook, 2008). In fact, when using information posted on social media sites, employers should disregard information that is not job relevant, disregard illegal information, and obtain permission from the job applicant prior to reviewing personal social profiles (Cook, 2008).

Some companies are attempting to replace traditional hiring practices by using social media websites (Hunt, 2010; Stamper, 2010) because they are perceived as easier, cheaper and efficient. It is suggested that social media augment traditional hiring processes, but not replace them. Hiring managers should use networking opportunities, recruiters, and intra-company recommendations to find suitable job candidates. When companies do use social media outlets, they must find and use appropriate channels, such as industry specific networking communities rather than using a general approach. Monster.com has launched a Face book app – Be Known -- because of the growing use of Face book as a recruiting tool. The application has over 800,000 monthly users (Light, 2011).

Stamper (2010) reports that many managers judge potential job candidates too harshly when relying on social media information and profiles. Younger job candidates (Generation Y/Millennial) are very comfortable mixing professional and personal lives, often sharing more personal information than other job candidates.

Common social media mistakes made by job applicants

Information that individuals post on their social media profiles can provide potential employers insight into their personality that may indicate a good fit with the company, collaboration of professional qualifications, examples of creativity, good communication skills, awards received, and indications that the candidate is a well-rounded individual (Adenle, 2010).

However, there are many items that job applicants are counseled to consider or not include on their social media profiles. Please refer to Table 2 for a listing.

Table 2: What to consider or not include on a social media profile

- Inappropriate photographs (Adenle, 2010; Bulles, 2010)
- Indications of drinking or drug use (Adenle, 2010; Bulles, 2010)
- Negative remarks about former employers, bosses, co-workers, customers (Adenle, 2010; Bulles, 2010)
- Discriminatory remarks (Adenle, 2010)
- Use of poor communications skills, poor grammar, spelling errors (Adenle, 2010)
- Discussing confidential company/employer information (Adenle, 2010)
- Don't link personal sites to professional business sites (Bulles, 2010).
- Pictures or videos showing you doing something stupid (Bulles, 2010).
- Personal and financial information (Bulles, 2010)

Social Media Recommendations

There are a number of actions job candidates can take to make sure that they present themselves well on social media sites to potential employers. Individuals should regularly "Google" their name to determine what online presence they have (Adenle, 2011). Social media sites allow employers to gain a broader view of job applicants than what is presented on an application and to determine if the applicant is a good fit for their company (Gildea, 2009).

Because recruiters and potential employers regularly visit LinkedIn, Face book and Twitter, it is important to have a complete and professional profile on all 3 social media sites. Individuals might consider including references or comments from previous employers or managers (Adenle, 2011).

It is important to carefully consider information that is shared on social media. Individuals might consider including links to news stories hosting discussions or joining professional groups to participate in discussions (Adenle, 2011; Gildea, 2011). It is important to keep social media files updated.

Potential employers may be checking all types of social media, so employers should consider setting up a blog to show skills, vision, credentials (Adenle, 2011) and communication skills. In addition, a web resume may be beneficial in providing another way for job hunters to get notice. Select a one-page electronic online resume format that is visually appealing and combines video and other links to your resume (Adenle, 2011).

Finally, it is recommended that job applicants develop a personal brand and keep all social media sites aligned with that personal brand (Adenle, 2011; Gildea, 2011). A personal brand represents the job candidate's promise of value to an employer and allows the individual to stand out.

How does one develop a personal brand? Meg Guiseppi (2009) suggests starting the process by answering the following questions to gain insight into yourself:

1. What are you most passionate about? What do you care deeply about?
2. What are your top 3 or 4 personal attributes – the things that define how you make things happen?
3. What are your 3 or 4 greatest strengths or top motivated skills that have benefitted your companies/employers?
4. What differentiates you from your competition for your next job? What do you have to offer that no one else does?

Once you have some insight into yourself, you can begin developing a 1 -2 sentence brand statement that reflects (Sundberg, 2011):

- What value do you provide, what problem do you solve
- How do you do it uniquely (your unique setting point or USPs)
- Who do you do it for (identify your target audience)

Sundberg (2011) suggests that you be very clear in identifying the value that you provide and how you are able to provide that value in a unique manner. Don't use 'fluffy' or vague words. The audience may be a specific industry, geographic area, age demographic, etc. It is important to stay focused on a sector of the market. A personal brand should be punchy, memorable, and short. On an annual basis, a personal brand should be evaluated and changed, especially if your professional skills or value have changed.

CONCLUSION AND FUTURE STUDY

After thoroughly examining various researches, it is evident that what is considered appropriate to wear to work is complex, confusing and ever changing. Not to mention the fact that social media is prevalent and utilized in a multitude of ways that can help or hinder an individual's potential for employment. Younger generations may have trouble understanding what appropriate dress is or how to properly utilize social media and/or what the law allows from an appearance perspective.

More research is needed to investigate whether corporate employee handbooks are properly defining business dress codes and attire expectations for employees. In addition, more research is needed to investigate how social media is being utilized from an employee perspective, and to see if there is an overall awareness that a personal profile can impact future/current employment. Finally, more research is needed at the collegiate level to examine if students graduating from college understand what business casual means, how their social profile impacts future employment and their general awareness of the law as far as appearance is concerned. The authors in the paper are furthering their research and conducting surveys on college students to examine the previous questions.

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The Great Recession of 2008: An exploratory case study of the impact of the recession on five small businesses in Hawaii.

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ABSTRACT

Small businesses residing on remote islands depend on larger economies for tourism. This paper investigates five Hawaiian small businesses impacted by tourism and the declining USA economy. The hope is to explore the experience of Hawaiian business owners recounting their survival tactics and the financial hardship faced during troubled times. The results of the study include an in-depth analysis of the experience of five Hawaiian business owners, the business strategies or tactics employed throughout the recession, challenges and obstacles faced during the recession, motivations for starting a business in paradise, and challenges associated with running a business in Hawaii. Similarities between the experiences were reported and conclusions were drawn including conclusions about Resource Based View. For the purpose of this study, only small businesses impacted by tourism were examined. All five businesses utilized in the study remain confidential and the names of the businesses were changed to protect the anonymity of those ventures.

Key words: Nascent ventures, start-up companies, recession, small business, Hawaiian small business, entrepreneurship, new ventures, Resource Based View, case study.

INTRODUCTION

The Great Recession of 2008 is the nastiest economic slump since the Great Depression of 1929 as far as small business is concerned (State of Small Business Report, 2009). For approximately 27 million small businesses residing in the USA, the economic dip challenged business owners in ways they never imagined (State of Small Business Report, 2009). Business owners continue to struggle, cope, compete, and remain innovative across the nation while facing tremendous economic hardships. According to research, even though small businesses are responsible for the majority of employment and growth in the USA economy, more than half of the country's net job losses were due to their failure to secure capital and expand during the Great Recession of 2008 (State of Small Business Report, 2010). In fact, during the first two years of the recession, the country experienced the closure of nearly 170 thousand small businesses (Thomas, 2012; Kavoussi, 2012). Of the nearly 27 million small businesses registered in the USA, only an estimated 6.7 million were in fact cash flow positive through 2010 (Thomas, 2012; State of Small Business Report, 2009). In 2007, out of nearly seven million American businesses with positive balance sheets, about half a million were classified as nascent or new firms (Strangler, 2010).

In today's economy, it is extremely difficult for new ventures to obtain the funding necessary for entrepreneurs to develop their businesses and their ideas, to expand, and to grow (Isidore, 2008). This is simply because during periods of recession, less capital is available and fewer customers spend money frivolously on products and services. Instead customers contract their spending and save money in preparation for the hardships that lie ahead. Due to the lack of customer spending, many small businesses and nascent firms struggle to survive, much less to grow and expand.

From a historic perspective, small businesses are vital to the American economy both in periods of economic growth (Small Business Administration, 2007) and during recessions (State of Small Business, 2010). According to the US Census Bureau, America has 27 million small businesses that employ 100 people or less, generate more than 40 million USA jobs annually and gross more than $ 6 trillion in revenue per year. According to the State of Business Success Index (2007), small businesses generate approximately half of the USA GDP, create about three-quarters of the new jobs in our country and are responsible for a large portion of new innovation (Small Business Administration, 2007). In fact, small businesses are responsible for half of all of American payrolls that are non-farm related (Small Business Administration, 2010).

The Small Business Administration believes that new ventures and small businesses will guide the U.S. economy out of the recession through new job creation and increased innovation (State of Small Business Index, 2010). The USA economy is relying on a consistent flow of new business formation to lead us out of the economic slump and help us continue leading the world as an international powerhouse.

As a country relying on small businesses to revive its economy, a question that is worth asking is how can a small business operating in a remote location, such as on a Hawaii island, survive and grow during a recession when customers are traveling less and spend less money?

To help answer this question, an exploratory, multiple case study approach was utilized to investigate five local Hawaiian small businesses impacted by tourism and the Great Recession of 2008. The purpose of this paper was to explore the experiences of the Hawaiian business owners, to examine the challenges and obstacles they faced and to review the unique strategies employed throughout the recession. The hope is to report their experiences, recount their survival tactics and discuss the hardship faced during troubled times.

Specifically, the exploratory case study addressed the following questions: 1) What were the experiences of Hawaii business owners during the Great Recession of 2008? 2) How are Hawaiian businesses which rely on tourism surviving the recession? 3) What tactics or strategies did the business owners use throughout the recession to keep their businesses going? 4) How did their experiences influence their decision making related to the business tactics/strategies utilized 5) What are the primary motivations of Hawaiian business owners for starting a business in paradise? 6) What obstacles and challenges do Hawaii business owners face in Hawaii? 7) Can the Resource Based View (RBV) explain these results?

Specifically the authors will uncover each business owner's personal experiences and examine how these experiences influenced decision making related to the business tactics/strategies utilized. Various marketing and management strategies were explored, along with discovering each founder's motivation for starting a business in paradise. Obstacles and challenges that the small businesses face in Hawaii are discussed.

For the purpose of this study, only small businesses impacted by tourism were examined. All five businesses utilized in the study remain confidential and the names of the businesses were changed to protect the anonymity of those ventures. Similarities and differences between multiple case analyses are presented. For the purpose of this paper, a recession is defined as a noteworthy decline in economic activity extending across the nation which lasts more than a few months. The Great Recession officially started in December, 2007 (Isidore, 2008)

Hawaii

The Hawaiian Islands are a group of remote islands in the Pacific Ocean that make up the Hawaiian State, the 50th state (Lawrence, 1959) of the United States of America. Hawaii is famous for its sand beaches, surf waves, waterfalls, flowers, trade winds and majestic beauty with approximately 7.4 million tourist visitors annually. The population size of Hawaii is 1,374,810, with nearly 30% of the population holding a bachelor degree (Hawaii Visitors Guide, www.hawaii-guide.com). According to the Center of Budget and Policy Priorities, Hawaii has a $500 million Fiscal Year 2013 Gap (8.6% shortfall), compared to a $ 540 million gap in FY 2012 (9.6% shortfall), and a $ 594 million FY 2011 gap (16.2% shortfall) (Oliff et al, 2012). Hawaii has the highest cost of living in the nation, with Honolulu being the second most expensive city after New York City www.hawaii-guide.com). The median rent in Hawaii is 50% more than the national median, where 75% of Hawaiian households spend about half of their household income on rent alone (Hawaii Visitors Guide (2012), www.hawaii-guide.com).

As a geographically remote state, people might expect Hawaii to be the first state to experience economic hardship as a result of a declining USA economy or recession. However, Hawaii reported economic slowdown in only a few key industries, such as construction and tourism, which impacted the state's economy slightly but not to the degree that other USA states saw during the start of the Great Recession (Young, 2008). Federal and military spending were considered "bright" spots for revenue in Hawaii, as were capital improvement projects funded by the state of Hawaii which helped propel the Hawaiian economy into 2008, compared to other state economies in the USA (Young, 2008). Thus, the overall Hawaiian economy avoided the early financial hardships compared to other states during the start of the Great Recession of 2008.

However, just because the economic hardship did not impact Hawaii originally at a high degree does not mean that Hawaii was problem free during the prolonged recession (Oliff et al, 2012; Thomas, 2012). Many local entrepreneurs and small business owners in Hawaii were challenged throughout the recession as a result of prolonged decreased visitor counts, decreased frequencies of leisure/business travelers, and decreased visitor spending on the islands. As the recession progressed and financial hardships in the USA and internationally continued, growth of the Hawaii economy stalled and contracted through 2009 (Young, 2008; Oliff et al, 2012).

The DBEDT report shows that Hawaii saw a ten percent decline in visitor travels to the state in 2008 and an additional two percent decline in visitor travels in 2009 (Young, 2008). Nearly 6.8 million visitors were expected to visit Hawaii in 2008, compared to approximately 6.7

million in 2009 (Young, 2008). Hawaii's real GDP was projected to grow 0.3% in 2008, with a negative two percent expected in 2009 (Young, 2008). Finally, wage/salary growth was expected to be zero in 2009 and a negative job forecast growth of nearly half a percent was expected in 2009 (Young, 2008).

For a small business owner, the statistics reported above means that economic hardship and hard times were ahead for many Hawaiian businesses, especially those relying on tourism and visitor spending. During the Great Recession of 2008, Hawaii anticipated a reduced number of tourists on the islands, thus anticipating decreased revenue for many Hawaii businesses relying on tourism. Overall, the recession caused a decrease in the number of small businesses formed in more than 93% of the USA markets (Thomas, 2012). Hawaii saw less entrepreneurs establish businesses from 2008 to 2009, with 22,044 businesses formed in 2008 compared to 21,748 businesses formed in 2009 (Thomas, 2012). This in turn impacted the number of employees that local Hawaiian businesses employed, supplies they purchased and therefore the amount of revenue they created in the local Hawaiian economy. It is important to note that the unemployment rates in Hawaii tripled from November 2006 thru 2011, with low income workers hit the hardest (Oliff et al, 2012).

With the above in mind, the following examines the state of entrepreneurship itself in Hawaii compared to other states in America between the years 2008 to 2011. According to the State of Entrepreneurship Index of 2012, Hawaii was ranked 39th out of 50 states in 2008 as far as business formation and innovation (Thompson and Walstad, 2012). In 2010, Hawaii slipped to number 41 out of 50 states and in 2011 it dropped to number 45 out of 50 states on business formation and innovation (Thompson and Walstad, 2012)

Hawaii experienced a decrease in the percentage of growth establishments, business formation rates, patents per thousand people, and the average income per non-farm proprietor compared to most of the states in America. Overall, this means that the entrepreneurship environment was less attractive to small business owners and entrepreneurship from 2008 thru 2011 in Hawaii compared to other states in the USA.

Table 1 takes a closer look at the number of establishments and growth rate according to the Entrepreneurship Index (Thompson and Walstad, 2012). As evident in the table, the actual number of establishments in Hawaii increased slightly from 2007 thru 2009, but then contracted in 2010 and 2011. In addition, the growth rate contracted in 2009 and 2011. It is also apparent, that Hawaii, New York, California and Louisiana experienced growth contractions in 2009, which is during the Great Recession of 2008. Please see Table 1 for further data.

Table 1: Number # of Establishments and Growth Rate from 2007-2011

	2007	2008	2009	2010	2011
State	# firms Growth Rate				
Hawaii	36,404 3.95%	36,801 1.09%	37,021 0.60%	36,556 1.26%	36,386 0.46%
New York	563,450 1.18%	569,694 1.11%	570,602 0.16%	572,661 0.36%	580,476 1.36%
Louisiana	114,514 -1.25%	118,306 3.31%	119,102 0.67%	123,120 3.37%	120,309 2.28%
California	1,260,646 2.15%	1,293,475 2.60%	1,304,843 0.88%	1,299,532 0.41%	1,337,655 2.93%

*Source: (Thompson and Walstad, 2012)

Hawaii Small Business Demographic Data

Hawaii has a total of 120,374 small businesses established, compared to 27,092,908 in the USA. (US Census Bureau). There are .09% of small businesses in Hawaii that are black-owned, compared to 7.1% in the USA, 1.3% of Hawaii Businesses are American Indian or Alaska Native-owned, compared to 0.9% in the USA, 9.5% of Hawaiian small businesses are Native Hawaiian or Pacific Island owned compared to 0.1% in the USA and 47.2% of Hawaiian businesses are Asian-owned compared to 5.7% in the USA (US Census Bureau). Women-owned businesses account for 31% of all small businesses in Hawaii, compared to 28.8% in the USA and 3.6% of Hawaiian businesses are Hispanic owned versus 8.3% of the USA (US Census Bureau).

THEORETICAL AND CONCEPTUAL BASIS

The Resource Based View

The purpose of exploratory case analysis is to discover and understand situations that lack a single set of distinct outcomes (Baxter & Jack, 2008). The value of case analysis is to enrich theory and allow for a greater understanding of how the theory applies to the real world. This may not be possible through statistical analysis alone (Nutall et al, 2011). The method allows for the examination of a phenomena and the phenomena in a dynamic context. Therefore this approach allowed the authors to examine the applicability of the Resource Based View of the firm (RBV) to entrepreneurs dynamically reacting to their external and internal environments.

The Resource Based View (RBV) views organizations as combinations of resources, competencies, talents, and abilities (Penrose, 1959; Penrose 2003) that can provide unique competitive advantages difficult for competitors to emulate. Such resources may enable organizations to outpace their competitors, reduce internal flaws, provide superior products or services, and more importantly provide something that customers value. Examples of such competencies include but are not limited to: internal firm capabilities (Hart, 1995), specialized equipment or location (Eisenhart and Martin, 2000), start up assistance (Radojevich-Kelley and Hoffman, 2012), scientific expertise (Eisenhart and Martin, 2000), mentorship (Radojevich-Kelley and Hoffman, 2012), internal firm processes (Miller and Ross, 2003), and lean production (Womack, Jones, and Roos, 1991).

Eisenhart and Martin (2000) added the concept of “dynamic capabilities” or the ability to reconfigure or “recombine” resources to reenergize the firm with “synergistic” combinations that improve internal process or strategic matching of resources to customer needs. In a ten year review of RBV, Barney, Wright, and Ketchen (2001) suggest that the concept can be applied to entrepreneurs whose customer knowledge, market awareness, experience, and learning can provide sustainable competitive advantages. However, these authors did not provide examples or further explanation.

It is important to note that the RBV has been criticized by some scholars because previous applications did not take into account the external environmental context, trends and factors that impact businesses at large (De Toni & Tonchia, 2003; Hart, 1995). However, the authors of this paper believe that this study of entrepreneurs reacting to the recession of 2008 may provide insights into whether RBV applies. Did these entrepreneurs exhibit "dynamic capabilities" by realigning their resources into ways competitors could neither easily copy nor replace without great effort? If these conditions hold true and their company's bundle of resources assisted in sustaining above average returns, especially during a recession, then there is evidence present to support both RBV and its application to external environmental factors.

METHODOLOGY

Exploratory Case Study Methodology

Exploratory case study methodology is used to examine phenomenon, circumstances and situations where there is no set or predictable outcome (Baxter & Jack, 2008; Hancock and Algozzine, 2006; Tracy, 2010). Stake, 1995; Yin 1992). The examination of a phenomena or occurrence can lead to theory or propositions where few exist and allows for examination of not just a phenomena but the phenomena in its context such as relevant processes (Hoffman and Radojevich-Kelley, 2012; Yin, 1992; Yin, 1981). Exploratory case study is not limited to statistics or qualitative data; it allows researchers to observe multiple activities and outcomes over time, and to study multiple participants in-depth (Hancock and Algozzine, 2006; Stake, 1995; Hoffman and Radojevich-Kelley, 2012). Case study has been widely utilized in family business studies (Barach and Gantisky, 1995; Murray, 2003), franchise use of bootstrapping (Falbe et al, 2011) and nurse-patient research (Baxter and Rideout, 2006; Baxter and Jack, 2008).

There are many common mistakes utilized during case study analysis. According to Yin (2003) to avoid common pitfalls associated with case study analysis, researchers should place limitations on a case and avoid trying to answer questions that are too broad in nature. In other words, researchers should connect the case study by placing boundaries, such as place and time to it. For this reason, the authors of this study bound the case study by using Hawaiian entrepreneurs involved in tourism, during the Great Recession of 2008 as subjects for analysis.

Research Design

The research design utilized for the paper was an exploratory case study of five Hawaiian small businesses reliant on tourism during the Great Recession of 2008. The case study approach was selected because it allowed the authors to study an occurrence in an actual situation (Yin, 2003; Baxter & Jack, 2008; Hoffman and Radojevich-Kelley, 2012). The authors utilized multiple methods for data collection during the qualitative study (Tracy, 2011; (Hoffman and Radojevich-Kelley, 2012). Specifically, the authors observed case study participants during day-to-day operations, interviewed and surveyed business owners, reviewed company information and websites, analyzed relevant articles, reviewed social media sites, reviewed open-source materials, and relevant marketing materials were reviewed.

