Volume 16, Number 1

Printed ISSN: 1544-0036
Online ISSN: 1544-0044

JOURNAL OF LEGAL, ETHICAL AND REGULATORY ISSUES

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EDITORIAL REVIEW BOARD

TABLE OF CONTENTS

EDITORIAL REVIEW BOARD III

LETTER FROM THE EDITORS VI

EEOC VS. HIGHER EDUCATION: RECENT LAWS AND INTERPRETATIONS IMPACTING FACULTY DISCRIMINATION 1
Dawn Wallace, Southeastern Louisiana University
Phyllis King, Southeastern Louisiana University

VIEWING CYBERSECURITY AS A PUBLIC GOOD: THE ROLE OF GOVERNMENTS, BUSINESSES, AND INDIVIDUALS 7
Arben Asllani, The University of Tennessee at Chattanooga
Charles Stephen White, The University of Tennessee at Chattanooga
Lawrence Ettkin, The University of Tennessee at Chattanooga

A MULTINATIONAL ANALYSIS OF CORRUPTION AND ECONOMIC ACTIVITY 15
L. Murphy Smith, Murray State University
William C. Gruben, Texas A&M International University
Leigh Johnson, Murray State University
Lawrence C. Smith, Jr.,Louisiana Tech University (Retired)

A COMPARISON OF UNIVERSITY EFFORTS TO CONTAIN ACADEMIC DISHONESTY 35
Alan Hamlin, Southern Utah University
Casimir Barczyk, Purdue University Calumet
Greg Powell, Southern Utah University
James Frost, Idaho State University

THE WAGES OF SIN: SOCIAL NORMS AND EXECUTIVE COMPENSATION 47
David A. Sauer, Quinnipiac University
Gary P. Schneider, Quinnipiac University
Aamer Sheikh, Quinnipiac University

A CODE OF CIVILITY FOR THE UNIVERSITY SETTING:
THE ARCHITECTURE FOR IMPLEMENTATION 57
W. Michael Seganish, Towson University
Norma C. Holter, Towson University

IS IT PROFITABLE TO OFFER PAID LEAVE?
A CASE STUDY OF THE LEGAL PROFESSION 73
Lisa Giddings, University of Wisconsin-La Crosse
Donna Anderson, University of Wisconsin-La Crosse
Kathryn Birkeland, University of South Dakota

THE IMPACT OF FEDERAL REGULATIONS ON IDENTIFYING, PREVENTING,
AND ELIMINATING CORPORATE FRAUD 91
Beverley J. Alleyne, Belmont University
Raymond J. Elson, Valdosta State University

SUKUK: GLOBAL ISSUES AND CHALLENGES 107
Mustafa Mohd Hanefah, Universiti Sains Islam Malaysia
Akihiro Noguchi, Nagoya University
Muhamad Muda, Universiti Sains Islam Malaysia

AN EXAMINATION OF FINANCIAL PERFORMANCE AND RISK OF
ENVIRONMENTALLY FRIENDLY 'GREEN' COMPANIES 121
Janell L. Blazovich, University of St. Thomas
Katherine Taken Smith, Murray State University
L. Murphy Smith, Murray State University

LETTER FROM THE EDITORS

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Murray State University

EEOC VS. HIGHER EDUCATION: RECENT LAWS AND INTERPRETATIONS IMPACTING FACULTY DISCRIMINATION

Dawn Wallace, Southeastern Louisiana University
Phyllis King, Southeastern Louisiana University

ABSTRACT

The purpose of this paper is to present recent cases and settlements related to pay discrimination in higher education. Laws regarding workplace inequity have helped resolve and decrease many unfair practices in higher education environments. Still, employers continue to engage in practices that are prohibited by law. Some incidents of inequality are engaged in unknowingly through lack of knowledge of laws that are being reinterpreted, modified, and changed through litigation or mediation and through long-standing accepted practices that perpetuate discrimination. Through education and understanding of the law, institutions of higher education can work toward a more equitable workplace for all individuals.

INTRODUCTION

Throughout the past forty years, institutions of higher education have become well acquainted with Title VII, the Equal Pay Act, and other laws that prohibit discrimination of protected classes. As incidents of discrimination have been played out in the courts, administrators have learned that sovereignty laws do not protect institutions from lawsuits based discrimination (Anderson v. State University of New York at New Paltz, 2000); Jackson v. Birmingham Board of Education, 2005; & Nanda v. Board of Trustees of the University of Illinois, et.al., 2002), that hiring, salary determinations, and promotions must occur through well-documented and fair practices (EEOC v. Georgia Southwestern, et.al., 1985), and that the Equal Employment Opportunity Council (EEOC) will seek remedies and sanctions against universities and colleges that violate the law.

Yet, women and other protected classes continue to lag behind white males. For example, Dey and Hill (2007) found that, "controlling for hours, occupation, parenthood, and other factors normally associated with pay, college-educated women still earn less than their male peers earn." Also, the National Women's Legal Counsel (NWLC), citing U.S. census information, states that "women today are paid, on average, only 77 cents for every dollar paid to men, and women of color are paid even less" (NLWC, 2011). More specifically related to higher education, the American Association of University Women (AAUW) has published studies illustrating the

condition of women in the academe. Their research has found that "on average, compared to men, women earn less, hold lower-ranking positions, and are less likely to have tenure" (AAUW, 2004). Further, they assert that sex discrimination in higher education persists because "universities and colleges have been powerful cultural institutions in western culture since medieval times" (West, 2012). Given the disparity that still exists in higher education institutions, continued examination and evaluation of current issues are important. As such, the purpose of this paper is to present legal issues, remedies, and settlements that impact college and university pay discrimination.

Equal Pay, Title VII, and the Age Discrimination in Employment Act (ADEA)

Pay disputes in higher education usually start with a charge of discrimination filed through the Equal Employment Opportunity Center (EEOC). Plaintiffs typically file a complaint based on Title VII, the Equal Pay Act, the Age Discrimination in Employment Act, or a combination. The EEOC's enforcement of pay discrimination laws in the higher education arena has often proven to be a slow and arduous process. One of the most difficult hurdles to overcome has been decoding the subjective, unclear ways that universities award salaries and/or salary increases. Also, past law that set timeliness deadlines for reporting discrimination has barred many individuals from arguing their discrimination cases in a court of law. However, there have been successes in pay disparities through litigation and/or settlements. In recent years, the Employment Opportunity Commission (EEOC) has successfully won lawsuits and settlements against universities on behalf of employees who have been victims of discrimination.

EEOC v. Eastern Michigan University (EMU), 2000

Dr. Pamela Speelman was the second lowest paid professor in her department , despite the fact that she had a higher rank and more seniority than four of her male colleagues. The EEOC's investigation found no justification for the significantly lower wages the university paid Dr. Speelman as compared to her male counterparts. In a Consent Decree, the university agreed to raise Dr. Speelman's salary to the same level as the highest of her male colleagues. EMU also agreed to provide Dr. Speelman $100,000 in monetary compensation, consisting of $45,400 to make up for the difference in her pay for the past seven years; $4,600 to her retirement fund, and an additional $50,000 to resolve a related sex discrimination case. EEOC General Counsel Gregory Steward stated that Dr. Speelman, "was teaching similar courses under the same general circumstances as her male colleagues, and she was entitled to the same pay for this work" (EEOC, 2000).

EEOC v. Kettering University, 2003

A female faculty member charged Kettering University through Title VII and the Equal Pay Act. She alleged that the college paid her a lower base salary than a male colleague each academic year that they worked together. The complaint further alleged that the university allowed other male colleagues to earn supplemental income through "overload" assignments. The case was resolved through a settlement agreement of $55,000 to the charging party. The university also agreed to provide training to administration regarding the Equal Pay Act (EEOC, 2003).

EEOC v. Adelphi University of Long Island, 2009

A class of female full-time professors were paid less than male professors of the same or lesser rank teaching within the same school. The violation had been ongoing since at least April 2004. Under the terms of the consent decree, Adelphi agreed to pay $305,899 to 37 claimants, as well as salary increases for 30 claimants. The decree also required remedial relief, which required monitoring and training on federal employment discrimination laws for three years.

EEOC v. University of Louisiana at Monroe (ULM), 2010

Dr. Van McGraw, former professor and dean of the College of Business Administration at ULM, filed a charge of age discrimination and retaliation in violation of the ADEA. Beginning in 2002, Dr. McGraw applied for numerous positions with the university and was not hired. Through sworn testimony, it was revealed that Dr. Stephen Richters, provost of the university, told the head of the Department of Management and Marketing that the administration would not hire McGraw because of his former ADEA lawsuit that had previously been settled with the university. After several years of litigation, ULM agreed to pay $450,000 to McGraw and his attorneys and to issue new policies and procedures for hiring (EEOC, 2010).

Lilly Ledbetter Fair Pay Act

Potentially, one of the most important contributions towards equal pay came in 2009, when the Lilly Ledbetter Fair Pay Act was signed into law. The law was an answer to the Ledbetter v. Goodyear Tire & Rubber Co, 2007 decision that upheld, with dissention, a lower court decision that the statue of limitations for presenting an equal-pay lawsuit begins at the date the pay was agreed upon, not at the date of the most recent paycheck. Contrary to the Ledbetter Supreme Court ruling, the Ledbetter Act allows the Equal Pay Act time to file restriction of 180 days to be reset with each discriminatory paycheck received. Prior to Lilly Ledbetter, many cases were dismissed because of the timeline restrictions, including some regarding higher education

pay and discrimination. Because of the Lilly Ledbetter Fair Pay Act, administrators not only have the duty to ensure that new hires are treated fairly, but should evaluate and remedy hiring or wage decisions that would have expired with the Equal Pay deadlines of the past.

Although the Act promises to make great strides in remedying workplace discriminatory pay practices, issues surrounding the law continue to emerge. Participants in the legal battleground continue to wrestle with appropriate interpretations of Ledbetter. Since 2009, the Act has been applied as Congress intended for straightforward pay discrimination cases that had not yet been filed, were pending, or were on appeal at the time of the Ledbetter Act (NWLC, 2011). The NWLC cites three issues that courts have grappled with regarding Ledbetter. First, the Ledbetter Act cannot revive claims that were already dismissed and were not pursuing appeal on January 29, 2009, when the Act became law. Second, courts have reached differing conclusions on the issue of whether Ledbetter applies to employment-related statutes not expressly named in the Ledbetter Act (Title VII, the Americans with Disabilities Act of 1990, the Age Discrimination in Employment Act of 1967, and the Rehabilitation Act of 1973). Third, the Act states that an unlawful employment occurs "when an individual becomes subject to a discriminatory compensation decision or other practice" (NWLC, 2012). Although, the act clarifies that "other practice" must in some way relate to compensation discrimination, recent litigation has focused on the scope of the term "other practice." Courts have weighed in and differ on whether "other practice" should include failure to promote, demotion, reduction in hours, retaliation, reassignments, and job classifications.

When the Lilly Ledbetter Fair Pay Act was first introduced, higher education legal experts believed that the legislation would have little effect on universities (Kelderman, 2009). However, higher education faculty have begun the process of challenging their pay through the Ledbetter legislation. Two cases that have both used Ledbetter to challenge their adverse actions and have been highlighted by the AAUP as important indicators of the courts' treatment of discriminatory legal action in higher education are Gentry v. Jackson State University, 2009 and Mezu v. Morgan State University, 2010.

Gentry v. Jackson State University, 2009

In 2004, Laverne Gentry, a professor at Jackson State University was denied tenure, which resulted in the loss of a corresponding pay raise. In 2006, Ms. Gentry filed a discrimination claim with the EEOC, alleging that she was denied tenure because of her gender. The defendant university sought summary judgment towards Gentry's Title VII claim of gender discrimination on the basis that it was untimely because she filed well past the 180 days of a Title VII violation occurring. The courts denied the university's summary judgment request because her denial of tenure counted as compensation discrimination, which the court interpreted as falling under the "other practice" scope of Ledbetter. The university has filed an appeal in the 5th Circuit and is awaiting a decision.

Mezu v. Morgan State University, 2010

Rose Ure Mezu applied for promotion to full professor in 2002 and was denied. Ms. Mezu filed a Title VII complaint with the EEOC and then filed suit in federal court. The district court dismissed her claim, and the Fourth Circuit affirmed. Mezu applied again for full professor in 2004 and 2005. In 2005, her Departmental Promotion Committee recommended her promotion, but her chair denied the request, citing the need for additional publication. On April 2006,the university president informed her that she would not be promoted, and informed her that she could appeal. Mezu appealed within a few days, but the university took no further action. On March 25, 2007, Mezu filed another EEOC claim, and eventually sued. The district court dismissed Mezu's claim as untimely, finding that she had filed her claim beyond the statutory 300-day limitation period. In February 2010, the Fourth Circuit U.S. Court of Appeals upheld the district court's decision for dismissal based on the fact that the case was not filed in a timely manner.

Cases where discrimination clearly occurred, but that are barred from being heard because of the statute of limitations, often deter others from coming forward and ultimately perpetuates incidences of discrimination in the workplace. Also, the professional and personal costs of bringing a charge against a university have often proven to have devastating effects on the plaintiff, including monetary costs, emotional stress and depression, and loss of departmental collegiality and support (AAUW, 2004). For those willing to fight for their rights, and ultimately, the rights of others, the end results of successful cases hardly ever end "happily ever after" for either party. Universities that fail to comply with discrimination requirements that prohibit inequality have often resulted in costly, time-consuming settlements, as well as court-mandated supervisory programs that aim to correct and prohibit future abuses.

CONCLUSION

To address the issues of timeliness in Title VII claims, as well as provide further measures to strengthen Equal Pay Act law, the Paycheck Fairness Act has twice passed the U. S. House of Representatives and fell two votes shy of a Senate vote in 2010. It is being reintroduced in the 112th Congress (NLWC, 2011). Some opponents of the legislation believe that the Act will result in more employees filing suits that would be costly for employers to have to fight (DiStephan, 2010). Regardless of this legislation, administrators of higher education should keep a close watch on the legal cases surrounding higher education environments so that they can help prevent discrimination charges by working toward a more equitable work environment for all.

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VIEWING CYBERSECURITY AS A PUBLIC GOOD: THE ROLE OF GOVERNMENTS, BUSINESSES, AND INDIVIDUALS

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ABSTRACT

This paper explores the role of government for establishing an appropriate legal, social, and ethical framework to enhance cybersecurity. Previous doctrines of cybersecurity are briefly analyzed, and the concept of cybersecurity as a public good is explored. To better understand public cybersecurity, the paper compares it with safety, another public good. Similar to public safety, cybersecurity requires that federal, state, and local government, organizations, and individuals implement good cybersecurity controls that result in to the protection of national security. The paper concludes with a set of examples that illustrate the role of government to enhance cybersecurity and to mitigate cyber insecurities.

INTRODUCTION

The use of computers and information technology by organizations and individuals has grown drastically over the last few decades. Recent trends of globalization, outsourcing, off-shoring, and cloud computing, have changed the structure of organizations and their cyberspace. Information is no longer confined within the walls of the organization (UMUC, 2011). Today's organizations are constantly allowing their customers and suppliers to access their supply chain management systems. Customers can retrieve product information from their Electronic Commerce systems, and suppliers need to schedule data and their own employees to log on into the organizations' intranet. Trust is a key element of supply chain operations. Individuals have become more and more dependent on information technology. As employees, they use their computers and mobile devices to remotely access their organizational networks and connect to their friends and families through social networks. Professionals expand their connections and communicate with their colleagues through professional networks, such as LinkedIn.

The global reach of information systems at both the organizational and individual level has raised concerns over security and has made organizations and individuals more vulnerable to security threats. Organizations must pay special attention to cybersecurity. For example, a recent study about software vendors indicated that organizations lose around 0.6 percent in stock

price when vulnerability is reported, and the impact is more severe when the cybersecurity flaws are not addressed in advance (Telang & Wattal, 2007). However, while most organizations consider cybersecurity management as critical to their operations, fewer than 25% of them have security measures as an integrated part of their operations (Bosen, 2006).

There is an even darker side of computer systems. They are used to program weapons of mass destruction, biologic and chemical weapons, military applications, and financial applications where trillions of dollars are transferred every day. If these applications fall into the wrong hands, they can have a devastating impact on organizations and the lives of individuals. Because of this dependence on information systems, cybersecurity concerns have grown in parallel with the development of computer technology itself (Bosworth & Jacobson, 2009). As a result, organizations and computer professionals have developed new technologies for improving cybersecurity. But technological solutions must be deployed carefully and best practices must protect them from being circumvented by attackers. In addition, cybersecurity policy should create incentives for system developers, operators, and users to act in ways that enhance rather than weaken cybersecurity (Mulligany & Schneider, 2011).

Preparing an appropriate legal environment to deal with enhanced cybersecurity and mitigate cyber insecurities requires, among other things, a comprehensive legal framework. At the federal level, the legal framework in cybercrime is currently provided by US Code & 1030 section 1030(a), which includes seven actions considered to be federal offenses, as follows: access computer without authorization; access digital financial records; access a computer used by a federal agency; access a computer and benefit more than $5000 per year; create and use a computer program to do any of the above; cause physical or medical damage via a computer or computer program; and transmit a virus intending to benefit financially (Brenner, 2006). This framework is supplemented by the copyright and child pornography laws (Brenner, 2006).

The above legal framework is not adequate. Cybercrime is a unique type of crime, a crime which involves the use of computers or computer expertise. Cyberspace and cybersecurity are always dependent on technology, and the fast pace of technology changes require fast changes in the cybersecurity legal framework. The rapid changes in computer technology make it a formidable task for the U.S. legal system to develop laws related to the security of technology (UMUC, 2011). Another challenge toward creating a workable framework for cybersecurity is the "transnational nature" of cybercrime. International jurisdictional issues must be solved through international cooperation among law enforcement agencies. Policies or agreements designed to overcome the challenges of the international nature of cybercrime include mutual legal assistance treaties (MLAT), extradition treaties, and letter rogatories.

There is a compelling need for a cybersecurity doctrine. This paper explores the concept of cybersecurity as a public good. This examination will help to address important questions with regard to the role of government in enhancing cybersecurity. For example, should U.S. taxpayer money be used to enhance the security in cyberspace? Can government intervene and mandate private industries to set up or improve their cybersecurity? What authority gives

Congress or the Executive branch the right to regulate this area? Finally, do private organizations have a responsibility to protect national security and comply with cybersecurity regulations and guidelines?

PREVIOUS CYBERSECURITY DOCTRINES

Cybersecurity approaches have evolved as technology has changed over time. The focus of the early cybersecurity doctrine was on developing security technologies (Mulligany & Schneider, 2011). Physical access controls and maintaining proper security protocols were the main focus of security in an environment where here were no online users, no passwords, and no user IDs (Bosworth & Jacobson, 2009).

Subsequent cybersecurity doctrines focused on policy to leverage those technological solutions that were at hand. During the 1980s, mainframes were gradually replaced by local area networks (LANs), and security policies changed accordingly. While mainframes were kept in separate rooms with good physical controls, the typical LAN server had a higher risk of tampering, sabotage, or theft.

In the 1990s, the introduction of wide area networks and the Internet made it easy for anyone (legitimate users or hackers) to access remote data. Computers and Risk (National Research Council, 1991) was an important publication by the System Security Study Committee of the National Research Council and was used as a reference to address cybersecurity concerns. In addition, at this time, security standards were influenced by government initiatives, such as the InfraGard program aimed at protection of the U.S. critical infrastructure (Bosworth & Jacobson, 2009).

Currently, there are two major developments that have raised security concerns: wireless computing and international operations of mafia-like rings of computer criminals. A recent collusion between these two developments resulted in over 41 million stolen credit and debit card records from TJX. The ring consisted of eleven hackers from five countries: the U.S., Estonia, Ukraine, Belarus, and China (Department of Justice, 2008). In addition, distributed denial of service (DDoS) attacks, copyright infringements, child pornography, fraud, and theft identity are ongoing security threats, and no perfect defense measures have been implemented (Bosworth & Jacobson, 2009).

CYBERSECURITY AS A PUBLIC GOOD

Approaching cybersecurity as a public good represents a sensitive starting point toward creating an appropriate legal framework (Mulligany & Schneider, 2011). It justifies the role of federal, state, and local governments to implement policies and initiatives that improve the cybersecurity of individuals and organizations. The definition of "public good" is provided in many mainstream microeconomics textbooks (Varian, 1992; Gravelle & Rees, 2004). These

sources define public good as one that is non-rival and non-excludable. Non-rival means that consumption of the good by one individual does not reduce availability of the good for consumption by others. Non-excludability means that individuals cannot be easily excluded from using the good.

Public safety is an example of a public good (Cooter & Siegel, 2010). It is non-rival, because having the population safe implies a lower prevalence of crimes, which in turn decreases the chances any member can be in danger. It is also non-excludable, because nobody can limit an individual's ability to benefit from a safe environment. The essential characteristics of public safety laws are focused on the safety of the population as a whole and the responsibility of government to enhance their safety.

The federal government discharges this responsibility through various government agencies, private organizations, and individuals. Government agencies, for example, are responsible for enforcing laws and standards on food safety, urban safety, air, and water-quality safety. For example, government can impose private organizations to be responsible for safety in the workplace. Government can also require individuals to follow road safety laws.

Mulligany & Schnieder (2011) provide a compelling argument that cybersecurity is a public good. The authors argue that cybersecurity is non-rival, because when an individual benefits from good security measures in a computer system, this benefit does not diminish the ability of other users to benefit from the security of the same system. Similarly, the security from a cyber attack enjoyed by one individual does not detract from the security enjoyed by another individual. Further, protecting the digital rights, patents, copyrights, and trademarks of one group of professionals should not diminish the same rights to another group of professionals.

Cybersecurity is also non-excludable, because individual users of a secure system cannot be easily excluded from benefits that this security brings. For example, if the government enhances security measures against a cyber attack, everyone will be able to benefit from these measures. Excluding individuals from enjoying the benefits of cybersecurity is infeasible or uneconomical. For example, all residents of the U.S. are able to enjoy the existing benefits of cybersecurity with no additional cost.

GOVERNMENT AND CYBERSECURITY

The doctrine of cybersecurity as a public good necessitates the financing of cybersecurity through taxes and justifies the role of government in its attempt to enhance cybersecurity. The doctrine demands that federal, state, and local governments provide a comprehensive legal, social, ethical, regulatory, and liability framework to protect individuals and organizations from the threat of cybercrime or cyberterrorism. The framework will also protect the digital rights, patents, copyrights, trademarks, and other intellectual property rights of individuals and organizations.

Creating of this comprehensive network is a daunting task. The challenges arise because of the ever-changing nature of information technology, the international nature of cybersecurity threats, and the high level of expertise required enhancing cybersecurity. Approaching cybersecurity as a public good allows government agencies to specify goals and means to achieve those goals. Cybersecurity goals include some agreed-upon kinds and levels of cybersecurity, characterizing who is to be secured, at what costs, and against what kinds of threats. Means might involve technological, educational, and regulatory measures. Some examples of the role of government justified by the doctrine of public cybersecurity include the following:

Enhance Public Education about Cybersecurity

Knowledgeable developers are less likely to build systems that have vulnerabilities. They are also better able and thus more likely to embrace leading-edge preventions and mitigations. As cybercrime cases are generally difficult to investigate and prosecute (Brenner, 2006) government can create incentives to focus on prevention of cybercrime through better education and technical training.

Improve Criminal Justice System to Fight Cybercrime

There is a need for a better legal framework of crime, a framework which includes the tendency of cybercrime to cross borders, especially national borders (Brenner & Schwerha, 2002). Congress must introduce and approve new laws that are designed to deal with the novel ways criminal activity can manifest itself in the online world.

Fight and Prosecute Cyberterrorism

A long struggle with cyberterrorism may be just beginning (Jaeger, 2006). Governments can sponsor agencies that promote cybersecurity and safe behavior online. For example, the National Cyber Security Alliance (NCSA) is a partnership which issues guidelines about operating systems' upgrades and patches, antivirus software, password protocols, and other safeguards that most individuals, organizations, and businesses can apply to prevent a cyberterrorist attack.

Enforce Regulatory Compliance for Information Security

Today, many organizations are storing sensitive corporate and personal information in electronic form in local or remote servers. These organizations have the obligation to maintain the security of these data. Based on the premise that cybersecurity is a public good, government

has the right to impose regulatory compliance and potential liability in the event of a security breach. During the last few years, the government has approved several regulatory standards, such as HIPPA (Privacy Individual Identifiable Health Information) in the healthcare industry, FERPA (Family Educational Rights and Privacy Act) in education, Consumer Protection Law as enforced by the FTCA (Federal Trade Commission Act), and the Sarbanes-Oxley Act (SOX), which applies to companies organized in the U.S. or elsewhere (Waleski, 2006).

Regulate Legal, Social, and Ethical Aspects of the Internet

The doctrine of public cybersecurity requires that government must create a regulatory and legal framework that balances the benefits from the technology and detriments of security and freedom rights. The Internet, for example, has empowered ordinary citizens in novel ways but also has created a number of legal, social, and ethical problems. The government protects these rights through such laws as Copyright law, Electronic Speech, Internet Censorship, Privacy law and the Internet, and Secure Electronic Voting Protocols (Himma, 2006).

Protect the Digital Rights, Patents, Copyright, and Trademark Laws on the Internet

As the Internet becomes a critical channel to reach customers, suppliers, and other business partners, the value of digital rights, patents, copyrights, and trademarks has never been higher. Just as in the case of ethical and social rights of individuals, the government must ensure that security concerns are addressed to protect the rights of professionals, inventors, knowledge workers, and business innovators.

DISCUSSION

This paper argues that cyber security should be considered a public good provided by the government. Such an approach to cyber security takes a utilitarian view of preventing cyber crime (Starr, 1983). Taking such a view can have a potential negative effect on general business in that businesses generally compete by differentiating their products or services (Porter, 1985). Differentiating products or services prevents firms from selling their goods as a commodity which, in turn, allows for price differentials. In effect differentiating products allows firms to charge a "price premium" (Porter, 1985) which increases profit. Differentiating products can occur in many different ways ranging from attributes of the product (more bells and whistles) to better sales service. Organizations dealing with information distribution via the web would not be able to differentiate of security if the government successfully assumed overall responsibility for cyber security.

Conversely, free-market capitalism in a laissez faire environment would enable a particular company to better protect its data and communications relative to other firms. By increasing its overall level of data protection (cyber security), a company could differentiate its service relative to other firms. For example, a firm could advertise that its customers have less to fear because of the firm's investment in security. This is especially true if the government did not provide adequate security.

Organizations would likely prefer the utilitarian approach because it would provide a better cost structure for the firm since government would pay for all cyber security as well as a more benevolent information transfer environment. Were total cyber security to be assured to an economy, companies would gain cost savings albeit at the expense of potential gains in competitive advantage.

Unfortunately, in the foreseeable future, the possibility of governments creating a complete guarantee of cyber security is remote at best. Therefore, a blended approach is advisable; that is, government provides the base level of security while companies can differentiate themselves on the basis of going the extra mile for in-house security. Thus giving customers the opportunity to track information, see new products they might enjoy, and pay fees by using their smart devices. This will enhance innovation and competition.

CONCLUSIONS

Creating an appropriate social, legal, and ethical framework for cybersecurity is difficult. Cyberspace and cybersecurity are based on fast-changing information technology across state and national borders. Previous doctrines in cybersecurity address computer security concerns through physical controls and technological solutions. Cybersecurity is mainly supported by associations of IT professionals and private and public organizations. This paper explores the concept of cyber security as a public good. Such examination can be used to justify the role of government to enhance public cybersecurity. Similar to other public goods, such as health and safety, cybersecurity requires that federal, state, and local government organizations; and private organizations and individuals to implement good cybersecurity controls that lead to the protection of national security.

In order to understand cybersecurity as a public good, the paper compares cybersecurity to another established public good: public safety. Cybersecurity satisfies both characteristics of public goods: non-rival and non-excludable. The non-rival characteristic means that the security from a cyber attack enjoyed by one citizen does not detract from the security enjoyed by another citizen. The non-excludable characteristic means that excluding individuals from enjoying the benefits of cybersecurity is infeasible or uneconomical. For example, all residents of the U.S. are able to enjoy the existing benefits of cybersecurity with no additional cost.

These above two characteristics necessitate the financing of cybersecurity by taxes and justify the role of government in its attempt to enhance cybersecurity. The paper illustrates the role of government to enhance cybersecurity and mitigate cyber insecurities. This role includes, but is not limited to enhancing public education about cybersecurity, fighting and prosecuting cyberterrorism, improving the criminal justice system to fight cybercrime, enforcing regulatory compliance for information security, regulating legal, social, and ethical aspects of the Internet, and protecting the digital rights, patents, copyright, and trademark laws on the Internet.

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A MULTINATIONAL ANALYSIS OF CORRUPTION AND ECONOMIC ACTIVITY

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ABSTRACT

The relationship between corruption and economic activity is a complex one. The purpose of this study is to examine the relationship in selected countries between level of corruption and economic activity, using data obtained from the Organization of Economic Cooperation and Development (OECD) and Transparency International (TI). Transparency International publishes annually a ranking of countries according to the Corruption Perceptions Index (CPI). Examples of corruption activities include: (1) bribery, (2) corporate fraud, (3) cartels, and (4) corruption in supply chains and transnational transactions. Corruption is associated with a variety of problems, such as impeding economic development. Effective corporate governance that restricts corruption benefits not only the business firm but also economic activity in host countries. Results of this study offer insights into the consequences of corruption on economic activity. Generally lower-corruption countries have experienced significantly less unemployment than higher-corruption countries. In addition, gross fixed capital formation and foreign direct investment were more favorable (though not significantly different) for the lower-corruption countries.

INTRODUCTION

Corruption can be a serious detriment to economic activity and progress. The relationship between corruption and economic activity is complex. The purpose of this study is to evaluate the relationship in selected countries between level of corruption and economic activity, using data obtained from the Organization of Economic Cooperation and Development (OECD) and Transparency International (TI). Economic variables examined in this study include gross domestic product, unemployment, gross fixed capital formation, and foreign direct investment. The study will seek to add new insight into a fundamental research question: Does corruption negatively affect economic activity?

Transparency International publishes annually a ranking of countries according to the Corruption Perceptions Index (CPI). Technically, the CPI is a measure of 'perceived' corruption but is regarded as a close proxy for actual corruption. Examples of corruption activities include:

(1) bribery, (2) corporate fraud, (3) cartels, and (4) corruption in supply chains and transnational transactions. These and other types of corruption are associated with a variety of problems, including economic development. Effective corporate governance that restricts corruption benefits not only the business firm but also economic activity in host countries. Results of the study will provide insights into the consequences of corruption on economic activity.

Results are mixed but reveal some notable relationships between corruption and economic activity. At the macro level, these relationships should be considered by policy makers who are considering changes to laws and regulations, in efforts to combat corruption and facilitate economic activity and progress. At the micro level, these relationships should be evaluated by corporate managers who are making decisions on where to set up business operations and will want to consider how corruption might affect the risks of doing business in a given business location.

REVIEW OF RELATED LITERATURE

Corruption is one of the most common and severe ethical problems in global business today (Everett et al., 2006). It often starts with the payment of bribes or controversial political contributions to government officials but can extend to other corrupt activities, including kickbacks, undisclosed agreements and insider dealing. Many corrupt activities have a common, and often criminal, purpose: they attempt to influence decision-makers without disclosing such actions to the public (Ryan, 2000). As such, these activities are abuses of power (Weber, 2004), undermine free trade and good governance, erode the rule of law, limit economic and political advancements and have devastating effects on various stakeholders (Everett et al., 2006).

Many companies believe that they compete with firms that make corrupt payments; consequently, these companies also make corrupt payments in order to remain competitive with others and facilitate transactions. When corruption is customary in a country, companies have increased incentives to make corrupt payments and often become participants in an ongoing cycle of corruption. These circumstances, however, do not justify such actions, and most ethicists agree that such payments are morally objectionable (Weber, 2004).

Decisions based on corruption, rather than value and merit, distort markets and reduce economic efficiency (Mauro, 1995). From a utilitarian perspective, such actions hinder overall economic development, thereby reducing utility. Corruption violates the principle of rights, because such activities prevent fair competition (Baron, 2010) and encourage individuals to use their circumstances for personal gain, which violates a duty to their principals. Furthermore, corruption impedes participation in the political process, a fundamental human right (Weber, 2004); as such, it also violates the principle of justice. Corrupt payments prevent government officials from making impartial decisions, affect the equality of political rights and reward recipients on the basis of their position or power rather than their actions. Moreover, corruption violates Kantian ethics; individuals would not want economic systems where competition and

individual decisions were influenced by corruption. Rather, reason would dictate a universal rule of economic competition without corrupt payments (Baron, 2010). Finally, virtue ethics does not support corruption. Individuals and organizations who participate in corrupt activities inherently lack honesty and integrity. In fact, some researchers note that virtue ethics requires us to consider not only the morals of those involved in corruption, but also whether the individuals and groups that fight corruption are themselves virtuous or moral actors (Everett et al., 2006).

Although corrupt payments are objectionable according to several moral philosophies, and often violate the laws of the country in which they are made as well as corporate codes of conduct, the prevalence of corruption in some countries causes some to think that it is the only way to do business. However, bribery and corruption are not the only modus operandi. While anecdotal and research evidence indicates how greed leads to corruption, there is also research indicating that there are businesspersons who show character opposite of greed (e.g., benevolence). Research by Frémeaux and Michelson (2011) examine the alternative notion of social and business experience that transcends the dominant logic of exchange: the existential gift. The authors consider how the existential gift provides human actors with greater freedom in their choices and relationships. They suggest that this freedom leads to a new 'ethic of generosity' in which major progress can be made towards developing more human models and practices in business.

