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Tommy J. Robertson, Jr. Sam Houston State University

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LETTER FROM THE EDITOR

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The *BSJ* is a journal which allows for traditional as well as non-traditional and qualitative issues to be explored. The journal follows the established policy of accepting no more than 25% of the manuscripts submitted for publication. All articles contained in this volume have been double blind refereed.

It is our mission to foster a supportive, mentoring effort on the part of the referees which will result in encouraging and supporting writers. We welcome different viewpoints because in those differences we improve knowledge and understanding.

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This is a Special Issue edited by Joey Robertson as a result of the Sam Houston State University conference held in April. We appreciate the opportunity to present the outstanding papers selected from the participants of that conference.

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Tommy J. Robertson, Jr. Special Issue Editor Sam Houston State University

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RED OPS - VIDEO GAME PIRACY IN CHINA

Devin McCullough, Sam Houston State University Joey Robertson, Sam Houston State University Laura L. Sullivan, Sam Houston State University

ABSTRACT

During the late 1970's China moved from a centrally planned closed market to a more market-oriented system. This economic change helped improve China's standing with other world markets, allowing it to play a major role in global trade (Central Intelligence Agency, 2012). The new role in trade that should have made China a welcome member of global society has plagued multiple industries with a high rate of piracy, intellectual property (IP) theft, and fake goods. Many industries have attempted to fight against these pirated products using the traditional methods of government and legislative intervention, however over time some have given up on such tactics finding them either too costly or too time consuming. These companies have found that piracy and IP theft is just a cost of doing business in China (Schaffer, Agusti, & Earle, 2009).

One industry that has continued fighting for IP protection since the 1980s is the media industry, which is made up of the film and music industries. While this industry is very vocal about their fights with piracy the video game industry has been finding innovative methods of distribution for countries that have a high risk of piracy, such as China. Even though video game piracy is not unique to China the steps the video game industry has taken may show a way to combat piracy in other areas of the world.

The video game industry is normally left out of discussions involving piracy within media and entertainment. Often seen as an immature industry, with the first commercially available video games released in the late 1960's and early 1970's (Shah, 2006), video game companies have been actively fighting pirated versions of their products through means outside of legal system. In China the task is difficult, because the government has kept a tight hold on which outside entertainment products are allowed within the country. There have been advances through working with would be pirates and competitors. With piracy problems common to other industries, and challenges unique to the video game industry, many of these techniques could be used with minor adaptations by other media and technology industries.

CHINESE COPYRIGHT LAW & ENFORCEMENT

Part of China's copyright legislation problem, is that the copyright law is unclear. This is because the laws concerning copyright are a combination of four different influences. The first

two influences are from Western copyright laws that emphasize private economic rights, and Western copyright laws that emphasize natural "moral" rights. The third influence is from socialist copyright law, which holds that copyright is not a natural right but one created and granted by the state, thus deemphasizing private rights and stressing innovation for the betterment of society. Finally, the historical tendency in China to consider state censorship powers a central feature of publishing regulations (Qu, 2002). This seemingly odd mixture of copyright laws and ideas are due in part to China's scramble to acclimate to gain acceptance, trust, and economic trade with international counterparts. From a historical perspective private property rights became meaningless in China in 1949 with the rise of Chairman Mao and Communism (Yu, 2002).

With this theoretical mixture of Chinese copyright law in place, we must also consider how laws in China are created and enforced by China's governing bodies. Laws are created and enacted by the National People's Congress (NPC) and the Standing Committee, but these two groups have also given rights to lower congresses allowing them to establish various rules and regulations for their regions (National People's Congress, 2012). The Local People's Courts, which is the lowest level of the three parts of Chinese government, is made up of three groups. The basic level is the first stop for criminal, civil, and administrative cases, located at the county and municipal district levels. The intermediate level is the first place for appeals and is located at the prefecture level. The higher level is a step above the intermediate and also hears appeals, but is located at the province level. Next are the Special People's Courts which oversee military, maritime, and railway cases. Finally, is the Supreme People's Court which tries cases appealed from the Higher People's Courts and the Special People's Courts, along with trying cases it recognizes as high importance, and reports to the National People's Congress (Swike, Thompson, & Vasquez, 2008).

Based on the legislative structure presented above it is easy to see the difficulty a company would find in bringing a case of IP infringement against a group in China. The first step of this process would be to bring the case before Basic Local People's Court. Sadly, as history has shown, companies stand a low chance of success here, as local governments often have connections with counterfeiters, and may be reluctant to rule in favor of corporations (Swike, Thompson, & Vasquez, 2008).

When China decided to consider IP protection as a greater part of its strategy, to engage the rest of the world in trade, the Sino-US Trade Agreement (1979) was finalized, but China lacked experience involving IP issues. The US began pressuring China to create a domestic framework to strengthen IPs which caused China to sign on to several international IP treaties including, the Paris Convention (1985), Madrid Agreement (1989), and the Integrated Circuits Treaty (1989). During the mid-80's China established the State Intellectual Property Office (SIPO) and Trademark Office. After facing the realities of China's legislative issues it became designated by the US as a "priority foreign country", this is a country whose trade policies and/or inadequate IP protection are deemed injurious to US commerce (Mercurio, 2012).

In 1992 China again reached an agreement on IP regulations with the US (Trade Compliance Center, 2012). As part of this agreement China joined the Berne Convention (1992) and Geneva Convention (1993), and ratified the treaties known as Universal Copyrights Convention (1992), Patent Cooperation Treaty (1994), and Budapest Treaty (1994). China also agreed to adopt effective measures to enforce IP rights and protection within its country and its borders. Through the rest of the 1990's and into the 2000's China continued to update and revise its laws and regulations relating to IP and trademark rights (Mercurio, 2012).

The amount of laws, treaties, other agreements, membership in the World Intellectual Property Organization (WIPO), and membership in the World Trade Organization (WTO) might infer that the problem is not that of adequate laws, but the problem of enforcement. While enforcement is a major concern, all of the regulations currently in place are ideas that focus around isolated instances of piracy as many of the manufacturers who create infringing material may also produce legitimate products. Several of these regulations also fail to recognize piracy networks that operate internationally and other complexities associated with underground trade (Priest, 2006).

The entertainment industry has been slow to give up on combatting Chinese piracy through traditional methods, such as seizing illegal product and lobbying the U.S. government for stronger IP laws (Dean & Fowler, 2005). The movies and music industries are of the most vocal victims of large scale piracy. While it is commonly thought that only western entertainment industries have issues with copyright piracy, data shows that China's copyright holders have lost around \$2 billion annually. The U.S. has suffered losses between \$2.53 and \$2.64 billion in displaced sales of CDs, DVDs, VCDs (video compact discs), and software between 2004 and 2005 (International Intellectual Property Alliance, 2009). It becomes more difficult after 2005 to determine total losses; data for displaced sales becomes unclear for entertainment industries outside of business software and music (International Intellectual Property Alliance, 2009).

One group that contains organizational bodies who represent various areas of media, including print, film, music, and video games, is the International Intellectual Property Alliance (IIPA). The International Intellectual Property Alliance is made up of the Association of American Publishers, Business Software Alliance, Entertainment Software Association, Independent Film & Television Alliance, Motion Picture Association of America, National Music Publishers' Association, and Recording Industry Association of America; these groups make up the major organizations that the publishers, creators, and distributors for the entertainment and media industries (International Intellectual Property Alliance, 2011). Reports from the IIPA have shown that their work against piracy in China since 1996 has been based on various forms of legislation against China through the WTO, Chinese court systems, and the U.S. House of Representatives' Subcommittees (International Intellectual Property Alliance, 2012). Little progress has been made in 2012; the majority of questionable successes are in the area of internet sharing (International Intellectual Property Alliance, 2012).

There are several criticisms of the IIPA that can be attained from the brief mention. First is the methodology for determining the amount of money lost. The determinant for the amount of money lost is based on the commercial value of pirated software methodology from the Business Software Alliance (BSA) (International Intellectual Property Alliance, 2012), which determines the value of pirated software equals the number of unlicensed software units times the average software unit price (Business Software Alliance, 2012). It would be difficult to find the exact number of unlicensed products sold for one industry, much less several industries. So the first part of the equation must be viewed as an assumption. The second part of the equation is also an assumption that postulates the person buying a pirated product, sold at a fraction of the true price, and would be willing to buy a legitimate product at full retail price.

At first when thinking of piracy in a developed country with strong IP protection it is a difficult to argue the validity of the equation's second part. Most of the piracy in these countries occurs with internet file sharing where money is not paid for the product, which makes it difficult to say that every downloaded file is a direct loss at full retail price. The IIPA seems to have realized this, and has been careful to no longer mention the term "displaced sales" in its Chinese reports since 2009. However, unlike China these products are readily available in most developed countries. It is logical to say that for physical piracy in a region where the pirated product may not be readily available displaced sales could read as a reliable statistic if adjusted to the cost of similar goods.

While businesses complain about the estimated number of pirated goods, certain corporations have learned to use the estimated data to their advantage. Robert Neuwirth said during a talk at the TED Global 2012 conference that while researching his new book he spoke to a major sneaker manufacturer to get their thoughts about piracy. What he was told is that they use piracy for market research. "If [they] find that Puma or Adidas sneakers are being pirated and [theirs] are not, then [they] are doing something wrong." (Neuwirth, 2012) Entertainment industries need to learn from this, and use it to estimate their product's notoriety in these countries. The video game industry in particular can use this information to market other official products and new games in these areas. It is very difficult to know what companies are doing this as Neuwirth was told by his unnamed sneaker executive jokingly, "You can't quote me on this because if you quote me on this I will have to kill you (Neuwirth, 2012)." This example that shows the products and designs that are regularly pirated, copied, or mimicked are ones of quality, and that some companies have started looking at these pirated products as a form of market research.

Using the estimates of loss the movie, music, and video game industries sustain due to piracy each year, it is reasonable to say that American entertainment has a good level of market penetration. This shows the demand for these products, pirated or not, which also shows that the problem is not necessarily due to demand, but instead supply. With heavy restrictions by the Chinese government in place, organizations like the IIPA might be better served working with

the Chinese government to open trade for their industry as opposed to pushing for more regulation.

Oddly, in the IIPA's 2012 report the Electronic Software Association (ESA), an organization that exclusively serves the computer and video game industry, is only mentioned twice. Even though the report recognizes that, "video game files [are] fast becoming the predominant form of piracy along with websites that offer infringing videogame product that can be accessed from home PC's and Internet cafes (International Intellectual Property Alliance, 2012)." Many may believe that the video game industry is part of the entire entertainment grouping, yet most data gathering organizations separate the two (Datamonitor, 2011) (MarketLine, 2012). Video games have always been the proverbial "black sheep" of entertainment, even though the market value has seen a steady increase over time and now eclipse other sections of the entertainment business. There are many reasons for the fast success of video games, but one area that is interesting is their willingness to enter markets with piracy problems, like China, with new ideas for curbing the ongoing problem.

VIDEO GAMES IN CHINA

The video game industry, not satisfied with the results of government intervention alone, has been attempting to find new and inventive methods to solve these problems. Unique and creative methods for market entry are a reoccurring theme, in the video game industry. Unlike movies and music, video games have been a bit trickier to introduce and sustain in the Chinese market. Even since the introduction of the 8-bit Nintendo Famicom in the 1980's, China has regulated these items to a grey market. A dominant thought of the time, and now, in China is that these systems could corrupt their children. Due to the lack of IP protection measures on early video game consoles many clones of these systems were created and sold as "study consoles" (Cao & Downing, 2008).

Two distinct types of piracy occur in the video game industry, direct copies and infringement on the characters used. Direct copies are the most well-known type of piracy that occurs, not only in China but all over the world. Where video games differ from film and music piracy is seen in an example where games are copied with minor differences, and at times changes to these unlicensed games involve using characters from other licensed games. An interesting segment of the Chinese pirate video game developers who have programed unlicensed content onto Famicom are the ones who convert more advanced games, from higher powered systems such as the Sony Playstation, to an 8-bit format. This is a process known as back porting, the process of taking a piece of software and applying it to older hardware or software. While the differences between the versions are apparent, the storylines and most of the characters remain intact. Creating new unlicensed games, utilizing popular pre-existing characters, has continued to this day; this is apparent due to the number of new titles showing up on popular websites like EBay, YouTube, and various video game collector internet forums.

Super Mario Bros. and Sonic the Hedgehog games see numerous unlicensed versions released on the Famicom, Sega Genesis, and Super Nintendo Entertainment System consoles. Another series that has become popular to pirate is one of the most successful video game based intellectual properties, Pokémon. The Pokémon franchise is not a surprising target for pirates as the popular series of games, movies, cartoons, and characters, are known worldwide. As of 2010, Nintendo has stated that the fourteen year old series has sold more than 200 million games (Nintendo, 2010). Many of these original pirated games continue to use, what most consumers in the West would consider, outdated hardware. A reason for this could be that earlier systems are now cheaper to make, and often times the hardware for these older systems are sold in modern system cases. Often times these systems have a number of games, normally unlicensed copies with minor character substitutions, built into the hardware along with a port for cartridges. Some pirated games created by various groups often take other pirated and unlicensed software from other creators and change minor things, normally character sprites.

A company that is known not only for making pirated game cartridges but game systems media, including games, can be pirated onto or will play burned discs is ShenZhen NanJing Tech Co., Ltd. Through a quick internet search several sites appear to be selling various handheld systems that share a similarity with Nintendo's GameBoy SP, Nintendo DS, and Sony's PSP. The PSP models are called the PVP and PXP. Several home consoles are also sold with one resembling the slim model of the PlayStation 2 that supports the PlayStation 2's wired and wireless controllers. All of the systems show that they either have games built into the system, support SD cards, or support numerous file types including those associated with music and video. The sites also use characters from other various companies associated with the video game industry to market their products. What is slightly more difficult to find is NanJing's pirated game cartridges, most of which are considered to be of poor quality by pirate game collectors. A few of NanJing's back-ported games are seen by many as impressive due to keeping the core gameplay and story in place. Two of these are versions of Pokemon Yellow originally on Nintendo's Game Boy Color handheld and Final Fantasy VII, created by Square Enix, originally released on the PlayStation. These games have become popular among video game collectors as they perfect recreations for the Famicom, and attract curiosity from noncollectors visiting various websites and blogs.

The Chinese government decided to ban the sale of video game consoles in 2000; this could be a reason for the prevalence of new games for older video game hardware. Lisa Hanson, from market researcher Niko Partners, in an interview with Kotaku explains, "Consoles have been banned in China since the year 2000. The government thought that was the best way to protect Chinese youth from wasting their minds on video games, after a parental outcry (Ashcraft, 2010)." Even though this decision was made in 2000, retailers in China have continued to sell video game consoles. Because of an incident in March 2006, hackers were able to change the firmware on the Xbox 360's DVD-ROM drive to play non-authenticated games. Copied games are now sold in China for less than 10% of official retail price (Carless, 2006).

This shouldn't come as much of a surprise as the three modern game systems, Nintendo Wii, Sony's PlayStation 3, and the Microsoft Xbox 360, along with other consumer electronics, are manufactured in China by Foxconn Technology Group, a core subsidiary of Taiwan's Hon Hai Precision Industry Co. (MarketWatch, 2010) (Yam, 2007) (Kain, 2012). At the moment sales of the modern game consoles are considered unauthorized.

Not willing to give up on what could be potentially a large market, Nintendo found a way to alternatively distribute its games in China. By using the pirate's trick of selling consoles that have pre-installed games and are capable of having more titles downloaded onto a flash memory card, Nintendo was able to enter the market along with partner Wei Yen under the partnership of iQue Ltd. The original console was known as the iQue was released in 2003 for US \$60. The console was an all in one console, with the hardware and games being contained in the controller that plugged directly into the television (Ashcraft, 2010). The games released for this player were from the Nintendo 64, originally released in Japan and the United States in 1996 (Nintendo of America Inc., 2012). Since this system Nintendo has used the iQue name to release its handheld Game Boy Advance and DS consoles in China. The most recent console, the iQue DSi, came preinstalled with one game and is able to connect to the internet where extra games can be downloaded. These downloads take points that users can purchase on pre-paid cards to download new games (Fletcher, 2009). Downloadable games have become part of the video game business as the current generation of systems, Xbox 360, PlayStation 3, Wii, PSVita, and 3DS have this ability, and has become an important part of the industry in all countries. Trying to release legal versions of video games is not only a concern of the current console manufactures, but of past ones as well. Much like Nintendo, Sega has partnered with AtGames Holdings Ltd. to distribute its software, through downloads and original hardware, in China (Sega Corporation, 2005). This agreement has expanded to include other countries (Atgames Digital Media Inc., 2012).

If the new game console from Eedoo Technology, a subsidiary of Lenovo, is any indication, the end of the ban could be soon. This console was made to be a direct competitor of Microsoft's Xbox 360 and Kinect by being a controller free console, controlled entirely by body movements and gestures. Additionally, much like other modern game consoles, the Eedoo system is capable of doing many other things than playing games. A company spokesman for Eedoo, Zhang Zhitong, said about the company's console, "This device can show pictures, play music, go online and has many other functions. It is a home entertainment device. The gaming function of the machine is just one of its many capabilities (Reynolds, 2011)." Positioning the console as a home entertainment machine, along the lines of a computer created specifically for media consumption will certainly raise questions concerning the legitimacy of the ban. This could lead to the end of China's console ban from the most unlikely company, Lenovo.

Even though arcades, and arcade machines, are nearly non-existent in the United States, and are now seeing a decline in Japan, they have continued to be popular in China. Several companies, including major worldwide developers Sega, Taito, and Konomi, showed off their new entries into the market during the 8th annual China Cartoon-Comic-Game Expo in Shanghai

(Arcade Heroes, 2012). While the arcade business sees growth, but much like other media forms in China this one is also fraught with piracy. The pirated games range from classic arcade offerings to modified versions of popular mobile games, such as *Angry Birds* and *Plants Versus Zombies* (Jou, The Wonderful and Seedy World of Chinese Arcades, 2012). Seeing the popularity of some of these unlicensed conversions has pushed several companies, including *Angry Birds* creator Rovio, to bring official versions of their product to China. Rovio is one of these companies looking to expand further into the Chinese market by opening branded retail stores to sell their official products based on their franchises (Prodhan, 2012). It would seem that Rovio is attempting to turn the losses they have suffered from piracy into a way for them to bring their licensed brand and products to China. The company can see that its largest franchise is viable in the Chinese market, and, much like the unnamed sneaker executive from Neuwirth's talk, Rovio knows its product can enjoy stability for the duration of its life span.

Over the past ten years video games have still been available in China through another method where piracy isn't as effective, the Massive Multiplayer Online Games (MMOG). At the time of the console ban and government restructuring of arcades MMOGs dominated the Chinese video game market. By the end of 2004 the market tripled from US \$149 million to US \$517 million a year in revenue (Cao & Downing, 2008). The rapid growth of this market is due to a number of factors. One of the leading Chinese MMOG companies, Shanda Interactive Entertainment Ltd., began selling pre-paid gaming cards for their MMOG's. These pre-paid gaming cards allowed users to access games hosted on secure company servers, for a period of time, and allowed users to access the game from any computer. This solved two of the biggest issues for the video game industry, cost for new users and piracy. The cost for users, under this model, is lower for entry, equating to only a few cents per hour. For the companies, this subscription based model can allow for higher profits than the traditional retail model. Piracy is nearly eliminated under this model, because some form of pre-payment is required to play these games on the company's secure servers (Ewing, 2007). Soon after many other companies began to follow this model, both inside and outside of China, such as NetEase.com Inc., and The9 Ltd. Now, companies looking to enter the Chinese MMOG market look to partner with companies like Shanda, NetEase.com, and The9 Ltd., to bring their product to the country.

In 2006 MMOGs took in US \$995 million in revenue, and accounted for ninety percent of the video game market. The game that was popular during this time, and still is to this day, worldwide is Activision Blizzard's hit *World of Warcraft*. A game that has found huge popularity, and huge profits, in countries around the world, as had its own difficulties with entering the Chinese market. Originally Activision Blizzard partnered with The9 Ltd., to introduce *World of Warcraft* to the Chinese market. In 2006 this game was able to gain 3.5 million subscribers in China amounting to US \$126 million in revenue for The9 Ltd (Ewing, 2007). The success of *World of Warcraft* was surprising to many as this game, unlike many MMOGs being offered in China at the time, did not have any Chinese specific characters or ideas. More so as most global MMOGs, which are normally focused on player versus

environment (PvE), are not popular in China, normally the Korean and Chinese made MMOGs prevail in this country as they are focused on player versus player (PvP) gameplay (Cao & Downing, 2008). On June 8, 2009 The9 Ltd. lost the licensing rights to *World of Warcraft* to NetEase Inc. (formally NetEase.com) (Raj, 2009).

Much like console video games, MMOGs also have to be submitted for government approval prior to release. This has caused, in the past, The9 and NetEase, on behalf of Activison Blizzard, to censor certain parts of World of Warcraft. Big points of contention were the skeletons that symbolized dead characters, and the skeletons used in other areas of gameplay. The changes made include dead characters now represented by headstones and skeletons are given flesh. At the time these changes seemed simple, but they took six extra months to complete before being released to the Chinese public (Variety Staff, 2007). This delay angered many Chinese fans, as it does when the game occasionally went offline for additional censorship. Learning from the past, NetEase has made sure to submit expansions for World of Warcraft early to have time to make changes. World of Warcraft: Mists of Pandaria, is the next expansion in the series and has already gained approval from The Chinese Ministry of Culture, and was released during the expansion's global launch week. The expansion adds many Chinese and Eastern cultural characters and environments to the game, and is thought to be embraced by the large Chinese consumer base. This will also mark the first time the game is offering premium content through the "Ultimate Edition" of the game. This includes in game abilities and physical products, art book, mouse pad, soundtrack CD, and a behind the scenes DVD (NetEase.com, Inc., 2012). With the large dedicated subscriber base in the millions, NetEase might have found a way to make a profit on a physical product in a region with a high piracy rate. With the success found in licensing games from Blizzard Entertainment along with creating its own games, NetEase is aware of the difficulties with entertainment product in China and how the banning of one or more of these games can negatively affect their business (NetEase, Inc., 2012).

An additional benefit of this model is that the MMOGs can be updated by the developer based on consumer feedback, making these virtual worlds as dynamic and ever changing as the real world. This is an ability that is unique to MMOGs, and has spawned another subsection of the industry called "free-to-play". The free-to-play model is one that has become increasingly popular for new games, browser games, and old games looking for new life. These games are free to download and play, relying on either advertising or micro-transactions for income. Micro-transactions give consumers additional in-game abilities, benefits, time, or fashions, in exchange for real money. Each of these purchases are small relatively small, but can lead to an individual paying more than the average price for a subscription game. One of the largest companies in this section is Zynga who in 2011 reported US \$1.1 million; however the Chinese company Tencent, who provides internet access and free-to-play games, is expected to surpass Activision Blizzard in revenue from PC games. This model has helped PC game revenue increase 15% worldwide in 2011 to \$18.6 billion (DeCarlo, 2012). MMOG's in China have grown significantly to reach US \$9.7 billion in 2012 (Handrahan, 2013).

SOLUTIONS TO CHINESE PIRACY

The Chinese government has many laws already in place to protect IPs; so why do companies have to find new and innovative models to limit the problem? While many of the large cities are seeing heavy crackdowns where millions of pirated DVDs, CDs, software (Li, 2006), and even arcade machines are confiscated and destroyed (Jou, Why Video Game Gambling Machines were Destroyed in China, 2012) in public, it is the smaller towns that seem to have the largest problems with piracy. Most companies in these towns are small or medium-sized, government services are few, and laws are routinely ignored. Because of this people in Southern China say that, "the mountains are high and the emperor is far away" (Gardner, 2011). This shows that the issue of IP protection is not due to a lack of laws, but instead a lack of enforcement. As previously stated part of the lack of enforcement is because the small towns believe that they are helping their people, and business, by not enforcing copyright protection. What is not realized is that this attempted protection hurts Chinese companies' just as much as International companies.

