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AUDITING DUE DILIGENCE IN LAW AND ETHICS: THE PONZI "FEEDER FUND" CASES

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ABSTRACT

Financial accounting is an information conveyance process. When financial auditors issue an opinion in regard to financial statements, the auditors are providing assurance that those financial statements fairly represent the entity, and are prepared in accordance with the relevant standards. If there is a problem with the financial statements for which an unqualified audit opinion has been issued, the auditors may be questioned in regard to their compliance with professional technical and ethical standards that require competency, honesty, and full disclosure. These questions may be asked by the auditors' professional organizations, such as the American Institute of Certified Public Accountants (AICPA), by government regulators who authorize the performance of auditing services, and by the judges and juries of the judicial system. This paper considers how the judiciary, in particular, takes into account auditors' technical and ethical standards when auditors are sued for professional negligence and negligent misrepresentation. This investigation is done within the context of the recent lawsuits against auditors of "feeder funds" that invested with Ponzi scam artists such as Bernard Madoff. This paper concludes that the auditing profession has a "teachable moment" in the wake of the feeder fund failures, and should not overlook this opportunity to upgrade its ethical standards.

JEL: K23; M42; M48

KEYWORDS: Auditing, financial disclosure, due diligence, negligent misrepresentation, accountants' liability, professional ethics, Ponzi, feeder funds.

INTRODUCTION

Financial auditing is a professional discipline that requires both the technical skills and ethics. In the United States, the technical skills include both a thorough understanding of generally accepted accounting principles (GAAP) employed by the audit client, and rigorous application of generally accepted auditing standards (GAAS) in order to ensure that the auditors' opinions are reliable. Auditors must also adhere to rigorous standards of due diligence, honesty and full disclosure in order to ensure that the auditors' opinions are trustworthy.

This paper provides a discussion of skills required of auditors. This paper considers how the judiciary, in particular, takes into account auditors' technical and ethical standards when auditors are sued for professional negligence and negligent misrepresentation. Specifically, we discuss the issue in relationship with the Bernie Madoff fraud case. In the following section the relevant literature and background are provided. The paper continues with a discussion of Ponzi feeder funds. The next section provides a discussion of red flags in Ponzi feeder fund audits. This paper continues with sections on legal and ethical analyses of auditor due diligence. The paper closes with some concluding comments.

LITERATURE REVIEW AND BACKGROUND

Several systems operate to evaluate and assess financial auditors' skills and ethics. First, financial auditors attempt to self-regulate through organizations such as the American Institute of Certified Public Accountants (AICPA) and affiliated state accounting societies. These organizations monitor member compliance with the AICPA code of professional conduct and related industry-generated pronouncements. The AICPA maintains a joint ethics enforcement program that investigates complaints about members who may have violated professional standards. When investigators conclude that members have in fact failed to comply with these standards, disciplinary actions ranging from enhanced continuing education requirements to suspension or termination of membership are enforced.

State regulators provide a second tier of oversight. Certified public accountants are licensed by state licensure agencies who require licensees to abide by state laws and regulations designed to make sure that they are performing reliable and ethical services. Unlike the AICPA and state professional societies, whose primary objective is the enhancement and survival of the profession, state regulators are more concerned with protecting the interests of businesses and consumers who rely upon the services of these professionals. Sanctions for violating state accountancy requirements include warnings, fines, and, in more severe cases, suspension or revocation of the accountant’s license.

Federal regulators also play a role in the oversight of accounting professionals. The Securities and Exchange Commission (SEC), for example, reserves the right to prohibit an accountant from serving as an auditor (or even as an officer or director) of public corporations. Auditors and other accountants who do not comply with the technical and ethical standards of their profession can be sanctioned by the SEC and temporarily or permanently “disbarred” from practice before the SEC. Similarly, the Internal Revenue Service (IRS) requires accountants to maintain certain ethical standards as a condition of their right to represent taxpayers before the organization.

Federal and state legislators also play an important role in the regulation of the auditing profession. Federal and state laws governing the performance of financial audits are continually reviewed and updated. Most recently, the Sarbanes-Oxley legislation bolstered the financial auditing process by requiring corporate directors and officers to implement more rigorous internal controls, and to certify that the financial information provided to external auditors is accurate and reliable. This legislation, enacted in the wake of the Enron and related scandals, strengthen the role of auditors and provided additional sanctions for misrepresentation and other violations of the public trust.

Finally, the ultimate arbiter of questions about auditors’ performance is the judiciary. Accountants whose services may have fallen below technical and ethical standards may find themselves being sued by plaintiffs, such as investors, lenders, and other users of audited financial statements. Allegations of professional negligence (i.e., malpractice), negligent misrepresentation, and fraudulent misrepresentation can result in liability on the part of auditors if the juries and judges of the court system conclude that the charges are factual. Criminal charges can also be brought when accountants engaged in fraud or willful misrepresentation (or, in securities cases and some other cases, gross negligence or recklessness).

After all of these safeguards, it would seem that the accounting profession is subject to sufficient oversight, so that the risk of economic fallout from investor and creditor reliance upon faulty financial statements would be minimized. History, has proven otherwise. In the recent past, the financial crisis that resulted in the failure of many financial institutions, and triggered the collapse of the housing market, was due in part to the willingness of financial auditors to allow faulty financial statements to be issued. Most recently, questions have been raised about the role of financial auditors who approved the financial statements of “feeder funds” that were invested with Ponzi scam operators such as Bernie Madoff.

This paper examines the technical skills employed by financial auditors who audited these feeder funds, and considers whether both the technical and the ethical standards have been met in these cases. This study considers the role of these financial auditors in light of standards enforced by the various oversight bodies. To the extent that those standards have not been met, this paper serves as a critique of the oversight systems. To the extent that those standards did not effectively serve to prevent auditors from approving the faulty financial statements of these feeder funds, this paper also serves as the basis for recommendations to improve the standards themselves.

The Madoff Ponzi scheme came to light in December 2008. Ionescu (2010) has considered the Madoff system of fraud and its impact on, and implications for, global financial markets (Ionescu, 2010). Similarly, Sinclair and McPherson (2011a; 2011b) have offered analyses in regard to the influence of the Madoff scam on notions of due diligence generally. Others have studied specific "red flags" (e.g., Fuerman, 2009) or clusters of such warning signs (e.g., Gregoriou & Lhabitant, 2009; Benson, 2009) that should have alerted auditors of and advisors to feeder fund dependencies upon Bernie Madoff's system of carefully controlled information fabrication and flow. To date there has not been an effort to examine the duty of care of Madoff feeder fund auditors in light of both the legal standards as they have been articulated in recent cases, and professional ethical standards.

Here, the Madoff scam is examined from the larger viewpoint of public policy, and also from the perspective of individual victims. In particular, the G. Phillip Stephenson is studied. Mr. Stephenson did not invest directly with Mr. Madoff, but instead invested in a feeder fund that, in turn, placed his funds with Madoff. The role of the auditors of Mr. Stephenson's feeder fund, as well as feeder funds generally, is then considered, especially in light of the red flags that the feeder fund auditors either did not notice or ignored. The actions (and inactions) of the auditors is viewed in light of both the legal standards of care, and, professional ethical standards of care. The paper concludes with the observation that even if auditors are able to avoid legal liability, it is in their best professional interests to adopt higher ethical standards that would require greater diligence when suspicious circumstances such as those surrounding the Madoff scandal are extant.

PONZI FEEDER FUNDS

In December 2008 Bernard Madoff revealed that his multi-billion dollar investment firm, Bernard L. Madoff Investment Securities, LLC (BMIS), was a massive fraud (Efrati, Lauricella & Searcey, 2008). Madoff was a prominent and respected member of the investing community, who used his investment company BMIS to engage in a multi-billion dollar fraudulent scheme. Madoff deceived countless investors and professionals, as well as his primary regulators, the Securities and Exchange Commission ("SEC") and the Financial Industry Regulatory Authority ("FINRA"). On December 11, 2008, Madoff was arrested by federal authorities. Madoff, along with BMIS's accountant and other associates, and on March 12, 2009, Madoff pleaded guilty to securities fraud and related offenses arising out of his scheme. He was eventually sentenced to 150 years in prison.

Madoff's accountant, David Friehling of Friehling & Horowitz CPAs, P.C., and his chief financial officer, Frank DiPascali, have pleaded guilty to conspiracy to commit securities fraud and related offenses. Irving Picard, the trustee of Madoff's bankrupt estate, continues to try to claw back assets from members of his family and various investors who over time "redeemed" more from the fraudulent investment fund than they "invested" in the first place. Recently, Picard has begun suing banks, brokers and accounting firms that allegedly failed to detect (or consciously avoided detecting) the true nature of Madoff's activities.

To facilitate his scheme, Madoff had claimed he utilized a "split-strike conversion strategy" to produce consistently high rates of return on investment. This strategy, described in detail by Markopolos & Casey (2010), supposedly involved buying a basket of securities corresponding to stocks in the S&P 100 Index as well as options to hedge the risk of those securities. Since at least the early 1990s, however, Madoff did not actually engage in any trading activity. Instead, he generated false paper account statements and trading records. If a client asked to withdraw her money, Madoff would pay her with funds invested by other clients. These tactics are the earmarks of what is generally referred to as a "Ponzi" scheme.

Many individuals and institutions that invested with Madoff did so through "feeder funds." Investors would often become limited partners or account holders who invested in the feeder fund, which would then invest its assets with BMIS. BMIS, in turn, acted as trader, broker, and custodian of all funds and securities in the account and reported results back to the feeder funds. Feeder fund investors could usually make monthly withdrawals of funds, funded either from a separate feeder fund account or from BMIS itself.

Some feeder funds invested most, if not all, of their assets in BMIS. For example, as noted in the in the case of *Stephenson v. Pricewaterhousecoopers, LLC* (2011 U.S. Dist. LEXIS 23244, 2011), the Beacon Fund was a feeder fund that invested approximately 71% of its assets with Madoff. Between 1995 and 2008, Beacon invested approximately $164 million with Madoff and withdrew approximately $26 million, leaving a net investment of approximately $138 million. As alleged in the case of *In Re: Beacon Associates Litigation,* the reported value of the Beacon Fund's Madoff account in November 2008, just prior to the revelation of Madoff's fraud, was approximately $358 million (2010 U.S. Dist. LEXIS 106355, 2010). Similarly, Greenwich Sentry, a limited partnership affiliated with a larger firm known as Fairfield Greenwich (Bermuda) Ltd., invested all of its investors' funds into BMIS, as also observed in the case of *Stephenson v. Pricewaterhousecoopers.*

G. Philip Stephenson, was an individual who invested on behalf of himself as well as on behalf the revocable living trust he established for his family as part of his estate plan. He eventually lost $60 million as a result of his investment in Greenwich Sentry, a feeder fund. The following facts, taken from the *Stephenson v. Pricewaterhousecoopers, LLC* lawsuit initiated by Philip Stephenson in January 2009, tell the story of, and serve as an example of, the plight of feeder fund investors.

In February 2008, after expressing interest in Greenwich Sentry, Stephenson received documents about one of Greenwich Sentry's sister funds, Fairfield Sentry. He was told that analogous documents for Greenwich Sentry were not yet available but that he could expect them to be similar, and that they would be audited by PWC. These documents included a "due diligence questionnaire" that described protections in the funds, including the role played by PWC. One week later, Stephenson received profit analyses for Fairfield Sentry which he was told by FGG would be representative of results he could expect as a limited partner in Greenwich Sentry.

In March 2008, Stephenson received the Greenwich Sentry Limited Partnership Agreement and fund reports showing that Greenwich Sentry earned profits of just under one percent as compared to a multi-percentage point fall in the Down Jones Industrial Average. Stephenson also received the Greenwich Sentry investment prospectus which described the BMIS split strike conversion strategy and explained that the strategy was implemented by through accounts maintained by Greenwich Sentry at BMIS. Stephenson understood that PWC had approved some or all of these documents and would be serving as auditor for Greenwich Sentry. That was critical for Stephenson as an experienced investor who knew the value of strong risk management: he specifically asked the feeder fund representatives whether PWC had identified any issues with Greenwich Sentry and now claims that he never would have invested in the Greenwich Sentry fund if PWC or a firm of equal repute was not auditing the fund.

In April 2008, Stephenson executed a subscription agreement in his individual capacity and deposited $60 million in Greenwich Sentry accounts. In May 2008, he received the 2006 and 2007 Greenwich Sentry financial statements in which PWC delivered unqualified audit opinions affirming that the statements were prepared in accordance with Generally Accepted Accounting Practices ("GAAP") and Generally Accepted Accounting Standards ("GAAS"). After receiving those opinions, Stephenson executed a new subscription agreement in his capacity as trustee on June 1, 2008, and transferred his $60 million limited partnership interest to the Trust.

At first, the Trust's investment appeared to be paying off. By October 31, 2008, Citco Fund Services (Europe) BV and Citco (Canada) Inc., the fund administrator and sub-administrator respectively, had reported that Stephenson's original $60 million investment was worth $62,540,565. And by the end of November 2008, the same investment had realized a 6.59% gain at a time when the Dow Jones Industrial Average experienced losses many times that percentage. Of course, as the world now knows, those gains were illusory and Madoff needed money from investors like Stephenson to pay those prescient few who cashed out before the truth came out. Indeed, on December 11, 2008, when Madoff revealed his fraud, Greenwich Sentry refused to withdraw Stephenson's investment and he has still never recovered a cent of his $60 million.

FEEDER FUNDS AUDITS: THE RED FLAGS

In many cases, feeder funds were audited by prominent public accounting firms who issued unqualified opinions. That is, the auditors, gave assurance to feeder fund investors that the financial statements of the feeder funds, including balance sheets that provided values of BMIS investments, were a fair representation of the underlying investment portfolios. As it turns out, the BMIS investments were entirely fictitious, and so the feeder fund financial statements, as audited, were equally unreliable.

As noted above, Greenwhich Sentry was one of the feeder funds whose financial statements were audited by Pricewaterhousecoopers (PWC). PWC is a prominent firm which provides auditing, accounting, and other advisory services around the world. PWC conducted an annual audit of Greenwich Sentry. For purposes of that audit (and the audit of other BMIS feeder funds), PWC developed an audit plan. As outlined in the *Stephenson* lawsuit, the audit plan proposed that PWC would conduct discussion and enquiry with BMIS in order to obtain an understanding of the key control activities as they relate to the operations, sub-custodian and prime broker functions. The audit plan also indicated that PWC would perform transaction testing on the investment strategy applied by BMIS for the applicable funds. And the audit plan recognized the need to confirm the existence of investments with BMIS and derivative contracts associated with BMIS's split strike conversion strategy.

Among the items examined during a financial audit are the internal controls that serve to safeguard the integrity of the audit client's financial reporting system. In addition, GAAS requirements, including *Statement on Auditing Standard No. 99: Consideration of Fraud in a Financial Statement Audit* (AICPA, 2002), require auditors to investigate "red flags," or signals of possible fraud, when they become aware of them.

In addition to the technical requirements of GAAS, such as *Statement on Auditing Standard No. 99*, auditors are required to comply with the ethical requirements of the *Code of Professional Conduct* promulgated by the AICPA. Rule 201 of that *Code* provides that an AICPA member shall undertake only those professional services that the member or the member's firm can: reasonably expect to be completed with professional competence; exercise due professional care in the performance of professional services; adequately plan and supervise the performance of professional services; and obtain sufficient relevant data to afford a reasonable basis for conclusions or recommendations in relation to any professional services performed (AICPA, 2010).

In their lawsuits against feeder fund auditors, investors have accused the auditors of violating GAAS. In many cases, these investor-plaintiffs have charged the auditor-defendants with either fraud or gross negligence, in part because these types and levels of culpability, if proven, would qualify as *scienter*, or knowledgeable wrongdoing, as defined under the federal securities laws. If *scienter* is proven, the plaintiffs can expect to recover higher levels of damages from the defendants than would otherwise be the case. But even if *scienter* cannot be proven under federal laws, plaintiffs can look to lesser state law remedies for negligence, including negligent misrepresentation and professional negligence (malpractice).

Feeder fund auditors have been charged with wrongfully overlooking a variety of red flags, including: (1) the centralization and combining of management, trading and reporting functions by the feeder funds with BMIS, minimizing or eliminating any feeder fund controls over these functions; (2) inconsistencies between the reported asset values of the feeder funds, and financial reports filed with the SEC; (3) the extraordinary returns supposedly generated by BMIS;(4) the lack of market response to the supposed large block trades the BMIS claimed to have transacted; and (5) the implausibility that the "over-the-counter" markets could have supported the large hedge transactions reported by BMIS. Each of these is addressed briefly below.

In many cases, Madoff had managed to wrest control of information flow from the feeder funds. BMIS not only had exclusive control of the management of feeder fund assets, but was also the sole executing broker for trades involving the feeder funds as well as for their trading strategies. BMIS was the sole custodian of the feeder funds, and also the sole source of information for their trades and asset values. Details of these arrangements were disclosed in the public documents filed with the SEC by the feeder funds. Still, even though these arrangements were unusual in the industry, and even though documentation of these arrangements was publicly available, they were not treated by auditors as being indicative of an operational risk that required closer scrutiny.

A second red flag alleged against the feeder fund auditors generally, and PWC in particular, is that BMIS reported asset values for feeder funds that in the aggregate exceeded the value of the total assets under BMIS management that BMIS reported to the SEC. PWC, as auditor of several of the major feeder funds, had access to the financial reports of feeder funds whose assets exceeded the value of total assets reported to the SEC. Of course, PWC also had access to the public reports filed with the SEC. PWC either did not analyze this information (despite internal policies requiring that the firm obtain and review regulatory filings in general), or, did analyze the information but choose not to consider the information to be of sufficient concern for purposes of any follow-up investigation as called for by *Statement on Auditing Standard No. 99*.

The third red flag was the inexplicable rate of return offered to BMIS investors. Not only did BMIS provide extraordinary returns, but it purported to do so at a very low risk by exiting the market on quarter-ending days when its so-called split strike conversion strategy indicated that remaining in the market would not have been profitable. As a general rule, many courts have found suspicious quarter-end transactions to be red flags of fraud, but the feeder fund auditors remained unconcerned about these phenomenal occurrences.

The fourth red flag was the observation that BMIS could not have executed its purported strategy to enter and exit its positions *en masse* because, given the massive size of its holdings, these transactions would have caused market volatility that never in fact occurred. That is, market data did not reflect the transactions BMIS reported to make. To the extent that feeder fund auditors expressly or impliedly indicated that they were adept at analyzing market returns, and that they would do so as part of their audit procedures, this market impact would likely have surfaced. Nevertheless, the auditors did not identify the lack of market fluctuation as a red flag.

The fifth red flag is the charge that the over-the-counter investment markets could not support the volume of options BMIS would have had to place in order to execute its purported split-strike conversion policy. To the extent that the feeder fund auditors held themselves out as management, the auditors had the ability to recognize and understand the rationale for significant and unusual business transactions, and to know about counter-party trading. However, these skills were not employed by feeder fund auditors in the pursuit of red flags in the case of BMIS.

LEGAL ANALYSIS OF AUDITORS' DUE DILIGENCE

There have been several federal lawsuits filed against feeder fund auditors, and each of them has been dismissed. In all of these cases, the presence of audit-significant red flags, including those described above, has comprised the foundation for allegations of fraud or recklessness on the part of the auditors. And in all cases, the courts have determined that as a matter of law the plaintiffs did not meet the legal requirements for maintaining a claim of fraud or recklessness again the feeder fund auditors.

One of the largest feeder funds in the Madoff case was the Beacon Fund. In November 2008 (just prior to the revelation of Madoff's fraud) the reported value of the Beacon Fund's Madoff account was approximately $358 million. Friedberg Smith & Co. P.C. was the auditor of the Beacon Fund, and after the demise of BMIS in December 2008, Friedberg was sued by Beacon Fund investors who allegedly relied upon the unqualified Beacon Fund audit opinions issued by the auditor. In making their case against Friedberg, the Beacon Fund plaintiff-investors in the case of *In re Beacon Assocs. Litig.* alleged numerous red flags which they claimed should have prompted further inquiry by Friedburg. First, there was no published SAS 70 audit report available for BMIS; an SAS 70 audit report is a widely recognized auditing standard developed by the AICPA and represents that a service organization such as an investment adviser has been the subject of an in-depth audit of their control objectives and control activities. Second, the vast majority of the Beacon Fund was invested in BMIS, increasing risk. Third, Madoff's accounting firm, Friehling & Horowitz, had been telling the AICPA that it did not perform audits for fifteen years, despite serving as Madoff's auditor. Fourth, Madoff ran his own "back office," which entailed that BMIS calculated its own net asset values and prepared its own account statements.

To bolster their case against Friedberg, the Beacon Fund investor-plaintiffs also alleged that many publicly available facts had suggested that Madoff was obviously a fraud, and that many private investors decided Madoff was suspicious after examining the publicly available data. These additional red flags included: Madoff's intense secretiveness; investors' inability to replicate Madoff's results using his claimed strategy; the low correlation of Madoff's performance to the market, despite the fact that his hedging strategy should have closely correlated to overall market performance; the suspiciousness of Madoff's claims to buy a security at its daily high and sell it at its daily low consistently; instances of Madoff's records reflecting a trade of a security at a price outside of the daily reported range for that security; the fact that an insufficient volume of options were traded on certain days to support Madoff's stated strategy; Madoff's decision to forego the standard hedge fund management fee of 1% plus 20% of profits and settle for commissions on trades, possibly to avoid heavier audit requirements; Madoff's stated practice of liquidating all securities at the end of each reporting quarter and investing the proceeds in treasury bills, ensuring that auditors could not verify the existence of Madoff securities for that period; Madoff's lack of a third-party custodian to hold BMIS's securities; Madoff's use of a small, unknown accounting firm; the fact that BMIS audits did not show any customer activity; the fact that key positions at BMIS were staffed by Madoff's family members; and Madoff's use of paper documentation of account activity and trades despite BMIS's supposed technological sophistication.

The Beacon Fund investor-plaintiffs also noted that although government regulators such as the SEC failed to catch Madoff's fraud, numerous private entities who conducted basic due diligence of BMIS readily came to the conclusion that an investment with Madoff was unwise. As early as 2002, Rogerscasey, a domestic registered investment adviser, warned clients away from Madoff feeder funds. In 2005, Harry Markopolos submitted a complaint to the SEC alleging that Madoff was a fraud. Hedge fund adviser Acorn Partners doubted Madoff's bona fides. Many European hedge funds avoided Madoff because he did not pass their due diligence. In 2007, investment manager Akasia advised clients not to invest with Madoff after becoming suspicious of him. In July 2008, Albourne Partners, a London due diligence firm, advised a client to liquidate a $10 million investment in a Madoff feeder fund. Despite these litanies of red flags and recognizable warning signals, the court in *In re Beacon Assocs. Litig.*

concluded that the investor-plaintiffs failed to show that Friedburg ever became aware of them, and that the red flags were either not so obvious that an auditor must have known of them, or not strong enough to support an inference of recklessness on the part of the auditors.

The ripple effect of the Madoff fiasco impacted auditors of feeder funds, like Beacon, but it also affected sub-feeder funds. Fulvio & Associates LLP was the auditor of FM Multi-Strategy Investment Fund, LP ("MS Fund"), a sub-feeder fund that invested in larger funds such as the Beacon Fund, which in turn funneled money to Madoff. When the Madoff scam came to light, the investors sued, among others, the auditor, in the case of *Wolf Living Trust v. FM Multi-Strategy Inv. Fund, LP* (2010 U.S. Dist. LEXIS 118169, 2010). The investor-plaintiffs alleged that Fulvio conducted inadequate audits and knowingly or recklessly disregarded numerous red flags with regard to the Fund's investment in Madoff. Given its failures, the investors alleged that Fulvio disseminated false audit reports that it knew would be provided to limited partners and potential investors. The case was dismissed on jurisdictional technicalities, and the court saw no grounds for jurisdiction under federal securities laws.

The Fairfield Greenwich Group was another feeder fund organization whose financial statements were audited without qualification. The investor-plaintiffs in the case of *Anwar v. Fairfield Greenwich, Ltd.* (2010 U.S. Dist. LEXIS 108929, 2010) charged that the auditors, PWC, overlooked an extensive array of so-called "red flags" – ranging from the impossibility of Madoff's returns to other financial firms refusing to invest with Madoff – that should have alerted the defendants to infirmities in the Fairfield funds. They suggested that PWC and other feeder fund defendants brushed off suspicions aroused by Madoff's use of an essentially one-person accounting firm for his multi-billion dollar investment business, and by the unblinking acceptance of trade confirmations that were fraudulent on their face.

The *Anwar* investor-plaintiffs were very specific about the failings of PWC to exercise due diligence in their audits of the Fairfield feeder funds. For example, they charged that PwC had originally claimed that it would meet with BMIS to obtain an understanding of the key control activities as they relate to the operations and process over the custodian, sub-custodian, and prime broker functions.. However, it appeared to the plaintiffs that PwC accepted Madoff's representations without any independent investigation. For example, Madoff stated to PwC that BMIS's trades were mostly electronic, with records and reconciliation updated daily. But PwC allegedly knew that Madoff did not provide electronic confirmations to the Funds, but instead provided delayed paper records of his trades. The feeder fund investors alleged that had PwC analyzed and tested Madoff's investment strategy, it would have detected that the strategy could not have functioned as described, and that the returns claimed by Madoff were not achievable. In short, the plaintiffs alleged that if PwC had performed a proper audit, it would have discovered that Madoff did not actually engage in any legitimate trades and that the assets of the Funds did not exist. Despite these detailed allegations and charges, the court in the concluded that the investor-plaintiffs failed to allege facts that give rise to a strong inference of anything more than a neglect to uphold professional auditing standards. As such, the complaints against PWC and several other Fairfield feeder fund defendants in the *Anwar v. Fairfield Greenwich, Ltd.* case were dismissed.

A group of accounting firms was sued in the case of *Saltz v. First Frontiers, LP* (2010 U.S. Dist. LEXIS 136140, 2010), which involved another sub-feeder fund (First Fontiers) that invested in the feeder fund Beacon Associates LLC rather than in BMIS directly. The plaintiff-investors in that case alleged that the auditors aided and abetted the lack of due diligence by First Frontiers by approving inaccurate and false financial performance statements, and that the auditors knew, or should have known, but for their conscious avoidance, that the statements far overstated the value of each investor's account because they included the value of worthless BLMIS holdings. The plaintiffs also alleged that the auditors had to have known of at least some of the red flags (unless they were egregiously reckless), but took no action to investigate or disclose the red flags. The court, however, concluded that the plaintiffs were not prepared to prove that the auditors actually knew of the red flags that supposedly would have led them to discover

Madoff's fraud, and dismissed the case against the auditors. The more plausible competing inference, for the court, was that these auditors, like others in the industry, did not find the information available to them so disturbing as to merit further investigation.

Another recent case, *In Re J.P. Jeanneret Associates, Inc., et al.*, involved the accounting firm of Margolin, Winer & Evens LLP. (2011 U.S. Dist. LEXIS 9630, 2011). The Margolin firm audited the Income Plus Fund, a feeder fund that enabled individuals, charities, pension funds and retirement accounts, institutions and other entities including other hedge funds to invest with Madoff. Participation in The Income Plus Fund was offered to investors through confidential Offering Memoranda (OM) that were released in 1993 and in 2003. The plaintiff-investors in that case asserted that Margolin had a duty to understand details of Income Plus' investments, and that in so doing the firm was required to do more than rely solely on the procedures it performed. Much of the Income Plus Fund's investment and income information made available to Margolin was based on information from Madoff, and the plaintiffs charged that the Margolin firm should have looked more closely at the Income Plus Fund. In dismissing the case on behalf of the Margolin firm, the court considered the federal securities law claim asserted against the firm to have been a fraud-by-hindsight claim that is often brought against the auditors who happen to have been engaged to audit feeder funds.

The most recent of these dismissals involved G. Philip Stephenson. As noted above, Stephenson sued PWC and several other parties, alleging, among other things, fraud and malpractice on the part of PWC. The initial lawsuit, *Stephenson v. Citco Group Ltd.,* was filed shortly after the Madoff scam came to light, was dismissed in its entirety on March 31, 2010 (700 F. Supp. 2d 599, 2010). Stephenson appealed the dismissal, but the dismissal was upheld on appeal (2011 U.S. Dist. LEXIS 23244, 2011). The courts determined that under established legal precedence, allegations of GAAP or GAAS violations do not, by themselves, establish *scienter* of their own force. The court also concluded that Stephenson was unable to prove that PWC both knew of, and ignored, the alleged red flags.

ETHICAL ANALYSIS OF AUDITORS' DUE DILIGENCE

All of the dismissals of the lawsuits against feeder fund auditors, described above, involved claims of recklessness (or worse) on the part of the auditors. To the extent that some feeder fund investors decide to press their claims in state courts under a theory of professional negligence, or malpractice, they might be somewhat more successful than have the plaintiffs in these securities laws cases. Nevertheless, these cases have made it clear that the courts are reluctant to impose liability on feeder fund auditors based on legal interpretations of their standard of care in such circumstances.

Whether or not there is legal liability for overlooking the red flags in the Madoff Ponzi scheme, questions can and should be asked about whether or not the auditors of the feeder funds fulfilled their professional ethical duties. In particular, auditors are required to comply with the AICPA *Code of Professional Conduct* (2010). That code includes Rule 201, which requires that auditors exercising due professional care in the performance of professional services, that they adequately plan and supervise the performance of those services, and that they obtain sufficient relevant data to afford a reasonable basis for conclusions in relation to their audits.

To the extent that one or two red flags may have been missed by the feeder fund auditors, the case could be made that the auditors were acting in full compliance with the ethical requirements of their profession. But the cumulative effect of the laundry list of red flags, of which the auditors were either aware or arguably should have been aware, is compelling. And while such notions as do care, adequate planning, insufficient data are difficult to define precisely for purposes of deciding whether an auditor might have acted unethically, the auditing profession is not necessarily well served if it does not consider the long-term impact of the failures in these feeder fund cases. If the auditing profession does not assume responsibility for upgrading its ethical sense of responsibility in cases where danger signals are so numerous and voluminous, it may find that its usefulness and relevance to the investing public may diminish.