Simpson (1982) studies the manner in which large multinational businesses can exert powerful influences on economic, social, and political environments in which they operate. Some researchers have suggested that these businesses may be able to have a positive impact on the ethical climate in host countries (De George, 1993). Recent research by Kwok and Tadesse (2006) shows that business activity can be ethically positive and has indeed resulted in lower levels of corruption in host countries. However, other research indicates that that large multinationals do not consistently use the same ethical approach in home and host countries (Tan, 2009). Tan and Wang (2011) examine how multinational businesses balance ethical pressures from both the home and host countries. The researchers suggest that a multinational firm will implement unique ethical strategies under different scenarios and select the 'right' arrangement of core values and peripheral components that fit the institutional environment in host countries.

Baughn et al. (2010) recognize that globalization has led to business transactions that involve societies with different perspectives concerning bribery. Findings of their study suggest that the propensity to bribe was minimized if corruption was not tolerated in the company's home country, when the home country was a signatory of the OECD anti-bribery convention, and when there was heavy trading between the home country and high-wealth countries. A study by Baughn et al. (2010) parallels research by Halter and Arruda (2010) whose findings indicate that multinational companies are not consistent in their ethical behavior between home countries and host countries, especially in less-developed regions.

Although the literature on corruption addresses many aspects of this phenomenon, our concerns are associated with four factors. First, corruption is organized much like any business and involves sophisticated pricing policies and marketing strategies, and reflects market structure. Decentralized bribing systems typically extract more than centralized systems (Albornoz-Crespo & Cabrales, 2010; Olken & Barron, 2009) and this can result in a reduction of overall take (and of economic growth) because of the reduced number of payees in the market (Shleifer & Vishny, 1993).

Second, these characteristics may be seen as explaining, at least in part, another aspect of corruption. That is, some countries manage to grow rapidly despite widespread corruption, while corruption seems to constrain growth in others (Svensson, 2005). Although the literature suggests that these differentials may reflect other factors than corruption, it has been demonstrated that countries in which perceptions of corruption are high tend to exhibit signs of other market-impeding characteristics as well. These problems of multicollinearity complicate analysts' abilities to separate one effect from another.

Third, an additional complication of the analysis of corruption involves the procedures by which corruption is identified, or is attempted to be identified. A few papers present direct micro-measures measures of corruption (Olken & Barron, 2009). Some surveys directly ask respondents if they have experienced corruption themselves. However, most research is based on surveys in which respondents are asked about their perceptions of corruption in a country. One finding that raises questions about the survey enterprise is that responses to questions about direct experience are often substantially different from responses to questions about perceptions in general (Razfindrakoto & Roubaud, 2010; Treisman, 2006).

Fourth, perhaps the most widely addressed issues in the literature on corruption are the associations between corruption and income, corruption and output growth, and corruption and measures of wealth per capita. Although the negative association between measures of corruption and income per capita is widespread in the literature, the direction of causality is unclear, and the connection between corruption and growth in income per capita is also apparently inconclusive (Shaw, Katsaiti & Jurgilas, 2011; Treisman, 2006). However, recent econometric meta-studies of the literature (Campos, Dimova & Saleh, 2010) conclude a significant negative relationship between corruption and GDP growth per capita, even after accounting for characteristics correcting for "publication bias." In this last, a metric is developed to identify and correct for editorial bias in favor of papers that reject the null hypothesis of no effect (Doucouliagos & Ulubasoglu, 2008). Other work concludes a strong negative connection between corruption and growth in wealth per capita, after accounting for the effects of other variables. (Aidt, 2010).

CORRUPTION PERCEPTIONS INDEX (CPI) AND TRANSPARENCY INTERNATIONAL

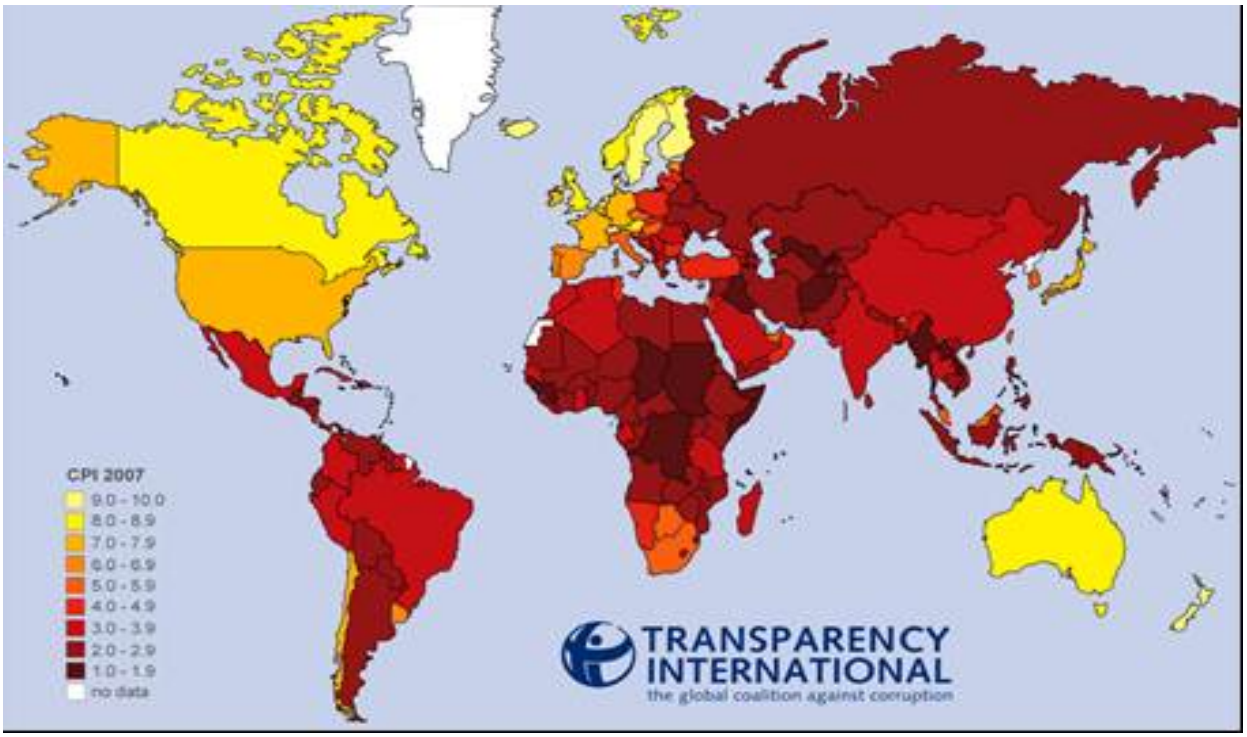
Corruption hurts economic activity in a myriad of ways. Corruption by government officials can lead to an anti-competitive economic environment, in which one company is given preferential treatment. Naturally a company would be unlikely to do business in a place where they have a competitive disadvantage. Further, corruption by a country's government officials substantially increases risk of doing business in that country. Of particular concern to a US-based company doing business in a country with high levels of corruption is the increased danger of violating the US Foreign Corrupt Practices Act (FCPA). The FCPA was passed in 1977 and in recent years has been heavily enforced. Other countries have similar laws to the US's FCPA; consequently, no matter what country in which a multinational company is based, it should be concerned about corruption and the risk it poses.

One method a company can use to identify high corruption risk areas is to make an assessment of risk by country of operations. Transparency International has published its annual Corruption Perceptions Index (CPI) since 1995. Transparency International is a global anti-corruption organization that leads the fight against corruption. The organization consists of more than 90 local national chapters, which combat corruption in various ways. Transparency International organizes key participants from government, civil society, business, and the media to promote transparency in elections, in public administration, in procurement, and in business (Transparency International, 2010).

The Corruption Perceptions Index provides a metric regarding the potential corruption risk by country. The CPI is available for 180 countries. The perceived levels of corruption are determined by expert assessments and opinion surveys. The CPI score ranges from zero to ten. A lower CPI score indicates high corruption risk. A disproportionate number of actions by the US Department of Justice (DOJ) and US Securities Exchange Commission (SEC) involve countries with a low CPI. Exhibit 1 provides a world map with countries colored according to CPI score (Transparency International, 2010).

The CPI cannot totally predict whether corruption will occur. Even in countries with high CPI scores (i.e., low risk of corruption), companies must still be on guard against corruption. For example, the multinational company Siemens recently settled an FCPA case for an unprecedented amount of $1.6 billion. The case centered on a bribe involving the Norwegian Department of Defense, regarding a contract for the delivery of communications equipment in 2001. This was surprising, as Norway is not perceived to be a country with high corruption risk. Norway's 2007 CPI index is 8.7, suggesting a minimal perceived risk for corruption. This means that CPI risk assessment has its limitations that companies must keep in mind.

Exhibit 1: WORLD MAP WITH COUNTRIES COLORED BY CPI SCORE



ORGANIZATION OF ECONOMIC COOPERATION AND DEVELOPMENT (OECD)

The countries comprising the sample used in this study are the members of the Organization for Economic Cooperation and Development (OECD). The OECD countries were used for several reasons, primarily because they have been the subjects of numerous other research studies, economic data is available, and their experiences regarding corruption and economic activity should be of interest to anyone concerned with this subject. The OECD is an international economic organization that is based in Paris and includes 30 countries. Most of the OECD members are high-income economies with a high Human Development Index (HDI) and considered developed nations (OECD, 2010a; Smith et al., 2011; Wikipedia, 2010).

The OECD began as the Organization for European Economic Cooperation (OEEC), led by Robert Marjolin of France, which helped administer the Marshall Plan for the reconstruction of Europe following World War II. Afterwards, membership was extended to non-European nations. The OEEC was reformed in 1961 as the OECD by the Convention on the Organization for Economic Cooperation and Development. Headquarters of the OECD is at the Château de la Muette in Paris, France (OECD, 2010a; Wikipedia, 2010).

The OECD's underlying principle is to bring together the governments of countries committed to democracy and the market economy from around the world to do the following:

1. Support sustainable economic growth
2. Boost employment
3. Raise living standards
4. Maintain financial stability
5. Assist other countries' economic development
6. Contribute to growth in world trade

The OECD offers a structure in which governments can compare policy experiences, seek answers to common problems, identify good practice and coordinate domestic and international policies. Subsequent to political changes in Central and Eastern Europe, in 1989 the OECD began assisting these countries to prepare market economy reforms. The Centre for Cooperation with European Economies in Transition (now succeeded by the Centre for Cooperation with Non-Members) was established in 1990. The following year, the Program "Partners in Transition" was initiated for the cooperation with Czechoslovakia, Hungary and Poland. During the period 1994 to2000, Poland, Hungary, Czech Republic, Slovakia, Mexico, and the Republic of Korea became members of the OECD (OECD, 2010a; Smith et al., 2011). The OECD member countries are shown in Exhibit 2.

Exhibit 2: OECD MEMBER COUNTRIES

Founding members (1961)	Admitted later
Austria	Listed chronologically with year of admission:
Belgium	Japan (1964)
Canada	Finland (1969)
Denmark	Australia (1971)
France	New Zealand (1973)
Germany	Mexico* (1994)
Greece	Czech Republic (1995)
Iceland	Hungary (1996)
Ireland	Poland* (1996)
Italy	Republic of Korea (1996)
Luxembourg	Slovakia (2000)
Netherlands	
Norway	
Portugal	
Spain	
Sweden	
Switzerland	
Turkey*	
United Kingdom	
United States	

Note: Currently there are 30 full members of the OECD. Among these, Mexico, Poland and Turkey (identified with *) are characterized as upper middle-income economies by the World Bank. The other 27 members are characterized as high-income economies.

The OECD provides expertise and exchanges views with over 100 other nations. During 2007, the OECD invited Chile, Estonia, Israel, Russia and Slovenia to open discussions for membership and offered enhanced engagement to Brazil, China, India, Indonesia and South Africa. While enhanced engagement is not equal to accession to the OECD, it offers the potential to lead to future membership (OECD, 2010a).

The OECD is one of the world's largest and most reliable sources of comparable statistics and economic and social data. The OECD collects data, but also monitors trends, analyzes and forecasts economic developments, and studies social changes or evolving patterns in trade, environment, agriculture, technology, and taxation. The OECD is among the world's largest publishers regarding economics and public policy.

Areas in which the OECD has made substantial efforts to improve global economic activity include coordinating international action on corruption and bribery, creating the OECD Anti-Bribery Convention, which began in February 1999. A total of 38 countries have approved the Anti-Bribery Convention, including all 30 OECD countries and 8 non-OECD countries (OECD, 2010b). Another major effort of the OECD is its implementation of an anti-spam task force. The task force submitted a detailed report, with several background papers on spam problems in developing countries. The OECD is evaluating effects of the information economy and the future of the Internet economy. The OECD also assesses educational performances among countries and publishes the Program for International Student Assessment (PISA), which facilitates multinational comparisons (OECD, 2010a).

The OECD's structure is comprised of three major bodies: (1) OECD Member Countries, (2) OECD Secretariat, and (3) OECD Committees. Each OECD member country is represented via a delegation led by an ambassador. The OECD Secretariat is headed by the Secretary-General. Delegates participate in committee and other meetings, mostly organized by the Secretariat. OECD committee members are generally subject-matter experts from member and non-member countries. Representatives of the 30 OECD member countries, along with representatives from some observer countries, participate in specialized committee meetings regarding policy areas, such as financial markets, trade, and economics (Wikipedia, 2010).

ANALYSIS AND RESULTS

Using data available from the OECD (OECD, 2010a) and Transparency International (Transparency International 2010), data was compiled regarding corruption and gross domestic product (GDP). GDP is the total market value of all the goods and services produced within the borders of a nation during a defined period, typically annually. Exhibit 3 shows the Corruption Perceptions Index and GDP for four years, 2005 to 2008, for the 30 nations comprising the OECD. As shown, the average CPI score is 7.11, ranging from 3.6 for Mexico to 9.3 for Denmark, New Zealand, and Sweden. The US CPI is 7.3. Average GDP increased from $1.184 billion in 2005 to $1.455 billion in 2008.

Exhibit 3: CPI SCORES AND NOMINAL GDP IN US$ BY COUNTRY BY YEAR

Rank	Country	2008 CPI Score	GDP Nominal – US$ Yr1	GDP Nominal – US$ Yr2	GDP Nominal – US$ Yr3	GDP Nominal – US$ Yr4
1	Denmark	9.3	257.68	273.87	310.06	340.03
2	New Zealand	9.3	109.49	106.11	129.00	128.41
3	Sweden	9.3	366.01	393.15	453.32	478.96
4	Finland	9.0	195.67	209.71	246.25	271.87
5	Switzerland	9.0	372.48	391.23	434.09	500.26
6	Iceland	8.9	16.30	16.65	20.32	16.79
7	Netherlands	8.9	639.58	678.32	779.43	876.97
8	Australia	8.7	713.21	755.20	910.33	1,013.46
9	Canada	8.7	1,133.76	1,277.56	1,427.19	1,499.55
10	Luxembourg	8.3	37.67	42.59	49.72	54.97
11	Austria	8.1	303.45	321.65	371.14	414.83
12	Germany	7.9	2,793.23	2,919.51	3,328.18	3,673.11
13	Norway	7.9	302.01	336.73	388.48	451.83
14	Ireland	7.7	201.93	221.95	260.08	267.58
15	United Kingdom	7.7	2,282.89	2,442.95	2,800.11	2,680.00
16	Belgium	7.3	376.99	400.30	459.03	506.18
17	Japan	7.3	4,552.19	4,362.58	4,380.39	4,910.69
18	United States	7.3	12,638.38	13,398.93	14,077.65	14,441.43
19	France	6.9	2,147.76	2,270.35	2,597.70	2,866.95
20	Spain	6.5	1,132.13	1,235.92	1,442.91	1,601.96
21	Portugal	6.1	185.77	195.19	223.66	244.64
22	Korea	5.6	844.87	951.77	1,049.24	929.12
23	Czech Republic	5.2	124.55	142.61	174.22	216.35
24	Hungary	5.1	110.20	113.01	138.76	155.93
25	Slovak Republic	5.0	47.98	56.00	75.21	95.40
26	Italy	4.8	1,780.78	1,865.11	2,117.52	2,313.89
27	Greece	4.7	246.22	267.71	312.75	357.55
28	Poland	4.6	303.98	341.67	425.32	527.87
29	Turkey	4.6	482.69	529.19	649.13	729.98
30	Mexico	3.6	849.03	952.34	1,025.43	1,088.13
	AVERAGE	**7.11**	**1,184.96**	**1,249.00**	**1,368.55**	**1,455.16**
DATES: YR1 = 2005 YR2 = 2006 YR3 = 2007 YR4 =2008						

Sources: Transparency International 2010; OECD 2010.

Exhibit 4 shows the percent change in GDP by country by year and compared according to CPI scores. T-tests were used to analyze differences. In the higher CPI group, which includes Denmark, New Zealand, and Sweden, the average CPI is 8.58. In the lower CPI group, the average CPI is 5.64, which is significantly different from the higher CPI group ($p<.001$).

Exhibit 4: PERCENT CHANGE IN GDP BY COUNTRY BY YEAR GROUPED BY HIGH/LOW CPI SCORE

Rank	Country	2008 CPI Score	GDP Nominal – % Change, Yr1 to Yr2	GDP Nominal – % Change, Yr2 to Yr3	GDP Nominal – % Change, Yr3 to Yr4
1	Denmark	9.3	6.28	13.22	9.66
2	New Zealand	9.3	(3.09)	21.57	(0.45)
3	Sweden	9.3	7.42	15.30	5.66
4	Finland	9.0	7.17	17.43	10.40
5	Switzerland	9.0	5.04	10.95	15.24
6	Iceland	8.9	2.11	22.05	(17.37)
7	Netherlands	8.9	6.06	14.91	12.51
8	Australia	8.7	5.89	20.54	11.33
9	Canada	8.7	12.68	11.71	5.07
10	Luxembourg	8.3	13.07	16.74	10.56
11	Austria	8.1	6.00	15.39	11.77
12	Germany	7.9	4.52	14.00	10.36
13	Norway	7.9	11.50	15.37	16.31
14	Ireland	7.7	9.92	17.18	2.88
15	United Kingdom	7.7	7.01	14.62	(4.29)
	AVERAGE	**8.58**	**6.77**	**16.07**	**6.64**
16	Belgium	7.3	6.18	14.67	10.27
17	Japan	7.3	(4.17)	0.41	12.11
18	United States	7.3	6.02	5.07	2.58
19	France	6.9	5.71	14.42	10.36
20	Spain	6.5	9.17	16.75	11.02
21	Portugal	6.1	5.07	14.59	9.38
22	Korea	5.6	12.65	10.24	(11.45)
23	Czech Republic	5.2	14.50	22.16	24.19
24	Hungary	5.1	2.55	22.79	12.38
25	Slovak Republic	5.0	16.71	34.30	26.86
26	Italy	4.8	4.74	13.53	9.27
27	Greece	4.7	8.73	16.82	14.32
28	Poland	4.6	12.40	24.48	24.11
29	Turkey	4.6	9.63	22.66	12.46
30	Mexico	3.6	12.17	7.67	6.11
	AVERAGE	**5.64**	**8.14**	**16.04**	**11.60**
		***			*

DATES: YR1 = 2005 YR2 = 2006 YR3 = 2007 YR4 =2008

NOTE: *=Significant at P<.10, **=Significant at P<.01, *=Significant at P<.001.**

Sources: Transparency International 2010; OECD 2010.

As shown in Exhibit 4, the average percent change in GDP was higher in two of the time periods for the lower CPI group than for the higher CPI group. For 2005 to 2006, the average percent change in GDP was 6.77 percent for the higher CPI group and 8.14 percent for the lower CPI group. For 2007 to 2008, the average percent change in GDP was 6.64 percent for the higher CPI group and 11.60 percent for the lower CPI group. The difference was significant only in the most recent time period, 2007 to 2008 ($p<.10$).

Unemployment is defined as the proportion of the total labor force that is unemployed but actively seeking employment and willing to work. Exhibit 5 shows the CPI score compared to the unemployment rate for Years 1 to 4 (i.e., 2005 to 2008). During these four years, the average unemployment rate declined from a high of 7.05 percent in 2005 to 5.76 percent in 2008.

Exhibit 5: CPI SCORES AND UNEMPLOYMENT RATES BY COUNTRY BY YEAR

Rank	Country	2008 CPI Score	Unemploym-ent Rate Yr1	Unemploym-ent Rate Yr2	Unemploym-ent Rate Yr3	Unemploym-ent Rate Yr4
1	Denmark	9.3	5.00	4.10	4.00	3.40
2	New Zealand	9.3	3.80	3.80	3.70	4.20
3	Sweden	9.3	6.00	5.40	6.10	6.20
4	Finland	9.0	8.30	7.70	6.80	6.40
5	Switzerland	9.0	4.40	4.00	3.60	3.40
6	Iceland	8.9	2.60	2.90	2.30	3.00
7	Netherlands	8.9	5.10	4.20	3.50	3.00
8	Australia	8.7	5.00	4.80	4.40	4.20
9	Canada	8.7	6.80	6.30	6.00	6.10
10	Luxembourg	8.3				4.80
11	Austria	8.1	5.20	4.70	4.40	3.80
12	Germany	7.9	11.10	10.30	8.60	7.50
13	Norway	7.9	4.60	3.40	2.50	2.60
14	Ireland	7.7	4.30	4.00	4.00	5.20
15	United Kingdom	7.7	4.60	5.40	5.30	5.30
16	Belgium	7.3	8.50	8.30	7.50	7.00
17	Japan	7.3	4.40	4.10	3.90	4.00
18	United States	7.3	5.10	4.60	4.60	5.80
19	France	6.9	8.90	8.80	8.00	7.40
20	Spain	6.5	9.20	8.51	8.30	11.34
21	Portugal	6.1	7.60	7.70	8.00	7.60
22	Korea	5.6	3.70	3.50	3.20	3.20
23	Czech Republic	5.2	7.90	7.10	5.30	4.40
24	Hungary	5.1	7.20	7.50	7.40	7.80
25	Slovak Republic	5.0	16.20	13.30	11.00	9.60
26	Italy	4.8	7.70	6.80	6.10	6.70
27	Greece	4.7	9.60	8.80	8.10	7.20
28	Poland	4.6	17.70	13.80	9.60	7.10
29	Turkey	4.6	10.30	9.90	10.30	11.00
30	Mexico	3.6	3.51	3.16	3.39	3.50
	AVERAGE	**7.11**	**7.05**	**6.44**	**5.86**	**5.76**
			**	**	**	*

DATES: YR1 = 2005 YR2 = 2006 YR3 = 2007 YR4 =2008

NOTE: *=Significant at F<.10, **=Significant at F<.01, *=Significant at F<.001.**

Sources: Transparency International 2010; OECD 2010.

Exhibit 6 shows the percent change in unemployment by country by year and compared according to CPI scores. For the high CPI countries, the average unemployment rate was 5.49, 5.07, 4.66, and 4.61 for 2005, 2006, 2007, and 2008, respectively. The average unemployment rate for the low CPI countries was 8.50, 7.72, 6.98, and 6.91 for 2005, 2006, 2007, and 2008, respectively. Higher CPI countries had significantly lower rates of unemployment each year.

Exhibit 6: UNEMPLOYMENT RATES BY COUNTRY BY YEAR GROUPED BY HIGH/LOW CPI SCORES

Rank	Country	2008 CPI Score	Unemploym-ent Rate Yr1	Unemploym-ent Rate Yr2	Unemploym-ent Rate Yr3	Unemploym-ent Rate Yr4
1	Denmark	9.3	5.00	4.10	4.00	3.40
2	New Zealand	9.3	3.80	3.80	3.70	4.20
3	Sweden	9.3	6.00	5.40	6.10	6.20
4	Finland	9.0	8.30	7.70	6.80	6.40
5	Switzerland	9.0	4.40	4.00	3.60	3.40
6	Iceland	8.9	2.60	2.90	2.30	3.00
7	Netherlands	8.9	5.10	4.20	3.50	3.00
8	Australia	8.7	5.00	4.80	4.40	4.20
9	Canada	8.7	6.80	6.30	6.00	6.10
10	Luxembourg	8.3				4.80
11	Austria	8.1	5.20	4.70	4.40	3.80
12	Germany	7.9	11.10	10.30	8.60	7.50
13	Norway	7.9	4.60	3.40	2.50	2.60
14	Ireland	7.7	4.30	4.00	4.00	5.20
15	United Kingdom	7.7	4.60	5.40	5.30	5.30
	AVERAGE	**8.58**	**5.49**	**5.07**	**4.66**	**4.61**
16	Belgium	7.3	8.50	8.30	7.50	7.00
17	Japan	7.3	4.40	4.10	3.90	4.00
18	United States	7.3	5.10	4.60	4.60	5.80
19	France	6.9	8.90	8.80	8.00	7.40
20	Spain	6.5	9.20	8.51	8.30	11.34
21	Portugal	6.1	7.60	7.70	8.00	7.60
22	Korea	5.6	3.70	3.50	3.20	3.20
23	Czech Republic	5.2	7.90	7.10	5.30	4.40
24	Hungary	5.1	7.20	7.50	7.40	7.80
25	Slovak Republic	5.0	16.20	13.30	11.00	9.60
26	Italy	4.8	7.70	6.80	6.10	6.70
27	Greece	4.7	9.60	8.80	8.10	7.20
28	Poland	4.6	17.70	13.80	9.60	7.10
29	Turkey	4.6	10.30	9.90	10.30	11.00
30	Mexico	3.6	3.51	3.16	3.39	3.50
	AVERAGE	**5.64**	**8.50**	**7.72**	**6.98**	**6.91**
		***	**	**	**	**

DATES: YR1 = 2005 YR2 = 2006 YR3 = 2007 YR4 =2008

NOTE: *=Significant at P<.10, **=Significant at P<.01, *=Significant at P<.001.**

Sources: Transparency International 2010; OECD 2010.

Gross fixed capital formation is measured by the total value of a producer's acquisitions, less disposals, of fixed assets during the accounting period plus certain additions to the value of non- produced assets (such as subsoil assets or major improvements in the quantity, quality or productivity of land) realized by the productive activity of institutional units. Exhibit 7 shows CPI Scores and Gross Fixed Capital Formation by Country by Year.

Exhibit 7: CPI SCORES AND GROSS FIXED CAPITAL FORMATION BY COUNTRY BY YEAR

Rank	Country	2008 CPI Score	Gross Fixed Capital Formation Yr1	Gross Fixed Capital Formation Yr2	Gross Fixed Capital Formation Yr3	Gross Fixed Capital Formation Yr4
1	Denmark	9.3	37,314.83	43,716.06	46,585.11	44,829.24
2	New Zealand	9.3	17,308.06	17,744.53	18,815.69	18,261.82
3	Sweden	9.3	51,939.81	57,679.45	63,489.93	67,070.61
4	Finland	9.0	27,399.12	29,646.21	33,688.96	35,100.42
5	Switzerland	9.0	58,144.92	61,821.64	66,463.83	68,193.18
6	Iceland	8.9	3,706.56	5,057.90	4,662.58	4,545.49
7	Netherlands	8.9	89,382.72	98,003.50	104,675.70	112,141.15
8	Australia	8.7	151,181.28	165,063.80	185,555.68	209,951.71
9	Canada	8.7	197,064.86	218,135.36	233,514.02	244,076.20
10	Luxembourg	8.3	5,723.05	6,012.99	6,877.10	7,004.61
11	Austria	8.1	48,650.97	50,895.34	54,501.33	56,699.04
12	Germany	7.9	359,388.24	389,533.81	419,688.59	437,359.50
13	Norway	7.9	41,532.68	48,191.97	55,053.15	60,138.68
14	Ireland	7.7	39,794.53	43,828.41	45,502.05	36,358.84
15	United Kingdom	7.7	317,367.47	344,014.73	376,387.25	367,393.87
16	Belgium	7.3	57,840.43	61,680.49	67,028.75	71,849.09
17	Japan	7.3	1,084,627.66	1,099,304.97	1,119,754.09	1,087,247.25
18	United States	7.3	2,452,400.00	2,622,800.00	2,654,800.00	2,576,000.00
19	France	6.9	317,274.74	343,840.98	376,613.23	393,595.46
20	Spain	6.5	246,030.96	277,472.82	298,066.15	289,271.24
21	Portugal	6.1	30,493.84	31,102.18	32,773.36	33,240.65
22	Korea	5.6	220,776.77	230,468.72	245,957.33	264,963.92
23	Czech Republic	5.2	19,220.85	20,630.73	23,064.45	22,881.16
24	Hungary	5.1	17,952.69	18,290.79	19,067.84	19,700.57
25	Slovak Republic	5.0	8,565.90	9,547.11	10,533.72	10,938.91
26	Italy	4.8	273,056.37	288,672.55	301,961.53	302,539.25
27	Greece	4.7	37,451.88	42,232.68	45,095.49	43,185.76
28	Poland	4.6	41,228.05	47,930.20	58,381.25	64,641.16
29	Turkey	4.6	218,284.08	270,377.20	288,856.55	302,000.87
30	Mexico	3.6	197,586.82	229,168.87	253,185.43	283,224.05
	AVERAGE	**7.11**	**222,289.67**	**239,095.53**	**250,353.34**	**251,146.79**

DATES: YR1 = 2005 YR2 = 2006 YR3 = 2007 YR4 =2008

Sources: Transparency International 2010; OECD 2010.

Exhibit 8 shows the percent change in gross fixed capital formation by country by time period and compared according to CPI scores. As shown, for the high CPI countries, the average percent change in gross fixed capital formation was 10.92, 7.93, and 1.66 for 2005-06, 2006-07, and 2007-08, respectively. The average percent change in gross fixed capital formation for the low CPI countries was 9.13, 7.85, and 2.77 for 2005-06, 2006-07, and 2007-08, respectively. Differences between the high and low CPI countries were not significant for any time period.

Exhibit 8: PERCENT CHANGE IN GROSS FIXED CAPITAL FORMATION GROUPED BY HIGH/LOW CPI SCORES

Rank	Country	2008 CPI Score	% Change in Gross Fixed Capital Formation Yr1 to Yr2	% Change in Gross Fixed Capital Formation Yr2 to Yr3	% Change in Gross Fixed Capital Formation Yr3 to Yr4
1	Denmark	9.3	17.15	6.56	(3.77)
2	New Zealand	9.3	2.52	6.04	(2.94)
3	Sweden	9.3	11.05	10.07	5.64
4	Finland	9.0	8.20	13.64	4.19
5	Switzerland	9.0	6.32	7.51	2.60
6	Iceland	8.9	36.46	(7.82)	(2.51)
7	Netherlands	8.9	9.64	6.81	7.13
8	Australia	8.7	9.18	12.41	13.15
9	Canada	8.7	10.69	7.05	4.52
10	Luxembourg	8.3	5.07	14.37	1.85
11	Austria	8.1	4.61	7.09	4.03
12	Germany	7.9	8.39	7.74	4.21
13	Norway	7.9	16.03	14.24	9.24
14	Ireland	7.7	10.14	3.82	(20.09)
15	United Kingdom	7.7	8.40	9.41	(2.39)
	AVERAGE	**8.58**	**10.92**	**7.93**	**1.66**
16	Belgium	7.3	6.64	8.67	7.19
17	Japan	7.3	1.35	1.86	(2.90)
18	United States	7.3	6.95	1.22	(2.97)
19	France	6.9	8.37	9.53	4.51
20	Spain	6.5	12.78	7.42	(2.95)
21	Portugal	6.1	1.99	5.37	1.43
22	Korea	5.6	4.39	6.72	7.73
23	Czech Republic	5.2	7.34	11.80	(0.79)
24	Hungary	5.1	1.88	4.25	3.32
25	Slovak Republic	5.0	11.45	10.33	3.85
26	Italy	4.8	5.72	4.60	0.19
27	Greece	4.7	12.77	6.78	(4.23)
28	Poland	4.6	16.26	21.80	10.72
29	Turkey	4.6	23.86	6.83	4.55
30	Mexico	3.6	15.98	10.48	11.86
	AVERAGE	**5.64**	**9.18**	**7.85**	**2.77**
		***			

DATES: YR1 = 2005 YR2 = 2006 YR3 = 2007 YR4 =2008

NOTE: *=Significant at P<.10, **=Significant at P<.01, *=Significant at P<.001.**

Sources: Transparency International 2010; OECD 2010.

Foreign direct investment (FDI) is the category of international investment that reflects the objective of a resident entity in one economy to obtain a lasting interest in an enterprise resident in another economy. Exhibit 9 shows CPI scores and foreign direct investment by country by year. A simple regression analysis indicates a significant relationship between CPI and foreign direct investment in the most current year.