While several organizations within and outside of the media have worked to lobby the United States government for stricter sanctions on their IPs when it comes to trade with China, the Chinese already seemed to be stretched thin when comes to law enforcement. A first step to minimizing the problem of unlicensed content, products, and services flooding the market is to work with the Chinese government to open up the market, allowing Chinese companies, and government, to prosper from sales and innovation. In the time that organizations like the IIPA has existed, working with the Chinese government on opening their market has been a low priority. 2004 was the first time the IIPA acknowledged in its Special 301 report that the market needed to be opened up. Each year the IIPA participates in 10 training sessions involving various government agencies and trade associations. In 2011 this training included, Annual Greater China Law Enforcement Seminar, Judges Training on Internet Content Protection, Training for Cultural Law Enforcement Agencies in Beijing and Shanghai, Anti-Camcording Trainings for Theater Owners (International Intellectual Property Alliance, 2012). None of the details show that this training includes information to government entities on the benefits of opening trade. This opening of trade in China is not a single step solution to end piracy. The method of distribution will also play an important role in allowing international countries to enter the market. Distribution must provide easier access and at a lesser or comparable cost to the consumer than compared to pirated DVDs, CDs, and Blu-rays. One possible solution is distribution by selling products with other uses containing multiple types of media pre-installed, a subscription based model, or a flash drive that can be taken to a kiosk to easily download new

An Irish start-up company called ProtoMedia tested out one of these ideas with movies in Dublin at the end of 2007. The original starter pack sold for \$60 and came with a flash drive, dock, and six movies, and for \$160 one could get a 240GB hard drive, dock, and twelve movies

games at a price less than pirated versions

(Kanellos, 2008). It seems that this company has failed, as ProtoMedia's webpage no longer exists, and no new references to the company can be found. With storage devices becoming cheaper it may be possible for a company to open in China with a similar business plan. Instead of selling starter packs, one only needs a registered USB style flash drive that can connect to kiosks to download games from a catalogue. These machines should be able to accept Yuan in addition to on account credit cards for transactions. Games could be played on computers with USB ports, and adapters for televisions should be made available.

One television adapter and modern console that could be easily adapted for use in China is the Ouya. Funded by backers from Kickstarter, the Ouya is a \$99 console that is around the size of a Rubik's Cube (Strauss, 2012), but unlike other consoles it has no disc drive, all games are delivered over the internet through an app store. Using the open Android operating system new programs can be readily written for system, and have access to the already vast Android program library (Kohler, 2012). The Ouya could be fitted with an additional USB port for those without home internet access. A console like the Ouya could easily fit within the idea of a "study console" as there are many books and educational apps available on the Android platform. This console would work well in China as much of the growth in Chinese game industry is credited to the growing number of affordable Android devices. The key to this product's success is in the supporting companies' ability to quickly upload new games at a price less than average pirated cartridge or disc. Technologically this is not difficult, if the kiosks have a reliable internet connection, the problem lies in the Chinese government's want to control released media. Much like *World of Warcraft: Mists of Pandaria*, major media companies will need to be willing to work with the government in this process to learn the true guidelines.

Another way the video game companies could fight piracy through business operations is by creating a unified downloadable or streaming service. As of November of 2011 China has 505 million internet users (Lee, 2012). While this is not the entire population of the country, calculated at 1.34 billion (National Bureau of Statistics of China, 2012), it is a sizable amount for the industry to take advantage of while the internet continues to reach the more rural areas. Several companies currently exist for downloadable video game distribution on the home computer system, Steam, Origin, and Good Old Games. Microsoft, Nintendo, and Sony also have similar downloadable game distribution for their consoles with both unique games and games sold at retail. Each of these companies have various deals with various developers and producers for various release rights to their content. While it may be difficult one company would need to bring together the vast library of the major studios to make the service viable in China. As MMOGs have done, retailers could sell pre-paid cards to allow users access to the game library for a limited time or a certain number of games. Deals with the pirate developers could be reached to create original or officially licensed versions of the games they have previously, and with the assistance of companies providing the license the pirate video game industry of China could create better quality games at a low cost to both the producers and consumers.

CONCLUSION

Entertainment companies have long combated piracy in China through traditional methods of government intervention, but have made little headway. The push for the U.S. government to get tougher on China seems to be unlikely to benefit the entertainment industry as China already has appropriate laws in place but lacks enforcement. Finding new ways to enter the market by either adding value to the current product, choosing an alternative distribution method, or combining products to make one purchase, will be the best method not just for the video game industry to enter China but for current and future media companies. Physical piracy continues despite the increased legislation and industry training for various Chinese government agencies and trade associations. The movie and music industries have been slow to learn that traditional methods of IP protection in China are failing. Where legislation has found mixed results, innovation has the chance to succeed. Piracy in China may never be completely eliminated, but by using these methods it may be able to be reduced without added government intervention

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CORPUS CHRISTI ESTATE PLANNING COUNCIL FACES CHALLENGES

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CASE DESCRIPTION

This case can be used to illustrate a variety of concepts in marketing including strategic market planning for non-profit organizations, event planning & promotion strategies, marketing of educational services, and the challenges associated with small businesses/organizations. This case is appropriate for a variety of courses and teaching strategies. The case contains enough information to permit students to perform a situation analysis (with or without external research required), identify and prioritize issues/problems, evaluate alternative courses of action (including "do nothing"), and recommend one or more strategies making it appropriate for upper-level (3 or 4) case-based courses in marketing strategy, promotional strategy or services marketing. Formal case analysis would require three to ten hours of preparation by students depending on the requirements of the class/instructor. Alternatively, this case could be employed in lower-level marketing classes by asking students to respond to several discussion questions. Depending on the topics and complexity of the questions, this type of usage would require from one to three hours of preparation time by students and one to two class periods for in-class discussion.

CASE SYNOPSIS

The Corpus Christi Estate Planning Council (CCEPC) is a non-profit organization dedicated to improving the practice of estate planning in South Texas. Recognized by the IRS as a 501(c)(3) organization, the primary mission of the CCEPC is to provide continuing education opportunities to members and non-members. The CCEPC recently recovered from a significant decline in membership numbers but is still concerned that membership dues are not covering the membership meeting costs and operating costs for the organization. As the organization prepares for FY 2013, the board is considering raising dues (again) to increase membership revenue or allowing proceeds from the annual educational seminar to subsidize membership dues. In either case, the annual seminar is suffering from a significant decline in attendance and the board needs to consider options for reversing this trend and perhaps even returning attendance levels to the highs enjoyed during the 1990s.

INTRODUCTION

The Corpus Christi Estate Planning Council (CCEPC) is a non-profit organization dedicated to improving the practice of estate planning in South Texas. Recognized by the IRS as a 501(c)(3) organization, the primary mission of the CCEPC is to provide continuing education opportunities to members and non-members.

Many professionals involved in estate planning require continuing education to maintain state licensure. For example, license renewal for Certified Public Accountants (CPAs) in Texas requires a minimum of 120 hours of continuing education during the most recent three year period with a minimum of 20 hours per year (from an accredited provider). The CCEPC provides two primary opportunities for members and non-members to earn continuing education credit: membership meetings (targeted to members) and an annual seminar (targeted to members and non-members). Both opportunities qualify for continuing education credit for a variety of professions including CPAs, attorneys, insurance professionals, certified financial planners and bank trust officers.

BACKGROUND

The CCEPC is governed by a nine-member Board of Directors (hereinafter referred to as "the board") elected by the membership to serve a nine-year term. The board consists of two attorneys, two bank trust officers, two CPAs, two insurance professionals, and the past president. The newest member of the board represents the same group as the past president to ensure consistent representation of the primary membership groups.

For the first four years of service, board members are classified as "directors". In the fifth year, they begin progressing through the following executive positions: Treasurer, Secretary, Vice President and President until they conclude their term by serving as past president (and advisor to the current president). The Board meets on the Thursday following each monthly meeting and once a month in the summer to prepare for the following year.

The CCEPC has six membership meetings per year. Each membership meeting includes dinner and a guest speaker. Each board member (except the newest member, President, and past President) is responsible for arranging the guest speaker for one meeting. Members who attend the meeting are eligible for one hour of continuing education credit.

The first meeting of each fiscal year (July 1 to June 30) is held in September. At this meeting, the organization provides each member with two coupons for drinks at the bar. Members pay for their own drinks at subsequent meetings. Direct membership meeting expenses include room fees and meals. In addition, the guest speaker's actual travel costs (if applicable)

and an honorarium of \$250 (though in recent years, many speakers have declined the honorarium and instead considered their service as a charitable contribution to the CCEPC).

The secretarial service sends a notice to the members about two weeks prior to each meeting and then sends a reminder the following week. Members that want to attend the meeting are asked to confirm their attendance to provide a count for the caterer. Members that confirm attendance but do not attend are charged a no-show fee of \$15 to cover the cost of the meal. Members that do not confirm attendance, but come to the meeting are charged a late fee of \$5. Otherwise, the cost of the meeting is included in membership dues.

Annual operating expenses for the CCEPC consist of:

- 1. Clerical Support a secretarial service that handles membership support, promotion and communication activities, and basic record keeping. In FY 2010-11, the CCEPC switched from using a commercial secretarial service to an independent contractor.
- 2. Continuing Education (CE) Accreditation expenses associated with maintaining accredited status for CE. An increasing number of licensure boards have reporting and fee requirements to maintain the accredited CE status of CCEPC educational programs.
- 3. Tax Return expenses associated with filing federal taxes and maintaining 501(c)(3) status.
- 4. Gifts Speakers at the membership meetings receive an appreciation gift, usually a coffee table book. In addition, the organization provides funds for recognizing the contribution of past presidents of the organization.
- 5. PO Box Rental
- 6. Check Printing
- 7. Postage

For many years, membership in the CCEPC remained fairly constant at about 90 members. Membership dues were structured to cover the costs of membership meetings, board meetings, and annual operating expenses. A variety of factors caused membership to decline during the first part of the last decade (between 2000 and 2005). During the decline, the Board held annual membership dues constant at \$95 to avoid further loss of membership. Following strategic improvements in membership communication and a efforts to encourage word-of-mouth promotion by existing members, membership stabilized and eventually grew to its pre-2000 levels by 2006.

With the strengthened membership retention, the board was comfortable raising membership dues to \$100 in 2007 and then to \$125 in 2008 to cover increased meeting and operating expenses. Membership dues were increased again in 2010 to \$135. The increases do not appear to be having a negative impact on membership as the organization grew to 105 members in 2012.

As the first Board meeting of fiscal year 2012-13 approaches, some members and advisors have expressed concerns that, even with the recent increases in membership numbers

and annual dues, membership receipts are still not meeting the objective of covering all meeting and operating expenses. One option the board will consider is increasing membership dues to \$150, but some members are concerned that another increase might reverse the recent growth trend in membership numbers. Other members favor a strategy of subsidizing membership receipts with revenue from the annual seminar, but opponents suggest that such a strategy is riskier and requires significantly more cost and effort. Recent declines in attendance at the annual seminar and the fact that the annual seminar is the last event of the year, occurring after all the costs for membership meetings are incurred, increase the riskiness of relying on the annual seminar to cover membership meeting and operating expenses. In addition, excess proceeds from the annual seminar have historically been used to award scholarships to local college/university students and increasing the costs covered by seminar receipts may reduce future contributions.

CCEPC ANNUAL SEMINAR

The CCEPC Annual Estate Planning Seminar (hereinafter referred to as the "annual seminar") is the second primary source of funds for the organization. The annual seminar is held in May on the campus of Texas A&M University – Corpus Christi (TAMUCC). Seminar participants are eligible for eight hours of continuing education credit. In addition to this primary benefit, the annual seminar also offers social and networking benefits to participants that some members of the board believe are even more valuable than the continuing education benefit.

The primary source of revenue for the annual seminar is the seminar registration fee. Between 1989 and 2001 (when attendance began a downward trend), the average number of paid registrations per year was 118 with a high of 152 in 1993 and a low of 86 in 2001. Table 1 displays the number of paid registrations and selected participant information for the 2002 through 2012 annual seminars.

Following flat registration numbers for 2002 and 2003, the board identified poor communication as an issue and implemented various strategies to improve communication with potential participants including expanding mailing lists and sending promotional materials farther in advance of the seminar date. Paid registrations increased to 100+ in 2004 and remained there until 2007 when they again fell to less than 90. The downward trend has continued since that time with the 2012 numbers falling below 80 for the first time in the 39-year history of the seminar.

Some members of the board assume that the decline in registration is a function of the proliferation of continuing education providers, especially online providers, and increasing opportunities for CE credit through other professional organizations. One board member noted that, "...the glory days of the early 1990s appear to be gone". Increases in competition may

present significant challenges for the organization going forward. Other environmental variables such as changes in state licensing regulations and requirements, economic forces, and others may also affect the revenue and/or costs of the organization in general and the annual seminar in particular.

Table 1 ANNUAL SEMINAR PARTICIPANTS												
	Al	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Paid Registrations		91	87	116	104	105	89	92	91	84	91	77
Career Field			•			•			•	•		
	Attorney	22	23	32	27	31	28	31	26	27	35	18
	CPA	31	39	42	46	47	34	33	29	34	32	32
	Trust Officer	17	15	26	14	12	13	15	12	12	15	11
	CLU/Insurance	11	6	10	7	6	5	5	5	10	5	14
	Other	10	4	5	10	9	7	8	10	3	4	2
	Total	91	87	115	104	105	87	92	82	86	91	77
Geographic Location												
	Corpus Christi, TX ¹	83	79	93	88	81	74	76	69	69	70	60
	Victoria, TX ²	1	1	9	4	11	9	11	11	13	9	9
	San Antonio, TX ³	5	4	11	8	9	2	3	5	1	2	2
	Brownsville-Harlingen, TX ⁴	2	3	0	2	1	1	0	0	0	1	1
	Other ⁵	0	0	2	2	3	1	2	6	1	9	5
	Total	91	87	115	104	105	87	92	91	84	91	77
Membership Status												
	Member	50	50	63	72	61	54	49	54	47	49	53
	Non-member	41	37	52	32	44	33	43	34	35	42	24
	Total	91	87	115	104	105	87	92	88	82	91	77
¹ Includes the communities of	of Portland, Robstown, Beeville, A	lice, Port	Aransas,	Aransas	Pass, Roo	ckport, R	efugio, B	ay side, Fr	reer & Ki	ngsville		

²Includes the communities of Port Lavaca, Goliad, and Palacios

Includes the communities of Pleasanton & Karnes City

⁴Includes the community of Rio Grande City

⁵Includes participants from as far away as Houston, Austin, and Henderson.

The annual seminar generates a small but increasing amount of sponsorship revenue for the CCEPC. The College of Business and the Office of Institutional Advance at TAMUCC are the named co-sponsors of the annual seminar. The College of Business provides resources for seminar development and support for student guests. The Office of Institutional Advancement also provides resources including a \$500 cash donation to cover selected seminar expenses. In addition, a local bank donates the cost of the luncheon (up to \$1,700) and receives recognition on the back cover of the seminar book. Starting in 2011, another bank agreed to donate the cost of the continental breakfast (\$750) and is acknowledged with tent cards on the breakfast tables and on the inside back cover of the seminar book. Board members have been instrumental in ensuring that their employers continue to provide the sponsorships and they are likely to continue.

In recent years, the seminar coordinator (a finance professor at TAMUCC) has encouraged the CCEPC to sponsor an increasing number of "student guests" at the annual

seminar. Student guests are asked to pay a nominal fee (\$30) to cover meal expenses with the remaining costs of attendance absorbed by the CCEPC. Some members believe that the board should look for opportunities to expand the student guest program without incurring additional costs.

The president of the board is responsible for choosing the speaker(s) for the annual seminar. The speaker(s) provides a packet of materials that the CCEPC compiles into a "seminar book" that participants can take away from the event. Some participants (and non-participants) have expressed an interest in purchasing additional copies of the seminar book for recent seminars but the CCEPC has not yet established policies to administer the practice.

Seminar participants are given the opportunity to evaluate the annual seminar. The evaluation instrument asks respondents to rate the following factors on a scale of poor (1) to excellent (4): speaker(s) content, speaker presentation, usefulness of the information, quality of the facilities, value for the money, and overall quality of the seminar. Average ratings for the 2008 through 2012 seminars appear in Table 2.

Table 2 ANNUAL SEMINAR EVALUATIONS										
	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$									
Speaker Content	n/a	n/a	3.38	3.54	3.46					
Speaker Presentation	n/a	n/a	3.23	3.67	3.54					
Overall Rating	3.04	3.55	3.38	3.65	3.44					
Usefulness of Information	3.04	3.3	3.32	3.59	3.23					
Facilities	3.65	3.74	3.5	3.55	3.77					
Good Value	3.35	3.68	3.5	3.67	3.66					

¹Speaker Content & Speaker Presentation numbers are the average of three speakers. Individual ratings ranged from 3.04 to 3.74 for content and from 2.75 to 3.81 for presentation.

The seminar evaluation instrument also includes the following question: "What day of the week is best for continuing education seminars?" Between 2008 and 2010, 46% of the evaluators that expressed a preference indicated that Friday was a better day than the historical Monday date for the annual seminar (see Table 3). The board responded by moving the seminar to Friday in 2011 and 2012.

Informal comments by seminar participants suggest that some of the participants that travel from more distant locations may favor the CCEPC annual seminar because it allows them to take advantage of the tourist and recreational opportunities offered by the Corpus Christi location. At least one advisor has suggested that the CCEPC might be able to increase attendance (or at least reverse recent declines) by selectively targeting more "out of area" prospects and

²Speaker Content & Speaker Presentation numbers are the average of five speakers. Individual ratings ranged from 3.11 to 3.77 for content and from 3.11 to 3.83 for presentation.

positioning the annual seminar as an opportunity to earn continuing education credit and enjoy a "weekend break".

Table 3 BEST DAY FOR CE SEMINARS								
2008 2009 2010 2011 2012								
Monday	13	11	21	27	12			
Tuesday	5	5	5	5	2			
Wednesday	3	2	4	3	3			
Thursday	10	8	9	11	6			
Friday	32	29	22	13	30			

Expenses associated with the seminar speaker can vary widely. Speaker honorariums for the last five years have varied by as much as \$5,000 with speaker expenses (automobile or airline travel & meals) ranging from a low of less than \$200 to a high of over \$2,200. In addition, the costs of reproducing the seminar book depend on the amount of materials provided by each speaker. Total costs for producing the seminar book ranged from as little as \$458 to over \$2,200 in the last five years. The seminar coordinator has suggested that providing formal guidelines to speakers and collecting seminar materials earlier to allow additional editing and formatting might control and stabilize seminar book production costs.

Because of the co-sponsor relationship with the university (TAMUCC), most of the activities associated with promoting and delivering the annual seminar are performed by university personnel for a much lower cost than the CCEPC would incur if it relied on external providers or contractors. Table 3 lists the Annual Seminar expenses for resources/services provided by TAMUCC for 2008 through 2012.

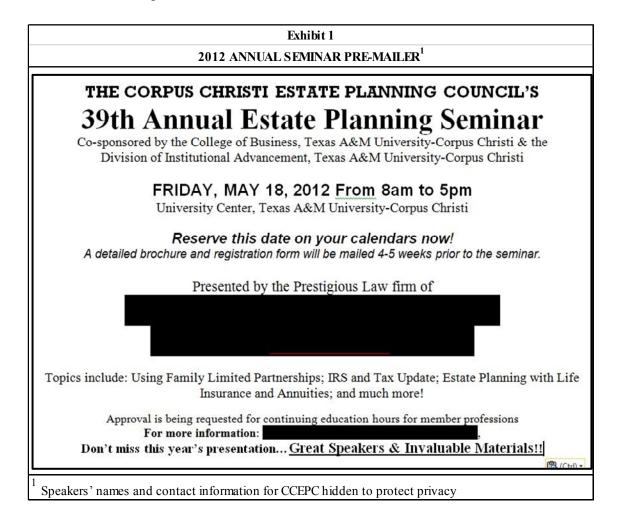
Table 4										
ANNUAL SEMINAR EXPENSES (DUE TO TAMUCC)										
2008 2009 2010 2011 201										
Pre-mailers	\$48.62	\$37.88	\$63.17	\$62.27	\$81.83					
Slick Brochures	220.22	270.63	355.59	\$313.21	\$303.00					
Seminar books	2,208.15	458.48	910.60	\$1,095.35	\$740.78					
Catering (breakfast, lunch & breaks)	2,510.75	2,783.35	2,668.35	\$1,748.53	\$2,587.65					
University Center	636.37	664.56	667.70	\$604.65	\$784.50					
Speaker's Hotel Room ¹	185.30	97.75	196.20	\$189.66	\$0.00					
University Marques	75.00	75.00	75.00	\$75.00	\$0.00					
Pin Name Tags	20.98	37.18	0.00	\$16.89	\$15.12					
Phone and Graduate Student Support	100.00	135.00	50.00	\$200.00	\$250.00					
TOTAL	\$6,005.39	\$4,559.83	\$4,986.61	\$4,305.56	\$4,762.88					
¹ Speakers' hotel was not booked by TAMUCC in 2012	. Room cost of	f \$98.90 inclu	ded in semina	r speaker exp	enses in					

Table 5.

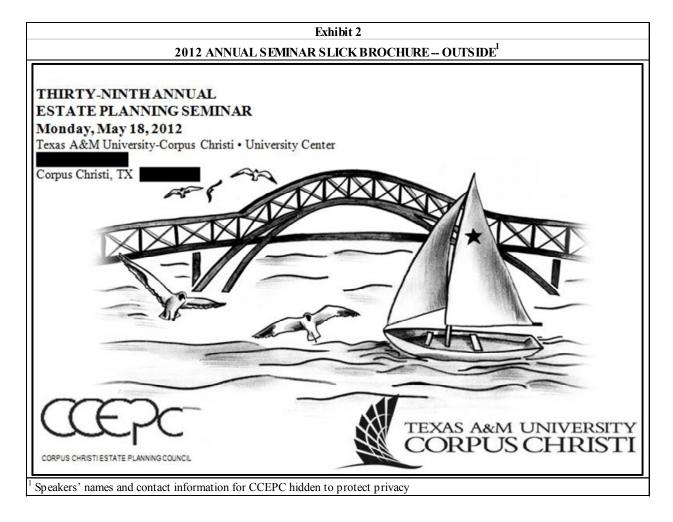
The "pre-mailer" and "slick brochure" are the primary promotional materials for the annual seminar. The pre-mailer is a 5"x8" card mailed to prospective participants about two months before the seminar announcing the date and speaker. Exhibit 1 is a sample of the pre-mailer for the 2012 annual seminar.

About three weeks after the pre-mailer is sent (in early April), a slick brochure with more information is sent to the same prospects. The slick brochure is printed on glossy paper, folded and sealed with mailing information and a brief "teaser" on the outside (see Exhibit 2 for a sample from the 2012 seminar). The inside contains the seminar agenda, registration information and a detachable registration form (see Exhibit 3 for a sample for the 2012 seminar).

Both promotional fliers are designed and printed at the university and then sent to the CCEPC clerical service for distribution. The CCEPC maintains several mailing lists of prospects, but has not yet considered consolidating the lists and renting additional prospect lists to increase the reach of promotional efforts.



In October 2011, the CCEPC created a Facebook page and began posting announcements for membership meetings and the annual seminar. As of the end of FY 2012, the CCEPC Facebook page had garnered just 13 "likes" (and was not structured to allow people to join the group) prompting one advisor to suggest that they are not taking full advantage of the promotion, communication, and relationship-building opportunities offered by Facebook (and other social and networking media sites such as Twitter and LinkedIn). The CCEPC does not have a web site and does not currently accept online registrations for the annual seminar. Some board members have expressed concerns that the costs of developing an online registration option outweigh the benefits while other have noted that the ease and convenience of online registration may increase the number of registrations by more than enough to cover any costs incurred.



The CCEPC does not currently have a formal process for soliciting additional sponsors for the annual seminar. Recent economic conditions prompted the bank that sponsors the annual

seminar luncheon to limit its contribution to \$1,700. While that level of support has come within \$100 of the actual cost of the lunch in recent years, some members have expressed concern that any increase in the cost of catering might force the CCEPC to either reduce the quality of the meal provided or seek additional sponsorship funds.

Future sponsorship contributions from TAMUCC may also be influenced by economic conditions. While the university was able to continue its contribution for the 2011 and 2012 seminars, there is concern on both sides that the trend toward higher education budget cuts in Texas may affect the ability of the university to maintain its current level of sponsorship.