Data Collection

Five Hawaiian small business owners were selected for the study. Subjects were selected based on their convenience and willingness to participate and willingness to disclose information for the study. Hawaiian business owners were contacted first by telephone, with follow-ups conducted through email. Each participant was asked to fill out an open-ended questionnaire. After the questionnaire was complete, additional follow-up phone calls and emails were conducted; website reviews, social media sites were reviewed and marketing materials were examined.

It is important to note that the sample was a convenience sample with business owners who agreed to participate and who were directly involved with the day to day business throughout the Great Recession of 2008. None of the authors had prior connection, contact or involvement with any of the Hawaiian business owners who participated in the study.

Specifically, the authors contacted five potential Hawaiian Business Owners who 1) had a business in operation during the Great Recession of 2008, 2) had two or more employees working for them, 3) were located on a Hawaiian Island, 4) were involved in the tourism industry, 5) were willing to disclose information and participate for the length of the study and 6) had experiences they were willing to describe about running a business in Hawaii and during the recession. All five business owners participate for the length of the study and throughout the study.

The authors collected data and conducted in-depth analysis one company at a time. The primary means for data collection methods were 1) qualitative, open-ended questions concerning the experiences, strategies, challenges and obstacles that business owners faced throughout the recession, 2) observation of the day-to-day operations of the business, interaction with customers and interaction between employees and employer 3) review of company websites, social media, personal interviews, relevant open-source materials and marketing materials located in the community.

The results of the study included an analysis of the experience of five business owners, the business strategies or tactics employed throughout the recession, challenges and obstacles faced during the recession, motivations for starting a business in paradise and challenges associated with running a business in Hawaii. Similarities between the experiences were reported and conclusions were drawn. According to case study analysis, five in-depth case analysis is an acceptable number of cases to study for the case study approach (Creswell, 1998)

Interview Data

All Hawaiian business owners were asked open-ended questions about their experience with running a business during the recession, the business strategies or tactics employed throughout the recession, challenges and obstacles faced during the recession, motivations for starting a business in paradise, and challenges associated with running a business in Hawaii. This research design was selected to allow subjects to elaborate when needed, and to select from multiple choice questions where applicable. Business owners were asked to expand their thoughts, answers and opinions where relevant.

Author's Roles

It is recommended for authors to disclose their involvement during qualitative data collection (Nutall et all, 2010) to help establish roles and assess whether the involvement added or hindered the data collection and assessment processes throughout the study. The authors of this study are faculty members and all three authors are small business owners. This allowed the authors to understand the research process, the challenges and obstacles that owners experience and enabled a greater understanding of small businesses ownership during troubled economic times.

Results

Explanation of Results

Each case has commonalities in that they all reside on Hawaii, are reliant on tourism, have employees and operated during the recession of 2008.

Hawaiian Business Information

As indicated in Table 2, the businesses in the study emphasized that eighty percent or more of their business is reliant on tourism. Annual revenues for all the businesses surveyed were half a million dollars or greater per year. Every Hawaiian business owner stated that they saw a drop in revenue since the start of the 2008 recession. Four out of five companies surveyed were currently cash-flow positive. One business owner reported that their business was not cash flow positive at this time and that the recession had impacted their sales and revenue noticeably. For greater details, please see Table 2.

Table 2: General Information

Hawaiian Company	% of Business Relies on Tourism	Cash Flow Positive as of Today	Recession decreased revenue and sales?	Annual Revenue
Kids Toys and Gifts Store	85%	No, the recession has impacted our sales greatly	Yes	$ 501,000
Snorkel Boat	90%	Yes	Absolutely, yes	Above $ 1 million
Condo: Time Share	80%	Yes	Yes	Above $ 10 million
Upscale Grocery/Gift **Store**	90%	Yes	Yes	Above $ 2 million
Clothing/ T-shirt Store	90%	Yes	Yes	$ 5 million

According to Table 3, most of the businesses in the study were formed between 1991 and 1998, while one started in 2006. Virtually all the businesses were involved in retail, accommodation, food/service or services which are highly dependent on tourism. All businesses reported having several employees and all except one small business had more than one location on the Hawaiian Islands. For more information, please refer to Table 3.

Table 3: Hawaiian Business Information

Hawaiian Company	Year Created	Industry	Product or Service	# employees	# Locations on Hawaii Islands?	Legal Structur e
Kids Toys and Gifts Store	1998	Retail	Products	2 FT, 4 PT	2	Sole Prop
Snorkel Boat	2006	Other Services	Service	8 FT, 10 PT	2	LLC
Condo: Time Share	1991	Accommodations-Hotel/Condo& Food/Service	Service	10 FT, 25 PT	4	C Corp
Upscale Grocery Store and Gift Store	1996	Retail	Products & Services	32 (10FT, 22 PT)	No	C Corp
Clothing/ T-shirt Store	1992	Retail	Products	2 FT, 4 PT Each store	22 total	C Corp

Tactics and Strategies Utilized During the Recession

Table 4 supports the RBV theory in that unique strategies, talents, efficiencies and capabilities were isolated to create a competitive advantage for the firm which allowed them to compete throughout the recession. For example in Table 4, one business owner reported that they worked the business “floor” on a day to day basis to reduce staff reliance and payroll expenses. Many were forced to reduce staff size and become creative with discounts, incentives, new product or service offerings to entice tourists to spend their money. See Table 4 for greater details.

Table 4: Overall Business Strategy

Hawaiian Company	What strategies were utilized to help the viability and growth of the business since the Great Recession of 2008?	Since Recession we focused more heavily on…..
Kids Toys and Gifts Store	Owner worked more on the business floor with the customers and cut back on staff	Decrease the size of the sales force (to save money)
Snorkel Boat	Reduced number of cruises offered, offered 10 dollars off and reduced staff	Decreased our sales force
Condo: Time Share	Added incentives to entice travelers	Added new and different products/services
Upscale Grocery Store and Gift Store	Cut staff, gave responsibility to managers, restructured and worked on maintaining loyalty with customers	Cut staffing and added new services/products
Clothing/ T-shirt Store	Cut staff, offered new products, targeted locals	Added different products

Table 5 reports the various sales promotion and advertising outlets for building awareness with customers. All the Hawaiian business owners claimed to increase sales and discounts, relied more heavily on coupons, increased their advertising in the free local magazines distributed to tourists at airports and grocery stores, and decreased radio and newspaper ads. Several owners reported they linked up with vacation clubs to offer discounts through them. Please see Table 5 for further details.

Table 5: Marketing Strategy

Hawaiian Company	Since recession our sales promotions …..	Since the Great Recession what media outlet do we rely on for advertising?
Kids Toys and Gifts Store	Focused solely on targeting frequent customers, reduced formal advertising and flyers, increased number of sales to attract the local Hawaiians into the store, discounted products quicker	Reduced radio and newspapers and relied heavily on ads in local magazines found in stores
Snorkel Boat	Offered a discount for seniors and kids, offered ten dollars off coupon, offered discounts on early morning cruises (when numbers are low), charged for alcohol and ran specials on the boat ride back to the docks. Announce drink specials throughout the cruise to lure, charged extra for pictures, for under water cameras and for scuba diving	Focused on adding ads in magazines found at airports and stores, negotiated discounts with vacation clubs (coupons and discounts)
Condo: Time Share	Offered more sales/incentive upgrades, more points with perks, gave-away a discount card for things on the island if sat through 'sales' pitch. Offered free week with purchase, increased "pressure" sell and person-to-person sell, rewarded frequent customer idea	Social media (Facebook), outdoor advertisements (billboards, bus-stop benches), word of mouth and person-to-person selling at strip- mall areas
Upscale Grocery Store and Gift Store	Offered "bundled" coffee and breakfast items for price conscious vacationers, increased "ready-made" food option sales, offered more variety and options to take away foods with discounts. Increased daily deals, increased discounts on alcohol products. Added more unique sauces and spices, Hawaiian products for sale. Offered a free gift with a 150$ purchase.	Banners and ads on windows of the store, prime location and daily sales. Joined vacation club "pitch" discount program.
Clothing/ T-shirt Store	Offered more sales and discounts. Bundling our products (buy one and get 50% off next product, or buy one and get a coffee mug free)	Magazines and Facebook..we reduced ALL other ads (no radio, newspaper because it was expensive). We use a lot of outdoor advertising on bus-stop benches and billboards)

As evident in Table 6, most of the Hawaii business owners sought to find one of a kind products or services that were not easily substituted with competitor products. Many focused on providing superior customer service, or offering high quality, unique products not found elsewhere. See Table 6 for greater detail.

Table 6: Differentiation Strategy

Hawaiian Company	What differentiation strategies have been used since Great Recession began?
Kids Toys and Gifts Store	Unique offering that other toy stores do not have and cannot be bought just anywhere, we focused heavily on superior customer service, looked for quality products, and increased the variety of products that we offer
Snorkel Boat	Offered more unique offerings, increased the drink specials, offered cameras and SNUBA which was not being offered elsewhere. Hired FUN crew members who entertain, focused on superior customer service, cook fresh on the boat, target finding new customers
Condo: Time Share	Offered more options, offer extra points for premium packages, targeted new customers, focus on impulse purchases…try to make it look better so they sign up without thinking too hard. Show how we are different from average vacation club
Upscale Grocery Store and Gift Store	More variety, more options, focused on high-end foods and ready made foods, focused on options for grab and go and also cook at condo. Increased alcohol offerings. Increased unique spices and local unusual products, and focused on improving customer service. Increased our focus to include the Japanese market and products they might buy. Translated several advertisements and promotions in Japanese.
Clothing/ T-shirt Store	Offered more products, focused on superior service, offer a warranty, offered unusual products, targeted new customers (translated coupons in various languages) and participated in local events to target local Hawaiians.

Challenges and Obstacles with Running a Business in Hawaii During the Recession

Table 7 identifies various obstacles and challenges reported by Hawaiian business owners. All five Hawaiian business owners reported that their greatest obstacle was less customers caused by a decrease of tourists on the islands due to the recession. In other words, business owners reported hardship from the decreased tourism. These results support the literature review which reported that Hawaii had a drop in tourism of 10 percent during 2008 and twelve percent in 2009, thus impacting the local economy (Young, 2008; Thomas, 2012). In addition, all of the business owners stated that electricity costs increased, thus causing extra hardship for them. Several owners reported that due to higher energy bills, higher rent on the Hawaiian Islands and because of its remote location, the overall cost for merchandise on Hawaiian is higher compared to mainland USA. This is simply because shipping costs and supply costs are higher in Hawaii due to its remote location. Owners reported frustration because customers felt that they were being taken advantage of or felt "ripped off" because costs for products/services were substantially more. According to Hawaiian business owners, the cost of goods and costs of running a business in Hawaiian is higher, thus products/services cost more which does not necessarily translate to increased sales. See Table 7 for more information.

Table 7: Challenges & Obstacles Hawaiian Business Owners Faced During the Recession

Hawaiian Company	Challenges and Obstacles with running a business in Hawaii during the Recession?
Kids Toys and Gifts Store	Lack of tourists visiting and less spending when they come. Increased energy bills, and increase cost of getting merchandise to the island
Snorkel Boat	Increase costs in bills and less tourists on Big Island
Condo: Time Share	Less customers
Upscale Grocery Store and Gift Store	Added cost of getting merchandise to Hawaii and customers do not understand that. Also increase energy bills
Clothing/ T-shirt Store	Energy bills are high, rent is expensive, and less tourists

Problems that Small Businesses Face in Paradise

As evident in Table 8 and as discussed earlier, the greatest difficulty with owning a business in Hawaii is the cost associated with running the business on a remote island where everything is more expensive. The findings in Table 7 and 8 supports the literature review which found that rent in Hawaii is the highest in the America, next to New York (www.hawaii-guide.com). Virtually all the business owners complained about finding customers, high rent, high energy bills, and the need to attract not just Americans but the Asian customers simultaneously. Please see Table 8 for more information.

Table 8: Problems with Having a Business in Paradise

Hawaiian Company	Problems with running a business in Paradise…
Kids Toys and Gifts Store	PRICING….Tourists think we are ripping them off with our prices, but it takes time and is expensive to get things shipped here. Also, we need more tourists on the Big Island to help support our businesses.
Snorkel Boat	Getting customers, high costs of energy, taxes, mandatory insurance costs, high cost of products and rent
Condo: Time Share	Getting customers, rent is expensive
Upscale Grocery Store and Gift Store	Stocking a huge variety of products to entice tourists from all over (especially Asia) , pricing things affordably, high bills
Clothing/ T-shirt Store	Getting the word out about our business especially in different languages to cater to the tourist flow. High costs in Hawaii.

Motivations for Starting a Business in Paradise

Table 9 reports that the primary motivation for starting a business in paradise was for freedom. One entrepreneur reported that they began a business to increase personal wealth, while another entrepreneur created a venture to pursue a lifelong dream of owning a venture. No entrepreneurs report that they start a business due to necessity or because they had no other employment options. Please see Table 9 for details.

Table 9: Motivations for Starting a Business in Paradise

What motivated you to start a business in paradise?	% based on Hawaii business owner response
Freedom	60%
Increase personal wealth	20%
Pursuit and harvest of life-long dream of owning a business	20%
Necessity	0%

Discussion

According to the results, Hawaiian business owners reported similarities in experiences since the recession. First, they all claimed that revenue decreased and all of them believe the drop in sales was caused by the Great Recession of 2008. They reported similar frustrations with running a business due to higher costs of electricity, rent, material costs, and shipping costs to the islands. Virtually all business owners admitted to personally reducing staff and working the sales floor to a greater extent since the recession. In addition, they reported similarities in marketing tactics utilized, such as offering more coupons, greater discounts, more incentives and bundling products/services together to entice customers. In addition, many of the business owners utilized Facebook more often to build awareness with customers since the recession. Finally, all of the business owners increased their usage of the local free tourist magazines to advertise rather than in newspapers and on the radio.

Although all of the business owners reported using various strategies to attract tourists to their business during the recession, the strategies employed were unique to the business itself. Therefore, several differences emerged among the business owners which gave their specific businesses a competitive advantage over other competitors. For example, the local Hawaiian kid's toy store owner reported a shift in focus from tourists to locals. In other words, the owner attempted to attract local customers by offering and advertising more unique toys and children's gifts not found in larger chain stores such as Wal-Mart or Target. In addition, the store offered a repeat customer or loyalty card directed towards the locals living on Hawaii. Of all the businesses studied, the toy store was the only store that was cash-flow negative at the time of the case study.

The upscale grocery store owner stated that they shifted their focus to the Japanese market because they believed the Asian market was not as severely impacted by the recession. This owner translated all their signage, marketing materials and advertising signs to include the Japanese market. In addition, the store introduced more Japanese products meant to appeal to their Japanese clients. Lastly, they offered more breakfast and lunch 'ready-made' items at affordable prices to entice the price conscious tourists.

The snorkel boat owner explained that they expanded discounts for seniors and children, and offered more drink specials on the boat rides. In addition, they offered a family rate and extra discounts on the early morning excursions which had lower customer volumes. They also focused more heavily on alcohol promotions and sales because they found that they had higher margins on alcohol sales compared to other offerings. In addition, the owner explained that they focused on improving customer service and improving the overall customer experience while on the excursion. They offered a reduced rate for local Hawaiian residents with a valid driver's license. They also introduced SNUBA at an extra cost, which was unique and rarely offered on most competitor excursions at the time. The company owner stated that they trained their staff to understand that "fun" and entertainment is a competitive advantage unique to them and that crew and staff were expected to entertain and provide stellar customer service at all times. They started stocking, promoting and selling disposable underwater cameras, group pictures, DVD video footage of the excursion itself, tubes of sunscreen, rash guard swim shirts and they offered a unique, one of a kind beverage that combats/aids sea sickness all for an extra fee. The owner stated that these strategies were successful and set them apart thus far.

The local t-shirt/gift shop owner stated that they bundled their shirts with local Hawaiian tourist items, such as calendars and coffee mugs to entice customers. In addition, they translated sales and discount offers in many languages to help build awareness in the market. The owner also started to work the sales floor and reduce their reliance on staff to cut expenses.

The condo owner stated that they focused more heavily on pressure sales, impulse purchases and by focusing less on the "hidden" extra costs associated with time-share and condo ownership in Hawaii. In addition, they focused their sales pitches towards the idea that customers are investing in a paid vacation for the rest of their life, their kids' life, and their grandkids lives. In other words, they focus sales on the emotional side to sell their condos and time-shares. Lastly, the condo enticed customers to come see the condos by offering a free discount card that provided customers with 20% off at many local retail stores, excursions and restaurants to reduce the cost of their vacation. The discount card was free as long as customers listened to company "sales pitches". Once the customer is at the pitch, the sales personnel use pressure tactics, emotional marketing and impulse purchases paid over a life time to 'lock' customers in.

General Comments

All of the Hawaiian business owners reported similar challenges and obstacles during the recession. The single most identified complaint by the Hawaiian business owners was the marked drop in the number of tourists on the Islands since the recession began. They reported similar frustrations with drops in revenue caused by less tourists traveling to Hawaii to spend money. In addition, many complained about the increased cost of living associated with running a business, and increased energy costs which placed extra hardships on the business throughout the economic downturn.

Application of Resource Based View to Results

Some of the benefits of the exploratory case study approach are insights into both phenomena and their context and better connections of theories to the real world. The study uncovered four such insights into RBV's real world application: these owners' actions utilized both RBV's structure and process, they reacted to their external environment - a recession, they used a combination of internal and external actions to prosper, and they displayed "dynamic" capabilities.

Resource Based View (RBV) suggests that businesses are a collection of resources, and capabilities which create distinctive competitive advantages (Penrose, 2003; Ravenswood, 2011). The structural portion of the theory emphasizes unique resources (Barney, 1991) while the process portion emphasizes internal processes within a firm that creates efficiencies (Miller & Ross, 2003).

First, Hawaiian businesses provide a good example of the "structure" portion of the RBV because they each rely on unique resources. For example, business owners state that human capital resources are critical and vital to the success of the business throughout the recession. The staff and owners focused on quality customer services to remain cash flow positive.

The process portion of the RBV is evident through the competitive advantages established by the Hawaii business owners. Business owners report efficiencies, such as working the sales floor instead of relying on staff to sell products/services, reducing formal advertising in newspapers and radio, and offering unique or one of a kind products/services to set the business apart from competition, etc.

Next, entrepreneurs used a combination of internal and external activities, such as streamlining internal operations, varying their marketing strategies and promotion tactics, and marketed to a larger customer group- the Japanese.

Fourth, the authors believe that the owners displayed Eisehart and Martin's (2000) "dynamic capabilities" by accurately assessing their internal and external environments and by changing or realigning their resources. The insight from the case study raises numerous questions: 1) does this disprove the RBV critics who believe that the RBV does not account for environmental changes, 2) what are the differences between the owners who changed and those who did not, 3) is the dynamic capability a unique characteristic requiring both the ability to conduct environmental assessment and the ability to change, 4) can this capability be taught, and is it aligned with other entrepreneurial characteristics?

If future quantitative studies confirmed similar findings in competitive advantages and unique resources, such results would enhance RBV.

Limitations of the Study

The main limitation on the study is that it is not generalizable to the population (Sandelowski, 1986). The in-depth case study only examined five Hawaii business owners during the recession. The study looked at the experiences occurring over a select period of time, the Great Recession, which would be impossible to replicate. In addition, the study looked at businesses impacted by tourist on Hawaii which is also challenging to replicate.

The results cannot be generalized to other business owners in the US. This is simply because the unique circumstances that the Hawaii business owners faced and their personal experiences were unique to where they lived and the economic times they faced. However, it is recommended that a large quantitative study, surveying a large group of business owners across the USA might add value to the findings from this study regarding business owner experience during a recession. In addition, it is advised that a larger study be conducted on Hawaii business owners to see if generalizations can be made.

Conclusions and Future Research

Propositions

Exploratory case study research should establish propositions to help promote discussions in academics (Editors, 2011). Based on the results in the study, the authors believe that ensuing research could determine the validity of the propositions created as a result of this research study.

Proposition 1: Small businesses are impacted by a down-turned economy, specifically revenue decreases.

This proposition is a result of comments made by all of the Hawaii business owners regarding the recession. All of the business owners stated that their revenue and sales decreased due to a reduction of tourism caused by the recession of 2008. This can be verified in future follow up surveys on business owners reliant on tourism.

Proposition 2: In a recession small businesses must rely on innovative, competitive advantages to survive.

This proposition was established because all five business owners utilized innovative tactics or strategies, such as focusing on stellar customer service, incorporating new and unusual products, and targeting new customers. These strategies/tactics allowed Hawaii business owners to compete successfully during the recession. This can be verified in follow-up studies which examine marketing and management strategies/tactics employed by business owners to help gain competitive advantages. Please see Tables 4, 5 and 6 for further information regarding specific tactics and strategies.

Proposition 3: Hawaii business owners and founders face unique obstacles and challenges during the recession.

Table 7 results support this proposition. Business owners discussed the reduction of tourism that plagued the Hawaiian Islands and impacted their revenues.