As it happens, there are ethical protocols in place that would be helpful and instructive if the AICPA chooses to come to grips with the ethical implications of the feeder fund failures. Ironically, in November 2008 (approximately one month before the Madoff failure), the AICPA published guidelines for complying with most of the rules of its *Code* (2008). Those guidelines describe an approach that auditors and other accountants can use to evaluate those relationships or circumstances that can impact the due diligence of an auditor, but that are not explicitly addressed by the *Code* itself. Those guidelines require that auditors carefully identify threats to their compliance with the ethics rules, and evaluate the significance of those threats. If the threats are not at an acceptable level, the threats and safeguards approach involves determining whether safeguards are available to eliminate the threats or reduce them to an acceptable level and, if so, applying such safeguards or, if not, avoiding the situation increase the threats. Threats are identified and evaluated both individually and in the aggregate because they can have a cumulative effect on an auditors compliance with the requirements of due diligence.

This type of analysis of the threat of non-compliance with the due diligence requirements (and other professional ethics standards of the auditing profession) was not conducted by the auditors of the feeder funds in the Madoff Ponzi scheme, for two reasons. First, the threats and safeguards guidelines were not published by the AICPA in time to have had an impact on the feeder fund audits. Second, and much more importantly, the AICPA chose not to make its threats and safeguards guidelines authoritative. That is, the AICPA chose to avoid treating these guidelines as anything more than mere suggestions. This, despite the fact that the AICPA was willing to issue fully enforceable, authoritative threats and safeguard guidelines in regard to one specific rule (that is, the independence Rule 101 of the *Code*). Instead, the guidelines for Rules 102 to 505 of the *Code* were explicitly not required, and were published only as a means of assistance to members in their efforts to comply with the actual rules of the AICPA's ethics code.

CONCLUSION

Lord Moulton famously referred to ethics as "obedience to the unenforceable" (1924). In the case of the feeder fund audits, auditing standards of care that would have required auditors to be alert to, and to respond to, red flags such as those in the Madoff Ponzi scheme, may be unenforceable. The goal of this paper was to consider, through legal research, how the judiciary, takes into account auditors' technical and ethical standards when auditors are sued for professional negligence and negligent misrepresentation. The primary finding of this paper is that that courts have been unwilling to enforce those standards of care in such a way that auditors are held responsible for disregarding any number of danger signs that went into problems in the financial statements of the feeder funds. This finding is limited by the fact that not all of the Madoff-related feeder fund cases have found their way through the courts, and so there is the unlikely possibility that one or more of the courts could change direction in the years ahead.

It would not serve the auditing profession well to hide behind these court decisions. The auditing profession is entirely dependent upon its reputation for credibility, integrity and diligence. That reputation would be enhanced if the auditing profession treated the failures to exercise sufficient care, planning, and data gathering in these cases, as a "teachable moment." The profession could begin this process very easily, by simply dusting off its own guidelines for managing the risks of noncompliance with its own ethical standards, and making them enforceable. Future research could result in suggestions for how this might be done.

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THE COMPONENTS OF THE INNOVATIVE ORGANIZATION: EVIDENCE FROM THAILAND

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ABSTRACT

This paper examines the components of the innovative organization in Thailand. The mixed method was used in gathering the data that can be categorized in two parts. Qualitative collection used focus group discussion in an R&D unit. The findings revealed that employees understood the innovation concept and the importance of innovation. This understanding could enable the company to compete in new business environments. In the quantitative element of the study, data were gathered from 152 employees by questionnaire. The results showed the means of innovative firm factors, company infrastructure, external confidence, clear objectives, team constitution, external influence, freedom, attitude toward risk, internal confidence, department growth and development, were not very different and the work period affected the perception of employees. The employees recommended that firms should create an innovative culture, set innovative behaviors as the work standard, and that communication among individuals, groups, and organizations would help employees create new ideas and implement their ideas.

JEL: M10, M12, M14

KEYWORDS: Innovation, Innovative Organization, Corporate Structure, Biotechnology, Strategy

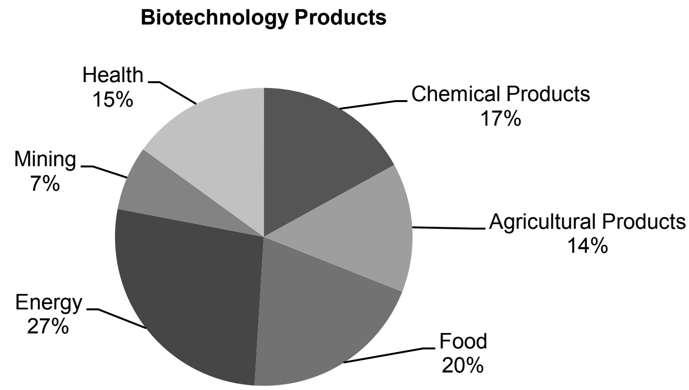
INTRODUCTION

Biotechnology is the process of improving and utilizing the DNA of small cells, including the processes of genetically-modified organisms. It is used in important industries including the food industry, pharmaceutical industry, and energy industry. Each of these industries are related to the quality of people's lives. The governments of the United States, China, Japan, Singapore, Malaysia, and India have intensively invested in biotechnology research and development, and have allocated resources and set clear directional frameworks to obtain a world market share of biotechnology products as shown in Figure 1.

An examination of biotechnology products reveals that energy products represent the highest proportion, followed by food products, chemical products, agricultural products, health products, and mining. Moreover, a report of the National Science and Technology Development Agency found that the economic value of biotechnology products in the world in 1983 was about 5,400 million dollars and increased to 11,000 million dollars and 58,000 million dollars in 1994 and 2003, and will increase to 300,000 million dollars in 2020.

The Thai government has also realized the importance of biotechnology and has developed a biotechnology development policy framework. The goal of the framework is to increase the nation's competitiveness as well as to develop the health and well-being of the people. Further, the government expects to receive investment from both domestic and international companies, cooperation between local firms and large countries in technology development, and expanded local trade to neighboring countries (National Science and Technology Development Agency, 2003). For this reason most local biotechnology companies have changed their strategy to an innovative and compete in the new business environment.

Figure 1: Market Share of Biotechnology Products



This figure shows the proportion of biotechnology product global market share in 2003 taken from the National Science and Technology Development Agency report.

Scholars have provided many definitions of innovation; however, in this paper the authors offer a simple definition. Innovation refers to new products or new processes that enable organizations to maximize the value of production, reduce costs, increase efficiency, and respond to the customer.

With innovative strategies, the organization would be wealthy and sustainable in the long run. However, successful innovation is not easy, it depends on several factors, such as marketing, funding, networking, and personnel and corporate management (Hawitt-dundas, 2006). Tidd & Bessant (2009) have noted that the challenges of modern management are to create an innovative organization. Executives should be a role model in changing and setting clear directions, preparing infrastructure, permitting employees to think and work on their own, and recognizing the employees' potential and developing their capabilities.

The aim of this paper is to examine the components of the innovative organization in Thailand. The paper is divided into five parts; the first part is the introduction, the second part is the literature review, the third part concerns methodology. The fourth part reports the findings, and the last part presents come concluding comments.

LITERATURE REVIEW

In the competitive economic era, innovation strategy is critical. Many organizations have tried to start new policies and create a learning environment and corporate culture that encourage employees' creativity and innovation (Hewitt-Dundas, 2006). These managerial practices will help the company obtain an advantage in the short and long terms (Hsueh and Tu, 2004; Santos-Rodrigues, Dorrego and Jardon, 2010).

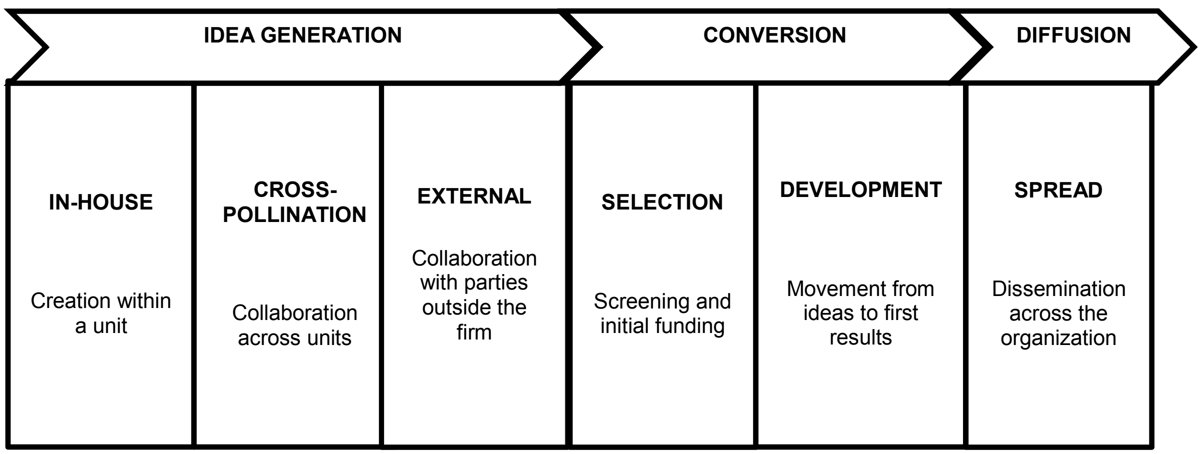
Innovation has many meanings depending on the scholar's area of study. For instance, Burton and White (2007) suggested a broad definition of innovation that refers to the process of new products or new service development. Meanwhile, Roger (1995) stated that innovation is a new idea regarding implementation, that sometimes may be related to technology. One business expert also describes innovation as an entrepreneurial tool for obtaining property (Drucker, 1994).

Jain (2010), divided innovation into three levels: the individual level, group level, and organizational level. At the individual level, the organization focuses on innovative behavior, idea generation, and idea implementation. Group innovation was the culmination of individual result. This process also affects knowledge sharing and knowledge absorption within the group. Finally, the organization level is impacted by the system, policy, strategy, organizational structure, corporate culture, and other factors. All innovation levels result in new products, processes, and service.

Rothwell (1994) noted that the innovation process has many and varied models; however, the innovation model that is widely recognized is comprised of five models: the Technology Push Model, the Market Pull Model, the Coupling Model, the Integrated Model, and the Networking Model.

In this paper, however, the authors present Hansen and Birkinshaw's innovation model (2007) that described the stages of innovation process based on the value chain concept as follows: 1. Idea Generation which is the first stage of the innovation process. Ideas can be both from internal sources (employees), and external sources, such customers, users, suppliers, etc. 2. Conversion is the process of idea selection and development. The organization assesses the feasibility of the ideas and chooses potential projects to implement. 3. Diffusion is the commercialized stage. The organization distributes new products or services into the market.

Figure 2: Innovation Value Chain



This Figure shows the innovation value chain.

In organizational management, some academics have stated that the organization should emphasize the decision-making abilities of the manager, technology, and the work environment that helps employees to think, create, and implement ideas (Chalhoub, 2010; Craig and Dibrell, 2006). Additionally, Rosenfeld (2008) stated that executives not only have multi-skills, but also can motivate the employee to innovate. Meanwhile, the organizations have to create the appropriate infrastructure, corporate structure, and trust.

Tidd and Bessant (2009) have noted that the new challenge of organizational management is to create innovative organizations that focus on creativity and innovative behavior of employees though job design, reward systems, employee participation, and team building. Further, Tidd and Bessant described the critical components of the innovative organization as follows: 1. Company Infrastructure which refers to the resources, management models, and corporate structures that affect the operation. 2. External Confidence which refers to the attitude and confidence of the executive concerning employees. 3. Clear Objectives that guide employees in what needs to be done to achieve organizational goals. 4. Team Constitution which refers to the characteristics of team members and interaction between members. 5. External Influences that affect the operations of the organization such as funding, new technology, government policy, etc. 6. Freedom refers to the extent to which the organization permits employees to have the authority to decide, plan, and control their work. 7. Attitude toward risk, meaning the attitude of both the top executive and employees. They should have the characteristics of proactive thinking, being ready to change, and learning from mistakes. 8. Internal Confidence refers to trust in a group of employees or the team, and the belief in the team members' potential. 9. Department Growth and Development realizes the employees' potential and develops their skills continually, including setting a clear career path.

Katz (2004) stated that the emergence of innovation often occurs in the organization because of the large investment in research and development and knowledge management system. He demonstrated the characteristics of a successful innovative organization, called the human side of the innovation, as follows: 1. Corporate Culture which focus on the innovation process and support the innovative behavior of employees. 2. Architecture/Structure meaning the relationship between the manager and subordinates, including the interaction among individuals, teams and the department. 3. Roles meaning the employees' role, both formal and informal, in the innovation process: project leader, product champion, supporter, and gatekeeper.

A pleasant environment and good management will result in effective innovation. Moreover, Francis and Bessant (2005) have noted that different types of innovation (incremental innovation and radical innovation) require different resources and management support.

METHODOLOGY

The research design of this paper is the mixed method, and the study focuses on a well-known biotechnology firm in Thailand. The case here is the import-export company that distributes raw animal feed materials and initiates new agriculture products through investment in research and development to expand the domestic and ASEAN market. The main products include shrimp feed, shrimp head protein extracts, soybean processing, organic minerals, organic agricultural supplement, and protein and probiotic enzymes. The current target is to accelerate to research and develop of human functional food. Additionally, the company works with government agencies, research institutes, and academic institutions to develop technology and to transfer knowledge. Further, the company has many valuable patents and won a National Innovation Award in 2007.

The methodology is categorized into two parts: the qualitative method and quantitative method. The qualitative collection used focus group discussion in the R&D unit. The participants consisted of a manager, an assistant manager, a supervisor, and two employees. The data analysis described the nature of the participants and grouping information followed the components of the innovative organization (Tidd and Bessant, 2009). The quantitative collection consisted of an employee opinion survey concerning the components of the innovative organization. The samples were 152 employees in all departments selected with the simple random sampling technique.

Table 1 shows the sample distribution. Most respondents were male (N = 99), age between 20-30 years (N = 81), and graduated from high school (N = 115). An average of 52.5% of employees were operators and 44.7 % of employees had stayed with the organization from 1-5 years.

FINDINGS

In this part, the authors divided the findings into two sub-parts based on the gathering methods: the findings from the quantitative method and the qualitative method.

<u>The Quantitative Method Findings</u>

Employees were surveyed concerning the components involved in the innovative organization: company infrastructure, external confidence, clear objectives, team constitution, external influence, freedom, attitude toward risk, internal confidence, department growth and development. A Likert scale ranging from 1 (fully disagree) to 5 (fully agree) was used for the measurement. Table 2 shows the means and standard deviation of the components perceived to be involved in the innovative organization.

Table 1 Sample Distribution

Topics	Number of Employees	Percentage
Gender		
Male	99	65.1
Female	53	34.9
Position		
Officers	72	47.4
Operators	80	52.6
Age		
20-30 Years	81	53.3
31-40 Years	61	40.1
41-50 Years	10	6.6
Education		
High School	115	75.7
Certificate	14	9.2
Bachelor Degree	23	15.1
Work Period		
0-1 Years	43	28.3
1-5 Years	68	44.7
6-10 Years	26	17.1
More than 10 Years	15	9.9

This table shows summary statistics from the sample.

The team responses ranged. The high value was for constitution and external influence of ($\bar{x}$ = 4.34), followed by attitude toward risk ($\bar{x}$ = 4.18), company infrastructure ($\bar{x}$ = 4.14), clear objectives ($\bar{x}$ = 4.01), and internal confidence ($\bar{x}$ = 3.99). Department growth and development and the freedom dimension were at the same rate ($\bar{x}$ =3.96). Finally, external confidence was rated at a low level ($\bar{x}$ = 3.89). This suggests that all components were equally critical.

Table 2 Means and Standard Deviation of the components of the Innovative Organization

Components	Mean	SD
Company Infrastructure	4.15	0.86
External Confidence	3.91	1.02
Clear Objectives	4.02	0.78
Team Constitution	3.94	0.74
External Influence	4.34	0.79
Freedom	3.98	0.73
Attitude toward Risk	4.19	0.59
Internal Confidence	4.01	0.75
Department Growth and Development	3.97	0.93
Total	4.06	0.64

This table shows means and standard deviations of the sample responses.

When we tested the sample characteristics and the components of the innovative organization we found that the work period and almost all components of the innovative organization were significant. Table 3 shows the sum of squares, mean square, and *F*- test. The statistics revealed that the employees that had different work periods had different opinions concerning all of the components of the innovative organization, except the company infrastructure dimension.

<u>Findings from the Qualitative Method</u>

Almost all employees understood the innovation concept, that innovation implies new products, services or processes. The innovation novelty has multiple levels: new to the world, new to the nation, new to the organization, or new to the market. However, the importance of innovation is the extent it can be commercialized. This company planned to create a learning organization and to transfer the basic innovation concept to all employees.

Table 3 Work Period and the Factors of Innovative Organization

Factor		Sum of Squares	*df*	Mean Square	*F*	*Sig.*
Company Infrastructure	Between Groups	3.45	3	1.15	1.55	0.20
	Within Groups	109.92	148	151	0.74	
	Total	113.38	151			
External Confidence	Between Groups	30.95	3	10.31	11.83	0.00**
	Within Groups	128.52	148	0.86		
	Total	159.48	151			
Clear Objectives	Between Groups	10.76	3	3.58	6.39	0.00**
	Within Groups	83.08	148	0.56		
	Total	93.85	151			
Team Constitution	Between Groups	14.00	3	4.68	9.95	0.00**
	Within Groups	69.44	148	0.46		
	Total	83.45	151			
External Influence	Between Groups	9.765	3	3.25	5.55	0.00**
	Within Groups	86.67	148	0.58		
	Total	96.44	151			
Freedom	Between Groups	8.40	3	2.8	5.59	0.00**
	Within Groups	74.04	148	0.50		
	Total	82.42	151			
Attitude toward Risk	Between Groups	12.14	3	4.04	14.73	0.00**
	Within Groups	40.65	148	0.27		
	Total	52.79	151			
Internal Confidence	Between Groups	22.17	3	7.39	16.91	0.00**
	Within Groups	64.69	148	0.43		
	Total	86.87	151			
Department Growth and Development	Between Groups	24.42	3	8.14	11.11	0.00**
	Within Groups	108.37	148	0.73		
	Total	132.79	151			
Total	Between Groups	11.33	3	3.77	10.77	0.00*
	Within Groups	51.86	148	0.35		
	Total	63.19	151			

*This table shows test of Work Periods and Factors of an innovative Organization. ** indicates significance at the five percent level.*

Moreover, all processes in the organization were based on the innovation process concept: idea generation, conversion, and diffusion. This could be seen from the development of innovative products and on-going research. In addition, top executives also played a supporting role in encouraging life-long learning of employees and creating external networking. When considering the components of the innovative organization proposed by Tid and Bessant, the authors grouped the company data from the case as follows:

1. Company Infrastructure refers to the resources, management models, and corporate structures that affect the operation. The company had tools and equipment, but for some scientific equipment, which was often less used and required high investment, the company contacted outside provider agencies. Further, the organization not only restructured to a flat organization, but also created a suggestion system that was a direct channel between employees and executives via e-mail. This created close contact among employees, departments, and top management positions.

2. External Confidence means the attitude and belief of executives about employees. In this case, top executives recognized the employees' capability and supported staff in attending training at technology institutions and development programs, including socializing the innovative values.

3. Clear Objectives refers to the company setting clear directions and communicating with employees in monthly meetings and on prime occasions. For instance, meeting president had focused on company vision, mission and strategy to ensure that all staff received the same directions before starting new discussion topics.

4. Team Constitution is associated with team member characteristics and the interaction between them. They often coordinated and shared information, such as production problems, new research and development knowledge, and customer needs among various departments. This information was essential for the innovation process, at the stage of idea generation, and all employees became involved in goal setting and corporate directions.

5. External Influence refers to the external environment, such as funding, new technology, and government policy that affect the organizational operation. In this case, The company was benefited from the biotechnology development policy framework. Therefore, the company had the cooperation with the National Innovation Agency (NIA) and the National Science and Technology Development Agency (NSTDA) in funding support and knowledge transfer, including also work with the Science Park, universities, educational institutions, and research and technology agents.

6. Freedom refers to the company permitting the employees to work on their own, express their opinion and delegated authority in decision making about their job. This helped to encourage the creativity of employees because the staffs' proposals and ideas would not be blocked, thus bringing about a sense of belonging and creating the challenge of work.

7. Attitude toward Risk refers to the company investing in high technology projects with high risk. However the staff understood characteristics of innovation that sometimes may face failure and sometimes may be successful, as well as have the ability to learn from past experience.

8. Internal Confidence refers to trust within a group or a team, and the belief in the team members' potential. This company not only made an effort to create a happy work place and quality of work life, but also focused on open communication to retain good interpersonal relationships and trust in the team.

9. Department Growth and Development involves emphasizing continuous learning of the staff at all levels. Especially in the research and development unit, the company invited technology experts to be employee consultants, and coaches. Further, the company highlighted on internal and external training programs as well as set clear employee career paths.

CONCLUSION

In biotechnology development policy framework, Thai local companies have realized how to compete in the new business environment and innovation strategy has become an alternative way to achieve a competitive advantage in the long run. Therefore, several Thai companies have changed their strategies and action plans.

However, successful innovation is not easy, and it depends on several factors. This study aimed to examine the components of the innovative organization and used the mixed method to gather the data on a well-known biotechnology firm that categorised two parts. The qualitative collection used focus group discussion in the R&D unit. The quantitative section involved collecting data from 152 employees via questionnaire.

The findings revealed that the survey and focus group discussions aligned. The staff understood the concept of innovation, and all of the components of Tid and Bessant's innovative organization concept affected the company's innovation process. When considering the quantitative data it was found that the means of all factors (company infrastructure, external confidence, clear objectives, team constitution, external influence, freedom, attitude toward risk, internal confidence, and department growth and development) were not different and the work period affected the perception of employees. This implies that all components were important and that companies needing to set innovation strategies should be concerned about these components.

Finally, the employees mentioned organizational development and the idea that the company should emphasize creating an innovative culture and establish innovative behavior, idea generation, and idea implementation as a performance appraisal standard. Moreover, the employees also offered some opinions regarding the government. They indicated the government must take a proactive role in promoting and supporting biotechnology firms more than is apparent with current action.

This study had some limitations, as the population was small and included only a single company. As such, the results are not complete or reliable. Further study that increases the size of the population and compares the results with other biotechnology companies or other industries would be beneficial.

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CREDIT POLICIES IN SOUTHERN ITALY SOLID WASTE FIRMS

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ABSTRACT

The aim of the present work is to analyze how relations between financial choices and the capital structure of firms condition the business dynamics of the companies involved. The paper involves an analysis of the balance sheets for the three year period 2005-2007 of firms dealing with urban waste disposal in a region of Southern Italy. The results show how economic dynamics and current tariff policies have resulted in conditions of financial imbalance that, in more than one case, have led to financial bankruptcy. The massive credit given to insolvent public bodies has resulted in excessive risk exposure. The result is levels of debt that it is hard to imagine would be tolerated in companies working under normal market competition. This paper analyzes waste disposal companies dealing in a part of the country that has been defined as underutilized. This sample provides an interesting opportunity to study the policy implications of the crisis and failure of such companies.

JEL: M4

KEYWORDS: Public Utility, Capital Structure

INTRODUCTION

The expression "public service" has diverse definitions and interpretations. This is true especially at the scientific and academic levels because of the absence of any precise legal definition (Sorace, 2001). National legislation has never provided a definition of local public service, nor of public service in general, neither has it laid down a basis on which to build an exact description (Cattaneo, 1990). Indeed, it is this lack of a systematic frame of reference governing legislative measures that has made it impossible to arrive at a clear definition in the academic and theoretical field (Maggiora, 1986; Fresa, 1983). There is no theoretical consensus on how to define public service. Various and often conflicting criteria are used to identify services which can be labelled public.

One line of theory suggests it is necessary to make use of subjective criteria. From this standpoint, ervices offered by public subjects or all those carried out by Public Administration in general can be defined as public (Borgonovi, 1984). From another theoretical view, it is essential to link the determination of public service to objective data. What is considered necessary is not the quality of the subject that undertakes the activity but rather the nature of the service. Thus, it is irrelevant whether the service provider is public or private. There is no shortage of authoritative theoretical positions that claim that the two approaches, if applied rigidly, can be inadequate because the definition of public service implies consideration of various criteria including: subjective, objective, teleological, institutional and so on (Zucchetti, 2002). In fact, to be defined as a public service, the goods and activities produced must respond to basic and widespread needs of the local community and to realize social, economic and civic ends (Landolfi, 1999).

Regarding local public services, legislators have taken up a midway position between the objective and subjective conception, privileging a mixed notion of public services. Article 112, first section of the legal decree 267/2000 on the one hand focuses attention on the role of the local body whose job it is to manage service provision. It tries to give some content to public service, by claiming that it must have as its aim the production of goods and activities to fulfil social ends and to promote the economic and civic development of local communities. This mixed notion adopted by the legislation does not pose any substantial limits to the activities of local government administrations in the Single Text formula. All activities to do with economic and social development are included except for those activities mentioned in the list of "functions".

Service allocation can be direct or indirect. In any event it must satisfy the needs of the local area under the control of the public service provider. In other words, the service is public as it is provided to the community and because of the fact that a public subject defines the characters which it assumes as obligations (Casetta, 1999).

A public service should consist of a certain type of economic activity whose aim is to satisfy needs so widely felt as to be considered belonging to the community. One can claim that public services have as an essential precondition the achievement of social ends (Picarelli, 1975). The service becomes public only if public institutions recognize it as such. Public services are addressed to the community to meet its public needs. The task of the Government is to make available the necessary means to satisfy these needs. There is a collective interest in ensuring progress in public service management to bring it in line with best international practices.

Public services provide a clear sign of the well-being of a country and characterize its ability to supply citizens with a quality of life considered acceptable, and the ability of companies to satisfactory compete on a global scale (Rassu and Saporito, 2009). Satisfactory levels of efficiency in the supply of general services by public administrations can contribute to the quality of public policies, to increase productivity, thereby allocating other services to the community and to general improvement in the local environment for both firms and citizens (Onida, 1967; Massei, 1992). Obviously low efficiency levels in the supply of local public services, especially related to productivity, act as a brake on territorial development. Indeed, inefficiency and backwardness in services carry a heavy burden for citizens and users alike. This cost weighs heavily both directly and indirectly on the local economy (Tretola, 2004).

Studies of demand levels, supply and the efficiency of certain collective services show, in line with *Istat* data, a marked backwardness in southern parts of the country compared to the north and center with regard to the quality of overall provision of local public services. In more dynamic parts of the country, legal reforms started in the 1990s aimed at liberalizing various sectors and introducing elements of competition, and favored a process of rationalization and reorganization of the industrial supply side base with significant gains in efficiency and a growing entrepreneurial ethos in certain subjects running the system (Severi, 1991; Montrone, 2006). In the south of the country, however, reforms were introduced more slowly and often resistance to the changes was much stronger. The system of supply, was also handicapped by a less developed demand. It remained fragmented and tied to public management models reluctant to any market opening.

The reform process of local public services began in the final decade of the last century. The main driving force behind this process can be found in the municipal model crises, brought about by the unsustainably high cost of such services, the increase in the complexity of the public's needs and the related inadequacy of the bureaucratic structure in meeting those needs (Ammannati, 2008).

The need to reduce costs and streamline the structure connected to community pressure for the liberalization of certain sectors of public services resulted in a process of reform related to running the public services, shown by law n. 142 of 1990. This law represented the evolution of various regulations which had been introduced one after another over time. This law introduced new forms to manage public services providing an opening towards third parties and economic management open to an influx of capital from local sources. Later, there was a further move towards introducing a business structure for the management of local public services (Corso, 1997; Delli Santi and Santiapichi, 2000).

The structure of local public services underwent another change through the legal decree 269 of 2003, that converted into law n. 326 in the same year. The first significant element of this change was the distinction between local public services with economic importance and others. This substituted the old distinction between local public services with an industrial importance and others, hitherto used by the Italian legal system. Legal decree 269 underscores that network ownership belongs to the local bodies and stipulates that in running the network administrations can delegate service provision to suitable companies chosen through open tenders, to publicly listed companies who could take over to run the service, providing the public body providing the public money continues to exercise the same control as would be the case under direct management and that the new service provider cooperates in its activities with the controlling public body or bodies.

The discipline regulating the offloading of economically important services was completely overhauled. Strict conditions were stipulated for awarding private contracts, which had to meet standards of the sector in question as well as those fixed by EU norms as follows: 1) private companies are selected through an open public tendering system; 2) mixed private/public companies in which the private partner was selected through public tendering procedures; 3) companies financed by public money on the condition that the bodies controlling the public capital apply the same control and monitoring as would be the case with their own services, and the companies work closely and cooperate with controlling bodies.

Services of no economic importance, awarding control through a system of tendering to third parties was eliminated and the business model to run such companies was reformulated, substituting mixed companies with companies financed by public money. With the ruling n. 272 of 27th July 2004 the Constitutional Court declared illegitimate article 14, section 1, e) and section 2 of the legal decree n. 269 of 30th September 2003, which afterwards became law n. 236 on 24th November 2003, being in conflict with articles 117 and 118 of the Constitution. The Court decided for public services of economic relevance that the government intervention must limit itself to laying down the guiding principles, leaving the detail to the local public bodies concerned. With regard to public services of no economic importance, the court declared that government intervention was not legitimate since competition had no relevance.

After this judgment the Italian government intervened once again in the question of public services with the aim of encouraging the widest possible application of competition. They determined that awarding control to a mixed company through public procedures for the selection of the operative partner, the so-called “dual objective tender”, is covered by ordinary modes of allocating tenders for the running of local public services, stipulating that the private partner be awarded a percentage of no less than 40%.

Significant innovations in public services have been introduced by the Bersani Decree, converted amendments into Law No. 248/2006. This decree was intended to curb the proliferation of regional or local companies, which had been included in market’s related to areas other than those institutionally their local public services (Clarich, 2006; Longoni, 2006). Further amendments to the regulations were introduced by Finance Act 2008. This law introduced a model of triangulation negotiation between the operator and user control, aimed at achieving higher levels of quality of public services provided.

The much-troubled reform of local public services has took place in 2008 (for further details, see Lucarelli, 2008, and Bassi, 2008). In 2009 the law was further amended. The subject matter covered by the new art. 23-bis, Law 166/2009, included two modes of local public services: The award for employers or companies in any form consisted of identification through a public competitive procedure. Our reliance on joint venture companies and private public companies provided that the selection is carried out by the member using a public competitive procedure and should transfer to the private partner a share of at least 40 percent of the tasks

In the course of 2010 was also approved the DPR No 168 of 2010 amending the Regulations on local public services of economic interest. Lastly the government has recently approved the Decree Law No. 138/2011, currently under conversion, article 4 provides for the adjustment of the discipline of public services to local referendum and the law of the union the European Union. This decree applies to local public services of economic interest with the exception of water service, the service distribution of natural gas distribution services of electricity, the regional rail service and the operation of pharmacies.