Exhibit 9: CPI SCORES AND FOREIGN DIRECT INVESTMENT BY COUNTRY BY YEAR

Rank	Country	2008 CPI Score	Foreign Direct Investment, net Yr1	Foreign Direct Investment, net Yr2	Foreign Direct Investment, net Yr3	Foreign Direct Investment, net Yr4
1	Denmark	9.3	(3,372,185,288.58)	(5,726,180,175.85)	(8,144,724,906.28)	(17,153,182,198.03)
2	New Zealand	9.3	2,992,960,597.65	7,272,720,257.01	(729,166,065.99)	2,246,630,488.68
3	Sweden	9.3	(16,639,983,959.10)	3,625,922,171.46	(15,310,687,126.00)	1,518,948,847.78
4	Finland	9.0	390,478,086.96	2,460,472,304.20	4,444,582,951.62	
5	Switzerland	9.0	(51,368,902,312.47)	(44,603,783,439.99)	(905,316,258.52)	(66,395,266,570.36)
6	Iceland	8.9	(3,990,143,606.67)	(1,305,825,831.59)	(9,077,245,703.82)	
7	Netherlands	8.9	(82,596,600,161.61)	(57,563,471,720.66)	96,844,732,723.61	(53,991,187,139.38)
8	Australia	8.7	(1,660,553,560.74)	2,481,744,581.07	15,603,697,205.37	4,440,414,409.01
9	Canada	8.7	(1,725,069,777.33)	15,221,223,258.44	51,802,721,926.01	(33,663,463,126.51)
10	Luxembourg	8.3	(8,133,870,964.75)	14,609,225,757.82	(65,300,892,106.83)	(22,791,742,858.15)
11	Austria	8.1	(193,822,310.15)	(3,049,590,545.03)	(4,074,260,930.71)	(15,212,673,752.12)
12	Germany	7.9	(30,482,513,950.12)	(69,642,331,924.72)	(124,783,933,740.39)	(133,125,782,540.47)
13	Norway	7.9	(16,613,644,856.07)	(14,552,461,167.20)	(8,711,718,972.34)	(29,058,200,957.26)
14	Ireland	7.7	(44,824,253,570.13)	(15,589,892,559.33)	4,080,513,170.07	(25,085,923,049.78)
15	United Kingdom	7.7	96,615,160,032.72	56,586,734,309.75	(77,735,638,178.88)	
16	Belgium	7.3	3,606,997,510.16	7,087,129,966.37	16,512,542,588.42	(10,305,495,824.79)
17	Japan	7.3	(42,224,391,037.03)	(56,954,380,863.35)	(51,307,783,630.77)	(106,266,213,015.02)
18	United States	7.3	76,402,000,000.00	715,000,000.00	(95,730,000,000.00)	7,418,000,000.00
19	France	6.9	(28,829,338,872.56)	(44,029,103,564.77)	(67,628,570,764.24)	(103,955,715,187.37)
20	Spain	6.5	(17,349,438,740.91)	(72,311,447,256.34)	(69,682,764,863.54)	(10,160,348,608.67)
21	Portugal	6.1	1,806,313,638.84	3,793,955,480.00	(2,495,048,466.56)	1,381,859,995.48
22	Korea	5.6	2,017,600,000.00	(4,540,400,000.00)	(13,696,700,000.00)	(10,593,800,000.00)
23	Czech Republic	5.2	11,628,782,840.44	4,042,698,664.47	8,963,737,280.61	8,966,891,344.97
24	Hungary	5.1	5,396,156,974.45	1,117,201,024.52	4,732,237,544.86	3,581,697,051.58
25	Slovak Republic	5.0	2,266,463,455.83	3,798,756,919.35	2,960,033,821.42	
26	Italy	4.8	(21,147,536,968.46)	(3,471,818,801.36)	(52,081,260,187.02)	(33,401,432,644.60)
27	Greece	4.7	(818,350,755.18)	1,175,033,340.92	(3,303,102,384.99)	2,527,382,308.00
28	Poland	4.6	6,951,000,000.00	10,727,000,000.00	17,976,000,000.00	12,951,000,000.00
29	Turkey	4.6	8,967,000,000.00	19,065,000,000.00	20,089,000,000.00	15,602,000,000.00
30	Mexico	3.6	15,324,500,000.00	13,381,900,000.00	18,910,400,000.00	18,151,300,000.00
	AVERAGE	**7.11**	**(4,586,839,585.16)**	**(7,539,298,993.83)**	**(13,592,620,502.50)**	**(22,783,627,039.50)**
						*

DATES: YR1 = 2005 YR2 = 2006 YR3 = 2007 YR4 =2008

NOTE: *=Significant at F<.10, **=Significant at F<.01, *=Significant at F<.001.**

Sources: Transparency International 2010; OECD 2010.

Exhibit 10 shows the percent change in foreign direct investment by country by year, and split into two groups. The countries with higher CPI scores are compared to the countries with lower CPI scores. As shown, for the high CPI countries, the average percent change in foreign direct investment was 49.56, -43.35, and -605.79 for 2005-06, 2006-07, and 2007-08,

respectively. The average percent change in foreign direct investment for the low CPI countries was -17.42, -953.55, and 10.77 for 2005-06, 2006-07, and 2007-08, respectively. Differences between the high and low CPI countries were not significant in any of the time periods.

Exhibit 10: PERCENT CHANGE IN FDI AS PERCENTAGE OF US$ GDP BY COUNTRY BY YEAR GROUPED BY HIGH/LOW CPI SCORES

Rank	Country	2008 CPI Score	% Change in FDI as % of Nominal US$ GDP, Yr1 to Yr2	% Change in FDI as % of Nominal US$ GDP, Yr2 to Yr3	% Change in FDI as % of Nominal US$ GDP, Yr3 to Yr4
1	Denmark	9.3	(59.77)	(25.63)	(92.04)
2	New Zealand	9.3	150.75	(108.25)	409.52
3	Sweden	9.3	120.29	(466.21)	109.39
4	Finland	9.0	487.95	53.83	
5	Switzerland	9.0	17.33	98.17	(6,263.88)
6	Iceland	8.9	67.95	(469.53)	
7	Netherlands	8.9	34.29	246.42	(149.55)
8	Australia	8.7	241.14	421.59	(74.44)
9	Canada	8.7	883.04	204.65	(161.85)
10	Luxembourg	8.3	258.84	(482.88)	68.43
11	Austria	8.1	(1,384.36)	(15.78)	(234.07)
12	Germany	7.9	(118.58)	(57.18)	3.33
13	Norway	7.9	21.44	48.11	(186.78)
14	Ireland	7.7	68.36	122.34	(697.54)
15	United Kingdom	7.7	(45.27)	(219.85)	
	AVERAGE	**8.58**	**49.56**	**(43.35)**	**(605.79)**
16	Belgium	7.3	85.04	103.19	(156.60)
17	Japan	7.3	(40.75)	10.28	(84.75)
18	United States	7.3	(99.12)	(12,843.30)	107.55
19	France	6.9	(44.48)	(34.24)	(39.28)
20	Spain	6.5	(281.79)	17.46	86.87
21	Portugal	6.1	99.91	(157.39)	150.63
22	Korea	5.6	(299.76)	(173.64)	12.66
23	Czech Republic	5.2	(69.64)	81.50	(19.45)
24	Hungary	5.1	(79.81)	244.97	(32.65)
25	Slovak Republic	5.0	43.61	(41.98)	
26	Italy	4.8	84.33	(1,221.30)	41.31
27	Greece	4.7	232.06	(340.63)	166.93
28	Poland	4.6	37.30	34.62	(41.95)
29	Turkey	4.6	93.93	(14.10)	(30.94)
30	Mexico	3.6	(22.15)	31.24	(9.55)
	AVERAGE	**5.64**	**(17.42)**	**(953.55)**	**10.77**

DATES: YR1 = 2005 YR2 = 2006 YR3 = 2007 YR4 =2008

Sources: Transparency International 2010; OECD 2010.

CONCLUSIONS

This study examines the relationship between corruption in selected countries and economic activity, including GDP, unemployment, gross fixed capital formation, and foreign direct investment. The measure of corruption used in this study was the Corruption Perceptions Index prepared annually by Transparency International. The sample of countries evaluated in the study consists of the Organization of Economic Cooperation and Development (OECD) countries. This study offers some background information regarding the OECD. This study also provides a brief review of past research concerning corruption and its impact on economic activity.

During the time period of the study, 2005 to 2008, average GDP increased from $1,184 billion to $1,455 billion. When comparing the higher CPI countries to lower CPI countries, average increase in GDP was not significantly different between high and low CPI countries for two of the three time periods. Over the time period of the study, the average unemployment rate decreased from 7.05 percent in 2005 to 5.76 percent in 2008. When comparing the high CPI countries to low CPI countries, average unemployment rates were more favorable in all four years for the higher CPI countries than the lower CPI countries.

During the time period of the study, the average percent change in gross fixed capital formation was higher for the high CPI countries, compared to the low CPI countries, for two of the three time periods. However, the differences were not statistically significant. Regarding foreign direct investment, high CPI countries experienced more favorable changes in two of the three time periods, but the differences between high and low CPI countries were not statistically significant.

The research question of this study was stated as: *Does corruption negatively affect economic activity?* The answer is mostly 'yes.' Results are mixed but reveal some notable relationships between corruption, as measured by CPI, and economic activity. Generally lower-corruption countries have experienced significantly less unemployment than higher-corruption countries. In most time periods, gross fixed capital formation and foreign direct investment were more favorable for the lower-corruption countries, but the differences between high- and low-corruption countries for these two measures of economic activity were not significant.

At the macro level, policy makers who are considering changes to laws and regulations, in efforts to prevent corruption and enhance economic activity, should review the relationship between corruption and economic activity. At the micro level, these relationships should be evaluated by corporate managers who are making decisions on where to set up business operations and will want to consider how corruption might affect the business environment, including risks associated with violation of the US Foreign Corrupt Practices Act and similar laws in other countries.

LIMITATIONS AND FUTURE RESEARCH

This study is limited by its sample of OECD countries and the time periods examined. The OECD consists of mostly economically advanced countries. Consequently, the results may not be generalizable to all countries, particularly developing countries. Future research could expand the sample to include additional countries. The current study could provide a base point to future longitudinal studies that include additional time periods.

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A COMPARISON OF UNIVERSITY EFFORTS TO CONTAIN ACADEMIC DISHONESTY

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ABSTRACT

Incidents of academic dishonesty continue to affect every college and university in the nation, at both the undergraduate and graduate levels. At some point during their academic careers, estimates are that 50-70% of all college students engage in cheating, plagiarism and other forms of dishonesty. The need for action to minimize this problem is evident, especially given the need of employers for highly-skilled and ethical workers in a global economy, and the recent spate of business scandals related to ethical misconduct. This paper describes what various colleges and universities are doing to combat the problem. This usually involves the creation of specific policies, a committee to enforce those policies, and a mechanism to communicate them to students and faculty. Institutions use different approaches to address the problem, but all have the same goal – to reduce and hopefully eliminate unethical behavior by students in their academic endeavors.

INTRODUCTION

The authors of this article have extensive and long-term experience as both college professors and management consultants. Over the past several years, they have collected information from the faculty of domestic and foreign colleges and universities on their attitudes toward academic dishonesty and what they do when infractions occur (Frost, Hamlin & Barczyk, 2007). This paper examines the approaches and policies several institutions use in an effort to minimize the problem of academic dishonesty. Often there is a lack of alignment between individual professors and their institutions of employment, both in terms of attitudes and enforcement of policy. This is particularly acute for non-tenured faculty, who often fear retaliation by students on course evaluations if they act as "policemen" who protect the university's policies on academic integrity. This has resulted in the creation of committees that enforce sanctions against students who are found guilty of various acts of academic dishonesty. In so doing, these committees relieve the individual instructor of the obligation to act as judge and jury. Generally, institutions create a policy that defines expected behavior, establishes a

committee to enforce the policy, and formulates a communication program to explain to everyone exactly what is expected.

This paper is organized into three sections. The first describes why the problem of academic dishonesty is important. It examines the extent of the problem and describes approaches to control it. The second section presents the administrative mechanisms employed by ten U.S.-based universities to help manage student academic dishonesty. The third section provides some conclusions. Limitations of this research and implications for further study are discussed.

WHY THIS PROBLEM IS IMPORTANT

While the root cause of academic dishonesty is subject to much debate, anecdotal evidence suggests multiple factors. Many undergraduate students in colleges and universities either engage in dishonest behavior themselves; refuse to turn in fellow students who they see cheating; think it is permissible to cheat if the rewards are high enough; or have some other type of unhealthy or unrealistic attitude. These attitudes result in more dishonest behavior, which in the long run, hurts the cheater and honest students that do not engage in dishonest acts.

According to Hamlin and Powell (2008) the need has never been greater for a solution to the problem of academic dishonesty. Six points highlight the urgency of this issue. First, academic dishonesty occurs frequently in every discipline, as discussed in the next section. Second, there is no uniform method for dealing with the problem within the same department, much less between different universities. Thus, individual faculty members can be left to fend for themselves, and most instructors, regardless of tenure status, do not wish to increase their workload by becoming classroom enforcement officers. Third, non-tenured faculty members have even less incentive to deal with this problem, since student retaliation on end-of-semester evaluations can interfere with the instructor's goal to attain tenure. Fourth, discrepancies in either policy or implementation can result in legal problems. Fifth, honest students are disadvantaged when dishonest students are not charged and punished, especially if the instructor grades on a curve. Sixth, how the issue is handled is of paramount importance in getting a positive outcome from this very negative experience. Academic instructors must foster the perception for the benefit of faculty and students, that integrity policies and enforcement mechanisms are fair and consistently applied. Even if these points are addressed, dishonesty will remain a problem for colleges and universities. The scope of the issue is so significant that the authors strongly believe that it is their responsibility to at least make an effort to minimize it.

Extent of the Problem

Academic dishonesty permeates all levels of the American educational system. A study by Bushway and Nash (1977) reported that students cheat as early as the first grade. Some

studies show that 56% of middle school students and 70% of high school students have cheated in the course of their studies (Decoo, 2002). The first scholarly studies of academic dishonesty at the college level were conducted in the 1960s (Bowers, 1964). This researcher found that in US colleges and universities, 50-70% of students had cheated at least once. In a major study in 1990, rates of cheating remained stable, but differed between institutions, depending on their size, selectivity, and anti-cheating policies (LaBeff, et al., 1990). Generally, smaller and more selective schools had less cheating. Small, elite liberal arts colleges had cheating rates of 15-20%, while large public universities had rates as high as 75% (LaBeff, 1990). Klein and others (2007) surveyed 268 students and found that the business students did not report cheating more than the other students. However they were more lenient in their attitude toward cheating.

It is also important to note the motivators for cheating. Simkin and McLeod (2010) noted several factors which enabled students to cheat. First, they noted the issue of new opportunities that did not exist twenty years ago. The ability to quickly copy materials verbatim from the internet is very tempting to time-strapped students. This is coupled with a "winning is everything' attitude that can justify anything that will be a competitive advantage. There is the issue linked to the previous motivator that the reward for excellence may exceed the punishment if caught breaking an academic integrity rule. In fact, these are sometimes only guidelines and these are open for personal interpretation. There is also a major concern for the faculty member's career and/or the classroom environment when noting an issue of academic integrity. Some schools foster an environment that accepts issues in academic integrity and any faculty member that takes a student to task on integrity issues may find their career sidetracked. Not many schools include vigilance in academic integrity in their promotion and tenure guideline. This links to the attitude in some schools to redefine what is cheating. Again, there is often an opportunity to apply personal interpretation. Finally it is interesting that students may operate under a different "moral code" and not view cheating as a serious problem.

The complexity of cheating detection is compounded by the fact that students cheat in a variety of ways. An early study by Hollinger (1996) showed that one third of students surveyed admitted to "neglecting to footnote or cite reference material" used in a writing assignment. Students participating in this same study admitted to copying homework or lab assignments (26.7%), copying from another student's exam (26.3%), and providing false excuses for missing an assignment or exam (22.7%). Hollinger (1996) found that other forms of academic dishonesty occurred less frequently, e.g., using crib notes on an exam (10.4%), accessing exam questions prior to an exam (9.3%), submitting another student 's work as his/her own (8.0%), and studying from a copy of a stolen exam (5.2%).

In a survey involving self-reported data, Davis (1992) found that students used a variety of cheating techniques during examinations including a system of hand and foot positions to communicate, trading papers to compare answers, and using a textbook to locate answers. In that study a few students admitted to some inventive approaches stating "I hid a calculator in my pants," and "I would make a paper flower, write notes on it, and pin it on my blouse" (Davis,

1992). Cheating has become so pervasive that a book entitled *The Cheater's Handbook: The Naughty Student's Bible* has been published to assist would-be cheaters (Corbett, 1998).

Curtailing Academic Dishonesty

Many institutions have recognized the need to reduce cheating and plagiarism. They have developed a number of frameworks to address the problem. While the approaches differ, there seems to be general agreement that the core elements of effective frameworks include an emphasis on prevention (through education and deterrence), supported by sound procedures for the detection of cheating and plagiarism. Mechanisms for detecting cheating vary. In the last several years, anti-plagiarism services such as Turnitin have become increasingly popular and appear to be somewhat effective (Stapleton, 2011; Batane, 2010). Additional research in the area of cheating prevention advocates reminding students frequently of the professor's zero-tolerance cheating policy, strict monitoring on exams, and providing each student with a "unique" version of the test (Chapman et al, 2004). Web-based courses present special challenges relating to cheating; particularly when it comes to taking exams. Tools such as Securexam and SofTest have shown some promise in preventing cheating in an on-line teaching environment (Guernsey, 2001).

Other elements include a robust and transparent system for dealing with student dishonesty and clearly-communicated penalties (Park, 2004). Generally, a framework for dealing with academic dishonesty should be open and transparent. Faculty and students must have full knowledge of the framework and there must be campus-wide dissemination of the specifics (Park, 2004). Research shows that student perceptions of the seriousness of cheating can be changed by institutional policy statements on cheating and plagiarism (Brown & Howell, 2001).Consistent with the suggestions offered by Park (2004), professors seeking to deter cheating and plagiarism should clearly communicate their personal philosophy on honesty with students and should include a written policy on academic integrity in all course syllabi. Professors should keep exams, grade books, and copies of grade sheets in secure locations (Moeck, 2002). Requiring students to sign a written honesty/ethics policy statement can also be a positive deterrent (Moeck, 1999).

An effective academic dishonesty framework must require penalties that are fair, consistently applied, and transparent for those who cheat. Since institutions typically prefer to tailor penalty and sanction systems to local needs and individual cases, there is a dearth of literature on how students are disciplined for acts of academic dishonesty. Some of the more common sanctions include allowing a student to rewrite an incorrectly-cited paper (Whiteneck, 2002), failing a student who plagiarized on an assignment (Burnett, 2002), and failing a student for cheating on an exam. Extreme sanctions include failing a student for an entire course, withholding a degree, or expelling an offending student from the institution (Park, 2004).

The following is a sampling of policies and procedures employed by ten U.S.-based universities in their efforts to respond to suspected academic dishonesty. They represent medium to large institutions, both public and private, and are from all areas of the United States. The institutions are listed in alphabetical order:

University of California Los Angeles

The University of California Los Angeles (UCLA) has a website called "Bruin Success" that is dedicated to educating students about intellectual property, file sharing, multiple submissions, and other forms of academic dishonesty. It is very informative and is presented in an attractive and entertaining "comic book" format, which is designed to appeal to students.

For Professors and Teaching Assistants there is an online site called "Faculty and Teaching Assistant Guide to Academic Integrity" which states: "When a student is suspected to have engaged in academic dishonesty, Academic Senate regulations require that the instructor report the allegation to the Office of the Dean of Students. The Dean resolves the issue. The Academic Senate does not permit punitive grades."

UCLA's approach to managing academic dishonesty focuses less on punishment and more on being pro-active in preventing situations that would cause students to cheat.

Cornell University

Cornell University has an Academic Integrity Handbook available to students which summarizes the university's expectations. A Code of Academic Integrity has been created as well as an Academic Integrity Hearing Board for each college and school within the University, including the Graduate School and the School of Continuing Education and Summer Sessions. In cases of infractions, the faculty member may hold primary hearings or refer the case directly to the Hearing Board for adjudication. A typical Hearing Board consists of a Chairperson (member of the faculty), three faculty members, three students, and a nonvoting record-keeper. The Handbook also provides a coaching section for faculty members entitled Suggested Methods for Preventing Violations.

University of Maryland

The University of Maryland has a Code of Academic Integrity that specifies the definition of student dishonesty and the responsibilities of parties to report it. It has a website that details the university's Honor Statement, Honor Pledge, and the procedures used when a student breeches the code of academic integrity.

This university's "Honor Pledge" is a statement that both graduate and undergraduate students must write by hand on all examinations, papers, and other academic assignments. After

writing the pledge, they must provide their signature, attesting to their compliance with it. The Honor Pledge states "I pledge on my honor that I have not given or received any unauthorized assistance on this assignment/ examination."

The University of Maryland has also created a Student Honor Council and Honor Board, composed of graduate and undergraduate students, which have the responsibility to:

- Increase the awareness of academic integrity throughout the campus
- Receive complaints or reports of academic dishonesty from any source
- Review cases of misconduct
- Assist in teaching seminars on academic integrity and moral development
- Issue an annual report on Academic Integrity at the University
- Make recommendations for appropriate changes

The standard sanction at the University of Maryland for proven cases of student academic misconduct is issuance of a grade of "XF" which is noted on the transcript as "failure due to academic dishonesty." Students may petition the Honor Council for removal of the "X" from their transcript one year after having been found guilty, provided they successfully complete an academic integrity seminar.

Massachusetts Institute of Technology

Massachusetts Institute of Technology (MIT) has an Academic Integrity Handbook which is available to students and faculty. Faculty members handle violations on a case-by-case basis, and are expected to deal with their students directly. When a student is found to have engaged in academic dishonesty, the involved faculty member may write a letter describing the incident, which is incorporated into the student's file. The letter remains on file for five years following the student's graduation. No record of the student's violation of the institution's academic integrity policy is shown on his/her academic transcript for a first offense. Extreme cases may be sent to the Committee on Discipline, comprised of elected members of the campus faculty; three undergraduate and two graduate students; the Dean for Undergraduate Education; the Dean for Student Life; the Dean for Graduate Students; and other representatives as designated by the respective Deans.

University of Pennsylvania

The University of Pennsylvania has a common Code of Academic Integrity for most students on campus, but has special codes and specialized instruction for certain disciplines and groups, including international students, engineering students and nursing students. The university's Academic Integrity website also provides instructional material for students on topics like the consequences of academic integrity violations, plagiarism, student collaboration

policies and copyrights. The Code of Academic Integrity was adapted with permission from the code used at MIT.

Rutgers University

Rutgers divides violations of Academic Integrity into levels where the punishments for infractions depend on the severity of the violation. For example, a Level 1 offense is the least serious and requires the offender to participate in a seminar on academic integrity. A Level 2 offense requires that a student receive a failing grade on his/her assignment or examination. A Level 3 offense requires that the student receive a failing grade in the course. A Level 4 violation requires that the student be permanently expelled from the University with a notation on his/her transcript indicating the cause.

Level 1 and 2 violations, which include the non-permitted working with another student or failure to reference a source, are considered "non-separable" (meaning students cannot be expelled from the University for their first offense). Level 3 and 4 violations may be separable.

Each school at Rutgers University has an Academic Integrity Facilitator. If a student charged with academic dishonesty chooses to appeal, the case is referred to the Academic Integrity Review Committee, comprised of two students and two faculty members. The decision of this committee is final.

Stanford University

At Stanford, there is a code of conduct called the "Fundamental Standard" that underlies all efforts to monitor academic dishonesty on campus. The code reads: "Students at Stanford are expected to show both within and without the University such respect for order, morality, personal honor and the rights of others as is demanded of good citizens. Failure to do this will be sufficient cause for removal from the University." This code has been in effect since 1896.

The Stanford University website also contains the Honor Code, the first campus-wide code in the nation, established in 1921. It reads: "The Honor Code is an undertaking of the students, individually and collectively: 1) that they will not give or receive aid in examinations; that they will not give or receive unpermitted aid in class work, in the preparation of reports, or in any other work that is to be used by the instructor as the basis of grading; 2) that they will do their share and take an active part in seeing to it that others as well as themselves uphold the spirit and letter of the Honor Code." There is also a section regarding faculty and departmental responsibilities.

Stanford University engages in affirmative steps to promote and communicate its Honor Code. The university:

- Includes explicit discussion of the Honor Code in orientation meetings and department handbooks
- Posts copies of the Honor Code and Fundamental Standard on bulletin boards that provide student information
- Emphasizes the importance and mechanics of the judicial process in TA training
- Develops a common departmental handout on the Honor Code that faculty can distribute in classes
- Designates a faculty member in the department to serve as a liaison to Judicial Affairs and as an advisor to faculty and TAs who discover violations
- Encourages faculty and graduate students to take part in the Judicial Panel Pool and Board on Judicial Affairs

Southern Utah University

The Southern Utah University (SUU) general catalog, available both in hard copy and online, has long included a message discouraging academic dishonesty. The 2009-2011 catalog states:

The university's goal is to foster an intellectual atmosphere that produces educated, literate people. Cheating and plagiarism are at odds with this goal and therefore will not be tolerated in any form. All work submitted by a student must represent that student's own ideas and effort. When the work does not represent the student's own work it must be properly cited; if it is not, the student has engaged in academic dishonesty. Cheating, forgery, plagiarism, or the use of work belonging to another, are all considered academic dishonesty.

The catalog elaborates by providing examples of student academic dishonesty, which include:

- Purchasing a paper or other project for which one then seeks to receive credit
- Copying from another student with the intent of receiving credit as one's own work
- Using "crib notes" or other stored information…without expressed permission from the faculty member
- Misrepresenting yourself or someone else in an exam setting
- Collaboration on assignments or exams when such collaboration is prohibited
- Failing to properly document source material in a paper or project
- 'Cutting and pasting' source material from various internet sites and submitting it as your own work without proper citation (SUU General Catalog, p. 36).

After providing a definition of academic dishonesty, the university catalog concludes with the following statement: "Except in cases of major offenses, responding to academic dishonesty is the responsibility of the instructor of the course in which the dishonesty occurs. If

a student is found responsible for academic dishonesty, the student may be dismissed from the class and may receive a failing grade. Other penalties may include suspension or expulsion from school. Such transgressions become part of the student's permanent University record." The student reading the catalog is then referred to the SUU Student Handbook and the SUU Policies and Procedures for further material on their rights and responsibilities.

Notwithstanding University policy, there is little coordination between departments and schools across the SUU campus, making it easier for students who cheat to continue their behavior even if they are caught in one or two classes (Hamlin and Powell, 2008). Departments and Schools at SUU have their own approach to dealing with student academic dishonesty, and often information is not shared across campus. For example, the School of Business has an honor code, an Academic Integrity policy, and an Academic Integrity Committee to enforce its code and policy. Other Schools and Colleges at SUU simply use the University policy on academic integrity and have faculty members enforce it. Only the School of Business reports incidents and sanctions to the Office of the Dean of Students.

Texas A&M University

The Honor Code at Texas A&M states: "An Aggie does not lie, cheat or steal or tolerate those who do." This is very similar to the code of the SUU School of Business. For first offenses, the instructor may handle an alleged case of misconduct or refer it to the Honor Council. The Director of the Honor Council appoints a faculty member and a student to serve as Case Investigators. If the investigators gather sufficient evidence, the case moves on to the Honor Council Hearing Panel, comprised of four members of the Honor Council.

If the alleged offender is found guilty, he or she is sanctioned with an "F* Honor Violation Probation" grade. The student is then restricted from all student organizations and intercollegiate athletics. In addition, he or she is prohibited from participating in graduation and from receiving a diploma and official transcript. To permanently remove the grade of F* and replace it with a grade of F, the student must petition the Honor Council and complete an Academic Integrity Development Program.

University of Utah

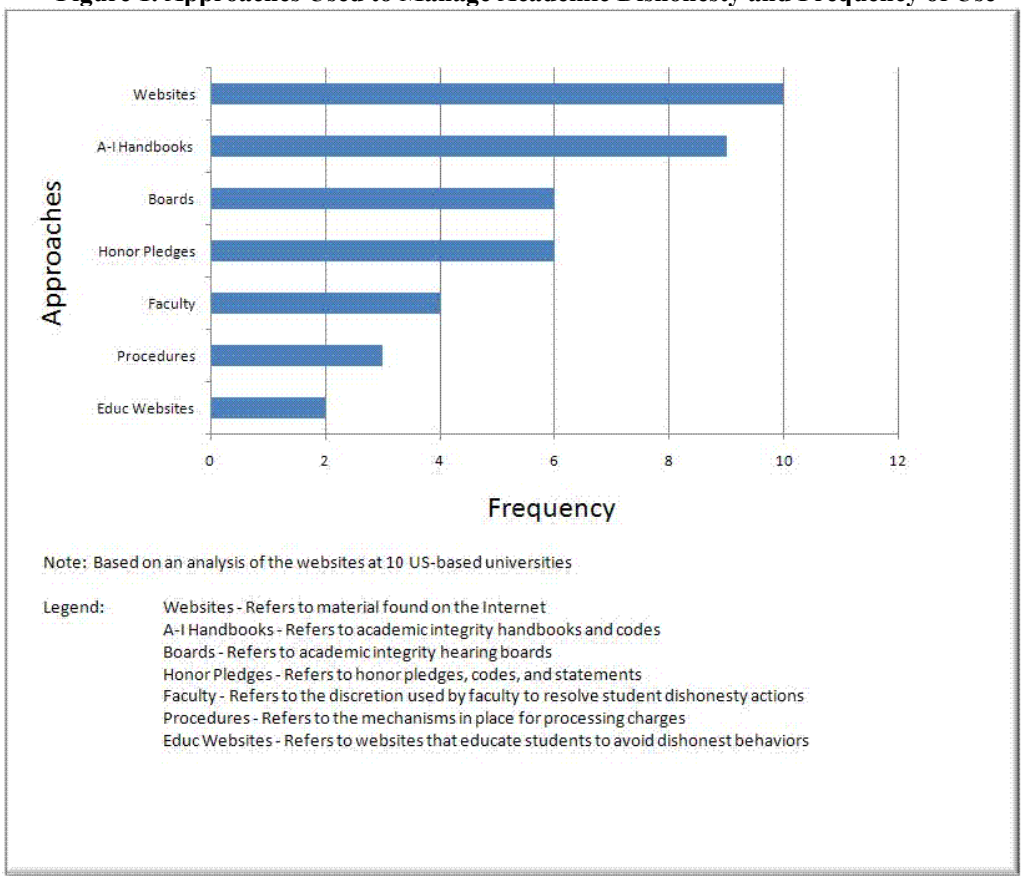
The University of Utah has a Center for Teaching and Learning Excellence that has the responsibility for developing the expectations for the campus' policy on academic integrity. By accessing its website, students and faculty can review the university's "Student Code", which explains students' rights and responsibilities. The website also provides a statement of the policies on academic dishonesty and misconduct, and explains the students' "Bill of Rights." The Center affords students the opportunity to take quizzes on their understanding of ethical

behavior. Under the mantra of "Refresh, Deter and Detect," the Center aims to help students and faculty become pro-active in dealing with cases of academic dishonesty.

SUMMARY OF MECHANISMS DESIGNED TO MANAGE STUDENT ACADEMIC DISHONESTY

The approaches developed by the ten U.S.-based universities to address the problem of academic dishonesty are detailed below. Figure 1 presents a graphical summary of the major approaches implemented by these universities and their frequency of use.

Figure 1. Approaches Used to Manage Academic Dishonesty and Frequency of Use



CONCLUSION

Academic dishonesty continues to plague colleges and universities across the nation. Institutions have tried numerous approaches to effectively manage the issue, but there is little consensus on a best policy, how to implement it, and how to effectively communicate expected behaviors. Most schools have a policy on academic integrity, and many have an Honor Code

specifying those behaviors that are expected or disallowed. Some colleges and universities have created enforcement committees that typically include student representatives. Most institutions publish their policies and codes online, in catalogs, and in other formats.

One substantial problem is that schools and colleges within university structures often apply the codes and policies on academic integrity in an inconsistent manner. In addition, they do not share information on offenses and offenders in a manner that can be filed, retrieved, and utilized by other campus units for appropriate progressive disciplinary action. The net effect of this lack of information sharing is that a student who is caught plagiarizing in a communication class might receive a failing grade on an assignment because it was a first offense. If caught again in a biology class for a similar infraction, he/she may get the same punishment because the latter department was unaware of the incident in the former department. Generally, the authors believe that each college or university should have its own standards and expected behaviors, but should centralize communications and procedures to become more efficient and fair in the implementation of their policies.

A limitation of this research is that it focuses on the mechanisms to contain and manage student academic dishonesty at medium to large universities. While small institutions may have similar problems with students who engage in plagiarism and other acts of dishonesty, their approaches to handling those problems may be different from their larger counterparts. It might prove beneficial to examine how smaller or religious-based colleges or universities implement academic integrity policies.

This study has implications for future research. Among them would be an analysis of the effectiveness of university policies on academic integrity. It may be possible to examine how units within a particular institution coordinate and communicate information on students found guilty of acts of academic dishonesty. It may also be possible to explore whether sanctions for academic dishonesty are progressive and consistently applied across campus units.

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THE WAGES OF SIN: SOCIAL NORMS AND EXECUTIVE COMPENSATION

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ABSTRACT

This paper provides preliminary evidence on the effect of social norms on CEO pay. Using a sample of sin firms and non-sin firms for the years 1992-2010, we find that CEOs of sin firms earn higher pay than CEOs of non-sin firms. In addition, the bonus and cash pay-performance sensitivities of CEOs of sin firms are higher than the bonus and cash pay-performance sensitivities of CEOs of non-sin firms when performance is measured using accounting returns. These results add to the growing literature on the effect of social norms on financial markets.