Proposition 4: As small businesses are impacted by the recession they spend less money on advertising and marketing.

This proposition was a result of all five Hawaiian business owners stating that they switched from expensive media, such as radio and newspapers to lower cost, more visible and affordable advertising. Each business owner admitted to advertising in the local free magazines displayed at the airports and grocery stores. Owners found these magazines more visible, with greater circulation and greater return for the money compared to radio and newspapers.

Proposition 5: Even without a recession, small businesses on remote islands are plagued by higher cost of doing business which frustrates customers because products/services are excessively expensive.

This proposition was established because virtually all the Hawaiian business owners reported frustration with the lack of understanding from the customers. They expressed concern with the high costs associated with running and operating a business on Hawaii, such as high energy bills, high rent, high taxes, high cost of transportation and shipping and resource shortages. They expressed frustration that customers do not take these into account when looking at the overall price of products/services on the islands. Table 8 reports the results supporting this proposition.

Proposition 6: The ability to both assess internal and external environments and the willingness to adapt to those environments are unique "dynamic capabilities."

This proposition is introduced because many Hawaii businesses faced the same recession – some businesses changed, while many did not. Those that adapted gained competitive advantages from their capability to shift or change.

Future Research

The authors of this study believe that more research needs to be done on Hawaiian businesses in the form of a larger quantitative study. In addition, the authors believe it would be worthwhile to examine small businesses on other islands, similar to Hawaii to see if their experiences and frustrations are similar. Lastly, other states that are impacted by tourism, such as ski resort states would be interesting to research and compare to Hawaiian business owners. If further research is conducted, the validity of the propositions in this study should be examined.

Further quantitative analysis would establish whether proposition 6 is true opening a new avenue of research into successful entrepreneurial characteristics.

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Water Rights Arrangements in Australia and Colorado: A Comparison Focused on Possible Lessons from the Australian Water Reform Program

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ABSTRACT

The system of defining, monitoring and enforcing the right to use water is of critical importance in all regions of the world, but especially in areas like Australia and the southwestern United States where rainfall is low. Water law and water rights administration play pivotal roles in facilitating the efficient use of water. This paper examines legal frameworks of Australia and Colorado water allocation law, as well as government involvement in water resource management, environmental protection mechanisms, water rights administration and the criteria for efficient water rights uses, and asks what lessons can be learned from Australia's new water reform program.

INTRODUCITON

The system of defining, monitoring and enforcing the right to use water is of critical importance in all regions of the world, but especially in areas like Australia and the southwestern United States where rainfall is low. Water law and water rights administration play pivotal roles in facilitating the efficient use of water. Water is also an important part of a region's economic welfare — as in Australia, where irrigated agriculture constitutes one-fourth of the value of the country's total agricultural production, and in Colorado, where 86% of the state's entire water resources are devoted to agricultural use. But in both the southwestern United States and in Australia, the current rate of water use in some of the main river basins is not commercially or environmentally sustainable.

Australia and the American Southwest have similar climates and similar land uses. Likewise, their complex water rights systems, both in the legal and the administrative arenas, have similarities — but also some differences. An understanding of how these systems compare will assist stakeholders in making difficult decisions arising from climate change and eras of severe drought. This paper will examine legal frameworks of Australia and Colorado as well as government involvement in water resource management, environmental protection mechanisms, water rights administration and the criteria for efficient water rights uses and administration. The right to use and control water is vested in the government in both jurisdictions, although individual right-holders also can acquire a right to use an amount of water at a certain place and time for their own benefit, albeit under different legal systems with different consequences.

Australia has effectively implemented changes in trading water and water rights as part of its overall reform of legal and administrative systems as it reacted to its worst drought and fires in recent history. This paper will consider how market efficiency can be improved, and if there are lessons that can be learned from Australia's embrace of competition and markets as its new paradigm for water management. Australia has conducted multiple studies to investigate the impact of its water reform program and how it can rectify some of the environmental problems caused by the recent reforms. This paper will consider if and how these reforms could be implemented in Colorado and the Colorado River Basin in the southwestern United States.

Climate Change and Drought: From New South Wales to Colorado

Australia's "Big Dry" refers to an extended drought, from 2000 until 2010. The drought was unprecedented; nothing like it had ever occurred on the continent. The largest river basin in Australia, the Murray-Darling, experienced 40-50% reductions in runoff and the river ceased to flow at its mouth. In 2009, fires erupted over parts of Australia that claimed 175 lives. Temperatures reached 115 degrees Fahrenheit in Melbourne and 2,000-mile dust storms blew across the lands. Farmers had nowhere to turn and many took their own lives (Udall, B, 2010). Although it has eased somewhat, the drought continues; in 2012 and 2013, median rainfall from South Australia to Central Australia was 60-70% below normal (Australian Bureau of Meteorology).

Similarly, the southwestern states of the United States have experienced devastating droughts in the last decade. In Colorado, 2002 was the driest year in recorded history. The Hayman fire that year, the largest ever in the state's history, burned 140,000 acres, destroyed more than 600 homes and left the Denver water supply system vulnerable (Eichenseher, T., 2012). Record heat and severe drought conditions caused six major fires to surge through the state in the summer of 2012, burning more than 100,000 acres and hundreds of homes. The diminishing precipitation in the Colorado River Basin affects not only Colorado but also citizens in the other six states that depend upon the river — California, Nevada, Arizona, New Mexico, Wyoming and Utah (US Drought Portal).

A theory first articulated in the 18th century by George Hadley, an English physicist and meteorologist, described the trade winds and the associated (north-south) circulation pattern of air near the equator that explains the shared drought conditions in the southwestern United States and Australia (Udall, B., 2010). The ongoing effects of climate change increase the impact of the Hadley Cells 101 theory such that the long-term meteorological forecast for both Australia and Colorado is one of prolonged drought (Udall, B., 2010). Illustrative of this theory are studies conducted by the Colorado Department of Water Resources that predict a water supply gap of 600,000 to 800,000 acre-feet (the amount of water needed to support a household of four for one year) of additional water to meet growing municipal and industrial needs by the year 2050, when the state's population is expected to have doubled (Colorado Water Conservation Board). The Commonwealth Scientific and Industrial Organization (CSIRO), an Australian government agency, predicts that climate change is likely to reduce the Murray-Darling River's flow by as much as 5% in 20 years and 15% in 50 years. CSIRO cites a worst-case scenario of 20% less water in 20 years and 50% in 50 years (CSIRO, 2013). Indeed, inflows to the Murray-Darling have fallen to less than half of their long-term average over the past six years (CSIRO, 2013). Water management is wise to proceed on the assumption that low flows are here to stay.

The disputes among farmers, municipalities and distinct regions of both Australia and Colorado can either continue to be exacerbated by the looming water shortage or the stakeholders can work toward a sustainable future. To their credit, neither Australia nor Colorado passively await the continued crises that accompany prolonged drought conditions and severe water shortages. Both commenced actions years ago to change long-entrenched legal and administrative systems and policies that control the allocation of their water resources. Australia has been much bolder in embracing these political and legal changes in ways that could lend direction for Colorado and other states in the American Southwest.

Historical Water Law and Administrative Systems: Riparian Law vs. the Doctrine of Prior Appropriation

History sheds light on the possibilities for the future. The courage to change traditional, predictable, entrenched habits and legal traditions can only come from a recognition of the value, as well as the shortcomings, of existing systems and practices. Colorado turned away from traditional riparian doctrine in the mid-19th century, and Australia is taking bold steps to reform its water laws and administration in the 21st century. A look back provides context for an analysis of reform.

Australia and Riparian Water Rights

Riparian water rights, a system for allocating water based on ownership of land adjacent to waterways—lakes, rivers and streams—have their origin in English common law and thus exist in jurisdictions with a common-law heritage, such as Australia, Canada and the eastern United States. The word "riparian" comes from the Latin word meaning "along the river," and in most states east of the 100th meridian—which runs along the western border of Kansas—as well as in Australia, the riparian doctrine rules, just as it does in England, from which it was imported. The general characteristics of the riparian doctrine of English common law were adopted in the eastern United States because the humid climate and annual precipitation in these areas—above 30 inches, as opposed to Colorado's annual precipitation of 12-17 inches—are similar to that in Western Europe. In the Australian colonies, the riparian doctrine did not meet with resistance because the primary economic activity was sheep grazing, which depended on surface water sources. The British Crown, which owned all of the land, gave licenses for new settlers to use the land and have access to the riparian lands along rivers and streams. The Crown also kept its codes firmly in place, not allowing room for change via common law; indeed, between 1850 and 1870, only five cases came in front of the New South Wales judiciary, and all were resolved in favor of maintaining the riparian system (Harris, 2007).

The riparian doctrine provided the framework for water law throughout the Roman Empire. It stated that the water in a stream belonged to the public for fishing and navigation and could not be controlled by individuals. The owner of property along the stream (a riparian landowner), however, did have the right to make de minimus (reasonable) use of the water (a unsatisfactory right) for milling, domestic and agricultural uses. These uses, however, could not injure others who used the stream for navigation or fishing. The riparian landowner had to return diverted water back to the stream unchanged in quantity and quality:

> The public use of the banks of a river is a part of the law of nations, just as is that of the river itself. All persons therefore are as much at liberty to bring their vessels to the bank, to fasten ropes to the trees growing there, and to place any part of their cargo there, as to navigate the river itself. But the banks of the river are the property of those whose land they adjoin; and consequently the trees growing on them are also the property of the same persons." (Justinian Code, A.D. 533)

The Justinian Code of Roman law, along with Teutonic law, the Napoleonic Code and English common law, guided decisions in the development of case law. The characteristics of the riparian doctrine include the following (Cech, T., Jones, P.A., 2009):

1. Riparian rights are of equal priority.
2. Generally, the right to water is not quantified, but rather extends to the amount of water that can be reasonably and beneficially used on the riparian parcel.
3. Riparian rights are correlative—during times of water shortage, the riparian landowners share in any shortages.
4. Water may be used only on that portion of the riparian land parcel that is within the watershed of the water source.
5. The riparian right does not extend to seasonal storage of water.
6. The riparian rights remain with the land when the land is sold.
7. When riparian lands are subdivided, parcels that are severed from the adjacent water source lose their riparian rights unless the rights are reserved.
8. A riparian right is not lost by non-use.

New South Wales (NSW), Australia's most populous state, located on the eastern coast of the continent, provides a clear context to illustrate Australia's historical development of water rights laws. NSW inherited the common law of riparian rights by virtue of the Australian Courts Act (1828), which established the date for the introduction of British common law, including riparian rights, to the colony as July 25, 1828 (Harris, 2007). After that date, English court decisions did not bind colonial courts, and thus NSW courts could adopt, adapt or ignore any or all aspects of British precedent established after 1828 that might not be suitable to colonial conditions (Harris, 2007). Then as now, water scarcity in NSW was a condition to which new settlers, ranchers and growing cities had to adjust. The NSW judiciary, therefore, had an opportunity to introduce a different kind of legal system for the allocation of water resources. Given the aridity of the lands, the NSW courts could have applied and adopted the prior appropriation doctrine that was formalized in the American West after the gold rush in California in 1849, and was codified in the Colorado Territorial Constitution and subsequently in the Colorado State Constitution in 1865.

The prior appropriation doctrine was enacted to facilitate the entrepreneurial activity of gold mining, which could not have been sustained under the riparian doctrine. The NSW courts, on the other hand, affirmed the riparian doctrine, and in so doing ignored one of the more flexible responses to maximizing capital investments in an arid land (Harris, 2007). Instead, the historical dependence on grazing—a non-capital intensive industry that can co-exist with correlative rights—endured and was the only industry that could be efficient under the riparian doctrine. Times change, however, and a variety of factors – from burgeoning metropolitan areas to tourism to the emergence of viticulture and other lucrative industries (not to mention the historic, 10-year drought)—presented Australian leaders with major political and legal challenges with regard to water.

Colorado and the Prior Appropriation Doctrine

Colorado water law is a repudiation of riparian law, grounded in the right of prior appropriation, constitutionally guaranteed by sections 5 and 6 of article XVI of the Constitution, which establish and protect the right of any person or entity to appropriate the waters of the state and put them to beneficial use. Those sections provide that:

> "The water of every natural stream, not heretofore appropriated, within the state of Colorado, is hereby declared to be the property of the public, and the same is dedicated to the use of the people of the state, subject to appropriation as hereinafter provided….
> The right to divert the unappropriated waters of any natural stream to beneficial uses shall never be denied (Colorado Constitution, article VI).

Under the Colorado doctrine of prior appropriation, the person who first diverts water and puts it to beneficial use has a right superior to any other person who subsequently appropriates water from the same source. An appropriative water right is considered to be a "most valuable property right" based on the owner's right to use a certain amount of water, subject only to the amount of water physically available for appropriation, and must satisfy senior priorities (Navajo Dev. Co., Inc. v. Sanderson).

The right to appropriate water in Colorado is distinct from any ownership right in the land through which the water flows (Cech, Jones, 2007). Unlike under the riparian doctrine, the value of a water right in Colorado does not depend, in any way, on ownership of land next to or beneath a waterway. In Colorado, the value of a water right is the priority to use a certain amount of water from a specified source, such as a river or a lake.

Imagine the gold and silver miners in 1859 who depended on running water as an essential element of their prospecting. Mining claims were often located on land away from streams; the nature of the mining business hence depended on diverting water from a stream and delivering it to those claims. The riparian principle of proximity was not suited to the arid Western states and the new mining boom. Sharing water in the stream would not have worked either, as a miner needed to depend on a specific flow of water to make his sluice work properly. If flows in the stream were inadequate to supply multiple mining claims, it made no sense to share the limited flows; sharing water, as in the riparian system, would give each miner a "reasonable" amount of water, but not enough to operate multiple sluice boxes. It made more sense, then, that one miner—the one who was the first to claim the right to the water for his mining purposes—should carry on his operations, even if all others had to cease their operations as a result of not having enough water.

Colorado, and other western states such as California, thus developed a new doctrine to replace the riparian doctrine. The guiding principles of the prior appropriation doctrine are based on a usufructory right. To establish a water right, a party had to divert the water and apply it to a beneficial use. No person could "own" the stream or water in it, but he could develop a right to use the water for a beneficial purpose. The earliest users of the water gained a right to use it—to the exclusion of others—during times of shortage: “first in time, first in right.” On any river or stream, users knew the order in which water diversions were developed. If there was not enough water in the stream to satisfy all users, later users (those with “junior” water rights) had to stop diverting water so the earlier users (those with “senior” rights) could divert all the water to which they were entitled (Cech, Jones, 2007). Under the prior appropriation doctrine, water could be removed from a stream and used in locations distant from the stream; ownership of riparian lands was not a condition precedent to the use of water flowing in the stream. And finally, once a water right had been established, the right to use the water could be sold to third parties, and the party purchasing the water right also purchased the priority of the user from which he is purchasing the right. So a miner who purchased a very senior water right had the right to use the water in a new mining location, but had the same priority date that attached to the water right from the first claim.

Water rights owners in Colorado, therefore, have a vested interest in their property right and are hostile to the idea of government interference, except, of course, when their property right has no value because there is no water. Farmers depend on government money to build large reservoirs and other water infrastructure that can help assuage the affects of a long-term drought. Municipalities and industries, which also are water rights holders, likewise look to states and the federal government for assistance in finding ways to meet the growing gap between water supply and water demand. Neither the pure prior appropriation doctrine developed in the mid-19th century nor the pure riparian doctrine imported from England can solve the problems presented in the increasing arid climate of the 21st century.

Colorado River Compact of 1922

In addition to the private property rights assigned to the decreed use of a water right, Colorado also recognizes its obligations described in interstate compacts, the first of which was the Colorado River Compact, a 1922 agreement among seven states in the basin of the Colorado River that governs the allocation of rights to the river’s water. The Compact, by its very nature, acknowledges the dependence on the Colorado River of all states and all citizens in the river basin, regardless of contractual claims, property claims or jurisdictional claims.

Development was the prime concern of the Colorado River Compact when it was signed in 1922; unfortunately, environmental issues weren’t taken into consideration. Using and reusing the river water as well as frequent damming results in an unfavorable environment for native fish species. Dams block fish passage, reduce silt deposition and change water temperatures, all negatively impacting the natural ecosystem. High water usage has also caused the river delta, located in Mexico, to significantly deteriorate. Once a lush and green area from the high amounts of silt deposit, the vibrant ecosystem has now all but disappeared. To begin to reduce the damage, more water will need to be appropriated to Mexico.

The Australian governance of its largest river basin, the Murray-Darling, is strikingly similar; and just as Colorado could have offered lessons for Australia in the 19th century, Australia now is moving from its tragic reality to the hope of a better future, and can show the Colorado River Basin stakeholders an avenue for a bold move forward.

Australian Water Reform Program

Australia's longest river system, the Murray-Darling, drains a basin the size of France and Spain combined, but it no longer carries enough water to reach the sea. Although it still hosts anglers in its blue waters, pleasure boats that cruise its sandbanks toward the southern ocean and beach strollers along its banks, its ability to run depends on the continual action of a mechanical dredging vessel that runs around the clock to prevent the river mouth from silting up. After more than a decade of drought, Australia's central government continues to argue that the only hope of restoring the river to health is a complete reformation of how it is managed. Forty percent of Australia's agriculture comes from the Murray-Darling basin but its vines and fruit trees are dying and the economic consequences have been alarming (The Big Dry, 2007). Due to the balkanization of Australia's states and territories, negotiations over the federal constitution dealing with water rights were so divided that the water of the river was over-exploited, resulting in reduced flows and a threat to the security and quality of water supplies. States were allowing irrigators to use too much water; the mouth of the river was silting up, the water was becoming salty due to increased runoff from saline soils churned up by agriculture, the number of indigenous fish was falling because floods that induce them to spawn were rarer and toxic algae flourished in the warm, sluggish waters (The Big Dry, 2012). People worried that taps would run dry and farmers were alarmed about the uncertain security and quality of their water supplies (The Big Dry, 2012).

In 1994, the Coalition of Australian Governments (COAG) released its Water Reform Framework, after meeting to discuss policy related to the future of water resources on the continent (Council of Australian Governments' Water Reform Framework, 1994). Since then, Australia has enacted multiple initiatives and plans — with the approval of the states and the Australian parliament — to attempt to overhaul the management of the continent's rivers and water resources (Langford, J., Briscoe, J. 2011).

Through such reforms — including the establishment of a National Water Commission, the simplification of water rights in the legal system, the creation of water markets and the infusion of more than $13 billion Australian dollars (AUD) into the initiatives (Udall, B., 2010) — the central Australian government is urging the four states through which the Murray-Darling flows to hand their authority over the river to the federal government (The Big Dry, 2012). Planning is underway for the construction of large desalination plants in every major city, water recycling, interbasin transfers, rainwater harvesting and investments in agricultural infrastructure to the tune of $2 billion AUD (Udall, B., 2010). Other elements of the Australian water reform program are a strong focus on conservation aimed at keeping outdoor watering to a minimum as well as investing more than $3 billion AUD to purchase water from private owners of allocated water sources, all to be held by the federal government (Udall, B., 2010).

Australia responded to its drought crisis with a management plan that could serve as a model for management of the large, exploited rivers of the world, such as the Colorado River in the southwestern United States. Among other things, three states (New South Wales, Victoria and South Australia) agreed to: cap the amount of water taken from the river; maintain transparent public records of water-use rights; work to reduce salinity and increase flows of water to sustain fish and waterways, including the construction of fish ladders around dams and weirs and the release of extra water into important breeding grounds, spawning a recovery in native species; and spend more than $650 million AUD to boost environmental flows, mainly by stemming losses from irrigation, leaving more water in the river (The Big Dry, 2012).

The states and the federal commonwealth agreed to the creation of the Murray-Darling Basin Commission, a management body comprising the commonwealth and the multiple riparian states, all of which would have equal representation, and with all decisions to be by consensus

(Young, D., 2010). The commonwealth representatives agreed to a set of principles by which water should be managed throughout the country. These included a halt to irrigation subsidies; a requirement that farmers would pay for maintenance of dams and channels; an agreement on the level of water released for non-consumptive uses, as discussed above; and, of keen interest, the use of water markets and trades for all water, both within and between states (Young, D., 2010).

Two basic sorts of transactions exist: the sale of part of a farmer's water allocation for the year, or a permanent transfer. Even as far back as 2003, temporary exchanges between farmers in the same state accounted for one-tenth of all water used for agriculture, matching the cumulative amount of water that has changed hands permanently within the same state.

The trade in water has met with success. One government assessment of a pilot program for interstate trade found that such shifts prompted large investments in irrigation and food-processing and that water trading helps reduce damage from droughts (The Big Dry, 2007). For example, struggling dairy and rice farmers in New South Wales and Victoria have sold water to the booming orchards and vineyards of South Australia.