In this context of reform, privatization and liberalization, it is interesting to analyze the companies dealing with municipal solid waste in southern Italy, an area of the country defined underutilized. The Italian case represents an interesting natural experiment because both privatisation of utilities and market liberalisation were launched at the same time - the 1990s - with the intervention of the regulator and other supervision mechanisms.

Specifically, this study aims to analyze how relations between the financial and capital structure affect the dynamics of firms in the regulated businesses. Researchers have long hypothesized there exists an important interaction between the pricing choices of regulators that set rates in regulated environments and the capital structure decisions of firms which operate in those markets. The general consensus that can be drawn from the theory is the existence of price regulation in the output market provides the regulated entity with incentives to utilize additional levels of debt to finance the operations of the firm. Literature on the subject is conspicuous and will be analyzed in the following section.

Data on regulated industries such as cable television, local telephone, electricity generation, and natural gas distribution, find considerable empirical evidence consistent the predictions from the theory - rate regulation creates an incentive for firms to increase their debt levels. For example, De Fraja and Stones (2004) have investigated the role of capital structure in a regulated firm. They have show that it affects the prices set by the regulator: the expected price is lower the higher the proportion of debt finance. Also, Cambini and Rondi (2006), with data from the four largest public utilities Italian companies - Eni, Enel, Autostrade and Telecom - conduct a descriptive analysis of the interrelation between leverage, price, profitability and investment rate. This article analyzes the relationship between the financial and capital structure in the solid waste management company in Southern Italy city.

The article is organized as follows. The next section gives the basic framework of the strategic regulation process. The empirical analysis section discusses the aim of the present research. The subsequent sections describes the data, the research method and the empirical results. The last section concludes the paper.

LITERATURE REVIEW

The process of privatization determined a new scenario for public utility companies, opening the field to competition both national and international (Marchetti, 1995; Bonelli, 2001; Clarich and Pisaneschi, 2000). The economic and financial crisis at the beginning of the new millennium showed up the extreme debt situation of these companies and sometimes an clear abuse of leverage for financing activities and acquisitions. The levels of debt of many of the regulated companies, also, were it would hardly have been tolerated by the banking system in normal market conditions.

The regulation has some implications. First, the regulation increases a monopolist's cost efficiency (Coco and De Vincenti, 2004). When the firm's cost-reducing effort depends on the output supplied, a binding pricecap, by compelling the monopolist to produce more, finally results in lower costs. There may be several reasons for which an unregulated monopolist or a firm regulated by non-binding caps may lower its cost-reducing effort below the socially optimal level. For example, insufficient market discipline could originate phenomena similar to those correlated with soft budget constraints create separation between management and property of the firm. When management maximises its discretionary budget with a profit constraint. Coco and De Vincenti (2004) provides another, simpler, reason. Management builds on the so-called “Arrow effect”: comparing the incentives to process innovation under a monopolistic and a competitive market structure, Arrow (1962) concluded that they are greater under competition because the marginal gain from innovation in terms of cost-reduction is positively correlated with output. Cabral and Riordan (1989) exploited this intuition in a natural monopoly regulation model to highlight the positive, but discontinuous relationship between the X parameter of the pricecap and the level of a one-shot effort exerted by the firm at the beginning of the regulatory period.

A regulated monopoly may be more cost-efficient than an unregulated one, so that regulation may not only improve allocative efficiency but also productive efficiency (Coco and De Vincenti, 2004). The behavior of regulated companies is subject to many variables that affect- often in an irreversible manner- their economic and financial stability. The classical circular relationship between debt, internal performance and company expected value is interrupted in regulated companies because the performance rate is decided by the regulator and the capital structure by the company. The performance of a regulated company depends on the way in which prices for services offered by the company are controlled. In general the price is set in such a way that the expected earnings equal the company’s expected earning needs (Cavallo & Coco, 2002).

The capital structure of regulated firms is a key determinant of regulated rates. Under traditional cost-of-service regulation and some forms of price–cap regulation, commissions set regulated rates so as to ensure firms a “fair” rate of return on equity (see e.g., Bonbright, Danielson, and Kamerschen, 1998; Phillips, 1988; and Spulber, 1989). Consequently, regulated firms have an incentive to choose their capital structure in anticipation of its effect on their rates. Given the size and political sensitivity of the regulated sector and the fact that stocks of regulated firms are widely held, it is clear that an understanding of strategic interaction between firm capital structure and the rate setting process is needed.

Spiegel and Spulber (1997) examine two key aspects of financing strategies of regulated firms. First, due to the limited commitment ability of regulators, a regulated firm may have an incentive to become leveraged. Debt may deter regulators from lowering rates because they seek to minimize the likelihood that the firm will go bankrupt and incur a deadweight loss. Second, asymmetries in the information that regulators, investors, and the regulated firm possess about the firm’s costs significantly complicate the leverage effect. Recognizing the information conveyed by its capital structure fundamentally alters the financing incentives of the regulated firm.

In the last thirty years, a large literature has emerged that studies optimal rate regulation under asymmetric information (e.g., Baron and Myerson, 1982; Laffont and Tirole, 1986; Lewis and Sappington, 1988; and Spulber, 1989), these models assume that regulators can precommit to optimal regulatory mechanisms and apply the principal agent framework to derive incentive schedules.

Regulated firms make large investments in infrastructure and generally finance them with a mix of debt and equity. Spiegel and Spulber (1997) show that in such cases, firm capital structure is uncorrelated with their expected values, reflecting the pooling of diverse firm types. This results suggests that countervailing incentives should be taken into account in future empirical studies of capital structure and cost of capital of regulated firms. Moreover, this result can explain why Miller and Modigliani (1966), in their classic study of the electric utility industry, found “no evidence of sizeable leverage or dividend effect on firm value of the kind assumed in much of the traditional finance literature. This empirical result supports the Modigliani and Miller irrelevance theorem (1958). However, it conflicts with later financial signaling models in which capital structure conveys the firm’s private information about its value. The countervailing incentives identified in Spiegel and Spulber (1997) can serve to reconcile these two approaches to the case of regulated industries.

The effects of countervailing incentives on the capital structure of firms have been studied by Gertner, Gibbons, and Scharfstein (1989). They examine a model in which a firm uses its capital structure to signal private information to both the product and capital markets. In their model the firm competes in an oligopolistic product market.

A leverage effect is identified by Taggart (1981) although not in a strategic setting. This effect has been observed empirically by Taggart (1985) and by Dasgupta and Nanda (1993). The effects of regulatory opportunism in a full-information setting were considered by Spiegel and Spulber (1994) and Spiegel (1994) in the context of capital structure and by Spiegel (1997) in the context of the choice of technology. Lewis and Sappington (1995) examine optimal incentive regulation under asymmetric information when the firm obtains investment funds from the capital market.

Capital structure plays an important role in rate regulation due to the interaction between the investment and financial decision of a regulated firm and the pricing choices of regulators. First, regulatory commissions set rates that depend on the firm's level of investment and capital structure, thus reflecting not only ratepayer interest, but also those of investors. The capital market, in turn, values the equity and debt of the regulated firm on the basis of its investment and capital structure, as well as on present and future regulatory policies. Second, the regulated firm makes its investment and financial decisions in anticipation of regulatory policies and the capital market's reactions.

Spiegel and Spulber explain these interactions and examine their implications for the regulatory process. Specifically, Spiegel and Spulber (1994, 1997) and Spiegel (1992) have developed models that examine the strategic interaction between capital structure, regulated price, and investment. Spiegel and Spulber (1994) study the strategic interaction between interaction between the firm's capital structure and the rate-setting process, finding that rate regulation induces firms to become leveraged. They show that by issuing debt, a regulated firm can induce the regulator to increase the regulated price in attempt to reduce the probability that the firm becomes financially distressed. Moreover, it show that this price increase as a positive effect on the firm's incentive to invest and on its choices of technology.

The regulatory process is modelled has a three-stage game in which the payers are the firm, outside investors, and consumers. At the beginning of the game, the firm is all-equity and has no liquid assets. In stage 1, the firm chooses how much to invest in enhancing the quality of its output, and it issues a mix of debt and equity to outsiders to finance this investment. The market value of this securities is determined in a competitive capital market in stage 2. Finally, in stage 3, the regulated price is determined in a rate-setting process.

The sequential structure of the model reflects two important features of rate regulation. First, the sequential structure of the model reflect the fact that "the selection of the class and the amount of securities to be issued for utility purposes ordinarily is a management function in the first instance" (Tuner 1969). Second, it reflects the inability of regulators t commit to particular rates before the firm makes irreversible investment decisions. The absence of regulatory commitment to rates is also explored by Banks (1992) in the context of regulatory auditing and by Besanko and Spulber (1992) in the context of the choices of investment.

This structure reflects the dynamic nature of the regulatory process in which regulators can observe the investment and capital structure decisions of firms as well as the capital market equilibrium. The framework recognizes the greater flexibility of regulated rates in comparison with the capital investment and capital structure commitment of the regulated firms. This implies limited commitment by regulators. Howe (1982) finds that in many states (e.g., Michigan, Oklahoma, Kansas, Delaware) courts restrict the scope of state commissions' inquiry in security issue proceedings by directing the commissions to inquire only whether the proposed projects are within the range of the utility's corporate activity, and not whether they are "reasonable" or "necessary". Today, rate regulation of public utilities in electricity, natural gas, telecommunications, cable TV, water services, and other industries is practiced by state regulatory commissions as well as federal regulatory agencies. Given the significance of this sector, it is useful to understand the interaction between rate regulation, capital structure, and investment.

A number of studies suggest that rate regulation creates an incentive for regulated firms to increase their debt levels. Others show that debt has a positive effect on regulated prices and on the allowed rate of return on equity. Bradley, Jarrel and Kim (1984), in a study of 25 industries over the period 1962-1981, find that regulated firms such as telephone, electric and gas utilities, and airlines are consistently among the most highly levered firms. Hyman, Toole and Avellis (1987) compare the Bell Regional holding companies (BHCs), as a proxy for the telephone industry, to 104 industry groups and find that these companies remain highly leveraged even when risk is taken into account. Taggart (1985) studies state electricity and natural gas regulation in the period 1912-1922, and concludes that the establishment of regulation increases the utility's debt-equity ratio. Taggart attributes this in part to reduction in the firm's risk due to regulation, but cannot reject a "price influence" effect of debt on regulatory decisions. Besley and Bolton (1990), in a survey of 27 regulatory agencies and 65 utilities, find that approximately 60% of the regulators and utilities surveyed believe that an increase in debt relative to equity increases regulated prices. Hagerman and Ratchford (1978) show that, for a sample of 79 electric utilities in 33 states, the allowed rate-of-return on equity is increasing in the debt-equity ratio. Dasgupta and Nanda (1991, 1993), in a cross-section of U.S. electric utilities for the years 1980-1983, show that increased debt is taken on to cope with a regulatory environment that is harsher to stakeholder. They find support for the view that debt precommitment can raise rates by causing the regulator avoid bankruptcy costs.

Dasgupta and Nanda (1991,1993) address debt precommitment under more restrictive demand assumptions with a fixed investment level. The Averch-Johnson effect and capital structure issues are discussed by Meyer (1976) and Sherman (1977). Greenwald (1984) address the issue of rate base measurement in an interesting dynamic setting. Taggart (1981) identifies a "price-influence effect" of debt due to price increased by regulators seeking to reduce the risk of bankruptcy.

Capital structure theories have focused on tax considerations, agency cost, asymmetric information, and corporate control as the forces driving capital structure. See Myers (1984) for a discussion of tax-based theories, and Harris and Raviv (1991) for an extensive survey of theories based on agency costs, asymmetric information, and corporate control. Also, the implications of symmetric information for the capital structure of regulated firms are examined in Spiegel and Spulber (1997), Lewis and Sappington (1992), Myers and Majluf (1984), Sappington and Stiglitz (1987), Stiglitz and Weiss (1981); and the interaction between agency costs, risk management and capital structure is analyzed by Leland (1998). Although these theories may also provide an explanation for the capital structure of regulated firms, they are not entirely satisfactory because none of them addresses the important interrelations between a regulated firm's capital structure, its investment, and regulated rates (Spiegel and Spulberg, 1994).

Most of the models on the interaction between price regulation, capital structure and investments levels of regulated companies have been produced by Spiegel and Spulber. They have found evidence of company underinvestment about the best socially desirable level (Spiegel and Spulber, 1994). This is due to the opportunistic behavior of the regulator reacting to company investment by lowering the regulated price. It is clear that the regulator allows the company to take on debts only if the debt increases the level of investment *ex ante*, so the benefits derived are enough high to overcome the likely costs of insolvency.

Spiegel and Spulberg (1994) have showed that in equilibrium the firm issues a positive amount of debt as a consequence of regulation. The regulator responds to this debt level by raising the regulated price to reduce the probability that the firm will become bankrupt. Nevertheless, in equilibrium the firm becomes bankrupt with a positive probability because the regulator does not increase the regulated price the point where the firm is completely immune to bankruptcy. Because debt has a positive effect on the regulated price, it mitigates regulatory opportunism. This suggests that regulators permit debt financing as a means of making implicit binding commitments. However, despite the positive effect of debt on the regulated price, underinvestment persist in equilibrium, reflecting the lack of regulatory commitment to specific prices.

The consequences of limited regulatory commitment are examined by Banks (1992) in the context of regulatory auditing, and by Besanko and Spulber (1992) in a model of investment. This article goes beyond those studies by focusing on the crucial financial issues. The use of debt as a commitment device was examined in an oligopoly setting by Brander and Lawis (1986, 1988).

Klein, Phillips and Shiu (2002) later tested the model of Spiegal and Spulber (1994) by analyzing the USA insurance sector, where once again the main aim of the regulator was to minimize costs through excessive debt. The empirical evidence confirms two main theories: i) debt burdens in regulated companies operating in the insurance sector are higher than those of companies operating in an unregulated context; ii) debt burden has a growing role in severe regulation, estimated on the basis of various parameters.

The Italian case represents an interesting natural experiment because both privatization of utilities (change of ownership from public to private) and market liberalisation (regime change) were launched at the same time - the 1990s - with the intervention of the regulator and other supervision mechanisms.

This dual change of regime had far-ranging results because before liberalization regulation geared toward political ends. In utilities, especially where there was public participation, the main objective was both to redistribute income and maintain employment, and to provide a comprehensive service to the public. These diverse objectives, not all concerned with maximizing profits, make the relationship between company and regulator similar to that between a publicly owned company and the government, where the taxpayers have the final say. In the regulation regime in which the process of privatization has been carried out, interaction takes place between the regulator and a private subject, shareholder or owner of the regulated company. The main difference is that the regulator is still acting as agent of the citizens, users and customers, but the latter are no longer the final owners of the private regulated company; they become so only in the sense that they become shareholders. This suggests a change in the regulator's perspective towards the opposite side in the bargaining on tariffs because the regulator can only act in the interest of the public or users of the service if and only if there is a clear separation of roles and interests and the company is privately owned.

Decisions on investment and financing, privatization and regulation introduce in the rapport between the regulator and the regulated a new conflict of interests. This occurs because it creates (at least in theory) separation between the person who decides the price and the actor who makes decisions regarding financing and investment.

Spiegel and Spulber (1994) show that threat of company failure, resulting from leverage, allows the company to raise prices. Yet this result crucially depends on the ownership structure and the private or public nature of the owner. In practice the threat of failure becomes real only when ownership is in private hands. The case analysed in the present study, focused on an economically weak area of the country, supports Spiegal and Spulber's theory. We find the real threat of failure has not only prevented operators from charging higher prices but also prevented them from carrying out strategies aimed at efficient restructuring. This occurs because the largest shareholder of the company providing the local public service is itself public.

EMPIRICAL ANALYSIS

Since 1997 there has been an environmental state of emergency in Calabria with regard to refuse collection. Refuse collection has always occupied an important position in environmental policy for the EU. Since 1972 the need to prevent and reduce the production of rubbish and encourage recycling has been accomplished through a key policy instrument called "action programmes". At the outset refuse disposal in Italy was regulated under TU (single text) of the laws on public health that delegated to local councils the task of organising the service through the issuing of local health regulations and by the law n. 366/1941 that governed the collection, transportation and disposal of solid waste in urban areas.

Over the years various other measures were taken, but it was the legal decree 22/1997, also known as the Ronchi decree, which reformed the area. Later the legal decree 152/2006 aimed to unify regulations governing the same sectors within a single text (*Testo Unico*) in order to avoid duplication and confusion and to put into practice directives from the EU. In particular, Optimal Territorial Ambits were introduced, coinciding with the provinces. The role of these ambits is to ensure unified management of urban refuse disposal and the drawing up of management plans.

Part of the role of the ambit authorities is to choose companies to run the service. The discipline in force is applied to the allocation of local public services. The relationship between ambit authorities and subject awarded the job of operating the integrated service is regulated by the service contract.

The ambit authority has legal powers in each of the Optimal Territorial Ambits, delimited by Region, to which local bodies must participate, and to which the exercise of power regarding matters of integrated refuse collection is transferred. The ambit authority organizes the service and determines the objectives to be pursued in order to guarantee functioning in accordance with criteria of efficiency, sound economics and transparency. The management and allocation of the integrated service and the fulfilment of the objectives laid down by the ambit authority are entrusted to subjects under art. 113 section 7 of the TUEL.

The aim of the present research is the analysis of the management and disposal of solid refuse in an economically underutilized area such as Calabria which is representative of Southern Italy as a whole. In areas which are considerably less developed than other parts of the country, from an economic point of view, public service companies can act as a break or a catalyst to wealth creation and, in this sense, they play a crucial role in the territory.

The research hypothesis to be tested, in line with the thesis of Spiegel and Spulber, is that the results concerning the income, capital and financial situation of public service companies examined, that constitute a real threat to their ability to continue to operate, do not allow the companies to charge higher prices, or to adopt a management policy that would enable the company to be saved from bankruptcy and work efficiently. Nor can these companies embark on a restructuring to improve efficiency because the majority shareholder of the company is public.

DATA AND METHOD

The study plan differentiated rubbish disposal into 5 Optimum Territorial Ambits coinciding with the 5 regional provinces: Optimal Territorial Ambit Cosenza refuse (ATO-Rn.1), Optimal Territorial Ambit Catanzaro refuse (ATO-Rn.2), Optimal Territorial Ambit Crotone refuse (ATO-Rn.3), Optimal Territorial Ambit ViboValentia refuse (ATO-Rn.4), Optimal Territorial Ambit Reggio Calabria refuse (ATO-Rn.5) The territory of each OTA is further subdivided into sub-ambits, called Collection Areas, which are the effective units.

There are 14 Collection Areas, each run by a joint private public company whose task it is to organize distinguished collection throughout the area. Looking at the situation in greater detail we examine the results obtained from a study of the 14 companies operating in the refuse collection and waste disposal sector, created by the Environmental Emergency Commission in Calabria for the three year period 2005-2007. The budget analysis is geared towards studying the company from three perspectives: 1) the economic profile; 2) capital adequacy; 3) financial solidity.

The first expresses the ability of the company to obtain positive results thereby remunerating adequately all the factors of production employed. The second is the ability of the company to maintain over time a capital basis, in the form of a composition of resources and investments that allow it to operate in stable conditions. This means that the sources of finance, i.e. the mode of raising capital, must be in line with the investments. The third perspective is management's attitude towards maintaining a financial balance between income and expenditure both in the short and medium to long term.

In the light of the above considerations the following phases were followed for the analysis of the 14 companies: 1) interpretation of budget data, including identification of the meaning and content of the single items (e.g. accruals and deferrals, risk capital and debts); 2) reclassification of profit and loss accounts and the balance sheet. The first was reclassified on the criteria of collectible liquid assets. For the second the value added criteria was used to identify the contribution of different business areas to the formation of the company's economic results; 3) calculation of indicators to highlight the company's weaknesses and strengths and 4) critical evaluation of the results.

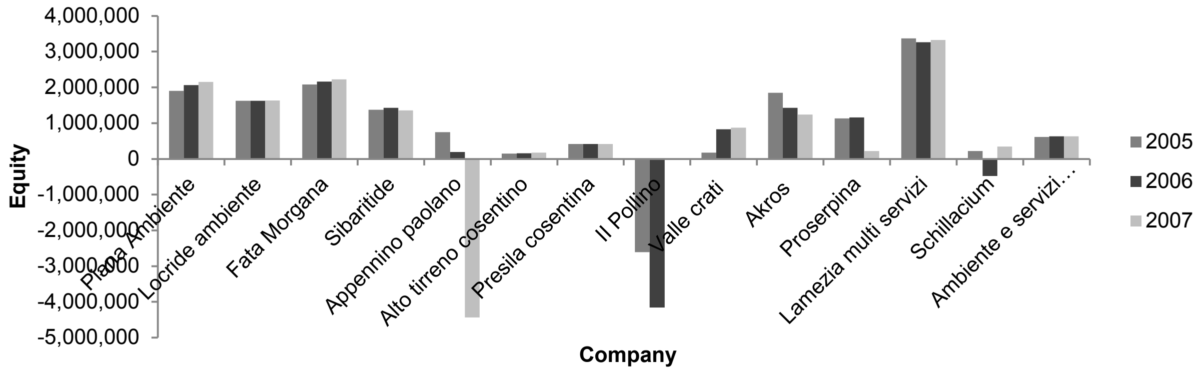
The 14 companies of the Calabrian OTAs are as follows: Sibaritide, Proserpina, Schillacium, Presila cosentina, Alto tirreno cosentino, Ambiente e servizi, Vallecrati, Lamezia multi servizi, Pollino, Piana Ambiente, Akros, Appennino Paolano, Fata morgana, Locride ambiente. The mixed companies with majority public shareholdings were set up under the commission's ordinance n. 1057/2000 with the aim to create a basic structure to provide the know-how and the operative capacity on the ground and to quickly set up a differentiated refuse collection service. The majority holding of 51% is publicly owned, while the remaining 49% is private.

RESULTS

From the analysis of the companies' equity in Figure 1, we see in the three year period, the companies recorded a positive result with high levels of net capital growth (Piana Ambiente, Locride Ambiente, Fata Morgana, Sibaritide, Alto Tirreno Cosentino, Presila Cosentina, Vallecrati and Ambiente and Servizi). Companies whose assets were positive, but decreasing over the period considered, (Akros, Prosperina), recorded losses. Companies with net losses (Appenino Paolino, Pollino and Schillacium) find themselves in serious difficulties because these losses are significant enough to erode their capital base. The other companies show a variable capital structure on account of mixed earnings results.

From the ROE analysis in Table 1, it emerges that, in the companies considered the ROE is negative or is decreasing, with the exception of Lamezia Multiservizi, for which there is an increasing ROE trend in the three years considered. So, the ROE calculation shows the inability of firms to reward their shareholders. In the cases where an increase in annual profits was recorded in certain years (Locride ambiente, Alto tirreno cosentino, Presila Cosentina, Lamezia multiservizi and Schillacium) the result can be attributed not to a successful attempt to contain costs or to an increase in earnings, but to the arrival of regional funds.

Figure 1: Equity (in €)



This figure shows the analysis of the companies' equity. It emerges that, in the three year period, the companies recorded a positive result with high levels of growth of net capital (Piana Ambiente, Locride Ambiente, Fata Morgana, Sibaritide,, Alto Tirreno Cosentino, Presila Cosentina, Vallecrati and Ambiente and Servizi).The companies whose assets were positive, but decreasing over the period considered (Akros, Prosperina), recorded losses. Appenino Paolino, Pollino and Schillacium are the companies with net losses that find themselves in serious difficulties.

Table 1: Roe (in %)

Company	Roe (in %)		
	2005	2006	2007
Piana Ambiente	10.98	7.75	4.13
Locride ambiente	0.05	0.14	0.32
Fata Morgana	2.01	3.69	2.64
Sibaritide	-8.17	3.48	-5.30
Appennino paolano	-56.08	-297.02	104.26
Alto tirreno cosentino	-24.10	9.66	9.71
Presila cosentina	0.18	0.53	0.58
Pollino	128.23	37.16	ND
Valle crati	-78.03	4.97	1.60
Akros	-14.53	-28.89	-15.85
Proserpina	-52.83	2.04	-421.90
Lamezia multiservizi	5.55	8.86	17.60
Schillacium	-540.78	137.55	2.85
Ambiente e servizi Catanzaro	-100.07	2.79	1.09

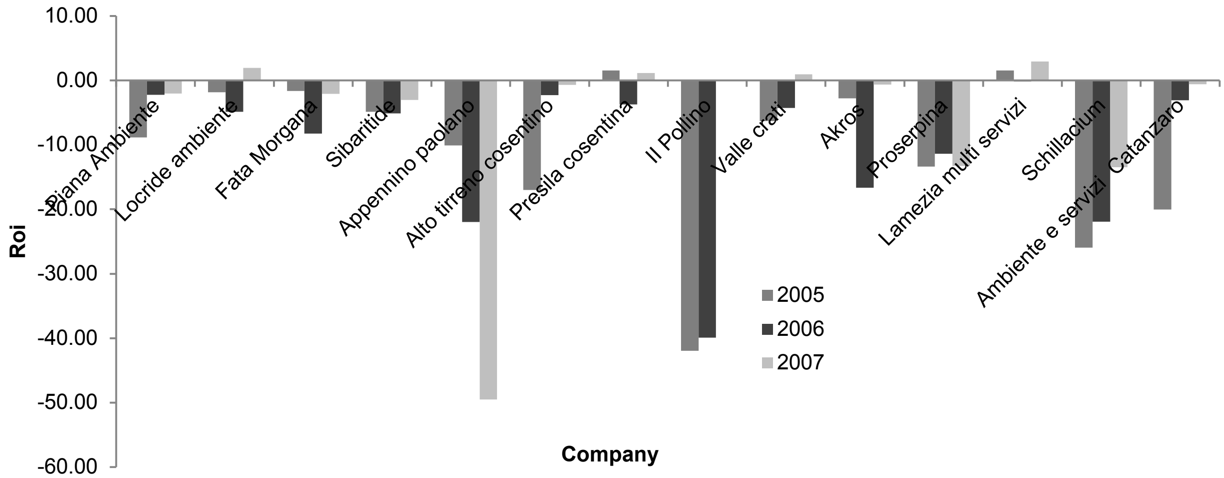
*This figure shows the analysis of the companies' equity. It emerges that, in the three year period, the companies recorded a positive result with high levels of growth of net capital (Piana Ambiente, Locride Ambiente, Fata Morgana, Sibaritide,, Alto Tirreno Cosentino, Presila Cosentina, Vallecrati and Ambiente and Servizi).The companies whose assets were positive, but decreasing over the period considered (Akros, Prosperina), recorded losses. Appenino Paolino, Pollino and Schillacium are the companies with net losses that find themselves in serious difficulties. This table shows the trend in Roe (ROE =(net profits/net assets)*100) during the period 2005-2007. In the companies considered the Roe is negative or is decreasing, with the exception of Lamezia Multiservizi, for which there is an increasing trend in Roe in the three years considered. So, the calculation of ROE shows the inability of firms to reward their shareholders.*

The analysis of operating income in Figure 2 shows negative values for all the companies analyzed except four in some years (Locride Ambiente and Vallecrati in 2007, and Presila Cosentina and Lamezia Multiservizi in 2005 and 2007). The ROI analysis in Figure 3 (ROI= (operating income/invested capital)*100) confirms the overall lack of efficiency that characterises many companies. ROI expresses the maximum remuneration that normal operations are able to produce for €100 of financial resources acquired as loans or risk capital. In particular: i) the numerator considers the result of ordinary business and not of extraordinary and fiscal operations or of financial management; ii) the denominator includes resources of a financial nature collected by the company in the form of debt or risk capital. As above, where the calculation of ROE demonstrated the inability of some firms to reward their shareholders, the negative ROI shows that some firms are even incapable of remunerating their creditors. In order to interpret this index accurately it is necessary to compare it with the average cost of borrowing expressed by the index of the credit burden on capital Shown in Table 2 (ROD=(financial burdens/borrowed capital)*100).

Figure 2: Operating Income (in €)

This figure shows the analysis of operating income. It registers negative values for all the companies analyzed except four in some years (Locride Ambiente and Vallecrati in 2007, and Presila Cosentina and Lamezia Multiservizi in 2005 and in 2007).

Figure 3: ROI (in %)



*This figure shows the analysis of ROI in years 2005-2007. Calculating ROI = (operating income/invested capital)*100) confirms the overall lack of efficiency characterizing many companies. In particular, the negative ROI shows that some firms are even incapable of paying their creditors.*

The comparison clearly shows that ROI is always less than ROD, hence the earning power generated by the companies from their normal activities does not appear to be sufficient to cover the passive interest on their debts. ROD is close to zero because the interest refers to debt versus the banks and suppliers. From the analysis of the balance sheet it emerges that the highest incidence of debt concerns taxation, pensions and national insurance payments. For this reason the interest has not been calculated. Borrowed capital is calculated as the sum between the cost of short term and funded liabilities.

The companies present serious problems of inefficiency in the running of their affairs and, therefore, the earnings from their normal business activities are not enough to cover operating costs. Thus we analysed the level of company debt and the ability to honor debt commitments in a reasonable time frame through the calculation of the treasury margin as shown in Table 3 and Figure.4 (Treasury margin= immediate liquidity + deferred liquidity – current liabilities). Treasury margin measures the company's ability to meet its current liabilities with immediate and deferred liquid assets. Appennino Paolano, Vallecrati, Akros, Prosperina, Schillacium and, above all, Pollino have liquidity problems.