INTRODUCTION

Akerlof (1980) defines social norms or customs as acts whose utility to the agent performing them depends in some way on the beliefs and actions of others. Social norms are thought to be important determinants of economic behavior (Elster, 1989; Kubler, 2001). In the setting of capital markets, social norms manifest themselves in the form of "socially responsible investing" where investors do not invest in corporations which operate in specific industries perceived to be exploiting human vice (Haigh and Hazelton, 2004; Statman, 2000; Statman, 2006). However, others have argued that investing in stocks that exploit human vice or "sin" stocks provide superior returns when compared to other investment strategies (Ahrens, 2004; Fabozzi, Ma, and Oliphant, 2008; Krantz, 2011; Nelson, 2009; Statman and Glushkov, 2008; Waxler, 2004). Sin stocks are defined as the stocks of publicly traded corporations that are engaged in morally reprehensible productive activities – typically those engaged in the production of alcohol and tobacco products as well those companies operating in the gaming industry.

Hong and Kacperczyk (2009) document that social norms can have important effects in capital markets. Specifically, they provide empirical evidence showing that sin stocks are ignored by investors even though they provide superior returns due to a "neglect effect." This is due to investors following social norms for not investing in such stocks. Kim and Venkatachalam (2011) reinforce this result by documenting that this "neglect effect" holds true even though sin

firms possess higher financial reporting quality. We investigate how this "neglect effect" influences CEO pay arrangements at sin firms. Specifically, we examine the association between CEO pay and firm performance for a sample of sin stocks as compared to the general population of Standard & Poor's (S&P) 1500 stocks whose CEO pay data is available on the S&P ExecuComp database for the years 1992-2010.

To the best of our knowledge, this is the first paper to examine the influence of social norms on CEO pay. We add to the small but growing literature on social norms by documenting that CEOs of sin firms earn higher pay than CEOs of non-sin firms, and that the association between CEO pay and firm performance is higher for CEO bonuses and cash pay. The results of this study show how social norms influence the behavior of corporate boards in terms of how they reward their CEOs in addition to their effect on investor behavior and capital markets. This study may also prove to be useful to compensation committees of corporate boards as they determine CEO pay arrangements in the future.

The rest of the paper is organized as follows. Section 2 reviews the current research on the effects of social norms in financial markets. Section 3 examines CEO pay arrangements in sin firms versus non-sin firms. Section 4 summarizes and offers some concluding comments.

SOCIAL NORMS IN FINANCIAL MARKETS

Becker's (1957) theory of discrimination is perhaps the earliest work on the influence of social norms on markets. Becker (1957) explains that, in labor markets, agents (employers) may discriminate against hiring individuals possessing certain characteristics (e.g., gender or race), even if this discrimination results in harm (financial costs) to the agents. Akerlof (1980) formally defines social norms or customs as acts whose utility to the agent performing them depends in some way on the beliefs and actions of others.

In the setting of capital markets, social norms manifest themselves in the form of "socially responsible investing." Socially responsible investing "refers to the practice of directing investment funds in ways that combine investors' financial objectives with their commitment to social concerns such as social justice, economic development, peace or a healthy environment" (Haigh and Hazelton, 2004, 59). Investors believe that by investing in firms that are socially responsible, they can influence the actions and practices of these firms, and presumably, discourage such firms from engaging in the exploitation of human vice.

However, others have argued that investing in stocks that exploit human vice or "sin" stocks provide superior returns when compared to other investment strategies. Sin stocks are defined as the stocks of publicly traded corporations that are engaged in morally reprehensible productive activities – typically those engaged in the production of alcohol and tobacco products as well those companies operating in the gaming industry. Recent research shows that a portfolio of sin stocks outperforms the market as well as a portfolio of non-sin stocks (Fabozzi, Ma, and Oliphant, 2008; Liston and Soydemir, 2010, Statman and Glushkov, 2008).

Hong and Kacperczyk (2009) document that social norms can have important effects in capital markets. Specifically, they provide empirical evidence showing that sin stocks suffer from a "neglect effect." Sin stocks are ignored by investors even though they provide superior returns. Specifically, sin stocks have lower institutional ownership and lower analyst coverage. They posit that this is due to investors following social norms for not investing in such stocks, even though they bear the finanical cost of earning inferior returns. Kim and Venkatachalam (2011) reinforce this result by documenting that this "neglect effect" holds true even though sin firms possess higher financial reporting quality. Specifically, they find that sin firms report earnings that are better predictors of future cash flows, and earnings that are more timely in recognizing losses. While prior research has documented the influence of social norms on financial markets, it has not examined the influence of social norms on corporate governance practices. We conduct this exploratory study to see whether social norms have an impact on corporate governance practices, specifically, CEO pay.

CEO PAY ARRANGEMENTS IN SIN FIRMS VERSUS NON-SIN FIRMS

Sample Selection and Descriptive Statistics

There is no agreed upon definition of sin firms in the current literature. We use the definition employed by Kim and Venkatachalam (2011) who add firms in the adult entertainment industry to the sin firms identified by Hong and Kacperczyk (2009). Intersecting this set of sin firms with the S&P ExecuComp database yields those sin firms which have CEO pay data available for the years 1992-2010. We compute descriptive statistics for sin firms and non-sin firms for the following variables. *Salary*, which is the dollar value of the base salary earned by the CEO during the fiscal year, *Bonus*, which is the dollar value of the bonus earned by the CEO during the fiscal year, *Cash Pay*, which is the sum of salary and bonus, and *Total Pay*, which is the sum of salary, bonus, other annual cash pay, total value of restricted stock granted, total value of stock options granted (using Black-Scholes), long-term incentive payouts, and all other total pay items.

ROE, or *Return on Equity*, is net income before extraordinary items in fiscal year t divided by average book value of common equity. *RET* is the one year total return to shareholders, including reinvestment of dividends. *SIZE* is the natural logarithm of total assets. There are two measures of risk – *RISKROE* is the standard deviation of *ROE* based on a rolling five year window, while *RISKRET* is the standard deviation of *RET* based on a rolling five year window. *AGE* is the age of the CEO. *TURNOVER* is an indicator variable that takes the value of 1 in the year in which there is a change in the CEO of the firm. *IOS* (Investment Opportunity Set) is a measure of the firm's growth opportunities, and is measured as the market-to-book value of total assets. Data for all of these variables are drawn from the S&P's ExecuComp database.

Table 1 provides descriptive statistics for the samples of sin firms and non-sin firms. We adjust all data for inflation using the Consumer Price Index (CPI) for All Urban Consumers available from the Bureau of Labor Statistics. All data is reported in 1998 constant dollars. The Shapiro-Wilk tests for normality indicate that all of the variables are not normally distributed (for both sin firms and non-sin firms). Thus, in our discussion below, we rely on the results of the non-parametric Wilcoxon Rank Sum test for equality of medians across the two samples, to highlight differences among sin firms and non-sin firms.

Table 1: Descriptive Statistics and Tests of Differences in Means *(Medians)* Between Sin Firms and Non-Sin Firms
ExecuComp Data 1992-2010

Variable	SIN FIRMS	NON-SIN FIRMS	Difference	t-statistic (z-statistic)
SALARY ($)	716,849 *(664,825)*	595,575 *(543,660)*	121,274 *(121,165)*	6.39*** *(6.87)***
BONUS ($)	771,074 *(442,894)*	492,922 *(182,239)*	278,152 *(260,655)*	4.83*** *(5.75)***
CASH PAY ($)	1,487,923 *(1,055,979)*	1,088,497 *(762,924)*	399,426 *(293,055)*	5.84*** *(7.87)***
TOTAL PAY ($)	6,526,977 *(3,357,271)*	3,972,632 *(2,098,877)*	2,554,345 *(1,258,394)*	3.50*** *(6.07)***
ROE (%)	21.23 *(12.42)*	2.46 *(11.04)*	18.77 *(1.38)*	4.22*** *(3.54)***
RET (%)	19.80 *(13.83)*	146.74 *(9.39)*	-127.94 *(4.44)*	2.26** *(1.49)**
SIZE	7.44 *(7.41)*	6.68 *(6.59)*	0.76 *(0.82)*	6.89*** *(6.97)***
RISKROE	19.79 *(6.61)*	25.68 *(7.11)*	-5.89 *(-0.50)*	1.55 *(0.09)*
RISKRET	40.92 *(28.72)*	294.75 *(37.75)*	-253.83 *(-9.03)*	4.83*** *(5.70)***
AGE	56.04 *(56.00)*	55.72 *(56.00)*	0.32 *(0.00)*	0.63 *(0.30)*
TURNOVER	0.42 *(0.00)*	0.20 *(0.00)*	0.22 *(0.00)*	10.10*** *(12.39)***
IOS	5.98 *(2.27)*	3.52 *(2.22)*	2.46 *(0.05)*	0.89 *(0.85)*

NOTES:
*** indicates statistical significance at the 1% level or less (two-tailed test).
** indicates statistical significance at the 5% level (two-tailed test).
* indicates statistical significance at the 10% level (two-tailed test).

CEOs of sin firms earn higher pay than CEOs of non-sin firms. The CEOs of sin (non-sin) firms receive higher (lower) median salary, $664,825 ($543,660), median bonus, $442,894 ($182,239), and median cash, $1,055,979 ($762,924) payments. The CEOs of sin firms also earn

higher total pay. Sin firms' CEOs earn median total pay of $3,357,271 compared to $2,098,877 for CEOs of non-sin firms. Sin firms are also more profitable than their non-sin counterparts: median ROE is higher (lower) for sin (non-sin) firms. Sin firms' report median ROE of 12.42% compared to non-sin firms' median ROE of 11.04%. Sin firms' median stock returns (13.83%) are also higher than the median stock returns of non-sin firms (9.39%). Thus, sin firms appear to perform better than non-sin firms during the period 1992-2010. Sin firms are larger in size than non-sin firms. Sin firm also appear to be equal in risk (when risk is measured based on the standard deviation of ROE) or even lower in risk (when risk is measure based on the standard deviation of RET) to non-sin firms.

HYPOTHESES TESTS AND EMPIRICAL SPECIFICATIONS

We use a levels model to evaluate the relation between CEO pay and firm performance (Murphy, 1999). We winsorize the data at the one percent tails when estimating the OLS regressions in order to mitigate the effect of outliers on our inferences (e.g., Garvey and Milbourn, 2003). The model regresses the current level of a CEO's annual pay (measured in separate model specifications as salary, cash bonus, cash pay, and total pay) on an indicator variable *SIN* that takes the value of 1 for a sin firm, and a value of 0 for a non-sin firm (*SIN* appears as a main effect and in interaction with measures of firm performance), current accounting returns, and current stock returns (measures of firm performance), and control variables (measures of firm size, risk, CEO's age, CEO turnover, and the firm's growth opportunities).

No empirical evidence currently exists regarding how pay-performance sensitivities differ between sin firms and non-sin firms. To examine how pay-performance sensitivities differ between sin firms and non-sin firms, we test the following eight hypotheses.

Salary:

$H1_{null}$: There is no difference in the association between salary and ROE between sin firms and non-sin firms.

$H2_{null}$: There is no difference in the association between salary and RET between sin firms and non-sin firms.

Bonus:

$H3_{null}$: There is no difference in the association between bonus and ROE between sin firms and non-sin firms.

$H4_{null}$: There is no difference in the association between bonus and RET between sin firms and non-sin firms.

Cash Pay:

$H5_{null}$: There is no difference in the association between cash pay and ROE between sin firms and non-sin firms.

$H6_{null}$: There is no difference in the association between cash pay and RET between sin firms and non-sin firms.

Total Pay:

$H7_{null}$: There is no difference in the association between total pay and ROE between sin firms and non-sin firms.

$H8_{null}$: There is no difference in the association between total pay and RET between sin firms and non-sin firms.

The specific regression model used is shown in equation (1) below. There are four variations of this basic model that are employed, with the dependent variable (CEO Pay) taking four different forms. Model 1 uses Salary as the dependent variable, Model 2 uses Bonus as the dependent variable, Model 3 uses Cash Pay as the dependent variable, and Model 4 uses Total Pay as the dependent variable. *SIN* appears as a main effect and in interaction with accounting returns, and stock returns. The coefficients of *SIN x ROE* and *SIN x RET* measure the adjustments to contemporaneous pay-performance sensitivities in the presence of sin. Thus, the coefficients of *ROE* and *RET* estimate the contemporaneous pay-performance sensitivities of non-sin firms.

$$CEO\ Pay_{it} = \beta_0 + \beta_1 (SIN_{it}) + \beta_2 (ROE_{it}) + \beta_3 (SIN_{it}\ x\ ROE_{it}) + \beta_4 (RET_{it})$$

$$+ \beta_5 (SIN_{it}\ x\ RET_{it}) + \beta_6 (SIZE_{it}) + \beta_7 (RISKROE_{it}) + \beta_8 (RISKRET_{it})$$

$$+ \beta_9 (AGE_{it}) + \beta_{10} (TURNOVER_{it}) + \beta_{11} (IOS_{it}) + \varepsilon_{it} \qquad (1)$$

Table 2 presents the non-parametric Spearman rank-order correlations of the key variables. There is a positive association between various forms of CEO pay (salary, bonus, cash pay, and total pay) and measures of firm performance, firm size, risk, the CEO's age, CEO turnover, and the firm's growth opportunities (Murphy, 1999). *SIN* is positively correlated with all measures of CEO pay, indicating that a larger proportion of the pay of CEOs of sin firms is unrelated to performance.

Table 2: Correlation Structure of Key Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13
1 SIN	1.0												
2 SALARY	0.0108**	1.0											
3 BONUS	0.0143***	0.6649***	1.0										
4 CASH PAY	0.0128***	0.9656***	0.8085***	1.0									
5 TOTAL PAY	0.0096**	0.9388***	0.6793***	0.9388***	1.0								
6 ROE	-0.0021	0.5659***	0.4962***	0.5935***	0.5685***	1.0							
7 RET	-0.0063	0.5319***	0.4508***	0.5561***	0.5491***	0.6258***	1.0						
8 SIZE	0.0049	0.8044***	0.5542***	0.7888***	0.7908***	0.6724***	0.5689***	1.0					
9 RISK-ROE	-0.0159***	0.4098***	0.2964***	0.4134***	0.4354***	0.3480***	0.4566***	0.3930***	1.0				
10 RISK-RET	-0.0282***	0.3706***	0.2612***	0.3759***	0.4061***	0.2940***	0.4538***	0.3321***	0.7010***	1.0			
11 AGE	0.0022	0.1904***	0.0709***	0.1588***	0.0279***	0.0550***	0.0131*	0.1066***	-0.0796***	-0.0785***	1.0		
12 TURN-OVER	0.0618***	-0.0345***	0.0316***	-0.0142***	-0.0187***	0.0223***	-0.0044	0.0081	-0.0858***	-0.1196***	-0.1475***	1.0	
13 IOS	-0.0060	0.5517***	0.4580***	0.5705***	0.5747***	0.8067***	0.6760***	0.6301***	0.3936***	0.3459***	-0.0302***	0.0266***	1.0

NOTES:
*** indicates statistical significance at the 1% level or less (two-tailed test).
** indicates statistical significance at the 5% level (two-tailed test).
* indicates statistical significance at the 10% level (two-tailed test).

Results

Table 3 presents the results of the levels OLS regressions of CEO pay on performance measures for sin and non-sin firms and control variables (equation 1). The dependent variable in Model 1 is Salary, in Model 2 is Bonus, in Model 3 is Cash Pay, and in Model 4 is Total Pay. The CEOs of sin firms earn a larger proportion of their bonus, cash pay, and total pay which is unrelated to performance (the coefficient of *SIN* is significantly positive in Models 2, 3 and 4). We are unable to reject H1 and H2 as there are no significant differences in the salary pay-performance sensitivities between sin firms and non-sin firms. However, this is hardly surprising since prior research documents that salary is typically fixed, and unrelated to performance (Murphy, 1999).

When CEO's bonus (Model 2) and cash pay (Model 3) are used as measures of compensation, sin firms have higher pay-performance sensitivity to accounting returns than non-sin firms. When CEO's bonus (Model 2) is used as the measure of pay, sin firms have higher pay-performance sensitivity to accounting returns than non-sin firms. With respect to ROE, non-sin firms have a bonus-performance sensitivity of 0.78801, while sin firms have a bonus-performance sensitivity of 5.26003 (0.78801 + 4.47202). These pay-performance sensitivities with respect to ROE are significantly different between sin firms and non-sin firms. Thus, we reject H3. On the other hand, there is no significant difference between the bonus pay-performance sensitivity with respect to stock returns. Thus, we are unable to reject H4.

Table 3: Regression Results of CEO Pay on Performance Measures and Controls for Sin Firms and Non-Sin Firms					
		Model 1	**Model 2**	**Model 3**	**Model 4**
		SALARY	**BONUS**	**CASH PAY**	**TOTAL PAY**
Intercept	β_0	-481.75708***	-1,209.90560***	-1,737.36333***	-8,728.94275***
SIN	β_1	20.03351	112.19367**	123.02265**	961.32579***
ROE	β_2	-0.06752	0.78801***	0.71007***	-5.00175***
SIN x ROE	β_3	0.54135	4.47202***	4.98434***	4.36382
RET	β_4	-0.10065***	1.01215***	0.91742***	2.00680***
SIN x RET	β_5	-0.07194	-0.21838	-0.23170	-7.21773
SIZE	β_6	124.04476***	182.21654***	310.09721***	1,704.48314***
RISKROE	β_7	0.03894	0.30978**	0.34709**	2.09142**
RISKRET	β_8	-0.23782***	0.06270	-0.17509*	5.83658***
AGE	β_9	3.64858***	5.46518***	9.60559***	-9.76993***
TURNOVER	β_{10}	-56.79948***	-0.58531	-59.08223***	48.18476
IOS	β_{11}	3.98355***	13.42969***	16.92632***	202.66391***
Sample Size		19,203	19,203	19,203	19,203
Adjusted R^2		51.60%	18.50%	32.72%	33.97%
F-Value		1,862.27***	397.18***	849.94***	899.18***

NOTES:
*** indicates statistical significance at the 1% level or less (two-tailed test).
** indicates statistical significance at the 5% level (two-tailed test).
* indicates statistical significance at the 10% level (two-tailed test).

Table 3 (continued): Regression Results of CEO Pay on Performance Measures and Controls for Sin Firms and Non-Sin Firms					
		Model 1	**Model 2**	**Model 3**	**Model 4**
		SALARY	**BONUS**	**CASH PAY**	**TOTAL PAY**
Tests		**F-Value**	**F-Value**	**F-Value**	**F-Value**
$\beta_1 = 0$		1.91	5.60**	5.23**	12.30***
$\beta_2 = 0$	Non-Sin	2.52	32.17***	20.29***	38.80***
$\beta_2 + \beta_3 = 0$	Sin	1.25	14.39***	13.10***	0.01
$\beta_2 = \beta_2 + \beta_3$	Difference	1.62	10.38***	10.01***	0.30
$\beta_4 = 0$	Non-Sin	16.36***	154.99***	98.89***	18.24***
$\beta_4 + \beta_5 = 0$	Sin	0.35	0.70	0.40	0.9
$\beta_4 = \beta_4 + \beta_5$	Difference	0.06	0.05	0.05	1.71

NOTES:
*** indicates statistical significance at the 1% level or less (two-tailed test).
** indicates statistical significance at the 5% level (two-tailed test).
* indicates statistical significance at the 10% level (two-tailed test).

When CEO's cash pay (Model 3) is used as the measure of compensation, sin firms have higher pay-performance sensitivity to accounting returns than non-sin firms. With respect to

ROE, non-sin firms have a bonus-performance sensitivity of 0.71007, while sin firms have a pay-performance sensitivity of 5.69441 (0.71007 + 4.98434). These pay-performance sensitivities with respect to ROE are significantly different between sin firms and non-sin firms. Thus, we reject H5. On the other hand, there is no significant difference between the cash pay-performance sensitivity with respect to stock returns. Thus, we are unable to reject H6.

We are unable to reject H7 and H8 as there are no significant differences in the total pay-performance sensitivities between sin firms and non-sin firms. This is consistent with Core and Guay's (1999) argument that corporations grant equity securities to adjust the CEO's incentives, rather than to reward performance (see also Matsunaga and Park, 2001). These results point to the importance of social norms in evaluating the association between CEO pay and firm performance.

SUMMARY AND CONCLUSIONS

This study extends Hong and Kacperczyk (2009) and Kim and Venkatachalam (2011) by examining whether social norms influence corporate governance policies, specifically CEO pay practices. We find that the CEOs of sin firms earn higher pay than CEOs of non-sin firms. We also find that the bonus and cash pay-performance sensitivities of CEOs of sin firms are higher than the bonus and cash pay-performance sensitivities of CEOs of non-sin firms when performance is measured using accounting returns.

We interpret these results as showing that even though sin firms suffer from a "neglect effect," there is a stronger association between pay and performance for the CEOs for such firms, perhaps to counter the possibility of increased public scrutiny and wealth expropriation by politicians and regulators (Beneish, Jansen, Lewis, and Stuart, 2008). Our results also provide evidence in support of social norms in that investors avoid investing in sin stocks even though they have a stronger link between CEO pay and accounting firm performance in addition to providing superior returns and higher financial reporting quality.

ACKNOWLEDGEMENTS

We thank Harrison Hong and Marcin Kacperczyk for providing a list of sin stocks that is publicly available at http://pages.stern.nyu.edu/~sternfin/mkacperc/public_html/sinstocks.pdf. We also thank Joseph Calabro and Murat Yacizi for providing excellent research assistance, and the Summer Research Grant program at Quinnipiac University School of Business for providing us with financial support

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A CODE OF CIVILITY FOR THE UNIVERSITY SETTING: THE ARCHITECTURE FOR IMPLEMENTATION

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ABSTRACT

In both academe and industry, there has been an evolution that demands the development and imposition of a Code for Ethical Behavior. One overlooked element of such Codes, especially in the academic setting, is the lack of civility (between students and professors and between students). The purpose of this article is to investigate the architecture of a Code of Civility and to develop those attributes into an operational model of behavior reflected in a Code of Civility for students.

Keywords: Code of Civility; Code of Civility Architecture; University Civility; University Code of Civility

INTRODUCTION

The Merriam-Webster Dictionary defines civility as "civilized conduct, especially courtesy, politeness" (2010). This definition is overly broad and not particularly helpful in developing a Code of Civility. The definition does not begin to encompass all of the behaviors expected of an educated person in society. Perhaps another way of defining civility is to describe it as "the sum of the many sacrifices we are called to make for the sake of living together" (Carter, 1998, p 11). However, it can be said that identifying civility is similar to the long-standing legal observation that while I cannot define pornography, I know it when I see it. [sic, Justice Stewart, 1964). The same is true in this particular situation. Even though the definition of civility may be broad and you may not be able to specifically define civility, you certainly know incivility when you see it

In the United States, civility can be traced back to one of our founding fathers, George Washington, who had 110 rules for civility (Selzer, 2000). George Washington carried these guidelines with him throughout his life (Selzer, 2000). His rules included etiquette rules, as well as other types of rules. For example, Rule 24 states that you should not laugh too loud (Selzer, 2000, p. 32) while Rule 98 cautions one not to talk with your mouth full (Selzer, 2000, p.127).

Under the Association to Advance Collegiate Schools of Business (AACSB) accreditation rules, ethics education has been required in the college of business for quite some time. With the passage of the Sarbanes-Oxley Act in 2002, a Code of Ethics must be developed (and published) by public companies. The Code is to be signed first by the Chief Executive Officer and the Chief Financial Officer. This watershed act brought an increased push for ethics education in the university. While most universities have incorporated a Code of Conduct/Ethical Behavior for their students, there are rising acts of incivility in the university environment.

A Code of Civility, while it incorporates some of the same concepts, is different from the Code of Ethics. Civility involves basic respect and courtesy and recognizes some unacceptable behavior not usually incorporated in a Code of Ethics, in addition to the traditional ethical considerations. Many institutions have recognized the uncivil act of bullying within their discrimination policies. However, there is a need for civility throughout the university. A Code of Civility will complement the Code of Ethics and reinforce many of the same attributes.

This paper will explore some of the causes of erosion of civility; introduce the concept of civility and develop the architecture of a Code of Civility. Basic to the development of a Code of Civility is the understanding of the interconnections of civility and the disconnections of incivility

SOCIETAL EROSION OF CIVILITY

Without delving into deep sociological concepts and theories, many factors have been bandied about as the cause for the continuous erosion of civility in our society. This has not been a sudden phenomenon but rather a slow erosion over a period of time during which many factors have dramatically changed. The changes may be characterized as precursors to student incivility and center around the students we now teach: often called Millennials born after 1982. They tend to be consumers of educational product, and technologically experienced and e-multitaskers. Baker, Comer, Martinak, 2008 p 67-69. Some of the contributing factors to this phenomenon follow.

Change in family structure

It is believed that the disappearance of the traditional family, where family members gathered for dinner and talked about their daily activities, versus today's modern family, a two-career family that copes with the daily logistical nightmares of transporting the children to the various sports and other after school activities, contributed to less communication and understanding, perhaps leading to less respect and interest in other family members. Seldom are the grandparents and other extended members of the family an integral part of the household, available to help with the upbringing of the children and to encourage a child to say thank you or

please, etc. Many children come home to an empty house (i.e. latch key children). Additionally, political correctness has shifted to a degree that correcting a child must be carefully weighed lest it be considered abusive, repressive, or an injury to the child's self esteem. Finally, Forni suggests that incivility is positively related to anonymity and that Americans have fewer significant ties with communities and "penalties for shame are non-existent" (Forni, 2002).

Technology's impact on our culture

"Manners are dying in part because technological change makes them seem less necessary…Our children are mimicking the incivility of the adult world" (Carter, 1998, p.10). One study found that young people (ages 8-18) spend an average of seven and one half hours per day using entertainment media. This is more than the equivalent of a full day of school (Burris, 2010, p.1). The advent of electronic devices such as cell phones, iphones, ipods, computers, and video games, replace direct interaction with other people: Two-year-olds now learn from the electronic Leap Pad Learning systems. Many popular electronic games have heroes characterized by crudeness and rudeness. Today's music and movies would have been considered inappropriate and vulgar in past years.

Communication is now via e-mail or text messaging. Text messaging has often been cited as the main reason why parts of our society are so disengaged. It is now wasteful or inefficient to type good morning or thank you and therefore the pleasantries which were once so commonplace have been discontinued. On the other hand, several words have become a popular part of our lexicon, such as "snark", reflecting the incivility that exists. David Denby in his book, Snark, defines snark as " a tone of teasing, snide, undermining abuse, nasty and knowing, that is spreading like pinkeye through the media and threatening to take over how Americans converse with each other…" (Denby,2009). The Internet has replaced many communication avenues. Social networks like face book, twitter, etc. contribute to the disintegration of interpersonal social contact. Many facts, private, fictional, and derogatory are now posted publicly about a person. And, sadly, there is now a worldwide forum for bullying. "Millennials" communicate through these impersonal and detached modes rather than face-to-face.

Economic Instability

The economic instability and insecurity began with the erosion of the manufacturing sector of the economy. Employees show continuing contempt for employers because of the discontinuance/reduction/conversion of company pensions and healthcare. Staffs have been cut to a minimum and the remaining employees must do the work of several.

There is insecurity about the future. There is a doubtful future for the social security system, unemployment remains high, while the country goes deeper into debt. Adding to these factors, there is the loss of confidence in the banking/financial system, the unpredictable swings of the

stock market, the financial meltdown in 2008, and the lingering recession which have deepened the instability.

Role Model Incivility

The tone at the top in government, banking, and industry seems to project the impression of a sense of entitlement. Greed on the part of politicians and CEOs is acceptable behavior. While the CEO enjoys bonuses, excessive perks, and golden parachutes, the remaining employees are left with no pensions or cost-of-living raises. It is disturbing when members of Congress decide not to seek re-election because of the lack of bi-partisanship. Partisanship often manifests itself in personal attacks, i.e., lack of civility, to the members of the other political party; legislative gridlock; and threats of government shutdown.

In this most stressful of worlds, respect, courtesy, and kindness are not valued and not relevant. Perhaps the ultimate breakdown in civility (viewed globally) occurred in the 2010 Winter Olympic Games. These games are intended to foster goodwill and respect but the host country, Canada, refused to allow other participants to practice on the Whistle downhill skiing course prior to the competitions (Hitchens, 2010, pp.46-48).

EROSION OF CIVLITY IN THE CLASSROOM

Actions of Incivility in the Classroom

There are numerous examples which illustrate a lack of civility in the University setting. It is more efficient to simply list some examples of incivility because they are easily recognizable and do not require a detailed explanation. Further, the reader can add his/her personal experience to this partial list of acts of demonstrated lack of civility.

A. Disruption to the Classroom

1. Lateness to class
2. Leaving class early without explanation
3. Cell phone use
4. Texting
5. I Phone use - student accessing the internet for non-class related matters
6. IPods

B. Lack of courtesy and respect to the Professor

1. Calling Professor by first name
2. Addressing Professor in "text language" or slang
3. Expecting Professor to take responsibility of the student in the class (i.e. Will you bring that handout again for me?)
4. Expecting Professor to make an exception for the student without cause for late projects, missing exams, or absence from class.
5. Using improper language to describe Professor
6. Coming to class unprepared for a test – without booklet and/or pencil/pen/calculator
7. Use of profanity
8. Wearing earpieces during class

C. Lack of courtesy among students

1. Name calling
2. Unwillingness to share notes
3. Failure to return borrowed notes
4. Failure to attend and/or participate in group projects/ meetings
5. Bullying or ostracizing a student

D. Lack of courtesy by the Professor to the students

1. Refusing to recognize a student's contribution to the class or trivializing it
2. Citing a specific student as a bad example
3. Lateness to class
4. Condescending attitude

E. Lack of respect for learning

1. Not completing homework assignments, readings, projects
2. A discourteous attitude whereby students consider themselves the "customer/ stakeholder" rather than a student learner/participant in the process

F. Lack of basic courtesy

1. Eating, drinking or sleeping in the classroom
2. Reading/studying non-related materials during class

3. Making snide comments and remarks
4. Applying make-up during class

Civility problems can be exacerbated in "large classroom environments" because of student anonymity and the lack of direct personal contact with the students.

INTRODUCING THE CONCEPT OF CIVILITY IN THE CLASSROOM

A recognized expert in the field of civility, Dr. P. M. Forni, states: "Formality is the homage that intelligence pays to value" (2005, p.16). He suggests that the first step to a code of civility is to establish a climate of "relaxed formality" in the classroom. Relaxed formality means the boundaries between the professor and student should remain solid (Forni, 2005, p. 6) There needs to be a formality between the professor and the students, and Dr. Forni indicates that he is firm in expecting undivided attention, from both professor and student, in order to foster a learning environment where restraint, respect and consideration are the norm. As a result of this duality, the students' learning improves (Forni, 2005, p. 17).

Any Code of Civility must be a two-way street. It must flow from the professor to the student and vice-versa. This approach is more likely to have the students "buy into" the code of civility rather than considering it a punitive document which chastises students when an infraction occurs. When an infraction occurs, giving positive reinforcement or making the incident a positive learning experience helps to reinforce the idea of civility.

THE PILLARS OF A STUDENT CODE OF CIVILITY

To understand the need for a code of civility, all of the parties must understand the interconnected properties of civility and the disconnected properties of incivility. (See Figure 1). A brief description of each of these follows.

Interconnected Properties of Civility

> Positive attributes encompass the interconnected properties or pillars of civility. These Pillars enhance the learning environment in the classroom. "Uncivil student behavior can disrupt and negatively impact the overall learning environment for students who are not involved in the disruptive or inappropriate behavior". Morrissette, P. J., 2001, p 2.

The first Pillar is **RESPECT**. Respect is reflected by a tolerance for all opinions (fellow students as well as the professor's) and an appreciation for diversity of opinion. In addition, recognition of the professor's additional education and experience is reflected in respect.

Respect for the Professor and the class means that all cell phones, I-Phones, and other electronic devices are turned off during class. These are the ultimate disruptions to class. In addition, there should be no texting during class as this sends the message that one is totally disengaged from the class, a lack of attention as well as respect.

"Civility is not another piece to be added onto the plate of an educator, it "is" the plate upon which all else is placed". (Connelly, R., 2009 p 55).

The pillar of **INCREASED TOLERANCE/APPRECIATION OF DIVERSITY** extends the pillar of respect to the cultural diversity of the students and/or professor. It is not a joke or polite to laugh at a language error or mispronunciation when English is a second language. Cultures have different customs which should be appreciated and shared. Female faculty and faculty of color are more prone to experience greater levels of classroom incivility. (Mia Alexander Snow, 2004, p 30) So this Pillar has the potential of expanding both student and faculty understanding and awareness.

The pillar of **PUNCTUALITY** means that the professor and the students will appear for class, meetings, events, etc. on time. If the student is late, an apology should be given not only to the Professor but to the class because of the disruption it causes. When the student is late, entrance should be by the back door of the room and not across the front of the room. This pillar includes the timely submission of projects, cases, papers, and team assignments.

PROFESSIONALISM demands that the student and the professor come to class prepared. This assures that the student reaps the full benefit from the class meeting. The student should come prepared to ask and answer questions regarding the day's assignment. This preparedness reflects a good attitude for the class and allows full and free inquiry into the subject matter. Professionalism also goes to dress. Students should realize that there is a certain decorum that is expected and it does not include beachwear.

Robert J. Connelly in an article entitled "Introducing a Culture of Civility in First Year College Class" proposes a Model Code of Academic Civility and class interaction. In its preamble it emphasizes improved learning and working together to achieve this goal. Obviously, not coming to class prepared and ready to contribute, i.e., lack of Professionalism, does not further this goal. (Connelly, 2009, p 58).