Australia's six biggest water reform policies can be further summarized as follows (Murray, J., 2010):

1. Water for the Future program: the declared objective of this program, according to the Federal Department of the Environment, Water, Heritage and the Arts, is to prepare Australia for a future with less water by addressing climate change, promoting the wise use of water, securing water supplies and supporting healthy rivers.
2. Private irrigation infrastructure program: through a government buy-back of water entitlements, more efficient and productive use of water will be realized with the assistance of major federal funding over a 10-year period.
3. On-farm irrigation efficiency program: improved efficiency and productivity of on-farm water use and management will be realized through the modernization of irrigation equipment and irrigation projects.
4. Non-urban water metering: non-urban water metering will be standardized nationally in order to have more accurate measurements of water usage from both rivers and

groundwater systems, and identify possible efficiency improvements to minimize water loss through delivery systems.

5. Menindee Lakes project: the reduction of evaporation of water in these lakes will improve water efficiency and secure a major water supply (Broken Hill) while protecting the local environment. This project will allow for surveys of groundwater resources and aquifer storage options.
6. Water entitlement buybacks: the federal government uses the slogan “Restoring the Balance in the Basins” for its promotion to buy back water entitlements from willing sellers. The amount of water entitlements far overreaches the actual water in many of Australia’s river systems, and especially in the Murray-Darling. As a result of these buy-backs, water can remain in the rivers, enhancing the chances of their long-term survival. .

A number of problems persist, however. The reforms do not address groundwater, only surface water in rivers. Farmers in some states can drill wells, establish plantations of trees that use water that would otherwise reach the river and build dams on small streams that trap runoff. (The drought undoubtedly encourages more dam-building that is out of compliance with regulations.) The rules in each state to regulate such groundwater use or dams vary greatly and enforcement is difficult. Each state has embraced water reforms differently and each continues to promote irrigation rights along its own stretch of the river unequally — although negotiations on a fair cap are ongoing. Still, a state such as New South Wales frequently exceeds its caps and farmers have not yet adjusted to planting different crops. (The Big Dry, 2007).

The federal government is urging the states to surrender their powers over the basin to the commonwealth in order for the government to develop a true picture of the use of water from wells and dams; to identify new, sustainable caps on water usage; and to help farmers meet the new restrictions by investing in more efficient irrigation or to allow the government to buy their water rights. The commonwealth is backing its plea with big bucks, offering up to $10 billion AUD for some of these plans. The trust in the central government’s ability to deliver, of course, remains constant (The Big Dry, 2007).

Colorado Courage: Present and Future Possibilities for Water Reform

Top thinkers and researchers in the United States have looked to Australia for lessons for Colorado and the Colorado River Basin, paying particular attention to the several remarkable elements of the Australia water reform program (Udall, B., 2010):

1. It utilizes markets to move water to maximize economic return.
2. It puts in place independent bodies for water oversight, such as the National Water Commission.
3. It advocates for the country to live within its limits; to this end, the central government is investing in purchasing water from willing sellers in order to put water back into river systems.
4. It finances the construction of a desalination plant for every major city.
5. It provides funding for water studies at levels unimagined in this country — upwards of $200 billion AUD.
6. It has reached out to economists, scientists, citizens and other groups — beyond just engineers and attorneys —to come forward to help design a new system.
7. It has moved forward to codify new statutory water management plans, new legislation, new departments of water policy and procedures, and new metering programs that would apply on a basin-wide and country-wide basis.

In Colorado, several proactive steps have been taken that parallel those taken in Australia. For example, the state legislature in 2005 approved the Colorado Water for the 21st Century Act Basin Roundtable Process, which envisions the negotiation of interbasin compacts on equitable division of the state's water, with a goal of replacing lengthy legal disputes over water allocation with a cooperative and collaborative problem-solving process (IBCC, 2013).

In addition, the Colorado River Cooperative Agreement — a historic pact signed in spring 2012 by Denver Water, the primary provider for the state's population, along with 40 other water providers, local governments and even the ski industry—focuses on providing proper balance among competing interests, a shared vision for better river health, reliable supply for all water users, and a future of cooperation, not conflict (Colorado River Cooperative Agreement, Denver Water, 2013). The visionary agreement provides for:

1. Resolution of longstanding conflicts and a holistic approach to resolving Colorado water disputes
2. Cooperative, long-term efforts to improve the health of the Colorado River mainstem and its tributaries
3. Additional water supply for those who live, work and play on the Western Slope and for customers of Denver Water.

The agreement has the potential to yield benefits similar to those produced by the Australian water reforms — ushering in a new era of cooperation, providing protections for river flows and water quality along the entire reach of the mainstem of the Colorado River, and improving the health of Colorado's rivers and streams by dedicating funds to pay for water treatment and aquatic habitat improvements in the Colorado River Basin (Colorado River Cooperative Agreement, Denver Water, 2013).

Another potentially far-reaching pact signed in 2012, the U.S.-Mexico Colorado River Agreement, provides for a series of joint cooperative actions between the United States and Mexico aimed at enhancing water infrastructure and promoting sharing, storing and conserving water as needed during both shortages and surpluses (Department of the Interior, 2012).

Possible Lessons from Australia for Colorado

Despite the promising steps that Colorado has taken in the recent past, its future depends on brave leaps forward. Australia has advocated for a government-owned system that combines private/public ownership and cooperation. Engineers who have worked in administering Colorado River Basin and South Platte Basin water over the last half-century have proposed establishing a single water power authority — operating outside of the prior appropriation system — that could increase yields in the basin by 150%, based on the management of the system as one large water district, as Australia is attempting to accomplish with the Murray-Darling system (Spann, S., 2012).

All of the water could be government-owned, as in the Australian model, with the intent of benefiting each water user in the basins. Lease-backs of agriculture water instead of "buy and dry" could become commonplace — again, mimicking the Australian regime. Timing of share releases, based on current mutual ditch operations coupled with the Murray-Darling protocol, could lead to plentiful water supplies even in times of water scarcity. The Colorado River system could be managed from the top of the Colorado Rockies to the Gulf of Mexico or the Gulf of Cortez as one water basin, realizing the needs, obligations and assets of all stakeholders. Indeed, the lessons of the Australian water reform program have much to offer for the southwestern river basins of the United States.

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The Regulatory Trade-Off in Real & Financial Markets

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ABSTRACT

It remains undeniable that the regulatory framework in place prior to the financial crisis is built on a flawed system. But does this automatically suggest that more regulation is better? In general, we have to distinguish between the quantity and quality of rules and in particular, the enforcement. The last issue does not necessarily mean we need more regulation – sometimes a better enforcement is enough. Still there remains the question about the degree of regulation. This paper builds a new theory on the optimal degree of the regulatory trade-off. We elucidate the optimal degree of efficacy in financial regulation and compare it with the optimal degree in goods market regulation. We prove that regulation does not follow a simple economic trade-off by costs and benefits in financial markets. In finance, the regulatory trade-off is a boundary solution, i.e. the efficient solution is either comprehensive or no regulation at all. Either way you prefer, financial markets must be regulated differently in comparison to the real economy.

INTRODUCTION

Many experts argue that the deficiencies of the regulatory system prior to the financial crisis caused the recent mess. In fact, one problem is the mere focus on microprudential regulation in banking and finance (Brunnermaier et al. 2009; French et al. 2010). The microprudential approach is just aimed at preventing the failure of individual financial institutions. Thus, it has a partial equilibrium view without taking into account network effects and interdependencies over time. Consequently, to mitigate the systemic risks we have to add a macroprudential approach that recognizes the general equilibrium effects, i.e. feedback loops, interdependencies, bubbles and so on (Bernanke 2008). Interestingly, despite the on-going debate about the Dodd-Frank Act in the US, there is no regulatory theory which indicates the optimal degree of regulation. We provide a simple theory that identifies the regulatory trade-off in different fields of market environments – real and financial markets. Subsequently, our model closes a current gap in economics and has strong policy implications. But the new insights will also help business leaders to prepare for the challenges ahead.

Putting together the existing insights from the literature on banking regulation and the functioning of financial markets (Tirole 2011), we argue for a different approach to answer this problem. We utilize an optimal control approach under specific constraints. Here, we model the specific environments of real and financial markets and identify the differences. This new idea allows us to analyse the regulatory trade-off and is in contrast to the standard approach by Freixas and Gabillon (1999).

We find novel insights about what distinguishes regulation in real and financial markets. First, the regulatory trade-off in the real economy and financial economy is different. While regulation in the real economy follows more likely a typical cost and benefit analysis, regulation in financial markets is rather different. In financial markets international regulation plays an important role because financial assets are more mobile and regulatory arbitrage puts conflicting incentives in place. Second, we show that international financial regulation has not only a singular regulatory trade-off of balancing costs and benefits. It rather has a boundary solution, i.e. either no international regulation or comprehensive regulation for all. Third, we find that the regulatory trade-off in financial markets depends on the shadow price (effect on utility) for risky assets and regulation costs. The higher the benefit from risky assets on utility in comparison to the costs of regulation, the more likely no international regulation is the efficient solution. This sounds astounding like a pure free-market or Hayekian view. However, on the contrary, it just shows as long as all regulatory authorities do not agree on a level playing field in finance, it is insufficient and unsuccessful. From a domestic point of view, an efficient or optimal international regulatory framework in finance requires mutually agreed rules on the international level. Only such a regulatory framework is able to consider the problem of systemic risks and interdependencies.

The literature on banking regulation has a long tradition. There are different aspects considered in this literature. The first and most important is the failure of financial institutions. Dimond and Dybivd (1983) argue for a deposit insurance that could provide a solution to bank runs. Another aspect in literature is solvency regulation and the implications of capital buffers (Crouhy and Galai, 1986; Kim and Santomero, 1988). More in our interest is a small literature on the question of who should be regulated. Laffont and Tirole (1986) argue that banks possess better information regarding their own risks and returns and just regulators will never be effective to regulate the dynamics of financial entities. However, we approach the existing problem from a different angle, and thus get fresh answers to a current debate in politics and business.

The rest of the paper is organized as follows. In section 2, we present the benchmark and extended model and discuss the results. Section 3, concludes the paper.

The Model

Let us now develop a simple model that illustrates the main difference between the regulatory trade-off in the financial and real market. In general, the basic trade-off in regulation is due to the additional (transaction) costs of new rules which will reduce beneficial real or financial investments. On the other hand regulation contains benefits because it ensures (real or financial) market stability and mitigates institutional failures or a crisis. Next, we model this idea in a rigorous analytical framework.

Let $s(t)$ denote the stock of risky real or financial investments and $l(t)$ the newly defined regulatory safeguards or buffers. Both variables are dependent on time t. In financial markets it is possible to imagine that $s(t)$ is the stock of risky assets and $l(t)$ the liquidity buffers. Furthermore, in country i the benevolent regulator maximize the stability of real and financial markets given the typical characteristics in the market environment. Suppose market stability is a scarce resource in the economy. The relationship between the change of risky assets over time $ds(t)/dt$ and the safeguards $l(t)$ gets

$$-\dot{s}(t) = l(t) \tag{1}$$

Intuitively, the risky investments are a declining function of the regulatory requirements over time. This reflects the regulatory trade-off: More regulation or safeguards $l(t)$ imply higher costs in terms of lower investments and thus a decline in investments over time $-\dot{s}(t)$. Hence, $l(t)$ produce either real or financial stability in markets and creates utility for the regulator. To describe this idea analytically, we define a typical concave production function $F(l(t))$ where the first derivative is positive $F'(l(t)) > 0$ and second derivative is negative $F''(l(t)) < 0$.

However, the more regulation is in place the lower the investments in the economy. This linkage implies less economic or financial growth and thus welfare costs. We model this by a typical cost function *Z(l(t))*. The derivatives are as in standard economics: *Z'(l(t)) > 0*, and *Z''(l(t)) > 0*. Both functions are elements of the overall utility function *U(F(l),Z(l))* of a benevolent regulator in country *i*. Again, we suppose that the derivatives of the utility function is as in standard economics: $U(.)_F > 0$, $U(.)_Z < 0$, $U(.)_{FF} < 0$, $U(.)_{ZZ} < 0$, and $U(.)_{FZ} = 0$. The first derivatives demonstrate that marginal utility increases with more produced stability *F(l(t))* and decreases with higher costs *Z(l(t))* due to new regulatory rules. The second derivatives indicate that both functions have diminishing returns or costs of regulation.

Note that both functions inside the utility function are only dependent on *l(t)*, i.e. the regulatory safeguards. Thus, the primary control variable for the benevolent regulator in country *i* is to find the optimal amount of regulatory safeguards or buffers *l(t)*. Next, we solve the basic model for real markets. We suppose that the benchmark model reflects the regulatory situation of a real economy. On the contrary, financial markets are special because financial assets are highly mobile and international financial regulation is still pretty diverse. Thus, regulatory arbitrage is a specific problem in finance but not in the real economy. International trade in the real economy is based on the mutual agreement of strict and rigorous product standards. This is the key difference to finance. In financial markets the national safeguards *l(t)* behave differently – sometimes even in contraction to rules in other countries – which gives incentives to regulatory arbitrage. That means you move your financial assets to countries with less regulatory requirements and safeguards to maximize your domestic profits. This simple difference between real and financial markets may sound astonishing but it exactly reflects the current debate in regulation. Today experts argue for more macropurdential regulation in finance (and not more regulation in the real economy), i.e. taking into account the interdependencies, systemic risk, and feedback effects in financial markets. Thus, the major difference between real and financial markets is simply characterized by the issue of interdependencies which require both a level playing field and regulation which accounts for those effects. Now, let us come back to the regulatory problem in the real economy.

Suppose the benevolent regulatory in country *i* is maximizing utility by determining the optimal time path of regulatory safeguards or buffers. In this case the regulator solves the following problem

$$\max_{l(t)} \int_0^T U[F(l(t))\,;Z(l(t))]\,dt \qquad s.t. \quad -\dot{s}(t) = l(t) \tag{2}$$

where $s(0) = s_0$ and $s(T) \geq 0$. We compute the solution of this optimal control problem by setting the Hamiltonian function such as

$$H(l(t)) = U[F(l(t))\,;Z(l(t))] - \lambda(t)l(t)\,. \tag{3}$$

Next, we maximize *H* with respect to the control variable *l(t)*. The next proposition summarizes the solution.

Proposition 1: *The solution of the optimal control problem for the real economy, after optimizing the Hamiltonian function in respect to l(t), results in*

$$U_F \frac{dF(l(t))}{dl(t)} + U_Z \frac{dZ(l(t))}{dl(t)} = 0\,. \tag{4}$$

The proof of proposition 1 is relegated to appendix A. But the intuition of proposition 1 is equally trivial and important. The first term in equation (4) measures the benefits of the produced market stability via more regulatory safeguards *l(t)*. The second term, expresses the disutility of market regulation or cost of regulation. Consequently, the optimal degree of regulation – i.e. the regulatory trade-off – results by balancing or equating costs and benefits in equation (4). In summary, the optimal amount of regulatory safeguards in the real economy follows an economic trade-off of costs and benefits determined by equation (4).

Admittedly, this intuitive solution is only the case for our benchmark model which describes the real market environment. However, as pointed out earlier, the optimal regulatory trade-off might be different in financial markets because of the specifics in finance. To analyze the regulatory trade-off in financial markets we need to understand the accumulation effect of interest rates and the role of international regulation.

In the benchmark model, we have assumed that the regulatory costs, *Z(t),* are a flow variable that dissipate over time. However, the financial crisis has illustrated that cost of regulation does not dissipate over time. In contrary, companies undertake all they can to reduce those cost especially via regulatory arbitrage. This issue is a particular problem in finance because financial investments are highly mobile across countries. Hence, we have to consider the international network of rules and regulations – with loopholes and sometimes even contradictions to national law – that affect the (national) cost function of regulation. This modelling takes into account that especially the accumulation of financial risks can only be reduced by a consistent framework of international regulations. Suppose the following relationship,

$$\dot{Z}(l(t)) = bl(t) - ca(t) - dZ(t) \tag{5}$$

where *b,c > 0* and *0 < d < 1,* and all parameters are constant coefficients. Intuitively, the change of costs $\dot{Z}(l(t))$ due to regulation depends on three terms. First, the national safeguards/rules *l(t)* themselves. The higher the required safeguards, the higher the explicit and implicit costs due to fewer money for investments *s(t)*. Second, the consistency and amount of international regulation *a(t)*. A more consistent and sophisticated international structure of rules establishes a level playing field and thus mitigates the costs of national regulation and regulatory arbitrage. Third, it depends from the level of the cost function *Z(t)* too. Obviously, the potential increase of regulatory costs over time should be less if the existing amount of safeguards and thus costs are already high. To close the model, we take the variable *a(t)* – reflecting the international level of regulation – as a further control variable into consideration such as

$$\dot{s}(t) = - a(t) - l(t). \tag{6}$$

Equation (6) states that higher national safeguards *l(t)* and higher international safeguards *a(t)* reduce the growth of risky assets/investments over time. This is intuitive because the higher the buffers a financial institution has to hold, the lower the amount of money for investments. Consequently, the optimal control problem in financial markets for the benevolent regulatory in country *i* results in

$$\max_{l(t),a(t)} \int_0^T U[F(l(t))\,;Z(l(t),a(t),Z(t))]\,dt \tag{7}$$

$$s.t. \qquad \dot{s}(t) = - a(t) - l(t)$$

$$\dot{Z}(l(t)) = bl(t) - ca(t) - dZ(t)$$

where $s(0) = s_0$, $s(T) \geq 0$, and $Z(0) = z_0$, $Z(T) \geq 0$, and $0 \leq a(t) \leq A$. The last inequality captures the international range of regulation which has an upper limit of A. This is a realistic assumption because an agreement about international financial regulation is always limited by a compromise, $\hat{a(t)} \in [0,A]$. Achieving an international rule set is a sophisticated endeavour within an international authority of conflicting interests across countries. This implies that international regulation *a(t)* ranges always in this interval, i.e. no compromise and no common rules ($a(t) = 0$), or all countries agree and choose the upper limit ($a(t) = A$), or something in between the two extreme regimes, ($a(t) = \hat{a(t)}$). The Hamiltonian function for this problem – let me stress that this is the optimal control problem for the financial sector – yields

$$H(l_t, a_t) = U[F(l_t); Z(l_t, a_t, Z(t))] + \lambda_Z(t)[bl_t - ca_t - dZ(t)] - \lambda_s(t)[l_t + a_t] \quad (8)$$

where the subscript of each costate variable λ_Z indicates the state variable associated with it and the subscript *t* indicates time dependencies. The benevolent regulator in country *i* optimize the Hamiltonian *H* with respect of *l(t)* and *a(t)*. Note, that in this case we have to consider the Kuhn-Tucker condition $\partial H/\partial l_t \leq 0$, together with the complementary-slackness condition $l(t)(\partial H/\partial l_t) = 0$. Both conditions show that we can rule out *l(t) = 0*, i.e. no national safeguards for the financial sector is not a solution (Appendix B).

Theorem: *The optimal choice of international regulation a(t) will never be in the interior of the interval* $a(t) \in (0, A)$. *The optimal choice of international regulation from the view of an benevolent regulator in country i, gets a boundary solution with either a(t) = 0 or a(t) = A.*

The proof is in appendix B. This Theorem provides an absolutely new insight into the dilemma of financial regulation from a national point of view. The national regulatory system who is maximizing the welfare of its citizens will never have an optimal solution in a financially integrated and interdependent world because every weak compromise, $\hat{a(t)}$, inside the interval is not efficient. Intuitively, as long as one country *x* offers regulatory arbitrage every compromise of course is ineffective. Hence, the firms in country *i* move assets and investments easily to country *x* even this country is very small for instance an island. Even more surprising is the implication that if all countries agree on a weak compromise, $\hat{a(t)} < A$, it's not an optimal solution. The reason is that international regulation in-between increase the cost of regulation *Z(l(t))* but does not produce sufficient (financial) stability *F(l(t))*. Consequently, only no international regulation or regulation at the upper limit *A* are a necessary and sufficient solution of the optimal control problem of the benevolent regulator in country *i*.

The final step is an in-depth analysis of the two boundary solutions *a(t) = 0* or *a(t) = A* of international regulation in financial markets. What determines both states? We are able to show that the shadow price of risky assets (λ_s) as well as the shadow price of regulation ($b\lambda_Z$) are the two distinguishing factors.

Proposition 2: *The boundary solution of international regulation is determined by the shadow price of risky assets in comparison to the shadow price of the regulatory costs, such as*

$$a^*(t) = \binom{0}{A} \Leftrightarrow \lambda_s \binom{>}{<} b\lambda_Z. \tag{9}$$

Proof of proposition 2 is in appendix C. Simply, if the shadow price of a risky asset λ_s is lower than the shadow price of the regulatory costs $b\lambda_Z$, we prefer the upper limit *A* of international regulation – and otherwise. Intuitively, a low shadow price for risky assets, *s(t),* means that an additional unit of a risky asset does add less utility than more regulation. Consequently, you prefer a stricter regulation and thus the upper limit *A* is optimal.