Table 2: Analysis from ROI and ROD

Company	2005		2006		2007	
	Roi	Rod	Roi	Rod	Roi	Rod
Piana Ambiente	-8.85	0.82	-2.24	2.21	-2.06	1.35
Locride ambiente	-1.83	0.28	-4.86	0.20	1.96	0.52
Fata Morgana	-1.63	0.18	-8.25	0.30	-2.07	0.30
Sibaritide	-4.85	1.33	-5.13	1.56	-3.05	1.88
Appennino paolano	-10.09	1.05	-21.96	0.13	-49.52	0.59
Alto tirreno cosentino	-16.98	0.83	-2.29	0.49	-0.72	1.24
Presila cosentina	1.55	0.36	-3.72	0.29	1.13	0.77
Pollino	-41.97	2.12	-39.92	0.58	ND	ND
Valle crati	-6.29	ND	-4.26	ND	0.93	ND
Akros	-2.80	1.66	-16.63	1.84	-0.64	1.26
Proserpina	-13.37	0.70	-11.39	0.52	-13.26	0.40
Lamezia multiservizi	1.53	ND	-0.14	ND	2.92	ND
Schillacium	-25.95	10.80	-21.91	0.20	-13.45	0.40
Ambiente e servizi Catanzaro	-20.01	1.27	-3.10	0.75	-0.58	1.37

*This table shows a comparison between ROI [(operating income/invested capital)*100]) and ROD [(financial burdens/borrowed capital)*100] in the three years considered. In order to interpret ROI accurately it is necessary to compare it with the average cost of borrowing expressed by ROD. The comparison clearly shows that ROI is always less than ROD. Hence the earning power generated by the companies from their normal activities does not appear to be sufficient to cover the passive interest on their debts (ROD is close to zero).*

Table 3: Treasury Margin (in €)

Company	Treasury margin (in €)		
	2005	2006	2007
Piana Ambiente	1.948.470	2.086.003	2.057.492
Locride ambiente	922,008	1,599,324	1,747,287
Fata Morgana	1,517,254	1,987,311	1,881,539
Sibaritide	933,367	1,357,900	1,444,793
Appennino paolano	343,600	-572,084	-149,367
Alto tirreno cosentino	-104,410	360,269	728,268
Presila cosentina	-16,728	101,141	131,360
Pollino	-3,101,907	-3,188,314	ND
Valle crati	812,594	-540,848	-47,065
Akros	-1,594,386	-619,288	588,066
Proserpina	-624,707	-214,512	-1,276,043
Lamezia multiservizi	1,631,344	2,363,165	3,290,548
Schillacium	-1,588,171	-2,365,262	-816,440
Ambiente e servizi Catanzaro	609,581	802,467	815,658

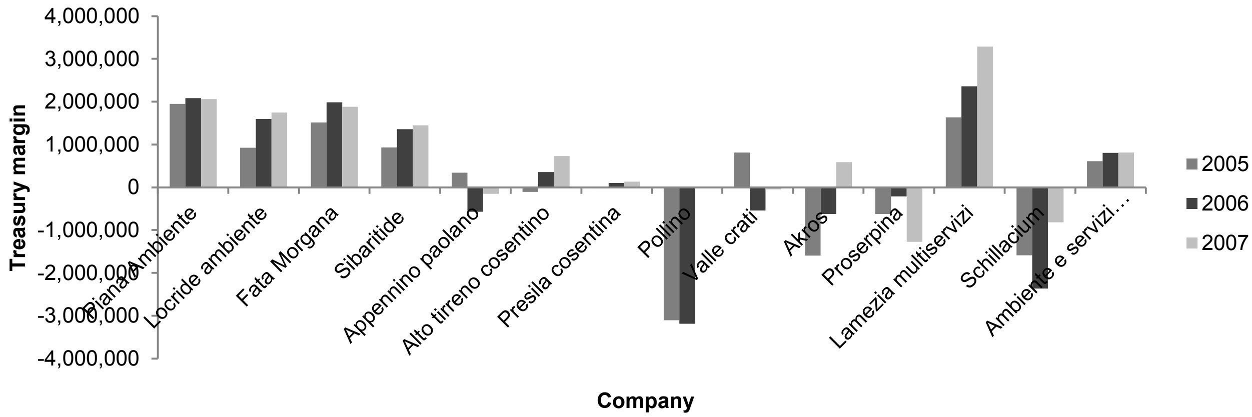
This table shows the trend in the treasury margin during the period 2005-2007. Treasury margin= immediate liquidity + deferred liquidity – current liabilities, measures the company's ability to meet its current liabilities with immediate and deferred liquid assets. Not all companies show the ability to honor debt commitments in a reasonable time frame. For some companies, treasury margin is negative.

As we have seen, for some companies the treasury margin is negative, which is a symptom of grave imbalance as it will not be possible to cover short term debts with available liquid assets and others that will become available. Thus to cover these debts it is necessary to access resources that should be destined for long term investments.

By analyzing the average times of payments, shown in Table 4, one notes that even companies with higher levels of liquidity do not arrange payments satisfactorily. From a comparison of the average payment time (Average payment time= debts v/suppliers/purchases *365) and the average cashout time (Average cashout time= credit v/customers/turnover*365) index, one can see that companies are faced with a situation where they have to pay suppliers before receiving payment from their customers.

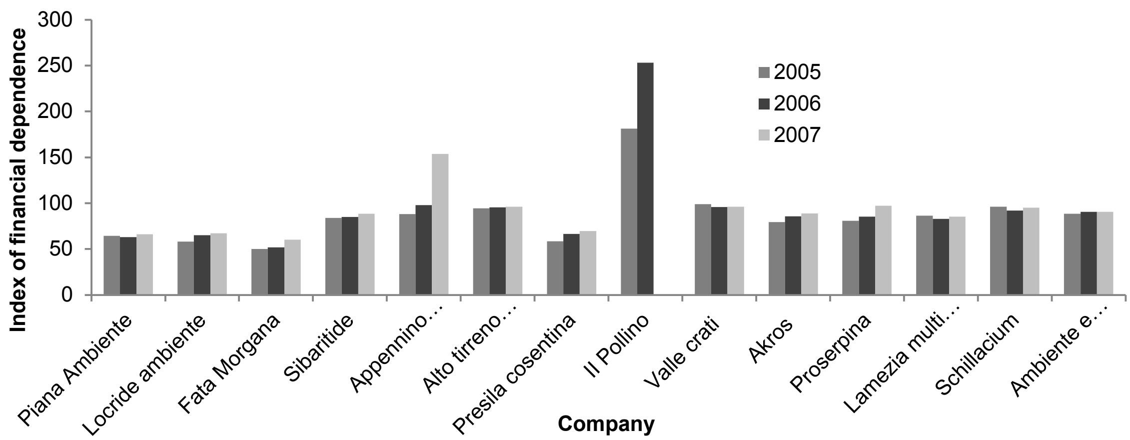
This state of affairs leads, in turn, to taking on new debts, asking their suppliers to accept delayed payment, borrowing money from the banks or making tax and national insurance payments in instalments. This explains why these companies are so dependent from finance as shown in Figure 5 (Index of financial dependence= borrowed capital/total investments*100). Debt is measured as the Debt index (leverage = total investments/own capital), that clearly generates further running costs, adding to the burden of financial repayments and eating into the income from normal business operations.

Figure 4: Treasury Margin (in €)



This figure shows a more immediate presence of negative values for some companies, which is a symptom of grave imbalance. The company will not be able to cover short term debts with available liquid assets and others that will become available. Companies with liquidity problems include Appennino Paolano, Vallecrati, Akros, Prosperina, Schillacium and Pollino.

Figure 5: Index of Financial Dependence (in %)



This figure shows the index of financial dependence in the years 2005-2007. For all companies the index is between 50% and 100%. This indicates that the financial structures is unbalanced or otherwise tending toward imbalance. Compaines in a strong state of imbalance include Appennino Paolano (in 2007 the index is about 150%) and Pollino (the index of financial dependence is between 150% and 250%).

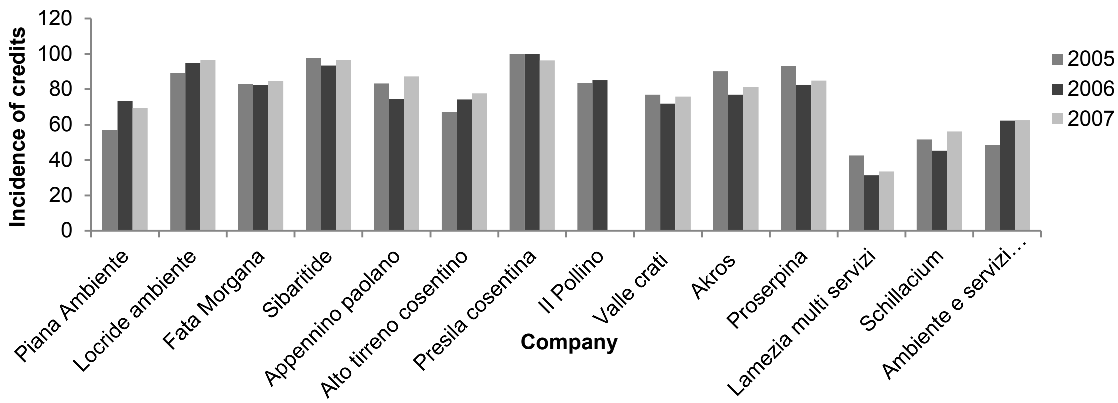
Analysis of the assets and liabilities confirms the results of the financial analysis. For all companies the incidence of credits over total investments, shown in Figure 6, is quite high (between 50% and 100%), except one, Lamezia Multiservizi, where credits is between 30% and 40%. The credit is mainly composed of claims on the Regional Administration for contributions not yet allocated, but also claims for payment on the municipalities that have awarded them the job of providing a refuse service. The incidence of loans to municipalities on the total credits during the period 2005-2007 is quite high. For a number of companies it is indeed over 80% of invested capital. Even, for Presila cosentina, the incidence of loans to municipality on the total credits is equal to 100% in 2005 and 2006 as shown in Table 6.

Table 5: Leverage

Company	Leverage = total investments / own capital		
	2005	2006	2007
Piana Ambiente	2.81	2.7	2.97
Locride ambiente	2.4	2.87	3.06
Fata Morgana	2.01	2.08	2.51
Sibaritide	6.17	6.68	8.63
Appennino paolano	8.47	45.1	-1.86
Alto tirreno cosentino	18.6	22.83	27.39
Presila cosentina	2.42	2.99	3.28
Il Pollino	-1.23	-0.65	ND
Valle crati	28.55	24.99	26.79
Akros	4.9	6.93	9.08
Proserpina	5.21	6.89	38.36
Lamezia multi servizi	7.29	5.92	6.8
Schillacium	27.12	-12.27	19.92
Ambiente e servizi Catanzaro	8.8	10.6	10.83

This table shows the trend in debt index (Leverage = total investments/own capital) during the 2005-2007 period. In all companies own capital is insufficient to finance total investment (leverage >2); this indicates that borrowed capital is greater than own capital. So, the companies are dependent on debt.

Figure 6: Incidence of Credits Over Total Investments (in %)



This figure shows credits over total investments during the 2005-2007 period. All companies show the high incidence of credits on total investments (between 50% and 100%), except one. Lamezia Multiservizi, incidence of credits is between 30% and 40% in the three years.

Table 6: Incidence of Loans to Municipalities on the Total Credits (in %)

Company	Loans to municipalities / total credits * 100		
	2005	2006	2007
Piana Ambiente	56.80	73.52	69.57
Locride ambiente	89.28	94.89	96.51
Fata Morgana	83.08	82.37	84.75
Sibaritide	97.57	93.45	96.59
Appennino paolano	83.38	74.60	87.20
Alto tirreno cosentino	67.26	74.31	77.73
Presila cosentina	100.00	100.00	96.3
Il Pollino	83.46	85.15	ND
Valle crati	76.90	71.95	75.96
Akros	90.24	76.96	81.35
Proserpina	93.27	82.54	84.86
Lamezia multi servizi	42.56	31.33	33.60
Schillacium	51.56	45.28	56.08
Ambiente e servizi	48.39	62.36	62.56

This table shows the incidence of loans to municipalities on the total credits during the 2005-2007 period. It is quite high. For a number of companies it is indeed over 80% of invested capital. Even, for Presila cosentina, the incidence of loans to municipality on the total credits is equal to 100% in 2005 and 2006.

CONCLUSIONS

Capital Structure plays an important role in regulating public utilities firms due to the interaction between investment and financial decisions and the level of regulated prices (Teisberg, 1993; Spiegel, 1994; Spiegel e Spulber, 1994).

This paper analyzes how relations between the financial and capital structure affect the dynamics of firms in regulated business. Specifically, we analyzed three years of budgets of companies that manage solid waste in a region economically underutilized area, Southern Italy, Calabria. In geographical areas lagging behind in terms of economic development, public enterprises may enhance or reduce the creation of economic wealth, and are therefore crucial for the territory.

The research hypothesis tested, is in line with the thesis of Spiegel and Spulber (2004). The argument is that the income, capital and financial situation of public service companies examined constitute a real threat to their ability to continue to operate. They are not allowed to charge higher prices which could would enable the company to be saved from bankruptcy and work efficiently. Nor can these companies embark on a restructuring to improve efficiency because the majority company shareholder is public.

The analysis conducted here shows how the current subdivision of territorial ambits in Calibre and the allocation of services for the collection and disposal of urban waste to public companies hinder efficiency, both from the economic and technical points of view. In particular, the financial management of these companies has led to a vicious circle triggered by a high incidence and level of outstanding debt vis-à-vis customers, especially local councils.

Other reasons for the management crisis are found in the legal basis of the public and private companies. These companies operate outside the dynamics of normal market competition, and are limited to certain territorial ambits limiting the ability to achieve economies of scale. Also, they have opted to remain providers of a single service instead of diversifying their product. To sum up, the empirical evidence found in the case of Calabria confirms that the presence of public money in mixed public service companies does not lead to the best economic outcomes.

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BIOGRAPHY

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SHORTCUT TO THE U.S. MARKETS THROUGH REVERSE MERGERS

Congsheng Wu, University of Bridgeport

CASE DESCRIPTON

A reverse merger takes place when a public company, commonly known as a "shell", acquires a private operating company through a share exchange transaction. The public shell typically has no business operations, but is valuable because of its public trading status. Post-merger, the operating company's owners take control of the newly formed public company. Reverse mergers have long been used in the U.S. as an alternative to achieve public trading status. Conventionally, foreign companies wishing to cross list their shares in the United States have followed the old-fashioned initial public offering (IPO) process. Their shares, typically in the form of American Depositary Receipts (ADRs), are registered with the SEC and are listed on a major stock exchange. In recent years, however, an increasing number of Chinese companies have gained U.S. market listing through reverse mergers. This article provides a detailed case study of an actual reverse merger. The case is appropriate for upper-level undergraduate or graduate finance courses such as corporate finance. Students should have the basic knowledge about the financial markets and corporate finance. Students can work individually or in teams on this project, which requires around 5-8 hours outside of class to complete. Classroom presentations and discussions should be arranged in a regular, 2-hour class.

JEL: G34

KEYWORDS: Reverse Mergers, Chinese Companies, Public Shell; Case Study

CASE INFORMATION

A reverse merger is a merger between a public company that has virtually no business operations and a private company that has a viable business. The public company, commonly known as the "shell", issues shares to the owners of the private operating company in exchange for their 100% ownership. Post-merger, however, the former private company's owners take a majority control over the newly created company, which retains its public trading status. Reverse mergers are also known as reverse takeovers. They have long been used by private companies to achieve public trading status in the United States. Armand Hammer, a world-renowned oil magnate and industrialist, is generally credited with inventing the reverse merger. In the 1960s, Hammer invested in a public shell company into which he merged his Occidental Petroleum. Another notable example is the reverse merger completed by Ted Turner in 1970 with Rice Broadcasting, which went on to become Turner Broadcasting.

Typically the shell companies are publicly traded companies that have fallen on hard times. Frequently, they are companies that went public some years past. Some may have been traded on formalized exchanges such as the New York Stock Exchange (NYSE) or the Nasdaq Stock Market, but now are traded on the OTC Bulletin Board (OTCBB). Most of these companies have ceased business operations for years or on the verge of bankruptcy. They are basically worthless except for the fact that they are publicly traded. In response to the demand for "clean" shells, investment houses specializing in reverse mergers regularly create pure clean shells and other special purpose acquisition companies. To create a shell, they incorporate a company, register its shares and file the required quarterly and annual reports with the Securities and Exchange Commission (SEC), and list the shares on the OTC Bulletin Board. There are no minimum quantitative standards which must be met by an issuer for its securities to be quoted on the OTCBB, as long as the issuer files required reports with the SEC or other regulatory authority.

Conventionally, foreign companies wishing to cross list their shares in the United States have followed the old-fashioned initial public offering (IPO) process. Their shares, typically in the form of American Depositary Receipts or ADRs, are registered with the SEC and are listed on a major stock exchange. ADRs are negotiable certificates (denominated in U.S. dollars) that are issued by a U.S. depositary bank to represent the underlying shares of a foreign stock. ADRs are sold, registered, and transferred in the U.S. in the same manner as any share of stock.

In recent years, however, an increasing number of foreign companies have opted for reverse mergers as an alternative to achieve public trading status in the United States. Based on a report by Martin (2007) published in the Barron's magazine, as many as 170 Chinese companies were believed to have gained instant stock-market listing in the U.S. via reverse mergers by February 2008. What makes reverse mergers attractive to emerging Chinese companies seeking public trading status in the U.S.? One reason is simple: They have few other options. For privately held small companies in China, going public for a listing on the Shanghai or Shenzhen stock exchange seems to be out of the question. On top of the two-year wait time, Chinese regulators favor large, state-owned enterprises over small privately held companies when approving companies to be listed on the two official Chinese exchanges in Shanghai and Shenzhen.

Consequently, many Chinese companies seek stock listings elsewhere, especially in the United States (see, Wu, 2005). But traditional IPOs in the U.S. require, among other things, a relatively long and stable earnings history, which limits opportunities for emerging companies. In addition to the regulatory burden and stringent listing requirements associated with an IPO, many of these companies would not be able to attract top-tier investment banks to underwrite a public offer due to their small size and uncertain underlying fundamentals. Touted as a cheaper, easier and backdoor route to the U.S. public market, reverse mergers become the choice of many small companies.

To understand reverse mergers, consider a hypothetical private manufacturing company from China. The company was wholly owned by its sole founder. The company had decided to become a U.S. public company, but the conventional IPO procedure was out of reach due to the stringent listing requirements. With the help of an American investment house that specialized in reverse mergers, the company hooked up with a U.S. public shell, which had ceased business for many years but was still listed on the OTC Bulletin Board. After signing a Letter of Intent, the U.S. public shell company conducted a 100:1 reverse split to reduce the number of shares outstanding. At the closing, the public shell issued enough new shares to the founder of the Chinese company in exchange for his 100% ownership. As a result, the private company became a wholly owned subsidiary of the U.S. public company. At the closing, the former sole director of the U.S. shell company resigned and the founder of the private company was elected as the chairman of the board and the chief executive officer of the new company, which maintains the listing status on the OTCBB.

The benefits from reverse merges are limited, however. First of all, shares of the merged company are quoted only on the OTCBB. Stocks traded in the OTCBB are usually thinly traded "microcap" or "penny" stocks. Many investors avoid these stocks due to a well-founded fear that share prices are easily manipulated. The SEC has issued stern warnings to investors to beware of common fraud and manipulation schemes. Additionally, corporate governance is not required for companies listed on OTCBB. Secondly, top-tier investment houses venture capitalists have almost always avoided such reverse mergers. Thirdly, a reverse merger itself is a pure share exchange transaction: no new capital will be raised. Nevertheless, becoming a public company makes it more attractive to private equity investors.

In some cases, the reverse merger is accompanied or followed by a private equity investment, bringing new capital to the newly formed company.

Despite reverse mergers' emerging popularity, studies on them are rare due to data constraint. A few existing studies are limited to reverse mergers between two U.S. companies (Gleason, Rosenthal and Wiggins, 2005, for example). This paper adopts a case-study approach by focusing on an actual reverse merger between a U.S. public shell (Point Acquisition Corporation) and a private operating company from China (Powersmart Holdings Limited).

The U.S. Shell Company

Point Acquisition Corporation was originally incorporated under the laws of the state of Washington on November 13, 1947 under the name Silver Mountain Mining Company. On August 20, 1979, the articles of incorporation were amended to change the corporate name to Leadpoint Consolidated Mines Company. From its inception until 2001, the company operated various unpatented mining claims and deeded mineral rights in the state of Washington. The unpatented mining claims were terminated and abandoned during 1993 due to increased maintenance costs. The deeded mineral rights were abandoned during 2001 due to their limited economic value. On August 15, 2006, in order to change its domicile from Washington to Nevada, the company was merged with and into Point Acquisition Corporation, a Nevada corporation. From about 2001 until the reverse acquisition on April 25, 2007, the company was basically a blank check company and did not engage in active business operations other than its search for, and evaluation of, potential business opportunities for acquisition or participation.

According to the 8-K Current Report filed by the company to the SEC on April 25, 2007, Point Acquisition did a 1 for 50 share reverse stock split on December 11, 2006. As a result of the reverse split, the total number of issued and outstanding shares of the company's common stock decreased from 5,792,100 to 154,529 shares, after giving effect to rounding for fractional shares. On November 1, 2006, Point Acquisition entered into Subscription Agreements with Halter Financial Investments (HFI), a Texas limited partnership, and Glenn A. Little, Point Acquisition's former sole officer and director. HFI specializes in reverse mergers. Pursuant to the Agreements, Point Acquisition, on January 3, 2007, sold to HFI and Mr. Little, respectively, 1,270,400 and 200,000 shares of post-reverse split common stock at a purchase price of $0.25 per share for gross proceeds of $367,500.

On April 17, 2007, the company entered into separate consulting agreements with Heritage Management Consultants, Inc. (Heritage) and Shufang Zhang, respectively. Heritage and Zhang have each been engaged to assist the company in its efforts to consummate the forthcoming reverse merger. In consideration for the services to be provided under the Consulting Agreements, Heritage and Zhang received 50,000 and 127,040 shares of the company's common stock, respectively.

The company's shares were traded on the OTCBB. The OTCBB is an electronic quotation system that displays real-time quotes, last-sale prices, and volume information for many over-the-counter (OTC) equity securities that are not listed on the Nasdaq Stock Market or a national securities exchange. Although the National Association of Securities Dealers (NASD) oversees the OTCBB, the OTCBB is not part of the Nasdaq Stock Market. Companies quoted on the OTC Bulletin Board must be fully reporting (i.e. current with all required SEC filings) but have no market capitalization, minimum share price, corporate governance or other requirements to be quoted.

The Private Operating Company from China

According to the Form S-1 Registration Statement filed by the company on May 14, 2007, Powersmart Holdings Limited was incorporated in the British Virgin Islands (BVI) on November 3, 2004. It has two direct wholly-owned subsidiaries: Henan Gengsheng Refractories Co. and Smarthigh Holdings Limited. Henan Gengsheng was incorporated in China in December 1992 and Smarthigh was incorporated in the British Virgin Islands in November 2004. Henan Gengsheng owns 89.33% of its Chinese operating subsidiary, Henan High-Temperature Materials, which was incorporated in September 2002. Smarthigh owns 100% of another operating subsidiary in China, Zhengzhou Duesail Fracture Proppant, Co., which was incorporated in August 2006. Table 1 illustrates the ownership structure of Powersmart Holdings Limited. The company's consolidated income statement and balance sheet are presented in Table 2 and Table 3.

Table 1: Ownership Structure of Powersmart Holdings Limited

Company name	Place/date of incorporation or establishment	Powersmart's effective ownership interest	Common stock/ registered capital	Principal activities
Henan Gengsheng Refractories Co., Ltd.	The People's Republic of China (PRC)/ December 20, 1996	100% directly held by the Powersmart	Registered capital of $6,049,879 fully paid up with share premium of $35	Manufacturing and selling of monolithic refractory products
Henan Gengsheng High-Temperature Materials Co., Ltd.	PRC/September 4, 2002	89.33% indirectly held through Henan Gengsheng Refractories	Registered capital of $363,000 fully paid up	Manufacturing and selling of functional ceramic products
Smarthigh Holdings Limited	BVI/November 5, 2004	100% directly held by the Powersmart	Ordinary shares: Authorized: 50,000 shares of $1 each; Paid up: 100 shares of $1 each	Investment holding
ZhengZhou Duesail Fracture Proppant Co.	PRC/August 14, 2006	100% indirectly held through Smarthigh	Registered capital of $2,000,000 of which $934,822 paid up	Manufacturing and selling of fracture proppant products

This table presents the ownership structure of Powersmart Holdings. Incorporated in the British Virgin Islands on November 3, 2004, the company has two wholly-owned subsidiaries: Henan Gengsheng Refractories Co. and Smarthigh Holdings Limited. Through these two subsidiaries, Powersmart also controls Henan High-Temperature Materials and Zhengzhou Duesail Fracture Proppant, Co.

The main reason why Powersmart and Smarthigh are incorporated in the British Virgin Islands is related to regulations imposed by the Chinese government. China's State Administration of Foreign Exchange (SAFE) rules issued in early 2005 prohibit registered Chinese companies from being acquired by offshore companies. Thousands of Chinese companies restructured offshore prior to the rules taking effect. These companies typically set up a holding company in the British Virgin Islands and then turn the original company located in China a subsidiary. British Virgin Islands have more than 810,000 companies from all around the globe and representing almost every industry one can imagine.

Henan Gengsheng and Henan High-Temperature, the two operating subsidiaries in China, manufacture monolithic refractory products and industrial ceramic products. Another operating subsidiary, Duesail, manufactures fracture proppant products. The first fracture proppant products were manufactured in December 2006 but none had been sold prior to the reverse merger.

The Reverse Merger Deal

The reverse merger was closed on April 25, 2007. The details of the deal are disclosed in the 8-K Current Report filed with the SEC on the same date. At the closing, Point Acquisition Corporation issued to Shunqing Zhang, the sole shareholder of Powersmart Holdings Limited, 16,887,815 shares of the public company's common stock, in exchange for all of the issued and outstanding capital stock of Powersmart. As a result of the exchange transaction, Powersmart becomes a wholly- owned subsidiary of Point Acquisition.

Upon the closing of the reverse acquisition, Timothy P. Halter, the sole officer and director of Point Acquisition, resigned immediately from all offices of Point Acquisition that he held. Mr. Shunqing Zhang was elected to the Board of Directors of Point Acquisition and was appointed its President and Chief Executive Officer. In addition, the executive officers were replaced by the executive officers of Powersmart upon the closing of the reverse acquisition.

Table 2: Powersmart's Consolidated Income Statements

	2006	2005	2004
Revenue			
Sales	$27,481,539	$22,184,246	$18,921,617
Cost of sales	(16,534,004)	(12,977,770)	(12,355,100)
Gross profit	10,947,535	9,206,476	6,566,517
Expenses			
General and administrative Expenses	2,411,939	2,077,114	1,707,787
Amortization and depreciation	157,814	129,107	101,283
(Recovery of) provision for doubtful debts	(58,259)	(6,788)	135,906
Selling expenses	3,783,071	3,131,897	2,189,218
Total Expenses	6,294,565	5,331,330	4,134,194
Income before the following items and taxes	4,652,970	3,875,146	2,432,323
Government grant income	33,251	320,783	465,528
Interest income	8,698	7,986	5,628
Other income	36,046	39,368	7,401
Finance costs	(226,236)	(102,824)	(93,084)
Income before income taxes and minority interests	4,504,729	4,140,459	2,817,796
Income taxes	(7,010)	(250,415)	(665,401)
Income before minority interests	4,497,719	3,890,044	2,152,395
Minority interests	(1,617)	(9,162)	(2,465)
Net income	$4,496,102	$3,880,882	$2,149,930
Earnings per share: basic and diluted	$44,961.02	$38,808.82	$21,499.30
Weighted average number of shares outstanding: basic and diluted	100	100	100

This table presents the consolidated income statements of Powersmart Holdings for 2004, 2005 and 2006. Data are obtained from the company's Form S-1 filed with the Securities and Exchange Commission on May 14, 2007.

On April 25, 2007, they also completed a private placement pursuant to which they issued and sold 5,374,594 shares of common stock to certain accredited investors for approximately $10 million in gross proceeds. In connection with this private placement, they paid to the placement agent, Brean Murray Carret & Co., LLC, a placement agency fee of $488,618 and issued to the placement agent a warrant for the purchase of 262,032 shares of common stock in the aggregate. In addition, they paid $195,000 of placement agency fee to a designee of Brean Murray Carret & Co., LLC and granted to said designee a warrant for the purchase of 112,299 shares of common stock in the aggregate. The company is under the contractual obligation to register shares of its common stock as well as shares of common stock issuable upon exercise of the warrants issued to the placement agent and its designee in connection with this private placement within a pre-defined period. Table 4 summarizes the main shareholders and their ownership before and after the share exchange deal.

The "Make Good" Provisions

At the closing on April 25, 2007, Shunqing Zhang entered into an escrow agreement with the private placement investors. Pursuant to the escrow agreement, Mr. Zhang agreed to certain "make good" provisions. The escrow agreement established minimum after tax net income thresholds of $8,200,000 for the fiscal year ending December 31, 2007 and $13,500,000 for the fiscal year ending December 31, 2008. Mr. Zhang deposited a total of 2,673,796 shares, to be equitably adjusted for stock splits, stock dividends and similar adjustments, of the common stock of Point Acquisition Corporation into escrow with Securities Transfer Corporation under the escrow agreement. In the event that the minimum after tax net income thresholds for the fiscal year 2007 or the fiscal year 2008 are not achieved, then the private equity investors will be entitled to receive additional shares of our common stock from Mr. Zhang based upon a pre-defined formula agreed to between the investors and Mr. Zhang.

Table 3: Powersmart's Consolidated Balance Sheets

	2006	2005	2004
Assets			
Current assets			
Cash and cash equivalents	$426,099	$1,420,344	$269,275
Restricted cash	192,300	-	-
Trade receivables	14,103,129	11,873,660	9,857,058
Bills receivable	238,452	662,161	369,626
Other receivables and prepayments	1,722,429	465,909	2,103,859
Inventories	6,416,703	2,781,771	2,502,324
Deferred taxes	13,561	-	330
Total current assets	23,112,673	17,203,845	15,102,472
Know-how	319,753	-	-
Deposit for acquisition of property, plant and equipment	-	-	107,665
Deposit for acquisition of land use right	-	-	60,500
Property, plant and equipment, net	6,640,189	3,544,450	3,545,331
Land use right	871,738	861,148	181,648
Total Assets	$30,944,353	$21,609,443	$18,997,616
Liabilities			
Current liabilities			
Trade payables	$4,661,178	$2,651,289	$2,882,958
Bills payable	192,300	-	-
Other payables and accrued expenses	3,164,381	2,644,607	2,045,711
Income tax payable	217	-	209,876
Amounts due to related parties	-	-	399,300
Non-interest-bearing loans	1,698,846	837,330	2,231,910
Secured short-term bank loans	1,923,000	1,240,000	1,210,000
Deferred tax liabilities	12,967	14,456	-
Total current liabilities	11,652,889	7,387,682	8,979,755
Minority interests	142,782	125,382	113,278
Stockholder's equity			
Common stock: par value $1 per share	100	100	100
Additional paid-in Capital	6,050,014	6,050,014	6,050,014
Statutory and other Reserves	6,212,239	5,705,454	4,748,365
Accumulated other comprehensive income	867,757	311,556	642
Retained earnings (accumulated losses)	6,018,572	2,029,255	(894,538)
Total Stockholder's equity	19,148,682	14,096,379	9,904,583
Total Liability and Stockholder's equity	$30,944,353	$21,609,443	$18,997,616

This table presents the consolidated balance sheets of Powersmart Holdings for 2004, 2005 and 2006. Data are obtained from the company's Form S-1 filed with the Securities and Exchange Commission on May 14, 2007.