FREEDOM OF INQUIRY follows up on professionalism. Classroom incivility has been defined by Lloyd J. Feldmann as any action which interferes with a harmonious …learning atmosphere in the classroom. (Feldmann 2001 p 137). The classroom environment should be open enough that the students feel free to ask questions, without fear of criticism or prejudice, related to the topics discussed and studied, as well as other questions the professor may be qualified to answer. However, this freedom should not be abused by questions simply to divert the professor off the subject matter to be studied. Students should appreciate the value of class time and not waste it with frivolous discussion.

COURTESY means that the student should not cause disruption or interruptions to the classroom environment. Manners should be displayed: holding the door for someone else;

saying a pleasant "thank you" or "please"; not talking while another student is talking or answering a question; raising your hand rather than shouting out; no text messaging, e-mails, telephone calls during class; turning off all electronic devices when coming into the class; and no eating or drinking during class.

An **APOLOGY** for incivility should be encouraged and expected. For example, an apology for class disruption should be given if one's phone rings during class. Students should not need to be reminded at the beginning of class to turn off the phone or put the phone on vibrate. An apology reflects an understanding of the meaning of civility and shows that the student knows and honors the environment of civility. Depending upon the severity and frequency of the incivility, additional actions may be needed including expulsion from class, Office of Student Affairs Hearing, etc.

REMEDIATION is the follow-up to an apology for an incivility. Remediation is recognizing the infraction and bringing oneself in compliance with the elements of the Code of Civility. Some universities have an Office of Civility/Civil Behavior. When a serious or recurring infraction of the Code of Civility occurs, and is reported, a student panel will determine the necessary remediation. (See later section on communicating and implementing the Code of Civility).

The Disconnected Properties that Reflect Incivility

Incivility is experienced practically daily. While a Code of Civility should emphasize the expected behaviors, there should be a statement that certain other behaviors will not be tolerated. The disconnected properties are: class disruption, lack of courtesy, lack of respect for learning, profanity, harassment/bullying and violence. These will be briefly discussed through examples.

CLASS DISRUPTION is caused by many factors: tardiness of students to class; noises that are uncalled for; talking or communicating with someone while another student is answering a question or presenting; leaving class before the end of class; packing books and papers into a backpack before the end of class; use of cell phone or I-phone; texting; and in the computer classroom/lab, using the computer for purposes other than class use. These acts individually may have a small impact; but in the aggregate chip away at the learning environment (Feldman, L. 2001, p 137)

LACK OF COURTESY is lack of respect for the Professor as well as the other students in the class. There are times when a "thank you" is expected or warranted and it is not mentioned. Lack of courtesy is also manifested through other disconnects such as class disruption and lack of respect for learning. Yelling and the use of profanity do not reflect an educated or civil person.

LACK OF RESPECT FOR LEARNING is manifested by not being prepared for class; not doing the required homework; not completing a project; not completing your responsibility

for a team assignment; arriving late or leaving early from class; unwillingness to participate in class; and absence from class for unfounded reasons.

Tuition is not an insignificant sum of money and the student should want to maximize their learning experience. An education is not something that is purchased but a benefit and self-improvement experience (self-discipline, responsibility, time management, interpersonal communication, team learning) that is earned.

PROFANITY is sometimes described as a feeble mind trying to express itself forcibly. It is violent language. Profanity is so common in many songs and other social media that students often mistake it to be acceptable in the university environment. By stating in a Code of Civility that such language will not be tolerated, there will be no question about this. This also applies to yelling and screaming within the buildings.

HARASSMENT/BULLYING sometimes accompany students when they come from high school into the university environment. It should be clearly stated that such conduct will not be tolerated. Harassing, bullying, ostracizing/excluding another person is not acceptable behavior. This abusive behavior can be physical or psychological (Going to a person's self esteem) and is manifested by verbal comments, actions, gestures or snarking.

VIOLENCE is not frequent but it does occur. Carrying weapons of any sort (gun, knife, or club) should be prohibited. It is sometimes preceded by some unacceptable behavior such as anger, or evidenced by throwing a chair or other item in the classroom. Again, it is a preventive control to state in a Code of Civility that violence will not be permitted in the university environment. The University Security or Police should be called immediately in this situation.

Communicating and Implementing the Code of Civility

"Never in the history of this country has there been so much discourse on civility" (Forni, 2011, p. 21). However, "discourse very often doesn't translate into action" (Forni, 2011, p.21). A Code of Civility should be adopted by the particular College's Faculty Council or by the University Faculty Senate. Most colleges/universities have an office of Civility located in various student auxiliary functions and called by a number of different names. (Office of Student Affairs). This office should be brought in during the Code formation and adoption. Once adopted, the Code of Civility should be explicitly communicated. The Code of Civility should be included in the University's policies, posted on the Colleges' and University website, and in the college catalogues and in classrooms. It should be included in the packet that incoming students receive and incoming students should be requested to read and sign the document to reflect their compliance. Reinforced awareness will be required for a time period to insure faculty and students are familiar that such a policy exists. As to the classroom, in an Article by Susan D. Baker, Debra R. Comer and Linda Martinak entitled "All I'm askin' is for a Little Respect", the authors recommend transactional suggestions and transformational change. The former includes use of the Syllabus to discuss acceptable behavior; cast classroom policies in a

positive light, establish a Code of Civil Classroom Conduct including student input; developing a student handbook which identifies acceptable and unacceptable student conduct and establishing credibility and "walk the walk" by the Professor being a role model. The transformational change examination and revision of our own teaching to recognize the new technology generation; virtual generation; V-Generation Learner. (Baker, S., Comer, D., Martinak, L. 2008 p 71-73). An example of a Model Code of Civility is presented in Appendix A.

The difference between civility and ethics should be emphasized. The pillars discussed earlier should be clearly explained and followed by a statement that the Code will be enforced. It will be enforced by responding to incidents of incivility not in a punitive reaction but in the majority of cases with constructive actions. Baker, et al. contains a procedure and approach to respond to incidents of incivility. First, deal immediately with even minor acts of incivility to set the classroom tenor. Late arrivals, early departure, inattention are individual actions that "slowly chip away" at the learning environment. (Feldmann, L. 2001 p 137). Second, ask rude or serious offenders to meet after class. Third emphasize that incivility affects the students' peers. Fourth, be consistent by applying the class policies from the beginning of class. Fifth, be aware that persistent offenders may be asked to leave the classroom or campus security may have to be called. (Baker, S., Comer, D., Martinak, L. 2008 p71). Referring to the Code of Civility throughout the course, as necessary, reinforces the concepts. Namely, if there is a violation of the Code, it is important that corrective action is taken. However, the remediation should become part of the learning experience.

CONCLUSION

It is clear that we are in an entirely different age of ethics than that which existed twenty years ago. There is a need for a Code of Civility because it goes a step further than the traditional Code of Ethics. Many professions have a Code of Civility in addition to a Code of Professional Responsibility (ethics). See Appendix B, where the Code of Civility for Lawyers and Judges is presented (Maryland State Bar Association, 1997). The University should be no different. The Code of Civility provides basic standards for courtesy, respect and consideration between the professor and the students in the classroom. It can be used as a continuous model throughout the semester to reinforce positive conduct (civility) and discourage class disruption and disrespect. The classroom is a great environment to introduce, exhibit, refine and apply a Code of Civility.

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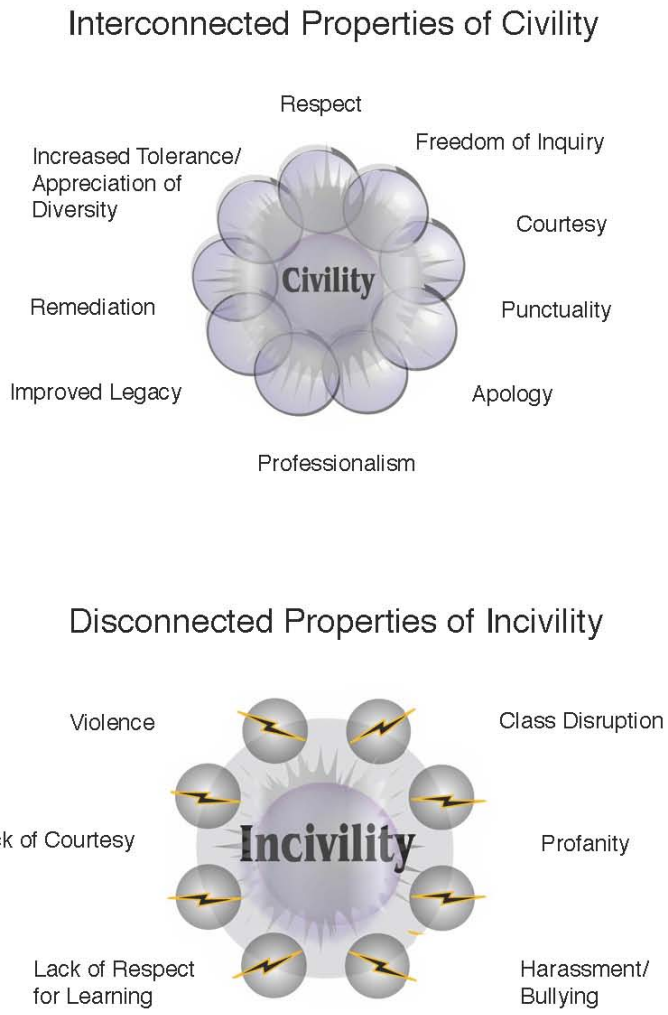
Figure 1: Interconnections of Civility
Disconnection of Incivility



Source: Adapted © 2001 Giovinella Gonthier, Civility Associates

APPENDIX A: EXAMPLE OF A UNIVERSITY CODE OF CIVILITY

As an institution of higher learning, the University strives to practice higher levels of civility. This code of civility fosters respect for all people and their diverse roles and contributions.

PROPOSED MODEL OF A STUDENT CODE OF CIVILITY

RESPECT	Everyone should show respect in their actions/dealings within the University. No texting during class and all phone/electronic devices are turned off during class.
TOLERANCE/DIVERSITY	Respect should be extended to different cultures and societal relationships and especially to those who have a different opinion from yours. No rudeness.
PUNCTUALITY	Everyone should be punctual for class, team presentations, meetings, and events.
PROFESSIONALISM	Students and Professor shall be prepared for each class in order to derive the maximum learning benefit. Undivided attention should be given to the subject matter, reflecting commitment.
FREEDOM OF INQUIIRY	There should be an environment which fosters questions and discussion without criticism or prejudice
COURTESY	Students should be considerate of the learning experience of fellow students and not cause interruptions or disruptions to the class. The student should notify the Professor if he/she needs to leave class early unless it is an emergency situation
APOLOGY	An apology for an incivility will be expected. This reflects an understanding of the meaning of civility
REMEDIATION	If there is a breach of this Code of Civility, an apology is expected and actions will be taken to assure one is once again in compliance with this Code
PROHIBITED ACTIONS:	Class disruption; lack of courtesy; lack of respect for learning; profanity and yelling; harassment/ bullying, and violence.

APPENDIX B: EXAMPLE OF A PROFESSIONAL CODE OF CIVILITY

MARYLAND STATE BAR ASSOCIATION (MSBA)
CODE OF CIVILITY

In May, 1997, the Maryland State Bar Association's Board of Governors approved the following aspirational Code of Civility for all lawyers and judges in Maryland. MSBA encourages all Maryland lawyers and judges to honor and voluntarily adhere to the standards set forth in these codes. Civility is the cornerstone of the legal profession.

LAWYERS' DUTIES

1. We will treat all participants in the legal process, in a civil, professional, and courteous manner and with respect at all times and in all communications, whether oral or written. These principles are intended to apply to all attorneys who practice law in the State of Maryland regardless of the nature of their practice. We will refrain from acting upon or manifesting racial, gender, or other bias or prejudice toward any participant in the legal process. We will treat all participants in the legal process with respect.
2. We will abstain from disparaging personal remarks or acrimony toward any participants in the legal process and treat everyone with fair consideration. We will advise our clients and witnesses to act civilly and respectfully to all participants in the legal process. We will, in all communications, speak and write civilly and respectfully to the Court, staff, and other court or agency personnel with an awareness that they, too, are an integral part of the judicial system.
3. We will not encourage any person under our control to engage in conduct that would be inappropriate under these standards if we were to engage in such conduct.
4. We will not bring the profession into disrepute by making unfounded accusations of impropriety or attacking counsel, and absent good cause, we will not attribute bad motives or improper conduct to other counsel.
5. We will strive for orderly, efficient, ethical and fair disposition of litigation, as well as disputed matters that are not yet the subject of litigation, and for the efficient, ethical and fair negotiation and consummation of business transactions.
6. We will not engage in conduct that offends the dignity and decorum of judicial and administrative proceedings, bring disorder to the tribunal or undermines the image of the legal profession, nor will we allow clients and witnesses to engage in such conduct. We will educate clients and witnesses about proper courtroom decorum and to the best of our ability, prevent them from creating disorder or disruption in the courtroom.
7. We will not knowingly misrepresent, mischaracterize, or misquote fact, or authorities cited.
8. We will be punctual and prepared for all scheduled appearances so that all matters may begin on time and proceed efficiently. Furthermore, we will also educate everyone involved concerning the need to be punctual and prepared, and if delayed, we will notify everyone involved, if at all possible.
9. We will attempt to verify the availability of necessary participants and witnesses so we can promptly reschedule appearances if necessary.
10. We will avoid ex parte communications with the court, including the judge's staff, on pending matters in person (whether in social, professional, or other contexts), by telephone, and in letters and other forms of written communication, unless authorized.

JUDGES' RESPONSIBILITIES

1. We will not use hostile, demeaning or humiliating words in opinions or in written or oral communications with lawyers, parties or witnesses.
2. We will be courteous, respectful and civil to lawyers, parties, witnesses, and court personnel. We will maintain control of all court proceedings, recognizing that judges have both the obligation and the authority to ensure that judicial proceedings are conducted with dignity, decorum and courtesy to all.
3. Within the practical limits of time, we will afford lawyers appropriate time to present proper arguments and to make a complete and accurate record.
4. We will make reasonable efforts to decide promptly all maters presented for decision.
5. We will be considerate of professional and personal time schedules.
6. We will be punctual in convening trials, hearings, meetings, and conferences; if they are not begun when scheduled; proper and prompt notification will be given.
7. We will inform counsel promptly of any rescheduling, postponement, or cancellation of hearings, meetings or conferences.
8. We will work cooperatively with all other judges and other jurisdictions with respect to availability of lawyers, witnesses, parties and court resources.
9. We will treat each other with courtesy and respect.
10. We will conscientiously assist and cooperate with other jurists to assure the efficient and expeditious processing of cases, while, when possible, accommodating the trial schedule of all lawyers, parties and witnesses

IS IT PROFITABLE TO OFFER PAID LEAVE? A CASE STUDY OF THE LEGAL PROFESSION

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ABSTRACT

"Family-friendly" policies are often explored from the perspective of the employee and benefits therein in terms of reduced turnover and higher productivity. Little research examines the profitability of such policies from the firm's perspective, and specifically that of a law firm. This paper provides a case study of one law firm's practice of maternity leave and the effect of the policy on the firm's bottom line. The analysis reveals that the effect of the paid leave policy on the firm's bottom line is strongly related to the employee's classification, when he or she takes the leave over the course of his/her career, and the type of work performed. We find that the level of profitability and set of profitable circumstances is larger for those employees with clearly defined work schedules and duties. Furthermore, when paid leave is taken by an attorney, the firm loses the least when the attorney is at the lower level of the occupational hierarchy.

INTRODUCTION

The phrase "Mommy Track" recently turned 22 years old. Although not coined by Felice N. Schwartz, the term originated from her article "Management Women and the New Facts of Life", published in the *Women and Management Review* (Schwartz, 1989) warning firms that they were losing talented women with their inflexible working conditions. The solution she suggested was essentially a two-track system in which women who wanted to balance career and family could opt for part-time and flexible schedules, shared jobs, telecommuting and maternity leaves. Since that time, firms interested in retaining valuable employees have responded by offering what has been called "family-friendly" or "work-life" policies.

Law firms are among those that are concerned about retaining top talent, and in light of the fact that over 47 percent of law school graduates are women (American Bar Association, 2011), have adopted paid parental leave policies in order to attract and retain high performers. Currently 86.5 percent of law firms surveyed by the National Association for Law Placement (NALP) have written parental leave or family care policies and 71.3 percent have written alternative work option policies (National Association for Law Placement, 2005).

Despite the research that has been conducted in the last twenty years on the effectiveness of these policies to the firm and the worker, what is still lacking is insight on the profitability of such policies from the standpoint of the firm as well as research on which policies are effective in specific work environments and occupations. This paper contributes to the literature on industry and occupational differences by examining in which circumstances a specific type of work-life policy – paid family leave – is profitable at a for-profit law firm in which a variety of work is performed.

The paper begins with a review of the literature on work/family policies followed by an overview of federal and state legislation on parental leave. We include a summary and frequency of types of parental leave policies employed by law firms. This is followed by a theoretical treatment of the costs of labor and its importance in the subsequent profitability analysis of paid leave. We introduce an actual Midwestern law firm, "Egalitarian & Partners, LLP" (name changed) highlight the organizational structure of the firm, explain its paid parental leave policies, and provide cost of leave calculations for multiple members of the firm. We then compare the costs of offering leave to the cost of hiring new employees to determine the set of conditions in which it pays to offer these policies.

The analysis reveals that the effect of the paid leave policy on the firm's bottom line is strongly related to the employee's classification, when he or she takes the leave over the course of his/her career, and the type of work performed. We find that the level of profitability and set of profitable circumstances is larger for those employees with clearly defined work schedules and duties. Furthermore, when paid leave is taken by an attorney, the firm loses the least when the attorney is at the lower level of the occupational hierarchy. As explained later in the paper, lower level attorneys – associates - are not expected to generate business and therefore do not cost the firm as much in terms of lost business generation during periods of leave.

LITERATURE REVIEW

Research on the spillover between work and family has gained momentum in the last decade. This literature has focused on the effect in general (see Bailyn, et al, 2001; Barnett, et al, 1992; Grzywacz, et al, 2002; Jacobs & Gerson, 1998; Jacobs & Gerson, 2001; Leiter & Durup, 1996), gender differences (Duxbury & Higgins, 1991), industry differences (Anderson, et al, 2002), and workplace characteristics that mediate spillover and improve job satisfaction (see Anderson & Delgado, 2005; Wallen, *Balancing Work and Family: The Role of the Workplace,* 2002). Overwork and the loss of leisure has been the subject of several popular books, including *The Time Bind: When Work Becomes Home and Home Becomes Work* (Hochschild, 1997), and *The Overworked American: The Unexpected Decline of Leisure (*Schor, 1991). It was in part due to this research that companies began instituting family-friendly policies, including on-site childcare centers, eldercare referrals, more generous parental leave policies, and flexible

schedules. This began in United States companies in the early 1980s, and expanded a decade later (Galinsky, et al, 1991).

There is a growing literature on the effect of family-friendly policies on employee attitudes and work satisfaction. Much of this literature focuses on the effect of such policies among those who use the benefits or flexible schedules (see Eby, et. al., 2005; Lilly, et al, 1997; Baltes, et al., 1999).Other research focuses on the effects of particular types of policies offered such as on-site childcare (see Goff, et al, 1990; Kossek & Ozeki, 1998; Miller, 1984), or telecommuting (see Bailey & Kurland, 2002; Duxbury, et al, 1998; Igbaria & Guimaraes, 1999), while other strands of research focus on how family-friendly policies alter workplace issues including job satisfaction, organizational commitment, turnover rates (see Batt & Valcour, 2003; Allen, 2001; Behson, 2002; Behson, 2005; Clark, 2001; Thompson, 1999; Abbasi, & Hollman, 2000), satisfaction (Anderson, Birkeland, & Giddings 2009; Kossek & Ozeki 1998; Lambert 2000; Haar & Spell 2003; Greenberger et al.1989; Boles, Howard, & Donofrio 2001), and productivity (Konrad and Mangel 2000).

In theory, we expect that generous family-friendly policies in the workplace should increase productivity and then, ultimately, profits. The efficiency wage hypothesis tells us that more generous compensation may increase worker productivity and decrease shirking as the cost of losing a job increases (Akerlof & Yellen, 1986). A work environment that takes into consideration the psychic costs of family-related stress situations particularly among workers with young children may increase worker productivity by reducing absenteeism and turnover. The theory on job matching suggests that the family-friendly firm may draw from a larger and more diverse pool of applicants, increasing the chance of realizing a good workplace-employee match (Heiland & Macpherson 2005).

The broad literature on earnings should give us some clues as to how family-friendly policies should affect profitability and productivity in firms. This literature gives support to the idea that increasing employee compensation leads to an increase in labor productivity, (Hammermesh 1990; Kahn & Sherer 1990; Campbell 1993), lowers turnover and, consequently, hiring costs to firms (Holzer 1990). However, although existing literature shows that wage and non-wage compensation are substitutable (Macpherson & Hirsch 1995; Waldfogel 1998; Glass 2001), the evidence on family-friendly policies on worker productivity and firm profits is inconclusive. Studies on the effect of flexibility in work schedules show that employee attendance and productivity increases (Shepard, Clifton & Kruse 1996; Kim & Campagna 1981; Orpen 1981; Schein, Mauer & Novak 1977). In a study examining the effect of flexible schedules on turnover and absenteeism in Canada, researcher found no evidence of a decline in turnover rates or use of sick leave (Haines et al. 1999). Evidence from a job sharing program showed a decline in worker productivity (Lanoie 2001).

A study based on 120 employers in New York found that companies that offered flexible sick leave and child care assistance experienced lower turnover (Baughman et al. 2003). Meyer, Mukerjee & Sestero (2001) found that those companies that were named among the 100 most

family-friendly by Working Mother Magazine in 1991-1995 were more profitable after offering work-family programs including sick leave and working from home option. Among these same firms there was no effect on profits for flexible time and part time arrangements. Arthur & Cook (2004) examined Fortune 500 companies and found that companies that pioneered a family-friendly workplace experienced increases in their equity value. A representative sample of British workplaces with ten or more employees found that the availability of financial help with child care and paternity leave increases the likelihood that a workplace outperforms the average workplace financially while eight other work/family policies had no effect. Several of the family-friendly benefits were associated with a lower quit rate but only financial help with child care contributed to an increase in labor productivity (Gray 2002).

Frank Heiland & David A. Macpherson (2005) examined differences in profitability and productivity among a random, representative sample of firms with varying family-friendly policies. The authors found evidence that having some control over work schedule was associated with higher productivity but had little effect on profits. This implies that while many of these kinds of policies may improve productivity, they do so at a high cost. Furthermore, they showed that paid maternity leave is associated with lower productivity and profits. They concluded that family friendly practices do not increase the performance of the workplace.

PARENTAL LEAVE: FEDERAL, STATE, AND PRIVATE INITIATIVES

Federal Legislation

Since August of 1993, workers in the United States have been eligible for federally mandated parental leave under the Family and Medical Leave Act (FMLA). Some states and private employers were already offering parental or medical leave before the FMLA. The law extended unpaid, job protected leave to workers of all public sector employers and private sector employers with more than 50 employees. The Act requires that workers have worked for the employer for 12 months and worked at least 1,250 hours during the previous 12 months. As noted, the leave is unpaid and does not apply to small businesses. Spouses employed by the same employer are required to share the total 12 weeks of unpaid leave. These drawbacks lead to gaps in coverage. “Less than half (46 percent) of all women workers are estimated to be covered, and some estimates show that only 20 percent of new mothers are covered and eligible for FMLA”, (Rudd, E. 2004).

State Legislation

Given the drawbacks of FMLA, some states have begun initiatives to offer more generous parental leave benefits including expanding the leave requirements to smaller employers, part time workers, or workers who have not been at the employer for 12 months.

Currently, California and New Jersey have paid family leave programs. However, these paid leave benefits do not include the job protection benefits of FMLA. In California, the Paid Family Leave Insurance Program provides up to six weeks of paid leave for the illness of a family member or birth of a child. In New Jersey, the six weeks of paid leave are through the Family Leave Insurance program. In both states, the program is administered through the state's disability insurance program (Fass 2009). Most paid family leave at the state or private level is through temporary disability insurance. One study conducted by the U.S. Office of Personnel Management (OPM) on paid parental leave considered the addition of paid parental leave to the benefits of federal workers (2001). The OPM found that "while paid maternity leave is available for approximately half of the female workforce covered by existing surveys, the time off is generally paid through temporary disability coverage. In addition, only 7 percent of new fathers receive paid paternity leave (United States Office of Personnel Management, 2001).

Private Initiatives in the Legal Industry

In the most recent summary of responses to the NALP Workplace Questionnaire, 86.5 percent of law firms have a written parental leave or family care policy. However, there is a wide disparity among the types of benefits that firms offer. Some firms have policies that cover adoptions and are available to domestic partners, while some firms offer paid leave for a limited time and unpaid leave up to a year. Other firms include cash payments to offset adoption costs in addition to paid leave. Further, 45.7 percent of firms offer subsidized use of a child care facility; although most allow this only for emergency child care. Most firms, 71.3 percent, also offer alternative work options such as job sharing, flex-time, telecommuting, or part-time schedules with eligibility determined for the most part on a case-by-case basis. In a recent analysis, NALP found that of the 5.9 percent of lawyers working part-time, 73 percent of them are women. This translates into 13 percent of all women lawyers working part time and 2.4 percent of all male lawyers working part time (National Association for Law Placement, 2009a).

BACKGROUND ON EGALITARIAN & PARTNERS, LLP

Egalitarian & Partners, LLP (hereafter *Egalitarian*) is a mid-sized law firm located in a large city in the upper Midwest. The firm was recently noted for crossing the threshold of having more than 50 percent of its shareholders as women (Murphy 2010). A "shareholder" or "partner" in a law firm is an individual who has become an owner in the firm. As such, the individual has earned the rights and responsibilities associated with ownership. They generally take home part of the firm's annual profits, bear the risks associated with losses, and are expected to generate business for the firm. From its inception in 1996, the firm sought to differentiate itself from the culture that large law firms in big cities historically cultivate. Instead, they focused on diversity, work-life balance, and a less hierarchical structure. Their bylaws state the following: "we

recognize that we live in a diverse world and that promoting equal opportunity and inclusiveness remains a critical issue for the legal profession, our business clients, and the communities in which we live and work." Even the firm's office space reflects these values, with the more senior partners located in inside offices rather than in the big windowed-corners.

Types of Work-Life Balance Policies the Firm Offers

Egalitarian considers work-life balance options on a case-by-case basis and have offered the following options: flexible scheduling, domestic partnership benefits for its gay and lesbian employees, telecommuting options, reduced hour schedules, sabbaticals and paid family leave for attorneys. The firm's family leave policy states that

> An attorney employed by [*Egalitarian & Partners, LLP*] may be entitled to a total of six (6) months (26 weeks) of parenting leave following the birth of the attorney's child (or the birth of a child by the attorney's spouse or partner), adoption of a child by the attorney, or foster care placement of a child with the attorney. A parenting leave of up to six (6) months will not affect an attorney's salary and benefits progression. Attorneys who take up to six (6) months of parenting leave during their tenure as an associate with [*Egalitarian & Partners, LLP*] will not be held back in her or his progression toward shareholder status. The progression toward partnership for an attorney who takes more than six (6) months of parenting leave during her or his tenure as an associate with the Firm will be evaluated on an individual basis by the management of [*Egalitarian & Partners, LLP*].

Structure of the Firm and Type of Work Performed at Law Firms

While law firms are similar to firms in general, they are unique enterprises. There are clear demarcations among staff members in terms of education, age, work expectations, and remuneration. Table 1 demonstrates the different types of workers at *Egalitarian* including shareholders, associates, paralegals and an administrative staff. At *Egalitarian*, the average age of shareholders is 48, they are 53 percent female, and are expected to bill at least 1,800 hours of work per year as well as to generate business for the firm. Each shareholder's billing rates vary by the level of their experience as well as the type of work performed.

At *Egalitarian*, shareholders work includes primarily managing clients and working on cases at an hourly rate that varies by both the type of work and the attorney's experience. Shareholders are expected to generate business for the firm by garnering new cases and clients. This is primarily achieved by attending conferences, improving one's reputation and by attending regular events in the area in order to make connections with other attorneys and possible clients. *Egalitarian* also emphasizes administrative work that supports the firm's

institutional environment. This includes being on the firm's board of directors, being a practice group leader, managing and mentoring the group of associates, paralegals or administrative assistants. Shareholders are paid in both an annual salary and a bonus. Both the salary and bonus are correlated to their productivity as measured by hours billed and billing rate, as well as the shareholder's business generation and administrative work.

Table 1: Occupational Structure, Work Requirements and Pay by Age and Sex, 2010

	Shareholders	**Associates**	**Paralegals**	**Administrative**
Average Age/% Female	48years/50%	31years/40%	40years/100%	41.5years/83%
Work Requirements	Bill at least 1,800 hours of work per year and generate business for the firm	Bill at least 1,800 hours of work per year (at a lower rate than shareholders), supporting shareholder business.	Bill at least 1,600 hours per year (at a lower rate than the associates) supporting both the shareholders and the associates.	No billing hours required.
Remuneration	Salary and bonus linked to productivity, business generation, and the size of the firm's profits that year.	Salary and bonus linked to productivity.	Salary and bonus.	Hourly wage.

Associates at *Egalitarian* (as well as most other firms) are lawyers who are new to the firm and have not yet become a shareholder. The average age among the associates at *Egalitarian* is 33 years with 40 percent women**.** Associates are required to bill at least 1,800 hours per year at a rate that is lower than a shareholders. They are not required to generate business, and tend to support shareholders' work. Their remuneration consists of an annual salary and a bonus, which are both linked to productivity. This billable hour requirement is comparable to the national average. In 2009, 30.8% of law firms with 50 or fewer lawyers required associates to bill 1,800 hours compared with 45.1% that required 1,850 hours or more (National Association for Law Placement 2009b).

Paralegals are a hybrid between staff and professionals at a law firm. At *Egalitarian*, the average age is 42 and paralegals are 100 percent women. Paralegals are required to bill 1,600 hours per year at a rate that is lower than associates. Their work supports both the shareholders as well as the associates. Paralegals are remunerated by both salary and bonus, but the salary is set while the bonus is more directly linked to productivity. A paralegal is required to have at least a paralegal degree.

Lastly, *Egalitarian* employs an administrative staff whose average age is 45 and 83 percent women. Individuals in this category work a 9-5 job for an hourly wage supporting all

lawyers and paralegals. There are no billing hours required and they do not receive bonuses. There is no degree required for this job.

COSTS AND BENEFITS OF PAID PARENTAL LEAVE

The costs faced by a typical law firm fall into two major categories: explicit costs and implicit costs. Explicit costs are costs that the firm actually pays and fall into two categories: fixed costs and variable costs. Fixed costs do not vary with output - the hours billed by each attorney and paralegal - and include, for example, the building mortgage or rent, the cost of utilities including phone and internet, and salary and benefits of certain employees such as those who provide administrative and technology support. The variable costs, which do vary with output, include the worker's wages and/or salaries, office supplies, and phone and fax charges.

Implicit costs are associated with the foregone use of existing resources. For a typical firm, the most expensive implicit cost of granting leave to a business generator, such as a salesperson, is the loss of revenue that results from the absence of that person. Overall, implicit costs are often more difficult to measure, but are no less important in determining the profitability of policies and choices made by the firm.

Table 2: Explicit and Implicit Costs to the Firm by Category of Employee

	Category of Employee			
	Shareholder	**Associate**	**Paralegal**	**Administrative**
Explicit Costs	Paid Salary/Bonus Share of Overhead	Paid Salary/Bonus Share of Overhead	Paid Salary Share of Overhead (1/2 of attorneys)	Zero, unpaid leave. Zero Overhead*
Implicit Costs	Lost Business Generation Lost Hours Billed	Zero	Zero	Zero

*The administrative staff is part of overhead itself.

Table 2 summarizes how the explicit and implicit costs associated with a paid leave at the law firm vary based on the employment category. For attorneys and paralegals, the explicit costs of a leave of absence include salary and bonuses because the firm offers them paid family leave. The explicit costs of family leave for administrative workers, however, are zero since their leave is unpaid. Regardless of the classification of the worker, the firm must also pay the fixed costs associated with the overhead in running the firm including the rent paid on the office space and the pay of remaining support and administrative staff. Lastly, the firm pays a small variable cost associated with the overhead of each attorney, paralegal or staff member. These sorts of costs are a small share of the overhead and may include use of paper or printing materials and technology

support. Most of the firms' costs are fixed, so it is more profitable for a firm to fill all of its empty offices, get attorneys working, billing and bringing in revenue.

The implicit cost (or opportunity cost) of a leave of absence – paid or unpaid - is the lost business generation that the attorney may have conducted had they not gone on leave. This includes new business that the attorney brings to the firm. While on leave, it is presumed that the attorney does not do the necessary activities to generate business. Further, for shareholders, associates and paralegals, if they are working on projects when they have to take leave, the potential loss of billable hours while on leave is another implicit cost. An associate's and paralegal's billable hours can be passed onto other employees, but this is not necessarily the case for a shareholder.

The varied work expectations for each class of worker in a firm, along with the associated sex and age distribution, have implications for the costs and benefits leave policies. Paid leave for shareholders cost the firm the most in both explicit and implicit costs because they have the highest salaries and bonuses and because they are the only category of worker expected to generate business. However they also bring in the most revenue for the firm and can, therefore, more easily make up for losses.