But there remains a ordinary question: Does $a(t) = 0$ mean no international regulation in finance? Mathematically yes, but economically and politically it's debatable. In general, the debate is similar to the opposing views of F. Hayek and J. Keynes in macroeconomics. While Keynesians always argue in favour of government intervention and regulation, admirers of Hayek oppose this view. They point out the importance of free markets. Both diametrical opinions seem to be efficient solutions as our model show. However, are they realistic in government or business practice of today?

There are two arguments not considered in our model: First, despite the independence of central banks, they intervene in financial markets defined by government principles such as price-stability, low unemployment and high economic growth. Thus, choosing the interest rate according to the Taylor rule and providing liquidity (lender-of-last-resort) limits automatically the idea of free markets proposed by Hayek. However, our stylized model, still very insightful, does not account for these institutional issues. Consequently, the boundary solution of no international regulation is probably neither achievable nor realistic in the reality of today. But what remains achievable is the global commitment and dialog to achieve a solution of international regulation at the upper limit *A*. Second, there is empirical evidence that people are willing to pay substantial fees or taxes if this mitigates national or global catastrophes (Pindyck and Wang, 2009; Barro, 2009; Parson, 2007; Sunstein, 2007; Posner, 2004). This may affect the assumption of the standard cost function of regulation in our model. If people are willing to pay for less crisis this may result in a cost function which is less convex. The optimization with a modified cost function leads to a singular equilibrium at the level of comprehensive international regulation, A. The intuition is simple: the new cost function reduces the weight of costs and increases the weight of benefits of the regulatory framework.

Interestingly, this model does not only reveal policy conclusions for the national and international regulator. It also demonstrates both business and leadership implications. An important business implication is the awareness that the regulatory trade-off is different between the real and financial economy. Thus, in terms of regulation we have to treat both market segments (real vs financial) differently. However, the leadership implications are even more significant because investing in a financial environment and utilizing regulatory arbitrage, despite the knowledge of the regulatory dilemma at home, is not automatically contradictory to principals of corporate social responsibility (CSR). As matter of fact it is a global policy failure. Policy-makers in all countries have failed to achieve a level playing field in financial markets and that is not the fault of businesses.

CONCLUSION

This paper presents a unique contribution to the literature of regulation with strong economic and business implications. We show that financial regulation is different due to higher mobility of financial assets, the interdependencies of financial markets and the complexity of international financial regulation. Trade relationships are usually based on mutually negotiated trade agreements with certain standards for both sides. In financial markets this is not the case due to different national rules and a few international rules with loopholes and incentives to regulatory arbitrage. Given this difference we show that the regulatory trade-off of costs and benefits is true in the real economy but false in a financial economy. The national and international regulation of financial markets is even more surprising because an international agreement based on a weak compromise does not lead to an efficient solution. International regulation has two optimal regimes: No regulation or comprehensive regulation.

In summary, the model provides an innovative insight into the current debate about regulating financial markets and the responsibility of regulators and businesses on this issue.

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Technical Appendix (just for review process)

Appendix A

Proof of Proposition 1:

First calculate the first-order condition of the Hamiltonian function *H*. It is

$$\frac{\partial H}{\partial l(t)} = U_F \frac{dF(l(t))}{dl(t)} + U_Z \frac{dZ(l(t))}{dl(t)} - \lambda(t) = 0, \tag{A1}$$

where $U_F = \frac{dU}{dF}$ and $U_Z = \frac{dU}{dZ}$. To make sure that this problem maximizes the Hamiltonian, we simply check the sign of the second derivative. The Hamiltonian *H* is maximized if $\frac{\partial^2 H}{\partial l(t)^2} < 0$ which is easily to check and the case in our model. Next, we analyse the time path of $\lambda(t)$. The maximum principle tells us that the equation for λ yields

$$\frac{d\lambda(t)}{dt} = -\frac{\partial H}{\partial s(t)} = 0. \tag{A2}$$

This condition imply $\lambda(t) = c$, i.e. is constant. To define the constant *c*, we use the transversality conditions

$$\lambda(t) \geq 0, \quad s(t) \geq 0, \quad \lambda(t)s(t) = 0. \tag{A3}$$

It is immediately clear that $\lambda(t) = 0$ because of equation (A2). With $\lambda(t) = 0$, equation (A1) reduces to equation (4) in the main text. Q.E.D.

Note: $l(t)^* = l^*$, i.e. the optimal degree or amount of national safeguards is constant over time in our model. The amount of risky assets, as in reality, is given by $s(t) \geq 0$. In the end, equation (4) in the main text balances cost and benefits of regulation and is similar to the well-known condition in microeconomics: Marginal costs (MC) = Marginal Revenue (MR).

Appendix B

Proof of Theorem:

We postulate $l(t) > 0$. Then is follows from complementary slackness condition that

$$\frac{\partial H}{\partial l(t)} = U_F \frac{dF(l(t))}{dl(t)} + \lambda_Z b - \lambda_s = 0. \tag{B1}$$

Since, the second derivative of *H* is negative, we have a maximum. In addition, we maximize *H* with respect to *a(t)*:

$$\frac{\partial H}{\partial a(t)} = - c\lambda_Z - \lambda_s. \tag{B2}$$

Besides, *a(t)* is restricted to the closed control set *[0,A]*. Thus, to maximize *H*, the left-hand-side boundary solution is *a*(t)=0,* if $\frac{\partial H}{\partial a(t)} < 0$, and the right-hand-side boundary *a*(t)=A* if $\frac{\partial H}{\partial a(t)} > 0$.
In general,

$$c\lambda_Z + \lambda_s \begin{pmatrix} > \\ < \end{pmatrix} 0 \quad \Rightarrow \quad a^*(t) = \begin{pmatrix} 0 \\ A \end{pmatrix}. \tag{B3}$$

From complementary slackness together with equation (B1), we see

$$\lambda_s = U_F \frac{dF(l(t))}{dl(t)} + b\lambda_z. \tag{B4}$$

Using equation (B4) in equation (B3), gets

$$U_F \frac{dF(l(t))}{dl(t)} \begin{pmatrix} > \\ < \end{pmatrix} - (b + c)\lambda_Z \quad \Rightarrow \quad a^*(t) = \begin{pmatrix} 0 \\ A \end{pmatrix}. \tag{B5}$$

The optimal choice of *a*(t)* thus depends on λ_Z. The optimal policy choice for international regulation *a(t)* is a boundary solution.
Next, we show that *a*(t)* is never a interior solution in *(0,A)*. Consider the equations of motion of the following costate variables:

$$\dot{\lambda}_Z = - \frac{\partial H}{\partial Z(l(t))} = - U_Z + \lambda_Z d \tag{B6}$$

$$\dot{\lambda}_s = - \frac{\partial H}{\partial s(l(t))} = 0 \qquad \Rightarrow \lambda_s = constant \tag{B7}$$

If *a*(t)* is an interior solution, then

$$c\lambda_Z + \lambda_S = 0. \tag{B8}$$

Since λ_S is a constant, equation (B8) shows that λ_Z must also be a constant, which implies that

$$\dot{\lambda}_Z = 0 \quad \Rightarrow d\lambda_Z = U_Z \tag{B9}$$

But if λ_Z and *d* is constant then this requires U_Z to be constant, too. Since *U(.)* is monotonic in *Z(.)*, there can only be one value of *Z(t)* that would make U_Z take this particular and constant value. Thus *Z(t)* must be constant too if *a*(t)* is an interior solution. But given that $Z(T) = z_0 > 0$, , the transversality condition requires

$$Z(T)\lambda_{Z(t)} = 0. \tag{B10}$$

With a positive *Z(t)*, it is required that $\lambda_{Z(t)} = 0$. Since $\lambda_{Z(t)}$ is constant by equation (B9), we get

$$\lambda_{Z(t)} = 0 \quad for\ all \quad t\epsilon[0,T]. \tag{B11}$$

However, $\lambda_{Z(t)} = 0$ would imply for an interior solution, by eq. (B4) with $U_F\frac{dF(l(t))}{dl(t)} = 0$, which contradicts the assumptions that U_F and $\frac{dF(l(t))}{dl(t)}$ are both positive. Consequently, an interior solution of *a*(t)* must be ruled out. Q.E.D.

Appendix C

Proof of Proposition 2:

The boundary solution is linked to

$$U_F\frac{dF(l(t))}{dl(t)} = \lambda_s - b\lambda_Z. \tag{C1}$$

Intuitively, the positive effect of regulation on utility measured by $U_F\frac{dF(l(t))}{dl(t)}$, equals to the shadow prices of risky assets and cost of regulation. Using equation (C1) with condition (B5) gets equation (9) of proposition 2 in the main text. Q.E.D.

A MODEL OF HIGH-TECH ENTREPRENEURIAL CAREERS: THE LIFE AND CAREER OF STEVE JOBS

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INTRODUCTION

The financial and business success of high tech entrepreneurs Steve Jobs of Apple, Bill Gates of Microsoft, and Mark Zuckerberg of Facebook have captured the interest of academics, practitioners, and the general public. The products developed by their companies have changed the way businesses operate, how people spend their work and leisure time, and the ways they connect with each other. The companies these entrepreneurs have developed are some of the country's wealthiest companies, with Apple edging out Exxon for highest valued company for much of 2012. While recent analytical doubts about the future of Apple have seen Apple drop out of the number one spot of financial top companies, Apple's long term viability is not in question (Myuhi, 2013). These and other high profile computer and high tech companies (e.g. Google) are viewed as highly desirable places to work by college graduates. Also capturing the public's interest is the unimaginable wealth these individuals have amassed, often at relatively young ages, compared to most successful entrepreneurs. While embodying the American dream, the success of these entrepreneurs has world wide appeal.

The meteoric rise, dramatic fall, and spectacular comeback associated with Steve Jobs' career path is an evocative example of the risks and rewards associated with following an entrepreneurial career. While research on entrepreneurs has primarily focused on their characteristics, there is limited research on the career paths of entrepreneurs in either the careers or the entrepreneurship literature. Traditional stage and linear models of careers do not appear to fit the career paths that Jobs, Gates, Zuckerberg and other high tech entrepreneurs have followed. Thus, the purpose of this paper is to propose a new model of entrepreneurial careers that better reflects the realities of pursuing a career in the high tech computer industry. The career path of

Steve Jobs is used to illustrate the entrepreneurial activities that comprise the stages, phases, and ages components of the proposed model.

STEVE JOBS

Steve Jobs' life story and career path offer management scholars a modern day case study in which to explore career theories and models. The interest in Steve Jobs' personal life and management style, along with the popularity of Apple's consumer electronic products, including the iMac, iPod, iPhone, and iPad, offers academics an engaging and relatable business case relevant to several disciplines. His successful return to Apple after a very public firing add to the uniqueness of his story.

Steve Jobs’ life and career combine to create a compelling story on many levels. There is the rags to riches story of an adopted child who achieves cult like adoration from the customers who buy his products. There are spectacular failures along with undreamed of successes. There are incredible self-disappointments including being ousted from a company he founded by a CEO and a board he chose. There are imaginative designs after multiple revisions. There are enemies created and friends alienated by a lack of social skills. There are huge risks and ultimatums given to corporate giants. There is the brutal treatment of those he called friends. There is a hero who battles cancer and a genius whose work is cut short at the age of fifty-six. At the heart of the story, there is an entrepreneur.

Steve Jobs’ career exemplifies the unique path that high tech entrepreneurs may follow. This paper differentiates the high tech entrepreneurial career path from other stage models of careers. His early career path can be followed from Apple, to Next, to Pixar, and back to Apple. There are some aspects of entrepreneurial career theories that may apply to his early career decisions. However, it is after he is fired from Apple that his unique high tech career path emerges and serves as an illustration for the proposed model. Research on the mid-career paths of entrepreneurs may differ greatly from the early career paths of entrepreneurs just as it may for all careers. Research on entrepreneurs’ long term career paths is lacking. In addition, research is lacking on differentiating the career path of entrepreneurs from standard career theories.

Although the career trajectory of Steve Jobs is utilized to illustrate the new model that is presented, Steve Jobs is not alone in exhibiting a unique high tech entrepreneurial career path. Throughout the world there are examples of entrepreneurs who do not fit traditional academic models. Some include Richard Branson, Bill Gates, George Lucas, Mark Zuckerberg and others. Silicon Valley offers numerous examples of high tech entrepreneurs who have not followed traditional entrepreneurial paths. It is short sighted to not examine the career paths of these entrepreneurs. Their successes serve as inspiration for other would be entrepreneurs, their stories offer business lessons for future generations of management practitioners, and their "unique" career paths are likely to become the norm for those who choose to work in high tech companies. Careers researchers must begin to reformulate their assumptions about the careers of high tech entrepreneurs.

CAREERS RESEARCH

Developmental theories of career development assume that "career development is a process that takes place over the life span." (Super, Savickas, & Super, 1996, p. 28). Numerous psychologists and sociologists have suggested that individuals progress through distinct career stages, where each career stage is characterized by unique career concerns, psychological needs, and developmental tasks. Most of these developmental theories of career development also assign an expected age range to each stage in their career path model (Levinson, 1978; Hall, 1976). The key assumption underlying stage models of careers are that careers are linear, with individuals progressing in a step by step fashion through each career stage. These models do not explicitly recognize that individuals can cycle through the various stages several times in their careers. Entrepreneurial careers which are often characterized by repeated failures and multiple start-ups do not conform to traditional career stage models. Also problematic is the fact that some high profile entrepreneurs are successfully running their own companies before the age of thirty. It is doubtful that these young millionaires and billionaires consider themselves to be in the early stages of their careers.

Donald Super in his model of careers (1980) emphasized the fact that careers develop over time. That is, while occupational decisions might otherwise be considered in relative isolation, Super's work suggested that such decisions must be considered with reference to the past and the future. In reviewing Jobs' career path, one can clearly trace the linkages between his occupational decisions. For example, the software developed at NeXT is utilized in Apple's current operating systems.

Although most models of career development have been based on the careers of white middle class males, some models have been developed for specific populations including women (Fossen, 2012), entrepreneurs with and without dependents (DeMartino, 2006), the MBA student (Nabi, Holden, & Walmsley, 2010), minorities (DeCaro, 2010), transnationals (Portes, 2002), Cuban-Americans (Peterson, 2001) and for specific geographical regions such as Finland (Brannback & Carsrud, 2008). Few models exist which address the unique aspects of entrepreneurial careers. Plehn-Dujowich (2010) has identified a model for serial entrepreneurs; these are entrepreneurs who repeatedly start new businesses across their careers, such as Richard Branson (Wright, Robbie, & Ennew, 1997). There is no career model for *One Hit Wonders*, entrepreneurs who develop one successful company across their life span such as Sam Walton or Walt Disney although some have investigated entrepreneurs with one hit item fad businesses (May, 2010).

ENTREPRENEURSHIP RESEARCH

The study of entrepreneurship is relatively young. Yet, in a short time researchers have put forth and studied numerous theories of entrepreneurship. These theories seek to explain the process of entrepreneurship and attempt to predict who will become entrepreneurs or what conditions lead to entrepreneurship. Besides helping academics to understand the entrepreneurial process, these theories have the goal of assisting people who are or want to become entrepreneurs. However, there has been very little research on the career paths of entrepreneurs, nor the stages they may go through as their careers unfold.

There is still the problem of the definition of entrepreneurship. It has been defined as innovation (Schumpter, 1958), initiating, maintaining, and developing a profit-oriented business (Cole, 1965), making significant decisions about changes which affect resources of a company (Sawyer, 1958), risk-bearing (Mill, 1848), ultimate formal authority within an organization (Weber, 1917), or making changes in strategy for an existing firm that alter the state or pattern of resources deployment (Ginsberg, 1988). Today there are many definitions of entrepreneurship accepted and each researcher is responsible for defining precisely what type of entrepreneur or entrepreneurial activity they are studying. There is still much discussion about whether entrepreneurship can take place in a corporate environment (Guth & Ginsberg, 1990) or whether street peddlers should be included as entrepreneurs. An inclusive definition which permits a broad exploration of entrepreneurship is "a process by which individuals - either on their own or inside organizations - pursue opportunities without regard to the resources they currently control" (Stevenson *et al.*, 1989, p. 23).

In the nineteenth century an entrepreneur was any successful business man. Books were written about business tycoons such as Astor and Vanderbilt. These descriptions assumed entrepreneurs were owners. Early historians described the entrepreneur's motivations as material wealth, public recognition and esteem, and the welfare of society. His distinguishing qualifications were hard work and good luck (Livesay, 1982). The study of entrepreneurship entered the professional disciplines in the late 1920s. N.S.B. Gras and his colleagues at Harvard attempted to relate the business executive to the management of the firm and the socioeconomic environment in which the firms operated. These Harvard academics produced a stream of case studies on business executives and firms (Livesay, 1982). Today, much of the study of entrepreneurs is still based on case studies. This has led to numerous criticisms of the history of entrepreneurial research. Historians may have been studying the careers of business tycoons instead of the formation of new companies (Vesey, 1982).

There is still much work to be done in the field of entrepreneurship. No one theory has been shown to explain the process completely. While research in the field is growing at an amazing rate, there are still some basic problems to be worked out in the grounding of entrepreneurial theory. There are two major streams of theory building in entrepreneurship; psychological and sociological. Sociological theories look at how the environment affects entrepreneurship. These studies began with McClelland's work on the need for achievement (1961). He felt that the high economic and social growth in some societies fostered entrepreneurship. In his view, this growth was owed to a large segment of these societies being high in need for achievement. Hagen's (1960) theory states that entrepreneurs are lower status groups trying to overcome their social inequality with economic venturing. He drew on historical cases from different countries. Recent historical research has found evidence that it was not the lower status groups in the country who were creating new businesses (Fleming, 1979; Kaser, 1978). Hagen's theory is now dismissed because of these inconsistent findings. Perhaps his theory should not be dismissed so easily. Sociological theories have tried to come up with one theory of how environmental conditions affect all members of the population.

Psychological theories of entrepreneurs look at the distinguishing psychological characteristics entrepreneurs possess. These characteristics have been correlated with entrepreneurial performance in an attempt to predict who will become successful entrepreneurs. These psychological theories take a broad view of psychology. The three factors most often studied on entrepreneurs are the psychological influences on, the personal characteristics of, and the effects of previous experience on the individual (Brockhaus, 1982).

While there is much research on the factors leading to an individual's decision to become an entrepreneur (Sing & DeNoble, 2003), there is less research on how they live out their entrepreneurial careers. Some research has focused on entrepreneurs' growth intentions (Cassar, 2007), but very little has examined the career stages of entrepreneurs as their careers evolve. Other research has explored how different variables at different stages of a person's life may influence them to become entrepreneurs (Singh & Verma, 2001). However, there is not much research on the influence of these variables on later career stages. Very few theories or models of mid-career stages exist and even fewer address the mid careers of entrepreneurs.

Individuals may make the decision to become entrepreneurs at different stages of their lives, including retirement (Singh & DeNoble, 2003), right after school (Shaver & Scott, 1991), or after working for a while (Katz, 1994). The decision to become self-employed is affected by different factors at various stages of an individual's life course (Singh & Verma, 2001). Another important factor to consider is the co-evolution of the industry the individual works in (Jones, 2001). For example, Steve Jobs' career path cannot be examined without considering the evolution of the personal and home computer industry.

This brief review of current themes in entrepreneurship research reveals the need for theoretical and empirical work that examines the entrepreneurial careers of individuals working in the computer and other high tech industries. The next section of the paper describes a proposed model of entrepreneurial careers. Relevant examples are drawn from Steve Jobs' career at Apple, NeXT, Pixar, and his return to Apple.

A NEW MODEL OF ENTREPRENEURIAL CAREERS

The purpose of this paper is to propose a new model of entrepreneurial careers that reflects the realities of pursuing a career in the high tech computer industry. The career path of Steve Jobs is used to illustrate the entrepreneurial activities that comprise the stages, phases, and ages components of the proposed model. It is not the purpose of this paper to explore the reasons why Steve Jobs may have become an entrepreneur (Isaacson, 2011). As perhaps the world's most widely recognized CEO, Steve Jobs exemplifies entrepreneurs operating in the high tech-high touch arena of consumer electronics. This paper proposes to develop a model of entrepreneurial careers and illustrate the components of the model by examining Jobs' career path.

A model of hi-tech entrepreneurial career development is relevant to and necessary for understanding today's fast paced technological environment. This model will serve to connect career theories and entrepreneurial theories. The model draws on historical career theory by utilizing developmental stages, however, these stages are conceptualized to reflect the stages that entrepreneurs experience. The model includes the concept of career stages to incorporate the fact that entrepreneurs may develop several products and companies across their careers. Finally, recognizing that entrepreneurs can start companies at many points in their lives, age is included as a component in the model.