Several companies have offered to sponsor selected costs of the seminar (e.g., the seminar book, snacks provided during breaks) in recent years. All have requested that their products be advertised to seminar participants, but most members of the board believe that allowing advertising in seminar materials for products that may compete with the products and services offered by CCEPC members is "...a bad idea". However, a few members and advisors believe that it may be possible to attract new sponsors for the event that sell non-competing products and services (e.g., travel & tourism organizations, publishers, business supplies & services providers, etc...).

The seminar registration fee remained stable at \$150 from 1997 until 2004. The fee increased to \$160 in 2004 and to \$180 in 2010. In 2011, The Board experimented with a two-tier pricing strategy that increased the base fee to \$185 while offering a \$25 discount to CCEPC members. The two-tiered strategy yielded a small increase in registrations by existing members, but decreased registrations by non-members to the lowest level ever recorded.

Board members have expressed concern about breaking through "psychological prices levels." For instance, \$199 would be more palatable than \$200. However, the board is reluctant to raise the seminar registration fee again so soon after the last increase, especially in the face of declining registration numbers.

Most of the annual seminar expenses are incurred in the final two weeks before the seminar. The seminar book is printed at the university the week before the seminar and delivered to the University Center the Friday before the meeting. Catering is confirmed seven (7) days before the meeting. While the University Center is booked a year in advance, because the seminar qualifies as a university-sponsored event, the CCEPC does not pay a deposit or incur the normal cancelation fees for reservations. The speaker's hotel room is booked through the university to take advantage of state rates, but the reservation is not billed until the speaker checks into the room. The university also provides a welcome message and directions to the event (and event parking) on university marques for a nominal fee. Miscellaneous expenses including name tags and phone and other support by graduate students are also incurred during the week of the seminar.

			Exhibit 3			
	2012	ANNUAL SEMIN	AR SLICK B	ROCHUR	E INSI	DE ¹
	The T	ne Corpus Christi I Thirty —Ninth A ed by the College of I Institutional Advance	nnual Esta Business, Texas	te Plann A&M Univ	ing Ser	ninar rpus Christi
		1	May 18, 2012			
			AGENDA			
8:00 a.m. 8:15 a.m.	REGISTRATION					
8:30 a.m.	NOT THE PERSON NAMED IN COLUMN TO SERVICE OF THE PERSON NAMED IN COLUMN TO SER	ANNOUNCEMENTS MITTED PARTNERSHIPS	& WHATTO EX	DECTERON	THE IDS D	v —
10:10 a.m.	BREAK	MITED FARTNERSHIPS	S& WHAT TOES	PECIFROM	THEIRS	×1
10:25 a.m.	and the second second second second	TIONS & OTHER RETA	AINED CONTROL	TECHNIQUE	ES FOR CH.	ARITABLE GIVING BY
11:15 a.m.	LIFE INSURANCE	ISSUES AND ESTATE PI	ANNING BY			
12:05 p.m.	CCEPC BUSINESS	MEETING (MEMBERS	ONLY)			
12:05 p.m.	LUNCH & UNIVE	ERSITY UPDATE BY				
1:05 p.m.	TAXPAYER BEWA	RE: AUDIT TRENDS IN	TEXAS TAX BY			
2:45 p.m.	BREAK					
3:00 p.m.	STRATEGIC PHILA	ANTHROPY: CURRENT	IDEAS FOR DON	ORS, NONPR	OFITS AND	THEIR ADVISORS BY
3:50 p.m.	COOKING WITH U	NCLE SAM: ARE YOU	R CLIENTS OR TH	HEIR TRANSA	ACTIONSO	N THE FRONT BURNER? BY
5:30 pm.	ADJOURN					
	This	seminar has applied for c	continuing educatio	n credit for m	ost professi	ons
Take I-37 to Sh follow Ennis Josi passes for Fre	oreline Blvd., turn right	ght. Take first entrance in uted when you check in f	(Shoreline becom	es Ocean Dr.) ake the first les struction projec	OR take S.I	isti P.I.D. (Hwy 358) to Ennis Joslin Ex sse park in the parking garage. Park underway on both routes, so observe
			Presenters:			
	Registrations rece	for CCEPC members; \$2 ived after May 4: \$25 ad for the seminar/ma	aterials lunch. PLEASE PRINT	sfo	\$50, if cop	oies are available.
Street Address_			City/State/Zi	р		
Telephone ()		Fax	Nametag na	me preference		
Occupation: (Ple	ease circle) Attorney	Trust Officer	Insurance	CPA	CFP (Other
	A STATE OF THE STA	- Control Scotts				
-Mail address	Make your check payable to CCEPC and return with this form to: For more information:					
M		to CCEPC and return wi	th this form to:		C College of	

If the annual seminar were to be cancelled, the expenses that were already incurred would have to be reimbursed to the university as would expenses associated with services already rendered by the secretarial service. For example, if the speaker cancelled before the catering was confirmed or the books printed, those expenses would not be incurred, nor would the rental of

the ball room. Likewise, the speaker's fee, hotel and travel expenses would not be due. The worst case scenario would be if a problem occurred the day of the event.

	Т	able 5				
	CCEPC RECEIPT	S & DISBURSM	ENTS			
		FYE 6/30/08	FYE 6/30/09	FYE 6/30/10	FYE 6/30/11	FYE 6/30/12
Receipts						
	Membership Dues	\$10,760.00	\$11,835.00	\$12,515.00	\$12,690.00	\$13,350.00
	Late Registration/No-show Fees	\$35.00	\$315.00	\$285.00	\$200.00	\$75.00
	Membership Meeting Guest Fees	\$30.00	\$210.00	\$115.00	\$270.00	\$360.00
	Seminar Registration Fees	\$16,415.00	\$16,045.00	\$15,205.00	\$16,790.00	\$13,900.00
	Seminar Sponsorships	\$1,254.00	\$2,163.50	\$3,017.70	\$4,900.00	\$5,000.00
	Other Receipts 1	\$0.00	\$448.29	\$597.79	\$2,500.00	\$0.00
	TOTAL RECEIPTS	\$28,494.00	\$31,016.79	\$31,735.49	\$37,350.00	\$32,685.00
Disbursements						
	Board Meeting Expenses	\$824.83	\$1,280.52	\$1,286.54	\$1,052.14	\$1,268.14
	Membership Meeting Expenses	\$7,831.37	\$8,464.56	\$9,921.88	\$8,728.40	\$7,772.18
	Meeting Speaker's Expenses	\$1,167.81	\$1,112.36	\$1,100.39	\$1,244.50	\$1,501.01
	SUBTOTAL MEMBERSHIP MEETING COSTS	\$9,824.01	\$10,857.44	\$12,308.81	\$11,025.04	\$10,541.33
	Clerical Support	\$2,467.07	\$2,859.56	\$2,510.56	\$1,444.49	\$2,796.57
	CE Accreditation	\$347.50	\$499.50	\$1,344.00	\$1,540.50	\$987.00
	Tax Return	\$0.00	\$0.00	\$775.00	\$810.00	\$0.00
	PO Box Rental	\$211.00	\$38.00	\$42.00	\$40.00	\$52.00
	Check Printing Charge	\$78.95	\$63.96	\$0.00	\$0.00	\$0.00
	Postage	\$0.00	\$680.00	\$350.44	\$585.00	\$458.23
	Gifts	\$75.00	\$254.28	\$433.25	\$400.00	\$270.63
	SUBTOTAL OPERATING COSTS	\$3,179.52	\$4,395.30	\$5,455.25	\$4,819.99	\$4,564.43
	A mayor Compined Consolved a Francisco	\$157.06	\$365.39	¢1 292 44	\$270.01	\$2,227.85
	Annual Seminar Speaker's Expenses	\$157.06		\$1,382.44	\$379.01	. ,
	Annual Seminar Speaker's Honorariums ²	\$3,000.00	\$5,000.00	\$3,500.00	\$4,000.00	\$0.00
	Annual Seminar Expense	\$6,005.39	\$4,559.83	\$4,986.61	\$4,305.56	\$4,762.88
	Seminar Coordinator Stipend	\$1,500.00	\$1,500.00	\$1,500.00	\$1,500.00	\$1,600.00
	Seminar Refunds	\$0.00	\$185.00	\$160.00	\$160.00	\$350.00
	SUBTOTAL ANNUAL SEMINAR COSTS	\$10,662.45	\$11,610.22	\$11,529.05	\$10,344.57	\$8,940.73
	Scholars hips ³	\$10,000,00	\$5,000.00	\$6,000.00	\$1,500.00	\$6,000.00
	TOTAL DISBURSEMENTS	\$33,665.98	\$31,862.96	\$35,293.11	\$1,300.00	\$30,046.49
	TOTAL DISBURSEMENTS	\$33,003.76	\$31,002.90	\$33,273.11	\$27,009.00	\$50,040.49
NET RECEIPTS		(\$5,171.98)	(\$846.17)	(\$3,557.62)	\$9,660.40	\$2,638.51
	<u> </u>					
Additional Inform		¢12.250.22	¢0.004.15 I	05 161 70	¢14 570 10	¢17.210.64
	Actual Checking Account Balance CD Balance	\$12,250.32 \$17,948.05	\$9,904.15 \$18,497.37	\$5,161.73 \$18,869.17	\$14,572.13 \$16,454.08	\$17,210.64
	CD Balance	\$17,948.05	\$18,497.37	\$18,809.17	\$10,454.08	\$16,454.08

¹Following the significant shortfall of funds in FY 2010, the board cashed in a CD for \$2,500 to cover scheduled disbursements at the beginning of FY 2011. Tax refund from taxes withheld by bank in error.

²The 2012 annual speaker requested that the honorarium be used to fund an additional scholarships (\$1,000) to TAMUCC.

The CCEPC traditionally awards \$5,000 in scholarships each year. An adminstrative oversight caused the FY 2006-07 scholarship funds not to be distributed to TAMUCC until after the award deadline (note the two disbursements in FYE 6/30/08) and the funds were not distributed to students in Fall 2007. When the CCEPC requested a summary of recipients in early FY 011, the error was discovered and the CCEPC decided to apply the balance of the funds held by the university since Fall 2007 to the Fall 2011 scholarships instead of making the scheduled contribution that year. The CCEPC added an extra \$1,500 in scholarship funds for FY 2011

If the university suffered a power or water outage or if an early hurricane threatened the area the day of the event, the seminar would likely have to be cancelled and the registration fees returned, but most of the expenses paid. Such events are not probable but do increase the risk of any strategy that involves subsidizing monthly meeting costs or membership dues with the annual seminar.

Table 5 summarizes the total receipts and disbursement for the CCEPC for the most recent five years. It also shows the year-end balance for the organization's checking and investment (CD) accounts (serves as an emergency fund and/or possible source of funding to pursue new opportunities).

As the board prepares for the first director's meeting of the 2012-13 fiscal year, they face a number of challenges revealed by ongoing analysis of the information presented above. If the board wishes to cover membership meeting costs and operating expenses with membership dues, then it must consider increasing membership dues. Alternatively, if the board wishes to subsidize membership dues (possibly to the point of reducing dues in the future), then it must identify strategies to increase receipts and/or decrease the costs of the annual seminar. As evidenced by some of the information presented above (e.g., changing the day of the seminar, creating a Facebook page), the board has demonstrated its openness to new marketing strategies for the annual seminar as long as those strategies don't compromise the mission or reputation of the organization.

INSTRUCTORS' NOTES

CASE DESCRIPTION

This case can be used to illustrate a variety of concepts in marketing including strategic market planning for non-profit organizations, event planning & promotion strategies, marketing of educational services, and the challenges associated with small businesses/organizations. This case is appropriate for a variety of courses and teaching strategies. The case contains enough information to permit students to perform a situation analysis (with or without external research required), identify and prioritize issues/problems, evaluate alternative courses of action (including "do nothing"), and recommend one or more strategies making it appropriate for upper-level (3 or 4) case-based courses in marketing strategy, promotional strategy or services marketing. Formal case analysis would require three to ten hours of preparation by students depending on the requirements of the class/instructor. Alternatively, this case could be employed in lower-level marketing classes by asking students to respond to several discussion questions. Depending on the topics and complexity of the questions, this type of usage would require from one to three hours of preparation time by students and one to two class periods for in-class discussion.

CASE SYNOPSIS

The Corpus Christi Estate Planning Council (CCEPC) is a non-profit organization dedicated to improving the practice of estate planning in South Texas. Recognized by the IRS as a 501(c)(3) organization, the primary mission of the CCEPC is to provide continuing education opportunities to members and non-members. The CCEPC recently recovered from a significant decline in membership numbers but is still concerned that membership dues are not covering the membership meeting costs and operating costs for the organization. As the organization prepares for FY 2013, the board is considering raising dues (again) to increase membership revenue or allowing proceeds from the annual educational seminar to subsidize membership dues. In either case, the annual seminar is suffering from a significant decline in attendance and the board needs to consider options for reversing this trend and perhaps even returning attendance levels to the highs enjoyed during the 1990s.

RECOMMENDATIONS FOR TEACHING APPROACHES

This case provides sufficient detail for instructors to assign it to students (individual or group assignment) for formal written case analysis in a senior or graduate-level marketing strategy/policy course. Using the information in the case, including detailed financial

information, and a wealth of resources available on the Internet, students could conduct a SWOT analysis to identify one (or more) of several key problems faced by many non-profit organizations including revenue and cost control, identifying and satisfying multiple target markets (donors/sponsors, customers, members), and adapting to changing environmental conditions (e.g., embracing new technologies and responding to new competitive threats).

Students in a course on non-profit organization and/or services marketing would benefit from reviewing/learning the features/benefits of IRS non-profit status and identifying opportunities and strategies for the CCEPC to realize the full potential of its 501(c)(3) status. For example, students might identify a number of ways to increase receipts by soliciting tax-deductible donations to support scholarships for the existing educational opportunities and/or the development of new educational opportunities.

The case could also serve as the foundation for developing an Internet marketing plan for courses in Internet and electronic marketing. A Google search of the term "estate planning council" would provide students with dozens of sample sites for estate planning councils across the country. With these examples, students could develop (and possibly implement) recommendations for design, organization, and content of a Web site for the CCEPC. The same search terms would also give students access to the CCEPC Facebook page to permit them to evaluate current strategies and make recommendations for new strategies to improve the organization's use of Facebook and/or other social media to communicate with members and non-members. Additional online exploration by students would allow them to make recommendations related to online registration/membership renewal options, search engine optimization, and cost effective online advertising strategies.

The case could also be used as a homework assignment, take-home exam, or class discussion topic in lower-level/introductory marketing courses by asking students to respond to one or more discussion questions. Such discussion could focus on a variety of topics including identifying and satisfying multiple target markets, benefits of repositioning the annual seminar as a "working vacation" to attract attendees from a larger geographic area, modifying the pricing strategy to maximize revenue, introducing cost control strategies, and strategies for expanding sponsorship and donor opportunities for educational programs.

CASE ANALYSIS OUTLINE

1. Analyze the history, structure and growth of CCEPC to identify current strengths and weaknesses.

Using information from the case, students may identify the following strengths:

Length of board membership - the long service requirement (nine years) allows for a continuity of decision making and an opportunity for institutional memory.

Seminar coordinator -- having a seminar coordinator (who is also the university liaison), the CCEPC enables continuous improvements to the seminar. Seminar sponsorships – use of sponsorships to support annual seminar meals to allow continued quality of meals provided have allowed the fees to be kept down. The board members' have been instrumental in ensuring that their employers continue to provide the sponsorships, and they are likely to continue. Significant financial reserves -- the CCEPC has nearly a full year's worth of total revenue in cash - checking/CD savings.

Tax exempt status -- The tax exempt status of the university (and the board) have allowed them to save taxes on some expenses (the 2012 speakers did not charge speaker fees for their presentations, though they did not necessarily economize on travel expenses).

University partnership -- The co-sponsorship of the College of Business and the Office for Institutional Advancement at TAMUCC gives the CCEPC access to university resources to reduce costs associated with the annual seminar. Reputation for quality – largely positive evaluations by seminar participants. Willingness to change – moving the seminar from Monday to Friday and creating a Facebook page indicates that the board is willing to change the status quo to improve efficiency and customer satisfaction.

Weaknesses:

Time commitment -- length of time that each board member must commit is long. Attracting people to volunteer for the board may be difficult.

Dependence on the university -- The university provides a significant portion of the services for the board including the seminar venue, catering, and printing (mailings & seminar book).

Dependence on contributions for meals – without sponsorship of meals, net receipts for the seminar would decrease and/or the board would need to increase seminar fees to cover meal expenses.

Rejection of additional sponsorship opportunities

2. Study the external environment facing CCEPC to identify opportunities and threats.

In a discussion limited to the information in the case, students should be able to identify the following opportunities and threats:

Opportunities include taking advantage of seminar location to target attendees looking for a "weekend getaway", expanding educational offerings to take advantage of increasing CE requirements, possible demand for seminar materials is a potential new source of revenue, potential for expanded sponsorship relationships for annual seminar, improving bottom line by identifying and utilizing free/low-cost online communication and

promotion opportunities, and leveraging 501(c)(3) status by soliciting tax-deductible donations to support CCEPC mission.

Threats include increasing competition from online CE programs/providers, uncertainty of higher education funding in Texas and economic conditions may affect continuation of current sponsorships, and increasing costs.

Instructors might recommend the following resources to encourage deeper analysis of opportunities and threats:

Employment statistics for the state of Texas (especially south Texas) – allow students to identify the size and geographic location of potential markets for the CCEPC seminar. Corpus Christi tourism attractions – allow students to identify potential sponsors for the annual seminar that don't compete with members' organizations and allow repositioning of the seminar as a working vacation.

Continuing education requirements and providers -- allow students to identify current competitors for CCEPC educational programs. Analysis of competitive offerings would allow students to make recommendations for positioning/repositioning the annual seminar and identify ideas for new educational programs for CCEPC.

Corpus Christi, TX tourism – allow students to identify other non-profit organizations devoted to increasing tourism in Corpus Christi and for-profit entities in tourist-related industries (e.g., hotels, attractions) that might be willing to sponsor other costs associated with the annual seminar (e.g., printing of brochures or seminar book) to access the highend target market served by CCEPC programs.

3. Analyze competitive position of company and match strengths and weaknesses to opportunities and threats.

Student answers will vary depending on the nature and level of the course and the depth of analysis required in the first two stages. Students might choose to focus on cost control and efficiency by developing online programs and/or communication methods, repositioning the seminar as a "mini-vacation" to attract new attendees and sponsors, or targeting donors to cover expenses and/or provide funds for expansion of existing programs.

4. Identify the key issue(s)/problem(s) facing the company in the future.

The main issue identified by the board case is that membership dues do not cover membership meeting and operating costs. Students may argue that this perception is inaccurate based on the information in Table 5 but should be encouraged to note that the organization was in the red for three of the five years provided and that the positive net receipts for the last two years were the result of extraordinary cost savings or receipts that are not sustainable.

Should the CCEPC increase membership dues to cover membership and operating costs? Students that favor this strategy might note that membership appears to be price inelastic, that the dues increase required to cover costs is relatively small, that it allows the board to cover costs before they are incurred (instead of relying on the last event of the year to cover budgeted costs), and that the strategy is consistent with the culture of the organization. Students that oppose this strategy might note that the annual seminar is invariably profitable and that significant potential exists to increase receipts for the seminar, that maintaining the size of the organization is necessary for longevity and that increasing dues beyond the current level might dilute the benefits offered by membership.

Should the CCEPC subsidize membership dues with proceeds from the annual seminar? Students that favor this strategy should note cost inefficiencies in current promotional plans (e.g., reliance on mailings), opportunities for additional sponsorships and/or donations, opportunities for additional receipts associated with seminar (e.g., selling seminar book) and more. Students that oppose this strategy may note the risks and uncertainties associated with seminar costs and attendance, the significant variability in costs that make budgeting problematic, and increased competition from online providers that offer participants more convenient opportunities for CE.

Additional issues students may identify include:

Failure of board to consider other options for increasing net receipts such as modifying cost structure of membership meetings (e.g., eliminating drink coupons at first meeting, setting limits on speaker costs for membership meetings, reducing printing and mailing costs by expanding use of online communication/promotion opportunities, and changing venues).

Lack of a Web site to communicate with members and non-members. Weak/inconsistent use of Facebook to communicate with members. Facebook may be inappropriate for target market – use of LinkedIn or other online social/networking sites may better fit the characteristics of the CCEPC target market. Failure to leverage tax-deductible status for donors to increase receipts.

5. Develop alternative strategies for addressing key issue(s)/problem(s), evaluate alternatives and recommend a course of action including detailed tactics for implementation and control.

Student answers will vary depending on the issue addressed.

Students that focus on increasing membership dues may discuss alternate timelines for implementing another dues increase, alternate strategies for communicating the justification for a dues increase to members, and alternate strategies for targeting and attracting new members to offset any loss of existing members due to another increase.

Students that focus on increasing the net receipts from the annual seminar to subsidize membership and operating costs may discuss options for increasing attendance (e.g., repositioning seminar, expanding mailing lists to target new attendees), increasing sponsorship receipts (e.g., soliciting sponsorships for promotional materials or seminar book), implementing online registration and other strategies to make it more convenient for potential attendees to commit to seminar, and altering the pricing structure (e.g., eliminating membership discounts, charging a separate fee for meals and/or seminar books).

IMPERFECT KNOWLEDGE AND MACROECONOMIC STABILITY

Dina Rady, Ain Shams University

ABSTRACT

This paper investigates the role that imperfect knowledge about the structure of the economy plays in macroeconomic stability. We show that imperfect knowledge raises the persistence of inflation, and distorts output stability. The problem of imperfect knowledge is especially acute in small open economies and transition economies that have been drawn to inflation targeting. These results highlight the value of mitigating the influence of imperfect knowledge on the economy to the decision maker in targeting inflation and fostering macroeconomic stability. Our analysis suggests that policies formulated and communicated that are fundamentally unknowable may be particularly problematic. A more reliable approach to successfully implementing inflation targeting is to search for monetary policy strategies that are robust to imperfect knowledge.

INTRODUCTION

Central banks around the world pay close attention to inflation expectations, including surveys, market-based measures, and economic forecasts.

Perfect knowledge is the state of knowing the information that completely eliminates uncertainty in a situation, as opposed to imperfect information which only reduces uncertainty. Imperfect knowledge means that the knowledge is fragmented and uncertain. It is fragmented in that every individual can only know a very small part of all that is to be known, though individual fields of vision may overlap. Knowledge is neither centralized nor certain; rather it is dispersed, frequently in the form of subjective and conflicting estimates, among many minds.

Our concern is to demonstrate how imperfect knowledge alters the economy's responses to economic disturbances, and to ensure that the fullest use will be made of the relevant knowledge which is dispersed among many minds.

Uncertainty is an integral part of all decisions made in the real world- Gough (1988). The decision-making process involves a set of actions and outcomes, each of which has a probability associated with them. Uncertain situation occurs when either the outcomes are unknown or the agreement to a probability distribution cannot be reached- Janet Gough (1988). This uncertainty may be part of the environment in which the decision is being made or it may be connected with the outcomes resulting from these decisions. Uncertainty may be descriptive (with regard to the variables defining the system) or measurement (with regard to the value of the variables).

The multi-dimensional nature of uncertainty includes the outcomes and their probabilities -Handa (1983), however it has other dimensions these dimensions are also relevant to individuals' decisions; one dimension is represented by probabilities attached to the outcomes and another dimension related to the degree and kind of information on which the probability estimates are based. These dimensions may also change in the individual's opinion.

Dealing only with outcomes and probabilities and ignoring these other dimensions of uncertainty will give inaccurate results because of the association between probabilities and these other dimensions.

An agent is an actor and decision maker in a model; buyers, sellers, households ,firms, governments or central banks are the main types of agents in an economy.

In general, the private agents attempt to infer the central bank's goals and reactions through past actions. In such an environment, the characteristics of inflation targeting policies in practice—including transparency, commitment to price stability, and close attention to inflation expectations—can influence the evolution of inflation expectations and the economy's behavior.

The nature of expectations matters when conducting monetary policy. The assumption of Rational Expectation -Woodford (2006)- implies an extraordinary ability to predict exactly what the public will be expecting when policy is conducted in a particular way.

According to the theory of rational expectations (TRE) developed by "Robert Lucas" there are main assumptions; first, people can quite correctly predict future conditions and take actions accordingly, and they construct their expectations in a rational manner that, more often turn out to be correct. Second; in efficient markets with perfect or near perfect information (modern open-market economies) people will anticipate government's actions to stimulate or restrain the economy, and will adjust their response accordingly. People are presumed to be able to both detect past patterns in their prediction errors and base their behavior on the "best possible" forecast of future economic conditions. Rational expectations theory defines the kind of expectations as being identical to the best guess of the future (the optimal forecast) that uses all available information.