Administrative workers are the least costly because they do not get paid leave. Paid leave for associates and paralegals is more costly to the firm than leave for shareholders. Although their salary and bonuses are smaller and are not associated with potential lost business, associates and paralegals generate less revenue. It is important to note, however, that the majority of their work can be passed to another employee during the leave so there is no loss in potential hours billed.

HYPOTHETICAL CASES

A "Superstar Associate" Has a Baby

Julia Espinosa is a superstar associate at the firm. She is a driven and very productive third-year associate. At her level, *Egalitarian* expects her to bill at least 1,800 hours per year at a rate of $190 per hour. She typically bills around 1,900 hours. This translates into a range of revenue for the firm (depending on the actual number of hours she bills and the fee that she charges, depends on the number of years she attorney has been working, the client and the market segment in which the client operates) of between $342,000 and $361,000. In 2006, the year before Julia took a leave of absence, her total compensation was $115,000 with a base salary of $100,000 and a bonus of $15,000.

In 2007 Julia had a baby and took four months off from work. Between the hours that she billed before and after her leave that year, she billed 1,000 hours in 2007. This generated $190,000 in revenue for the firm. Because of her leave she billed 800 hours less than the number of hours expected by the firm, translating into a loss of $152,000 in potential revenue that the

firm could have earned had she not taken a leave and worked full-time, year round. These revenues are implicit. The firm does not actually have to pay this cost. It is simply (potentially) lost revenue.

But did the firm actually lose revenue? No. Because of both the nature of the work and the structure of the remuneration at *Egalitarian*, Julia's work was passed on to another associate at the firm. Because associates are not expected to generate business and because associates have not yet specialized in any particular type of work or for any particular client, any work that needs to be done can just be shifted to another worker (assuming they have more than one associate with a similar skill set). Furthermore, because the firm is for-profit and because workers are paid based on productivity, this shift of work does not necessarily impose a cost onto other workers. Associates need to bill at least 1,800 hours and many need the work. If they bill beyond 1,800 hours their bonus will reflect that extra work performed.

The firm did, however, have to pay explicit costs associated with Julia and her leave. It costs the firm approximately $111,000 per attorney per year in overhead. This includes the previously mentioned costs of rent, administrative support, technology support, utilities, etc. In 2007 Julia cost approximately $110,000 (she would not have used quite as much overhead costs being out of the office for four months of the year). In addition, the firm paid her salary and bonus for the year. Julia's salary for 2007 (the year of her leave) was $118,000 with a base salary of $105,000 and a bonus of $13,000.

Table 3: The Net Effect of a Superstar Associate's Four Month Leave of Absence: Revenue Minus Costs

	With Leave	**Without Leave (Expected values assuming full time work at prior rate)**
Revenue Generated in 2007	$190,000	$361,000
Minus Salary	$118,000	$125,000
Minus Share of Overhead	$110,000	$111,000
Net Gain or Loss to the Firm	-$38,000	$125,000

Table 3 presents the costs and benefits to the firm associated with Julia's leave of absence. If Julia is good, and the firm wants to retain her and eventually offer her shareholder status, the $38,000 loss is worth it. It seems reasonable given the firm's hiring cost estimates of an average of one year's salary to replace an attorney. Therefore, it would cost *Egalitarian* approximately $100,000 if Julia was to quit when she had the baby. The cost of offering her family leave is $38,000 which means that if an associate has less than 2.63 children, it is more profitable to keep her and pay for family leave than to hire a new attorney. Based on the age structure by category of work (see Table 2), the least costly categories of workers are the most likely to have kids and on average (particularly among the highly educated populace in the

United States) have fewer than 2.5 kids, so it is profitable for *Egalitarian* to provide generous maternity leaves to its associate attorneys.

An "Average Associate" Has a Baby

Mia Smith is an average associate at the firm. She is a third-year associate that wants to have a good balance between her work and her life. She is not interested in becoming a workaholic and is careful to not take on too many projects that would require her to work more than 60 hours per week. At her level, *Egalitarian* expects her to bill 1,800 hours per year at a rate of $190 per hour. She typically bills 1,700 hours. This translates into a range of revenue for the firm (depending on the fee that she charges the client and the actual number of hours she bills) of between $323,000 and $342,000. In 2006, the year before Mia took a leave of absence her total compensation was $105,000 with a base salary of $100,000 and a bonus of $5,000.

In 2007 Mia had a baby and took four months off from work. Between the hours that she billed before and after her leave that year, she billed 800 hours. This generated $152,000 in revenue for the firm. Because of her leave she billed 1,000 hours less than the required number of hours, translating into a loss of $190,000 in potential revenue that the firm could have earned had she not taken a leave and worked full-time, year round. As before, these revenues are implicit. The firm does not actually have to pay this cost. It is simply (potentially) lost revenue.

The firm did pay the explicit costs associated with Mia and her leave. As in the case of Julia, without leave, Mia cost the firm approximately $111,000 per year in overhead, and approximately $110,000 with leave. Mia's salary for 2007 (the year of her leave) was $108,000 with a base salary of $105,000 and a bonus of $3,000. Table 4 presents the net losses to the firm in the year of her leave as compared to the expected gains had she not taken a leave.

Table 4: The Net Effect of an Average Associate's Four Month Leave of Absence: Revenue Minus Costs

	With Leave	Without Leave (Expected Numbers)
Revenue Generated in 2007	$152,000	$323,000
Minus Salary	$108,000	$118,000
Minus Share of Overhead	$110,000	$111,000
Net Gain or Loss to the Firm	-$66,000	$94,000

Note that the net losses for Mia's leave are larger than for Julia's. She works less and earns less revenue for the firm. While offering Mia one leave is worth it for the firm when comparing the cost of leave to the cost of replacing her ($100,000), it would not be worth it to offer more than one paid leave to a worker like Mia. Beyond the first leave, the costs of leave are higher than the costs of replacing her. Realistically, the firm would prefer that Mia take unpaid leave for four months and return to work. We assumed for these examples that the paid family

leave benefit had a positive impact on the probability of returning to work and the likelihood the attorney would stay with the firm.

A Shareholder Has a Baby

Anna Birdings is a second-year shareholder at the firm. At her level, *Egalitarian* expects her to bill at least 1,800 hours per year at a rate of $300 per hour. She typically bills around 2,200 hours. This translates into a range of revenue for the firm (depending on the fee that she charges the client and the actual number of hours she bills) of between $540,000 and $660,000. She was also credited with generating $50,000 worth of business for the firm for which she is compensated through her bonus. In 2006, the year before Anna took a leave of absence her total compensation was $175,000 with a base salary of $125,000 and a bonus of $50,000.

In 2007 Anna had a baby and took four months off from work. Between the hours that she billed before and after her leave that year, she billed 1,300 hours. This generated $390,000 in revenue for the firm. She billed 500 hours less than the required number of hours, translating into a loss of $150,000 in potential revenue that the firm could have earned had she not taken a leave and worked full-time, year round. Again, as stated before, these revenues are implicit. However, because the shareholder's work is more specialized, and because the client relationship is more personal, it is difficult to shift her work onto another shareholder. When a shareholder takes a leave, the firm risks losing revenue from hours billed that cannot be shifted as well as the possibility that the client will not be satisfied with a possible decline in service during a leave of absence.

Furthermore, additional costs associated with Anna's leave include any lost business that could have been generated. These costs are much more difficult to calculate, are highly dependent on each individual case, and may evolve over time. On one hand, Anna may continue to work, maintaining at least some minimal contact with the client during her leave of absence. On the other hand, Anna may decide to pass her client on to another shareholder, shifting her attention away from business generation (and maintenance) and, in the long run, to her family. For the purposes of this case study, let's assume that Anna maintains her client relationship but does not generate any additional business for the year.

The firm did pay the explicit costs associated with Anna's leave of absence. In 2007 Anna's overhead cost approximately $110,000. Anna's salary for 2007 was $160,000 with a base salary of $130,000 and a bonus of $30,000. Table 5 presents the net losses to the firm in the year of her leave as compared to the expected gains had she not taken a leave. Anna bills only 500 hours less than is expected at a much higher rate than the associates, which does cover the cost of her leave. However, because of the difficulty in shifting her work another shareholder, the firm could lose up to $150,000 in revenue from lost hours billed.

Table 5: The Net Effect of a Shareholder's Four Month Leave of Absence: Revenue–Costs		
	With Leave	**Without Leave (Expected Numbers)**
Revenue Generated in 2007	$390,000	$660,000
Explicit Costs		
Minus Salary	$160,000	$190,000
Minus Share of Overhead	$110,000	$111,000
Implicit Costs		
Lost hours billed	$150,000	
Lost business generation		
Net Gain or Loss to the Firm	-$30,000	$359,000

On net, Anna's leave cost the firm approximately $30,000, which is less than the cost of both Julia and Mia's leave of absences. This is in part due to the fact that the shareholder bills at a higher rate, and also due to the fact that we left out the immeasurable costs in our calculation. It is impossible to know the counterfactual: how much business would Anna have generated had she been working and what would have been the future income stream to the firm associated with that business. One way to measure this is to compare Anna's business generation to those of her similarly-experienced colleagues. But for the purposes of this paper, we avoid such an estimation.

CONCLUSION AND DISCUSSION

This paper provides implications for the workforce generally in terms of the profitability of extending generous family leave policies to its workers. Generous leave policies are sometimes profitable for *Egalitarian* but may not be for all types of organizations. The factors that make paid leave profitable for *Egalitarian* include the fact that the organization is for-profit and pays its employees based on productivity. In the case of associate-level work, the firm does not lose revenue when an associate takes a leave because the work can be passed to another worker. Furthermore, because bonuses are linked to productivity, the leaves of absence do not create resentment among workers asked to do a colleague's work. In addition, the structure of the firm in terms of age and gender and the type of work performed is such that the least costly workers are most likely to make use of the paid leave benefit. These are associates that are not generally required to generate business. Furthermore, the average number of children in the United States right now is approximately 2.1, which is less than the break-even point for the firm in terms of the costs and benefits associated with the leave.

Even for *Egalitarian*, however, the effect of the leave on productivity and profitability depends on the type of work performed. Work which is around-the-clock, national or international, and unpredictable, such as litigation, does not lend itself to family responsibilities generally, let alone four month leaves from work. In an increasingly globalized and connected world, attorneys are expected to maintain connections with their clients on a more regular and

consistent basis. However, transactional, commercial and regulatory law practices are typically local and predictable and 9-5. As such they are much more conducive to both family-work balance and leaves of absence.

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THE IMPACT OF FEDERAL REGULATIONS ON IDENTIFYING, PREVENTING, AND ELIMINATING CORPORATE FRAUD

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ABSTRACT

Fraud appears rampant in the United States and reports seem to indicate an increasing trend despite the many regulations currently in place by government and private enterprises. This study determines if identifying, eliminating, and preventing corporate fraud is possible using the current regulations and deterrents in place, namely the Securities Acts of 1933 and 1934, and the Sarbanes Oxley Act of 2002. The study revealed that the Sarbanes Oxley Act of 2002 is more effective than the Securities Acts of 1933-1934 in identifying, eliminating, and preventing corporate fraud. The study's main limitations are (a) all frauds and misrepresentations that occurred in corporations may not be reported to the Association Certified Fraud Examiners, and (b) the data presented is limited to the length of time that the Association of Certified Fraud Examiners was collecting, recording and reporting corporate fraud.

Key Words: Sarbanes Oxley Act, Securities Act, legislation, corporate fraud

INTRODUCTION

The Securities and Exchange Commission's Federal Securities Acts of 1933 and 1934, and the Sarbanes Oxley Act of 2002 (SOX) are two of the most powerful pieces of legislation developed with the intent to curb and in many cases, eliminate corporate fraud. The 1933 and 1934 Federal Securities Acts were developed as a result of October 1929 crash of the United States stock market, and SOX was developed as a direct result of the collapse of energy giant Enron among others. Are these legislations accomplishing their goals? Is it even possible to stop fraud from occurring? The SOX report card has mixed reviews and divided opinions – three years after the law was enacted, the question remains - has it made a proven difference in the level of corporate fraud? The question of effectiveness and worth remains the topic of much debate (Sweeney, 2005).

This paper examines the effectiveness of legislation, specifically the Securities Acts of 1933 and 1934, and SOX, in identifying, preventing, and eliminating corporate fraud.

BACKGROUND

What started as accounting scandals quickly evolved into full-blown corporate fraud at companies such as Tyco, WorldCom, Global Crossing and Adelphia, to name a few. In 2008, a mere seven years after the Enron debacle, the United States economy crashed. The housing bubble, banking and credit-market crisis, and the subprime failure have all been identified as the culprits. Businesses failed, corporations collapsed and millions of jobs were lost. Consumer confidence is now at a new low. Huge banks such Washington Mutual, the nation's largest savings and loan bank was dismantled and brokered the sales of the company to JP Morgan Chase (Block, 2008). Other giant mortgage companies such as Fannie Mae and Freddie Mac, and automobiles behemoths like General Motors were unable to exist without immediate governmental financial aid. Corporate mismanagement and fraud were just a few of the reasons provided as the cause of these collapses.

Federal securities transactions are regulated by several statutes and the most important ones are the Securities Exchange Act of 1933 and the Securities Act of 1934. These acts attempted to make market competition vigorous by demanding fair and full exposure in the marketplace of all material information (Cronin, Evansburg, & Garfinkle-Huff, 2001). The purpose of the 1933 Act is to provide fair and full disclosure of the character of securities sold in foreign commerce, interstate commerce, and through the mail, and to stop fraud in the sale of securities. The 1933 and 1934 Securities Acts and the US Supreme Court rulings viewed securities as stock of closely held companies and therefore subject to antifraud provisions of the Acts (Quinlivan, 1992).

SOX was signed into law on July 31, 2002. Congress instituted SOX in the wake of Enron's demise. Facing political pressure to act, the U.S. House of Representatives and the Senate immediately approved a package of reforms by near-unanimous approval (Dodwell, 2008). The requirements of SOX are considered as the most overwhelming changes affecting corporate governance since the Securities and Exchange Acts of 1933 and 1934 (Bumiller, 2002; Mitchell, 2003). About six years after its passing, however, many governance experts question whether the expense and time of compliance created any real reforms. The Securities Acts and SOX were legislated primarily to address reports of misrepresentation by corporate executives, corporate mismanagement, and excesses of management (Valenti, 2008).

SOX was passed as a result of the Enron destruction and other corporate downfalls that shook the investor community and the general public (Dodwell, 2008). The intent was to curb corporate mishandling, excesses, and misleading by corporate executives. The Act provides key provisions related to corporate boards, with at least one member having financial expertise (Valenti, 2008).

MOTIVATION

Corporate fraud continues to be a pervasive problem. Fraud statistics are staggering and remain one of the most problematic issues for businesses worldwide according to The Global Economic Crime Survey of 2007 (Anonymous, 2007). The 2007 "Global Economic Survey" by PricewaterhouseCoopers shows that in comparing its 2003 and 2007 results there is a drastic increase in the number of companies reporting fraud. The Association of Certified Fraud Examiners (ACFE) 2010 "Report to the Nation on Occupational Fraud and Abuse" estimated that a typical organization loses five percent of its annual revenues to fraud (Apostolou & Crumbley, 2008).

The number of financial restatements almost doubled from 2004 to 2005. This represents nearly 8.5% of U.S. publicly traded companies. In 2006, there were 1,420 restatements representing one out of every 10 public companies, and 12 times higher than in 1997 (Apostolou & Crumbley, 2008). Fraud is no longer a domestic problem since global trading started and continues to increase. Corporate fraud is widespread, costly, multifaceted, and serious. Because of globalization, new business models are being developed and this alone is increasing exposure to corporate fraud. Fraud is seen mainly as an information technology and financial issue (Castelluccio, 2008).

Fraud detection information technology tools, intrusion detection systems, whistle-blowing hotlines, and reference checks before hiring employees are just a few of the techniques companies have tried to mitigate fraud, yet big rackets continue to hit the headlines. How do comprehensive and sophisticated management controls fail to detect and prevent manipulation of information, dishonesty, and increasingly widespread corporate-wide fraud? Some believe that corporate culture plays a direct role. The culture of a corporation can influence the controls that are not only developed but implemented (Free, Macintosh, & Stein, 2007).

Congress passed the Securities Act of 1933 and the Securities Exchange Act of 1934 in response to securities markets fraud, an apparent lack of public information in the stock markets, and in the aftermath of the Stock Market Crash of 1929. Both of the Acts mandate fair and full disclosure of all material information in order to guarantee an energetic market competition (Cronin et al, 2001). Prior to the Acts, the offer and sale of securities were regulated by a mixture of state laws.

SOX was created in response to the massive frauds at Enron, WorldCom, Adelphia, and Tyco, among others (Hermanson et al, 2008). Weismann (2004) addresses the issue of corporate transparency and congressional window dressing provided in SOX. The author believes that the SEC's implementation of regulations for the Act undermines the lofty legislative goal of increasing corporate "transparency" as a deterrent to corporate fraud because the regulations do not provide meaningful regulatory oversight of the internal affairs of publicly traded corporations. Instead, the regulations empower publicly traded corporations to design,

implement, and self-police "improved disclosure" without SEC scrutiny to ensure that disclosure accurately reflects risk. Weismann further pointed out that events in history of securities regulation prove that self-regulation is a failed legislative reform paradigm (Weismann, 2004).

THE STUDY

The purpose of the study is to examine the effectiveness of legislation, specifically the Securities Acts of 1933 and 1934, and the Sarbanes-Oxley Act of 2002, in identifying, preventing, and eliminating corporate fraud. To measure effectiveness, fraud statistics during the Federal Securities Acts and prior to SOX Act were compared to fraud statistics subsequent to the implementation of SOX. This was done to determine if the number of frauds and the dollar amount involved were increasing or decreasing. Data collected from The Association of Certified Fraud Examiners' Report to the Nation for the period 1996 – 2008 was used in the study. These reports are extensive and published by the Association of Certified Fraud Examiners on the status of white-collar crime and fraud in the U.S. Its sole purpose is reducing the incidence of fraud and white-collar crime, assisting members in its detection and deterrence, and by training anti-fraud professionals in their fight against economic crime. The Report to the Nation on Occupational Fraud and Abuse is known as the largest privately-funded study on this subject. The Association collects details of actual fraud and abuse cases from Certified Fraud Examiners and the data it analyzed based on the cost of occupational fraud and abuse, the victims, the perpetrators, and the methodologies.

DATA ANALYSIS

Figures 1 through 12 provides comparisons of the two legislations (1933 SEC Act and 2002 SOX Act) in various areas of fraud such as asset misappropriations, corruption schemes, and fraudulent statements.

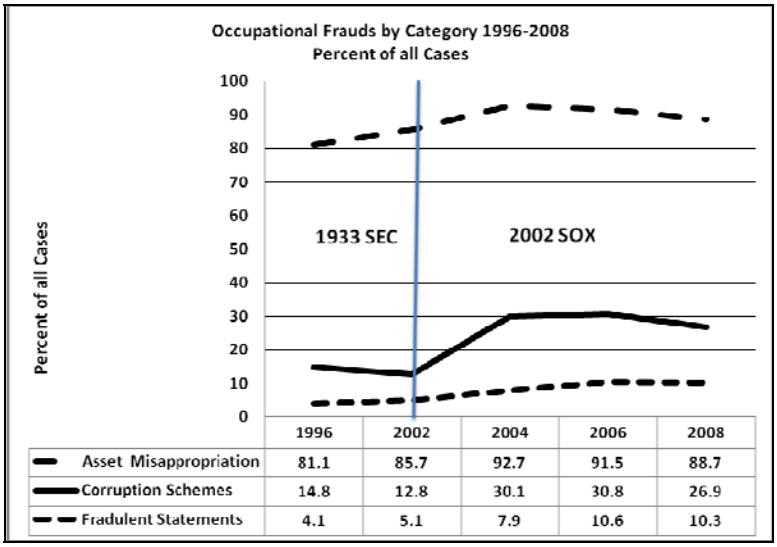
Occupational fraud represents the largest fraud area with organizations losing approximately $600 billion, or $4,500 for each employee each year. Occupational fraud includes asset misappropriations, corruption, or fraudulent statements. Asset misappropriations accounts for approximately 80% of the total, followed by corruption with fraudulent financial statements accounting for the different. From a quantitative perspective, 90% of asset misappropriation situations involve cash. However, fraudulent financial statements are the most costly form since each scheme results in a median loss of $4.25 million.

Types of Fraud

In analyzing Figure 1, fraudulent statements shows the highest value change in the median dollar loss per percent of cases when compared to the period during the Federal

Securities Act of 1933 and 1934, and the period subsequent to the Sarbanes Oxley Act of 2002. Although fraudulent statements represents the smallest percentage of cases 4.1% in 1996 compared to 81.1% for asset misappropriation and 14.8% for corruption schemes, the median dollar loss per percent of cases as shown in Figure 2: Occupational Fraud by Median Dollar Lossis significantly larger ($975,610) than asset misappropriation ($801) and corruption schemes ($29,730) in 1996. The percent of all cases increased subsequent to the implementation of SOX. However, there was a sharp decline in the median dollar loss per percent of cases. The sharp decline of the median dollar amounts in fraudulent statements occurred subsequent to SOX's implementation compared with asset misappropriation and corruption schemes as indicated in the downward slope in the graph of Figure 1. It can be concluded that there is some difference in the level of corporate fraud during the Securities Acts of 1933 -1934, and the Sarbanes Oxley Act of 2002.

Figure 1: Occupational Fraud by Percent of all Cases



	1996	2002	2004	2006	2008
Asset Misappropriation	81.1	85.7	92.7	91.5	88.7
Corruption Schemes	14.8	12.8	30.1	30.8	26.9
Fradulent Statements	4.1	5.1	7.9	10.6	10.3

Non-cash misappropriations involve the theft of non-cash assets such as inventory, equipment, and proprietary information while cash misappropriations involve the theft of an organization's cash. Assets misappropriation schemes can be subdivided based on the type of assets that is misused or stolen.

Figure 2: Occupational Fraud by Median Dollar Loss

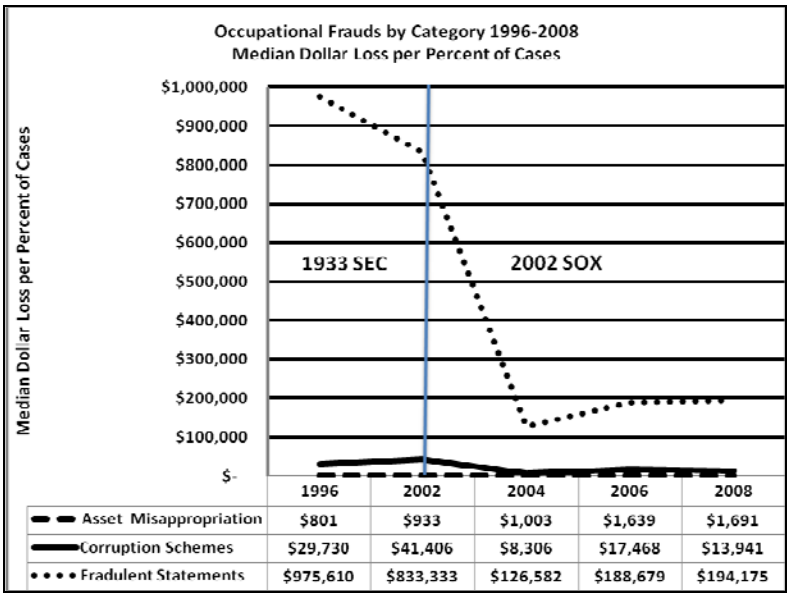
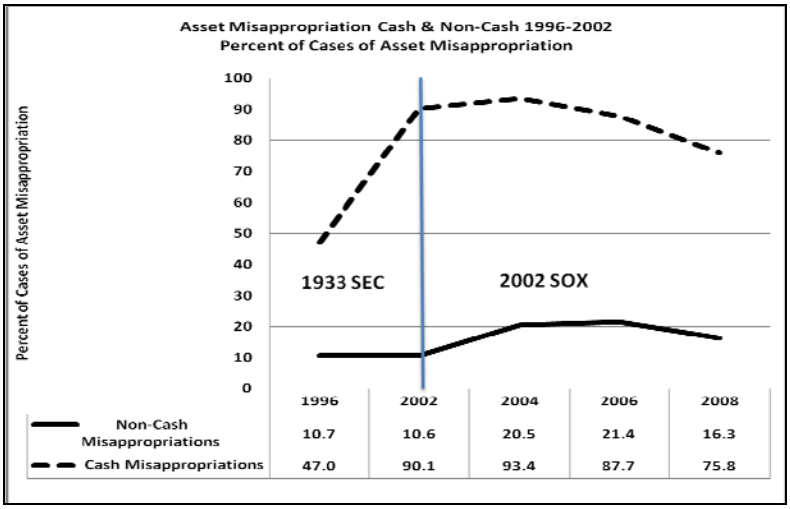


Figure 3: Asset Misappropriation shows that 93.4% (of the asset misappropriation cases) involved the theft of an organization's cash. Non-cash asset thefts, although less common, were on average, more costly. Cash misappropriations are higher values than non-cash misappropriations per percent of cases. It is very noticeable from Figure 3 that the SEC legislation has little impact on the non-cash misappropriations as shown by the flat trend, and cash misappropriations actually increased during the SEC legislation period. When the SEC results are compared to SOX, both non-cash, and cash misappropriations initially increased with SOX but subsequently decreased, showing more effectiveness than the SEC. Although, non-cash misappropriations cases also initially increased after SOX, later trends show a decline in the percentage of cases.

Figure 3: Asset Misappropriation (Cash versus Noncash)



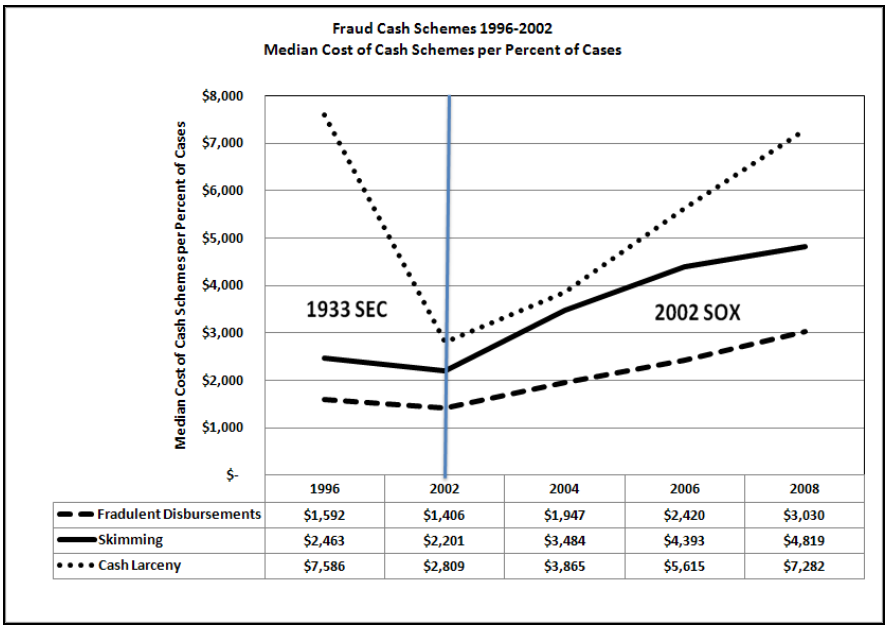
Note: the sum of percentages in some cases exceeds 100% because some cases involved more than one type of fraud.

Disbursements

Fraudulent disbursements, skimming, or cash larceny are all categories used to identify cash schemes. Fraudulent disbursements occur when the perpetrator causes the organization to disburse funds through some trick or device such as submitting false invoices or false timecards. Skimming involves cash being stolen from an organization before it is recorded on the organization's books and records. Cash larceny involves cash being stolen from an organization after it has been recorded on the organization's books and records.

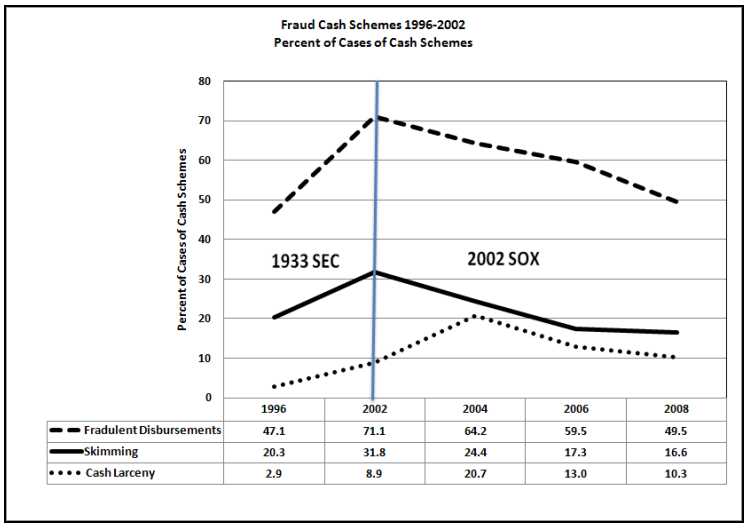
Figure 4, Secondary Data on Cash Schemes by Median Cost,shows that cash larceny outweighs fraudulent disbursements and skimming per median cost of cash schemes, although it represents the smallest percent of cases (Figure 5). For example, in 1996, cash larceny was only 2.9% of cases of cash schemes as shown in Figure 5, yet it averaged $7,586 of median cost of cash schemes per percent of cases. On the opposite side of the spectrum for the same year of 1996, fraudulent statements represented the highest percentage of cases with a loss of only $1,592 (see Figure 4), while it represented the largest percent (47.1) of cases (see Figure 5). As depicted in Figure 4, during the Securities Act period the median cost of all cash schemes – fraudulent disbursements, skimming, and cash larceny were all decreasing but began increasing during SOX. Despite the increase in median cost, there was a consistent decrease in the percent of cases of cash schemes, indicating that larger amounts of cash are being stolen in less number of incidences. It can be concluded that there is some difference in the level of corporate fraud during the Securities Acts of 1933 -1934, and SOX.

Figure 4: Secondary Data on Cash Schemes by Median Cost



Billing schemes occur when a fraudster causes the victim organization to issue a payment by submitting invoices for fictitious goods or services, inflated invoices, or invoices for personal purchases. Payroll schemes occur when an employee causes the victim organization to issue a payment by making false claims for compensation. Check tampering occurs when the perpetrator converts an organization's funds by forging or altering a check on one of the organization's bank accounts, or steals a check the organization has legitimately issued to another payee. Expense reimbursements schemes occur when an employee makes a claim for reimbursement of fictitious or inflated business expenses. Register disbursements schemes occur when an employee makes false entries on a cash register to conceal the fraudulent removal of currency.

Figure 5: Cash Schemes Percent of Cases

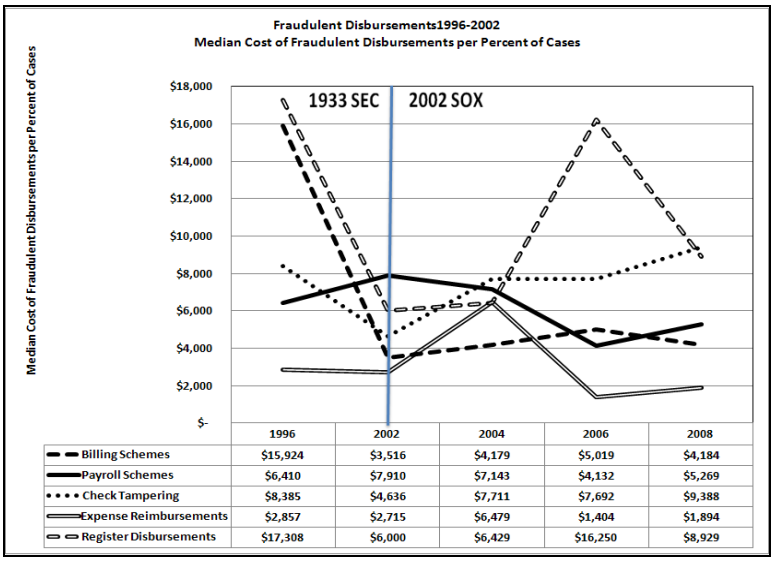


	1996	2002	2004	2006	2008
Fradulent Disbursements	47.1	71.1	64.2	59.5	49.5
Skimming	20.3	31.8	24.4	17.3	16.6
Cash Larceny	2.9	8.9	20.7	13.0	10.3

Note: the sum of percentages in some cases exceeds 100% because some cases involved more than one type of fraud.

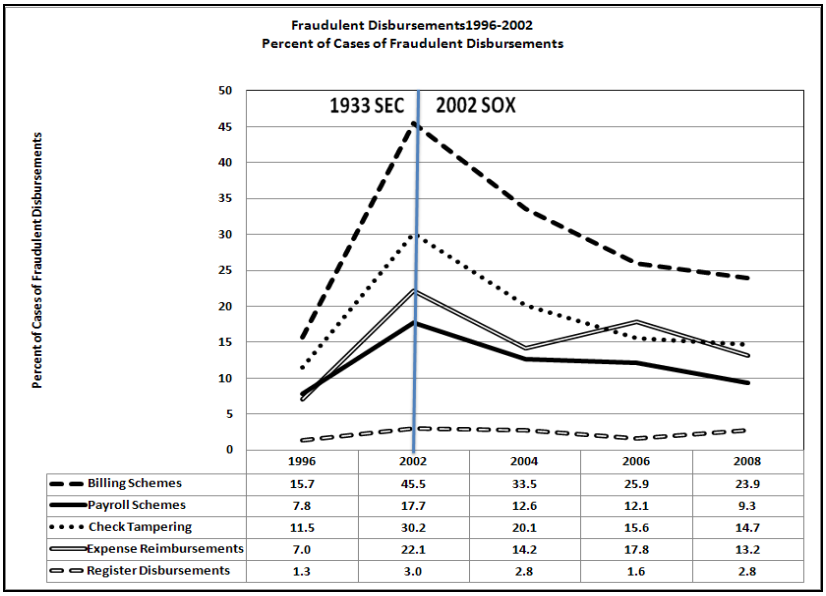
The data presented in Figure 6 shows that the percent of cases of fraudulent disbursements were increasing during the years prior to 2002 but after implementation of SOX there was a continuous drop in the percent of cases. During the downward trend there are however, incidences of increases that did not continue over time. For example, in 1996, prior to SOX, the largest median cost occurred in register disbursements ($17,308), while representing only 1.3 percent of cases (Figure 7), and billing schemes was the next largest with ($15,924).