As a high tech entrepreneur, Steve Jobs' career trajectory illustrates the components of the model of entrepreneurial careers that is presented in this paper. Jobs' early career success, his ouster from the company he created, his work at Next and Pixar, and his ultimate return to Apple, offer management scholars a contemporary version of the Horatio Alger success story. Studies on his successes and failures are likely to continue for years after his death. Steve Jobs was a very successful entrepreneur. His startups of Apple, Next, and Pixar created millions of dollars for him and his stockholders. His return to Apple in the 1990s ushered in a string of highly profitable consumer electronic products and dramatically increased Apple's market value.

There are three components in this new model of entrepreneurial careers. The components are career stages, career phases, and career ages. The first component of the model is career stages. Similar to other stage models of careers, entrepreneurial careers unfold across a series of stages. The model is similar to developmental models of career stages. Very little research has linked career theories to entrepreneurial careers (Katz, 1994). However, unlike traditional career models which have linear progression, the proposed model recognizes that entrepreneurs, by their very nature, startup different businesses which results in them cycling through the stages multiple times. There are four stages in the proposed model. The first stage is reconnection. The second stage is transition. The third stage is reflection, and the fourth stage is death.

A second component of this model of entrepreneurial careers is the element of *career phases*. Since the primary focus of most entrepreneurs is on starting and building companies, the model needed to reflect the idea that entrepreneurial careers can be divided into identifiable career phases. Each career phases is usually associated with the specific company that the entrepreneur is focused on in that part of their life span. Entrepreneurs may operate in more than one phase at a time, but there is usually one primary company that is the focus of the entrepreneur's time, money, and effort in each phase.

The third component of this model is *career ages*. Many well-known career and developmental stage models such as Super (1980) and Levinson (1978) link the stages of their models to specific chronological ages. Some researchers have questioned whether specific ages should be linked to career stages (Leonard, Mathews, & Bowes, 1987). Previous research on entrepreneurship has illustrated that entrepreneurial careers can happen at many different ages (Katz, 1994; Shaver & Scott, 1991; Singh & DeNoble, 2003). The next section of the paper utilizes the career path of Steve Jobs to illustrate each component of the model.

APPLYING THE MODEL

Applying the model to Steve Jobs' career path, the following career stages are illustrated. The first stage of his unique career path is *Reconnection*. In 1985 Jobs was forced out of the firm he created. He returned to Apple in 1997 when the company purchased NeXT, the computer firm he started after his ouster from Apple. The Apple he returned to was a dying enterprise. Fourteen years later, at the time of his death, it had become the most valuable company in the

United States. Jobs reconnected with his old firm and reminded the company what was important about Apple. Jobs reconnected Apple to its true purpose, innovation, to transform Apple's organizational image. Jobs used Apple's organizational identity to build the company into one of the top firms in the country and he created a new purpose for the organization.

The next stage in the model is the *Transformation* stage. Key to Jobs's success at Apple was his transformation of Apple from a computer company to a mobile device company. Jobs introduced the iPad in a January 2010 Keynote. During that Keynote, Jobs announced that Apple was a mobile devices company (http://www.circleid.com/posts/steve_jobs_apple_is_a_mobile_device_company/). This shift in strategy and redefinition of the company's mission was a dramatic transformation for a company that had launched the personal and home computer industry.

Jobs transformed additional companies, as well as entire industries. He transformed Pixar from a computer division of Lucasfilm into an award winning computer animation film studio. He transformed the way that music was purchased, stored, and listened to through the development of iTunes and the iPod. He transformed software development and distribution with the creation of the App store, creating a cottage industry for thousands of app developers, and launching another generation of high tech entrepreneurs.

As he grew older and was diagnosed with cancer Jobs began the *Reflection* stage of his career. He began to speak to the media about his career and personal life. He chose to speak at graduations and other venues where he hoped to have an impact on people's lives and careers. He agreed to have a biography written about him (Issacon, 2011). He opened up about career failures as well as successes in the hope of imparting wisdom that would help people to learn from his successes and his failures.

In the reflection stage Jobs appeared to consider his generativity needs (Erikson, 1963). In his personal life he spent private time with his wife and children, as well as his friends and colleagues. Jobs prepared Tim Cook for the day when he would not be able to run Apple because of his health. He worked very closely with Apple's board to prepare the company for life at Apple after he was gone. Steve Jobs busied himself with making sure the company would survive without him. He focused on choosing his successor and setting up the next products that

Apple would introduce to the world. The three stories he told at Stanford's 2005 commencement were reflections on his life and legacy and lessons learned along the way.

Companies with strong entrepreneurial founders have to consider the impact that the eventual death of their company's founder will have on the long term viability of their firm. The fourth stage of the model is *Death*. Steve Jobs faced the fourth stage of the model by resigning from his duties as CEO of Apple and preparing for his death. He died on October 6, 2011 at the age of 56. His death sparked very unique public reactions throughout the world. Thousands of people outside of his immediate circle followed his journey through this stage. In the days following Jobs' passing reflections on his legacy were noted by the worldwide media. BusinessWeek devoted an entire issue to him, something they had never done in their publishing history. Apple users around the world felt the need to note the passing of Steve Jobs and be involved with this phase. Mac stores allowed customers and visitors to place Post-it notes around the store sharing their feelings on the loss of Steve Jobs. People were able to use Apple technology to create visual images to send around the world to mourn with other Apple customers and fans of Steve Jobs.

The death phase is a rarely studied phase in career theories. However, Bell and Taylor (2012) studied this phase of Steve Job's career by doing a semiotic analysis of photographic images and emails sent to Apple and other corporate websites after the death of Steve Jobs. Visual data such as this may provide an important way for stories about the life of an organization and its founder to be remembered. Visual data is an additional way for individual's to communicate messages about their leader's death and the loss their employees' may feel (Bell & Taylor, 2012). Continuous visual images may also illustrate the importance of the dead in the ongoing life of the organization and show how the organization's members seek to maintain a continuing bond with the dead (Bell & Taylor, 2011). Apple fans were in so much disbelief about his dying that they actually thought he would make a surprise appearance and launch Apple's latest product at a shareholder meeting two days before he died. On the one year anniversary of his death, visitors to the Apple website were presented with simply a picture of Steve Jobs followed by a voice over video by Tim Cook. For several days it was not possible to access Apple's website without seeing this visual image of a company mourning the loss of their founder and paying respect to him.

Another issue to consider in the death stage of entrepreneurial careers is the reaction of the financial markets to the death of the founding entrepreneur. Because of his inextricable relationship with Apple, questions were rampant about whether the death of its founder would also result in the death of his company. Entrepreneurial careers are unique in that the impact of losing the company's founder may be keenly felt and result in questions about the long term viability of their firm. There have been many product launches since the death of Steve Jobs. Although most have been highly anticipated and have generated huge sales numbers, Apple has dropped from its top spot as the world's biggest financial corporation. Investors are wary of Job's successor and whether he will be able to maintain the leadership of Steve Jobs. Steve Job's followers believed he was changing their lives with each new project. Cook has not yet enjoyed the cult like following that Jobs engendered. Competitors have cut greatly into Apple's market share and profits. Enormous law suits have bit into the cult like status of Apple by revealing many details of the innovation of Apple products that Apple would rather not be made public. These lawsuits are also causing Tim Cook to focus on many other issues than innovating new products for Apple. For the first time Apple profits have fallen. Although in reality this may have nothing to do with the death of Steve Job's, many will attribute the financial falls to Job's death. This aspect of the death stage of entrepreneurs is likely to be studied for many years.

A second component of the proposed model is career phases. It was important to include a variable that explicitly dealt with the reality that entrepreneurs may be involved with several products, businesses, and/or industries across their career span. In examining Steve Jobs' career path, four distinct phases may be identified. Phase one occurred with the founding of Apple Computer. After building the first personal computer in Jobs' parents' garage, Jobs' focus was on building the Apple 1 and Apple 2 computers, building Apple Computers, and taking the company public. Other key events in phase one include the development of the Macintosh, the hiring of John Sculley, and the eventual firing of Steve Jobs from Apple.

Phase two occurred at NeXT, the computer company that Jobs started after his ouster from Apple. Using technology developed for the Lisa computer, Jobs and his team developed a high end, costly computer aimed at the scientific and academic community. While the computer was not a commercial success, its software found wide spread application. Steve Jobs ultimately sold NeXT to Apple. The third phase in Jobs' career path phase occurred at Pixar. Jobs transformed a computer division at Lucasfilms into an award winning computer animated film studio. Pixar's first release was Toy Story which was both a commercial and critical success. Several other successful films were produced by Pixar and Jobs eventually sold the studio to Disney. During Jobs' Pixar phase he was able to fully integrate his love of artistry and technology (Isaacson, 2011).

The fourth phase of Jobs' career occurred at Apple. This phase encompassed his return to Apple in the mid-1990s until his death in 2011. During this phase Jobs transformed Apple from a computer company to a mobile devices company. There were multiple highly successful product launches including the iMac, the iPod, the iPhone, and the iPad. This phase also saw the creation of iTunes, the App Store, and Apple retail stores.

In examining each of these phases, it can be seen that part of Jobs' genius was his ability to see the strategic linkages between each phase of his career. Technology developed for one computer became the platform for other high tech products. It is also evident that while each of these phases of his career were distinct, there were strategic linkages between the businesses he focused on in each phase.

The final component of the model that Jobs' career path illustrates is ages. Career ages has interesting implications for both image norms (Giannantonio & Hurley-Hanson, 2006) and age norms (Lawrence, 1983). Entrepreneurship may intersect with age and image norms as people assess whether their occupation is age appropriate. Jobs was a millionaire in his twenties; he was fired from the company he founded at 30; he passed away at the age of fifty six. In his thirty year career he started and sold numerous companies. Consistent with the model presented in this paper, Jobs' entrepreneurial activities occurred at several ages. This is consistent with research evidence that suggests that entrepreneurial activity can occur at any age in the life span

CONCLUSIONS

The purpose of this paper was to present a new model of entrepreneurial careers and to illustrate the components of the model using Steve Jobs' career path. Future research should examine the careers paths of other high tech entrepreneurs to validate the stages, phases, and ages components of the model. Steve Jobs' was a charismatic entrepreneur whose business successes had worldwide interest. His career path was highly visible. Future research on the career paths of other high tech entrepreneurs will determine if it was also highly unique. The rate of change and innovation in the high tech industry demands an equally innovative approach to the study of entrepreneurial careers.

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The Financial Literacy of Maori Relative to Europeans in New Zealand

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ABSTRACT

This paper uses data from the 2009 Financial Knowledge Survey conducted in New Zealand to ascertain if there is any difference in scores between the ethnic minority Maori (the indigenous people of New Zealand) and Europeans. The results show that high income respondents produce more correct responses than low income respondents. Once accounting for income, age, gender and highest qualification, Europeans are significantly more likely than Maori to give a correct response. When question types are categorised according to whether the response relied on a calculation, knowledge, or asked for a behaviour, Europeans are significantly more likely than Maori to produce more correct responses across all three types of questions, with the biggest difference in calculations, where Europeans are three times more likely to give a correct response than Maori. This raises the question is simply providing greater access to financial literacy programs for ethnic minorities the best strategy, or do cultural differences need to be considered.

Keywords: Financial literacy, Maori, Financial Education, Ethnic Minorities, New Zealand

Topic Area 8 Economics II (Applied and Empirical Research) or 14 International and Global Economics

INTRODUCTION

Braunstein and Welch (2002) describe a “complex, specialised financial services marketplace that requires consumers to be actively engaged if they are to manage their finances effectively” (p. 445). They describe how increased competition, technology and market innovation have resulted in a sophisticated industry which has expanded access to credit for younger populations, and increased employee responsibility for directing their own investments in pension plans. At the same time, Braunstein and Welch (2002) describe how increased diversity of the population can result in households that may face cultural barriers to establishing a banking relationship. In their own analysis, Braunstein and Welch (2002) found that respondents with higher financial literacy test scores, greater income, and a higher level of education were more likely to rank above the median in terms of the number of financial products they used or owned, and the number of financial behaviours they exhibited. They also found that personal experience was most commonly cited as the most important source of information about personal finances. Lusardi and Mitchell (2007) concur with Braunstein and

Welch's (2002) description of a complex financial services marketplace, stating that "Workers and retirees have increasingly been asked to take on an unprecedented degree of responsibility for their retirement and other saving" (p. 36). Accordingly Lusardi and Mitchell (2007) describe how "consumers now confront a bewildering array of financial decisions and a wide range of financial products" (p. 36). From this they imply that economic know-how is becoming even more important for households to acquire and manage.

For equitable outcomes, it is therefore important that certain sectors of society are not disadvantaged in their understanding of the 'economic know-how' which Lusardi and Mitchell (2007) refer to. Much of the literature on financial literacy focuses on the demographic factors that influence financial literacy knowledge (represented by test scores) and financial behaviour (represented by participation in financial markets for example).

Two of the findings of the analysis Lusardi & Mitchell (2007) conducted were that the more educated are more likely to answer questions economic and political question correctly, and that Blacks and Hispanics are less likely to answer correctly than Whites. Mention was also made of the Colmar Brunton 2006 Financial Knowledge Survey, where "financial literacy was strongly positively correlated with socio-economic status" (p. 39). Chen & Volpe (2002) state that previous research by Volpe, Chen & Pavkicko (1996); Goldsmith & Goldsmith (1997a,b) and Chen & Volpe (1998) found that women knew less about financial management than men. Chen & Volpe (2002) found that amongst college students, males scored better than females on survey responses on general personal finance knowledge, savings and borrowing, insurance and investments. These results were obtained however without controlling for other variables such as general education and income. Chen & Volpe (2002) go on to examine the relationships between personal financial literacy, and a respondent's gender, education, work experience, income and other demographic factors. After running logistic regressions and ANOVA analysis, Chen & Volpe (2002) found that "male participants are more likely to be more knowledgeable about personal finance than female participants before and after controlling the effect of other variables" (p. 298). They also find that people's financial literacy is related to education, work experience and age, but not to ethnicity or income. This may however be because college students were used as respondents to their survey. If certain ethnic groups are underrepresented at college, it may be that students of a certain ethnic minority attending college are not representative of the ethnic minority population in general. The same argument could also be applied on the basis of income.

Perry and Morris (2005) state that the "working belief in the fields of financial services and social marketing is that there is a relationship between race and financial behaviour….While this relationship between ethnicity and financial behaviour may exist, it is likely that these differences result not simply from racial or ethnic variations but from social, economic, and psychological factors" (p. 303). They then go on to quote Aizcorbe, Kennickell and Moore (2003), who found that incomes for African Americans and Hispanics in the United States are significantly lower than that for Whites. Perry and Morris (2005) conclude that their findings imply financial management behaviour may vary by race and ethnic background, and that one possible explanation for these results could be differences in beliefs.

Cole and Shastry (2007) found that greater cognitive ability and educational attainment lead to significant increases in financial market participation. They also acknowledged that correlations may not warrant casual interpretations, giving the example that those with low education levels and low financial literacy are also likely to have low levels of income and wealth. They go on to measure the casual effects of education, financial literacy and cognitive ability on financial market participation, finding that education increases financial market participation for whites and blacks. They also find that financial market participation increases with net worth and cognitive ability. Cole and Shastry (2007) mention other research which supports their findings, namely Bertuat and Starr-McCluer (2001) who demonstrated that participation in financial markets increases with income and education; Lusardi and Mitchell (2007) and Von Rooij, Lusardi and Alessie (2007) who state that financial market participation increases with measured levels of financial literacy; and Hong, Kubic and Stein (2005) who found that participation increased with social connections. Cole and Shastry (2007) concluded that "Persistently lower participation rates among blacks than whites, even when one controls for differences in in education, income and financial literacy, have led some to explore whether culture, or other mediating factors depress participation". Cole and Shastry (2007) did find that financial participation among blacks responds to education in similar ways to whites, the relationship is stronger for whites with the exception of retirement income, where more schooling has a larger effect for blacks than for whites.

Lusardi and Mitchell (2006) found that financial illiteracy is widespread among older Americans, and that women, ethnic minorities and those without a college degree were particularly at risk of displaying low financial knowledge. They found that "demographic differences remain statistically significant even when we perform a multivariate analysis of pattern of responses and include controls for race, sex, marital status, educational attainment, place of birth, Baby-boomer cohort, and age". They go on to use the example of Blacks and Hispanics, who are less likely to answer compounding interest and inflation questions correctly, even accounting for educational attainment.
Lusardi and Mitchell (2011) describe findings consistent with previous research, that there is a difference in financial knowledge between Blacks, Whites and Hispanics; that women are generally less financially knowledgeable than men; and that financial literacy is highly and positively correlated with schooling. However, specific to schooling, they found that financial literacy is most acute for those with less than a high school degree.

Given the body of literature described above, age, gender, income, educational qualification and ethnicity could be described as key determinants of financial literacy. The purpose of this paper is to focus on income and ethnicity (Europeans and Maori, the indigenous people of New Zealand) as determinants of financial literacy levels, using data collected by the Colmar Brunton 2009 Financial Knowledge Survey. Specifically, the question this papers sets out to answer is 'is there a bias between European and Maori in financial literacy as measured by the 2009 Financial Knowledge Survey, once the variables of age, gender, income and highest educational qualification are held constant'? One contribution this paper will make to the general body of literature is further examination of the effects of ethnicity on financial literacy, but using an ethnic grouping that does not currently feature in the body of literature. If the results of this paper mirror the results from the majority of the literature which suggests that Blacks and Hispanics score lower than Whites on financial literacy test scores and financial market participation, this raises the question do financial literacy tests themselves bias against ethnic minorities by not recognising cultural differences which may impact on financial behaviour, and 'correct' financial knowledge.

METHODS

The data used in this paper are the results from the 2009 Financial Knowledge Survey, a nationwide survey conducted in New Zealand. The data was collected by Colmar Brunton on behalf of the Retirement Commission, through face-to-face interviews with 850 people aged 18+, between 7 March and 28 April 2009. Three key objectives of the survey were:

1. To identify areas of low financial literacy (either by topic or by population) and therefore assist educators improve financial literacy in those areas.
2. To assist the financial services industry to identify where products or services are misunderstood or confusing to consumers and thus be able to improve design or communication.
3. To measure changes in financial knowledge levels since 2006 in order to adapt education programmes and the design or communication related to financial products and services.

The data was categorised into binary correct/incorrect or desirable/undesirable responses to allow for odds ratios to be calculated. The data is categorised according to the following headings in the survey (with the number of questions in each category):

Money Management (17 Questions)
Budgeting (3 Questions)
Goals and Planning (6 Questions)
Debt Management (4 Questions)
Home Loans and Mortgages (10 Questions)
Managing Risk (2 Questions)
Saving (10 Questions)
Retirement Planning (5 Questions)
Investing (12 Questions)
Consumer Rights and Responsibilities (7 Questions)
Attitudes and Behaviours (32 Questions)
Life Generally (3 Questions)
Life Expectancy (3 Questions)
Kiwisaver (4 Questions)

Due to the level of interaction that exists between variables such as ethnicity, level of education and income, the approach this paper makes is to use stratified random samples from the survey responses to make two different samples as similar as possible on age, gender, level of schooling and income, but different in terms of ethnicity, with one Maori sample and one European sample. For level of schooling, respondents were categorised into two groups, those who had a school qualification or lower as their highest qualification, and those that had a higher than school level qualification. For income, the New Zealand Income Survey June Quarter administered by Statistics New Zealand calculates the medium income from those on wages or salaries to be $800. Survey respondents were categorised according to their self-declared personal income level, using the weekly figure of $800 as a guideline. Those earning more than $40,000 annually were classified as 'high' income earners, while those earning $40,000 or less annually were classified as 'low' income earners. This is not an unreasonable categorisation given that the medium weekly income from all sources (including beneficiaries) is $550, however you may prefer to think of high as referring to above the median, and low as below the median income level for workers. The 761 respondents that disclosed their personal income were categorised into the high or low income groupings, with odds ratios calculated to establish if there were any differences in levels of financial literacy between the two groups. The odds ratios reported are the same as those calculated by a logit regression reporting odds ratios. Chi square tests were performed on the odds ratios to establish if any statistically significant differences in financial literacy levels existed between the two income groups, for any of the categories listed above. A similar approach was used to test for significant difference in financial literacy levels between high income Europeans and high income Maori ethnic samples, once age, gender and level of schooling were accounted for.

RESULTS

Table one shows the odds ratios, chi square statistics and p values for participants in the survey who identified their levels of personal income. The sample size is 761, with 490 respondents classified as high income (>$40,000) and 271 classified as low income ($40,000 or less). For more information, please refer to Table 1.