In an environment of rational expectations with perfect knowledge, inflation expectations are anchored as long as policy satisfies a minimum test of stability. Well-anchored inflation expectations enable central banks to achieve greater stability of output and employment in the short run, while ensuring price stability in the long run. However, central bank communication loses any independent role because the public already knows all it needs in order to form expectations relevant for its decisions.

Inflation targeting has been a very popular strategy among central banks in small open economies. Strohsal and Winkelmann (2012) show that central banks' ability to achieve price stability highly depends to its ability to anchor inflation expectations.

Researchers have struggled - G. B. Richards (1953), to pin down exactly what inflation targeting means in terms of an implementable policy rule. To some, the Taylor rule (the proposition that central banks can stabilize the economy by raising their interest rate instrument

more than one-for-one in response to higher inflation), or any monetary policy rule with a fixed long-run inflation target, is a form of inflation targeting; to others, inflation targeting is identified with solving a central bank optimization problem in a rational expectations model.

Some monetary policy rules that would perform well under the assumption of rational expectations with perfect knowledge perform very poorly under imperfect knowledge.

Three elements of inflation targeting have been critically important for the successful implementation of price stability policies. First is the announcement of an explicit quantitative inflation target and the acknowledgment that low, stable inflation is the primary objective and responsibility of the central bank. Second is the clear communication of the central bank's policy strategy and the rationale for its decisions, which enhances the predictability of the central bank's actions and its accountability to the public. Third is a forward-looking policy orientation, characterized by careful monitoring of inflation expectations at both short-term and long-term horizons. Together, these important elements provide a focal point for inflation, facilitate the formation of the public's inflation expectations, and provide guidance on actions that may be needed to foster price stability.

The problem of imperfect knowledge may be especially acute and more dramatic in small open economies and transitional economies. Many of these countries have undergone dramatic structural change over the past few decades and have been drawn to inflation targeting. Imperfections in expectations arise when economic agents have incomplete knowledge of the economy's structure, consequently, the characteristics of optimal monetary policy rules that are based on rational expectations models with perfect knowledge cannot provide trustworthy guidance, and policies formulated to target inflation will lack efficiency.

Thus imperfect knowledge can act as a mechanism for macroeconomic disturbances in terms of amplification and persistence that have implications for monetary policy.

Policymakers' misperceptions regarding the evolution of natural rates can result in persistent policy errors, hindering successful stabilization policy. Orphanides and Williams (2007) discuss three factors that play an important role in ensuring successful stabilization policy; first, central bank transparency, including explicit communication of the inflation target, can lessen the burden placed on agents to infer central bank intentions and can thereby improve macroeconomic performance. Second, policies that do not rely on estimates of natural rates are easy to communicate and are well designed for ensuring medium run inflation control when natural rates are highly uncertain.

IMPERFECT KNOWLEDGE AND ADVERTISING

The fact that buyers and sellers may have only imperfect knowledge of the conditions on the market plays an important part in the economic theory of advertising which begins with Marshall, and over the second half of the 20th century, has advanced at a great pace. The economic implications of advertising are of great importance Bagwell (2005). The first view is that advertising is persuasive. This is the dominant view in the first half of the 20th century. According to this view, advertising affects consumers' tastes and creates product differentiation and brand loyalty, which will affect the demand curve for the product making it more inelastic, therefore advertising results in higher prices. Therefore according to the persuasive approach; advertising can have important anti-competitive effects, which induces artificial product differentiation resulting in concentrated markets characterized by high prices and profits.

The second view is that advertising is informative. This view emerged in the 1960s, under the leadership of the Chicago School. According to this approach, many markets are characterized by imperfect knowledge, since consumers do not access all the information about each product's existence, price and quality. This imperfection can lead to market inefficiencies. Advertising is not seen as the cause of the problem but instead it's what the market offers as a solution, where the consumers receive direct product information. Accordingly the firm's demand curve becomes more elastic, and advertising thus promotes competition among firms, facilitating entry to the industry. Thus advertising according to this view can have important procompetitive effects.

A third view is that advertising is complementary to the advertised product. According to this perspective, advertising does not change consumers' preferences, and it may but need not provide information, instead, it enters as a form that is complementary with the consumption of the advertised product. For example, if consumers value "social prestige" and the consumption of a product may generate greater prestige when the product is (appropriately) advertised. Standard methods can be used to indicate whether advertising is supplied to a socially optimal degree, even if it conveys no information.

While these views of advertising are of special importance, and have their effects on different economic variables including concentration, profit, entry and price, there has been always an informative element in all advertising. The effects of advertising on the volume of sales and other indicators have always been biased towards the persuasive elements in advertising, with much neglect of its informative character. However some empirical studies strongly suggest that no single view of advertising can be valid in all settings. Thus the economic implications of advertising can be subtle and controversial, and many of the most important questions remain unresolved.

IMPERFECT KNOWLEDGE AND MARKET EQUILIBRIUM

The structure of the market depends on the number of sellers and their competitive behavior. In equilibrium, all buyers tend to be well informed of the offers made by all sellers-Ozga (1960). The only difference is that if knowledge is imperfect, the size of the actual market, i.e., the number of actual buyers, is less than it would be otherwise, and that the element of time

is introduced into the process of competitive adjustments. This latter factor makes the possibility of ever reaching equilibrium rather uncertain, and it may, therefore, increase our doubts as to the usefulness of the whole equilibrium approach. But it does not affect the theoretical position of equilibrium.

Gilchrist and Saito (2006) argue that; in the presence of financial market imperfections, a policy that responds strongly to inflation eliminates much of the distortionary effect of price movements on economic activity.

IMPERFECT KNOWLEDGE AND MONETARY POLICY

Any method of expectations formation is known as a "learning mechanism", This terminology developed because rational expectations is justified by the notion that people eliminate systematic forecast errors over time, and the dynamic elimination of errors is a definition of learning. Bullard (1991) shows that there is a close relationship between learning and macroeconomic policy. In fact, the topic attracts attention precisely because of its perceived policy implications. Furthermore; learning is implicitly an integral part of rational expectations models. There is little prospect that one can avoid the study of learning by assuming rational expectations.

Orphanides and Williams (2005a) show that learning can give rise to inflation scares (unusual increases in inflation expectations) and can potentially explain the high sensitivity of expectations and asset prices to transitory shocks.

Learning has also been found to have important implications in the design of monetary policy. Modeling expectations using a "learning process" implies a bias towards a more aggressive central bank response to undesired movements in inflation than under rational expectations.

Imperfect knowledge leads to persistent movements in beliefs, requiring aggressive adjustment to monetary policy in response to transitory natural rate and cost push shocks. Eusepi et al. (2012) argue that changes in current interest rates lead to revisions of beliefs about future interest rates, with a lag due to learning dynamics. The revisions in beliefs in turn affect the state of aggregate demand in subsequent periods. Optimal policy requires small adjustments in current interest-rate policy because beliefs represent an additional distortion that policy must confront. Aggressive adjustment of current interest rates derives excessive movements in long-rates and macroeconomic instability.

Furthermore versions of Taylor rule which are calibrated to perform well under rational expectations with perfect knowledge can perform very poorly when agents are learning and the central bank faces uncertainty regarding natural rates.

IMPERFECT KNOWLEDGE AND DEBT MANAGEMENT POLICY

Expecting higher inflation, under rational expectations, monetary policy will provide higher real short-term interest rates that will restrain aggregate demand and therefore inflation. Inflation expectations will gradually be adjusted. This is the standard mechanism of monetary policy, supporting the Taylor principle.

Under imperfect knowledge, a second mechanism operates and is destabilizing; expected higher nominal short-term interest rates will increase debt issuance to the extent that higher government debt is perceived as net wealth. Aggregate demand and inflation increase, preventing the adjustment of inflation expectations. If the second mechanism dominates instability occurs.

CONCLUSION

Under rational expectations, monetary policy is generally highly effective in stabilizing the economy. However characteristics of optimal monetary policy rules that are based on rational expectations models with perfect knowledge do not always act as a trustworthy guidance, because of policymakers' misperceptions regarding the evolution of natural rates. The effect of imperfect knowledge on macroeconomic stability is more dramatic in small open economies and transitional economies where the problem of imperfect knowledge is more acute.

Imperfect knowledge plays an important role in the economic theory of advertising and its different views and has its effects on the market. These effects can be anti-competitive effects (in case of the persuasive view) or pro-competitive effects (in case of the informative view).

Though the informative element usually exists in all advertising, the effects of advertising on the volume of sales and other indicators have always been biased towards the persuasive elements, than the informative view, causing the economic implications of advertising to be much controversial.

We also find that under the process of learning, private inflation expectations contain potentially valuable information for the setting of monetary policy. Thus policies that respond to inflation expectations through the process of learning yield significant improvements in macroeconomic performance, inducing superior stabilization of inflation and economic activity.

Also if knowledge is imperfect, the size of the actual market will be less than it would be otherwise which will make the possibility of reaching equilibrium uncertain, leading to much distortion of the market.

Monetary policy rules that perform well under the assumption of perfect knowledge may perform very poorly with relatively modest deviations from rational expectations with the assumption that natural rates are known. Thus imperfect knowledge represents an additional distortion confronting policy, leading to greater inflation and output volatility relative to rational expectations.

In case of higher –short term-government debt countries the existence of imperfect knowledge causes destabilization of the economy. It happens when expected higher nominal short-term interest rates increase the debt issuance raising both aggregate demand and inflation and preventing the adjustment of inflation expectations. Therefore high average maturities of debt can be desirable as they promote stability even in heavily indebted economies.

These results illustrate the importance of identifying an alternative monetary policy framework when knowledge is imperfect, and suggest that; for a more reliable approach to successfully implementing inflation targeting is to search for monetary policy strategies that are robust to imperfect knowledge.

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THE DELISTING OF COMPANIES IN THE MEXICAN STOCK EXCHANGE

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ABSTRACT

In this study, we look at a comprehensive sample of delisted companies from the Mexican Stock Exchange (MSE), also known as the Bolsa Mexicana de Valores (BMV), from 1980 to 2012 we explored the reasons and potential motives behind the declining number of listed companies in the MSE. We also look at the performance of the delisted companies before, during and after the deregistered from the MSE. We find that delisted companies experienced poor financial performance and unexpected negative stocks returns. We find the evidence suggesting that there may be a systematic flaw that results unjustified higher risk and the need for better governance practices and transparency, which in turn could reverse the declining trend in companies listed in the MSE.

Key Words: Regulation, Corporate Governance, Event Studies.

INTRODUCTION

"If you know the enemy and know yourself, you need not fear the result of a hundred battles. If you know yourself but not the enemy, for every victory gained you will also suffer a defeat. If you know neither the enemy nor yourself, you will succumb in every battle"

Sun Tzu in the classical book The Art of War.

This study analyzes events, reasons, and possible motives behind the trend over the last thirty years of an increasing number of publicly traded companies in the Mexican Stock Exchange (MSE) in going private. Publicly traded Mexican companies experienced strategic, economic and even regulatory changes that may have led to their eventual self-delisting form the MSE.

Previous studies have correlated improved self-governance and better regulation with a greater number of companies listing and with enhanced investor's interest on the local stock exchange, particularly when the stock market is an emerging economy. In particular(Chong, Guillen, & Lopez-de-Silanes, 2009) have shown how changes in regulation and self-governance practices can lead to improved performance and can result in greater shareholders' benefits in the publicly traded companies in emerging markets. Improved regulation, better corporate

governance practices, and greater transparency seem to explain improved investor confidence in emerging markets. Similarly, better management due to better governance practices can increase the quality and quantity of earning to the shareholders (Machuga & Teitel, 2007).

Moreover, (Garcia, 2011) explained that publicly traded companies in the MSE with less than solid self-governance practices and with a lack of transparency showed increasing levels of financial leveraged and lower financial performance. Along similar lines, (Gibson, 2003) shows that ineffective government regulatory policies in emerging markets correlated with lower firm financial performance with low CEO turnover in such companies.

The growth of the equity market is key to the development and growth of a market economy. Globalization process has played an extraordinary role to increase international cash flow availability across different countries, especially from developed countries to emerging economies, two factors are related in this process, the diversification process across different rich countries and relatively better investors risk position and second the agency cost become less important due to increase of financial regulations, see (Stulz, 1999).

Previous research have studied companies that are actively traded into the MSE and how in different ways regulation, transparency, governance practices and globalization process have transformed the landscape and the investor's perspective, but little or no research have focused on the increasing company delisting trend in the Mexican market. We attempt with this study to fill in the void by looking into the reasons and consequences of company delisting in the MS.

Table 1 denotes the number of listed companies in three emerging markets in Latin America, the number of listed companies in Mexico is smaller than Colombia stock exchange, also publicly companies traded into the MSE before 1990 accounts only 23% for Mexico meaning that the market company composition is relatively young compared with Brazil 40%.

7	Table 1. Listed public companies, experience and growth.													
	Listed*	Before 1990	Between 90-00	Between 00-10	Between 11-12									
Mexico(1)	136	31	64	28	13									
	100%	23%	47%	21%	10%									
Brazil(2)	522	210	52	224	36									
	100%	40%	10%	43%	7%									
Colombia(3)	223	51	50	117	5									
	100%	23%	22%	52%	2%									

^{* #} of public companies traded in the stock exchange in 2012.

The index market concentration can be also associate with the number of delisted companies (Macey, O'Hara, & Pompilio, 2008), we discovered that MSE index participation is concentrated in few public companies, stocks such AMX, WALMEX, FEMSA, GMEXICO, TLEVISA, GFNORTE, ALFA, CEMEX, PENOLES and GMODELO accounts 80% of the total index due to the size, trade and relative importance. Moreover, in the same order each accounts, 27%, 12%, 9%, 7%, 7%, 5%, and the rest only 3% or less. Comparing same numbers, for Brazil,

⁽¹⁾ from the official site www.bmv.com.mx (2) from the official site www.bmfbovespa.com.br

⁽³⁾ from the official site www.bvc.com.co

accounts 39 companies that concentrate 80% of the index, Chile 17 companies' accounts 80% of the index participation. Peru 25 and Argentina 8 companies accounts the 80% of the index.

There are several limitations with the data analysis between countries, one can be related with the economic performance cycle period between countries, second is the open market period that the country has exposed to globalization process compared with the rest of the countries, population, economy size and all regulations related with the operation of the financial markets, including the foreign investment. Even though, the MSE has decreased the number of listed companies during the last 12 years and in the overall due to the size, economy, regulation and globalization exposure the MSE should have more listed companies.

We suspected that problem was not only concentrated in Mexico, because even within differences between all Latin America countries we still believe that there are so much potential compared with more mature financial markets such USA or Canada.

PREVIOUS RESEARCH

Theoretically, emerging markets should be studied differently because the context related with how regulation, transparency and governance practices have adopted locally are different from those related with developed countries (López de Silanes, La Porta, Shleifer, & Vishny, 1998), also businesses usually are administrated slightly different due to ownership concentration and local management practices, business opportunities and consumer preferences motivates to local firms to evolve in a different form compared with developed market, finally local regulation is part of this business process (Khanna & Palepu, 1997), following the same line economic performance measured by financials or stock performance can varies along different financial markets and specific firm situations (Khanna & Rivkin, 2001).

Latin America is not the exception, every country and every firm is a case to study and is theoretically embedded under different theoretical approaches and perspectives. Previous findings suggest that the best way to understand firms in emerging markets is using case methodology study and using at the same time a variety of research tools and multidimensional approaches to understand the micro and macro theoretical effects, (Aguilera & Jackson, 2010). Also because emerging markets environment is more dramatically influenced by globalization process, different labor and manufacture infrastructure, firm competition and market product potential, these reasons promote a unique place and unique typo firm that cannot be usually founded in developed countries (Garcia, 2013).

Under this umbrella we documented our theoretical perspective based on four driven forces that can explain the motives and reasons of why a company decides to go private again. According with (Modigliani & Miller, 1963) when a company have experienced poor financial performance and investors perceived lack of economic potential in the future then the firm can be exposed to competitors and financial market penalization, financial performance assures

actual and future operation of the firm, but if the firm experienced poor performance than investors can opt to sell the stock, remove the management or collect the remnants.

The second force is resulting from the previous force, is related with economic potential, industry position and corporate control, financial markets facilitate and promote firm economic growth investing in profitable investments, but also at the same time firm can be exposed to business control, mergers or acquisitions by the near competitors or by private equity funds. Under this approach there are several perspectives, for example (Zingales, 1995) analyzed the conflict between the original owner and the IPO and the level of the outsider ownership, this approach helps us to determine why a public company can decide to go back and be private again.

Following the same line and under same second force, ownership control can be an important factor that company can decide be delisted, for example initial ownership structure back when a company went public is one of the major roles to understand further ownership structure steps, this means that initial passive or active shareholders can determine the ownership structure of the firm in the future, see (Mello & Parsons, 1998). Finally, in the process of ownership structure when a company went public several factors arise to determine the ownership structure, factors like financial leveraged, industry, liquidity or even insiders stock position, see (Brau, Francis, & Kohers, 2003),

The third force, was related with the information and all the cost associate to produce and to reduce informational asymmetries between the agents and the principals, at the same time how the economic cost can be important to determine the financial structure of the firm, information cost and capital structure are determinants to any firm to went public or back to be private, see (Leland & Pyle, 1977) and (Subrahmanyam & Titman, 1999). This third force was consisted with the Mexican regulation context experienced in the past to improve corporate governance practices and minority shareholders rights.

The last force was liquidity and managerial autonomy, sometimes a company went public because it is profitable, has economic potential and has special strategic place inside the industry, but later because low trade and low public ownership the share tends to decline over the time, in this approach previous research determine that as important reason in why companies decided to went private again, see (Zingales, 1995), (Mello & Parsons, 1998), and lately more focused into management autonomy and investors participation see (Boot, Gopalan, & Thakor, 2008).

HYPOTHESIS AND RESEARCH DESING

The purpose of this research is to identify why the MSE is getting smaller, using a unique approach to explored recent delisting firms from the MSE and the motives and reasons of private process, also at the same time we wanted to identify any anomaly regarding the stock price performance involved during the delisted process.

We divided our research in two steps, the first part of the process was to identified from the MSE the actual delisted list of firms during the last 30 years, this step help us to understand the context and business performance under the company experienced the delisted process, then the second step uses the list of companies to understand the financial market conditions and especially we analyzed at firm level how was the abnormal returns involved in stock prices.

We designed our first step using the following five questions, what were the reasons of stock cancellation? What was the time of the company being public? What were the final stock price and the average price for the last 12 months? Was the business or Assets profitable during the last 18 months previous to the cancellation announcement? Was the business profitable to the shareholders during the last 18 months previous to the cancellation? The second step required to identify at level firm if there was abnormal returns in the stock prices.

For the first step was required ECONOMATICA data base, but we used additional data from El Financiero, Infosel and BMV Bolsa Mexicana de Valores which were the main available data sources for Mexico, we used financial data without the inflation effect.

Using the Economatica data base, we identified 77 cancelled firms from MSE and we obtained the initial universe of analysis that correspond Table 2 and Table 2.1 Summarize the data. The results showed us that there were three more affected sectors during the period of analysis, financial, retail and others. Financial sector suffered a major change during the period of analysis because changes made in regulation and foreign investment, the financial sector received FDI from multinational financial institutions and change the entire environment in terms of players and size of the financial institutions, Retail correspond more to companies with cannot overcome the external competition in different segments, finally Others correspond a set of companies in different sectors and segments. The detailed list is at the end of the document on Table 2.

Using Table 2 as the universe of delisted or cancelled stocks, we discard those companies with not available information regarding financial and stock data; we constructed a new table using the following concepts as a part of our research, the final universe of company decreases from 77 to only 56.

We applied the five questions to our 55 universe of companies, the first question regarding the reasons of cancellation; we classified all the motives and reasons in four major categories, Acquisition, Delisted, Restructuring and Merger. We defined in our research Acquisition to those companies where the control was transferred to another different company or the same company acquired again its own public shares, self-buyout, Delisted and compliance were defined to those companies where did not released financial information according with the regulation, also whether the company wanted to be delisted or the authorities delisted due to information, regulation, legal problems, high cost to inform to the financial market and/or low liquidity. Finally we classified Merger to those companies where one or more entities becomes one, mainly all merged companies were related within the same parent hold company or related

subsidiary. Restructuring was related with those companies where the financial performance becomes an important issue to keep the company operating within the financial markets.

Table 2.1 Cancelled stocks by econ	omic sector or Industry
Economic Sectors	# of Cancelled stocks
Agri & Fisheries	3
Basic & Fab Metal	4
Chemical	3
Construction	3
Electric Electron	2
Finance and Insurance	13
Food & Beverage	7
Industrial Machin	2
Nonmetallic Min	1
Other	12
Pulp & Paper	1
Telecommunication	6
Textile	3
Trade / Retail	14
Transportat Serv	2
Vehicle & Parts	1
Tota	l 77

The final stock price were related when the company or the authorities released the information regarding the delisting process entered by the company, in this case the final stock price was the final price that was traded on the market or the stock price day where the company stop traded in the financial market, we called to this particular final stock price the Event Day. Before the event day we tracked the stock price 270, 180, 120 and 90 days in order to identify if there were substantial abnormal return or losses during different periods of analysis.

Finally we defined if the company, business or Assets were profitable using two basic variations of performance, using Return or Assets (ROA) and Return of Equity (ROE), during 18 months (using six financial quarters or annual reports) before the event, we answered the questions about the profitability using the productivity of the assets, using ROA and for the investors or shareholders using ROE.

Our results are on the Table 3, according with the universe of the 56 companies we found 26 companies that were acquired during the period of analysis, also there were 16 firms which were delisted because of compliance or low operation. The data by firm is at the end of the document on Table 3, with this table we answered the initial five questions, regarding the reasons of the stock cancellation, the reasons of cancellation basically were concentrated in Acquisition, Delisted, Compliance and Low operation in more than 75% of the companies, 42 companies out of 56. Previous researches confirms same trend, (Macey et al., 2008) and later with additional economic and strategic analysis (Bharath & Dittmar, 2010). On average the

universe of the companies just lasted 9 years on the financial markets, it means the delisted companies were young and with lack of experience to outperform the financial and competitive environments.

	Table 3. Summary Basic Statistics. Reasons of delisted, stock price and financial performance.													
Stats	IPO	Delisted	Reason	Event Day		270*	180*	120*	90*	ROA	ROE	Delisted		
Average	1993	2004	Acquisition (26 companies)	\$	18.42	\$17.66	\$18.06	\$18.36	\$18.47	-13%	-50%	Jun-04		
Min	1956	1998	Delisted (16)	\$	0.06	\$ 0.09	\$ 0.08	\$ 0.07	\$ 0.07	-339%	-630%	Mar-98		
Max	2007	2011	Restructuring (8)	\$	230	\$ 243	\$ 240	\$ 237	\$ 234	28%	418%	Nov-11		
Std Deviation	8.1	3.7	Merger (6)	\$	37.40	\$37.43	\$37.51	\$37.56	\$ 37.49	53%	154%	N/A		

^{*}Days before the event day.

Using the final price and previous stock price performance by firm we identified how the financial markets reacted to such events, in theory if the company or authorities released information regarding the initial delisted process or similar information regarding potential acquisition, financial restructuring or merger, then we expected abnormal returns because the investors would react negatively or positively to such events, we were wrong; see how information can affect the stock prices (Fama, Fisher, Lawrence, Jensen, & Roll, Richard, 1969) and how event studies can be used to identify abnormal returns (MacKinlay, 1997).

Finally, the questions regarding if the company was profitable as business or to the investors or shareholders, on overall results the average were negative financial performance at least 18 months before the delisted announcement. The results were completely unexpected, if the company was experienced low ratio returns or low financial productivity during the last 18 months, then we expected lower return stock prices or at least considerable stock price deterioration.

The major number of delisted firms was during post regulatory and changes in law period, during 2004 and the major number of IPO's were before all the trading and globalization process of the country, before 2000. On the average there were no difference between the event day period and the previous stock prices, during the event period the average stock price was \$18.42 and almost twelve months before the event was \$17.66. The difference between the previous stock price and the event day decreases when is approaching the event day, that was completely unexpected, it means there were no abnormal loss or gains on the average.