In addition, on April 25, 2007 Mr. Zhang entered into a similar escrow agreement with HFG International, Limited. Under such an agreement, Mr. Zhang placed into escrow a total of 638,338 shares of Point Acquisition Corporation's common stock to cover the same minimum net income thresholds as described above with respect to the investor make-good. Similarly, if the thresholds are not achieved in either year, the escrow agent must release certain amount of the make-good shares that were put into escrow.

After the completion of the two deals, Mr. Zhang made the following statements:

> "We want to thank our financial advisor, HFG International, Limited, for facilitating our efforts in connection with our private financing and the going public transaction. These transactions have given us access to the U.S. capital markets, with the intent of capitalizing on significant growth opportunities."

Table 4: Shareholders and Ownership Before- and Post-Merger

Shareholder Name	***Before Closing of the Share Exchange Agreement***		***After Closing of the Share Exchange Agreement***	
	Amount of Beneficial Ownership	***Percent of Common Stock***	***Amount of Beneficial Ownership***	***Percent of Common Stock***
Original owners, including Glenn A. Little	355,431	19.7%	355,431	1.5%
Halter Financial Investments (HFI)	1,270,400	70.5%	1,270,400	5.3%
Shufang Zhang	127,040	7.0%	127,400	<1%
Heritage Management	50,000	2.8%	50,000	<1%
Shunqing Zhang	0	0	16,887,815	70.3%
Private equity investors	0	0	5,374,594	22.3%
Total	1,802,871	100%	24,038,280	100%

This table shows the main shareholders and their ownership before and after the reverse merger. The second and third columns describe the ownership structure of the U.S. shell, Point Acquisition, before the deal. The last two columns report the main shareholders and their ownership of the newly created company. The figures are collected from the company's various filings with the Securities and Exchange Commission and are based on the author's own calculations.

CASE QUESTIONS

1. Discuss the pros and cons of an initial public offering (IPO), which is the conventional approach for a foreign company to raise equity capital in the U.S. capital market.
2. What are the primary reasons for Powersmart Holdings Limited to conduct a reverse merger instead of an ordinary public offering?
3. Based on the details of the reverse merger deal, please discuss the direct and indirect costs of the deal, from the perspective of Powersmart Holdings.
4. What is the purpose of the "make good" provisions?

SHORTCUT TO THE U.S. MARKETS THROUGH REVERSE MERGERS

TEACHING NOTES

Congsheng Wu, University of Bridgeport

CASE DESCRIPTON

A reverse merger takes place when a public company, commonly known as a "shell", acquires a private operating company through a share exchange transaction. The public shell typically has no business operations, but is valuable because of its public trading status. Post-merger, the operating company's owners take control of the newly formed public company. Reverse mergers have long been used in the U.S. as an alternative to achieve public trading status. Conventionally, foreign companies wishing to cross list their shares in the United States have followed the old-fashioned initial public offering (IPO) process. Their shares, typically in the form of American Depositary Receipts (ADRs), are registered with the SEC and are listed on a major stock exchange. In recent years, however, an increasing number of Chinese companies have gained U.S. market listing through reverse mergers. This article provides a detailed case study of an actual reverse merger. The case is appropriate for upper-level undergraduate or graduate finance courses such as corporate finance. Students should have the basic knowledge about the financial markets and corporate finance. Students can work individually or in teams on this project, which requires around 5-8 hours outside of class to complete. Classroom presentations and discussions should be arranged in a regular, 2-hour class.

CASE QUESTIONS

1. Discuss the pros and cons of an initial public offering (IPO), which is the conventional approach for a foreign company to raise equity capital the U.S. capital market.

A foreign company wishing to raise equity capital in the United States may choose the conventional initial public offering (IPO) process. The shares, typically in the form of American Depositary Receipts or ADRs, are registered with the Securities and Exchange Commission (SEC) and are listed on a major stock exchange. ADRs are negotiable certificates (denominated in U.S. dollars) that are issued by a U.S. depositary bank to represent the underlying shares of a foreign stock. ADRs are sold, registered, and transferred in the U.S. in the same manner as any share of stock.

Students are encouraged to do their own research to learn more about the details of ADRs. They will find that there are several types of ADR programs: Level 1, Level 2 and Level 3. Level 1 programs are not listed on a stock exchange such as the New York Stock Exchange (NYSE) or Nasdaq. Rather, they are available for retail investors to purchase and trade in the over-the-counter (OTC) market. The foreign issuer can maintain home market accounting and disclosure standards and is not required to reconcile its financial statements to US GAAP. However, Level 1 programs cannot be used to raise new equity capital in the US. Level 2 ADR programs are more complicated for a foreign company than Level 1 programs. To set up a Level 2 program, the foreign firm must file a registration statement with the SEC and is under the SEC regulation. However, Level 2 programs cannot be used to issue new share or raise new equity capital. Level 3 ADR programs are the highest level a foreign company can have. Setting up a Level 3 program means that the foreign company is not only taking some of its shares from its home market and depositing them to be traded in the U.S. It is actually issuing shares to raise capital. These are the U.S. initial public offerings (IPOs) by foreign companies. To complete a Level 3 program, the foreign company has to follow the SEC registration process by disclosing its financial information. Additionally, it has to comply with the US GAAP accounting standards in its filings. After the IPO, periodic filings with the SEC are also required.

The advantage of an IPO is that it allows the foreign firm to gain direct access to the U.S. capital market. The firm can issue new shares using a Level 3 program, and the shares (or ADRs) will be listed on a formal exchange such as the NYSE or Nasdaq. A formal listing comes with prestige, liquidity and the opportunity to sell additional shares.

The main disadvantage of an IPO is the direct and indirect cost. The issuing firm will have to hire investment banks as underwriters. The underwriting fees are paid as a percentage of the gross proceeds, typically set at 7%. The indirect cost associated with an IPO is that the offer price is typically set at a substantial discount relative to the first-day close price. That is, IPOs are significantly underpriced. The average underpricing or first-day return is around 15% for IPOs completed in the United States.

2. **What are the primary reasons for Powersmart Holdings to conduct a reverse merger instead of an ordinary public offering?**

Most of the information needed to answer this question can be found directly in the article. In recent years, an increasing number of foreign companies have opted for reverse mergers as an alternative to achieve public trading status in the United States. The reason is simple: They have few other options. For privately held small companies in China, going public for a domestic listing seems to be out of the question. Chinese regulators favor large, state-owned enterprises over small privately held companies when approving companies to be listed on the two official Chinese exchanges in China. Consequently, many Chinese companies seek stock listings elsewhere, especially in the United States. But traditional IPOs in the U.S. require, among other things, a relatively long and stable earnings history, which limits opportunities for emerging companies. In addition to the regulatory burden and stringent listing requirements associated with an IPO, many of these companies would not be able to attract top-tier investment banks to underwrite a public offer due to their small size and uncertain underlying fundamentals.

Touted as a cheaper, easier and backdoor route to the U.S. public market, reverse mergers become the choice of many small companies. This is basically the situation facing Powersmart, the Chinese operating company. Prior to the reverse merger, the firm was owned by its founder, Mr. Shunqing Zhang. The firm wanted to gain access the U.S. market, but found it almost impossible to follow the traditional IPO approach.

3. **Based on the details of the reverse merger deal, please discuss the direct and indirect costs of the deal, from the perspective of Powersmart Holdings.**

It helps to review the process of the reverse merger and identify the various parties involved. The U.S. shell company, Point Acquisition Company, is basically worthless and the only purpose for its existence is for this deal. The deal maker is Halter Financial Investments (HFI), a specialist in reverse mergers. After the deal was completed, on April 25, 2007, the original owners of Point Acquisition retained 355,431 shares or 1.5% of the newly created company. HFI retained 1,270,400 shares or 5.3% of the new company. Two other parties involved in the deal also maintained some ownership. Together, these parties control 7.4% of the newly merged company.

Since the reverse merger itself didn't raise any equity capital, the firm relied on a private placement in which private investors gave the firm approximately $10 million in exchange for 22.3% ownership.

After the deal, Shunqing Zhang owned 70.3% of the company, surrendering 29.7% of his ownership to new investors.

4. What is the purpose of the "make good" provisions?

The primary purpose of the provisions is to align the interests of the original owner and the CEO of the new firm, Mr. Zhang, with the new investors. In the "make good" provision with the private placement investors, Mr. Zhang deposited a total of 2,673,796 shares in an escrow account. If the minimum goals laid out in the escrow agreement are not reached, then the private equity investors will be entitled to receive additional shares of our common stock from Mr. Zhang based upon a pre-defined formula agreed to between the investors and Mr. Zhang. Mr. Zhang also entered into a similar escrow agreement with HFG. Under this agreement, he placed into escrow a total of 638,338 shares to cover the same minimum net income thresholds. If the thresholds are not achieved in either year, the escrow agent must release certain amount of the make-good shares that were put into escrow.

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BIOGRAPHY

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DOES SEXUALITY IN ADS WORK FOR EVERYONE: MUSLIM CONSUMERS' REACTIONS TO SEXUALITY IN ADS

Ahmet Bayraktar, Rutgers University

ABSTRACT

This paper explores the reactions and responses of Muslim consumers to advertisements that include sexuality. Specifically, it seeks to answer the following questions: What do Muslim consumers think about the advertisements that include sexuality? How does sexual content of ads influence their behavior? What might be the mechanism that explains the behavioral process? This study utilizes exploratory research methods to answer these questions. It suggests that Muslim consumers tend to develop negative attitude toward the advertisements that include sexuality. They may also develop negative attitude toward the brands in these ads, and toward the firms that own these brands, a process explained by "halo effect." Furthermore, they tend to take some measures in order to prevent both themselves and their children from being exposed to these ads. This paper argues that the concept "personal modesty" explains Muslim consumers' responses to sexuality in ads.

JEL: M37

KEYWORDS: Advertising, sexuality, Muslim consumers, personal modesty

INTRODUCTION

The use of sexuality in ads and its effects on consumer behavior have been a matter for discussion among researchers. Some (e.g. Smith et al., 1995; Reichert, 2002; Treise and Weigold, 1994) have found that advertisements which include sexuality may negatively influence consumer behavior; on the other hand, others (e.g. Reichert et al., 2001; Dudley, 1999) have shown that sexuality in ads may positively affect consumer behavior. Research (Reichert, 2002) suggests that religious preference is one of the most important factors that influence individuals' reactions to sexuality in advertisements. Given the importance of conservatism, personal modesty, the value of women and raising moral and righteous children in Muslim community, it emerges as important questions to explore what Muslim consumers think about and how they react to advertisements that contain sexuality. Furthermore, given the significant number of Muslim population in the world, which is gradually increasing, and the widespread use of sexuality in ads, it becomes more important to explore the aforementioned questions.

This study aims at exploring how Muslim consumers react and respond to ads that include sexuality. Specifically, it seeks to answer the following questions: What might be the outcomes of sexual advertisements, when it comes to Muslim consumers? What might be the mechanism that explains Muslim consumers' reactions to ads that include sexuality? What explains their reactions and responses?

For these purposes, this paper firstly offers a brief review of literature on sexuality in advertisements and personal modesty in Islam. Secondly, it introduces the exploratory research findings along with the proposed mechanism that explains the behavioral process. Finally, it discusses the contributions and future research.

LITERATURE REVIEW

Sexuality in Advertisements

In recent years, there has been an increase in the use of sexuality in advertising. Human body has been abused in advertisements and provocatively used to sell products (Heller, 2000). Sexual appeals in advertisements consist of a variety of elements and are generally presented in visual elements such as attractive models (Gould, 1994). An analysis reveals that common forms of sexual content include the followings: nudity (dress), physical attractiveness, seductive behavior and interaction, innuendo, and other factors such as setting, context and camera effects (Reichert, 2002). Lambiase and Reichert (2003) suggest that there are five types of sexual information in ads: Nudity, sexual behavior, physical attractiveness, sexual referents, and sexual embeds. Ramirez and Reichert (2000) propose that physical characteristics are perceived as the most sexual in an advertisement and the sub-categories of these characteristics are clothing, attractiveness and body.

In many advertisements, women are used as a marketing instrument that exists to satisfy men's sexual desires (Bayraktar, 2011). Baker's study (2005) shows that an average person in the US is exposed to over 3,000 ads each day and in many of these ads, women are portrayed as sex objects (Smith et al., 1995; Boddewyn, 1991; Baker, 2005). Advertisers feature provocative images of sexually attractive women in ads (Reichert, 2002) without considering their negative effects on individuals and society (Bayraktar, 2011).

Many researchers have examined the effectiveness of ads that include sexuality. Most of them (e.g. Steadman, 1969; Alexander and Judd, 1978; Bushman, 2005; Bushman and Bonacci, 2002; Bushman and Phillips, 2001) have found that sexuality in ads negatively influences consumer behavior. One of the most significant negative effects of sexual content is that it reduces consumers' brand recall (Steadman, 1969; Alexander and Judd, 1978; Bushman 2005; Bushman and Bonacci, 2002). Research demonstrates that sexual images have high attention-getting value and that they arouse the immediate attention of both men and women (Baker, 1961). Many individuals pay more attention to sexual media than non-sexual media (Bushman, 2005). Therefore, when an advertisement contains sexuality, many viewers will direct their attention to sexual stimuli, pay less attention to other cues in the advertisement (Steadman, 1969; Alexander and Judd, 1978; Bushman 2005; Bushman and Bonacci, 2002) and have lower motivation to process brand information (Petty and Cacioppo 1986; Petty, Cacioppo and Schumann 1983). This mechanism negatively affects consumers' brand recall.

A limited number of studies have found that sexuality in ads positively influences consumer behavior. Reichert et al. (2001) argue that advertisements that include sexual images create more positive feelings about the implementation of the ad than do advertisements that do not include sexual images. Besides, researchers (Dudley, 1999; Reichert et al., 2001) suggest that sexual information attracts attention. In addition, findings show that advertisements which include sexuality are more engaging, involving, and interesting than advertisements which do not include sexuality (Reichert and Alvaro, 2001; Reichert, et al., 2001).

The above discussion demonstrates that sexuality in ads does not work as advertisers expect. It lowers consumers' brand recall, which is one the most important goals of advertisements. What would happen, if individuals also have negative attitude toward sexuality in ads? Would the negative outcome still be only reduced brand recall?

Personal Modesty in Muslim Community

Personal modesty is of significant importance in Muslim community (Denny, 2006). It has a great place in the Our'an, the holy book in Islam, and Hadiths, which are narrations originating from the words and deeds of the Islamic prophet Mohammad. Modesty in Islam is known as haya, a word that describes shyness, propriety in dress, speech and behavior, and a deeper modesty based on faith (Benlafquih, 2009). In the Qur'an, God says, "O children of Adam, We have provided you with garments to cover your bodies, as well as to be an adornment to you. However, the best garment is the garment of righteousness. These are some of God's signs, that they may receive admonition" (Quran, 7: 26). This verse emphasizes the importance of being righteous or modest. The Qur'an (24: 30-31) also says: "Say to the believing man that they should lower their gaze and guard their modesty; that will make for greater purity for them; and Allah is well acquainted with all that they do. And say to the believing women that they should lower their gaze and guard their modesty; and that they should not display their beauty and ornaments except what must ordinarily appear thereof; that they should draw their veils over their bosoms and not display their beauty except to their husbands..." In a Hadith prophet Mohammad says, "If you feel no shame, do as you wish." In another Hadith, He says, "Modesty is a part of faith," (Nevevi, 2009: 243). These suggest that modesty in Islam is so important that the absence of it can lead a person to sinful behavior and disbelief (Benlafquih, 2009).

In the writings of the Qur'an and Hadiths, the code of modesty for both men and women includes (1) lowering the gaze and avoiding flirtatious speech and behavior, (2) refraining from close physical contact with unrelated individuals of the opposite sex, (3) avoiding eyes from being exposed to forbidden images, (4) paying attention to wearing modest or Islamic dress and avoiding seductive dresses, (5) refraining from drawing unnecessary attention to oneself, and (6) protecting one's purity (Benlafquih, 2009; Guven, 2010; Colakoglu, 2001; Nevevi, 2009).

In Islam, both men and women are forbidden to look at the nude images of opposite sex. They are also forbidden to look at some parts of the same sex (Benlafquih, 2009; Guven, 2010). In a Hadith, it is defined as the adultery of the eye to look at women with desire (Nevevi, 2009: 490). Looking at unlawful images is regarded by Muslim scholars as a first step that takes one to greater sins such as adultery or other unlawful sexual relations (Guven, 2010). Thus, individuals are encouraged to avoid being exposed to sexual images. In addition, it is the parents' responsibility to protect their children from being exposed to illicit images or scenes. Islam pays much attention to raising righteous and moral children. Therefore, it is one of the main duties of parents to bring up modest children (Guven, 2010; Colakoglu, 2001).

Adultery appears explicitly in the Qur'an as "Nor come nigh to adultery: for it is a shameful deed and an evil, opening the road to other evils" (Bennett, 2007). Qur'an does not say "Do not commit adultery," instead, it says "Do not approach to adultery." This means, one should avoid from the ways or situations that may take him or her to adultery. Therefore, most Muslim individuals pay great attention to refraining from looking at sexual images or scenes (Guven, 2010). In Muslim community, prohibiting looking at unlawful images and adultery is thought to prevent emotional injury, and to result in greater familial stability and social harmony (Bennett, 2007, Guven, 2010). In addition, it is believed in Muslim community that looking at sexual or unlawful images or watching illicit scenes weakens individuals' memory and leads to amnesia (Guven, 2010).

Women have distinctive value in Muslim community. There is a chapter in the Qur'an named Nisa, which means women. In this chapter, the Qur'an enjoins fairness toward women. It says, "Live with them with kindness." In addition, we can find the same kind of distinctive value given to women in Hadiths. Prophet Mohammad says, "Act kindly towards women…" (Nevevi, 2009: 112) In another Hadith, He says, "The whole world is a provision, and the best object of the benefit of the world is the pious woman," (Rahim, 2000). In Muslim families, the man is responsible for his wife and girls' purity, and his honor is directly connected with the purity of the women in his family (MacNeill, 2009). Qur'an warns those who propagate shameful things among believers. It says, "Verily those who love that indecency should spread among the believers deserve a painful chastisement in the world and in the Hereafter. Allah knows, but you do not know," (Quran, 24: 19). In all Muslim countries, all kinds of body displays and sexual references are considered indecent (Boddewyn, 1991).

METHODOLOGY

This study adopted exploratory research method in order to obtain in-depth understanding of Muslim consumers' reactions to sexual advertisements and the mechanism of the process. It utilized observations of Muslim individuals and families, and interviews with them. The observations were conducted between February 2010 and December 2010 in New Jersey. Interviews with 18 Muslim individuals residing in New Jersey were conducted in summer 2010, during home and workplace visits. Convenience sampling method was used to recruit the interviewees. Since the subject matter is a sensitive issue in Muslim community and most Muslim individuals know the socially desirable answers to the interview questions, the interviews were conducted in friendly and informal atmospheres. The analysis of observations and interviews sought to identify Muslim consumers' general approach and reactions to sexuality in ads, their attitude toward the brands whose ads include sexuality and toward the firms that own these brands and the motivations behind their behavior.

RESULTS

The findings suggest that Muslim individuals tend to believe that today's advertisements include too much sexuality. Furthermore, irrespective of their gender, they have negative attitude toward the use of sexuality in advertisements and express their discomfort with it. In addition, they tend to avoid looking at or seeing advertisements that contain sexuality. The extent to which they take some measures to avoid being exposed to these ads varies. They tend to believe that most advertisements abuse females' body, degrading women's value in the community, and deteriorating social values. They are mostly troubled with the sexual ads on billboards, newspapers and TV channels. Moreover, some are irritated by the advertisements including sexuality. A great majority of women find some advertisements disgusting and insulting. Their discomfort tends to increase when the ads also include the images of sexual males. On the contrary, some Muslims do not have any negative attitude toward sexuality in ads and avoid seeing these ads. Moreover, they regard it as a legal strategy to attract consumers' attention. This research argues that religiosity level, in particular personal modesty, determines the extent to which a Muslim person has negative attitude toward sexuality in ads. Therefore, it hypothesizes that those who are more religious and have high level of personal modesty have more negative attitude toward sexuality in ads than those who are less religious and have low level of personal modesty.

At this point, significant questions arise: Does Muslim consumers' negative attitudes toward sexual ads influence their evaluations of brands in these ads? Do they develop negative attitude toward the brands and firms that own these brands? In other words, does "halo effect" occur? If yes, how is the evaluation process influenced? What extraneous variables affect the evaluation process? The exploratory research findings suggest that Muslim consumers may develop negative attitude toward the brands whose ads accompany sexuality, toward the firms that own these brands, and toward the advertisers who use sexuality in the advertisements that they make. Some informants make very harsh criticism against these firms and advertisers. One interviewee draws attention to a very interesting point, when criticizing firms' use of sexuality in the ads. He says,

> "Why do they use this strategy to attract my attention or why do they try to attract my attention by using sexuality? I feel insulted whenever I see an advertisement which includes sexual women."

He further claims that advertisers who use sexual women in ads are insulting men. Although not common, Muslims may even boycott the products whose advertisements include sexual images. They try to avoid buying them even if the products are desirable. One participant gives a very interesting example, saying that he has not bought a biscuit with a particular brand since he saw its advertisement. He says,

> "Almost 10 years ago, I watched the advertisement on TV, in which there were huge sexual woman lips that covered the whole screen, which had nothing to do with the product. It was disgusting…"

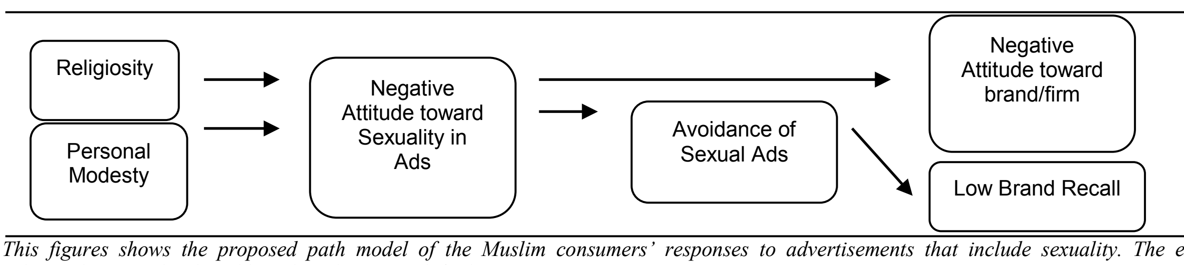
One claims that those who make sexual ads on billboards limit his freedom.

> "I can avoid those in newspapers by not buying the newspapers or those in TV channels by not watching the channels; however, it is difficult to avoid those on billboards."

The extent to which Muslim consumers' negative attitude toward sexual ads influences their decision making process needs further attention and examination of large samples by including other variables into the study such as price, brand name, product quality and product category. However, this research explores that sexual ads significantly influence their decision making when it comes to newspapers, magazines and TV channels. Muslim individuals tend not to buy any magazine or newspaper that contains advertisements including sexual images and watch TV channels that broadcast advertisements including sexuality. This tendency may also be related to other contents of these newspapers, magazines and TV channels. In addition, word-of-mouth effect may play role in the decision process. Those who know that a newspaper includes sexual images denigrate this newspaper and share their thoughts with others, trying to prevent their purchase. Therefore, we can claim that even if one does not know that a newspaper includes sexual ads, he or she may develop negative attitude toward the newspaper and avoid buying it through word-of-mouth communication.

Observations suggest that Muslim consumers tend to be stricter when it comes to their children. They tend to believe that advertisements that include sexuality deteriorate the culture and negatively affect children and adolescents. They consider that these advertisements arouse sexual thoughts in children and adolescents' mind, increasing their inclination to sexual behaviors. Some parents believe that it becomes more difficult for children who are frequently exposed to sexuality to focus on their education. Those who have children tend to prevent their kids from being exposed to these kinds of ads. Observations show that parents who are religious and who want their kids to become religious take more drastic measures. They tend not to let their kids to buy magazines or newspapers that contain sexuality and to watch TV channels that broadcast sexual images. In addition, those who do not have children consider that they would do almost the same thing if they had kids. It is interesting to note that those who do not criticize sexuality in ads are relatively sensitive when it comes to their kids. Based on the above findings, Figure 1 demonstrates the proposed mechanism that explains Muslim consumers' reactions to sexual advertisements.

Figure 1: Proposed Path Model of Muslim Consumers' Responses to Sexual Ads



This figures shows the proposed path model of the Muslim consumers' responses to advertisements that include sexuality. The expected relationships are developed based on the research findings.

CONCLUSION AND DISCUSSION

The effectiveness of advertisements that contain sexuality has been a matter for discussion among researchers. Many of them have found that sexuality negatively influences the effectiveness of ads, due to its high attention-getting value and attractiveness. Their argument is that sexuality attracts more attention than other cues in the ads, resulting in lower brand recall. However, when it comes to Muslim consumers, further negative effects occur. This paper aimed at exploring the responses and reactions of Muslim consumers to advertisements that contain sexuality. The findings reveal that irrespective of their age, gender and marital status, Muslim consumers tend to have negative attitude toward the use of sexuality in ads. The extent to which sexual ads influence their brand evaluation and purchase decision appears as an important research question. Furthermore, the antecedents of this negative effect and the moderators involved in the process require further attention.

Emotional perspective primarily considers the affective aspects of consumer decision process and accounts for the feelings of individuals as a complement to cognitive processes dominant in the value perspective (Auger, et al., 2010). According to emotional perspective, both positive and negative feelings can significantly influence purchase intentions (Holbrook and Hirschman, 1982). In addition, it can be inferred from the "halo effect" that the first impression of a brand may influence the future evaluations of the brand. Therefore, those who have negative attitude toward sexuality in ads may negatively evaluate the traits of the brand, when its ads include sexuality. In addition, their negative feelings can significantly influence their purchase intentions.

This study argues that Muslim consumers tend to avoid looking at or seeing ads that contain sexuality and try to prevent their kids from being exposed to these ads. This tendency is expected to lead Muslim consumers to have low recall of brands whose ads accompany sexuality. Furthermore, they tend not to buy newspapers or magazines that include sexual images and watch television ads that contain sexuality. This study suggests that "personal modesty," a concept that describes shyness, propriety in dress, speech and behavior, and a deeper modesty based on faith (Benlafquih, 2009), explains Muslim consumers' reactions to sexuality in ads. Therefore, it hypothesizes that advertisements that contain sexual stimuli will negatively influence consumers with high level of personal modesty.

This paper recommends that those who wish to appeal successfully to Muslim consumers should take into consideration the requirements of personal modesty. Specifically, they should avoid using sexuality in their marketing campaigns. The advertisers should refrain from using women with seductive dresses. They should also refrain from using flirtatious behaviors and speeches in television ads. Furthermore, the newspapers, magazines and TV channels targeting Muslim consumers should pay attention to the requirements of personal modesty and avoid sexual advertisements. In addition, since Muslim parents pay much attention to raising righteous and modest children and want them to stay away from sexuality, the marketers should not use any kind of sexual image in their marketing campaigns that target Muslim children. Moreover, they should not use any kind of sexual image on the products with which they target Muslim children. Briefly, firms that want to be successful in Muslim markets and appeal effectively to the consumers in these markets should use in their marketing campaigns the images and materials that comply with the requirements of personal modesty.

The findings of this study points to several future research areas. First, more research is needed to better understand how Muslim consumers respond to advertisements that include sexuality. Due to its exploratory nature, this paper offers an initial understanding of the subject matter. Future research needs to examine the issue with a large sample size and investigate some covariates such as age, gender, marital status, country of origin and educational background more in depth. Second, future studies need to pay attention to personal modesty in order to understand this phenomenon and its effects on consumer behavior. The development of "personal modesty scale" can help better understand Muslim consumers' behavior and contribute to consumer behavior literature. Finally, it is likely that cross-cultural investigations will offer new insights and a better understanding of the subject matter.

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BIOGRAPHY

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CHURNING AND SUITABILITY OF INVESTMENTS: A FINANCIAL INDUSTRY REGULATORY AUTHORITY ARBITRATION CASE STUDY

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CASE DESCRIPTION

The identities of all parties in this matter have been changed to maintain confidentiality. An investor claimed that a broker at a well established securities firm was churning her account and had placed her funds in an account that was not suitable, given her investment objectives. She retained legal counsel. Her attorneys hired a consultant who wrote a report that discussed whether the investments were suitable, as well as whether there was excessive trading. The consultant's report and ultimately the author's testimony were expected to be introduced as evidence in Financial Industry Regulatory Authority (FINRA) arbitration. Ms. Laura Smith, a 72 year old retired widow, opened a brokerage account with Establishment Securities in March 1997, in response to a telephone solicitation from George Shady, an Establishment registered representative. Ms. Smith's primary investment account was with another securities firm. In March 2000, Ms. Smith transferred her primary investment account to Establishment Securities in response to another telephone solicitation from Mr. Shady. Based upon a review of documents that Ms. Smith signed when the Establishment account was created, Ms. Smith had specified that the account was nondiscretionary, meaning that Mr. Shady could not make trades or changes to her portfolio without her permission and that her investment objectives were income and growth.

Subsequently by 2003, Ms. Smith noticed that there was unusual activity in her account, which prompted the legal action discussed in this paper. In particular, Ms. Smith's legal counsel filed claims against Establishment Securities alleging that her account had been churned and that her investments were not suitable, relative to her investment objectives. Pursuant to the agreement originally signed in the brokerage agreement, the parties agreed to settle disputes according to FINRA Code of Arbitration.

This case study is appropriate for Senior Level and Graduate students of Accounting and Finance.

JEL: M00, K1

KEYWORDS: Churning, Suitability.