Figure 6: Median Cost Fraudulent Disbursement Percent of Cases



	1996	2002	2004	2006	2008
Billing Schemes	$15,924	$3,516	$4,179	$5,019	$4,184
Payroll Schemes	$6,410	$7,910	$7,143	$4,132	$5,269
Check Tampering	$8,385	$4,636	$7,711	$7,692	$9,388
Expense Reimbursements	$2,857	$2,715	$6,479	$1,404	$1,894
Register Disbursements	$17,308	$6,000	$6,429	$16,250	$8,929

Figure 7: Fraudulent Disbursements Percent



	1996	2002	2004	2006	2008
Billing Schemes	15.7	45.5	33.5	25.9	23.9
Payroll Schemes	7.8	17.7	12.6	12.1	9.3
Check Tampering	11.5	30.2	20.1	15.6	14.7
Expense Reimbursements	7.0	22.1	14.2	17.8	13.2
Register Disbursements	1.3	3.0	2.8	1.6	2.8

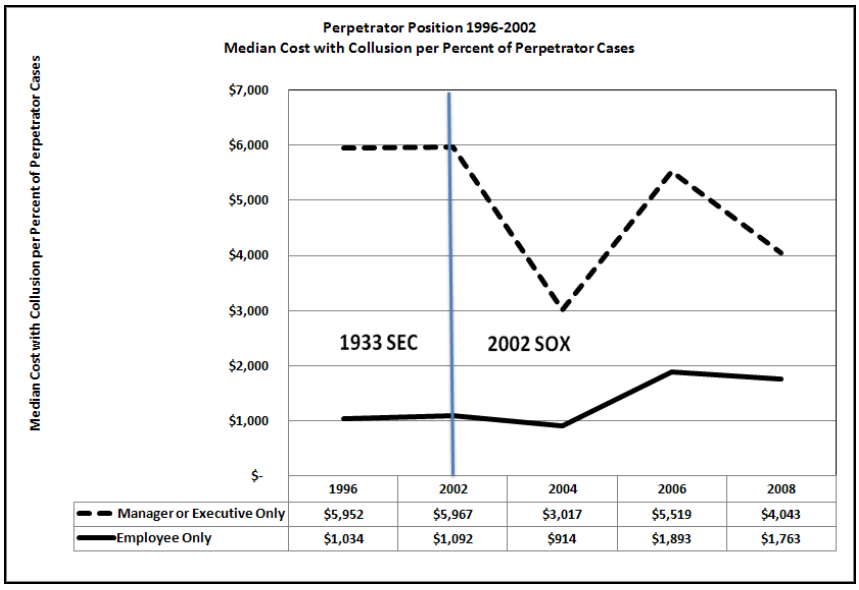
Note: the sum of percentages in some cases exceeds 100% because some cases involved more than one type of fraud.

Type of Fraudster

The position that an individual has within an organization appears to be one of the strongest indicators of the magnitude of the loss that the organization experiences.

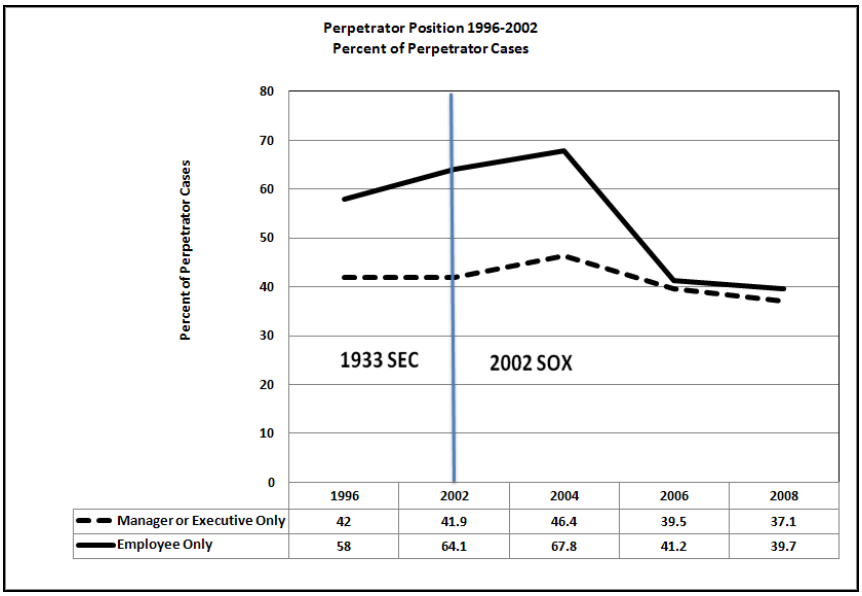
Figure 8 indicates that the dollar amount of loss is greater when committed by management than by employees. On average, the median dollar losses in 1996 was more than 5 times as high ($5,952) as losses associated with frauds committed by the rank and file employees ($1,034). Despite the initial peak in fraud cases between 2002 and 2004, in both employees only and manager or executive, there is drastic downward trend after 2004, which continued through 2008. There is some difference in the level of corporate fraud during the Securities Acts of 1933 – 1934, and SOX.

Figure 8: Median Cost by Perpetrator Position



Although based on percent there are more employees in an organization than its management as shown in Figure 9: Percent of Perpetrator Case.

Figure 9: Percent of Perpetrator Case



Age and Gender

In Figure 10, the data shows consistently that fraud in organizations is committed more by males than by females. It also shows that the SEC legislation had opposite effects on male versus females. Figure 10 shows that the percentage cases of fraud committed by males reduced from the time (before SOX) and after SOX's implementation, whereas for females the number of cases increased from the time (before SOX). However, subsequent to the implementation of SOX legislation there appears to be an immediate impact on the number of female cases which appears to remain stagnant before showing a decline in later years. Interestingly, there is an increase in the number of fraud cases by males with SOX, but at a lower rate than with the SEC legislation.

Figure11 shows that the highest percentage of fraud is committed by individuals between the ages of 41-50 at 33.05 for 1996. The lowest percent of fraud (2.8%) in 1996 is committed by individuals over 60 years old. Although the over 60 years age group represents the lowest percentage of perpetrators (2.8 in Figure 11), they represent the largest median dollar loss of $123,571 by age group (Figure 12). In evaluating the Securities Act and SOX, there is no difference in the level of corporate fraud during the two legislations for the age groups.

Figure 10: Gender of Perpetrator by Percent Cases

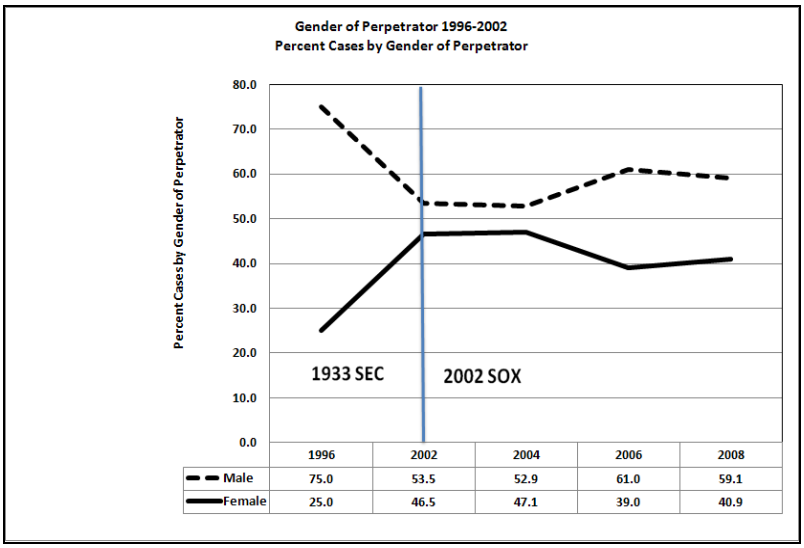


Figure11: Percent Age of Perpetrator

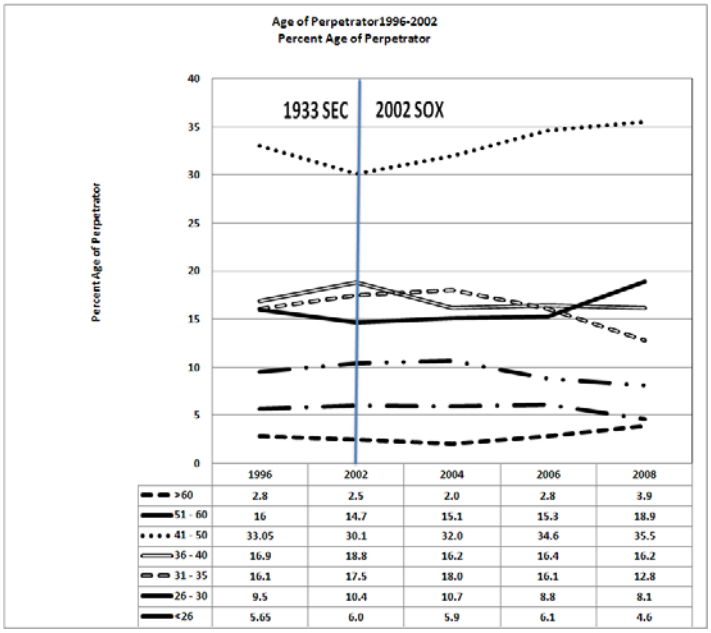
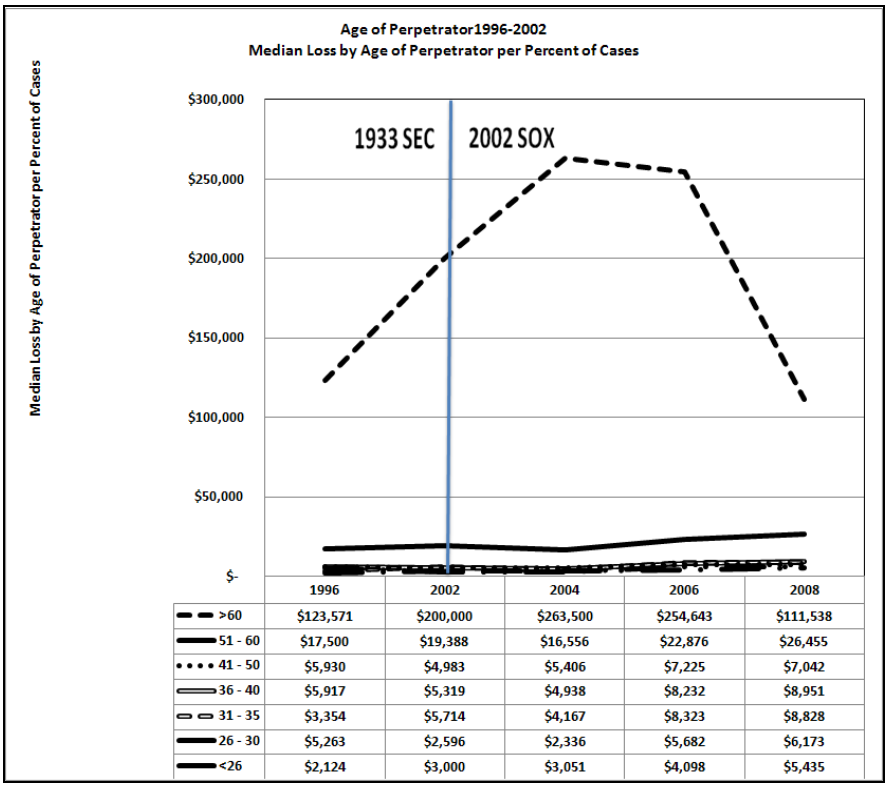


Figure 12: Median Loss by Age of Perpetrator



	1996	2002	2004	2006	2008
>60	$123,571	$200,000	$263,500	$254,643	$111,538
51 - 60	$17,500	$19,388	$16,556	$22,876	$26,455
41 - 50	$5,930	$4,983	$5,406	$7,225	$7,042
36 - 40	$5,917	$5,319	$4,938	$8,232	$8,951
31 - 35	$3,354	$5,714	$4,167	$8,323	$8,828
26 - 30	$5,263	$2,596	$2,336	$5,682	$6,173
<26	$2,124	$3,000	$3,051	$4,098	$5,435

CONCLUSION AND RECOMMENDATIONS

Based on the above analysis, it appears that SOX is more effective in identifying, preventing, eliminating, and corporate fraud. After implementation of SOX, the median dollar loss per percent of cases decreased (Figure 1). The percent of cases of cash schemes decreased during SOX (Figure 5). The median cost of fraudulent disbursements per percent of cases decreased during SOX (Figure 6). The median cost by perpetrator position decreased during SOX (Figure 8). The percent of perpetrator cases decreased during SOX (Figure 9). Implications of the results show that it is imperative that the SOX continues to be utilized as a requirement in corporations.

The study's limitations identified are (a) all frauds and misrepresentations that occurred in corporations may not be reported to the Association Certified Fraud Examiners (b) the data presented is limited to the length of time that the Association of Certified Fraud Examiners was collecting, recording and reporting corporate fraud. Results from this study may have been

different if access was available to the individual cases which would have allowed for more detailed statistical testing on the data.

Recommendations for future research include evaluating the questions "Are corporations implementing Sarbanes Oxley effectively? Are auditors sufficiently prepared to identify fraud during an audit? Are business schools adequately preparing students to recognize fraud when they enter the workforce in the auditing field? Is ethical behavior emphasized in corporations?

Although it appears that occupational abuse and fraud cannot be eradicated from the workforce, it is possible to reduce its costs. To accomplish this, preventative measures must be implemented, beginning with a clear understanding of the nature of the offenses. Abuse and fraud within an organization usually begins very small and gradually grows to the point that the existence of the organization may be threatened. Organizations need strike a balance between having too much trust in their employees and not having enough. Most occupational fraud is not hidden and although some of it is well hidden, most of it can be prevented and detected with solutions by using common sense and solutions that are not expensive. Some solutions include (a) consulting a Certified Fraud Examiner who have specialized knowledge and experience in detecting fraud, (b) setting the tone at the top which does not provide excuses for employees to be dishonest, and (c) having a written code of ethics that clearly states what the organization expects from its employees (d) checking employee references, (e) examining the bank statements of the organization by the highest possible level, and assigning an independent individual to review the statements for unusual transactions, (f) utilizing a hotline to allow for employees to anonymously report known fraud, and (g) creating a positive work environment which could reduce the motivation for employees to commit abuse and fraud.

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SUKUK: GLOBAL ISSUES AND CHALLENGES

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ABSTRACT

The purpose of this paper is to describe the differences between Sukuk and conventional bonds and discuss issues concerning accounting, recognition, measurement and disclosures in the financial statements. Currently most of the Sukuk issuers are Islamic financial institutions, but others including Singapore and the European countries are also joining the band-wagon to capture the capital-flows from the Middle Eastern countries. A number of issues are discussed in this paper; among them include recognition, measurement and disclosure of Sukuk according to two different international accounting standards. The possibility of harmonization of between IFRS for financial instruments and AAOIFI standard on investment is also discussed. The comparative analysis shows that there are not major differences between IFRS and AAOIFI standards as per recognition, measurement and disclosures of Sukuk, and therefore IFRS can be adopted by issuers worldwide for international comparability of financial statements. Global challenges and opportunities facing Sukuk are also discussed in this paper along with some recommendations on how to overcome them.

INTRODUCTION

Islamic finance is gaining popularity worldwide for more than three decades and demand for Islamic financial instruments is also growing rapidly. Among the Islamic financial instruments, Sukuk has become the main attraction among banks, corporations and customers. Sukuk is the Islamic asset-backed financial instrument issued by Islamic financial institutions according to the Shari'ah.

Although it is commonly referred to as Islamic bonds similar to conventional bonds, they, however, are not the same. Sukuk is not the counterpart of conventional bonds as commonly referred to in many articles. Conventional bonds are interest bearing debt instruments, but Sukuk, on the other hand, are assets-backed financial instruments. Sukuk are not interest bearing financial instruments but rather Sukuk holders have a right of ownership in the assets or properties of the corporation or the issuer (Vishwanath & Sabahuddin, 2009). Interest is forbidden in Islam so Sukuk does not bear interest to the holders, but they have a right to the

profit made by the company. Losses are also to be shared among the Sukuk holders and the issuer according to the contract between the two parties.

The basic principle behind the Sukuk is that the holder has an undivided ownership interest in a particular asset and is therefore entitled to the return generated by that asset. The classic Sukuk structure involves an acquisition of a property asset by a special purpose company (SPC). The SPC funds itself by the issue of Sukuk, declaring a trust in favor of the Sukuk holders. The Sukuk holders then receive a return based on the rental income of the asset (Wilson, 2008a).

Sukuk therefore are considered as certificates of equal value that represent an ownership interest in tangible assets. The Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) based in Bahrain has issued guidelines that emphasize the differences between Sukuk and conventional bonds. AAOIFI is mainly responsible for formulating and implementing international Islamic finance standards in the market. Currently AAOIFI has issued 85 standards and is supported by 200 institutional members (http://www.aaoifi.com/).

There are 14 different types of Sukuk described as permissible in the AAOIFI Shari'a standard 17 *Investment Sukuk*. Muhammad Taqi Usmani, Chairman of the Shariah Council, outlines the following differences between Sukuk and the conventional bonds. First, bonds do not represent ownership on the part of the bond holders in the enterprises for which the bonds were issued. Rather, they document the interest-bearing debt owed to the holders of the bonds. Second, regular interest payments are made to the bond holders. The amount of interest is determined as a percentage of the capital and not as a percentage of actual profits. Third, bonds guarantee the return of principal when redeemed at maturity, regardless of whether the enterprise was profitable or otherwise.

Furthermore, the issuer of conventional bonds is not required to return more than the principal and the agreed amount of interest. Whatever profits may have been earned by the enterprise accrue entirely and exclusively to the issuer. So the bond holders have no right to seek a share in the profits beyond the interest.

These characteristics are not to be found in Sukuk. However, many Sukuk in the market today have the same characteristics of the conventional bond. Furthermore, the Sukuk contract must explicitly abide by Shari'ah and that a Shari'ah board must monitor its implementation (Oliver Ali Agha & Grainger, 2009).

The above are a number of issues concerning Islamic finance, ranging from compliance to Shari'ah and more importantly issues concerning financial reporting and disclosures. At present, majority of the Islamic financial institutions worldwide use AAOIFI standards for reporting and disclosures only as a guideline. These standards are not mandatory. Many jurisdictions including Malaysia prefer companies to use International Financial Reporting Standards (IFRS) in their reporting and disclosures for consistency and international comparability. Malaysian Islamic financial institutions do not use AAOIFI standards for financial reporting and disclosures because they are not mandatory (Mohd. Edil Abd. Sukor et.al,

2008). Are AAOIFI standards compatible with IFRSs? Should there be two different standards for Islamic financial instruments? Can they be harmonized?

The purpose of this paper is to discuss the importance of Sukuk as a financial instrument in the global financial markets and issues concerning valuation, measurement and disclosures according to the IFRSs and the AAOIFI standards.

The next section briefly describes the importance and growth of Sukuk globally, followed by its structure, how it differs from the conventional bonds, and the last section discuss issues concerning financial reporting and disclosures according to IFRS and AAOIFI standards, the possibility of harmonization for international comparability.

GROWTH OF SUKUK MARKET

Sukuk market continues to grow rapidly across the globe in the first six months of 2012. According to the statistics, at least $68 billion worth of sukuk was issued during the first half of 2012, an increase of 36 percent on the same period in 2011 (Sukuk.me, 2012). According to the same report, the rapid progress by sukuk worldwide indicates that at least $100 billion of sukuk will be sold by the end of 2012 which will make it a record year.

Sukuk.me (2012), also reports that Malaysia issued more than 70 percent of global sukuk in the first six months of 2012 since the country is the global hub of Islamic finance sector. Saudi Arabia the largest oil producing country in the world has grabbed the second position after Malaysia by issuing 13 percent of global sukuk overpowering the United Arab Emirates. The kingdom made a record issuance of sukuk for the first time and tops all the Gulf Cooperation Council (GCC) countries.

Malaysia continued to dominate with generous issues to fund infrastructure development. After the huge issues from Projek Lebuhraya Utara-SelatanBerhad (PLUS) in January and besides the regular issues from Bank Negara Malaysia, Perbadanan Tabung Pendidikan Tinggi Nasional (PTPTN) closed a MYR3.5 billion sukuk program in the domestic market.

Malaysia sold tranches under an innovative Wakala MYR3 billion program at the end of June, issued by Johor Corporation, a state investment firm. Khazanah Nasional came back to the market with a successful issue of a seven-year benchmark exchangeable sukuk of $357.8 million via Pulai Capital. The offer received an overwhelming demand from investors underlining the market's strong confidence in Khazanah's credit-worthiness(Sukuk.me, 2012).

According to Sukuk.me (2012), the Gulf region witnessed the sale of $13.7 billion of sukuk in the first half of 2012 with a significant comeback for neighboring Yemen to the sukuk market. From the UAE, Emirates Islamic Bank, the Shari’ah-compliant sister of Emirates NBD, sold a $500 million third tranche of its $1 billion program, which came on the heels of a previous similar issue in January. The UAE, through its corporate and sovereign issuers, sold $4.3 billion of sukuk.

Saudi Arabia secured top ranking in the GCC with $8.8 billion sukuk sale. The General Authority of Civil Aviation's (GACA) $4 billion sukuk was the first sovereign to come from the kingdom, followed by Tasnee's first privately placed Islamic bond. Saudi banks increasingly sold sukuk through Saudi British Bank followed by Saudi Fransi marketing a benchmark sukuk in the international markets (Sukuk.me, 2012).

Sukuk offerings, while still concentrated in the Gulf States and Malaysia, are rapidly growing businesses with involvement by private companies, state enterprises, sovereign governments, Islamic financial institutions, and also non-Muslim international institutions. The increasing interest of non-Muslim participants in Islamic Shari'ah-compliant financial system, further promotes the growth of such facilities.

Singapore too aims to become a major player in Islamic finance in the near future. According to industry experts sukuk, and Syariah-compliant real estate investment trusts are two products that have strong growth potential in Singapore. So far, CIMB Bank in Singapore has sponsored four sukuk issues worth more than S$1.5 billion. One reason behind this success is the Monetary Authority of Singapore's efforts to create a supportive framework for a competitive Islamic finance landscape. Among the incentives that the regulator has provided are reduced taxes for Islamic transactions, waving of stamp duties for real-estate financing, and a 5 per cent concessionary tax rate for Islamic financing. These have paved the way for the introduction of more Islamic bonds and the entry of Sabana REIT, which in 2010 raised S$666 million in its initial public offering and is the only Syariah-compliant REIT in Singapore (Sukuksummit.co, 2011).

Based on the above developments, Islamic finance especially Sukuk is becoming an important financial instrument in the global financial markets. However, as the industry grows, more transparency and uniformity (as per the compliance to Shari'ah rules) is required in the Islamic financial products. With the increasing number of international financial institutions participating in the Islamic finance industry, the product and service innovation will benefit both corporates and consumers. Such ventures will not only benefit the development of the Islamic financial system but will also enable the major world economies to tap capital from the oil-rich Muslim states (Hesse, Jobst & Solé, 2008). Even in Australia two major Islamic finance and investment companies, the Muslim Community Co-operative Australia and Balance Finance, and the National Australian Bank are already laying the groundwork for the first Australian Sukuk (Bhatti, 2007).

There are many different Sukuk structures available in the financial markets. Most of the Sukuk issuances to-date has been wholly asset-based rather than asset-backed. In an asset-based Sukuk, the Sukuk holders rely for payment on the company seeking to raise finance, in the same way as they would under a corporate bond issue. In an asset-backed Sukuk, the Sukuk holders rely on the assets of the Sukuk for security. More recently convertible and exchangeable Sukuk too have been issued (Sukuk.me, 2011).

In terms of the types of Sukuk issued, Sukuk al Ijara was the most popular amongst corporate and governments wanting to raise funds in the Islamic debt markets. Sukuk al Ijara issues contributed 43.6% of total issues, followed by Sukuk al Musharaka at 27.5%, and then Sukuk al Mudaraba at 1 .4% (Sukuk.me, 2011). Some of the other types of Sukuk discussed here include Sukuk al Murabaha, Sukuk al Ijara, and Sukuk al Musharaka (Sukuk.me, 2011).

a) Sukuk al Murabaha: This is a process of direct structuring of securities wherein a Special Purpose Vehicle (SPV) invests the funds raised through the sale of Sukuk in Murabaha operations. The company purchases the asset from the SPV on a Murabaha basis, and the future periodic installments paid by the company to the SPV account for the repayment of the cost and the profit component.
b) Sukuk al Ijara: The company seeking to raise finance through the issuance of Sukuk al Ijara (the originator) sells certain assets to the issuer. The issuer, then, pays for the assets using the proceeds of the Sukuk issuance and holds title to the assets on trust for the Sukuk holders. The issuer leases the assets back to the originator for a fixed period of time and for a rent. At maturity, the originator may have the right to purchase the assets back from the issuer at a price which would represent the redemption value for the Sukuk holders at maturity.
c) Sukuk al Musharaka: Several corporate entities refer to these Sukuk as Musharaka Term Finance Certificates (MTFCs). Under the Sukuk al Musharaka, the Sukuk holders contribute a capital amount to the issuer. The issuer then enters into a joint venture with the party seeking finance (the originator) where the issuer provides the capital received from the Sukuk holders, and the originator supplies the assets and/or their own capital required for the business to function. The profits from the Musharaka business are distributed to the issuer and the originator at a predetermined basis. Any losses are shared in proportion to the capital contribution, and the issuer pays a periodic distribution amount to the Sukuk holders from the Musharaka profit distribution.

PRIOR STUDIES ON ACCOUNTING FOR SUKUK

Abdel-Magid (1981) is considered as the emergence of a scholarly literature of Islamic accounting in English (Napier, 2009, 125). The purpose of that paper was intended to describe Islamic banking and explore its accounting implications (Abdel-Magid, 1981, 79). The most unique feature pointed out there was that an Islamic bank was a legal entity comprising the accounting entities of the Zakah fund, normal banking operations, investment deposits, and general investments. Another important difference was the use of liquidation or exit value for the basis for asset valuation and income determination for Mudarabah. And the other interesting problem was about auditing. Because the bank was required to publish separate financial statements on investment deposits as a separate entity and to provide an independent auditor,

there were two auditors representing two different groups of investors with conflicting objectives who examine the same set of data (Abdel-Magid, 1981, 99-100).

As for the harmonization issues on accounting for Islamic banks and International Accounting Standards, Rifaat Ahmed Abdel Karim (2001) advocates the need to implement the accounting standards promulgated by the Accounting and Auditing Organization for Islamic Financial Institutions. Although the issues discussed in that paper was focused on accounting for Islamic banks, the need for harmonization between two global standards was made clear.

Muhammed Amin (2011) compared Sukuk issued under AAOIFI standards and IFRSs with clear examples. The results differ due to the emphasis given by both accounting standards board. IFRSs emphasize on the economic substance of the transaction, whereas AAOIFI standards are more concerned on the legal form of the contract and compliance to Shari'ah law. Nevertheless, he concludes that IFRSs should be used by all Islamic financial institutions since all efforts are now geared to convergence, and AAOIFI should concentrate on other standards not covered by IFRSs.

Mohd. Edil Abd. Sukor, et al. (2008) examined the contemporary accounting regulatory issues on investment in Sukuk in Malaysia. As AAOIFI FAS 17 was not enforced in Malaysia, there was no significant difference between the accounting practices for Sukuk and conventional bonds in Malaysia (Mohd. Edil Abd. Sukor, et al., 2008, 70).

NEW GLOBAL STANDARDS

In this section main issues and challenges are identified that are considered important for the future growth of Sukuk globally.

Muhammad Taqi Usmani, Chairman of the Shariah Council, have raised issues with market Sukuk structures that (i) guarantee the return of capital of the Sukuk holders (either through manager or issuer covenants to redeem Sukuk at face value, rather than market value); and (ii) provide for credit enhancement purchase guarantees by related companies. According to him, 85% of all GCC-based Sukuk were not structured in a Shari'ah compliant manner. In his opinion paper he argues that the current practices adopted by issuers are not in accordance with Shari'ah in three areas. They are discussed below:

First) Stipulating the amount in excess of the price of interest for the manager of the enterprise under the pretense of an incentive for good management. Usmani argues that the prescribed percentage in the existing Sukuk contracts is not linked to the expected profits from the enterprise, but to the costs of financing or to the prevalent rates of interest in the market. This is *riba* or interest because such payment to the manager is not based on the profitability of the commercial or industrial enterprise. AAOIFI's Sharia Council suggests that this practice should be corrected as it is not in

conformance with Shari'ah since the amount paid to the manager is fixed as in the case of an interest payment.

Second) Sukuk holders are at present guaranteed a fixed return of income, and if the yield is lower than the promised amount the manager distributes the shortfall as a loan to them. Later such amounts of loans are recovered either through the actual profits of the enterprise at the times of following distributions or through the sale of the enterprise's assets at maturity. This practice whereby the manager make loans to the Sukuk holders at times (for distribution) when actual returns fall below the (promised) rate of return, is classified as a sale with a credit in accordance with Shari'ah. The Prophet, upon him be peace, had prohibited sales linked to credits. The same was related by Malik in his al-Muwatta on the authority of trusted narrators (balaghan), and by Abu Dawud and al-Tirmidhi whose version reads, "A sale and a credit are not lawful." Thus, this practice of Sukuk issuance is considered not compliant with the Shari'ah.

Third) Sukuk should be redeemed at their market value and not at their face value as now practiced. The third issue is regarding the return of investors' capital that should be based on the market value and also it cannot be guaranteed. In Shari'ah compliant dealings there is always an element of risk. The legal presumption with regard to Sukuk is that there can be no guarantee that capital will be returned to investors. Instead, they have a right to the true value of the [Sukuk] assets, regardless of whether their value exceeds that of their face value or not.

The current practice in the market is that the manager pledges to the Sukuk holders that he will purchase Sukuk assets at face value upon maturity, regardless of their true value on that day. This is again not in compliance with Sharia. According to Shari'ah, at maturity, the Sukuk holders should not be paid at face value but rather at market value of the Sukuk.

Due to the confusion and current corporate practice, AAOIFI in 2008 issued the following as additional guidance for Sukuk issuers (as a supplement to the published AAOIFI standard on Sukuk).

a) Sukuk holders must own all the rights and obligations of the assets (tangible, usufructs or services), and the assets are to be transferred from the issuer to the Sukuk holders' books;
b) In order to be tradable, Sukuk cannot represent receivables or debt except for trading/financial entity sales that unintentionally convey incidental debt;
c) Sukuk managers may not cover loan shortfalls to Sukuk holders, but reserve accounts established for such a purposes are permissible if disclosed in the prospectus;
d) The purchase of assets at maturity is permissible at the market value rather than the nominal/face value; although Sukuk issuers/managers can guarantee capital in the event of negligence;

e) Lessees in Sukuk al-ijarah may purchase the leased asset for its nominal value, provided the lessee is not a general partner, mudarib (working partner) or wakil (investment agent). AAOIFI standards permit the redemption of Sukuk for usufructs at fair market values or at a price agreed between the parties at the time of redemption;

f) Shari'ah boards are to review all relevant contracts/documentation related to the transaction to ensure comprehensive compliance with Shari'ah and oversee that implementation and operation complies with Shari'ah.

CHALLENGES THAT HAVE TO BE OVERCOME

Accounting for trading purpose Sukuk

AAOIFI FAS 17 has recommended that recognition for investment in Sukuk and shares shall be recognized on the acquisition date and shall be measured at cost. However, at the end of accounting period, investment in Sukuk and shares held for trading purposes and available for sale shall be measured at their fair value. The unrealized gains or losses as a result of re-measurement need to be recognized in the income statement. The additional requirement is the share of portion of income related to owners' equity and portion related to unrestricted equity investment account holders must be taken into consideration.

This is considered crucial as no proper treatment and disclosure of this transaction of profit sharing and distribution may lead to confusion as to the method, ratio and process to disburse profit that have been taken place. This is to ensure transparency in profit and loss sharing on re-measurement of investment at the end of the year to be properly disclosed to the users. At the same time it fulfils the Syaria requirement of ensuring fair and just profit sharing and distribution between shareholders and depositors (investors).

Any unrealized gain or loss resulting from re-measurement at fair value, according to AAOIFI FAS 17 shall be recognized in the statement of financial position under the "investment fair value reserve". This reserve account will reflect the net gain or loss at the end of the year. The standard also makes a provision that in case the institution has reserves created by appropriation of profits of previous financial periods to meet future investment risks, it is recommended that unrealized loss resulted from re-measurement of investment at fair value shall be deducted from this reserve.