For the second step or phase, we compared the stock price performance during the year previous to the cancellation period and firm financial performance previous to the 18 months to the delisted announcement we realized that there was a systemic flaw. Using long time frame analysis between financial markets expectations and firm financial results, we expected deteriorated stock price if the company was financially deteriorated, we were wrong. To assess the abnormal stock price performance we used the event study methodology using parametric and nonparametric data and different periods, the results were unexpected so we divide the statistical test in two parts, in this document we show only the parametric results with different

periods of analysis using between 106 and 270 days stock price analysis (Corrado, 1989). We leave the comparison between nonparametric results and parametric results for further agenda, because statistical results were different between both methodologies in this specific emerging market (Bartholdy, Olson, & Peare, 2007). We used the following formula to calculate the Abnormal Return *ARo*:

$$ARo = Ro - a - b X RMo$$
 (Fama et al., 1969)

Where the stock returns Ro is subtracted from the expected return market model, the market model parameters denotes a as the interception, and b the slope and RMo as the market return. Returns were calculated using the following formula: Ro = Logarithm (Stock Price t / Stock Price (t-1)) and RMo = Logarithm (Market Index t / Market index (t-1))

We used the following formula to access the excess returns see (Patell, 1976),

$$T_{\mathbf{P}} = \frac{1}{\sqrt{m}} \sum_{j=1}^{m} \frac{A_{j,0}}{\sqrt{\operatorname{Var}(A_{j,0})}}.$$

Where the m is the size sample, Aj, θ is the abnormal return on the event date and Var (Aj,θ) is the variance under the window event. Results are shown on Table 4, for the entire table every row is a different period of analysis using range of data of 259, 189, 132, and 103 days. And represent the overall results of abnormal returns for the 56 companies, rows on column 9 denotes p-values under different periods of days, there were no significant variation under different periods of analysis. Column 8 denotes the excess of returns under different periods of analysis, the abnormal returns increases dramatically as the control period is reduced and approaching to the window event. From 56 companies of analysis, nine companies experienced negative stock price performance, meaning that 47 companies did not experience abnormal returns during the delisting process. Table 4.1 denotes the results by firm.

	Table 4. Overall Statistical Results of Abnormal Returns on Delisted Firms												
1	2	3	4	5	6	7	8	9					
69.6	0.8	0.000	0.2	0.0	0.028	259	0.719	0.662					
58.3	0.5	0.000	0.1	0.0	0.029	189	0.913	0.663					
46.7	0.5	0.000	0.1	0.0	0.030	132	14.356	0.659					
39.4	-0.2	0.000	0.1	0.0	0.031	103	12.500	0.650					

(1) Kurtosis, (2) Skewness, (3) Intercept, (4) Slope, (5) R-Square, (6) Standar Error, (7) Days traded before the event day, (8) Abnormal Returns, (9) P Value

CONCLUSIONS

We explored using two different statistical tools to understand better the delisting process of the MSE, first we explored the circumstances and performance context under the company decide to go private again, at this level we realized that most of the companies were under financial stress and mostly of the cases financially deteriorated. Mostly of the firms experienced strategically decisions and active ownership exchange decisions to keep competing inside the industry. Also there were motives and reasons of why the delisted companies decided or stopped to be public, the results of reasons and motives match perfectly with previous research and similar studies in emerging markets.

Then we decide to explore using event statistical analysis if the financial markets react as expected when a public company released important information regarding the decision to stop trading into the financial market, our findings are not related with the expected and previous researches using delisted universe of firms, mostly of the companies did not experience significant change in the stock prices. We find evidence that there may be a systemic flaw regarding how the insider information is regulated in the MSE, also the evidence suggest that regulation around the delisting process can be improved to avoid moral hazard to the investors' interest, finally improving governance practices and transparency to listed companies can motive to the investors' risk return position to promote growth to the MSE and reverse the declining delisted trend.

ADDITIONAL TABLES

	Table 2 Cancel	led sto	cks from the Mexican Stock Exchange (19	080-2012)
#	Name	Class	Sector NAICS last available	Sector Economática
4	Agro Ind Exportador	A	Crop Production	Agri & Fisheries
15	Campus S.A.	A	Greenhouse, Nursery, and Floriculture Produ	Agri & Fisheries
61	Savia	A	Oilseed and Grain Farming	Agri & Fisheries
45	Hylsamex	L	Steel Product Manufacturing from Purchased	Basic & Fab Metal
69	Tubacero	A	Steel Product Manufacturing from Purchased	Basic & Fab Metal
70	Tubos de Acero Mex	Ord	Steel Product Manufacturing from Purchased	Basic & Fab Metal
76	Verzatec	Ord	Steel Product Manufacturing from Purchased	Basic & Fab Metal
57	Plavico, S.A. de C.	Ord	Basic Chemical Manufacturing	Chemical
58	Q.B. Industrias	A	Basic Chemical Manufacturing	Chemical
60	Regioem B		Paint, Coating, and Adhesive Manufacturing	Chemical
14	Bufete Industrial	CPO	Heavy Construction	Construction
38	Giconsa	Ord	Heavy Construction	Construction
56	Planeacion Y Proyec	В	Heavy Construction	Construction
3	Acer Latinoamerica		Computer and Peripheral Equipment Manufac	Electric Electron
46	Iem S.A.	В	Household Appliance Manufacturing	Electric Electron
2	Abaco GF	В	Banks, Credit Intermediation and Related Ac	Finance and Insurance
10	Banamex Accival GF	О	Banks (Depository Credit Intermediation)	Finance and Insurance
11	Banco Compartamos	О	Banks (Depository Credit Intermediation)	Finance and Insurance
12	BBV-Probursa GF	В	Banks (Depository Credit Intermediation)	Finance and Insurance
17	Cbi Gpo Fin	A	Securities, Commodity Contracts, and Other	Finance and Insurance
34	Gfbancrecer	В	Banks (Depository Credit Intermediation)	Finance and Insurance
35	Gfbbva Bancomer	В	Banks (Depository Credit Intermediation)	Finance and Insurance
36	Gfbital	L	Banks (Depository Credit Intermediation)	Finance and Insurance
37	Gfscotiainverlat	В	Banks (Depository Credit Intermediation)	Finance and Insurance
44	Gserfin Gpo Fin	A	Banks, Credit Intermediation and Related Ac	Finance and Insurance
48	Ixe Gpo Financiero	О	Banks (Depository Credit Intermediation)	Finance and Insurance
62	Seguros Com America	A	Insurance Carriers	Finance and Insurance
65	Sureste Gpo Fin	A	Finance and Insurance	Finance and Insurance
8	Argos Embotelladora	В	Beverage Manufacturing	Food & Beverage
19	Continental Grupo	Ord	Beverage Manufacturing	Food & Beverage
27	Embot Valle Anahuac	В	Beverage Manufacturing	Food & Beverage
39	GModerna	Α	Other Food Manufacturing	Food & Beverage
49	Maizoro Sa de Cv	Ord	Grain and Oilseed Milling	Food & Beverage
54	Pepsigx (Gemex)	CPO	Beverage Manufacturing	Food & Beverage
75	Valle Jugos Del	В	Beverage Manufacturing	Food & Beverage
1	A C Mexicana	A1	Agriculture, Construction, and Mining Machin	Industrial Machin
55	Perkins Motores	В	Engine, Turbine, and Power Transmission Equ	
7	Apasco S.A.	Ord	Cement and Concrete Product Manufacturing	Nonmetallic Min
5	Almacenadora Acce	Ord	Warehousing and Storage	Other

	Table 2 Cancelled st	ocks fr	om the Mexican Stock Exchange (1980-20	112) Continued
9	Axis Sistemas	В	Administrative and Support Services	Other
22	Diana Editorial	В	Newspaper, Periodical, Book, and Database	Other
24	Dixon Ticonderoga		Other Miscellaneous Manufacturing	Other
26	Ece S.A.	Ord	Food Services and Drinking Places	Other
31	Gaccion	В	Real Estate	Other
33	Gemp Priv Mex	В	Management of Companies and Enterprises	Other
52	Орсар	В	Management of Companies and Enterprises	Other
63	Sidek Grupo	A	Traveler Accommodation	Other
64	Situr Grupo	В	Traveler Accommodation	Other
72	Union de Capitales	В	Management of Companies and Enterprises	Other
77	Video Visa Gpo	Ord	Other Amusement and Recreation Industries	Other
28	Empaques Ponderosa	В	Pulp, Paper, and Paperboard Mills	Pulp & Paper
6	America Telecom	A1	Telecommunications	Telecommunication
13	Biper S.A de C.V.	В	Telecommunications	Telecommunication
16	Carso Global Teleco	A1	Telecommunications	Telecommunication
47	Iusacell Gpo	Ord	Telecommunications	Telecommunication
67	Telmex Interna	A	Telecommunications	Telecommunication
71	Unefon	A	Telecommunications	Telecommunication
21	Covarra Grupo	Ord	Fabric Mills	Textile
53	Parras Cia Indus	Ord	Fabric Mills	Textile
66	Synkro Industrias	A	Apparel Knitting Mills	Textile
20	Control de Farmacia	В	Health and Personal Care Stores	Trade
25	Duty Free Sa de Cv		Other General Merchandise Stores	Trade
29	Ferrioni, S.A. de C	Α	Clothing and Clothing Accessories Stores	Trade
30	Fotoluz Corp	В	Sporting Goods, Hobby, and Musical Instrum	Trade
32	Gcorvi	A	Grocery and Related Product Wholesalers	Trade
40	Gomo	Ord	Electrical Goods Wholesalers	Trade
41	Gprove Quim	В	Chemical and Allied Products Wholesalers	Trade
42	Gsalinas Y Rocha	В	Furniture Stores	Trade
43	Gsanborns	B-1	Other General Merchandise Stores	Trade
50	Maq Diesel S. A.	В	Machinery, Equipment, and Supplies Wholesa	Trade
51	Nadro S.A.	В	Farm Product Raw Material Wholesalers	Trade
68	Tenedora US	B-1	Electronics and Appliance Stores	Trade
73	Universidad CNCI	В	Electronics and Appliance Stores	Trade
74	US Commercial	B-1	Electronics and Appliance Stores	Trade
18	Cintra S.A.	Α	Scheduled Air Transportation	Transportat Serv
59	Qtel S.A.	В	Rail Transportation	Transportat Serv
23	Dina Grupo	Ord	Motor Vehicle Manufacturing	Vehicle & Parts

	Ta	ble 3.	Reaso	ns (of delisted	d, stock p	rice and f	inancial p	erformar	ice.		
#	Name	(1)	(2)	(3)	(4)	270*	180*	120*	90*	(5)	(6)	(7)
1	Acer Latinoamerica	1996	2000	4	\$ 5.98	\$ 3.36	\$ 3.52	\$ 3.84	\$ 4.18	-10.0%	-49.5%	Mar-00
2	Agro Ind Exportador	1996	2005	2	\$ 0.06	\$ 0.09	\$ 0.08	\$ 0.07	\$ 0.07	-42.6%	-208%	Aug-05
3	Apasco S.A.	1981	2004	4	\$118.0	\$ 90.2	\$ 95.8	\$101.9	\$106.8	3.2%	30.7%	Jun-04
4	Argos Embotelladora	1998	2003	2	\$16.00	\$21.46	\$20.83	\$19.88	\$19.86	10.8%	14.6%	Jul-03
5	Axis Sistemas	1995	1998	4	\$ 3.40	\$ 2.80	\$ 2.82	\$ 2.89	\$ 2.96	7.7%	18.3%	Nov-98
6	Banamex Accival GF	1991	2001	1	\$15.58	\$17.12	\$18.54	\$20.13	\$21.04	2.6%	20.7%	Jul-01
7	Banco Compartamos	2007	2011	1	\$67.50	\$83.53	\$80.59	\$77.93	\$78.36	17.5%	35.5%	Oct-11
8	BBV-Probursa GF	1995	2000	1	\$ 0.97	\$ 1.10	\$ 1.14	\$ 1.08	\$ 1.02	0.6%	6.8%	Aug-00
9	Biper S.A de C.V.	1997	2007	2	\$230.0	\$242.6	\$239.9	\$236.9	\$234.0	28.1%	418.0%	Oct-07
10	Bufete Industrial	1993	1999	3	\$ 5.50	\$15.41	\$14.09	\$12.76	\$12.40	-8.8%	-68.7%	Jul-99
11	Campus S.A.	1998	2005	2	\$ 0.12	\$ 0.12	\$ 0.12	\$ 0.12	\$ 0.12	12.8%	15.1%	Jul-05
12	Carso Global Teleco	1996	2010	1	\$64.00	\$61.63	\$61.97	\$61.90	\$62.03	4.2%	22.5%	Jun-10
13	Continental Grupo	1991	2011	4	\$43.23	\$35.30	\$36.51	\$37.72	\$39.23	14.5%		
14	Control de Farmacia	1994	2003		\$ 4.50	\$ 7.50	\$ 6.90	\$ 6.12	\$ 5.32	-2.2%		
15	Covarra Grupo	1997	2001	3	\$ 0.60	\$ 0.76	\$ 0.75	\$ 0.75	\$ 0.69	-8.7%	-37.8%	
16	Diana Editorial	1998	2006	1	\$ 0.80	\$ 0.79	\$ 0.79	\$ 0.79	\$ 0.79	-4.2%	-13.8%	May-06
17	Dina Grupo	1993	2001	3	\$ 0.25	\$ 0.95	\$ 0.55	\$ 0.36	\$ 0.32	-39.0%	-329%	Aug-01
18	Dixon Ticonderoga	1994	2006	2	\$ 7.85	\$ 6.98	\$ 6.96	\$ 7.04	\$ 7.10	4.0%	7.3%	Nov-06
19	Duty Free Sa de Cv	1997	2001	1	\$ 8.00	\$ 8.02	\$ 8.00	\$ 8.00	\$ 8.00	20.4%	53.3%	Apr-01
20	Ece S.A.	1997	2001	3	\$ 0.10	\$ 0.18	\$ 0.15	\$ 0.15	\$ 0.14	-31.3%	-107.9%	Apr-01
21	Embot Valle Anahuac	1993	2000	1	\$ 5.90	\$ 5.05	\$ 5.05	\$ 5.69	\$ 6.12	-0.3%	-0.6%	Aug-00
22	Empaques Ponderosa	1996	2005	2	\$ 0.90	\$ 0.67	\$ 0.65	\$ 0.67	\$ 0.70	-158.2%	-199.3%	Jan-05
23	Ferrioni, S.A. de C	1994	2000	1	\$ 4.90	\$ 2.25	\$ 2.23	\$ 2.38	\$ 2.54	10.7%	10.6%	Apr-00

⁽¹⁾ correspond the year of the company IPO, (2) Is the delisting year, (3) Is the primary reason of delisting,

^{#1} correspond to Acquisition, #2 correspond to Delisted, Compliance and Low Operation, #3 is related to

Restructuring and #4 is Merger. (4) Event day stock price and (*) Stock price during different periods in days

⁽⁵⁾ Return on Assets ROA, (6) Return on Equity (ROE), (7) delisted month and year

	Table 3.	Reaso	ons of	deli	sted, stoc	k price a	nd financ	ial perfor	mance. (C	Continue)		
#	Name	(1)	(2)	(3)	(4)	270*	180*	120*	90*	(5)	(6)	(7)
24	Fotoluz Corp	1994	1998	2	\$ 0.10	\$ 0.12	\$ 0.11	\$ 0.10	\$ 0.10	-3.0%	-234.1%	May-98
25	Gaccion	1997	2005	1	\$ 9.50	\$ 6.46	\$ 6.86	\$ 7.54	\$ 8.15	1.1%	2.2%	Mar-05
26	Gcorvi	1996	2007	1	\$ 3.69	\$ 8.11	\$ 7.72	\$ 7.08	\$ 6.23	2.0%	7.4%	Jul-07
27	Gfbbva Bancomer	1991	2004	1	\$ 3.69	\$ 9.44	\$ 9.72	\$10.12	\$10.34	1.6%	12.5%	Mar-04
28	Gfbital	1991	2002	1	\$11.65	\$ 7.45	\$ 8.07	\$ 8.69	\$ 9.40	0.4%	5.8%	Nov-02
29	Giconsa	1994	2000	1	\$ 4.85	\$ 5.35	\$ 5.52	\$ 5.49	\$ 5.49	-8.4%	-30.2%	Dec-00
30	GModerna	1987	2009	1	\$82.90	\$80.87	\$81.90	\$82.65	\$82.69	8.7%	12.6%	Jan-09
31	Gomo	1997	2008	2	\$ 0.27	\$ 0.76	\$ 0.73	\$ 0.70	\$ 0.68	-1.2%	-2.7%	Jul-08
32	Gprove Quim	1998	2004	1	\$ 3.00	\$ 3.01	\$ 3.01	\$ 3.01	\$ 3.01	-3.0%	-5.6%	Apr-04
33	Gsalinas Y Rocha	1991	1999	3	\$ 2.27	\$ 5.83	\$ 5.01	\$ 3.98	\$ 3.29	0.1%	-44.8%	Feb-99
34	Gsanborns	1999	2006	1	\$25.69	\$21.68	\$22.73	\$22.65	\$22.56	10.6%	21.9%	Aug-06
35	Hylsamex	1994	2005	1	\$36.00	\$33.90	\$36.38	\$36.98	\$37.01	16.9%	34.3%	Oct-05
36	Iusacell Gpo	1994	2010	2	\$48.99	\$47.05	\$48.07	\$49.23	\$49.03	-16.4%	-176.1%	May-10
37	Ixe Gpo Financiero	1994	2010	4	\$15.43	\$14.46	\$15.39	\$15.75	\$15.68	0.3%	3.8%	Jun-10
38	Maizoro Sa de Cv	1996	2003	1	\$ 6.20	\$ 2.33	\$ 2.40	\$ 2.51	\$ 2.62	-1.3%	-2.6%	Apr-03
39	Maq Diesel S. A.	1996	2007	1	\$25.89	\$15.36	\$18.64	\$22.11	\$23.25	11.0%	28.1%	Mar-07
40	Nadro S.A.	1985	2004	1	\$ 6.70	\$ 5.54	\$ 5.79	\$ 6.09	\$ 6.08	6.0%	13.1%	Oct-04
41	Parras Cia Indus	1981	2008	3	\$ 0.40	\$ 1.33	\$ 1.30	\$ 1.24	\$ 1.18	-18.0%	-511.0%	Oct-08
42	Pepsigx (Gemex)	1990	2002	1	\$17.45	\$12.41	\$14.30	\$16.00	\$16.44	4.6%	10.4%	Oct-02
43	Planeacion Y Proyec	2003	2006	2	\$24.05	\$16.62	\$16.63	\$16.69	\$16.75	3.6%	8.4%	May-06
44	Regioem B	1989	2004	2	\$ 2.95	\$ 2.06	\$ 2.12	\$ 2.19	\$ 2.23	2.1%	3.5%	May-04
45	Savia	1989	2005	2	\$ 0.80	\$ 0.88	\$ 0.94	\$ 1.02	\$ 1.03	-71.7%	-127.5%	Apr-05
46	Sidek Grupo	1980	1999	2	\$ 0.17	\$ 0.28	\$ 0.18	\$ 0.11	\$ 0.10	-17.9%	-138.1%	Mar-99
47	Situr Grupo	1991	1999	2	\$ 0.18	\$ 0.14	\$ 0.13	\$ 0.10	\$ 0.09	-19.8%	-338.1%	Mar-99
48	Synkro Industrias	1966	1998	3	\$ 1.20	\$ 1.21	\$ 1.21	\$ 1.21	\$ 1.21	-25.2%	-48.7%	Mar-98
49	Tubos de Acero Mex	1956	2002	1	\$15.62	\$16.63	\$17.33	\$17.17	\$17.04	5.4%	8.9%	Dec-02
50	Unefon	2000	2005	2	\$ 3.00	\$ 3.01	\$ 2.98	\$ 2.94	\$ 2.92	24.5%	139.7%	Jul-05
51	Union de Capitales	1991	2002	4	\$ 0.60	\$ 0.65	\$ 0.61	\$ 0.60	\$ 0.60	-339%	-340%	Dec-02
52	Universidad CNCI	1997	2011	1	\$ 0.32	\$ 0.30	\$ 0.30	\$ 0.30	\$ 0.30	-0.6%	-2.2%	Nov-11
53	US Commercial	2002	2007	1	\$ 1.30	\$ 1.30	\$ 1.27	\$ 1.27	\$ 1.28	-85.7%	-630%	Dec-07
54	Valle Jugos Del	1994	2007	1	\$ 64.0	\$ 47.9	\$ 58.1	\$ 65.5	\$ 65.7	-10.9%	-47.9%	Jul-07
55	Verzatec	2006	2008	1	\$ 7.95	\$ 7.36	\$ 7.20	\$ 7.12	\$ 7.04	4.5%	7.2%	Feb-08
56	Video Visa Gpo	1994	2001	3	\$ 0.80	\$ 1.00	\$ 0.95	\$ 0.94	\$ 0.93	-47.8%	-94.1%	Apr-01

	Table	4.1 Summ	ary of stati	istical data	using 270	days as pe	riod of ana	alysis		
#	Name	1	2	3	4	5	6	7	8	9
1	Acer Latinoamerica	31.8	4.004	0.0014	0.6985	0.0763	0.0447	276	-0.2149	0.8298
2	Agro Ind Exportador	38.7	-3.933	-0.0057	0.4482	0.0019	0.0930	270	-0.8472	0.3969
3	Apasco S.A.	30.6	1.981	0.0013	0.2926	0.0302	0.0145	272	-1.2479	0.2121
4	Argos Embotelladora	76.8	-5.775	-0.0005	0.0045	0.0000	0.0143	276	-0.0402	0.9679
5	Axis Sistemas	133.7	10.127	0.0008	0.0078	0.0002	0.0114	276	0.0707	0.9436
6	Banamex Accival GF	26.4	3.024	0.0019	1.1321	0.4298	0.0212	276	0.5726	0.5669
7	Banco Compartamos	11.3	-0.382	-0.0004	1.1189	0.1833	0.0239	262	-0.2555	0.7983
8	BBV-Probursa GF	11.6	0.583	-0.0010	0.8116	0.1867	0.0356	270	0.8143	0.4155
9	Biper S.A de C.V.	66.5	6.576	0.0008	0.0174	0.0002	0.0150	270	2.0512	0.0402
10	Bufete Industrial	31.5	1.247	-0.0016	-0.1593	0.0097	0.0391	269	4.1820	0.0000
11	Campus S.A.	126.5	0.000	0.0000	0.0270	0.0061	0.0071	270	-0.0284	0.9773
12	Carso Global Teleco	27.7	0.437	-0.0001	0.6500	0.0896	0.0187	270	-0.3156	0.7523
13	Continental Grupo	14.5	2.097	0.0012	0.2442	0.0195	0.0149	270	1.1458	0.2519
14	Control de Farmacia	218.0	-13.931	-0.0027	-1.4404	0.0223	0.1355	270	0.0472	0.9623
15	Covarra Grupo	46.6	-3.442	-0.0011	0.1557	0.0041	0.0443	270	-0.0278	0.9778
16	Diana Editorial	70.5	0.000	0.0000	0.0001	0.0000	0.0015	158	-0.0003	0.9998
17	Dina Grupo	4.7	-0.816	-0.0079	0.1848	0.0052	0.0549	269	5.4995	0.0000
18	Dixon Ticonderoga	20.3	0.364	0.0003	-0.0192	0.0028	0.0052	270	0.0532	0.9576
19	Duty Free Sa de Cv	42.8	1.207	0.0001	0.0389	0.0048	0.0075	270	-0.0145	0.9885
20	Ece S.A.	25.1	-3.105	-0.0030	-0.0496	0.0021	0.0225	270	-5.7739	0.0000
21	Embot Valle Anahuac	60.6	-2.547	0.0000	0.0024	0.0000	0.0375	270	-0.0008	0.9994
22	Empaques Ponderosa	39.4	-1.120	0.0012	-0.0734	0.0014	0.0189	269	5.6037	0.0000
23	Ferrioni, S.A. de C	179.9	11.857	0.0032	-0.0955	0.0015	0.0466	270	0.0677	0.9461
	(1) Kurtosis, (2) Skewn traded before the ever				-	(6) Standa	r Error, (7)	Days		