CASE INFORMATION

Regulatory suitability rules prohibit a securities broker-dealer from recommending a security to a customer unless he has a reasonable belief that the security is suitable for that customer. The National Association of Securities Dealers (NASD) through its Rule 2310 and the New York Stock Exchange (NYSE) through its Rule 405 articulate guidelines as to the suitability of an investment. The various rules, collectively and singularly, impose an affirmative duty on the broker-dealer to take the client's particular circumstances and situation into consideration. The conditions that need to be assessed when recommending a particular security include a customer's financial situation, risk threshold, investment sophistication, investment objectives, and other securities holdings. Before agreeing to serve a client, a broker is expected to obtain sufficient information regarding the client's circumstances to be able to determine whether particular investments are suitable (National Association of Securities Dealers and New York Stock Exchange).

The difficulty with suitability arises because of the generality of the stated rules. For example, NASD Rule 2310 states:
In recommending to customers the purchase, sale or exchange of any security, a member shall have reasonable grounds for believing that the recommendation is suitable for such customer upon the basis of the facts, if any, discussed by such customer as to his other security holdings and as to his financial situation and needs.

NYSE Rule 405 is equally vague as it states:
Use due diligence to learn the essential facts relative to every customer, every order, every cash or margin account accepted or carried by such organization and every person holding power of attorney over and account accepted or carried by such organization.

This vagueness poses problems when trying to establish that a particular broker's behavior with a client account violates the suitability standard (Shapiro and Rodriguez, 2007).

Churning refers to excessive buying and selling of securities in a client's account for the purpose of creating greater broker commission income without regard to the client's interests. This type of behavior violates the antifraud provisions of Section 10 (b) of the Securities and Exchange Act of 1934, as well as various rules specified by the Securities and Exchange Commission, NASD and NYSE. It is common to use measures of turnover to access whether there was excess activity in a client's account. The most common measure used is the Looper Formula developed by the SEC in its enforcement actions (Looper & Co, 1958). The Looper Formula divides total security purchases by the average month-end account balance, and then the ratio is annualized.

$$Looper = \frac{Purchases}{AverageEquity} \div \frac{DaysInPeriod}{365}$$

In addition, the ratio of commissions charged for trades to average equity can be computed to yield a portfolio break-even rate of return, i.e., what the gross return on securities needed to be in order for the account commissions to be covered. The Commission-to-Equity ratio is computed as:

$$Commission - to - Equity = \frac{Commissions}{AverageEquity} \div \frac{DaysInPeriod}{365}$$

FINRA was created in 2007 as a regulatory body that would serve investors as a regulator of the practices and arbitration function of the National Association of Securities Dealers (NASD) and the New York Stock Exchange (NYSE). Under Section 12200 of the FINRA Rules, Arbitration Under an Arbitration Agreement or the Rules of FINRA, parties must arbitrate a dispute under the Code if: Arbitration under the Code is either: (1) Required by a written agreement, or (2) Requested by the customer; and The dispute is between a customer and a member or associated person of a member; and The dispute arises in connection with the business activities of the member or the associated person, except disputes involving the insurance business activities of a member that is also an insurance company.

The panel consists of three arbitrators in most cases. Pursuant to FINRA Code of Arbitration Procedure Section 12401 subsection (b), claims between $25,000 and $50,000 may proceed with a single arbitrator. Under subsection (a) of Code of Arbitration Procedure Section 12401 claims under $25,000 are decided by a single arbitrator, generally on the pleadings.

Table1: Arbitration Process

Step	Description
1	The arbitrators and the witnesses are sworn in.
2	Each party has an opportunity to make a brief opening statement.
3	The claimant presents facts to the arbitrators, including documents and live or written testimony.
4	The respondent presents his or her case in the same manner as the claimant.
5	Then, any counter claims are presented in the same way.
6	Parties may provide rebuttal evidence.
7	Parties may make closing statements or summations of the testimony.

Parties demonstrate proof of the claims included in the complaint. Evidence rules are subject to the panels' discretion. Parties are given the opportunity to cross-examine witnesses. The panel then decides if an award is appropriate. Parties may reach settlement prior to conclusion of the arbitration.
In the discovery or information gathering process, in the pre arbitration process in an arbitration involving churning, the discovery requested includes documents that prove the 1) allegations of churning, 2) allegations of failure to supervise, 3) allegations of misrepresentations or omissions, 4) allegations of negligence, 5) allegations of unauthorized trading and 6) allegations of unsuitability.

Documents supporting the churning allegations include 1) All commission runs relating to the customer's account(s) at and 2) All documents reflecting compensation of any kind, including commissions, for the two months preceding through the two months following the transaction(s) at issue, or up to 12 months, whichever is longer, and 3) Documents sufficient to describe or set forth the basis upon which the Associated Person(s) was compensated during the years in which the transaction(s) or occurrence(s) in question occurred, including: a) any bonus or incentive program; and b) all compensation and commission schedules showing compensation received or to be received based upon volume, type of product sold, nature of trade (e.g., agency v. principal), etc.

In addition, testimony of witnesses can be introduced to explain the impact of the violation. Due to the fact specific nature of the proceeding, the expert will correlate the facts with the corresponding legal and ethical responsibilities of the finance professional.

When Ms. Smith had moved her primary account to Establishment Securities, nearly all of her portfolio was invested in shares of General Electric common stock. The defendants claimed that their investment strategy involved diversifying her portfolio so that she was not overly dependent on the performance of a single stock, especially given Ms. Smith's age. Although initial activity in Ms. Smith's account was devoted to diversifying her portfolio, there was the issue of whether this had been done with Ms. Smith's permission, since this was a nondiscretionary account.

The consultant's focus was on assessing whether churning had occurred. In reviewing the activity in Ms. Smith's accounts, it was apparent that there was excessive trading (churning) in her account over the period from May 1, 2001 through September 30, 2003. Over the period from May 1, 2001 through September 30, 2003, total security purchases equaled $1,713,624.79 and the average account balance equaled $368,085.03. As a result, the turnover ratio, as measured by the Looper Formula, equaled 11.25 from May 1, 2001 through September 30, 2003. By comparison, courts have found that when the turnover ratio exceeds four, it is reasonable to conclude that there was excessive trading in a client's account, particularly if the investor's objectives are not speculative in nature (Gaughan, 2009).

The consultant also computed the commission-to-equity ratio. The total commissions on all trades in Ms. Smith's account equaled $94,420.39 from May 1, 2001 to September 30, 2003. As a result the Commission-to-Equity ratio equaled 10.62 percent. This implies that the costs associated with trading were so high that Ms. Smith needed to earn an annualized return on her securities portfolio in excess of

10.62 percent in order to profit from her securities portfolio after subtraction of broker commission, which is further evidence of excessive trading activity.

Damages were estimated from May 1, 2001 through November 1, 2003, when Mr. Shady was removed by Establishment Securities as the broker handling the account. November 1, 2003 was chosen as the end date because Ms. Smith began working with a new broker who she was much happier working with and who rebalanced the portfolio with Ms. Smith's involvement.

The first measure of damages involved comparing the portfolio performance of Ms. Smith's portfolio with the portfolio that had been set up by the new Establishment Securities representative as of November 30, 2003. From May 1, 2003 to November 1, 2003, Ms. Smith's account balance declined from $599,893.86 to $226,772.78. By contrast, if the $599,893.86 was continuously invested in a portfolio value weighted as it was on November 30, 2003 with withdrawals from the account by Ms. Smith mirroring actual withdrawals, the portfolio value on November 1, 2003 would have equaled $569,941.35. Hence, using this approach, damages to Ms. Smith over the period from May 1, 2003 to November 1, 2003 equaled $569,941.35 - $226,772.78 = $362,238.07.

In response to a critique of this author's initial report by a defense damages expert, an alternative approach was used by the consultant to compute damages. The second approach involved estimating Ms. Smith's damages under the assumption that in the absence of churning, her portfolio would have remained as it was on May 1, 2001, with 70 percent of the value of the assets invested in General Electric common stock. If the portfolio had remained unchanged from May 1, 2001 to November 1, 2003, it would have declined in value from $599,893.86 to $379,154.30, as compared to its $226,772.78 actual value. Under the second damages approach, the damages equaled $379,154.30- $226,772.78 =$152,381.52.

QUESTIONS

1. Ms. Smith had a nondiscretionary account. Do you think this alone made any unauthorized investment change by Mr. Shady unethical?

2. Would Ms. Smith's investments have been unsuitable for her if in the absence of churning, her portfolio had remained invested primarily in General Electric stock?

3. Damages were calculated by the consultant by comparison of the financial performance of investments made by Mr. Shady to the performance of investments in benchmarked portfolios. Do you agree with the consultant's choice of benchmark portfolios?

4. Do you think that the defense expert's criticism of the approach used to obtain a damages figure of $362,238 was appropriate?

5. Should there have been interest accrued on the award from November 2003 until an award of damages? If so, interest on what kind of investment?

CHURNING AND SUITABILITY OF INVESTMENTS: A FINANCIAL INDUSTRY REGULATORY AUTHORITY ARBITRATION CASE STUDY

TEACHING NOTES

Steven Shapiro, New York Institute of Technology
Katherine Kinkela, New York Institute of Technology
Peter Harris, New York Institute of Technology

CASE DESCRIPTION

The identities of all parties in this matter have been changed to maintain confidentiality. An investor claimed that a broker at a well established securities firm was churning her account and had placed her funds in an account that was not suitable, given her investment objectives. She retained legal counsel. Her attorneys hired a consultant who wrote a report that discussed whether the investments were suitable, as well as whether there was excessive trading. The consultant's report and ultimately the author's testimony were expected to be introduced as evidence in Financial Industry Regulatory Authority (FINRA) arbitration.

Ms. Laura Smith, a 72 year old retired widow, opened a brokerage account with Establishment Securities in March 1997, in response to a telephone solicitation from George Shady, an Establishment registered representative. Ms. Smith's primary investment account was with another securities firm. In March 2000, Ms. Smith transferred her primary investment account to Establishment Securities in response to another telephone solicitation from Mr. Shady. Based upon a review of documents that Ms. Smith signed when the Establishment account was created, Ms. Smith had specified that the account was nondiscretionary, meaning that Mr. Shady could not make trades or changes to her portfolio without her permission and that her investment objectives were income and growth.

Subsequently by 2003, Ms. Smith noticed that there was unusual activity in her account, which prompted the legal action discussed in this paper. In particular, Ms. Smith's legal counsel filed claims against Establishment Securities alleging that her account had been churned and that her investments were not suitable, relative to her investment objectives. Pursuant to the agreement originally signed in the brokerage agreement, the parties agreed to settle disputes according to FINRA Code of Arbitration.

This case study is appropriate for Senior Level and Graduate students of Accounting and Finance.

GENERAL COMMENTS

When assigning this case to students, the instructor should start with an overview of the role of the SEC, stock exchanges and FINRA in regulating the securities industry. The discussion should then continue on the topic of what constitutes ethical behavior by a broker or investment advisor. Students should be encouraged to chime in about the ethical standards that they believe are appropriate for brokers and investment managers.

QUESTIONS

1. Ms. Smith had a nondiscretionary account. Do you think this alone made any unauthorized investment change by Mr. Shady unethical?

Discussion of this topics should focus on the meaning of a nondiscretionary account. A perceptive student might notice that if the account was nondiscretionary then any activity by the broker without Ms. Smith's authorization should be viewed as leading to unsuitable investments.

2. Would Ms. Smith's investments have been unsuitable for her if in the absence of churning, her portfolio had remained invested primarily in General Electric stock?

Students should focus on the idea that having her portfolio invested in General Electric meant that she was not benefiting from the risk reduction associated with portfolio diversification. In addition, students might focus on the notion that for a senior citizen who is looking for income from her savings over a shorter term horizon, the risk from holding shares in a single company may well have been too risky.

3. Damages were calculated by the consultant by comparison of the financial performance of investments made by Mr. Shady to the performance of investments in benchmarked portfolios. Do you agree with the consultant's choice of benchmark portfolios?

In answering this question, there is not necessarily one correct answer. Students should be encouraged to speculate on what class or classes of assets would have been appropriate for a senior citizen and then assess portfolio performance for that benchmark portfolio during the period that churning allegedly occurred.

4. Do you think that the defense expert's criticism of the approach used to obtain a damages figure of $362,238 was appropriate?

Students should be asked to critique the method used by the financial consultant to model damages to Ms. Smith. In particular, students should examine whether the damages period was properly specified, as well as the appropriateness of comparing the performance of Ms. Smith's portfolio during the period of churning to a hypothetical benchmark.

5. Should there have been interest accrued on the award from November 2003 until an award of damages? If so, interest on what kind of investment?

Students should quickly realize that the loss of the time value of money is not being recognized unless interest is accrued on the damages. You may want to mention to students that experts are divided on whether the interest should be on a relatively risk free instrument or a risky instrument (Lanzillotti and Esquibel, 1990; Fisher and Romaine, 1990; and Patel, et al., 1982).

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CULTURAL DIAGNOSIS AND BYPASSING; THE EFFECT ON SUCCESSFUL INTERNATIONALIZATION

Andrews Adugudaa Akolaa, SMC University

ABSTRACT

Globalization and its effect on business continue to propel firms to look beyond local markets for opportunities for market development and as a source of growth. However, Cultural differences in various markets continue to exert enormous pressure on international market operations as a result of cultural bypassing or misdiagnosis and this requires international marketers to undertake robust cultural analysis to ensure successful market servicing strategies. This paper reviews and discusses the crucial role of culture in successful internationalization; key reviews of marketing strategies and failures of some major corporations presented, cultural analytical frameworks have been evaluated and novel theoretical propositions made to segment cultural elements into soft and hard cultures. The paper provides a logical step approach framework to guide the international market practitioners analyzing foreign market cultures.

JEL: F23, M106

KEYWORDS: International marketing, Culture, Diagnosis, Market failures, Soft and hard culture

INTRODUCTION

The role and influence of culture to international business operations is paramount in a globalized environment where consumers are more informed and discerning than ever before. The cultural dispositions and grounding of individual consumers affect their attitude and behavior towards a product or service. The environment in which the individual or group socialized affects the attitude and behavior (Zeenat 2011). However, numerous firms continue to misdiagnose, bypass or fail to consider the cultural implications of their international marketing decisions leading to preventable market failures.
Many researchers in the area have acknowledged the critical place of culture in the successful internationalization of firms and brands. Wilson & Gilligan (1997) confirms that the most fundamental and indeed closest influencing force on behavior is the culture of a people which proves to be the most enduring. Similarly, Subhashini (2007) noted that the dimensions considered in shopper behavior in India do not only examine the individual motivations but also the cultural differences that influence shopper behavior. Culture consists of the values, beliefs, and norms of a society and they represent the most influential factor to a successful product launch or failure (Young & Javalgi 2007).

Many companies consider new market development as a strategic growth path (Ansoff, 1957) and mostly they see the development of international markets as the fastest means of growth or expansion.
The process leading to internationalization would be clearer and less cumbersome if international market operators appreciate the fact that markets are not the same in terms of consumer profiling and behavior and that it is rare to transfer wholesale what pertains in the local markets into the foreign markets. As Kotler (1988) cited by Wilson & Gilligan (1997) suggest that, human behavior is largely a result of cultural socialization leading to the development of set of values, perceptions, preferences and behavior. It has been suggested that the marketer's main focus in the internationalization process is to understand the similarities and differences in cultural norms and values and to adapt their offering to suit the differences and similarities (Keegan, 2002). Further, social values and the culture of that society influence international marketing is strongly (Papadopoulos, Zikmund and d'Amico, 1988). Following from the above role that culture plays in the internationalization process, a critical cultural examination and

analysis is very crucial for any firm going international. The accurate analysis and diagnosis of the foreign market culture enhances the effective delivery and success rates in the foreign market operations.

In spite of the undisputed critical role of cultural values to successful internationalization of brands, there has been several complete brand failures as a consequence of cultural bypassing(CB) either inadequate research into the cultural norms and values of the foreign market or completely ignoring culture as a critical factor in the successful internationalization process. Very little empirical research exists testing the influence of culture in international marketing.

There have been several reports of international market failures because of cultural misdiagnosis (CMD) or cultural bypassing (CB) captured in various literature on international marketing. This has not influenced international marketing operations, as there has not been any systematic review and classifications of such failures into source documents on cultural failures within the marketing elements structure, where potential international marketers and academics can review these failures in a comprehensive manner with the objective of avoiding similar mistakes in international marketing operations. This paper seeks to explore this very important subject matter and bring to fore the crucial need for in-depth information on cultural failures.

Prior researchers in this area (Durand & Durand 1968, Van Fleet 1973, Ricks 1983, Shanklin 1986, Makridakis 1991, Garry Knight 1995, Dalgic& Heijblom 1996) have concentrated on general international market failures and mistakes with little attention on culture only as a major area of likely international failures. Pepsi in Japan with slogan 'come alive with Pepsi' was interpreted by the Japanese to mean 'bring back your dead ancestors with Pepsi' The fact that there continue to be terribly avoidable cultural mistakes in recent times makes the case for this study even more critical in the international marketing operations literature.

The study focused on most recent cases as a means of adding to the previously published ones and has examine the value of culture in the international marketing operations, identified and discuss major failures in international market as a result of practitioners bypassing cultural values and norms and the effect on the marketing mix elements.

LITERATURE REVIEW

Tylor cited by Crown Lee(1999) defines culture as 'that complex whole which includes knowledge, belief, art, law, morals, customs and other capabilities and habits acquired by man as a member of a society'. Lackman, Hanson and Lianas (1997) in their exposition on culture of societies include language, rituals, technology, and style of dress, ways of producing, food, religion and political and economic systems in a particular society. The consumer's attitude towards a product, service or any object is thus the culmination of his experiences because of socialization within the socio- cultural environment. As Kotler (1988) put it, because of the influence they exert on buyer behavior, it is pertinent that much effort is devoted to understand how culture and society interact and ultimately influence purchase behavior. Wilson and Gilligan(1997) in a similar vein observes that an individual's behavior is largely as a result of a learning process and as such individuals grow with a certain set of values, beliefs and perceptions that direct their attitudes and behavioral patterns in society. Empirical studies have provided evidence of some cultural dimensions including; man's relations to nature, time, personal activity and the others around the environment influencing the consumer behavior especially in high involvement decision process (Henry, 1976).

Schiffman and Kanuk(1983) cited by Wilson and Gilligan(1997) collaborate this by indicating that the individual develops a sense of achievement, individualism, freedom of action, success, efficiency, humanitarianism and these are the key drivers of behavior. The fundamentality and influence of culture in the behavioral exhibits of the individual is thus an ingrained factor established and cannot be underestimated in the study and practice of international business operations. (Hollensen 2007) indicates that, there are variations in cultural beliefs and values across foreign markets and cultural issues are of significance in terms of impact on the acceptability and adoption of a product or service and the accompanying marketing mix elements in the international market.

Slowwikowski & Jarratt (1997) in their study to understand the impact of culture on the adoption on high technology products between migrant Vietnamese and Polish in Australia found that culture especially beliefs, religion and fatality had a very strong compelling role in the adoption of high technology products. Similarly, the impact of cultural affected Disney world strongly when they transferred their strictly no alcoholic policy without adaptation into the French market. The French resisted the policy in a culture where wine was part of the daily meals and fun (Hollensen, 2007).

In a similar vein William(1991) cited by Slowikowski and Jarratt(1979) indicated that firms continue to establish global harmony in consumer taste in their manufacturing and marketing for economies of scale, but these consumers react differently as the various economies, geography, religions and historical antecedence differ. Zakaria and Abdul-Talib (2010) notes that national culture which underlines employee cultural values, beliefs and attitudes have remarkable impact on firms' performance and hence should not be undermined. Many research work points to the importance and influence of culture in international marketing operations (Douglas and Dubois, 1977; Munson and McIntyre, 1979) (Figure 1).

Figure 1: Attributes of Culture

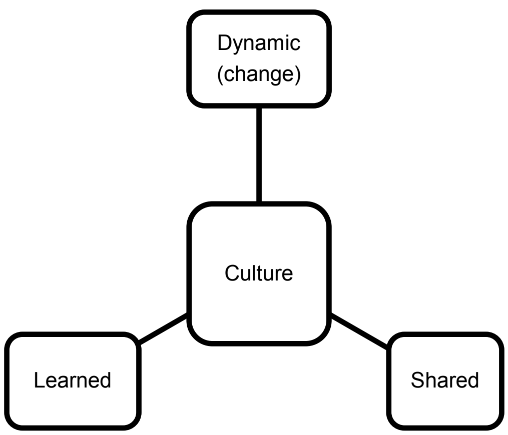


Figure 1 describes the key attributes on which culture is grounded and based on which individuals and societies are socialized and shaped

Culture has attributes and characteristics that make it a unique phenomenon and enduring in societies. People in a society through experience and individual education learn culture (Granot, 1996). The socialization of individuals into various cultures from their early lives through norms, values, beliefs, customs and attitudes accepted in that society impact on behavior. From generations to generations, societies passed down culture. . The learning process makes these attributes enduring and guides individuals in their decision making process.

The international marketer should explore to understand what is learned and enduring in any market with the objective of adapting to those values to influence positively the consumers' perception towards the product or service. Amongst a group of people they share culture also defined as knowledge shared by a society (Romney, 1999); Garcia, et al., 2004). Culture thus permeates a society and it is consistent with members of that community. Garcia et.al.(2004) notes that the people in a particular society view and interprate values, norms and traditions in a similar manner Individuals believe and share in the ideals of culture.

Culture is also dynamic (Yaprak, 2008). It is not static and changes from time to time although they are enduring. Cultural changes take time to unfold and the values and norms subject themselves to environmental conditions such as technology, education, communication, science and research without losing their core meanings to the society. As Volkman, (2006) puts it; rich and robust traditions will continue to flourish even in the global market storms. Nakata, (2003) argues that whilst cultures may be enduring, individuals in society may construct and reconstruct their beliefs and perceptions, attitudes of norms and values in the light of changing circumstances and globalization. This changing nature of culture means that international marketer must develop systems and structures that will consistently measure and evaluate any shifts in cultural values especially non -core values and norms. Various elements make up culture worth exploring, Carter (2002) intimate that any comprehensive analogy of culture must encompass the elements encapsulated in societal practices material and immaterial. These elements include; language, religion, values and attitudes, education, social organization, materials culture, law, politics and aesthetics (Figure 2).

Figure 2: Elements of Culture

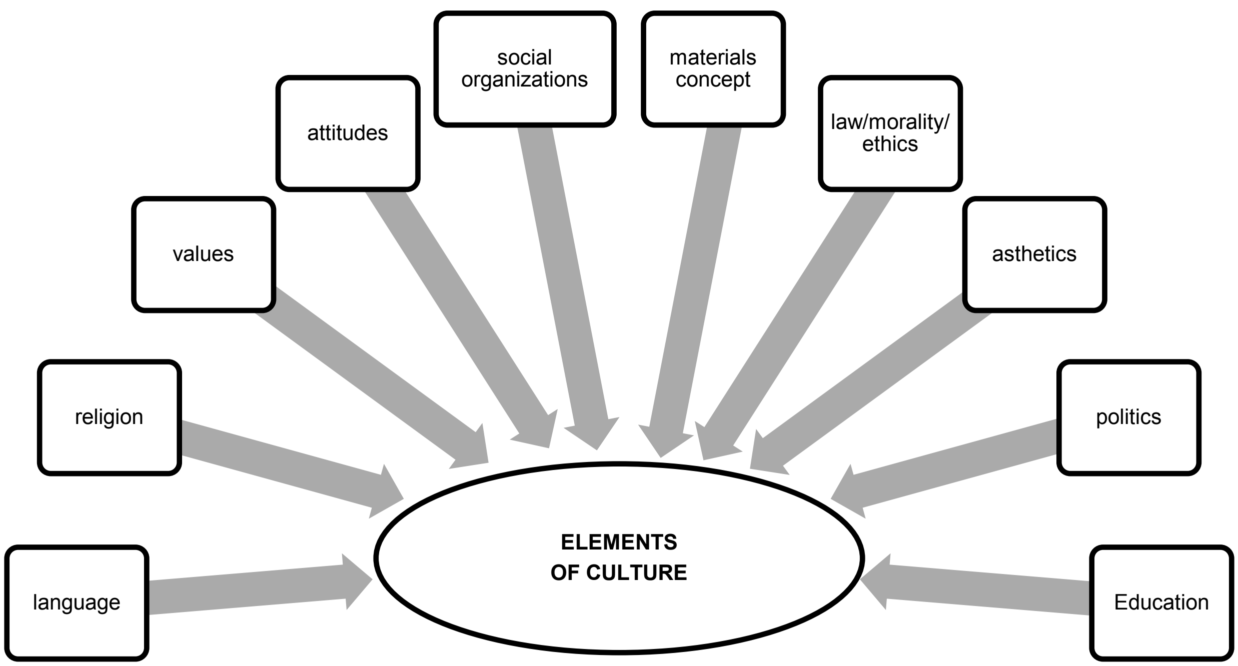


Figure 2- Depicts the key elements of culture that require critical attention in examining foreign market cultures.

The language of a people is the fundamental medium for information exchange. They are unique and the meanings of words in one market may be unbelievably different from that of another market (Freitag , 2005). International marketing practitioners have the arduous task of ensuring that the meanings of words are clear before using them in foreign markets. In the Frafra language in Northern Ghana the word ‘Calabar’ means a prostitute with negative associations while the same word is a city in Cross River State in Nigeria.

The famous Kentucky Fried chicken slogan; ‘finger-licking good’ was misinterpreted as ‘eat your fingers off’ in Chinese (Freitag, 2005). American Chevrolet also suffered a similar international failure when they bypassed language culture and marketed their Chevy NOVA in the Mexican market which indeed meant 'does not move or does not go' (Ingram, 2001). These earlier failures of respected multinational firms indicate the severity of the cultural situation, which persists even in the 21st century.

Another critical element of culture worth examining in international market diagnosis is religion. It establishes the belief in a supreme being controlling the laws of life and humanity and thus impact on the behavior of individuals and societies as a whole. Religion involves sacrifices, practices, norms, laws; ethics and morality of human living that distinguish one people from the other.

In India for example, the people of the Hindu religion taboos the cow for food because it is seen as their totem that guides them and gives them luck in their daily lives. Similarly, in some African traditional religions a woman in her menstrual period cannot serve food to the husband and therefore must stay away until it is over. In the Islamic religion women are expected to cover their bodies in public and have very little role to play in decision making in the home.

These practices are important to understand the movement from one market to the other in order to determine their impact on consumer perceptions attitude and behavior towards a product or service. Babakus et al. (2004), in their research to establish reactions to unethical behaviors across cultures found that religion was a critical predictor of consumer ethical perceptions and behavior. Religion also dominates the determinant of individuals' beliefs and value systems. Safire Mokhlis(2009) in his research on religiosity and consumer behavior established that shopper behavior was widely influenced by their religion.

Vassilikopoulou, Siomkos and Mylonaksi (2006) established that there was a difference in consumer behavior patterns between Muslims and Christians when they researched the impact of micro culture on consumer behavior in Greece. The research also confirmed the differences between the two groups in their perception of ideal stores to shop and their buying selection criteria.

Values systems and attitudes components of different cultures have also been found to impact greatly in the international marketing operations and behaviors (Belk, 1985 and Hofstedes, 1997 cited by (Luna and Gupta, 2001). Values are one common set of cultural factors reoccurring in most literature as influencing social organizations, conventions, habits, communication systems, roles and status in society.

Cultural values differ from one society to the other and they constitute the beliefs, norms, ways of life, concepts of what is relevant and what is not, moral values and ethics accepted and practiced by a society or group of people (Slowikowski and Jarratt, 1997; Vassilikopoulou et.al 2006). Henry 1976 established that cultural values play a crucial role in shaping the individual attitudes and final behavior in his study of the automobile market in America.

Other cultural established to impact on international marketing operations are the materials culture and aesthetics. Aesthetics relates to the concept of a people on art, color, shapes, clothing, artifacts, any other material aspects of life that adds value to the society's appreciations of products and services. O'neal(1998) refers to aesthetics as the study of human reaction to the non-instrumental qualities of an object or occurrence.

Aesthetics provide consumers with various dimensions emotionally, physical experience and evaluative values to determine the quality of apparel (De-Long, 1998) cited by M de Klerk and Lubbe, 2004). Moving into another market may require a better understanding of the aesthetic culture of the market in order to satisfy their expectations.

Social organizations in culture including; status, class, social distance, family structures, subordinate-superior relationships are very important in international business operations. Whereas some societies hold them against an individual because of class societies, others do not consider social organization as a serious barrier to doing business internationally. In most Arabic countries, women do not shake hands with men and most countries such as Nigeria where there is power distance; subordinates take instructions strictly from their superiors and cannot take decisions on their own.

Culture is a learned disposition of the individual acquired from generations to generations. It is a learned behavioral pattern. (www.anthro.palomar.edu). Culture thus influences the perceptions and beliefs of the individual about objects. Beliefs are the knowledge and inferences an individual hold about an object, product, service or society (Mowen and Minor (2000).

These beliefs serve as the pillars for the formation of attitudes, which eventually expresses overtly in behavior towards the object in a linear manner. Hernandez, et al. (2008) confirmed the positive effects of cultural beliefs on consumer behavior in their study of superstitious beliefs on consumer novelty and independent judgment in China. Marketers must seek to influence the perceptions and beliefs about their offerings in other to balance the hierarchy of effect in consumer decision making.

The variability of the international marketplace requires firm and robust structures and frameworks to diagnose and comprehend behavior. The influence of culture on behavior is acceptably very strong and no single framework has been adequate in clearly analyzing culture completely. This perhaps accounts for the continuous grievous mistakes and failures in international market operations. This notwithstanding, many researchers have developed sustainable frameworks to serve as tools for international market analysis for decision-making.

Hofstede (1980) led the path by initiating the literature and discussions on the cultural frameworks in international market research and diagnosis. Others however preceded his work like Hall (1976) who classified culture into two broad segments of low and high context cultures based on how different cultures communicate information and the considerations placed on meanings and interpretation. A large amount of research undertaken in this rather important aspect of international marketing,(Fiske, 1992; Trompernaars, 1993; Triandis, 1994); House et al., 2004). These studies have sought to improve and develop on the weaknesses of the Hofstede's model (1980) (Figure 3).