Accounting for held to maturity Sukuk and available for sale Sukuk

In the case of Sukuk held to maturity, AAOIFI recommends that it needs to be measured based on historical cost except that if there is impairment in value it should then be measured at fair value. The difference in value will then need to be recognized in the income statement and

the information related to the fair value is then need to be disclosed in the notes to the financial statements.

For securities held for trading and available for sale, AAOIFI FAS 17 recommends the measurement to be based on fair value. Fair value is defined as the amount which the instrument could be exchanged or settled between knowledgeable and willing parties in an arm's length transaction, other than forced or liquidation sale. As for stock market, quoted market price can be used as the measure of fair values.

However, for many financial instruments including Islamic bonds (Sukuk), quoted market prices may not be available except in certain countries like Malaysia and Bahrain. In the case of unquoted securities, it recommends that an estimate is based on the net present value or other valuation techniques. These techniques may involve uncertainties and are significantly affected by the assumptions used and judgments made regarding risk characteristics of various financial or capital market instruments. The uncertainties include the arbitrary used of discount rates, future cash flows, expected loss and other factors. The determination of fair value for Sukuk is a big challenge to the industry whenever there is no readily available market price for such financial instruments.

IFRS 9 too recommends fair value to be used to measure financial instruments. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Accordingly it states that published price quotations in an active market is the best evidence of fair value, and as argued above is not possible for all Sukuk in most countries.

Disclosure

AAOIFI FAS 17 has made special requirements of disclosure in the case of investments in Sukuk. Among the requirements are that disclosure shall be made by the issuer of Sukuk, if material, the face value of Sukuk, the percentage of Sukuk acquired from each party issuing the Sukuk and each type of Sukuk. There is also a requirement to disclose the party guaranteeing the Sukuk and the nature of the guarantee. Another useful disclosure requirement is the need to disclose the contractual relationship between the issuer and/or manager of Sukuk and the holders of such Sukuk. The additional disclosure with respect to investment in Sukuk is the requirement to disclose the classification of Sukuk according to their maturities.

All the above disclosure requirements indicates the need for the Islamic institutions to be more transparent in disclosing financial information pertaining investment in securities especially Sukuk. The underlying rationale is to provide useful information for users to make informed judgment especially about institution's investment in securities.

The above requirements do not contradict with IFRS 7. As for the significance of financial instruments, IFRS 7 requires the company to disclose the significance of the financial instruments according to different categories. Financial assets and liabilities are to be measured

at fair value through profit and loss, showing separately those held for trading and those designated at initial recognition. Different categories include those held-to-maturity, loans and receivables and assets available-for–sale. The disclosure requirements are similar to AAOIFI FAS 17 and therefore no contradictions between the two standards.

As for fair value, IFRS 13 recommends 3 levels of inputs based on the lowest level of input significant to the overall fair value:

- Level 1 - quoted prices for similar instruments
- Level 2 - directly observable market inputs other than Level 1 inputs
- Level 3 - inputs not based on observable market data

However, disclosure of fair values is not required by IFRS 7 if the carrying amount is a reasonable approximation of fair value, such as short-term trade receivables and payables, or for a contract containing a discretionary participation feature if the fair value of that feature cannot be measured reliably.. These requirements are not required in AAOIFI FAS 17. IFRS 7 also requires disclosures to be categorized into qualitative and quantitative nature along with risks associated with such financial instruments. Credit, liquidity and market risks must also be disclosed by companies according to IFRS 7. This additional disclosure on risks is important for users and it is recommended that AAOIFI should also adopt such disclosure requirements. Even Islamic financial instruments are subject to the various types of risks.

Global Issues and Challenges

In a Sukuk issuance, the company would transfer an asset to a special purpose entity (SPE), which in turn would offer to investors a claim in those assets, and the right to its future cash flows, in exchange for immediate cash. This sale of assets from the company to the SPE is only for the duration of the Sukuk, and in most cases the asset will be returned to the company after maturity date. One could argue that this type of transfer may not qualify as a sale and may not be derecognized under IFRS. This issue is currently being reviewed by IASB.

The next issue is whether the SPE is part of the company or a subsidiary that transferred the asset to it. If it is so then that entity should be consolidated in the group accounts and the asset value at the end of the financial period should reflect fair value in accordance to IFRSs and AAOIFI standards. Even if the SPE is a separate entity from the originator or company that transferred the asset then the value of the asset should be at fair value at the end of the financial period to be in compliance with Shari'ah.

One other pertinent issue regarding Islamic finance is time vale of money. Interest is forbidden in Islam according to Shari'ah. Only profit or loss should be recorded and disclosed. In all the IFRS, explanations are only focused on interest since Sukuk is not considered in the

standards. It is necessary to analyze the substance of Sukuk and reflect the difference between Sukuk and conventional bonds in IFRSs.

Among the numerous global challenges facing Sukuk include; Liquidity Management – capital adequacy, global regulatory framework, standardization, risk management and taxation for Islamic financial instruments. At present, only limited instruments are offered by Islamic financial institutions. They include Wakalah, Mudharabah and Tawarruq based financial instruments. Islamic financial institutions normally hold large amount of liquid asset on their balance sheet until maturity, and they rely mostly on balance sheet asset for liquidity management, indicating lack of diversified liquid asset.

Other challenges facing Islamic finance include i.e. tight liquidity, inter-connectivity to the global financial framework, exposure to systemic risk and financial/economic crises. Difference of opinions between Shari'ah scholars in Muslim countries due to different school of thoughts also complicates regulation & product offerings. This to certain extent affects investors' confidence.

Nevertheless there are many opportunities available not only for industry players, but also for global banking and financial industry, investors, regulators, universities, and graduates in Islamic finance, accounting, auditing and banking. For investors, Islamic products can facilitate portfolio diversification i.e. cash flow preservation, and for issuers, tapping into the Islamic capital markets widens investor base and provides access to new sources of capital and access to halal and ethical investments i.e. not involving gambling, and speculations.

Human resource in this discipline is scarce, so universities can play a role in producing qualified Shari'ah scholars and professionals. Majority of the Islamic financial institutions are currently using IT software developed not for them but for conventional banks and financial institutions. This software is unsuitable for Islamic financial institutions. Thus, it is an opportunity for IT professionals to develop software suitable for them. Shari'ah auditing guidelines for banks and professionals are also opportunities for all, along with Islamic Accounting, auditing and governance standards for companies other than banks and financial institutions.

SUMMARY

The purpose of this paper is to discuss the importance of Sukuk as a financial instrument in the global financial markets. Sukuk's phenomenal growth has drawn many countries to attract funds from the Middle East and other Muslim countries including Malaysia. Sukuk structures differ from the conventional bonds due to the strict requirements of Shari'ah, and this requires different accounting, valuation, measurement and disclosure practices or standards.

A comparative analysis between IFRSs and AAOIFI standards indicate that Sukuk or even other Islamic financial instruments do not require separate accounting standards for recognition, measurement and disclosures. IFRSs are sufficient and suitable for Islamic financial

instruments. The main difference is conventional bonds are debt-based and Sukuk is asset-backed financial instruments without any element of interest. These differences must be stated in the notes accompanying the accounts for users and readers of financial statements. It is highly recommended that all IFRSs must at all times consider the unique features of Islamic financial instruments in the development of new accounting standards.

IASB is making great efforts to ensure that all countries will converge their domestic standards with IFRSs. Many economies have already converged with IFRSs, and Malaysia has converged beginning 1 January 2012. For a true global and meaningful convergence to take place, it is imperative that IFRSs and AAOIFI standards should also be harmonized before any convergence takes place in the near future. This paper strongly recommends convergence should be given priority between AAOIFI standards and IFRSs to enhance Islamic finance globally.

Harmonization of Shari'ah rulings globally is a must in order for the industry to be more transparent and instill confidence among investors. At present, difference of opinions between scholars complicates regulation and product offering, and it affects investors' confidence. More financial products must be readily available to potential investors. An international regulatory framework agreed by all nations is needed for Islamic finance. Such a framework should include procedures to standardize legal documentation that will reduce ambiguity, expedite processes, boost investors' confidence, and to create wider investor-base globally.

ACKNOWLEDGEMENT

Mustafa Hanefah was a visiting professor at the Economic Research Center of the Graduate School of Economics at Nagoya University from April to July in 2011. Support from the Economic Research Center for the research is gratefully acknowledged.

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AN EXAMINATION OF FINANCIAL PERFORMANCE AND RISK OF ENVIRONMENTALLY FRIENDLY 'GREEN' COMPANIES

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ABSTRACT

Research on environmental matters is interdisciplinary, involving business, history, sociology, and science. Taking care of the environment has long been an important issue, going back to ancient times. As part of corporate social responsibility, companies are expected to safeguard the physical environment. To be identified as "green" or "environmentally friendly" is important to all types of business. This study sought to answer two research questions. Regarding the first research question as to the impact of being green on financial performance, a high green ranking was found not to be significantly related to firm financial performance. At the same time, this means that being green does not negatively impact firm profitability. Regarding the second research question as to the relationship of being green to business risk, analysis of three risk measures provides mixed results, with two of the three measures showing no relation between green score and risk. These results indicate that, at best, being green is associated with lower risk, and at worse, being green does not negatively impact firm risk.

Key words: environmentally friendly, green, financial performance

INTRODUCTION

Corporate social responsibility includes a myriad of factors, which could be categorized into two broad categories of responsibility: responsibility to people and to places. People include the traditional stakeholders such as stockholders, employees, lenders, creditors, customers, suppliers, government agencies, and people living in communities where the company operates. Places include the physical locations where the company operates. A company has a responsibility to care for the physical environment. Being identified as "green" or "environmentally friendly" is important to all types of business, whether they are retail firms, manufacturers, or service firms.

There was time, not so long ago, in which people knew little and had small concern for environmental issues. In recent decades, the concept of environmental friendliness has become a

notable concern to consumers and businesses. If a corporation attains an environmentally friendly 'green' image, an important question is whether the efforts to be recognized as environmentally friendly have a positive or negative affect on financial performance?

Prior research suggests that some consumers will seek to do business with 'green' companies (Laroche et al., 2001; Smith, 2010; Wolverton & Dimitri, 2010; Oliver, 2007), but whether this additional business offsets the costs of extra efforts to go green is not clear. In addition, by going green, a company might reduce risks (e.g. regulatory fines and litigation) associated with less-than-environmentally friendly activities. Considering the above, the purpose of this study is to answer two research questions: (1) how do green companies perform financially, and (2) what is the risk level of green companies?

The paper proceeds as follows. The next section summarizes prior literature and develops our hypotheses. Next, we describe our sample selection, present our empirical methods, and discuss our results. The final section concludes.

PRIOR RESEARCH AND DEVELOPMENT OF HYPOTHESES

Research on environmental matters crosses disciplines, including business, history, sociology, and science. Within business, there have been studies within all business subfields, such as accounting, economics, finance, and marketing. Taking care of the environment has been a concern since ancient times. Recommendations for preservation of the natural environment can be found in ancient writings, such as the Bible and Koran. Approximately 1400 B.C., the Prophet Moses specified how the ancient Israelites were to manage land and care for animals. About 650 A.D., the Prophet Mohammed gave directions regarding water conservation (Smith, 2010).

In more recent times, the term 'ecology' was coined by German biologist Ernst Haeckel in 1866. The definition of ecology is 'the study of the relationship between organisms and their environment.' Starting in the second half of the 20th century, the U.S. established a number of environmental laws, such as the Air Pollution Control Act of 1955, the U.S. National Environmental Policy Act of 1969, the Clean Air Act of 1970, and the U.S. Water Pollution Control Act of 1972. In 1998 the Federal Trade Commission established the "Green Guidelines" that define terms used in environmental marketing. In 2005, the Kyoto Protocol was established. Countries joining the Protocol pledge to reduce emission of gasses linked to global warming. Some of the key events regarding the environment are shown in Table 1.

Research shows that people in virtually every country of the world are interested in environmental issues. The only question is to what extent are people willing to give up their personal comfort and money to care for the environment. An important issue to many businesses is how to market environmentally friendly products to consumers. Wolverton and Dimitri (2010) examined whether environmental and social objectives are compatible with profit maximization. Their findings suggest that people have an impact on environmental quality and how companies participate in "green" marketing. Their study attempted to "open a discussion about green

marketing." Specifically, they examined how corporate governance relates to management's ability to reconcile environmental objectives with profit maximization.

Table 1: Timeline of Key Environmental Events	
1400 BC	Moses provides environmental guidance (e.g. allowing land to lay fallow and animals to rest, cf., Exodus 23: 10-12, Deuteronomy 5:14).
650	Mohammed gives environmental guidance (e.g. water conservation, cf., Koran 56: 68-70).
1866	German zoologist Ernst Haeckel coins the word 'ecology', deriving it from the Greek oikos, meaning 'house' or 'dwelling-place'. Ecology is defined as the study of the relationship between organisms and their environment.
1872	Yellowstone National Park is established, the world's first national park.
1886	The Audubon Society is formed.
1891	The US Forest Reserve Act is passed. The law enables the President to form forest reserves, which leads to the National Forest system.
1901-1909	Avid outdoorsman and conservationist, US President Theodore Roosevelt popularizes environmentalism and spearheads creation of several national parks.
1916	The US National Park Service is created with Stephen Mather as President.
1948	Twenty people die from a cloud of gas from the Donora Zinc Works, Donora, Pennsylvania. As a result the US government begins to study air pollution. This leads to the Air Pollution Control Act of 1955 and later the Clean Air Act of 1970.
1969	The Santa Barbara Oil Spill pollutes beaches in Southern California.
1969	Environmental Policy Act passes & Environmental Protection Agency (EPA) is formed.
1970	The US Clean Air Act passes.
1972	The US Water Pollution Control Act passes.
1973	The US Endangered Species Act passes.
1976	The US Resource Conservation and Recovery Act (RCRA) passes. RCRA of 1976 includes pollution control provisions including "cradle to grave" management. The law authorizes the EPA to conduct removal actions and cost recovery actions where endangerment to public health or welfare or to the environment is in existence.
1980	The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), known as Superfund, is enacted by Congress on December 11, 1980. This law created a tax on the chemical and petroleum industries and provided Federal authority to respond directly to releases of hazardous substances that may endanger public health or the environment.
1986	The Chernobyl nuclear plant disaster occurs. A total of 31people die and thousands suffer as a result of the explosion and fire at the nuclear plant.
1989	The oil tanker Exxon Valdez wrecks and spills massive amounts of oil off the coast of Alaska.
1998	Federal Trade Commission created the "Green Guidelines" that defined terms used in environmental marketing.
2005	The Kyoto Protocol is established. Participating nations pledge to reduce emission of harmful gasses linked to global warming.
2010	BP Deepwater Horizon oil spill and renewed concern regarding offshore drilling.
1998	Federal Trade Commission created the "Green Guidelines" that defined terms used in environmental marketing.
Adapted from Smith, 2010.	

A study by Kinnear et al. (1974) searched for characteristics of ecologically concerned consumers. Following their research, a number of studies examined 'environmentally friendly' or 'green' products. According to several studies, such products are desirable to consumers, even to the point that consumers are willing to pay more for these products (cf., Coddington, 1990; Laroche et al., 2001; Myburgh-Louw & O'Shaughnessy, 1994; Oliver, 2007; Suchard & Polonsky, 1991). Henrichs (2008) identified the greenest brands. These are listed in Table 2. Myburgh-Louw and O'Shaughnessy (1994) determined that 79 percent of female consumers would pay up to 40 percent more for an environmentally friendly product.

Table 2: The Greenest Brands

Company	Why
1. Toyota	Hybrid cars
2. Honda	Fuel efficient cars
3. Whole Food	Organic foods
4. General Electric	Alternative and renewable energy
5. Trader Joes	Organic foods
6. Beyond Petroleum	Green advertising
7. Ben & Jerry	Environmentally conscious stance
8. Body Shop	No animal testing
9. Energy Star	Energy efficiency
10. Timberland	Recycling

Adapted from: Henrichs, 2008

The public's concern for the environment generally and environmentally friendly products in particular has evolved over time (Li, Hartman, & Zee, 2009; Murphy, 2003; Oliver, 2007; Prothero, 1990; Ramsey & Rickson, 1976; Roberts, 1996; Schlegelmilch et al., 1996; Thomas et al., 2008). In a study by Li, Hartman, and Zee (2009), an instrument was developed to evaluate participants' awareness of and intentions to act concerning the 'green movement.' While environmental friendliness and sustainability are now major issues regarding green products, green manufacturing, and green organizations, the authors note that expressed support and actual behavior do not necessarily match.

In a study by Thomas, Speight, and Annareddy (2008), use of green products helps alleviate the increasing unease about the health of the planet. According to Oliver (2007), some manufacturers have been able to lower the price of or improve the quality of green products. Some studies suggest that business opportunities in green markets are 'the next big thing' for small business (Murphy, 2003). Research has shown that green products account for about 10 percent of new product introductions (Ottoman, 1998).

Consumers do care what companies are doing to the environment. Lai, Cheng, and Tang (2010) found that green retailing is a frequent phenomenon. They examined success factors regarding implementation of green retailing, leading to a better understanding of the different

coordinator roles of retailers between suppliers and customers in creating environmentally friendly value chains. Their findings offer practical steps to aid retailing executives in developing green practices.

Past studies have shown that environmental reporting is of interest to corporate stockholders, such that many companies provide voluntary information that goes beyond what regulations require (Ashcroft & Smith, 2008). Of particular importance is the issue of global warming, which is a highly debated environmental concern. In addition, there are numerous other concerns, including application of chemicals in preparing food, use of insecticides in producing crops, and generally safeguarding the natural environment. Environmental disclosures are considered among the most useful and informative reporting provided by businesses (Clarkson et al., 2004; Evers et al., 2006; Li & McConomy, 1999).

Regarding financial reporting, reporting on environmental matter is part of annual financial reports as well as specialized environmental reports. Past research indicates that about 44 percent of the Fortune global top 250 firms in the nonfinancial sector issue specialized environmental reports. Increasing pressure is being placed on businesses to offer environmental reports on items such as capital costs and operating expenses concerning pollution. More and more companies have their environmental reports substantiated by independent third parties, thereby integrating technical knowledge of environmental experts and financial auditors. The case is made that environmental responsibility yields a considerable positive impact on shareholder value (cf., Harrington, 2003; KPMG, 2000; Miller, 2000).

In the United States, Statement of Position (SOP) 96-1 provides direction on particular accounting issues that are part of the recognition, measurement, display, and disclosure of environmental liabilities, but is limited to environmental remediation obligations caused by litigation, assertion of a claim, or an assessment. Benchmarks are set forth in SOP 96-1 that specifies when an environmental remediation liability should be recorded per generally accepted accounting principles (Ashcroft & Smith, 2008).

In a study by KPMG (2000) environmental reporting was analyzed for the Fortune top 250 international firms and the top 100 firms of 11 countries. Results indicated that the number of companies with an environmental or health, safety, and environmental (HSE) report went up 24 percent in 1999, compared to 19 percent in 1996 and only 13 percent in 1993.

According to study by Price Waterhouse (1992), during the 1980s, capital expenditures by U.S. companies pertaining to environmental matters jumped tenfold, from 2 percent to 20 percent of capital expenditures. Of particular concern are unfunded and unpaid costs businesses have incurred for past violations of laws, such as an estimated $500 billion regarding the Superfund Act. Aggregate accounted-for environmental liability was estimated at between two and five percent of the U.S. gross domestic product. Given the increased concern for the environment and litigious nature of the U.S. society, this amount has likely increased in recent years.

In consideration of past research and addressing the first research question regarding the financial performance of green companies, the first hypothesis is stated as follows:

H1 Green companies have superior performance.

In consideration of past research and addressing the second research question regarding the risk level of green companies, the second hypothesis is stated as follows:

H2 Green companies are less risky.

DATA AND METHODOLOGY

To test our hypotheses, we use an external measure which ranks 500 large firms on their environmental responsibility, namely *Newsweek's* "2010 Green Rankings." To compile their ranking *Newsweek* partnered with multiple organizations, including: (a) MSCI ESG Research and Trucost, two environmental research organizations; (b) CorporateRegister.com, a directory of corporate social responsibility and environmental reports; and (c) ASAP Media, an editorial support firm (Newsweek 2010a). *Newsweek's* "2010 U.S. Green Rankings" list ranks the largest publicly traded U.S. firms on their "…actual environmental footprint and management of that footprint…" (Newsweek, 2010b). *Newsweek* computed each company's overall green score based on three environmental responsibility sub-scores.

In computing the overall green score, *Newsweek* gave each company (a) an environmental impact score, which comprised 45% of the company's overall green score, (b) a green policies score, which also comprised 45% of the company's overall green score, and (c) a reputation survey score, which comprised 10% of the company's overall green score. Each sub-score and the overall green score is presented by *Newsweek* on a scale from 1 (the low score) to 100 (the high score). To provide some context, the top 15 firms and bottom 15 firms, based on 'green score' are shown in Table 3. Not unexpectedly, the top 15's most prominent industry type is technology, while bottom 15's most prominent industry type is utilities.

Our sample begins with the 500 firms *Newsweek* ranked based on their environmental responsibility and presented on the "2010 Green Rankings" list. The final sample used for analysis includes the 412 publicly traded U.S. firms which are both ranked by *Newsweek* and available in Compustat.

To address our first hypothesis, that green firms have superior financial performance, we follow Blazovich and Smith (2011) and compute several accounting-based performance measures of profitability. Specifically, the profitability measures we examine are sales divided by total assets, cost of sales margin (computed as cost of sales divided by sales), return on total assets (computed as net income divided by total assets), return on equity (computed as net income divided by total equity), and market value of equity (computed as stock price per share

multiplied by total number of shares outstanding). Using one-way analysis of variance (ANOVA) and, when appropriate, Tukey's post-hoc analysis, we compare the top quartile of green score firms to the bottom quartile of green score firms.

Table 3: Highest and Lowest Ranked 'Green' Firms from Newsweek's Green Rankings

Panel A - Top 15:						
1	Dell	Technology	100.0	81.5	100.0	84.3
2	Hewlett-Packard	Technology	99.3	90.6	94.1	95.4
3	IBM	Technology	99.2	98.7	89.5	98.4
4	Johnson & Johnson	Pharmaceuticals	99.0	75.0	98.9	80.3
5	Intel	Technology	97.6	95.7	88.8	92.7
6	Sprint Nextel	Technology	95.0	99.7	94.6	44.7
7	Adobe Systems	Technology	94.2	89.6	88.1	72.6
8	Applied Materials	Technology	92.7	92.0	87.3	60.1
9	Yahoo!	Technology	92.7	68.6	89.1	59.7
10	Nike	Consumer Products, Cars	92.7	67.6	77.5	97.4
11	Accenture	Industrial Goods	92.0	89.8	84.6	65.9
12	Advanced Micro Devices	Technology	91.2	99.5	81.5	55.8
13	Cisco Systems	Technology	91.1	69.4	77.6	83.9
14	Johnson Controls	Consumer Products, Cars	90.9	90.8	81.7	65.0
15	Baxter International	Health Care	90.6	91.8	81.8	61.0
Panel B - Bottom 15:						
486	Duke Energy	Utilities	49.7	2.4	53.7	52.8
487	Vulcan Materials	General Industrials	48.6	7.5	9.4	48.3
488	PPL	Utilities	48.6	3.8	28.7	50.6
489	AES	Utilities	45.6	5.6	16.6	39.5
490	FirstEnergy	Utilities	44.8	4.0	21.8	40.9
491	Cliffs Natural Resources	Basic Materials	43.2	3.0	29.1	35.4
492	NRG Energy	Utilities	37.8	2.8	22.0	40.7
493	Archer-Daniels-Midland	Food and Beverage	34.0	2.6	19.5	21.5
494	Southern	Utilities	32.9	1.8	39.0	23.7
495	American Electric Power	Utilities	30.3	1.4	37.9	48.3
496	CONSOL Energy	Basic Materials	28.8	2.2	3.2	51.0
497	Monsanto	Food and Beverage	28.2	2.0	7.6	46.5
498	Ameren	Utilities	23.9	1.6	16.6	31.4
499	Bunge	Food and Beverage	18.8	1.2	19.5	20.1
500	Peabody Energy	Basic Materials	1.0	1.0	28.5	54.5

Source: *Newsweek*, 2010a.

Also following Blazovich and Smith (2011), we address hypothesis 2, that green firms are less risky, by evaluating several common accounting-based risk measures. It is difficult to ascertain a firm's riskiness or cost of capital from analyzing any one metric (Easton, 2003); however, collectively the three risk measures we examine provide a composite picture of a firm's overall riskiness. The three risk measures we examine include: (a) two balance-sheet liquidity measures, current ratio (current assets divided by current liabilities) and leverage (long-term debt divided by assets); and (b) the Altman-Z score, a credit score calculated as follows (Altman, 2000):

$$Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + X_5$$

where X_1 is working capital to total assets, X_2 is retained earnings to total assets, X_3 is earnings before interest and taxes to total assets, X_4 is total equity to total debit, and X_5 is sales to total assets. The Altman Z-score is a common predictor of both bankruptcy and the cost of debt issuances (Grice & Ingram, 2001). The Altman-Z score is negatively associated with firm risk; that is, the Altman-Z score decreases as overall firm risk increases. Consistent with our method to analyze performance measures, we use one-way ANOVAs and Tukey's post-hoc analysis to compare the riskiness of the top quartiles of green score firms to the bottom quartile of green score firms.

RESULTS

Descriptive Statistics

Table 4 reports descriptive statistics for both the overall green score and the three sub-scores. Table 5 bifurcates the sample and presents the means of the overall green score and the three sub-scores by green score magnitude: high (top quartile), low (bottom quartile), and medium (middle two quartiles).

Our full sample consists of 412 ranked firms. Per Table 4, the mean green score of the ranked companies ranges from 1.000 to 99.320 with a mean of 70.377 and median of 69.960. Although the range is comparable for all three environmental responsibility sub-scores, the means and medians are significantly lower. The mean (median) for the environmental impact sub-score is just 49.005 (46.045); the mean (median) for the green policies sub-score is even lower at 41.511 (39.070); and the mean (median) of the reputation sub-score is 47.620 (46.590).

Table 5 presents data by green score magnitude. Companies with green scores in the top quartile, over 76.765, are classified as having high green scores; companies with green scores in the bottom quartile, below 64.385, are classified as having low green scores. All green scores in the middle two quartiles are categorized as medium. The average green score for high green

score firms is 82.991 which is statistically greater than both the mean medium green score of 70.249 and the mean low green score of 56.663. In all cases the mean environmental responsibility sub-scores of the high green score firms are statistically higher than both the mean of the medium and the mean of the low green score firms, suggesting that no one environmental responsibility sub-score dominates the overall green score. Said another way, on average it does not appear that firms are earning high overall green scores by, for example, having exceptional reputations, but actually lack credible green policies.

Table 4: Descriptive Statistics for *Newsweek's* 2010 Green Rankings Score and Sub-Scores

	N	Quartile 1	Mean	Median	Quartile 3	Standard Deviation	Minimum	Maximum
Overall Score:								
Green Score*	412	64.385	70.377	69.960	76.765	11.381	1.000	99.320
Sub-scores:								
Environmental Impact Score	412	23.670	49.005	46.045	75.050	29.034	1.000	100.000
Green Policies Score	412	27.780	41.511	39.070	53.435	19.241	1.000	98.860
Reputation Score	412	39.610	47.620	46.590	53.845	13.309	1.000	100.000

* *Newsweek's* overall Green Score is comprised of (a) the Environmental Impact Score (45%), (b) the Green Policies Score (45%), and (c) the Reputation Score (10%).

Table 5: Descriptive Statistics – Mean Scores by Magnitude of Green Score (High, Medium, Low)

	Green Score	Environmental Impact Score	Green Policies Score	Reputation Score
High Green Score	82.991 †*	67.559 †*	65.224 †*	57.739 †*
N	*103*	*103*	*206*	*103*
Medium Green Score	70.249 ‡	48.195 ‡	39.727 ‡	46.144 ‡
N	*206*	*206*	*206*	*206*
Low Green Score	56.663	32.072	21.265	40.453
N	*103*	*103*	*103*	*103*

Where:

High Green Score = 1 if green score is in top quartile of all green scores; 0 otherwise.
Medium Green Score = 1 if green score is in middle two quartiles of all green scores; 0 otherwise.
Low Green Score = 1 if green scores is in bottom quartile of all green scores; 0 otherwise.

† = Mean for High Green Score category is statistically different than mean for Low Green Score category.
* = Mean for High Green Score category is statistically different than mean for Medium Green Score category.
‡ = Mean for Medium Green Score category is statistically different than mean for Low Green Score category.

Tests of Hypothesis 1

To test Hypothesis 1, that green firms outperform other firms, we conduct one-way ANOVAs and, when appropriate, post-hoc Tukey's contrast analysis to compare the means of the high green score firms to the means of the low green score firms, for our five profitability measures. As shown in Table 6, post-hoc contrast test results indicate companies in the top quartile (high green scores) are significantly larger, as measured by their market value of equity, than either companies in the middle two quartiles (medium green scores) or in the lowest quartile (low green scores).

Table 6: Hypothesis 1 Results – Post-Hoc Analysis for Profitability Measures by Magnitude of Green Score (High, Medium, Low)

	Sales to Total Assets	Cost of Sales Margin	Return on Assets	Return on Equity	Market Value of Equity
High Green Score	0.718	0.556 †	0.063	-0.294	42981.22 †*
N	*103*	*103*	*103*	*103*	*103*
Medium Green Score	0.902	0.638 ‡	0.051	0.396	19,846.06
N	*206*	*206*	*206*	*206*	206
Low Green Score	0.959	0.654	0.066	-3.966	13,247.71
N	*103*	*103*	*103*	*103*	103

Where:

High Green Score = 1 if green score is in top quartile of all green scores; 0 otherwise.
Medium Green Score = 1 if green score is in middle two quartiles of all green scores; 0 otherwise.
Low Green Score = 1 if green scores is in bottom quartile of all green scores; 0 otherwise.

† = Post-hoc analysis indicates the mean for High Green Score category is statistically different than mean for Low Green Score category.

* = Post-hoc analysis indicates the mean for High Green Score category is statistically different than mean for Medium Green Score category.

‡ = Post-hoc analysis indicates the mean for Medium Green Score category is statistically different than mean for Low Green Score category.

Using one-way ANOVAs and post-hoc contrast analysis, we find no difference in the mean value of sales to assets, return on assets, or return on equity by green score magnitude. Post-hoc tests indicate that the cost of sales margin is significantly higher for firms in the middle two quartiles, as compared to either the top or bottom quartile of green score companies. Taken together, our choices of profitability measures suggest that larger firms are more likely to have

established successful green policies. Although earning a high green ranking does not appear to improve firm performance, it is important to note that being green does not appear to negatively impact firm profitability.

Tests of Hypothesis 2

To test Hypothesis 2, that green firms are less risky than other firms, we conduct one-way ANOVAs and, when appropriate, post-hoc Tukey's contrast analysis to compare the means of the high green score firms to the means of the low green score firms, for our three risk measures. As shown in Table 7, post-hoc contrast analysis indicates the debt to assets ratio of high green score companies is significantly lower (i.e., better) than the debt to assets ratio of low green score companies, suggesting an association between being green and lower risk, at least as measured by the ratio of long-term debt to total assets.

Table 7: Hypothesis 2 Results – Post-Hoc Analysis for Risk Measures by Magnitude of Green Score (High, Medium, Low)

	Current Ratio	Debt to Assets Ratio	Altman-Z Score
High Green Score	1.663	0.195 †	3.250
N	*81*	*102*	*79*
Medium Green Score	1.693	0.212 ‡	3.284
N	*173*	*206*	*171*
Low Green Score	1.706	0.259	3.136
N	*95*	*103*	*93*

Where:

High Green Score = 1 if green score is in top quartile of all green scores; 0 otherwise.
Medium Green Score = 1 if green score is in middle two quartiles of all green scores; 0 otherwise.
Low Green Score = 1 if green scores is in bottom quartile of all green scores; 0 otherwise.

† = Post hoc analysis indicates the mean for High Green Score category is statistically different than mean for Low Green Score category.

‡ = Post-hoc analysis indicates the mean for Medium Green Score category is statistically different than mean for Low Green Score category.

Post-hoc contrast analysis finds no significant difference in the mean value of the current ratio or the Altman-Z score by green score magnitude, suggesting no relationship between firm risk and being green. In summary, analysis of our three risk measures provides varying results, with two of the three results suggesting no relation between green score magnitude and risk. Although our results are inconclusive, they appear to indicate that, at best, being green is associated with lower risk, and at worse, being green does not negatively impact firm risk.

CONCLUSIONS

Prior studies on environmental matters cross all academic fields, including business, history, sociology, and science. Protecting the environment has long been an important issue, going back as far as ancient times. Corporate social responsibility dictates that companies must take care of the physical environment. Being identified as "green" or "environmentally friendly" is a goal for all types of business. This study addressed two research questions, one pertaining to financial performance and the other to risk. Financial performance will be affected, depending on whether consumers will give their business to a green company, particularly if products or services cost more. Risk may be affected if a company goes green and thereby reduces potential environmental costs (e.g. litigation and regulatory fines).

Regarding the first research question as to the impact of being green on financial performance, a high green ranking was found not to be significantly related to firm financial performance. At the same time, it is important to note that being green does not appear to negatively impact firm profitability. Regarding the second research question as to the relationship of being green to business risk, analysis of three risk measures provides varying results, with two of the three results suggesting no relation between green score magnitude and risk. While these results are inconclusive, they appear to indicate that, at best, being green is associated with lower risk, and at worse, being green does not negatively impact firm risk.

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