Table 1: High Income and Low Income Comparison: Survey Categories

	Odds Ratios	Chi Square Statistic	P Value
Managing Risk	2.36	22.24	0.00
Home/Loans Mortgages	2.24	209.65	0.00
Saving	2.07	123.91	0.00
Debt Management	2.05	58.66	0.00
Investing	1.92	157.30	0.00
Money Management	1.90	178.20	0.00
KiwiSaver	1.70	22.93	0.00
Life Expectancy	1.58	27.67	0.00
Attitudes and Behaviours	1.53	176.56	0.00
Consumer Rights & Responsibilities	1.52	28.15	0.00
Budgeting	1.47	13.79	0.00
Goal Setting, Long Term Goals & Financial Planning	1.42	25.90	0.00
Retirement Planning	1.39	22.42	0.00
Life Generally	1.11	1.26	0.26
TOTAL	1.67	934.03	0.00

The odds ratios show the odds of a high income respondent answering a question favourably compared to the odds of a low income respondent answering a question favourably. An odds ratio of 1 means high and low income respondents both have the same odds of answering a question favourably. The biggest disparity between high and low income respondents lies in the areas of managing risk, mortgages, saving and debt management, where the odds of a high income respondent answering a question correctly are more than twice the odds of a low income respondent. The smallest difference is in the areas around planning, specifically retirement planning, goal setting and financial planning and budgeting. Apart from the life generally section in the survey, the p values all reflect a significant difference between the responses of high and low income respondents, at the 99% confidence interval. The life generally section is comprised of the following three statements:

59(a) My life is determined by my own actions.

59(b) My life is determined by things beyond my control.

59(c) My life is controlled by the actions of other people.

Each of the three questions required respondents to state whether they strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, or strongly disagree with the statement. For 59(a), a favourable answer was considered to be a strongly agree or somewhat agree response. For 59(b) & (c), a favourable answer was considered to be a somewhat disagree or strongly disagree response. The odds ratio of 1.11 coupled with the p value of 0.26 provide supporting evidence for the notion that there was no significant difference between high income and low income peoples responses to these statements.

To establish if there were any particular types of questions that were more likely to be answered correctly by high income respondents, the survey questions were placed into three categories, depending on the type of information the question elicited from the respondent. As table two shows, questions that required calculations to be completed resulted in the biggest disparity, with high income respondents twice as likely to answer a calculation question correctly. This is unsurprising given that higher incomes may be a function of higher education levels, and that high socioeconomic groups traditionally achieve better academically than low socioeconomic groups. The smallest disparity is in the questions on behaviour, however all three types of questions all still reflect a significant difference in answers between high and low income respondents at the 99% confidence interval. For more information, please refer to Table 2.

Table 2: High Income and Low Income Comparison: Question Types

	Odds Ratios	Chi Square Statistic	P Value
Calculations	2.09	141.73	0.00
Knowledge	1.84	632.51	0.00
Behaviour	1.45	213.22	0.00
TOTAL	1.67	934.03	0.00

As the research described in the introduction suggests, the financial literacy levels of people can be affected by variables such as age, education levels and ethnicity as well as socioeconomic status; with many of these variables suffering from colinearity, making measurement difficult. An important aspect of research into financial literacy is to ascertain whether certain groups of society are systemically displaying lower levels of financial literacy. In an attempt to separate out the effect of ethnicity on financial literacy levels, a sub sample of only those respondents who fell in the high income grouping, who identified their ethnicity as European or Maori was subjected to further analysis. Table three shows the odds ratios, chi square statistics and p values for European and Maori respondents with high levels of personal income. The sample size is 379, with 337 respondents classified as European and 42 classified as Maori. For more information, please refer to Table 3.

Table 3: High Income European and High Income Maori Comparison

	Odds Ratios	Chi Square Statistic	P Value
Retirement Planning	3.41	66.02	0.00
Saving	3.09	95.69	0.00
Managing Risk	2.92	16.07	0.00
Budgeting	2.28	18.80	0.00
Home/Loans Mortgages	2.21	56.22	0.00
Money Management	2.21	86.75	0.00
Investing	1.95	49.46	0.00
Attitudes and Behaviours	1.87	107.71	0.00
Life Expectancy	1.28	1.64	0.20
Consumer Rights & Responsibilities	1.19	1.35	0.24
Goal Setting, Long Term Goals & Financial Planning	1.03	0.03	0.86
Debt Management	0.94	0.12	0.73
KiwiSaver	0.63	3.84	0.05
Life Generally	0.52	10.03	0.00
TOTAL	1.81	350.98	0.00

The first eight question categories in the table all show a significant difference between high income Maori and high income European responses at the 99% confidence interval, with the first three categories showing large odds ratios of close to 3 or greater. The category on kiwisaver showed a significant difference at the 95% confidence interval, with the life generally category significant at the 99% confidence interval. Interestingly, these two categories have odds ratios of less than one, which means that high income European respondents are less likely to give a favourable response than high income Maori. Given that Europeans outperform Maori in socioeconomic status and educational attainment, an intuitive argument for the positive attitude to life by high income Maori may be because Maori are more likely to have risen from previous generations of lower socioeconomic groupings, so have a greater sense of control over their own lives and financial position. There is no significant difference between high income European and Maori respondents for the sections on life expectancy, consumer rights, goal setting and financial planning and debt management.

Despite the table showing significant differences in financial literacy levels between high income Maori and Europeans for the majority of survey categories, we still need to be mindful that other variables such as age and level of education may be disproportionately affecting Maori, or that the Maori sample may have a gender bias which the European sample does not. It may be for example, that high income Maori as a group still have lower levels of schooling than high income Europeans, which is accounting for at least some of the lower levels of financial literacy in high income Maori. An examination of the sub sample of high income Europeans and Maori reveals that the European high income sample contains 73% of respondents aged 44 or less, while the high income Maori sample contains only 36% of respondents aged 44 or less. Further inspection reveals that while 34% of the high income European sample was aged 55 or older, 0% of the high income Maori sample are aged 55 or older. To rectify this imbalance, all of the high income European respondents aged 55 or older were removed from the sample, and a random stratified sample was selected from the high income European group aged less than 55, so that the high income European and Maori samples were similar in terms of age, gender and level of education. As a result, the high income European sample contained 67% female respondents, 54.7% of respondents who had a high school qualification or higher as their highest qualification, and 73% of respondents aged 44 or lower. The corresponding percentages for the high income Maori sample were 69% female respondents, 48% of respondents with a high school qualification or higher as their highest qualification, and 71% of the sample aged 44 or lower. On the dimensions of gender, age and levels of education, the high income Maori end European samples are now essentially the same. The question asking the age of the respondent required them to tick the appropriate box out of 12 choices (coded 1 to 12), with each box having a range of four years, apart from the first and last boxes. The European sample has an average of 6.03, and the Maori sample having an average of 5.70. Similarly for the question on personal income, out of thirteen possible categories (coded 1 to 13), the European sample had an average category of 5.14, with the Maori sample having an average category of 4.93. For highest qualification earned, out of eight possible categories to choose from, the average European score was 4.42, the category corresponding to senior high school as the highest qualification earned. For the Maori sample, the average score was 4.16, again corresponding to senior high school as the highest qualification earned. As table four shows, there is no significant difference between the European and Maori samples for the variables of highest qualification, gender and age. For more information, please refer to Table 4.

Table 4: High Income European and High Income Maori Comparison on Demographic Variables

	Odds Ratios	Chi Square Statistic	P Value
Highest Qualification	1.33	0.689	0.41
Gender	0.92	0.049	0.82
Age	1.09	0.054	0.82

Odds ratios and chi square analysis were then calculated on these two demographically similar samples. The results are shown in Table 5.

Table 5: High Income European and High Income Maori Comparison Accounting for Age, Gender and Highest Qualification: Survey Categories

	Odds Ratios	Chi Square Statistic	P Value
Managing Risk	3.62	18.46	0.00
Saving	3.20	87.79	0.00
Budgeting	2.72	23.69	0.00
Money Management	2.51	101.40	0.00
Home/Loans Mortgages	2.35	57.90	0.00
Retirement Planning	2.27	25.47	0.00
Investing	2.16	57.45	0.00
Attitudes and Behaviours	1.80	83.13	0.00
Life Generally	0.52	8.93	0.00
Life Expectancy	1.52	4.00	0.05
Consumer Rights & Responsibilities	1.23	1.61	0.21
Goal Setting, Long Term Goals & Financial Planning	1.21	1.57	0.21
Debt Management	1.05	0.06	0.81
KiwiSaver	1.04	0.02	0.88
TOTAL	1.88	347.63	0.00

The first six question categories in the table all still have odds ratios greater than two, although there has been some shuffling of the order within the eight compared to table three. In terms of statistical significance, the life expectance category is now statistically significant at the 95% confidence interval, while the kiwisaver category is now no longer statistically significant. Interestingly, for both tables three and four, there is a significant difference between the European and Maori samples on their attitude to life generally, but it is in favour of the Maori sample, with odds ratios of less than one indicating Maori are more likely to give favourable responses than Europeans in terms of their attitude to life generally.

Table 6 uses the same data as for table five, but splits the data according to question type as in table two above.

Table 6: High Income European and High Income Maori Comparison Accounting for Age, Gender and Highest Qualification: Question Types.

	Odds Ratios	Chi Square Statistic	P Value
Calculations	3.05	96.25	0.00
Knowledge	2.04	228.02	0.00
Behaviour	1.54	66.61	0.00
TOTAL	1.88	347.63	0.00

Europeans are three times more likely to correct answer a calculation question than Maori, which is surprising given education level and income have both been accounted for. With questions requiring financial literacy knowledge, Europeans are twice as likely to answer correctly, with the smallest (but still significant) difference recorded in questions examining behaviour. All three results are significant at the 99% confidence interval.

CONCLUSION

The findings of this paper support the previous literature which found that high income respondents on financial literacy tests/surveys recorded higher scores than low income respondents. The findings also support earlier conclusions that after accounting for other variables such as age, income, level of schooling and gender, ethnic minorities record lower scores on financial literacy tests/surveys. It also contributes to the body of literature by finding similar results in an ethnic minority which is in a different country, and thus a different cultural setting to previous studies on financial literacy and ethnicity. This is important as it allows for the comparison of results across different cultures and settings of ethnic minorities, rather than relying on just one or two ethnic minorities living in the same country.

The reasons for Maori scoring lower on the Financial Literacy Knowledge survey are beyond the scope of this course, and certainly warrant further investigation. It could be that there are certain cultural factors in play where ethnic minorities value certain principles of financial literacy less than 'Western Society'. This is true in the Maori culture around the concept of reciprocity. In Maori culture it is seen as preferable to give at least an equal value to what you receive in an exchange, if not a greater value. This can be at odds with more westernised cultures where 'getting a good deal' may be emphasised. The extent that this cultural reason can be applied across many different cultures around the world however is debateable. Another possible reason for the difference in financial literacy levels of the different ethnic groupings is that in each of their countries, there is some systemic failure in the ethnic minorities accessing financial literacy information or education which is pertinent to them. One of the conclusions of Lusardi & Mitchell (2007) for example was that "education programs will be most effective if they are targeted to particular population subgroups" (p. 43). It may be that financial literacy information and programs are designed for the ethnic majority by the ethnic majority, and are thus less effective for, and seen as less relevant by ethnic minorities. The results of this paper do suggest that it may not simply be a case of making financial literacy education more readily available for ethnic minorities. There is however no intuitively obvious reason as to why Europeans are three times more likely to answer a calculation question correctly than Maori. Further research into comparisons between ethnic groupings for types of financial literacy questions, for example calculations as opposed to knowledge recall is desirable, as would more qualitative research examining the differences in belief systems pertaining to principles of financial literacy across different cultures.

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Altruism and the family business: A blessing or a curse?

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"How selfish so every man may be supposed, there are evidently some principles in his nature, which interest him in the fortunes of others, and render their happiness necessary to him, though he derives nothing from it, except the pleasure of seeing it." Adam Smith, Theory of Moral Sentiments, 1759

ABSTRACT

Despite the wide variety of papers and articles that have been written in the area of altruism in a Family Business, there are topics that have not been addressed by the current literature and may be considered in this paper as suggestions for future study and research. One such topic to consider may be the optimum level of altruism within family firms. While the literature addresses the negative and positive effects of altruism in family businesses such as in cohesion, participative decision making and conflict resolution, among others, it does not examine at which point altruism becomes a liability rather than an asset and how family firms can develop and maintain optimal altruistic levels. Examining how family firms can foster the right balance of altruism in order to minimize unfavourable outcomes and maximize its benefits can be considered a valuable contribution to the family business literature.

INTRODUCTION

In evolutionary biology, an organism is said to behave altruistically when its behaviour benefits other organisms, at a cost to itself. The costs and benefits are usually measured in terms of reproductive fitness. In nature, if the total contribution of the altruist to the fitness of others is greater than the fitness lost by the altruist, altruism will increase the prospects of the group's surviving in competition with other groups (Simon, 1993). According to this concept of Natural Selection (Darwin, 1859) the process by which certain heritable traits become more common in a population over successive generations, kin selection favors exhibiting behaviors that benefit others who share our genes, especially closely related kin (McAndrew, 2002).

Unlike biological altruism however, which is more or less demonstrated as unconscious behaviour, social altruism is a form of behaviour in which an individual places the needs or benefit of another over the needs or benefit of the self, consciously. Quite similarly an economist's perspective models altruism as a trait that positively links the welfare of an individual to the welfare of others (Schulze et al., 2002b). More specifically, altruism is self-reinforcing and motivated by self-interest because it allows the individual to simultaneously satisfy altruistic (other-regarding) and egotistic (self-regarding) preferences (Schulze et al., 2002a).

Altruism compels parents to care for their children, encourages family members to be considerate of one another and makes family membership valuable in ways that both promote and sustain the family bond (Simon, 1993; Eshel, et al., 1998). Furthermore, through altruism parents transfer resources to their children not only because they love them but also because they would otherwise harm their altruistic welfare (Becker, 1981).

Altruism is a notion rarely associated with the world of business because after all, the game of business is played in a competitive arena where few might expect business people to be altruistic (Kanungo & Conger, 1993). Yet, altruism in a family business is expected to play a more important role altogether than in a "regular" business, because family members in a family firm would engage in relatively more altruistic behaviors thereby suppressing their own self-interests for the collective good of the family (Sharma, 2006). Family members of family firms that are characterised as altruistic seem to also be more aligned with the success of the family firm (Eddleston & Kellermans, 2007). In these firms family members are highly dedicated to the business believing that they have a common family responsibility to see the business prosper (Cabrera-Suarez et al., 2001).

But are family firms characterized by strong family altruism also directly associated to specific business performance variables? Is altruism a good trait for the family business or is it also related to adverse outcomes? Is there an optimum degree of altruism within a family business?

The fascinating world of the theory of Natural Selection originating with Charles Darwin who also advanced a synonym with the term "Survival of the Fittest" in his 1859 book "On the origin of species by means of natural selection", was further articulated into an Evolutionary Theory with Richard Dawkins' 1976 seminal book, "The Selfish Gene" where Dawkins (1976) examined the impact (positive and negative) of selfish and altruistic behaviour on the evolution of the species. It seems that it only makes sense to consider whether what is true for biological organisms (Trivers, 1971) to be also true for economic organisms as well (Kanungo & Conger, 1993). Moreover, as Becker stated: "If I am correct that altruism dominates family behaviour, perhaps to the same extent as selfishness dominates market transactions, then altruism is much more important in economic life than is commonly understood." (Becker, 1981).

The flourishing of humanity and the human mind implies that human psychology is different from that of other species and one manifestation of that difference is the manifestation of conscious extreme altruism, as opposed to subconscious in other species. In this sense, the fact that people deliberately and willingly undertake the heroic sacrifice of laying down their lives in order to preserve close relatives in the context of warfare for example, it makes evolutionary sense, since an individual's genes could still be passed through the surviving members of a close knit family or a clan (The Economist, 2012). Therefore, since altruism strongly characterizes family relationships (Stark, 1989) and the fact that family business is the most prevalent form of business organization in the world (Schulze, et al., 2000), altruism as a "combination" of science and business was deemed a worthwhile topic to investigate and furthermore examine whether altruism as a commodity is a blessing or a curse in the family-owned business.

ALTRUISM IN FAMILY FIRMS

Altruism in family firms is a subject that has been studied extensively in the last couple of decades. It is of relevance at this point to indicate that Family Business was recognised in 1986 by the Family Firm Institute (FFI) for their multidisciplinary nature with major content areas included such as, behavioral sciences, financial, law and management sciences (Hoy & Sharma, 2006). Thus, the literature review on altruism for this paper included sources from many international journals of multiple disciplines. Most of this research is not experimental, but it is rather based on the principles of the grounded theory (Martin et. al., 1986), an analytical approach to which theories are allowed to emerge from existing concepts, notions, and observations, as opposed to formulated hypotheses which are empirically tested against actual data. Rather, non-empirical theoretical concepts are based (grounded) on observable experiences and researchers add their own insight into why those experiences exist. Grounded theory is in essence a reverse-engineered hypothesis, and this type of grounded theory is the prevalent type of literature review sources on altruism across disciplines.

Family firms are theoretically distinct from non-family firms because the agency relationships in family firms are characterized by parental altruism (Lubatkin et al., 2005), a trait that positively links a parent's welfare to that of their children (Stark, 1995). Parental altruism fosters loyalty, commitment trust, communication, cooperation and reciprocity (Simon, 1993), and it can promote a family bond, which, in turn, helps to align incentives and reduce information asymmetries among a firm's key decision makers, thereby reducing the cost of governance (Lubatkin et al., 2005). It is quite obvious that altruism in the family and thereby spilled over into the family firm is beneficial. Is however too much altruism harmful? Does an extraordinary consciousness by all family members of the need for a continuous and obligatory sacrifice for the rest of the family members no matter what, renders the family firm dysfunctional and low performing at the long term detriment of family members? The sections that follow presents both sides of this argument, through an extensive literature review of both positive and negative features of altruism suggesting that altruism in family firms may be a "two-edged sword" (Dyer, 2003).

Altruism as a blessing

Altruism makes each employed family member a family agent in the essence of the agency theory of the firm, and a de facto owner of the firm, in the sense that each member acts in the belief that they have a residual claim on the family's estate (Stark & Falk, 1998). At the same time, each member of an altruistic family is partly "insured" because all other members are induced to bear some of the business burden (Becker, 1981). As per the agency theory, this aligns the interests among family member/agents towards growth, opportunity and risk (Shulze et al., 2002).

Similarly, according to the stewardship theory (Davis et al., 1997) when family members consider themselves stewards of the family firm, they are motivated to fulfill organizational goals and to maximise firm performance and at the same time indirectly, by acting in the organization's best interest, maximize their own utility. Moreover, altruism in family firms is expected to reinforce the interdependence of family members and encourage them to place the firm's objectives ahead of their own (Zahra, 2003). Such altruistic families are characterized by the possession of collectivist orientations that encourage family members to exercise self-restraint and consider any potential negative effect of their actions on the family firm (Kellermanns & Eddleston, 2004; Corbetta & Salvato, 2004). Additionally, a high degree of altruism influences individual conduct in family firms and helps strengthen family bonds, becoming thus an important inhibitor of dysfunctional relationship conflict in family firms, while at the same time, altruism enhances the participative strategy process within a family firm and an important source of competitive advantage (Eddleston & Kellermans, 2007). Similarly, according to Zahra (2003), altruism encourages family members to work closely together in defining the family firm's mission, craft its strategy and develop effective ways of achieving its objectives. Furthermore, the intimate knowledge about each other that families bring to the family firm facilitates communication and some types of decision-making (Gersick et al., 1997). In contrast, when altruism is low, family members may lack commitment and a psychological ownership to the firm (Zahra, 2003).

As such, the existence or the absence of altruism may explain why in some family firms members are able to successfully work together and run a business, while in others, family members are loaded with animosity that can deteriorate firm performance (Eddleston & Kellermans, 2007).

Altruism as a curse

Despite the aforementioned arguments that advocate the benefits of altruism, it has also been observed that altruism does in fact have a dark side in that it can give both parents and children incentives to take actions that can threaten the welfare of the family and the firm alike (Schulze et al., 2003), especially when there is very little or no empathy whatsoever between parents and offspring (Vozikis et al., 2012). Due to the fact that the altruistic bond between parents and children is stronger than between unrelated individuals, this can lead to especially high agency costs that are quite distinct, such as information asymmetries, and significantly complicate firm governance, because they can cause parents to threaten their children with guilt trips and inner moral hazards (Lubatkin et al., 2005; Schulze et al., 2002).

According to Buchanan's theorem "The Samaritan's Dilemma" (1975) since altruism partly stems from a parent's endogenous co-dependency with his/her children and the children's desire to enhance their own welfare, parents have the incentive to become too generous and spoil their children putting their own interests second, and take actions that, however innocent the parental intent may be, encourage the children to free-ride, shirk and/or remain dependent upon their parents. The children often do not appear to appreciate these transfers, but instead view them as entitlements thus giving them a powerful incentive to continue a manipulative behavior. Likewise, similar dysfunctional parental attitudes and behaviors, such as stereotyping or preferential treatment, can foster hostile sibling rivalries in childhood. This happens because children develop feelings of competitiveness over parental love and attention and resentfulness, if they do not get their way, further eroding altruistic behaviors within the family (Avloniti et al., 2012). Thus, parents can provide their children consciously or subconsciously enticements to take actions or make decisions that may ultimately harm their own welfare, and as a consequence, the children become the masters of their parents. Buchanan (1975) theorized that agency problems between parents and children arise as their respective levels of altruism become asymmetric. In this respect, altruism becomes a curse because it can make even well-intended parent-owners bad agents since it is their attempt to enhance family welfare that increases the threats of moral hazard for their offspring. This situation makes the introduction of formal governance practices, instead of mere informal governance by the family, absolutely necessary (Schulze et al., 2002).