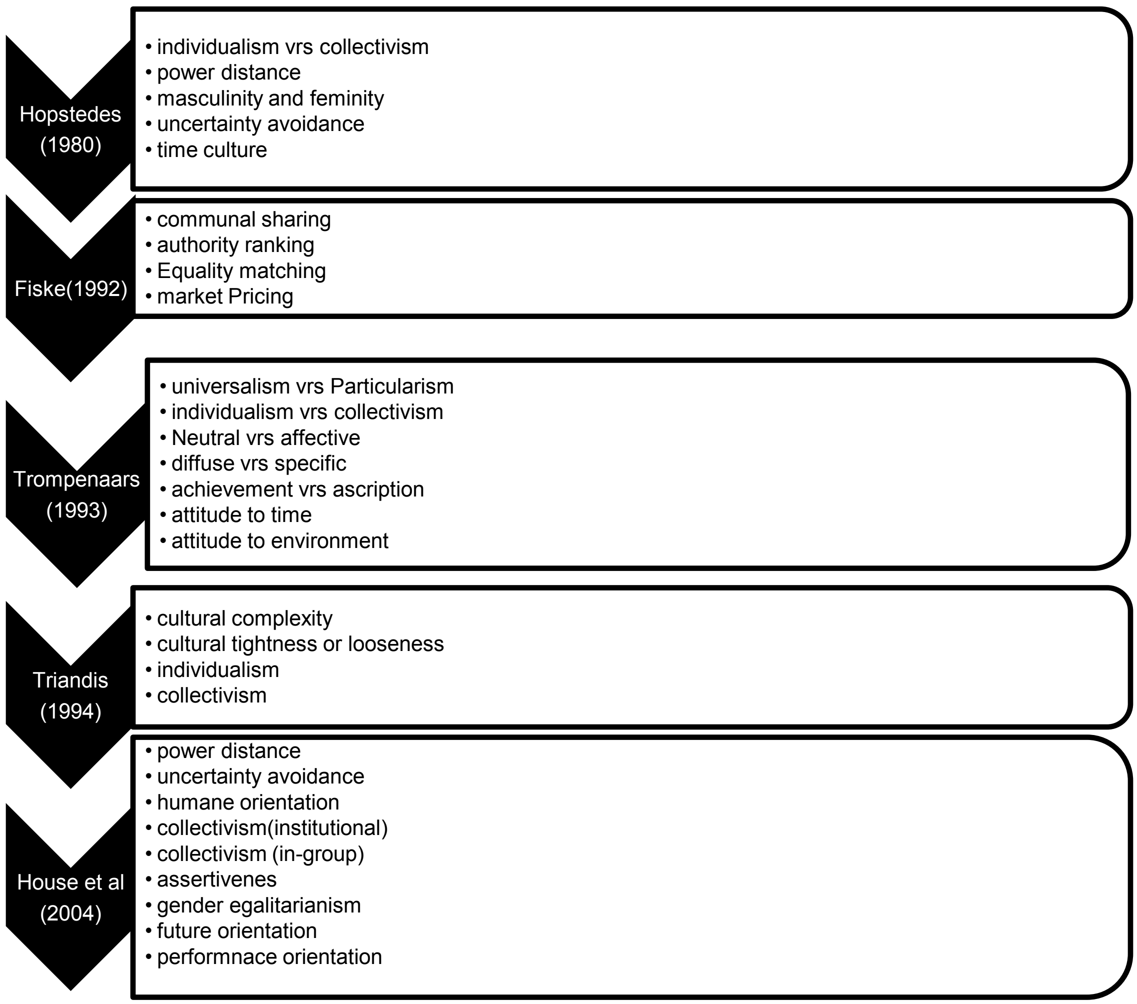
Whereas all these models and frameworks have in one way or the other contributed to the development of the international marketing discipline, there are no common approaches for their application in analyzing the culture of potential markets. They represent the informational component in the analytics and serve as guides for international market operators and do not direct the approaches and methodologies for analyzing the information for decisions, leaving practitioners to their own manipulations, thus generating the need to have practical based approaches for international cultural analysis for to avoid failures.

METHODOLOGY

The research adopts a secondary research method for the purposes of this research. This involved the use of desk review to collate and analyze some major international marketing cases and literature on culture and foreign market failures resulting from cultural bypassing (CB) or cultural misdiagnosis (CMD).
The main sources of the information generated from the desk review are the academic journals, the World Wide Web using search engines, books and other electronic sources. The desk review covered the key areas in international marketing mix decisions of product, price, place, promotion and people. (53) literature sources reviewed including 36 peer-reviewed articles on culture, five (5) websites, twelve (12) books and magazines.

Selected cases cover global businesses mostly in developed countries as most firms in developing countries may have mostly primary commodities for the international market. Thirteen (13) multinational firms reviewed with one diplomatic case and a personal service product. The cases selected also ranged from brand name failures, promotions, personal selling, product, pricing to cover most parts of the marketing mix elements.

Figure 3: Cultural Diagnostic Frameworks-(CDF)



A framework depicting chronologically some of the major research works done in the area of cultural analysis and the variables therein that separates different cultures on those bases.

RESULTS

A review of the literature and documents in the subject matter in this paper has revealed serious failures and blunders from diplomacy to global businesses. Some of the most recent and interesting cases have been articulated here as lessons for international market operators to consider in order to avoid repetition. Four basic categories and sections presented for easy review.

<u>Brand Name/Product Failures</u>

Case 1: In the year 2003, the Japanese government named the country's diplomat called Takauchi Kumamoto and the wife Kunyamavi Kayashika as an Ambassador and posted to Tanzania in Africa. The

Tanzanian government immediately protested the posting of the Ambassador and the wife to that country and they were immediately withdrawn from Tanzania. The Tanzanian government made it clear that the protest had nothing to do with the personality and the wife (the products) but their names were very offensive to the people of Tanzania. The name Kumamoto means something very vulgar on the female genitals in Swahili, while the name of the spouse Kunyamavi was also uncomfortable. The country immediately recalled and replaced the diplomats. This avoidable mistake is a result of language cultural diagnosis. Which the Japanese government failed to consider in the personality names (brand).

Case 2: In 2002, Unbro a British sportswear and kit manufacturer based in Manchester UK received many protest on its shoe brand Zyklon. Apparently, the word Zyklon bears the same name as the lethal gas used by Naxis in the concentration camps during the Second World War to extinguish enemies. The company withdrew the brand and apologized for the name used for the brand. Following this withdrawal, BBC news reported that Bosch Siemens Huasgeraete was withdrawing their applications to register the name Zyklon for its own products to avoid any protest.

Case 3: The Hershey Company, incorporated in 1927 is a manufacturer of chocolate and sugar confectionery products for global markets. In the early 1990's, the Hershey company introduced on the Japanese market a Chocolate named Mr. Good chocolate bar made of peanuts and chocolate. Consumers in Japan avoided this as Japanese believe that chocolate and peanuts cause nose bleeding. Sales of the chocolate dwindled because of this cultural belief about peanuts and chocolate.

Case 4: In the year 2003, the General Motors Corporation organized a focus group discussion on its new car the Buick Lacrosse introduce into Quebec, the French speaking part of Canada. During the discussions moderators realized that most of the young adults were laughing and giggling. When they found out, the name Lacrosse was the French slang for masturbation or Just got screwed or just got taken which embarrassed the General Motors officials. They decided to hold the name and to rename the car. It later became Allure in Canada.

Case 5: Honda Motors in 2001 introduced a new brand Honda Fitta in the Nordic countries but quickly re-named the brand to Honda Jazz as the name Fitta was a slang, which meant the woman genitals in Swedish, Norwegian and Danish. This is an obvious case of cultural bypassing in the selection of the brand name for the car. There was no proper cultural diagnosis in the Scandinavian market done to avoid such a grievous mistake.

Case 6: The Indian market is quite huge with a population over one billion. This markets size seems to cloud the judgment of many marketers entering that market. This is what happened to Kellogs breakfast cereal in 1994. They entered the market with big optimism that the figures represent the best market for their product in numbers. However, after entering the market, the demand for the product was sluggish and did not meet their expectations. The officials of Kellog had lost site of the Indian breakfast eating habit and culture that really promoted the consumption of hot vegetables in the morning. The company has since marketed its brand with an additional objective of changing the Indian breakfast eating habits endured for years. They have had to promote the brand name strongly to introduction other Kellog products into that market.

Case 7: A European hardware chain store Gotzen opened a branch in Istanbul Turkey. Little did the company know that the name Got means ass in Turkist. The company immediately changed its chain name to Tekzen that has since become one of the largest chain stores in Turkey.

Case 8: Euro Disney suffered cultural backlash and made losses for two years before making some profits in the French market. The company had operated successfully in California, Florida and Tokyo on a no alcohol policy in all its sites. This policy implemented without any regard to the French culture, which encouraged a glass of wine after meals when the amusement park opened in Paris in 1992. By the end of 1993, the company had to amend this strictly no alcohol policy, which saw the attendance and patronage increase. Although the initial failures cannot be totally attributed to culture only it was a major factor in this case.

<u>Promotional Failures</u>

Case 9: At the introduction of Coca Cola in China, the translation of the name in Chinese read Ke-Ke-ken-la, which meant bite the wax tadpole or female horse staff with wax. Promotional materials sent out extensively. The company did not realize it until a research commissioned on the brand revealed the negative and the translations changed to Ko-kou-ko-le, which means happiness in the can or the mouth.

Case 10: During the 1994 world cup, associated press reported that two major firms (Coca Cola and MacDonalds) suffered cultural failures when they had to cease the production and circulation of some marketing material meant for the world cup promotion. Whilst Coca Cola placed the flags of all the participating teams on a can of soda, MacDonald has placed the flags of all the participating teams on a carry out bag, which included the flag of Saudi Arabia. The inclusion of the Saudi Arabian flag drew the attention of the Muslim communities who protested against the use of the Saudi Arabian flag, which contains the Shahada professing the Islamic faith. The act considered by Muslims, as desecration of the flag and the companies had to halt further production of these paraphernalia.

Case 11: In 1994, the telecommunications company Orange had a serious criticism of its promotional theme in Ireland dominated by the Catholic faithful. The company ran a promotion, which stated 'the future is bright, the future is orange'; this interpreted to mean the future of Ireland lay in the 'orange order' that is a protestant religious sect group. This angered the catholic community and the company had to change the promotional theme to suit the Catholic dominated Northern Ireland (www.i18guy.com)

Case 12: Samarin is a Swedish over the counter stomach upset reliever produced by Cederroth Company. When the product print adverts was run in Arabic newspapers, the product sales did not pickup. The reason was very simple, Arabs read traditionally from right to left and not left to right so the pictures that depicted the product usage was negative in the Arabian reading sense.
Scenes 1: A man seen holding his stomach with pain
Scene 2: A man seen drinking Samarin
Scene3: A man seen happily jumping and smiling
From the Arabic reading community, it will read like this:
Scene1. A man seen jumping and smiling
Scene2. A man seen drinking Samarin
Scene3. A man seen holding his stomach in pain.

This is totally the inverse of the intent of the communication, as the message was negative and hence affected the brand sales performance.

Case 13: A Latin American country had decided to improve its communications network, because of the magnitude of the work they invited an American company to pitch for the business. The American firm decided to send their senior sales manager from home instead of their regular Latin American representative. On his arrival, the American Trade Attaché coached him on the way Latin Americans do business. The sales Manager failed to secure the contract although in spite of the thorough brief.

The reason was indeed very intriguing, in Latin America business is done based on trust and relationship, they never in a hurry to negotiate business, they spend most of the time building relationship with the potential supplier and will call for business when they are ready.

The Sales Manager spent days drinking tea, touring historical sites and having wines with the Minister in Charge of the contract without discussing a bit of the business. The Sales Manager became impatient after days and when the Minister showed him a statue and said "there stands the most cherished and greatest hero in the world, the liberator of mankind", the Sales Manager at this time could not hide his frustration and asked the name of the person. When told, he remarked, "I have never heard about him" and then walked on. This conduct of the Sale Manager offended the Minister and this was the last time the Sales Manager saw the Minister, the contract went to a Swedish firm. The American sales manager failed to recognize the way the Latin American country does business and lost the contract because of cultural bypassing.

<u>Pricing Failures</u>

Case 14: The pricing strategies of countries and cultures differ. An America Business school Professor was said to be negotiating the terms of his visiting professorship contract with a University in Africa. He was not used to the negotiating tactics of the African country and almost lost the job because he thought the negotiation culture of the University was very 'insulting' and lack of recognition for his value.

He consulted with some Africans and complained bitterly. The Professor sought explanation and realized that, the culture of most Africans to negotiate from high or low ceilings or floors, and continues creeping up down. The parties reach a consensus as to what is acceptable eventually and an agreement signed. This was contrary to the Western styles of fixed prices for services mostly non-negotiable. He picked up the job after getting the understanding of the negotiating culture in that country.

<u>Relationship Marketing Failures</u>

Case 15 : In the year 2004, the British business icon Richard Branson's Virgin Atlantic took 49% of the shares in the collapsed Nigeria Airways as the majority shareholder. The deal announced with all the glamour under the presidency of President Olusegun Obasanjo. After the change of government, the relationship changed and virgin had its wings clipped as it could not use the domestic terminal for its international operations and forcibly ejected. A situation Richard Branson described as "Mafioso tactics".

In 2008, the company after several legal battles had to sell off its 49% stake and take its brand out of Nigeria Airways, now christened Air Nigeria. What Richard Branson and his virgin team failed to recognize was the fact that in doing business in Africa a network of relationship culture was key to success and thus, failed to court the relationship of the new government. One Virgin Atlantic official remarked 'an agreement is an agreement and as far as we are concerned we have all the requisite documents'. www.news.bbc.co.uk (June 09)

<u>Discussions</u>

Culture is the bedrock of behavioral instincts. There is evidence of the influence of culture on consumers' behavior in various researches and thus not discounted in the international marketing schematic framework for success. It is enduring and at the same time dynamic in nature. Individuals and societies cherish and protect their culture that socialized in their generations.

The myriad of cases noted here some of which are very recent, is an indication of firms' lack of commitment of resources in the diligent investigations of international markets in their effort to internationalize their brands especially concerning cultural similarities, convergence and divergence.
Most of the cases reviewed are product and promotional mix element failures relating to brand names selection and interpretation, product acceptability, promotional goofs and ignorance of cultural value

implications as well as consumption cultural bypassing, which impinge severely on consumer choice of products and services.

The critical nature of brand name selection in international marketing makes its consideration a well thought out decision. International marketers must systematically evaluate the meaning and word references in languages of their target markets to ensure their accuracy before carrying them across. (Lubliner1993).

Brand names for products and services may portray different perceptions about a product as most names have natural associations to the brand attributes and values. Salciuviene et al (2010) found that services with French names perceived as more hedonic. 'In the context of hedonic services, the incongruence between brand names in foreign languages and country of origin leads to higher perceived suitability and perception for brand names in foreign languages'.

International marketers must systematically research brand names, logos, and symbols used into deeper spheres when going international with their products. The interpretation and meaning of names, symbols and logos sometimes completely differ in another language or culture thus affecting the brand negatively. Brand names must be simple, easy to recall, and appropriate and relevant to the brand and the target market. The brand failure cases discussed in this paper are avoidable with research insights.

Promotional failures are very common in international marketing, however they are avoidable when designers of promotional material for especially advertising consider and research the use of personalities, symbols and artifacts in their promotions. Pre-tested of advertisements meant for foreign markets with a sample of the target audience to ensure that ambiguous features including; the use of words, personalities, dressing, symbols, slogans and taglines, are properly scrutinized and treated before using the material is required to minimize mistakes.

In developing advertisements for international markets, it is also crucial to benchmark with existing regulations and legislations, cultural and sub-cultural practices in the target market to avoid failures. Certain practices may be unacceptable in particular countries because of socio-cultural and legal barriers. The review also covered key effects of culture on consumer behavior across markets, with various frameworks used to undertake cultural diagnosis.

The inclusion of some of the most respected and global icon corporations in the recent failures and cultural blunders make the subject matter a serious area for continuous research and highlighting to reduce the incidence of cultural failures in international marketing. Indeed some of the failures could have been avoided with international market research and scanning before implementation.

RECOMMENDATIONS, IMPLICATIONS AND LIMITATION

There have been several research and frameworks which have contributed immensely to the body literature in this important aspect of internationalization, most of them are etic or emic in nature and does not allow for a holistic analysis of culture for international marketing operations and culture has been acknowledged to contribute enormously to the success in any international marketing venture.

Despite all these, international marketers continue to make serious mistakes and blunders as those reviewed. Manrai and Manrai (1996) acknowledges that existing models are often too complicated to be practicalize and contain abstract terms and constructs that managers cannot fully appreciate and use . Luna and Gupta (2001) suggest that researchers must design and implement theoretically sound and practically efficient methods that are easy to measure and operationalize in consumer acculturation.

Following from the discourse and the critical nature of the subject matter this paper proposes and recommends the segregation of cultural elements into soft and hard culture. Soft culture (SC) referring to those elements that centers on the specific values of the society which are subliminal in nature in the market under review. These societal specific values are usually not obvious or easily discovered and yet affect the most on consumer behavior.

The hard culture (HC) refers to those elements of culture easily detected and can be discovered from even outside of the society or market under review. The categorization into soft and hard cultures will allow the application of varying methodologies to capture all aspects of society's culture and elements for effective market exploration across borders. Culture should appropriately be segregated into soft and hard; with the step approach suggested here applied in the analysis to ensure that every aspect is covered with the most suitable methodology. The focus should be on the elements to not only support product, pricing, place, promotion and other strategic marketing decisions but also highlight issues on business interactions such as in negotiations, gift culture, relationships lines and social interactions and organization (Tabla 1).

Table 1-Soft and Hard Culture (SHCM Model)

Soft Elements of Culture	Hard Elements of Culture
1. Respect for authority	1. Religious beliefs
2. Role of family in buying decisions	2. Rituals
3. Social class systems and strata	3. Symbols
4. Gender roles in buying decisions	4. Language
5. Materialism culture	5. Artifacts
6. Morality and Ethics	6. Politics
	7. History
	8. Food
	9. Music

Tabla 1 Soft and Hard Culture Model (SHCM) source: Author This theoretical SHCM model proposed to help international marketing operators diagnose cultural elements in a more structured manner. The application of different tools depending on whether they fall within the soft or hard category.

The Logical and Practical Steps in Diagnosing Foreign Culture

Existing models and frameworks really are too theoretical for practitioners, a proposed simplified step approach that will be practitioner friendly for even the beginner to use as a guide to analyze foreign cultures effectively put forward in this paper.

Table 2: The Step Approach to Analyzing Foreign Market Culture

Step one	Approach the analysis with an open mind and objectivity without any prejudice. The least prejudice may lead to a slip or cultural misdiagnosis. Many international market practitioners cloud their judgment with their self reference criterion which does not work for every market
Step two	Identify and segregate the elements into soft and hard cultures to make examination and analysis easier
Step three	Identify the most appropriate methodologies to assemble the information on each element
Step four	Identify the divergent and convergent elements in both the soft and hard cultures in relation to home country characteristics.
Step five	Decide on which parts of the marketing elements ought to be standardized or adapted based on culture to reduce the risk of failure in the foreign market.
Step six	Confirm findings with expert opinion within the researched market or society
Step 7	Use findings as a basis to implement international marketing decisions and review results for amendment

Table 2 *describes the step approach to diagnosing international market cultures in foreign markets. Source: Author*

CONCLUSION

The discussions in this paper have reviewed the pivotal role of culture in international marketing and the need to address appropriately all cultural concerns to limit international market failures.

Previous research findings and frameworks on culture examined and some of their limitations highlighted. Some avoidable foreign market blunders evaluated to reinforce and effectively diagnose culture in the attempt to market internationally.

The paper has made some novel propositions in the subject matter with the objective of adding to the existing body of knowledge and has simplified the phenomenon to ensure a better understanding and applications of the cross-cultural marketing tools.

The proposal to segregate culture into soft and hard culture (SHCM) model is worth examination and measurable studies done to make meanings of their degrees of influence on consumer behavior and international market operations. A simplified step approach to cultural diagnosis easier for international marketing operations with the objective of limiting mistakes in foreign markets proposed for practioners. New terminologies borrowed from the medical field including; diagnosis as it relates to culture, surgical bypassing as it relates to complete circumvention of culture has been introduced into the international marketing literature to project the critical role of a meticulous analysis in the successful international marketing operations.

The mistakes and blunders used in this case would serve indeed as lessons for firms and individuals involved in global and international marketing to view the cultural implications with keen attention if they are to avoid future mistakes. The step approach to international market cultural diagnosis provided in this paper should also be a relief to international market operators as it is devoid of the theory and academics that is usually difficult to apply.

The fundamental limitations with this research paper are the domination of multinationals from developed countries. The inability to reach most of the firms reviewed here for deeper insights of the matters raised in the paper which could have enriched further the understanding of readers of the paper is also a major limitation. The theoretical propositions of segregating culture into soft and hard elements and the logical steps proposed to analyze foreign market culture successfully in this paper needs validation.

Future researchers may test the theoretical propositions empirically to determine their validity. The corporations cited in this case are mostly multinationals and thus provides an avenue for future researchers to localize the research to their environments where they can interact in-depth to drill further into the case studies to bring out a broader perspective to the discussion.

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FAIR VALUE TELEVISION: SALES VOLATILITY, BUSINESS RISK, AND FINANCIAL LEVERAGE

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CASE DESCRIPTION

Business risk and financial risk are among the most important concepts in corporate finance. The total risk of a corporation is the sum of its business risk and financial risk. Business risk is the risk of the corporation before the financing decision. It is the uncertainty inherent in the corporation's future operating income. An important cause of business risk is sales volatility. Financial risk is the added risk caused by debt financing. Using financial leverage increases the total risk of the firm by increasing the volatility of a corporation's net income and return on equity. The case provides an opportunity for students to understand the determinants of business risk, financial risk, and market value in a real-world setting. Fair Value Television (FVT) is a television retailer in California with a high sales volatility and business risk due to competition. The company is considering the effect of increasing financial leverage on its return on equity and common stock value.

JEL: G30; G32

KEYWORDS: Business Risk, Financial Risk, Total Risk, Financial Leverage, Beta, Market Value

CASE INFORMATION

Fair Value Television (FVT), Inc., is a midsize retailer of television sets in California with several stores in Los Angeles, San Francisco, and San Diego. Johnson is the founder and CEO of the company who has an electrical engineering degree from Princeton University. He always wanted to run a company. Soon after he received his degree from Princeton, he opened the first FVT store in Los Angeles with some seed money from his parents and friends in 1990. The business was booming because there was an increasing demand for high definition television sets in the United States. Many people were getting rid of their old television sets and replacing them with new technology LCD or plasma television sets.

The company enjoyed a high growth rate during its first few years. Ian Johnson took the company public with a successful initial public offering in 1995. The company paid no dividends and reinvested all of its earnings during the high growth years in the 1990s. The investors were happy with the capital gain the company's stock was providing and they did not mind not receiving any dividends from the company. However, when the growth rate began to slow down at the turn of the century, the company had to start paying out some dividends with the pressure from the shareholders. The company has had no net growth during the last couple of years because many people have already replaced their old television sets with a new technology set. This has forced the company to start distributing all of its net income as dividends to shareholders. The business continues to be profitable, however, and the shareholders are happy to receive a substantial amount of dividend from the company every year.

Generous dividend payments have helped the market price of the company's stock to remain at a reasonably high level. However, an important problem causing volatility in FVT's sales and stock price has been television set imports with unknown brand names from phantom television set manufacturers in the Far East. These manufacturers would flood the market with cheap and low quality television sets from time to time causing FVT's sales and revenues to drop. Although many customers would prefer to buy quality television sets with well-known brand names, some people could not resist the low prices of the low quality television sets with unknown brand names. These phantom television set manufacturers would often stop their operations abruptly and they would disappear from the market for several years. In those years, FVT would enjoy high levels of sales with good revenues.

Sales Volatility and Business Risk

Ian Johnson realized the volatility of FVT's sales was adversely affecting the company's business risk and stock price. Therefore, he decided the company should conduct a study to determine the effects. At the beginning of the year, FVT hired Nancy Smart, who is a recent graduate of the Wharton MBA Program, as the head of the company's newly established Financial Analysis Department. Ian Johnson is familiar with the Wharton MBA Program's course offerings. He had considered getting an MBA degree from the Wharton School himself when he graduated from Princeton before finally deciding to go into the television sales business in Los Angeles. Wharton's MBA Program emphasizes case problems and Ian Johnson knew that sales volatility and business risk related problems are extensively studied in the MBA finance classes. Therefore, he was quite sure that Nancy Smart could do a good job for them in analyzing the impact of FVT's sales volatility on the company's business risk. The following conversation took place between Ian Johnson and Jamie Smart when they were discussing the issue:

Johnson: We have considerable volatility in our sales. Is there any effect of sales volatility on a company's business risk?

Smart: Business risk is defined as the volatility of a company's operating income (earnings before interest and taxes). Sales volatility is a major cause of business risk. A high business risk level can have a significant adverse effect on a company's market value. If we can reduce FVT's sales volatility, we can lower our business risk and improve our market value.

Johnson: The main cause of the volatility in our sales is the low price and low quality unknown brand name television set imports from phantom manufacturers in the Far East. These imports are mainly affecting the West Coast retailers. Our marketing department suggests that we could reduce the volatility in our sales significantly by having geographical diversification within the United States by opening new stores in several other states.

Smart: If we can reduce the volatility in our sales, it would lower our business risk and improve FVT's market value. With less competition from the phantom Far East manufacturers, our expected revenues are also likely to be positively affected. It would also have a favorable effect on FVT's market value.

Johnson: Our marketing department is expecting a large decrease in the volatility of our sales if we have geographical diversification next year. We are also expecting some improvement in our expected sales and revenue figures with less competition from the Far East phantom manufacturers. I will email you the probability distributions of our estimated sales for the current year and for next year. Please prepare a report analyzing the relationship between our sales volatility and business risk.

Smart: I can prepare the report within a week after I receive the statistics from you.

With the statistical data in Table 1, Nancy Smart prepared a report analyzing the impact of FVT's sales volatility on the company's business risk.

Table 1: Probability Distribution of Sales

Variable Costs:		50% of Sales
Fixed Costs:		$9,000,000
Marginal Tax Rate:		35%
Probability Distribution of Current Year's Sales		
	Probability	**Sales**
Low	0.2	$20,000,000
Below Average	0.2	25,000,000
Average	0.2	30,000,000
Above Average	0.2	35,000,000
High	0.2	40,000,000
Probability Distribution of Forecasted sales for Next Year		
	Probability	**Sales**
Low	0.3	$28,000,000
Average	0.4	33,000,000
High	0.3	38,000,000

This table provides the expected probability distribution of FVT's sales for the current year and next year. These statistics can be used to evaluate the effect of reducing sales volatility on the firm's business risk.

Financial Leverage and Financial Risk

Ian Johnson was very pleased when he received Nancy Smart's report analyzing the impact of FVT's sales volatility on the company's business risk. He thought that he had made a good decision by appointing Nancy Smart as the head of the company's newly established Financial Analysis Department.

Another issue that was bothering Ian Johnson was that FVT was using only equity financing with no long-term debt. He knew that some competitors were using as much as 30 percent debt financing. The issue did not matter too much when the company was experiencing a high growth rate in the 1990s and the stockholders were enjoying large capital gains. However, because of the sluggish growth rates in recent years, it would be a good idea to boost the return on stockholders' equity by using financial leverage. Ian Johnson decided to discuss this issue with Nancy Smart.

Johnson: Do you think it would be a good idea for FVT to use some financial leverage to boost its return on equity?

Smart: Definitely. The optimal debt ratio in our line of business is about 30 percent. Therefore, using up to 30 percent financial leverage would increase FVT's return on equity and improve our stock price. Because of the Fed's easy money policy, interest rates are low currently. It would be a good idea for FVT to have some debt financing in its capital structure.

Johnson: We already have a high business risk because of our sales volatility. Do you think the company's total risk would be too high if we use financial leverage?

Smart: True. It is recommended that business lines with an inherently high business risk should not use too much financial leverage. According to Dunn & Bradstreet statistics, most firms in our line of business have about 30 percent financial leverage. Therefore, it should be OK for FVT to use up to 30 percent financial leverage. In some other lines of business with lower business risk, the debt ratio can be as high as 50 or 60 percent.

Johnson: What precisely is the effect of using debt financing on a company's total risk?

Smart: A company's total risk is measured by the volatility of its ROE (return on equity). For a firm that does not use any debt financing, the volatility of its operating income (EBIT-earnings before interest and taxes) would be the same as the volatility of its ROE. Such a company's total risk would consist only of business risk. It is FVT's current position now. When a company starts using debt financing, the volatility of its ROE increases. The additional volatility in ROE caused by using financial leverage is called financial risk. The higher the debt ratio, the higher the financial risk. If the debt ratio is above the optimal level, it can adversely affect a company's market value.

Johnson: What is the effect of using debt financing on the shareholders' risk?

Smart: An increase in financial risk to the shareholders could be measured by the increase in the systematic risk. Currently, the beta of FVT is 1.0, which is the unlevered beta since we have no debt. By increasing the leverage, we expect the beta to increase to 1.26.

Johnson: What about the change in the firm value if we issue new debt?

Smart: We expect the FVT value to remain at $20 million after increasing the leverage from 0% debt to 30% debt.

Johnson: I would like to receive a report analyzing the possible effect of using 30 percent financial leverage on FVT's ROE and total risk. Investment bankers suggest that we should be able to sell long-term bonds with an interest rate of 8 percent. I would like to explain the advantages of our company using 30 percent financial leverage to our stockholders in the stockholders meeting two weeks from now. Would you be able to prepare the report within a week?

Smart: No problem! I should be able to prepare the report within a week.

Ian Johnson was very pleased when he received the report, which clearly showed the effects of FVT using 30 percent financial leverage on the stockholders' return on equity and on the company's total risk.

QUESTIONS

Assume that you are Nancy Smart. Answer the following questions:

1. Calculate the expected value, standard deviation, and the coefficient of variation of FVT's sales for the current year.

2. Calculate the expected value, standard deviation, and the coefficient of variation of FVT's ROE with the sales figures for the current year.

3. Evaluate the effect of the current sales volatility on the company's business risk.

4. Calculate the expected value, standard deviation, and the coefficients of variation of FVT's sales and ROE with the sales forecast for next year.

5. Calculate the value of equity after the new debt issue if FVT decides to buy back stocks with the new debt issue. Assume FVT does not have any short-term investments.
6. Determine how the expected decrease in sales volatility next year will affect the company's business risk.

7. Calculate the expected value, standard deviation, and the coefficients of variation of FVT's current sales and ROE with 30 percent financial leverage. Evaluate the effect of using 30 percent financial leverage on the company's current total risk.

8. Calculate the expected value, standard deviation, and the coefficients of variation of next year's sales forecast and ROE with 30 percent financial leverage. Evaluate the effect of using 30 percent financial leverage on the company's total risk next year.

9. What are the advantages and disadvantages of additional debt on FVT?

10. Calculate the cost of equity for FVT before and after the new debt issue given the risk-free rate is 3.5% and the market risk premium is 5%.