	Table 4.1 Su	ımmary of	statistical	data using	g 270 days a	s period o	f analysis	(Continu	ie)	
#	Name	1	2	3	4	5	6	7	8	9
24	Fotoluz Corp	81.6	-5.570	0.0001	0.0630	0.0019	0.0264	270	-0.0030	0.9976
25	Gaccion	229.9	14.809	0.0021	-0.0489	0.0003	0.0267	270	0.0829	0.9339
26	Gcorvi	251.7	-15.736	-0.0043	0.1760	0.0008	0.0711	270	-0.1160	0.9077
27	Gfbbva Bancomer	11.8	1.706	-0.0004	0.8430	0.2614	0.0122	270	0.8334	0.4046
28	Gfbital	22.0	2.835	0.0023	0.1377	0.0038	0.0304	270	0.9453	0.3445
29	Giconsa	59.9	6.168	0.0015	0.0400	0.0045	0.0126	270	10.0462	0.0000
30	GModerna	255.1	15.909	0.0002	-0.0062	0.0021	0.0030	270	0.0359	0.9714
31	Gomo	18.4	-0.640	-0.0023	0.1236	0.0040	0.0293	270	-0.1382	0.8901
32	Gprove Quim	260.0	-16.125	0.0000	-0.0001	0.0000	0.0002	270	0.0401	0.9680
33	Gsalinas Y Rocha	19.9	-2.295	-0.0043	-0.0082	0.0000	0.0349	269	-0.1123	0.9106
34	Gsanborns	16.2	1.160	0.0002	0.4587	0.1528	0.0157	270	0.0913	0.9272
35	Hylsamex	6.3	-0.531	0.0004	0.8327	0.1176	0.0217	270	1.1706	0.2418
36	Iusacell Gpo	10.2	0.873	0.0000	0.3671	0.0609	0.0167	270	-1.1318	0.2577
37	Ixe Gpo Financiero	11.1	0.663	0.0011	0.1384	0.0257	0.0097	270	-0.0639	0.9490
38	Maizoro Sa de Cv	212.4	14.062	0.0017	0.0215	0.0002	0.0220	270	0.0842	0.9329
39	Maq Diesel S. A.	97.9	8.930	0.0049	0.0655	0.0010	0.0297	270	0.1695	0.8654
40	Nadro S.A.	27.5	3.253	0.0004	0.0206	0.0001	0.0178	270	0.0330	0.9737
41	Parras Cia Indus	96.3	-8.072	-0.0012	0.0405	0.0006	0.0267	270	24.9447	0.0000
42	Pepsigx (Gemex)	10.7	-0.010	0.0029	0.1604	0.0071	0.0261	270	-0.2601	0.7948
43	Planeacion Y Proyec	259.9	16.118	0.0017	-0.1499	0.0042	0.0234	270	0.1685	0.8662
44	Regioem B	166.5	12.637	0.0008	-0.0549	0.0039	0.0094	270	0.0749	0.9403
45	Savia	17.5	1.807	0.0018	0.5529	0.0088	0.0560	270	-0.3389	0.7347
46	Sidek Grupo	104.7	-9.069	-0.0083	0.1886	0.0036	0.0737	270	-4.0303	0.0001
47	Situr Grupo	13.9	1.750	-0.0002	0.6473	0.0313	0.0849	270	-3.3610	0.0008
48	Synkro Industrias	1.4	0.064	-0.0035	0.5412	0.0293	0.0391	35	-0.1030	0.9180
49	Tubos de Acero Mex	1.5	0.242	0.0011	0.3967	0.0800	0.0189	269	0.3061	0.7596
50	Unefon	69.5	-6.078	-0.0002	-0.0246	0.0047	0.0033	262	-0.0414	0.9670
51	Union de Capitales	48.3	-0.547	-0.0014	0.2472	0.0083	0.0390	270	-0.0520	0.9586
52	Universidad CNCI	14.0	1.991	0.0007	0.1096	0.0036	0.0204	269	0.1713	0.8640
53	US Commercial	67.2	5.004	-0.0011	0.2852	0.0149	0.0297	269	-0.1122	0.9106
54	Valle Jugos Del	19.7	3.774	0.0036	0.1234	0.0047	0.0211	270	0.0389	0.9689
55	Verzatec	6.2	-0.452	-0.0001	0.2258	0.0315	0.0185	270	0.4029	0.6870
56	Video Visa Gpo	145.6	-11.386	-0.0016	-0.0002	0.0000	0.0131	270	-0.1214	0.9034

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PERCEIVED BENEFITS OF FLEXIBLE WORKING ARRANGEMENTS – A FACTOR ANALYSIS

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ABSTRACT

In the 1970s, women in Malaysia began to participate in paid labour, whereby a six day week with a 9-to-5 schedule was the norm. However, in the last decade, there has been a change in the needs of our society which requires a diversity of work schedules as dual career families face the inability to organise their lives. There seems to be an increasing interest among women who want greater work-time and work-location flexibility, even though there are still a few who fear negative implications. Data from 400 female employees from 14 organisations in the services sector in Klang Valley, Malaysia was analysed to see the perceived potential benefits of flexible working arrangements at the workplace. The results using factor analysis indicate that more time for family and shorter commuting time were important perceived benefits of flexible working arrangements. Different working arrangements also showed female employees revealing differing perceptions. Implications of these findings for working women and some policy implications are also discussed.

Keyword – Flexible Working Arrangements, Workplace flexibility, Women in the labour force, Factorial Analysis.

INTRODUCTION

In the 1970s, women in Malaysia began to participate in paid labour, whereby a six day week with a 9-to-5 schedule was the norm. However, in the last decade, there has been a change in the needs of our society which requires a diversity of work schedules as dual career families face the inability to organise their lives. The demographic composition of the Malaysian workforce has changed rather dramatically over the last few decades, especially with the entry of more women into the labour force. In looking back, it all started with the introduction of the New Economic Policy (NEP), a development policy in the 1970s and the export-led industrialisation policies, through which young, single, local Malay women migrated from the rural areas to the urban sector, resulting in an increase in female labour force participation. Changes have taken place in the employment pattern of women in tandem with the structural transformation of the

economy from an agricultural-based to an industrial-based economy, and thereafter to a service based economy. As Malaysia's continuing industrial growth has seen a tightening labour supply, higher wages and a shift to higher skilled work, women have been able to tap into this new labour market and secure better returns and conditions. However, the female labour force participation rate of women has remained stable around 40% since 1990 and has increased to 47.6 per cent in 2012 (Malaysia, Labour Force Survey Report, 2012).

Females have also been disproportionately concentrated in community services working as nurses, teachers and social workers (Malaysia, Labour Force Survey Report, 2012) which all show occupations with some form of flexibility at the workplace. While the United Nations Report (2011) identified workplace rigidity and child care responsibilities as major issues of concern in women's employment rate, women's participation in the Malaysian labour force has been stagnating at around 40 per cent in the last three decades (UNDP, 2011). One of the immediate measures recommended to increase female labour force participation in Malaysia was flexible working arrangements (FWAs).

In the last decade, the workforce includes more dual-earner couples who have responsibility for the care of children or elderly dependents and juggling the demands of the workplace and the home has become a more difficult balancing act. One of the tools likely to be widely used to keep people in jobs will be FWAs such as flexi time, part time work, teleworking and working from home. While many studies have shown that this non-conventional mode of employment can benefit both employers and employees (Mccann, 2004; Hill, Martinson et al., 2004), this mode of employment is still relatively "new" among many female employees in Malaysia. Even though there are still a few female employees who fear negative implications of workplace flexibility in the form of a threat to career progression, micro level studies have shown the growing interest among female employees in flexible working arrangements (Subramaniam, Ali & Overton, 2010).

In an attempt to understand the low participation of women in the labour force in Malaysia, this study tries to examine whether there is any relationship between FWAs and women's work in paid labour. This is investigated in the context of how working women perceive the advantages of work arrangements which are flexible. The paper finally concludes with discussions on whether child care facilities and other family friendly policies might have an effect on women's well-being.

The paper proceeds as follows: Section 2 reviews literature on the benefits and disadvantages of FWAs to working women. Section 3 describes the methodology used in the study while Section 4 describes the demographic profile of the respondents. Section 5 discusses the findings of the quantitative study and Section 6 concludes with discussions on possible workplace reforms which may be useful to enable women to manage work and family and increase women's participation in paid labour.

LITERATURE REVIEW

Workplace Flexibility (2010) defines a "flexible work arrangement" (FWA) as any one of a spectrum of work structures that alters the time and/or place that work gets done on a regular basis. FWAs are work practices (explained by the employer in employment policies and contracts) that allow the employees a certain degree of freedom in deciding how the work will be done and how they'll coordinate their schedules with those of other employees. The employer sets certain limits such as minimum and maximum number of hours of work every day, and the core time during which all employees must be present. FWAs include flexibility in the scheduling of hours worked, such as alternative work schedules, e.g., flex time and compressed work-weeks), and arrangements regarding shift and break schedules; flexibility in the amount of hours worked, such as part-time work and job shares; and flexibility in the place of work, such as working at home or at a satellite location. The workplace of the future is one that will be driven by new energy and with vision and workplace flexibility and worker-friendly management strategies are becoming more important now.

The introduction of FWAs date back as early as 1972, where Allenpach found that the pioneering German firm which initially adopted the system of flexible working hours was motivated by individual psychology of encouraging staff to work full swing in a tight labour market. However, the emphasis moved to the importance of recognising workers' needs for respect and appreciation and the aspiration towards self-fulfillment was only analysed later when the wide implications of the system were understood. It was also more as a means of relieving transit and commute problems and thereafter as a means to attract women with family responsibilities into the workforce.

FWAs are often considered to be essential components of 'family friendly policies' and are widely seen as the ideal means to achieving a more balanced work and home life. Research has found that FWAs benefit the employees in terms of individual, family and job perspectives. Available literature clearly casts FWAs as having a powerful and positive effect on employee attitudes which leads to job satisfaction (Lietchy & Anderson, 2007; Almer & Kaplan, 2001). As FWAs such as part-time work and flexi time give employees longer blocks of personal time and cuts down on commuting time, studies show that the integration of family and work through well designed FWAs represents an opportunity to the stakeholders to improve the employee relationship and also the organisational outcomes.

Most of the reasons why female employees want FWAs centers on family responsibilities and work life balance (Liechty & Anderson (2007). Studies in UK (Cole, 2006) and US (Hotchkiss, 2006) revealed that "spending time with family" was the most popular reason why women opted for FWAs. Studies have shown that an organisation which values its employees and recognises the importance of work life balance stands to win in terms of staff morale and commitment (Liddicott, 2003; Nadeem & Hendry, 2003). Employers' should begin by revamping their recruitment policies to facilitate work life balance. Flexible working

arrangements if used with quality practices at the workplace can actually become the core of human resource management and lead to good work performance and higher productivity (de Menezes & Wood, 2006; Hau & Chew, 2006). As argued by Liechty & Anderson (2007), FWAs are beneficial for both employers and employees and they also further described how highly it is valued by elderly parents whose children work under FWAs.

Some trend studies show that the new concept of part-time work influences the ability of mothers with young children to balance work and family responsibilities (Jeffrey et al., 2004). As Pacilli (2008) argues, mothers will be less likely to leave the labour market if more part-time jobs are available. This concept of part-time jobs and family friendly policies such as FWAs will enable more women to contribute to both work and home. With more flexible work and part-time work, literature suggests that possible benefits for these young mothers will be better monitoring of the children and more equality time with the children.

In the neighbouring country of Singapore, the Civil Service introduced flexi time as early as in 1970 with the main objective of easing traffic congestion during peak hours. But today, it is favourably received by staff as it enables better work life balance and the scheme has helped to better attract and retain valuable talents. As a result, FWAs lead to an increase in productivity, a more efficient organisation of work, application of more scientific methods of management and ultimately an increase in the productivity of the economy as a whole. When implemented with both employer and employee interests in mind, flexible work schedules can increase efficiency, work focus, and empower individuals to self-manage work time (Halpern, 2005; Kossek, 2005).

On the other hand, some research shows that FWAs though have many advantages and benefits the women employees, this working system can be negatively perceived in terms of career progression, relationship with colleagues and work performance (Kapler & Almer, 2000). There seems to be a trade-off between potential negative repercussions and work life balance, which means that not necessarily all women employees will take up the offer of FWAs. The question of whether workers "choose" and prefer FWAs to standard employment has been widely explored in the western countries (Blank, 1990; Blossfeld & Hakim, 1996; Meiksins & Whalley, 2002; Negrey, 1991; Tilly, 1996) but less is specifically known about whether FWAs are a solution to work-family demands in Malaysia. This study thus examines how Malaysian women perceive the benefits of FWAs.

Based on the above review, the main question to be explored in this study is how Malaysian women perceive the benefits of work arrangements which are flexible in their bid to juggle work and home?

METHOD

The survey was conducted among women who were in paid work in selected organisations. Firstly, a list of companies in the services sector was prepared based on information provided by the Malaysian Employers Federation. Based on internet search,

interviews and reliable information, a list of organisations in the services sector which have FWAs were prepared. The organisations were sub-grouped further and the organisations which were identified were from the Finance, Logistics, Telecommunication, Petroleum Shared Services, Educational Institutions and professional sub-sectors.

The purposing sampling technique was employed to identify a total of seven organisations which have FWAs in the Klang Valley, the central business hub of Malaysia. Using the comparative method approach (Lijphart, 1971), the corresponding seven organisations which have fixed working arrangements were identified. To reduce selection bias, random sampling was done within each organisation where the women employees were selected at random by the human resource manager.

For this survey, 500 questionnaires were distributed, 250 to FWA organisations and 250 to non-FWA organisations. The response rate from FWA was 56 percent and from non-FWA was 44 percent and the usable sample size was 396.

Careful attention was given in the preparation of the questionnaire which was done in two stages. First, based on literature, questions that might capture the element of study were identified. This was further tested by holding roundtable discussions with employees in FWA and non-FWA organisations. Two focus group discussions were also conducted with employees and the human resource personnel of two organisations. Finalised questionnaires were tested using a pilot study. The questionnaire consisted of 4 parts: Part A consisted of 5 items on the demographic profile of the respondents; Part B consisted of 2 items on the income level; Part C consisted of 3 items on family responsibilities; and Part D consisted of 16 items to assess the Perceived Advantages of FWAs to the employees. The demographic, socio-economic factors and family responsibilities parts were generic in nature and the respondents were required to answer Parts A and B by ticking the boxes with the most appropriate answer. Part C which was on family responsibilities was answered by writing the correct answer in the blank space. For Part D, on 'Perceived Advantages', there were 16 items, in a five-point Likert scale section. The items were adapted from a model by Almer et al., (2003) and further enhanced with items from focus group discussion.

SPSS 20 was used to analyse the data. While descriptive statistics gave an overview of the characteristics of the respondents, factorial analysis was done to answer the main objective of the study on working women's perception of FWAs.

FINDINGS

A simple factor analysis was run, and it was found that the sixteen original items actually got represented by three factors. As a first step, an exploratory factor analysis was done using a varimax rotation to reduce dimensionality (Hair, et al., 2006). Next, looking at the eigenvalues, only three factors with values more than 1 were retained. Out of the 16 statements, only one statement had cross loading, that is "Productivity will improve" and as a consequence, this

question was eliminated from the factor analysis. The KMO (Kaiser Meyer Olkin) of 0.9 shows that the items stated explains the factors well and gave three factors which explain more than 68 per cent of the variability in the data. The fifteen statements were grouped into three factors, namely Workplace Satisfaction, Time Management and Family Relationship. The first factor, Job satisfaction and Work Quality (Workplace Satisfaction) captures the possible change in job commitment, job satisfaction and work quality associated with the uptake of FWAs at the workplace. The second factor, Autonomy and Time Related (Time Management) captures the possible change associated with autonomy, commuting time and productive time. This includes having autonomy on workplace location, working at the most productive time and saving on commuting time. The third factor, Positive Impact on Family Relationship (Family Relationship) captures effect of FWAs on family relationships, which includes siblings, children, spouse and parents.

Table 1 shows the items, factors and the factor loadings for "Perceived Advantages" of FWAs.

Table 1 – Items, Factors and Factor Loadings for 'Perceived Advantages'

Items	Factor	Loading	gs
	F1	F2	F3
My loyalty and job commitment will increase	.973		
My job satisfaction will increase.	.947		
My quality of work will improve.	.877		
My morale will improve because I feel treated as a responsible professional.	.783		
My stress level will be reduced.	.630		
I can save on commuting time.		.811	
I can avoid interruptions at the office and get work done later.		.760	
I have autonomy over my own time schedule.		.751	
I can work during hours when I am most productive.		.706	
It will allow more time for networking.		.651	
It will allow more time for family.		.578	
It will have a favourable effect on relations with my siblings.			.877
It will have a favourable effect on relations with my parents.			.869
It will have a favourable effect on relations with my spouse.			.857
It will have a favourable effect on relations with my children.			.785

Where,

- F1 refers to Workplace Satisfaction
- F2 refers to Time Management
- F3 refers to Family Relationship

Respondents were asked to indicate their opinions regarding the perceived advantages which could possibly be achieved as a result of using FWAs at the work place. The importance

of advantages was rated on a five-point-scale ranging from (1) strongly disagree to (5) strongly agree. If the mean value is higher, it suggests greater perceived advantage.

Table 2 shows the respondents' perceived advantages such as more time for family, save time on commuting, increase in job satisfaction and having autonomy over own time schedule. The mean ranges from 3.788 to 4.321. Though the highest mean and the lowest mean have to do with family relationships, the respondents found that time factor is more important than relationships factor as denoted by the mean value. They perceive that flexibility will allow more time which is an issue of scarcity. These rankings are almost equivalent to Thompson et. al.'s (1998) ranking of factors which motivate workers to telework, which is another form of FWA. This is an indication that FWAs offer female employees time flexibility, less commuting stress, more autonomy and better job satisfaction.

Table 2 – Perceived Advantages of the Respondents

Rank	Items	Mean	Std.
			Dev.
1	It will allow more time for family.	4.321	2.17
2	I can save on commuting time.	4.113	0.86
3	My job satisfaction will increase.	4.098	2.69
4	I have autonomy over my own time schedule.	4.081	0.82
5	I can work during hours when I am most productive.	4.081	0.83
6	My stress level will be reduced	3.984	0.88
7	My morale will improve because I feel treated as a responsible professional.	3.977	0.88
8	My productivity will improve.	3.957	0.79
9	My quality of work will improve.	3.931	0.81
10	My loyalty and job commitment will increase.	3.929	0.82
11	It will have a favourable effect on relationship with my children.	3.926	0.97
12	It will have a favourable effect on relationship with my parents.	3.884	0.92
13	I can avoid interruptions at the office and get work done later.	3.876	0.91
14	It will have a favourable effect on relationship with my spouse.	3.866	0.95
15	It will allow more time for networking.	3.836	0.87
16	It will have a favourable effect on relationship with my siblings.	3.788	0.90

CONCLUSION AND POLICY IMPLICATIONS

Overall, findings from this study indicate that most women who are older, more educated and earn a higher income are more interested in FWAs at the workplace. Women who have young children and are in their 30s are also the ones who are more interested in FWAs.

Working women perceive that the biggest advantage of FWAs will be to enable them to balance work and family responsibilities, allowing them more time for family. In the Klang Valley where traffic congestion is common, and most women commute to work in their own vehicle, FWAs will reduce commuting time and allow more flexibility to manage travelling to

and fro. Besides benefits of FWAs at juggling personal demands of family and commuting time, many women perceive that FWAs will benefit workplace satisfaction in terms of productivity, quality and also loyalty.

In this study, only three types of FWAs were studied, namely flexi time, part-time work and working from the home and hence, FWAs should not be treated as a package but provided as an option for employees. Although this study has several notable contributions which are relevant to women's low participation in the labour force in Malaysia, several issues need and can be investigated further. Firstly, the sample size could be increased. Secondly, this study focussed on the services sector, further studies could be done to examine primary and secondary sectors

In terms of policy implications, findings conclude that FWAs have an effect on women's work life balance, time management and workplace satisfaction and further suggest that FWAs may have an effect on encouraging more women to work in paid labour.

The results may be useful in developing specific public policies directly or indirectly to provide guidance for policy makers to encourage women's participation in paid labour. The Malaysian government should aim at direct policy initiatives which can be implemented in three modes to benefit women.

- First, an enabling environment has to be provided by the government in a more institutionalised structure to provide a good support system for child care and after school care which is affordable and also reliable to enable women to participate in paid work.
- The second policy initiative is to look at legislation which is more gender sensitive and family friendly, in step with changes in society. Clear provisions for part-time employment and protection for other non-standard employment such as working from home should be addressed.
- The third policy initiative which may encourage women to participate in paid labour is tax incentives or rebates for women with young children. This policy has already been implemented in the government sector but not in the corporate sector. These tax incentives should also be given to the employers to improve flexibility in the workplace, for purchase of enablers and to support family friendly work policies.

In this regard, the recent Malaysian Budget announced by the government on 25 October 2013, shows the government's seriousness in increasing female labour force participation to achieve the target of 55 percent by 2015. When tabling the National Budget 2014, the Malaysian Prime Minister Datuk Seri Najib Tun Razak, mentioned that FWAs could be implemented through compressed work week, flexi hours and weekend work. To further encourage Malaysian companies to adopt FWAs, he further said that the government proposes that training expenses and consultancy fees incurred by employers in implementing FWAs be given further tax deduction (Bernama, 2013).

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There is a great need for change in mindset to create a paradigm shift to recognise women's position in the society, their multiple capabilities, resilience and also capitalise on their multifaceted talents and contribution in various fields instead of treating them as a threat. This includes changing the mindset on the traditional roles of men and women, eliminating discriminatory practices and working towards gender equality. Society also needs to be made to realise that household chores and caring responsibilities are not a woman's domain anymore. There needs to be an emphasis that family responsibilities should not be marginalised as women's issue but should actually be addressed more as a national issue.

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ON THE INTEGRATION OF CRITICAL THINKING ELEMENTS INTO AN UNDERGRADUATE MANAGEMENT BEHAVIORAL SURVEY COURSE

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ABSTRACT

This paper details the development and deployment of a critical thinking enhanced, organizational behavior course. Where the past design for this class emphasized didactic learning, the redesigned course emphasized reflective writing and discussion. The contents detail the motivation for the change, the contents of the change and reflections on the implementation. Additionally, we discuss the outcomes of this transition as well as applications for other courses.

Keywords: critical thinking, reflective writing, education

The encouragement and development of critical thinking scholarship has long been a goal of post-secondary education. Specifically, within colleges and schools of business, the Association to Advance Collegiate Schools of Business (AACSB) considers improving critical thinking and communication skills central to the design of the modern MBA (LeClair, 2011). The enhancement of critical thinking skills appears to be a core element of the AACSB Redesign of Undergraduate Curriculum movement (Davis, 2013). Within higher education, critical thinking is considered "the hub around which all other educational ends cluster" (CriticalThinking.org, 2013a).

Despite the importance of critical thinking, there is reason to believe secondary education systems are failing in their mission to develop critical thinkers. Ackerman, Gross and Perner (2003) observe that while employers prefer critical thinking skills, they express doubts as to the critical and creative thinking skill sets of business graduates. Additionally, while Roksa and Arum (2012) support the position that employers prefer critical thinking - their data suggests that college graduates with advanced critical thinking skills were largely buffered from the effects of the Great Recession - the data also suggests that U.S. post-secondary education system is failing to develop this crucial skill. Arum and Roska's (2011) suggest that the critical thinking skill-set a student brings to college is largely the same one they possess upon leaving college. In their large, multi-university sample they "observe no significant gains in critical thinking, complex reasoning, and writing skills for at least 45 percent of the students" (pg. 36). Their findings are largely corroborated in the work of Pascarella, Blaich, Martin and Hanson (2011) who go on to indicate that the limited gains of modern college graduates are roughly half that of college graduates a few decades back.

The United States is producing the same proportion of graduates as it did forty-years ago (OECD, 2012). However, it appears that we providing less of an education than we once did. Compared to students a few decades back, evidence suggests that today's students engage in roughly half the study-time and routinely enter the classroom unprepared for the topic of the day (Pascarella et al., 2011). Additionally, students in their final year of education routinely report that they have not written a single paper of substantive length (Arum & Roksa, 2011).