Altruism may also hamper the parent's perception about their children which may hinder their ability to monitor and discipline them (Buchanan, 1975) and/or employ them in positions for which they are not best qualified (Schulze et al., 2003). Thus, nepotism, together with the fact that parent-owners are less willing to offer certain promotional opportunities to non-family agents who are much more qualified, because selection criteria are based on family status rather than the agents' qualifications. This leads to altruistic bias and puts the family firm at a competitive disadvantage in the external labor market, while further introducing an adverse selection in the internal labor market leading ultimately to the appointment of lower-quality agents within the family firm (Lubatkin et al., 2005). In addition, due to control over the firm's resources, parent-owners can be unusually generous to their children and relatives, providing the family both with secure employment and privileges that they would not and probably should not otherwise receive (Gersick et al., 1997). Both adverse selection and increased costs in the form of compensation packages can threaten the performance of family firms and their long-term prosperity. Moreover, as similar compensation and reward mechanisms are not necessarily offered to non-family agents, this may lead to lower commitment and increase in the likelihood of opportunism on the part of the non-family agents by seeking employment elsewhere (Chua et al., 2009).

CONCEPTUAL FRAMEWORK

As mentioned earlier, altruism is found to be more often and at higher levels within family firms rather than larger and/or non-family firms, and this mere fact is believed to influence a number of important business variables as cited in literature presented earlier. These particular business related variables that are specifically idiosyncratic to family businesses and are mostly affected by the existence or absence of the notion of altruism are described below.

Role of altruism in cohesion among family business members

Cohesion among family members of a family firm is considered a major factor for a successful family business (Lansberg & Astrachan, 1994). Lack of cohesion within family agents prompts them to operate under an individualistic paradigm and may result in detrimental consequences both to the business and to the family. We propose that there is a strong correlation between the existence or absence of altruism and the existence or absence of cohesion in family businesses.

Role of altruism in participative decision making

Participative decision making is one of the key concepts in modern firms. If utilized effectively it can be an important asset and motivating tool for a firm and may result in a unique competitive advantage. We propose that the existence or absence of altruism in family businesses is a determining factor for the existence of family firm's participative decision making style or lack thereof, something that has already been identified in the literature (Eddleston & Kellermanns, 2006).

Role of altruism in conflict intensity

Conflict is endemic in everyday business environments. It can be defined as clash of interests, as an actual or perceived opposition of needs and values, and when it reaches considerably high levels can lead to serious problems for the business. We wish to ascertain that the level of existing altruism in a family firm might be a key determining factor for the intensity of prevailing conflict. Existing literature already suggests that such a correlation does exist (Eddleston & Kellermanns, 2006).

Role of Altruism in the "Long – Term Perspective"

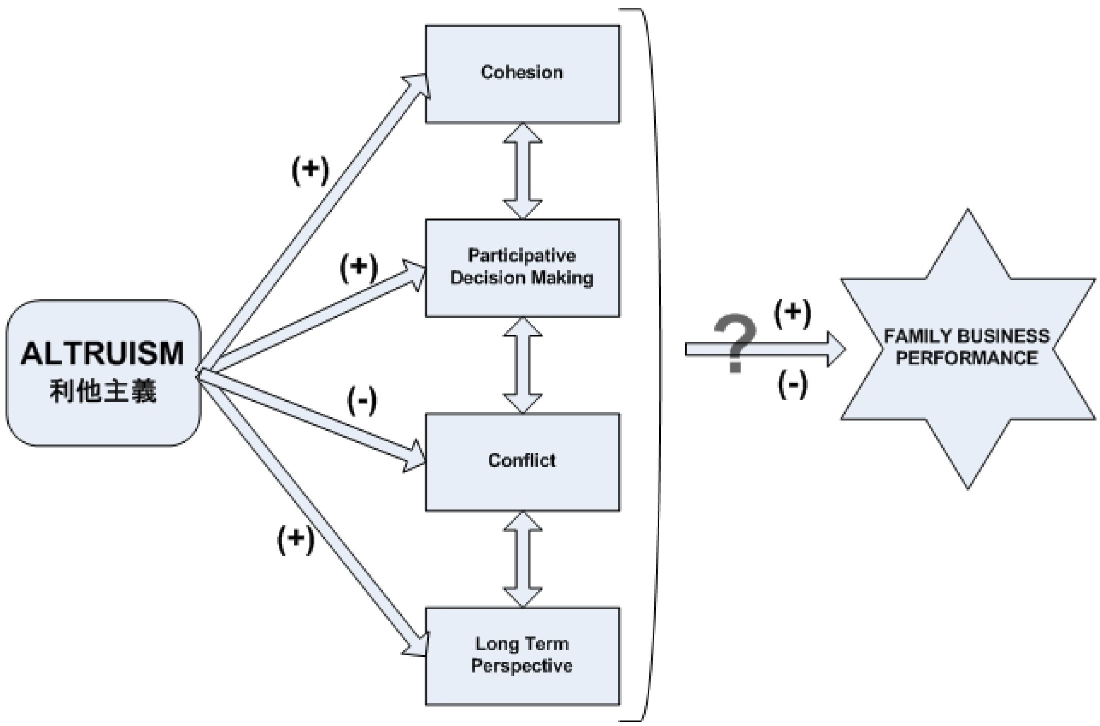
Any company that has successfully stood the test of time and survived has indeed much to be admired. To be successful in the long-run, family business owners need to have a long–term perspective. We propose that the degree of altruism within a family firm correlates with the nature of strategic perspective within the firm, where a high degree of altruism most likely spawns a long–term perspective and as such the viability of a family business for years to come, while a low degree of altruism most likely results in a short and "now" strategic perspective for the family firm.

RELATIONSHIPS AMONG CONCEPTS AND VARIABLES

Following the above identification of the concepts and variables we wish to focus upon our major quest which is to relate and define the correlation between the existence and the level of Altruism in a family firm as an independent variable and Cohesion, Participative Decision Making, Conflict Intensity, and Long–Term Perspective as intervening variables, which in turn will affect the family firm's overall performance. Certainly, existing levels of altruism will have an impact on other business variables too but the main focus of this paper is on Cohesion, Participative Decision Making, Conflict Intensity, and Long–Term Perspective, for internal validity purposes. We also need to mention at this juncture, that these intervening variables are quite possibly expected to influence each other, a fact that needs to be incorporated in the conceptual framework. The specific conceptual framework that will connect all variables and concepts outlined above is depicted in a schematic way below in Exhibit 1.

EXHIBIT 1

The relationship between altruism and family business performance



In presenting the conceptual framework above regarding the indirect impact of altruism on family business performance, a very important point must be emphasized, and that is, that it is essential to evaluate and measure levels of altruism using an appropriate method when testing this model empirically (Becker & Vance, 1993), so that its influence on the aforementioned business variables is determined accurately. Measuring altruism levels correctly and assessing its impact on the intervening variables of Cohesion, Participative Decision Making, Conflict Intensity, and Long–Term Perspective in an empirical study, will provide a solid ground theory and connect those variables with actual business performance. This is a critical step because as discussed earlier not all types and levels of altruism are beneficial to the performance of a family firm, even though we need to stress again that altruism has an impact on business variables other than the ones outlined above which also affect business performance.

RESEARCH PROPOSITIONS

Based on the previous discussion on the concept of altruism and the four intervening variables of Cohesion, Participative Decision Making, Conflict Intensity, and Long–Term Perspective it affects directly, as well as the proposed conceptual framework where it is shown that altruism affects the family business performance indirectly, the following Research Propositions are formulated:

Research Proposition 1: The existence and high levels of Altruism in a family firm is more likely to be positively correlated to high levels of Cohesion among family members.

It is intuitively expected that increased levels of altruism will also increase cohesion among family members. Alternatively, absence or decreased levels of altruism is expected to decrease cohesion among family members in a family firm. Altruism guides a family's primary social function, which is in essence to ensure the care and nurturing of its members (Lansberg, 1983). Altruism encourages family members to be considerate of one another, and cultivates loyalty and commitment to a firm's leadership (Eshel et al., 1998; Simon, 1993; Ward, 1987), thus fostering cohesion.

It is expected of course that the degree and level of altruism varies among families hence families differ in their level of cohesion and strength of bonding among its members. High degrees of altruism influence individual conduct in family firms and help strengthen family bonds, and depending on the degree of the cohesion, a more individualistic or collectivistic orientation will be favored within the family. Indeed, connected and cohesive families have a more collectivistic orientation (Lansberg & Astrachan, 1994). In a collectivistic family, interactions are characterized by reciprocity of altruism, which links each family member's welfare to that of other family members (Ling et al., 2002; Schulze et al., 2002)

In contrast, families that are not as cohesive tend to function under an individualistic paradigm (Lansberg & Astrachan, 1994). In an individualistic family altruism is not necessarily reciprocal. Therefore the likelihood that some family members will take advantage of another family members' altruism, especially the patriarch or matriarch owner's altruism toward other family members, increases (Schulze et al., 2002). In this scenario, self-interest takes precedent over the overall interest of the firm and relationship conflict among family members can escalate. Therefore, if altruism is not reciprocal, the utility functions of the individual family members differ and the likelihood of opportunistic behavior (Ling et al., 2002) and subsequent family cohesion decreases.

Research Proposition 2: The existence and high levels of Altruism in a family firm is more likely to be positively correlated to high levels of Participative Decision Making among family members.

The existence of high levels of altruism will most likely result in a higher degree of participative decision making in a family business, while the absence or low levels of altruism could hold back participative decision making. This is because altruism enhances family involvement and willingness to participate in the family firm's affairs (Zahra, 2003). A highly altruistic family firm is likely to have an involvement oriented organizational culture (Corbetta & Salvato, 2004) that can also be described as collectivistic (Kellermanns & Eddleston, 2004). This collectivistic culture (Davis et al., 1997) should in turn lead to cooperation and collaboration in the firm's decision-making processes (Zahra, 2003). In collectivistic cultures, "the belief is that only through joint effort can the best solutions be identified and tested" (Zahra et al., 2004). That is, the strong bonds of trust and a sense of loyalty and responsibility which are associated with altruism (Kepner, 1991) should encourage participative decision making. Indeed, Zahra S.A. (2003) argued that altruism encourages family members to work closely together to specifically define the firm's mission, craft its strategy and develop effective ways to achieve its objectives.

Contrary to the above, lack or low levels of altruism can lead to the pursuit of individual goals with little regard for collective utility (Gersick et al., 1997). When altruism is low, family members may lack the commitment and psychological ownership to the firm (Zahra, 2003), thereby preferring to withdraw and not show interest in the firm's decision-making process. Indeed, research suggests that a lack of altruism may endanger the family's bonds and hinder decision-making and communication within the family firm (Gersick et al., 1997; Lubatkin et al., 2005).

Research Proposition 3: The existence and high levels of Altruism in a family firm is more likely to be negatively correlated to high levels of Conflict intensity among family members.

The existence of high levels of altruism will most likely also result in a lower degree of conflict intensity in a family business, while the absence or low levels of altruism could definitely constitute grounds for levels of conflict to increase within the family and the family firm. As mentioned earlier, the existence of any type of relationship conflict among family members is strongly influenced by the existence or absence of altruism, and this is a key characteristic that distinguishes family firms from non-family firms (Ling, 2001). Family firms that are characterized as highly altruistic may have an advantage because family member interests are more aligned with the overall success of the family firm. In such highly altruistic family firms members are highly dedicated to the business and they believe that they have a common family responsibility to see the business prosper (Cabrera-Suarez et al., 2001) and ensure the continuation of the family's and the family firm's legacies. Altruism appears to promote the family bond by fostering loyalty, interdependence and commitment to the family's long term prosperity (Ward, 1987).

However, since the degree of altruism varies greatly among families, there are differences in their level of cohesion and strength of bonding (Lansberg & Astrachan, 1994). In family firms with a high level of altruism, communication and cooperation can be expected to be high (Daily & Dollinger, 1992; Simon, 1993) and this reinforces family member interdependence and encourages them to place the family firm's objectives ahead of their own (Zahra, 2003). This sense of commitment to the family as well as to the firm may help family members get along and cooperate and consequently try to avoid conflict at all costs.

Indeed, research has shown that a high degree of altruism influences individual conduct in family firms and helps strengthen family bonds (Corbetta & Salvato C., 2004). As such, altruism may reduce relationship conflict in family firms (Kellermanns & Eddleston, 2004). Relationship conflict is a dysfunctional form of conflict that includes affective components like annoyance, frustration, personal animosity, incompatibility and irritation of others (Jehn & Mannix, 2001; Simons & Peterson, 2000). Moreover, relationship conflict is emotionally charged and includes interpersonal clashes characterized by anger, resentment and worry (Johnson & Ford, 2000). Research has also shown that cohesive top management teams experience the least amount of relationship conflict (Ensley & Pearce, 2001) because cohesive teams are more trusting, less suspicious and have cooperative group norms (Ensley et al., 2002).

In contrast, when altruism is absent or at low levels, self-interest takes precedent over the interests of the firm and the likelihood of opportunistic behavior rises (Ling et al., 2002) making relationship conflict and overall conflict intensity more likely. Such self-interested behavior is clearly detrimental to the family-business system (Daily & Dollinger, 1992).

Research Proposition 4: The existence and high levels of Altruism in a family firm is more likely to be positively correlated to high levels of a Long–Term Perspective among family members.

The existence of high levels of altruism propagates a positive effect on long–term perspective of family members in a family business while the absence or low levels of altruism could definitely generate a "now" orientation among the family members and within the family firm. According to Steier (2003) the rationalities driving the governance structures of family-financed ventures are located on a continuum, with familial altruism potentially playing a major role in promoting particular ways of organizing, wherein economic gain in the short run is not always the primary motive. The structure of financial deals involving family members has a priori long-term implications for survival and success of the family business venture as well as the family's well-being.

Furthermore, fast-growing, high-performing family firms encourage participation in developing long-term goals and strategies and they tend to share them with both family and non-family employees on a regular basis (Upton et al., 2001). By encouraging moderate levels of task conflict with the common denominator of a long-term perspective, family firms garner the commitment of firm members to the agreed upon strategies and they improve the quality of their decision making. Indeed, through discussion and communication, the significance and relevance of the issues at hand are increased simply by calling attention to their implications for the long run (Salancik & Pfeffer, 1978).

As mentioned above, altruism is also positively related to a participative strategy process in family firms (Eddleston & Kellermans, 2007). In altruistic family firms, members are highly dedicated to the business and members believe that they have a common family responsibility to see the business prosper (Cabrera-Suarez et al., 2001), by fostering loyalty, interdependence and commitment to the family's long term prosperity (Ward, 1987). Working closely together to define the firm's mission, formulate its strategy and develop effective ways to achieve its strategic objectives as Zahra (2003) advocates, family members participate in the strategy-making process a task that may be particularly important for family firms because in order for family firms to remain successful, new strategies most likely should be generated for every generation that joins the business (Post, 1993).

In contrast, lack or low levels of altruism can lead to the pursuit of individual goals with little regard for the collective utility as Gersick et al. (1997) observed. When family firms do not encourage a long run perspective their overall performance may suffer, and they may fail to develop new strategies and transfer key knowledge, experience and core capabilities to the newer generations, which could ultimately hurt their performance in the future (Cabrera-Suarez et al., 2001).

CONCLUDING REMARKS

Altruism is a trait that positively links the welfare of an individual to the welfare of others. It is self-reinforcing and motivated by self-interest because it allows the individual to simultaneously satisfy altruistic (other-regarding) and egotistic (self-regarding) preferences (Schulze et al. 2002a). Within a family this applies to the parent-child relationship and this is manifested amply in a family business setting when the parents transfer resources to their children both because they love them but also to prevent harming their altruistic welfare (Becker, 1981). This way, as parental altruism promotes family bonds but it also helps to align incentives for the offspring to contribute to the success and survival of the family firm. An analysis of three generations in an empirical study showed that in both the US and Britain the effect of high income in one generation lasts for at least two more because the positive consequences of a family's history of altruistic behavior toward the children persists over time (The Economist, 2013) The existence or absence of altruism may thus explain why in some family firms members are able to successfully work together and run a business, while in others family members are filled with animosity and conflict intensity that deteriorates family business performance (Eddleston & Kellermans, 2007).

There has been an abundance of studies on altruism and our extensive literature review pointed to the fact that altruism is a “two-edged sword” (Dyer, 2003) which can generate both positive and negative consequences and outcomes within a family-owned firm. Therefore, altruism should not be blindly promoted or suppressed in a family business as long as it remains at reasonable levels because altruism may have a positive impact on business performance. It is of interest to note that altruism has been shown to facilitate the beginning phases of entrepreneurship like the start-up and initial market entry phases, but it can become a liability during the later phases of entrepreneurship stages of development (Schulze et al., 2002b). Nevertheless, based on the literature we have ascertained that most likely, there is a positive relationship between altruism and cohesion among family members within a family business; between altruism and participative decision-making among the family members; and between altruism and a long-term perspective for the future of the family firm. However, we also ascertained that there is a negative relationship between altruism and conflict intensity among family members. We presented these theoretical positions in a conceptual framework connecting the relationships between altruism and the variables above and we developed research propositions that could empirically test these relationships and develop grounded theory for solid theoretical implications.

The conceptual framework presented here however, has also practical implications for family businesses. First of all, owners and managers must realize the importance of existing and increased levels of altruism in family firms. They must become accustomed to the idea that altruism is not just a theoretical notion, but it strongly influences not only family variables in a family firm, but also specific important business variables and ultimately business performance. It is recommended that both family and non-family members in a family business recognize the importance of altruism not only for the present but also for the future welfare of both the family and the family firm. Furthermore, they would benefit from a solid understanding of the positive relationship between altruism and family cohesion, participative decision making, and a long-term perspective for the family firm, as well as, of the negative relationship between altruism and conflict intensity within the family and the family firm. This could facilitate decision-making capabilities and assist the family firm in avoiding pitfalls, as well as enhancing its ability to trace and confront any emerging problems derived from family-specific characteristics and aspects that may affect the family business earlier and faster. It may also prove important for many family firms to get into the process of somehow appraising and rating existing levels of altruism within the business by using methods similar to those proposed by Becker & Vance (1993). Documenting and detailing the current status in terms of levels of altruism could potentially assist owners and managers with the help of experts to identify areas where improvement is likely, realistic, and practicable.

However, there are some limitations in our conceptual framework. First and foremost, the most important limitation of this paper's thesis is the fact that the conceptual framework and the research propositions presented here were based on results of previous research studies that we attempted to connect and expand in a grounded theory mode. In order to support the main thesis of the conceptual framework empirical research would be required. The second important limitation of the findings is the fact that we only focused on the relationship between altruism and four specific business variables that were believed to be affected by altruism, namely, Cohesion, Participative decision making, Conflict intensity and Long-term perspective and their subsequent impact on family business performance. It is fundamental to note that many other family and family firm variables may be deemed as impacted by altruism and themselves impacting in turn business performance. Finally, it is quite possible that the four intervening variables impacted by altruism are not independent of each other. The latter however, is beyond the scope of this paper and we propose that it should be empirically investigated in future research.

We believe that the topic of altruism in family businesses is a very promising one for future research considerations. Researchers might consider revisiting the concept of altruism in a family business setting to a greater extent, and examine its impact on behavioral and business variables as it ultimately affects business performance as a final step. It would also be interesting to investigate whether there are significant cultural differences among peoples and cultures as far as the understanding and the impact of altruism on family and family business relationships are concerned, and if these differences are a determining factor for family business performance within that cultural setting. For example, researchers might consider examining levels of altruism within family businesses in China and other emerging markets, especially since entrepreneurial orientation through family business formats is exploding there and cultural ties in these societies are very strong, but the level of professionalism in business dealings is still low.

Finally as discussed earlier, a very interesting topic for future research would be to attempt to identify the optimum level of altruism in a family firm, taking into account the maturity level of the firm, its stage of organizational cycle, its professionalization phase, its size, its specific external business environment, and the sector within which it operates. Moreover, whereas extensive research on altruism has been performed with respect to parent-owners and their children, the consequences and impacts of altruism between family member-owners and more distant relatives or key non-family business employees have yet to be investigated. Addressing such an issue would help determine the true value of having family and/or non-family members in the top management ranks of the family business. Finally, research that directly relates altruism and business performance instead of indirectly has not been undertaken. Since scales to measure the degree and the level of altruism already exist, such as the adapting scale developed by Becker & Vance (1993), the measurement of the impact of the direct relationship between altruism and business performance without going through any intervening variables is possible and constitutes a quite promising topic of future research on altruism and its impact on family businesses.

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