The purpose of this paper is to describe the integration of critical thinking elements during the overhaul of a core undergraduate business course. In this behavioral course, the instructor transitioned from a textbook and lecture model to a reflective writing model. Doing so involved transitioning from the 'sage on the stage' model to more of a 'guide on the side' system. The results of this transition seems quite promising, students in the current course participate actively during class, engage in more reflective writing and manifest better communication of core course concepts. The remainder of this paper consists of four parts. First, we begin with a discussion of critical thinking and the various sources of motivation for the instructor's transition. Second, we describe the design of the system along with observations based on its deployment. Third, we offer a discussion of the course in action and potential limitations to this specific model. Finally, we offer a closing discussion reinforcing the need for more transitions of this nature.

REGARDING CRITICAL THINKING

Myriad definitions for critical thinking exist; Mulnix (2012) provides an excellent review of these definitions. She concludes that, "critical thinking is a process, a skilled activity of thought. It includes a commitment to using reason in the formation of our beliefs. It is not the same as creative, imaginative or emotion based thinking." (pg 471). Theda (2011) considers critical thinking to encompass identification and appropriate use of the right skills for the right situation while simultaneously recognizing and understanding the viewpoints and perspectives of others. Elder and Paul (2012) point out that despite being frequently tasked to evaluate and analyze, students generally lack a framework for analysis and similarly lack standards to evaluate the analysis of others or even of their own self.

Elder and Paul (2008) also observe that "instructors must design activities and assignments that require students to think actively within the concepts and principles of the subject" (pg. 32). In this regard, a critical thinking enhanced course resembles experiential learning, wherein "learning is the process of creating knowledge" (Kolb & Kolb, 2005, p. 194). Following Mulnix 2012 definition, envisioning critical thinking as a skill suggests that its success requires more than simply reading about it or watching it in action. She describes the development of critical thinking as "modeling the skill, having the student practice the skill, providing feedback on his performance, and some amount of natural talent" (pg. 474). Instructors do not control the natural talent level of the student and we are constrained by the current state of that talent at our point of intersection with the student. However, it is in our control to provide an environment of modeling, practicing and providing feedback. What is required is the motivation and guidance in the development and delivery of such a system.

Both systemic and personal interests motivated the redesign of the course in question. From a system perspective, our institution had elected to pursue critical thinking as a curriculum enhancement project for our school of business. Similarly, our University had designated critical thinking as a quality enhancement program. A number of faculty had been invited to participate in the development of critical thinking enhanced courses. To that end, the University had partnered with the Foundation for Critical Thinking in the planning and development of this transition (CriticalThinking.org, 2013a).

From a personal perspective, critical thinking had already been an important element of our course designs. Most of the courses we taught already contained intensive writing projects and one of the authors had developed a reading and discussion intensive graduate seminar. Similarly, one of the authors was involved with the school of business deployment of critical thinking and had participated in development of student self-directed critical thinking resources. Thus, with both individual and system motivation, a traditional lecture and textbook organizational behavior course was redesigned as a critical thinking enhanced course.

COURSE DESIGN ELEMENTS

The course in question is a senior level organizational behavior course. At our institution this is a survey course which is part of the core curriculum for all school of business undergraduate degree seeking candidates. While instructors vary in their required deliverables, this course is typically taught in a lecture/textbook survey model. In this sense, the course is generally deployed using a didactic model not uncommon to potentially high cap business courses (Gow, Kember, & Cooper, 1994).

It is critical to note that a key point in the design of the course is that students must be made aware of the expectations and standards. Arum and Roksa's (2011) work suggests that the critical thinking starting point for first generation and minority background students is quite low. Given the nature of our University enrollment, it was important to do more than simply toss the students into a system and expect them to perform well. Lectures during the first week of the course emphasized the elements of thought and standards of reasoning (Elder & Paul, 2012). Additionally, students were introduced to aspects of logical fallacies and fallacious reasoning (Mulnix, 2012). Further, the flow of individual course lectures was explained to students in a manner similar to that which we use to detail the same processes later in this section. In short, the first week of the course was devoted to the what, why and how of critical thinking, with the course content beginning in the second week.

Evidence suggests that student engagement and performance are directly impacted by faculty emphasis on high-impact activities like reflective learning (Kuh, 2009). Therefore, allocation of credit for course deliverables signals to students the importance (or relative lack thereof) for various course elements. In order for the critical thinking element of a course to be taken seriously, students must visibly see it impact their final grade outcomes. For purposes of this course redesign, 30% of the course grade came directly from critical thinking, reflective activities. 10% involved the completion of the weekly in-class reflective writing and discussion activities. The remainder came from completion of two open-ended reflection essay tests, which were developed from and based upon the in-class activities and discussions. Additionally, it was

explained to students that the more traditional objective tests used in the course had been designed selecting questions emphasizing higher-order thinking. Further, the group project assigned to the class involved selection, evaluation and description of contemporary organizational behavior peer-reviewed research. The success of each of these activities necessitated the student cultivation and use of their own critical thinking skills. Thus, while the course had a direct 30% critical thinking weight, the remainder of the course score was indirectly influenced by their successful application of the critical thinking elements.

Middendorf and Kalish (1996) observe that college students are only able to remain focused for roughly fifteen minutes of a lecture. Worse, after the fifth minute, retention and focus begin to degrade. This course redesign was built around 15-minute chunks. A 90-minute class, thus became five chunks with a bit of administrative time at the beginning and end of class. Similarly, a three hour night class was reconfigured as ten to eleven chunks with administrative time. One problem with direct application of Middendorf and Kalish's recommendations, though is that breaks every fifteen minutes happen too late. After five minutes, student engagement and recollection decay, by the fifteenth minute, the student is nearly fully disengaged. To this end, rather than applying the Middendorf and Kalish recommended interruptions, the fifteen minute chunks themselves were reconceived as passive, reflective or interactive moments.

To facilitate interactive and reflective moments, each chunk used a four-step model visualized in Figure One below. This process is consistent with Mulnix (2012) suggestion that developing critical thinking "involves modeling the skill, having the student practice the skill, (and) providing feedback on his performance" (pg. 474). Each moment involved a short instructor lecture, capped at five minutes. Following this, students were provided time for written reflection. Depending on the nature of the task, this reflection period might be up to a minute or as long as five minutes. After the reflective writing period, the class engaged in an interactive discussion for the remainder of the chunk. During the interactive element, students were encouraged to share their reflective writings with the instructor (and other students) offering feedback and encouragement.

Instructor provides discusses results write weflectively

Figure 1: Interactive and Reflective Moments

It is important to note that every class element was chunked and then subdivided into passive, reflective and interactive moments. Each topic, major theories, and recognized applications received the same treatment. Some activities such as the powerful and fundamental concepts, central questions and state-expand-explain-illustrate (SEE-I) writing techniques developed by the Foundation for Critical Thinking were repeated in every chapter and unit

(Louisville.edu, 2013). In other cases, topics were turned into reflective and interactive elements through use of data or queries as to the field-use of basic theory (e.g. how does one apply the principles of procedural justice?). Seven observations emerged during the deployment of this design.

Observation 1: Make them write

It is easy, albeit erroneous, to let the written element fall to the wayside in favor of direct student discussion. Students will, particularly early on, attempt to interject their thoughts without writing them. There are at least two reasons why this should be discouraged and avoided. First, discussion classes often devolve into a meeting of the minds between the instructor and a handful of students. Such "clique discussions" allow the more passive student to disengage from the class meeting. Forcing all students to write makes certain that even the less vocal ones remain focused on the activity. Second, verbal discussion often precludes variety. The first seemingly correct (or instructor endorsed) response can inadvertently cause all willing vocal participants to collapse their thoughts around that initial idea. Forced, silent writing time brings out a diversity of responses. In particular, for topics which have a variety of causes or effects, letting the students write and then prompting them to share their thoughts can help the class appreciate diversity and breadth beyond their individual initial perceptions.

Observation 2: Get a stopwatch

Given the importance of reflective writing, it is critical that the instructor lets the students write for an appropriate amount of time. For the student, five minutes to formulate and write down a complex thought is pretty brief. For the instructor at the front of the room, that five minutes seems much longer than it really is. While some recurring ideas (fundamental concepts and central questions) can have their time allotment compressed as the semester progresses and students become more practiced at these processes, others require a fixed length of time to complete. It is tempting to rush the writing, but it is better to give them an appropriate time frame to finish.

Observation 3: Deny Escape Trajectories

Students familiar with a didactic learning model are used to there being a right answer. They believe, from experience, that if they work at a problem long enough (or are given enough hints) they will come to the right answer. In a reflective writing exercise there are wrong answers, weak answers and strong answers. But there are rarely situations where a single correct answer manifests. The converse problem comes when students accept the multiplicity of correct answers. In these situations you run the risk that students decide that all answers are right answers and thus any response is acceptable. It is important to design activities that prevent them from falling into these traps (or force them to exit them).

One way to do this is to use ordinal ranking. Give them a list of possible alternatives and force them to rank order them, with an explanation of why each ranking is assigned. Deny the ability to create ties and consider allowing them to weight responses after they have ranked them. In this way they can make things a close second, a distant third, or the like. As an example, this technique was utilized in a discussion of ethics and values with each student sharing their three principle values. Forcing the sorting and weighting created an opportunity to show variety of responses across students while also noting which values were common among most students.

Another problem we have encountered is the situation where the student draws upon their own experience and projects it onto a theory base. As an illustration, when studying national culture and Hofstede's dimensions of culture (Hofstede, 2013), North American students often conflate individualism with masculinity. Their only basis for understanding these values lies in their own experience set and those two values comingle in their reality. However these are independent dimensions for a reason. It is important to design activities that force the student to untangle their own assumptions.

Scatter plots become a good opportunity to confront this prejudice. Continuing with the Hofstede example, the United States and Japan are similar in masculinity/aggressiveness while quite different on individualism/collectivism. Additionally, the United States and Norway are similar on individualism while quite different on masculinity/aggressiveness. Preparing a scatter plot of these two Hofstede dimensions for these three countries allows the instructor to present the students with something that appears to them as a conundrum. How can each pair be so similar in one way, but so different in the other? Working through this dichotomy assists students in coming to terms with their own biased framework and helps them broaden their perspective on values.

Related to the issue above, students often are challenged stepping outside of their own biases. Indeed, as they are usually blind to their biases, they cannot help but be constrained by them. We find that contrast and reflection (mirror) questions help them to observe their own biases. As an example, while discussing personality we address the Myers-Briggs typology. We provide them with an illustration that North Americans are typically more prone to sensing than intuiting. We point out that in all likelihood the class itself is comprised primarily of sensing individuals. Given the nearly 2:1 ratio of sensing to intuiting individuals in the overall U.S. population, it stands to reason that the world they live in was largely made by and for sensing individuals. What would it look like if it were the opposite? A question like this tasks students to integrate the meaning of the dimension, an examination of their world, identification of world and dimension overlap and then to finally identify a converse environment.

The key in each activity is to not provide an "easy out" question. Provide written tasks that require the student to face their biases and assumptions. Help them to confront the fallacies in those assumptions and then help guide them to a broader perspective. Activities like these prove challenging - but rewarding - to students. The discussion which follows is often lively and insightful.

Observation 4: Encourage Failure

"Good judgment is the result of experience and experience the result of bad judgment."

Mark Twain

Students often perceive dichotomies where answers are wrong or right. Within this deployment, we try to stress the idea that answers can be wrong, weak or strong. Strong answers make use of the right concepts and ideas, but also link those ideas together logically while using precise terms that do not comingle concepts. In our experience, students are not practiced at this activity and it is important to use the classroom as a learning laboratory. This means students must be willing to make and learn from their errors. We try to stress the idea that the classroom is the right place to fail and the right place to learn from failure.

For the instructor, this means playing the role of an encouraging coach. Encourage attempts and recognize the value and contribution of the attempts. Try not to correct students overtly, rather try to use follow up questions to help the student correct themselves. Some example questions follow.

- 1. What do you mean by this term?
- 2. Can you be more specific?
- 3. How would that work?
- 4. Would you place element-x ahead of element-y?
- 5. Why do you think that happens?

Try to assist students in reaching a point, but try not to jump ahead to that point. In many cases, a student reading their answer will notice that their written reflection has a problem, but they won't necessarily know how to correct or strengthen that answer. Complement them as they make progress. Additionally share with them areas and elements that challenge you, the process becomes more enjoyable for all when shared learning moments occur.

Observation 5: Get everyone involved

In most undergraduate classes you will have at least a few students who are comfortable and confident enough to engage immediately. Leverage off of those students to get the dialog moving, but it is just as important to avoid letting those students dominate the lecture. Find ways to bring other students into the conversation and encourage them to remain involved. One way to accomplish this is to divide writing tasks into segments and then divide your class in such a way that the more talkative students are clumped into a single group.

Another way to get more involvement is to have each student read a single line or element of their written exercise. For example, if you ask them to provide definitions and examples of a term, have one student read their definition while another provides the example. One might also consider using a notecard system where the instructor randomly draws the name of the speaker. Ultimately we try to maintain a voluntary participation system, but we do remind

students that everyone has to participate. They can choose when to jump in or we can choose for them – they usually find their own opportunities preferable.

Observation 6: Be ready to derail

Teaching in this manner requires some improvisational skill. Sometimes an activity you design won't work out as intended. Sometimes the students will struggle on something that seems fairly straight forwards. Sometimes the students will make an error or an observation that opens the door to a teachable moment. While it is important to generally follow your preparation, allowing the class to derail when an opportunity arises can be highly beneficial.

As an example, during a discussion of organizational design, we asked students to indicate something they desired from a University system. One student requested that faculty should meet individually with students for one hour each week. The student observed that such one on one time would have a positive impact on learning outcomes. When pressed as to why the student believed this didn't already happen, the response was simply "because faculty don't want to." This opened the door to a truly informative derail.

Walking the students through the job requirements of faculty as well as the teaching load for faculty quickly made it apparent that the task simply could not be accomplished in the current system design. Indeed, even 30-minute sessions would be improbable for many high-load faculty. Since the topic was one of system design, we then turned the discussion towards what it would take to design a system that met the goals of the student. We discussed the likely costs of that system compared to the current costs. At each step, students were tasked to answer with the instructor posing challenges and adding constraints. At the end of the process, the students had worked through a number of the tensions and choices present in system design in a far more involved manner than a simple lecture on mechanistic and organic systems.

Observation 7: Be prepared for moments of Satori

In Zen Buddhism, satori is a moment of enlightenment where one gains comprehension and sudden understanding. In our experience, a critical thinking designed course produces many such moments for both the students and the instructor. We discussed a moment of Satori above in the system design example in observation 6. Working through a derail allowed students to gain a better understanding of systems and, in particular, the education system they participated in

As instructors, we find moments of Satori ourselves. Sometimes in the process of lesson planning, sometimes while working through the question of a student, sometimes reflecting on what worked and what didn't work following a lesson. In our experience, it is rewarding to share these moments with the students. In particular this reinforces that learning is a lifetime activity and additionally it reinforces your approval and respect for such moments of learning. Indeed, sharing your moments of Satori is essentially modeling the rewards of critical thinking.

DISCUSSION

The course which prompted the origin of this paper is now in its second iteration. Our University system will begin offering critical thinking enhanced courses in the near future and this particular course is likely to be one of the first management courses with this designator. At this point in the process, there is not enough hard data to make significant statements on the learning outcomes of this transition. However, there exists a number of points of observation suggesting that this course design is worthy of broader deployment.

First, the students themselves find the course interesting. Upon completing the first iteration of the course, one student's written comments observed that "the instructor certainly has interesting ways of getting everyone to talk!" A second student noted their appreciation at the emphasis on "teacher-student learning," and emphasized how the student perceived this as an important element to his/her education. Both of these statements articulate a recognition that something different was afoot and something that the students themselves appreciated.

A second point involves convergence in thought between the instructor and students. We begin each chapter asking students to write out their perception of the central question, or main point, in the week's readings. We follow that up by asking the student to identify the fundamental concepts of the chapter. Both of these elements of thought are part of the Foundation for Critical Thinking model, but the ideas behind them are broadly complementary to any critical thinking pedagogical model. In our experience, student's observation of main points and fundamental concepts gravitates closer to that of the instructor after a few weeks. In the initial weeks of the course, the student's central questions tend to be broad or vague, the fundamental concepts are often simply main theories or models they recall from the readings. After a few weeks of repetition (across different content), though the students begin to dig deeper. Central questions begin to incorporate theory-asking concepts like why and how. Fundamental concepts begin to be written as explanatory mechanisms, not simply labels. In both cases, a transformation occurs after a few weeks and that transformation is something worth encouraging.

The third point of improvement is in the writing itself. This model does not task the students to write an extensive research paper, in that it falls short of the goals suggested by Arum and Roksa (2012). However, this course does have students writing roughly two pages of reflective material each week. Each week's class meeting is broken down into nine to ten chunks. Each chunk has at least one written moment (some chunks have several smaller written elements). While some written elements require only a sentence or two, many require a paragraph of writing. Further, this is "on demand" writing, not planned writing. The students have a general idea in that they know the assigned readings and they learn some of the more common techniques, but they don't know exactly what they will be asked from chunk to chunk.

Our review of the weekly written material suggests that the students are taking the material quite seriously. The written elements are typically reasonably well written, articulate and evidence some consideration of material. This is a good bit better than in a didactic model where many of these same students would be disengaged. Additionally, we suspect that simply knowing they have to write helps focus their reading in prior to the class meeting. This suspicion

is anecdotally reinforced by the noted quality changes in the central questions and fundamental concepts at the start of each class.

The fourth observation involves student performance on objective tests. This course continues to use a textbook and objective exam for half of its examinations. These two tests are multiple choice tests, but built around higher-order thinking questions. Questions pertaining to memorization are dropped in favor of questions pertaining to application, examples and implications. In the first and second deployment of this course, exam performance was roughly a letter grade higher than in prior courses for tests covering similar material.

It is difficult for instructors to change their methods. We are often creatures of habit and we tend to design our courses around the material available from textbooks and publishers (CriticalThinking.org, 2013b). It is also natural to worry about the quality and efficacy of a different pedagogical model. However, we should be aware that many of our courses simply produce surface-level processing, or memorization without internalization, in lieu of deep-level processing or understanding of concepts (Tagg, 2004).

Indeed, transitioning to a reflective writing model is recognized as enhancing learning and ultimately improving performance on otherwise objective tests (Cartwright & Stepanova, 2012). In fact, much of what students learn in a traditional education model is forgotten in a matter of months, retention of knowledge is actually tied to reflective, not didactic learning (Bacon & Stewart, 2006). Indeed, even amidst the semester itself, much of what is learned by students is surface level only. Indications exist that even when they know how to follow certain steps or solve certain problems, they are unable to then apply these lessons to applicable activities in which they are concurrently engaged (Rubin, 1983). Ultimately, making the transition to a critical thinking, reflective learning model begins by rejecting self-reinforcing, but erroneous, biases telling us that current models actually work.

While the course design described herein has advantages, it is not universally applicable. Indeed, it is our position that this design works well for survey or introductory courses, but much of the course design is not applicable outside of those courses. In particular, this design places the instructor as the ultimate arbiter of truth or accuracy and students are not routinely placed in a position of questioning and exploring the accuracy or voracity of the conclusions. In a capstone or other more applied course, the chunks would be designed around problem identification. Reflective writing moments would emphasize causal attribution. Interactive discussion would focus on what evidence would support/reject those causal attributions, where such evidence could be found, and what it would take to decipher that evidence. Intervening periods between classes would then be devoted towards finding, analyzing and answering those evidentiary questions. Courses of a more quantitative nature and courses involving the design of systems would likely require a still different model for which we are not prepared, nor qualified to articulate.

A course of this nature has issues with scale and the scale of our teaching loads is a challenge facing many faculty during these troubled economic times. This particular design scales well in the 30-50 range and certainly works well with smaller classes. Indeed, some elements of this design seem are built assuming reasonably high load classes. The lecture – write – discuss framework allows a one to many feedback model, necessary for larger classes. In a smaller class environment, one would provide detailed feedback to students individually. In

larger settings, though, the oral feedback process allows students to compare and contrast their answers and identify relevant feedback moments. This design takes advantage of the vicarious nature of social learning and thus scales moderately well. We are uncertain whether the course design would transition well to stadium sized classes, though.

We are also unable to comment on the design of a reflective writing, critical thinking model in an online course. Online courses are generally asymmetric and it is thus unlikely that the interactive discussions which prove useful could be replicated in a web format. Assuming a web course with chat sessions, voice over Internet protocol (VOIP) chat, or video chat (e.g. Skype), it is conceivable that this model would work well, although again issues of scale would be problematic. For now, we leave web based critical thinking course design to the work of other colleagues.

We are also, at this point, unable to address longitudinal learning advantages from this model. The model produces benefits within a semester and the style of this course design is consistent with other reflective learning approaches. Research on the trade-offs between writing and reflective education styles support the rejection of didactic learning environments. Students perform better when exposed to these environments and the economic outcomes based on exposure to these systems suggests the efficacy of the reflective approach over the didactic approach (Pascarella et al., 2011; Roksa & Arum, 2012). At the very least, movement towards a reflective, critical thinking intensive course design should help stem the drop-off in education quality exposed in the work of Arum and Roksa (2011).

The drop-off in education quality runs concurrent with the transition towards largely privatized funding of the U.S. tertiary education. In general, tertiary education systems in the United States receive substantially less public funding than their advanced economy peer group (OECD, 2012) and the funding received has declined precipitously in recent years (Skiba, 2012). Proportionally, the United States has a fewer faculty (61.8 per 1000) than the OECD average (67.5) and substantially less than that of systems producing higher educational outcomes (e.g. Norway at 108.2). Besieged on one side by budget cuts, rising costs and on the other side by threats from new teaching models like massively open online courses (MOOC's) (McFedries, 2012; Skiba, 2012; Vardi, 2012) or competency based education systems (Kinser, 2002), tertiary education in the United States seems ill predisposed to engage on the declines in critical thinking attainment.

However, it is precisely because of these threats that we must focus on classroom based learning outcomes. The transmission and development of critical thinking skills is typically a social process, not easily replicated in codified knowledge like textbooks or lectures. Rather it requires interaction between those taught and those teaching with reflective outputs from students and feedback from instructors. Such a system does not scale well to massive levels, providing a strategic advantage for our campuses if we successfully recapture it. We must find a way to instill critical thinking throughout the business curriculum. Doing so provides a better service to our charges while simultaneously protecting us from at least some of our most pressing external threats.

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A FACTORIAL ANALYSIS OF GENDER AND RANK ON BUSINESS SCHOOL FACULTY'S SALARIES AS A GAUGE FOR DISSATISFACTION

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ABSTRACT

Business faculty salaries from 13 institutions of higher learning across 5 states were collected via collegiatetimes.com, a public salary database. Those data included faculty members' gender, rank, and teaching field. A gender difference (p < .01) was found when four null hypotheses were tested. Chi-square was used to ascertain whether differences existed between relative frequency of occurrence of male and female faculty and ranks. Two-Way Analysis of Variance, with a 2 x 4 factorial design, was used to test for main effects and interaction effects when gender and ranks were the independent variables and salary was the dependent variable. Although women earn less than men across all academic ranks, the magnitudes in salary increases were non-significant with an interaction effect of p = .779. Therefore, female business school faculty might not be subject to more dissatisfaction than men when salary is used as a gauge for female dissatisfaction.

INTRODUCTION

University professors differ in many ways from other workers, including highly educated professional workers. University administrators can devise more effective strategies for recruiting and retention if they have the knowledge of the determinants of university professors' job satisfaction (Johnsrud & Heck, 1994; Seifert & Umbach, 2008; Smart, 1990; and Weiler, 1985). According to Herzberg, Mausner and Snyderman (1959), and Herzberg (1964), motivation and dissatisfaction are different factors. Herzberg (1964) included salary among the list of hygiene factors, i.e., fringe benefits, status, job security, and salary. The absence of these factors results in dissatisfaction. For example, when fringe benefits, status, job security, and salary are not present there is more dissatisfaction; however, when they are present there is less dissatisfaction, but this does not translate into more satisfaction because satisfaction and dissatisfaction are different constructs, theoretically independent of one another.

With respect to studies in the literature about the impact of hygiene factors in the workplace, Burke, Duncan, Krall, and Spencer (2005) reported on gender differences in faculty pay and salary compression. They found that annual fixed-dollar merit increases and similar

starting salaries contributed to comparable salary growth rates for all faculty. However, they found the male faculty earnings advantage was traced to higher rank and years of service. Additionally, they found that the literature was divided on whether the often observed lower pay of senior faculty is deserved. Moreover, they found that merit pay rises with additional years of seniority and that the seniority penalty was rooted in cost-of-living adjustments that failed to keep pace with market trends. The findings illustrated how the seniority penalty can be linked to budget considerations rather than the lower productivity of senior staff.

Renzuilli, Grant, and Kathuria (2006) compared the gender pay gap at predominantly white institutions (PWIs) with the gap at historically Black colleges and universities (HBCUs). They found that HBCUs seemed to have a smaller gap but that pay for all faculty at HBCUs was lower than in PWIs. Secondly, the gap was significantly smaller in the rank of associate professors. Third, the gap was smaller at the associate rank because men make less money in HBCUs than they do in PWIs. Fourth, elite HBCUs are more similar to PWIs than to HBCUs in terms of their gender pay gap. Race, class, and gender effects must be taken into account to understand patterns of wage equity across these institutions. The greater gender equity at HBCUs was apparent because of the absence of the "men's bonus," which was prevalent in PWIs and elite HBCUs.

Umbach (2007) studied gender equity in the academic labor market. He found that faculty in disciplines characterized by relatively low demand, high teaching loads, and low amounts of research funding earned less than do faculty in other disciplines. Additionally, after controlling for an array of individual and disciplinary characteristics, women faculty were found to earn less than their male peers.

Travis, Gross, and Johnson (2009) conducted a case study of faculty salaries at one university. The results indicated that both regression and simulation methods provided evidence of a sizable pay gap associated with gender, even after controlling for rank, academic field, and years of service. The gap occurred in fields traditionally viewed as female as well as science fields with typically lower female representation.

Bell and Joyce (2011) conducted a study using data made available through the Missouri Secretary of State's Office, via its website, to test for differences in salaries as a hygiene factor among business faculty teaching at ten Missouri State funded universities. One-Way ANOVA tests showed means differed significantly between gender and among ranks, with p < .01 in most cases. Female faculty overall earned 15% less than their male counterparts.

However, other research suggests that factors other than race and gender may have a greater impact on salary. A study by Fairweather (2005) found that in the late 1980s and early 1990s, among all faculty activities, research consistently showed that publishing and other forms of scholarly productivity were the strongest positive predictors of faculty pay. The paper reported that after more than a decade of institutional and state policies enacted to enhance the value of teaching, the results showed that spending more time on teaching still meant lower pay.

A study by Toutkoushian, Bellas, and Moore (2007) showed that gender, race or ethnicity, and marital status still mattered in determining faculty salary, but they did not exhibit many interaction effects. In general, faculty of color appeared to have at least achieved parity with white faculty and may enjoy a salary advantage.

Melguizo and Strober (2007) examined faculty salaries and the maximization of prestige. Spending more time on teaching was found to have no effect on salary, even in comprehensive universities and liberal arts colleges. The findings suggested that other types of institutions were emulating research institutions in their pursuit of prestige. Looking at faculty salaries through this lens raised serious questions about the implications of the current reward system in higher education.

FACULTY SALARIES AS HYGIENE

According to Balkin and Gomez-Meji (2002), when male management professors received a smaller pay raise than anticipated, they tended to resign from their positions more so than their female colleagues. Quitting one's job over money is clearly a sign of dissatisfaction. Comm and Mathaisel (2003) found that satisfied employees are important for organizational performance. They argued that employee satisfaction in higher education regarding workload, salary, and benefits can be used to improve academic quality; nonetheless, they reported that among faculty at a private college, most do not believe they are fairly compensated. A study by Terpstra and Honoree (2004) reported that faculty was most satisfied in their work and pay when teaching and research are given equal weight. Additionally, they found that institutions that primarily emphasize teaching fared poorly in terms of faculty teaching effectiveness, research performance, job, and pay satisfaction.

Bender and Heywood's study (2006) compared job satisfaction among university faculty, nonacademic researchers, and managers. They found that the more highly educated often are more dissatisfied with their jobs thus confounding any comparison of university professors with general occupational categories. The Bender and Heywood study showed that for both males and females, the relationship of pay to job satisfaction was statistically significant in both private business and in universities. Based on data from the U.S. Department of Education's 2005 Fall Staff Survey, Hurtado and DeAngelo (2009) reported that teaching load was a slightly stronger predictor than salary when it came to retention of senior women.

Crothers, Hughes, Schmitt, Theodore, Lipinski, and Bloomquist, et al. (2010) reported a difference in job satisfaction negotiation techniques of male and female faculty members. They reported that female faculty members earned significantly less than male faculty members, even when they controlled for years of experience. Females also reported a negative attribute of failed negotiations that they associated with their gender and vice versa when negotiations were successful.

Research Purpose

Based on the aforementioned research, salary appears to be a hygiene factor that can be used to gauge dissatisfaction. Thus, the magnitude of salary distributions across ranks and between genders could be a corollary with dissatisfaction among female business school faculty members. Our purpose for conducting this study is to test whether men and women differ in salary (main effect), whether there is a difference in ranks regarding salary (main effect), and if the magnitude of salary increases across ranks is different for male and female faculty members (the interaction effect).

METHODS AND RESULTS

Business faculty salaries from 13 institutions of higher learning across 5 states were collected via collegiatetimes.com, a public salary database. The rank and gender information was verified by visiting the websites of the 13 institutions. Faculty members had written biographical sketches and referred to themselves as he or she and most also showed photos. They also listed their ranks in those bios. The data analyzed included faculty members' gender, rank, and teaching field. A gender difference (p < .01) was found when four null hypotheses were tested. Chi-square was used to ascertain whether differences existed between relative frequency of occurrence of male and female faculty and ranks. Two-Way Analysis of Variance, with a 2 x 4 factorial design, was used to test for main effects and interaction effects when gender and ranks were the independent variables and salary was the dependent variable. The demographics and other independent descriptive variables (gender, rank, etc.,) are included in Table 1.

We analyzed the data in this study with SPSS 18.0. It is easy to request a Goodman and Kruskal tau be generated when running a Chi-Square Test in SPSS 18.0. Goodman and Kruskal (1972) developed a useful mathematical method that enables a researcher to predict, for example, if a male murderer is more likely to use a gun or a knife to commit a murder, or if a female murderer is more likely to use poison than a gun (Levin & Fox, 2000). To further investigate the differences in nominal-by-nominal variables and differences in salaries produced by content analysis, the following four hypotheses were written and tested using Chi-square Tests, Goodman and Kruskal tau and Two-Way ANOVA Tests, with a 2x4 factorial design.

	TABLE 1 FREQUENCY AND PERCENT FOR DEMOGRAPHIC VARIABLES									
		Frequency	Percent	Cumulative Percent						
Institution	Texas Southern University	43	5.4	5.4						
	Texas Tech University	85	10.6	16.0						
	Texas A&M University	154	19.2	35.2						
	SUNY-Buffalo	78	9.7	44.9						
	SUNY-SB	19	2.4	47.3						
	UC at Riverside	33	4.1	51.4						
	UC at Irvine	22	2.7	54.1						
	George Mason	63	7.9	62.0						
	Old Dominion	67	8.4	70.3						
	Virginia Tech	105	13.1	83.4						
	University of Virginia	55	6.9	90.3						
	Miami University	6	.7	91.0						
	The Ohio State University	72	9.0	100.0						
	Total	802	100.0							
Gender	Male	604	75.3	75.3						
	Female	198	24.7	100.0						
	Total	802	100.0							
Rank	Instructor	152	19.0	19.0						
	Assistant Professor	191	23.8	42.8						
	Associate Professor	198	24.7	67.5						
	Full Professor	261	32.5	100.0						
	Total	802	100.0							
State	California	55	6.9	6.9						
	New York	97	12.1	19.0						
	Ohio	78	9.7	28.7						
	Texas	282	35.2	63.8						
	Virginia	290	36.2	100.0						
	Total	802	100.0							
Teaching Field	Accounting	185	23.1	23.1						
	Finance	129	16.1	39.2						
	Management	139	17.3	56.6						
	Marketing	107	13.3	69.9						
	MIS	40	5.0	74.9						
	Business Administration	47	5.9	80.8						
	Other	154	19.2	100.0						
	Total	801	99.9							
	Missing	1	.1							
Total		802	100.0							

Four Null Hypotheses

- H_1 : Male and female faculty members do not differ in their relative frequency or percentage among the academic ranks as instructor, assistant professor, associate professor and full professor.
- H_2 : Means for faculty salaries do not differ between male and female faculty members.
- H_3 : Means for faculty salaries do not differ among the academic ranks of instructor, assistant professor, associate professor and full professor.
- H_4 : Means for the magnitude of faculty salaries do not differ between male and female faculty regardless of their rank as instructor, assistant professor, associate professor and full professor.

CHI-SQUARE TEST RESULTS

We rejected H₁, with a Pearson Chi-Square of p = .000. Male and female faculty members differ in their relative frequency or percentage among the academic ranks. Statistical test results are shown in Table 2. For instructor, the female observed count exceeded the female expected count 59/37.5 or nearly 60%. For assistant professor, the female observed count exceeded the female expected count 65/47.2 or nearly 38%. For associate professor, the male observed count exceeded the male expected count 154/149.1 or just over 3%. For full professor, the male observed count exceeded the male expected count 231/196.6 or just over 17%. Conversely, females were 11% below the associate professor expected count and 115% below the full professor expected count.

Goodman and Kruskal tau shows rank as independent variable predicts 6.3 percent of the variance (error) in gender, when gender is the dependent variable. On the other hand, when gender is the independent variable it only predicts 2.2 percent of the dependent variable rank. Thus, rank is more predictive of the rank of a male or female than vice versa. Table 2 illustrates that female faculty are significantly crowded in the lower level ranks of instructor and assistant professor while male faculty are significantly crowded in the upper ranks of associate professor and full professor. This is consistent with the recent literature (Bell and Joyce, 2011; Burke, et al, 2005; Travis, et al, 2009). Gender predicts that female faculty members will be concentrated at the lower ranks of instructor and assistant professor, while it predicts that male faculty members will be concentrated more often at the higher ranks of associate and full professors.

 $.000^{d}$

	CDOCC	TABI		+ CENE	AED.		
	CROSS-	TABULATION I	OR RANK	* GENL Gender	DER		
			Male		emale	То	tal
Rank	Instructor	Count	93	*	***59	15	52
		Expected Count	114.5		37.5	152	2.0
		% of Total	11.6%		7.4%	19.	0%
	Assistant Professor	Count	126	*	***65	19	01
		Expected Count	143.8		47.2	19	1.0
		% of Total	15.7%		8.1%	23.	8%
	Associate Professor	Count	***154		44	19	98
		Expected Count	149.1		48.9	198	3.0
		% of Total	19.2%		5.5%	24.	7%
	Full Professor	Count	***231	30		261	
		Expected Count	196.6	64.4		261.0	
		% of Total	28.8%		3.7%	32.:	5%
Total	•	Count	604		198	802	
		Expected Count	604.0		198.0	802	2.0
		% of Total	75.3%	2	24.7%	100.	.0%
Chi-Square	Γests		Value		Df	Asymp. Sig. (2-sided)	
Pearson Chi-S	Square		50.368 ^a		3	***.	000
Likelihood Ra			52.475		3	.00.	
•	near Association		49.120		1	.000	
N of Valid Ca			802				
a. 0 cells (.0%	(6) have expected count less	than 5. The minin	num expected	count is		T .	
Directional N	Measures			Value	Asymp. Std Error ^a	. Approx. T ^b	Approx. Sig.
Nominal	byLambda	Symmetric		.047	.013	3.620	.000
Nominal		Rank Depe	ndent	.065	.017	3.620	.000
		Gender De	pendent	.000	.000	c ·	c ·
	Goodman and Kruska	l tau Rank Depe	ndent	.022	.006		.000 ^d
				I .	Ī	1	

Gender Dependent

.063

.016

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Cannot be computed because the asymptotic standard error equals zero.

d. Based on chi-square approximation

TWO-WAY ANOVA TESTS RESULTS

We failed to reject H_2 , with F(1, 794) = 2.149, p = .143; means for faculty salaries do not differ between male and female faculty members. Tests of Between-Subjects Effects are shown in Table 3. Although the male mean is higher than the female mean across all ranks, the model does not show these means differ significantly. The finding is contrary to what is reported in the literature. Although female faculty members earn less than men in general, business school female faculty members are statistically the same as male faculty regarding salaries.

We rejected H_3 , with F (3, 794) = 130.087, p = .000; means for faculty salaries differ among the academic ranks of instructor, assistant professor, associate professor and full professor. This finding is very consistent with the literature and is therefore not surprising. Tests of Between-Subjects Effects are shown in Table 3. Rank is not surprisingly different because hierarchy implies higher compensation. In our model of 802 faculty members from 13 institutions representing five US States, the only exception to this was for associate professors who earn \$6,057.46 less than assistant professors, but the mean difference was non-significant in the Tukey's HSD Post Hoc Comparison. The other ranks increased in salary in nearly a stair-step pattern as they should.

We failed to reject H₄, with F (3, 794) = .364, p = .779; means for the magnitude of faculty salaries do not differ between male and female faculty regardless of their rank as instructor, assistant professor, associate professor and full professor. Tests of Between-Subjects Effects are shown in Table 3. The interaction effect was non-significant. This is a surprise because based on the literature women earn less than men in business schools and across the ranks. Nevertheless, the so called "men's bonus" reported by Renzuilli, et al, (2006) seems to have dissipated over the years. This is a very important finding and means a great deal in terms of gauging the dissatisfaction levels of female business faculty members. Estimated means and pairwise comparisons tables are located in the Appendix.

SUMMARY AND DISCUSSION

The literature review revealed that various studies had been conducted regarding faculty satisfaction and salary differences according to rank, gender, and teaching field. Our study's contribution to the literature is derived from a multistate study of business school faculty salaries according to gender and academic rank. These results can assist administrators in devising strategies for recruiting and retention.

The literature suggests there are three variables that affect the hygiene of salaries: gender, rank and the job security of tenure (Bell and Joyce, 2011). Women are less likely to receive the same salaries as men, regardless of rank, thus, for women salaries is less hygienic. The states where professors teach might also impact the level of pay. Rank has been shown to determine the level of pay and thus the level of the salary hygiene. Nevertheless, if salary is to improve hygiene

(less dissatisfaction), there should be no meaningful differences between the means of male and female business faculty and ranks should differ but only according to seniority and not lower-level ranks exceeding the pay of higher ranking female faculty members. In other words, there should not be huge magnitudes of difference at the various levels of rank if the salary hygiene is present.

UNIVARIA	ATE ANALYSIS C	TABLE : OF VARIANCE WIT	3 TH DEPENDENT VARIA	BLE: SALARY
Gender	Rank	Mean	Std. Deviation	N
Male	Instructor	\$51,182.10	\$40,211.46	93
	Assist. Prof.	\$131,202.88	\$34,662.98	126
	Assoc. Prof.	\$124,401.84	\$35,449.14	154
	Full Prof	\$168,973.49	\$65,843.85	231
	Total	\$131,593.14	\$63,356.26	604
Female	Instructor	\$50,151.39	\$25,077.01	59
	Assist. Prof.	\$125,751.38	\$31,946.07	65
dimension1	Assoc. Prof.	\$120,437.50	\$35,908.74	44
	Full Prof	\$155,619.83	\$66,733.80	30
	Total	\$106,568.77	\$54,201.03	198
Total	Instructor	\$50,782.02	\$35,028.13	152
	Assist. Prof.	\$129,347.66	\$33,777.91	191
	Assoc. Prof.	\$123,520.88	\$35,498.61	198
	Full Prof	\$167,438.59	\$65,955.35	261
	Total	\$125,415.06	\$62,136.01	802
Levene's Test of Equa	ality of Error Varian	ces ^a Dependent Varia	ıble: Salary	
F		df1	df2	Sig.
16.162		7	794	.000

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Gender + Rank + Gender * Rank

Tests of Between-Su	Tests of Between-Subjects Effects, Dependent Variable: Salary											
Source	Type III Sum of					Partial Eta						
	Squares	df	Mean Square	F	Sig.	Squared						
Corrected Model	1.318E12	7	1.883E11	84.226	.000	.426						
Intercept	7.300E12	1	7.300E12	3265.747	.000	.804						
Gender	4.804E9	1	4.804E9	2.149	.143	.003						
Rank	8.723E11	3	2.908E11	130.087	***.000	.330						
Gender * Rank	2.439E9	3	8.131E8	.364	.779	.001						
Error	1.775E12	794	2.235E9									
Total	1.571E13	802										
Corrected Total	3.093E12	801										

a. R Squared = .426 (Adjusted R Squared = .421)

The plot shown in Figure 1 is the best way to understand the dynamics of our findings; the 2x4 factorial design is plotted by rank (1= instructor, 2= assistant professor, 3= associate professor, 4= full professor) and gender (1= male, 2= female) and makes it clear as to why the interaction effect was non-significant, with a p = .779.

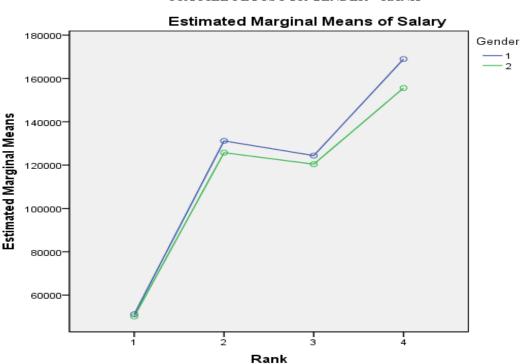


FIGURE 1
PROFILE PLOTS FOR GENDER * RANK

Even though our Levene's Test of Equality of Error Variance was significant (p = .000), we are not concerned about a Type I error, because the p-value for rank was significant well below p< .001. Also, in the fixed effects sampling frame, women are just not represented as well as men in collegiate schools of business. Females represented roughly 25% of our sample of 802 faculty members (198/802 x 100). Despite this fact, our findings appear to show equity in the magnitude of salary increases as males and females rise through the academic ranks. Crothers, et al (2010) found women in higher education institutions to be less satisfied with their negotiation skills when negotiations were not in their favor, nevertheless, female business faculty members working in the 13 business schools at five American universities in our sample of 802 faculty members don't seem to have any deficiency in negotiating salaries.

Female full professors had higher salaries than male associate professors for the most part, etc. We did not find any meaningful difference in the interaction between males and females as they migrated through the four levels of rank. Therefore, hygiene theory would suggest that female and male faculty members, both of whom are associate professors, should be earning statistically the same incomes. And, they are. Recall that ranks were different at the p = .000 level of significance. We found this to be true for all ranks, even though associate professors earn slightly less than assistant professors, women associate professors do not earn significantly less than their male counterparts at this same level of rank. We argue that when salary is a hygiene factor that controls dissatisfaction among rank and between gender, business schools are hygienic. Theoretically, women should be no more dissatisfied than men regarding their salaries.

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APPENDIX

Estimated Marginal Means

1. Gender

Estimates

Dependent Variable: Salary

Gender			95% Confidence Interval		
	Mean	Std. Error	Lower Bound	Upper Bound	
dimangian 1 Male	118940.078	2030.462	114954.369	122925.786	
dimension l Female	112990.027	3514.067	106092.067	119887.987	

Pairwise Comparisons

Dependent Variable: Salary

(I) Gender		(J) Gender	Mean Difference			95% Confidence Interval for Difference ^a	
			(I-J)	Std. Error	Sig.a	Lower Bound	Upper Bound
dimension1	Male	dimension2Female	5950.051	4058.503	.143	-2016.612	13916.714
dimension	Female	e dimension2Male	-5950.051	4058.503	.143	-13916.714	2016.612

Based on estimated marginal means

Univariate Tests

Dependent Variable: Salary

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	4.804E9	1	4.804E9	2.149	.143	.003
Error	1.775E12	794	2.235E9			

The F tests the effect of Gender. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

2. Rank

Estimates

Dependent Variable: Salary

Rank			95% Confidence Interval	
	Mean	Std. Error	Lower Bound Upper Bou	
Instructor	50666.743	3934.432	42943.625	58389.861
Assistant Professor	128477.133	3609.961	121390.938	135563.328
Associate Professor	122419.672	4040.858	114487.644	130351.700
Full Professor	162296.661	4587.556	153291.490	171301.833

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Pairwise Comparisons

Dependent Variable: Salary

(I) Rank		(J) Rank					95% Confiden	
				Mean Difference			Differ	rence ^a
				(I-J)	Std. Error	Sig. ^a	Lower Bound	Upper Bound
	1		2	-77810.389*	5339.623	.000	-88291.835	-67328.944
		dimension2	3	-71752.929*	5639.884	.000	-82823.774	-60682.083
			4	-111629.918*	6043.627	.000	-123493.293	-99766.543
	2		1	77810.389 [*]	5339.623	.000	67328.944	88291.835
			3	6057.461	5418.519	.264	-4578.856	16693.777
dimension1-			4	-33819.528*	5837.592	.000	-45278.467	-22360.590
difficusion1	3	-	1	71752.929*	5639.884	.000	60682.083	82823.774
	dimen	dimension2	2	-6057.461	5418.519	.264	-16693.777	4578.856
			4	-39876.989*	6113.445	.000	-51877.414	-27876.565
_	4	•	1	111629.918*	6043.627	.000	99766.543	123493.293
		dimension2	2	33819.528*	5837.592	.000	22360.590	45278.467
			3	39876.989 [*]	6113.445	.000	27876.565	51877.414

Based on estimated marginal means; 1= instructor, 2= assistant professor, 3= associate professor, 4= full professor

Univariate Tests

Dependent Variable: Salary

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	8.723E11	3	2.908E11	130.087	.000	.330
Error	1.775E12	794	2.235E9			

The F tests the effect of Rank. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

^{*.} The mean difference is significant at the .05 level.

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

3. Gender * Rank

Dependent Variable: Salary

Gender	Rank				95% Confidence Interval	
			Mean	Std. Error	Lower Bound	Upper Bound
dimension1-	Male	1	51182.097	4902.485	41558.734	60805.460
		2	131202.881	4211.846	122935.212	139470.550
		3	124401.844	3809.758	116923.456	131880.232
		4	168973.489	3110.654	162867.411	175079.567
	Female	1	50151.390	6155.052	38069.292	62233.488
		2	125751.385	5864.096	114240.421	137262.348
		3	120437.500	7127.404	106446.717	134428.283
		4	155619.833	8631.715	138676.154	172563.513

Post Hoc Tests

Rank

Multiple Comparisons

Salary

Tukey HSD

(I) Rank	k (J) Rank			Mean Difference			95% Confidence Interval	
				(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
dimension2—	1	dimension3	2	-78565.64 [*]	5138.854	.000	-91795.52	-65335.76
			3	-72738.86 [*]	5098.441	.000	-85864.69	-59613.03
			4	-116656.57*	4823.816	.000	-129075.38	-104237.75
	2	dimension3	1	78565.64 [*]	5138.854	.000	65335.76	91795.52
			3	5826.78	4794.941	.617	-6517.70	18171.26
			4	-38090.93*	4501.840	.000	-49680.82	-26501.03
	3	dimension3	1	72738.86 [*]	5098.441	.000	59613.03	85864.69
			2	-5826.78	4794.941	.617	-18171.26	6517.70
			4	-43917.71*	4455.652	.000	-55388.69	-32446.72
	4		1	116656.57*	4823.816	.000	104237.75	129075.38
		dimension3 2	2	38090.93*	4501.840	.000	26501.03	49680.82
		3		43917.71*	4455.652	.000	32446.72	55388.69

Based on observed means. 1= instructor, 2= assistant professor, 3= associate professor, 4= full professor. The error term is Mean Square (Error) = 2235195289.532.

^{*.} The mean difference is significant at the .05 level.

Homogeneous Subsets

Salary

Tukey HSD^{a,b,c}

Rank		Subset				
	N	1	2	3		
Instructor	152	50782.02				
Assistant Prof.	198		123520.88			
Associate Prof.	191		129347.66			
Full Prof.	261			167438.59		
Sig.		1.000	.620	1.000		

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square (Error) = 2235195289.532.

- a. Uses Harmonic Mean Sample Size = 193.270.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.
- c. Alpha = .05.