FAIR VALUE TELEVISION: SALES VOLATILITY, BUSINESS RISK, AND FINANCIAL LEVERAGE

TEACHING NOTES

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CASE DESCRIPTION

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QUESTIONS

Question 1: Calculate the expected value, standard deviation, and the coefficient of variation of FVT's sales for the current year.

Question 2: Calculate the expected value, standard deviation, and the coefficient of variation of FVT's ROE with the sales figures for the current year.

Solutions 1 and 2:

	Low	Below Average	Average	Above Average	High
Probability	0.2	0.2	0.2	0.2	0.2
Sales (mil. of $)	20.00	25.00	30.00	35.00	40.00
Variable Costs	10.00	12.50	15.00	17.50	20.00
Fixed Costs	9.00	9.00	9.00	9.00	9.00
Operating Income (EBIT)	$ 1.00	$ 3.50	$ 6.00	$ 8.50	$ 11.00
Tax (35%)	0.35	1.225	2.1	2.875	3.85
Net Income	$ 0.65	$ 2.28	$ 3.90	$ 5.53	$ 7.15
Equity (mil. of $)	$ 20.00	$ 20.00	$ 20.00	$ 20.00	$ 20.00
Return on Equity (ROE)	3.25%	11.38%	19.50%	27.63%	35.75%

E(sales)	*$30.0*
CV(sales)	*0.236*
E(EBIT)	*$6.0*
CV(EBIT)	*0.589*
E(ROE)	*19.5%*
CV(ROE)	*0.589*

$E(sales) = (20)(0.2) + (25)(0.2) + (30)(0.2) + (35)(0.2) + (40)(0.2) = 30$

$\sigma_{sales} = [(20-30)^2(0.2) + (25-30)^2(0.2) + (30-30)^2(0.2) + (35-30)^2(0.2) + (40-30)^2(0.2)]^{½} = 7.071$

$CV_{sales} = 7.071 / 30 = 0.236$

$E(EBIT) = (1)(0.2) + (3.5)(0.2) + (6)(0.2) + (8.5)(0.2) + (11)(0.2) = 6$
$\sigma_{EBIT} = [(1-6)^2(0.2) + (3.5-6)^2(0.2) + (6-6)^2(0.2) + (8.5-6)^2(0.2) + (11-6)^2(0.2)]^{½} = 3.536$
$CV_{EBIT} = 3.536 / 6 = 0.589$

$E(ROE) = (3.25\%)(0.2) + (11.375\%)(0.2) + (19.5\%)(0.2) + (27.625\%)(0.2) + (35.75)(0.2) = 19.5\%$
$\sigma_{ROE} = [(3.25\%-19.5\%)^2(0.2) + (11.375\%-19.5\%)^2(0.2) + (19.5\%-19.5\%)^2(0.2) + (27.625\% - 19.5\%)^2(0.2) + (35.75\%-19.5\%)^2(0.2)]^{½} = 11.49\%$
$CV_{ROE} = 11.49\% / 19.5\% = 0.589$

Question 3: Evaluate the effect of the current sales volatility on the company's business risk.

Solution 3: The coefficient of variation of sales showing current sales volatility is 0.236. The coefficient of variation of EBIT showing the company's current business risk is 0.589. The FVT's sales volatility is magnified 1.5 times on EBIT volatility because of company's having substantial fixed costs in its cost structure. The coefficient of variation of ROE is the same as the coefficient of variation of EBIT because the company currently uses no debt financing (i.e., the company's total risk consists only of business risk). The company can reduce its current business risk either by reducing the volatility in its sales or by lowering its fixed costs.

Question 4: Calculate the expected value, standard deviation, and the coefficients of variation of FVT's sales and ROE with the sales forecast for next year.

Solution 4

	Low	Average	High
Probability	0.3	0.4	0.3
Sales (mil. of $)	28.00	33.00	38.00
Variable Costs	14.00	16.50	19.00
Fixed Costs	9.00	9.00	9.00
Operating Income (EBIT)	$ 5.00	$ 7.50	$ 10.00
Tax (35%)	1.75	2.63	3.50
Net Income	$ 3.25	$ 4.88	$ 6.50
Equity (mil. of $)	$ 20.00	$ 20.00	$ 20.00
Return on Equity (ROE)	16.25%	24.38%	32.50%

E(sales)	*$33.0*
0.117	*CV(sales)*
E(EBIT)	*$7.5*
CV(EBIT)	*0.258*
E(ROE)	*24.375%*
CV(ROE)	*0.258*

$E(sales) = (28)(0.3) + (33)(0.4) + (38)(0.3) = 33$
$\sigma_{sales} = [(28-33)^2(0.3) + (33-33)^2(0.4) + (38-33)^2(0.3)]^{½} = 3.873$
$CV_{sales} = 3.873 / 33 = 0.117$

$E(EBIT) = (5)(0.3) + (7.5)(0.4) + (10)(0.3) = 7.5$
$\sigma_{EBIT} = [(5-7.5)^2(0.3) + (7.5-7.5)^2(0.4) + (10-7.5)^2(0.3)]^{½} = 1.936$
$CV_{EBIT} = 1.936 / 7.5 = 0.258$

$E(ROE) = (16.25\%)(0.3) + (24.375\%)(0.4) + (32.5\%)(0.3) = 24.375\%$
$\sigma_{ROE} = [(16.25\%-24.375\%)^2(0.3) + (24.375\%-24.375\%)^2(0.4) + (32.5\%-24.375\%)^2(0.3)]^{½} = 6.294\%$
$CV_{ROE} = 6.294\% / 24.375\% = 0.258$

Reduced competition from the phantom manufacturers in the Far East will increase FVT's expected ROE from 19.5 percent this year to 24.375 percent next year. The volatility of the company's sales, as a major cause of its business risk, will also decrease.

Question 5: Calculate the value of equity after the new debt issue if FVT decides to buy back stocks with the new debt issue. Assume FVT does not have any short-term investments.

Solution 5: FVT's new equity value after debt issue is:

$$\begin{aligned} \text{FVT's Equity} &= (w_{equity})(V_{FVT,\ after\ debt\ issue}) \\ &= 1 - w_{debt})(V_{FVT,\ after\ debt\ issue}) \\ &= (1 - 0.3)(\$20million) \\ &= \quad = \$14 \text{ million.} \end{aligned}$$

Question 6: Determine how the expected decrease in sales volatility next year will affect the company's business risk.

Solution 6: The anticipated decrease in FVT's sales volatility will lower the company's business risk substantially. The coefficient of variation of sales is expected to decrease about 50 percent from 0.236 to 0.117 next year. The company's business risk, as measured by the coefficient of variation of EBIT, will decrease about 56 percent from 0.589 currently down to 0.258 next year. Since the company does not have any debt financing, it has no financial risk. Its total risk, as measured by the coefficient of variation of ROE, is also 0.258 (same as the business risk).

Question 7: Calculate the expected value, standard deviation, and the coefficients of variation of FVT's current sales and ROE with 30 percent financial leverage. Evaluate the effect of using 30 percent financial leverage on the company's current total risk.

Solution 7

	Low	Below Average	Average	Above Average	High
Probability	0.2	0.2	0.2	0.2	0.2
Sales (mil. of $)	$ 20.00	$ 25.00	$ 30.00	$ 35.00	$ 40.00
Variable Costs	10.00	12.50	15.00	17.50	20.00
Fixed Costs	9.00	9.00	9.00	9.00	9.00
Operating Income (EBIT)	$ 1.00	$ 3.50	$ 6.00	$ 8.50	$ 11.00
Interest	0.48	0.48	0.48	0.48	0.48
Earnings Before Tax (EBT)	$ 0.52	$ 3.02	$ 5.52	$ 8.02	$ 10.52
Tax (35%)	0.18	1.06	1.93	2.81	3.68
Net Income	$ 0.34	$ 1.96	$ 3.59	$ 5.21	$ 6.84
Equity (mil. of $)	$ 14.00	$ 14.00	$ 14.00	$ 14.00	$ 14.00
Return on Equity (ROE)	2.41%	14.02%	25.63%	37.24%	48.84%

E(sales)	*$30.0*
CV(sales)	*0.236*
E(EBIT)	*$6.0*
CV(EBIT)	*0.589*
E(ROE)	*25.63%*
CV(ROE)	*0.640*

$E(sales) = (20)(0.2) + (25)(0.2) + (30)(0.2) + (35)(0.2) + (40)(0.2) = 30$

$\sigma_{sales} = [(20\text{-}30)^2(0.2) + (25\text{-}30)^2(0.2) + (30\text{-}30)^2(0.2) + (35\text{-}30)^2(0.2) + (40\text{-}30)^2(0.2)]^{½} = 7.071$

$CV_{sales} = 7.071 / 30 = 0.236$

$E(EBIT) = (1)(0.2) + (3.5)(0.2) + (6)(0.2) + (8.5)(0.2) + (11)(0.2) = 6$

$\sigma_{EBIT} = [(1\text{-}6)^2(0.2) + (3.5\text{-}6)^2(0.2) + (6\text{-}6)^2(0.2) + (8.5\text{-}6)^2(0.2) + (11\text{-}6)^2(0.2)]^{½} = 3.536$

$CV_{EBIT} = 3.536 / 6 = 0.589$

$E(ROE) = (2.42\%)(0.2) + (14.02\%)(0.2) + (25.63\%)(0.2) + (37.24\%)(0.2) + (48.84)(0.2) = 25.63\%$

$\sigma_{ROE} = [(2.42\%\text{-}25.63\%)^2(0.2) + (14.02\%\text{-}25.63\%)^2(0.2) + (25.63\%\text{-}25.63\%)^2(0.2) + (37.24\%\text{-}25.63\%)^2(0.2) + (48.84\%\text{-}25.63\%)^2(0.2)]^{½} = 16.41\%$

$CV_{ROE} = 16.41\% / 25.63\% = 0.640$

Using 30 percent financial leverage increases the expected ROE of FVT about 31 percent from 19.5 percent to 25.63 percent. However, the company's total risk also increases about 8.7 percent from 0.589 to 0.640. The increase in the company's total risk is caused by the financial risk introduced because of the company's decision to use 30 percent financial leverage.

Question 8: Calculate the expected value, standard deviation, and the coefficients of variation of next year's sales forecast and ROE 30 percent financial leverage. Evaluate the effect of using 30 percent financial leverage on the company's total risk next year.

Solution 8

	Low	Average	High
Probability	0.3	0.4	0.3
Sales (mil. of $)	$ 28.00	$ 33.00	$ 38.00
Variable Costs	14.00	16.50	19.00
Fixed Costs	9.00	9.00	9.00
Operating Income (EBIT)	$ 5.00	$ 7.50	$ 10.00
Interest	0.48	0.48	0.48
Earnings Before Tax (EBT)	$ 4.52	$ 7.02	$ 9.52
Tax (35%)	1.58	2.46	3.33
Net Income	$ 2.94	$ 4.56	$ 6.19
Equity (mil. of $)	$ 14.00	$ 14.00	$ 14.00
Return on Equity (ROE)	20.99%	32.59%	44.20%

E(sales)	*$33.0*
CV(sales	*0.117*
E(EBIT)	*$7.5*
CV(EBIT)	*0.258*
E(ROE)	*32.59%*
CV(ROE)	*0.276*

$E(sales) = (28)(0.3) + (33)(0.4) + (38)(0.3) = 33$

$\sigma_{sales} = [(28\text{-}33)^2(0.3) + (33\text{-}33)^2(0.4) + (38\text{-}33)^2(0.3)]^{½} = 3.873$

$CV_{sales} = 3.873 / 33 = 0.117$

$E(EBIT) = (5)(0.3) + (7.5)(0.4) + (10)(0.3) = 7.5$

$\sigma_{EBIT} = [(5\text{-}7.5)^2(0.3) + (7.5\text{-}7.5)^2(0.4) + (10\text{-}7.5)^2(0.3)]^{½} = 1.936$

$CV_{EBIT} = 1.936 / 7.5 = 0.258$

$E(ROE) = (20.98\%)(0.3) + (32.59\%)(0.4) + (44.2\%)(0.3) = 32.59\%$

$\sigma_{ROE} = [(20.98\%\text{-}32.59\%)^2(0.3) + (32.59\%\text{-}32.59\%)^2(0.4) + (44.2\%\text{-}32.59\%)^2(0.3)]^{½} = 8.99\%$

$CV_{ROE} = 8.99\% / 32.59\% = 0.276$

The decision to use 30 percent financial leverage with next year's sales figures will increase FVT's ROE about 34 percent from 24.375 percent to 32.59 percent. However, the company's total risk will also increase about 7 percent from 0.258 to 0.276. The additional risk is the financial risk caused by the company's decision to use 30 percent financial leverage.

Question 9: What are the advantages and disadvantages of additional debt on FVT?

Solution 9: The advantages of increasing debt include the tax shield and curbing CEO overinvestment. Tax shield is the tax savings from the tax deductibility of the interest payments on debt. Curbing CEO overinvestment arises from the fact the bondholders have the incentive to oversee the CEO so he could not easily take on value destroying projects.

The disadvantages of increasing debt include the bankruptcy risk, the bankruptcy costs and the CEO underinvestment. Bankruptcy risk increases when a company's ability to pay back the bondholders declines resulting in a higher cost of debt. Bankruptcy costs include the indirect costs such as losing customers and the direct costs such as lawyers' fees. CEO underinvestment occurs when CEO's risk aversion increases with an increase in debt level, which may cause him to take on projects that are less risky with lower returns.

Question 10: Calculate the cost of equity for FVT before and after the new debt issue given the risk-free rate is 3.5% and the market risk premium is 5%.

Solution 10: According to CAPM, FVT's cost of equity with 0% debt, 3.5% risk-free rate (r_{RF}) and 5% market risk premium (MRP) is:

$$r_{s,0\%debt} = r_{RF} + b_{0\%debt}\, MRP = 3.5\% + 1.0(5\%) = 8.5\%.$$

After the new debt issue, the cost of equity is:

$$r_{s,30\%debt} = r_{RF} + b_{30\%debt}\, MRP = 3.5\% + 1.26(5\%) = 9.8\%.$$

The increase in cost of equity from 8.5% to 9.8% is due to the increase of financial risk to the shareholders.

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CHANGES IN OPERATIONS MANAGEMENT OF PRIVATIZED SPANISH FIRMS

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ABSTRACT

Firm privatization entails a thorough process of reform that includes the introduction of new management practices. A review of theoretical and empirical studies conducted confirms that a systematic analys*is of changes in management arising after a public company's privatization does not exist. This study explores changes in operations management that take place after a public company's privatization and proposes relevant factors in four operations performance areas. In order to confirm the theoretical propositions posed, we used contemporary multiple case studies as a research methodology. In particular, changes experienced in the operations management area in four privatized Spanish companies were investigated using a longitudinal analysis. The results of this study confirm most theoretical propositions and identify four areas considered are relevant to the process of change in a privatized firm's operations management.*

JEL: M11

KEYWORDS: Privatization, changes in management, operations management, case study

INTRODUCTION

History includes periods in which state interventionism has alternated with private initiative and reducing the public sector size has been the main focus. Furthermore, the shift from one stage to another takes place because the negative results obtained from application of the preceding stage's economic policies. Since the 1980s, we have witnessed a defence of private property and initiative in which an anti-State or anti-public sector feeling that postulates a minimum of state intervention in economic life is widespread. In other words, a model of economic developmental has been chosen that focuses on private property and free trade. Only a small role is left for governmental action. Within this ideological context, applying privatization programs to public companies has been a relatively simple affair in many countries.

The current economic crisis has had a two-fold effect. First, it caused a number of governments to intervene in the private sector through varying degrees of nationalisation to avoid the risk of economic and financial collapse (the U.S., the U.K., Belgium, Holland, Austria, Germany and Ireland). According to the Fondazione Eni Enrico Mattei in Italy barometer*,* 2008 was the first year since 1981 that governments worldwide acquired more assets from the public sector than those they spun off through privatization programs. However, several countries are privatizing their shareholdings (Greece, the U.K. or the U.S.) in an attempt to reduce public debt and deficits triggered by the crisis. Privatization processes cause changes in operational areas of privatized firms.

The primary objective of this study is to explore changes in operations management that take place after a public firm is privatized. To do so, we formulated a series of theoretical propositions regarding the relevant factors behind these changes, assessed the degree of coincidence between the initial theoretical propositions, analyzed firm behavior and determined whether a common pattern among them exists.

This paper is structured as follows: it begins by reviewing the relevant literature and formulating the theoretical propositions. It then explains and justifies the research methodology used, which is based on case studies. The following section is a comparative analysis based on factorial behavior of the cases researched. The paper concludes with an exposition of the main conclusions drawn from the research and a brief reference to the study's limitations.

LITERATURE REVIEW AND PROPOSITIONS

In recent years, both the number of countries and the degree to which each country has privatized its public business sector and the economic importance of the privatization process and its scope have provided an impetus for research (Boubakri and Hamza, 2007; Boubakri *et al*., 2005, D'Souza *et al*., 2005; Gupta, 2005; Majumdar, 2008, Megginson, 2005, Méndez-Naya, 2007, Parker and Kirkpatrick, 2005, Ruiz-Porras, 2010, Wu and Parker, 2007). Furthermore, firms with a sufficiently consolidated history of privatization are now available to researchers for study.

Most empirical studies conducted on privatization use two different approaches to analyze corporate performance and evaluate efficiency. Comparative studies use a cross-sectional analysis of public and private firms that are all operating in the market at the same moment in time (Foreman-Peck and Waterson, 1985; Millward and Ward, 1987; Pryke, 1982; Atkinson and Halvorsen, 1986; Bruggink, 1982; Di Lorenzo and Robinson, 1982; Dewenter and Malatesta, 2000; Laurin and Bozec, 2001; Millward and Parker, 1983; Tian, 2000). On the other hand, case studies use an longitudinal analysis before and after a privatization to evaluate the evolution of performance in one sole firm as it transforms from public to private ownership (Burns and Weyman-Jones, 1994, Eckel *et al*., 1997, Foreman-Peck, 1989; Lynk, 1993, Martin and Parker, 1995, Boardman *et al*. 2003; Boubakri and Cosset, 1998, D'Souza and Megginson, 1999, Megginson *et al*., 1994).

Nevertheless, it may not be sufficient to ask whether change in ownership bring about increased efficiency. Privatizing a firm entails a thorough process of reform, including the introduction of new governance practices (Estrin, 2002). An analysis of internal changes that take place after privatization will lead to a better understanding of the relationship between privatization and efficiency, and motivate new research in this field. García Álvarez and Mariz (2003, p. 1094) indicate that many empirical studies have attempted to verify whether privatization brings about increased efficiency, however, theoretical and empirical studies that identify the concrete factors involved in this improved efficiency are practically nonexistent. However, some authors, such as Zahra *et al.* (2000), Rondinelli (2004) and Cuervo (2004) use their theoretical models to explain changes that take place in the company after being privatized.

Within this context, and in the spirit of helping bridge this gap, we present this research study, which examines the internal changes in operations management that take place in public firms which have been privatized. The relevant factors of change underlying the theoretical propositions that provide the basis for the development of the empirical study are constructed after a review of the literature and a consultation process with experts in operations management. The propositions are grouped into four areas: location, quality, production process and innovation.

Location

Public firms are under pressure to buy from local suppliers, which is not always the best option. As a result, they find themselves paying higher prices for inputs than those that could be obtained from other suppliers (Gamir, 1999, p. 60; Cuervo, 1997, p. 73; Millward and Parker, 1983, p. 222-223). Therefore, public firms do not have free rein to make their purchases and choose suppliers.

Moreover, decisions regarding the location of a public firm's plants are not made according to economic criteria, but rather according to political and social criteria (Fernández, 1989, p. 62; Cuervo, 1997, p. 58; Gómez and García, 2004, p. 860). In short, these authors' contributions lead us to establish the following theoretical propositions:

P1: Before privatization, companies are under greater pressure to maintain local suppliers, even paying higher prices for inputs.

P2: After privatization, economic and commercial criteria play a greater role in determining the location of company plants than political and social criteria do.

Quality

The evolution of the concept of quality in industry and services shows that we are shifting from a stage in which quality exclusively refers to end control - to separating faulty products from good ones - to a stage in which quality control targets the entire process with the slogan: "Quality is not controlled - it is manufactured." In this regard, we believe that privatizing a public enterprise can lead to improvements in quality control processes, through the use of quality assurance systems. Quality systems focus on ensuring that an organization's offering complies with specifications laid down previously by the company and the customer, ensuring consistent quality over time (ISO 9000 standards, the EFQM model, benchmarking, etc.). Thus, we can establish the following theoretical proposition:

P3: After privatization, there is an improvement in quality control and assurance systems (product certification, on-going improvement systems, quality circles, work groups, etc.).

Production Process

Several empirical studies indicate that the average cost of producing goods and services is higher in public companies. Their results indicate that private enterprise is better placed to achieve cost reductions and increased productivity (Pryke, 1982; Bruce, 1986; García and Mariz, 2003, p. 1087; Iranzo, 2004, p. 819; Izquierdo *et al.*, 2004, p. 886).

The degree of company capitalisation measured by the capital/labor ratio is higher in public firms (Argimón *et al*, 1997, p. 31). Capital equals the sum of machinery and transport elements or total fixed assets. In this vein, other studies indicate that public firms are less efficient than private firms because they keep too many workers with high labor costs and bear higher depreciation costs due to excess, generally underused fixed assets (Azofra *et al.,* 1991; Maroto, 1991 and Melle-Hernández, 1999). Boycko *et al.* (1996) uses a different argument to reach the same conclusion. They consider public firms are often used as a tool to boost the economy's net capital formation, which leads to public over-investment in physical capital. Other authors take a contrary stance in this regard. Hirsch (1968) argues that public firms have financial constraints that force them to work with labor intensive technologies. Likewise, RENFE's case, work by Baños *et al*. (2003) points out that labor has been overused compared with capital.

Still other authors (González-Páramo and Hernández de Cos, 2004, p. 662; Bradford *et al*., 1969) indicate that managers of public firms face the problem of strong union pressure when they attempt to replace jobs with more machinery. Prior and Surroca (2004, p. 686) concluded that "the prevailing situation (for more than two thirds of the sample) is that investments in fixed assets per worker rose after companies were privatized". On the other hand, we believe that after privatization, a company will outsource more of its production, i.e., the option to outsource part of its production will be chosen more frequently, primarily to cut costs in an increasingly competitive market. By and large, public firms do not resort to this resource, because of problems involved in downsizing the workforce. In short, the following propositions can be established:

P4:After privatization, the costs of producing goods and services in the company fall on average and productivity increases.

P5:After privatization, companies change the production structure and boost the capital/labor ratio.

P6: After privatization, companies outsource more of their production process.

Innovation

On occasion, public companies operate in markets that are not very competitive. Thus, they lack major incentives to boost the degree of innovation (García Alvárez and Mariz, 2003, p. 1088; Durá, 2004, p. 154). Likewise, Melle-Hernández (2004, p. 285-286) argues that public firms lack competition when they operating in poorly regulated sectors, resulting in few incentives to technologically innovate the production or supply of goods and services. In this sense, Fernández *et al.* (2004, p. 602) note that public companies "protected as they are from bankruptcy, have no incentive to innovate with increasingly efficient processes tailored to customers' needs in variety and delivery time and products for meeting both new needs and old ones, but with new forms". Another obstacle to innovation is that these organizations are highly change-resistant.

Therefore, after privatization, market orientation is expected to rise (Parker, 1995), as is interest in developing product and process innovations (Fernández *et al*. 2004). Pulido (2004, p. 196) states that "innovation is stimulated by the privatization process, particularly in competitive conditions and of course, in sectors with a robust technological evolution and highly dynamic markets that easily absorb new products." In an empirical study of thirty-five privatized European firms, Munari and Sobrero (2003) concluded that privatization has a positive effect on the number of patents.

However, there seems to be no unanimity on privatization's effect on innovation. In this regard, Sánchez and Vence (2009) point out that privatization of public firms in Spain has usually gone hand in hand with a reduction in R & D efforts per employee. This slump is due to a change in the firm's objectives to commercial criteria. These criteria seek short-term profit and a policy of distributing dividends to create shareholder value. In short, the following proposition can be established:

P7: After privatization, investment in R + D (research, development and innovation) rises.

METHODOLOGY

To confirm the theoretical propositions proposed, we used *contemporary multiple case studies* research methodology (Yin, 1993, 1994, 1998, 2002; Eisenhardt, 1989, 1991; Eisenhardt and Graebner, 2007; Siggelkow, 2007) with an essentially *inductive* and partially *deductive* scientific approach (Yin, 1994). The empirical study's scientific approach is: fundamentally, *analytical induction* through replication logic (analytical generalisation) with which one seeks to establish general laws from the experience of particular cases; and *partially deductive*, since deductive processes may be generated to the degree in which they are based on the theoretical propositions previously obtained from the review of theories, which are empirically verified.

In the case studies in our research, we used a longitudinal analysis approach - i.e., a study of each case before and after privatization – to investigate the changes undergone by the operations management areas of several privatized Spanish firms. We analyzed aspects of corporate evolution that constitute relevant factors in the process during different stages of public and private ownership. Table 1 presents the empirical data and highlights the present study's main methodological aspects.

Table 1: Technical File for the Empirical Study

Research objectives	To analyze changes in the management of privatized firms. To evaluate the degree of coincidence between the behavior exhibited by the privatized firms analyzed and the theoretical propositions. To outline a common or similar behavior pattern (should it exist) among the firms in the sample.
Research methodology	Multiple and holistic contemporary case studies (simple unit of analysis). Exploratory, descriptive and explanatory study
Unit of analysis	Spanish firms with consolidated privatization processes
Geographic scope	Spain
Universe/Population	Privatized Spanish firms that are members of Madrid's stock exchange and were privatized by means of a public stock offer between 1985 and 2003.
Type of sample	Logical and theoretical sample (capacity of analytically generalising the phenomenon under study), not random (sampling and statistical generalisation)
Sample	Four privatized Spanish firms: ENDESA, Iberia, Indra and Telefónica
Methods of evidence gathering	Documental review (documentation and files) Closed multiple-choice questionnaire Multiple in-depth interviews: open, semi-structured and in person
Sources of information	Internal: documentation (reports and internal files), files (websites, presentations, sound and image files), in-depth interviews, questionnaires, real physical context External: specialised publications, SABI database, reports from official entities and the media
Key informants	Directors (minimum of two) from the firms in the sample who participated in the privatization process
Methods of analyzing the evidence	Fundamentally qualitative: - Individualised description of each case - Search for degree of coincidence between the behavior of the firms analyzed, with the support of theoretical propositions - Creation of theoretical explanation (theoretical systematic comparison)
Scientific approach	Analytical induction through the replication logic (analytical generalisation). Deductive processes based on the theoretical propositions originated by the theories reviewed
Methodological quality and rigor	Validity (construct, internal and external) and reliability
Date conducted	December 2009 - November 2010

This table presents the empirical study's technical file and highlights the present study's main methodological aspects. Source: author.

The units of analysis were Spanish firms with consolidated privatization processes. Thus, we analyzed the cases of ENDESA, IBERIA, INDRA and TELEFÓNICA. This selection is not a representative sample of a population that can be statistically generalized, but rather a logical, theoretical sample that can be analytically generalized (Yin, 1994). An attempt was made to choose cases with greater explanatory capacity and directors willing to assume research commitments. Table 2 shows different aspects of the four firms analyzed, which allow a basic profile of each of them to be drawn.

To collect information, we resorted to several techniques, such as document review, questionnaires sent out for completion and in-depth interviews with a number of directors in the privatized firms selected. Thus, we can contrast the different types of data gathered in the process while maintaining the Triangulation Principle, which guarantees the study's internal and constructive validity (Yin, 2002).

Finally, we followed two generic analysis strategies (Arias, 2003). First, we developed a description of each individual case, which resulted in four descriptive cases. Second, the propositions obtained from the theoretical review were contrasted with the data obtained, through a search for common behavior patterns (a *pattern-matching* analysis) and on occasion, through another modality: *explanation building*.

Pattern matching analysis is an analytical process that consists in comparing an empirically obtained pattern with another pre-established one based on theoretical predictions. If the results coincide, internal validity increases (Chiva, 2001, p. 123). This technique is useful for linking the data with the propositions and reflecting a situation in which different parts of the information extracted from a case can be related to some theoretical propositions (Villarreal, 2010).

Table 2: Basic profiles of the Four Firms analyzed.

CHARACTERISTICS	**ENDESA (Case 1)**	**IBERIA (Case 2)**
HEADQUARTERS	Ribera del Loira, 60, 28042. Madrid	Velázquez, 130, 28006. Madrid
ACTIVITY AND SECTOR (Code CNAE 93 Rev. 1, NACE Rev. 1.1)	Electricity production, transport, distribution and commercialisation. Relevant operator in the natural gas sector. (40) Production and distribution of electricity, gas, steam and hot water	Passenger and freight air transport. Iberia is in charge of the passenger and aircraft handling in all Spanish airports. (62) Air and space transport
TYPE OF FIRM	Corporation. Listed on the stock exchange.	Corporation. Listed on the stock exchange.
YEAR CREATED	1944	1927
TOTAL Nº JOBS (31/12/2009)	26.305 people	20.671 employees
PRIVATIZATION PROCESS	1988: PSO (20.38%) 1994: PSO (9%) 1997: PSO (30.63%) 1998: PSO (33%)	1999: Restricted bidding (10%) 1999: Restricted bidding (30%) 2001: PSO (48.51%)
MAIN SHAREHOLDERS (31/12/ 2009)	• ENEL ENERGY EUROPE (92,063%)	• BRITISH AIRWAYS (13,15%) • CAJA MADRID (22,99%) • SEPI (5,16%) • EL CORTE INGLÉS (3,37%) • THE BANK OF NEW YORK MELLON (6,37%) • CHASE NOMINEES LTD (5,04%)
CHARACTERISTICS	**INDRA (Case 3)**	**TELEFÓNICA (Case 4)**
HEADQUARTERS	Avda. Bruselas, 35, 28108. Madrid	Gran Vía 28, 28013. Madrid
ACTIVITY AND SECTOR (Code CNAE 93 Rev. 1, NACE Rev. 1.1)	Defence systems and information technologies. Consultancy, project development, systems integration, business processes and information systems outsourcing. (64.2) Telecommunications (72) Informatics	International telecommunications firm. Landlines, mobile phones and Internet services. (64) Post office and telecommunications
TYPE OF FIRM	Corporation. Listed on the stock exchange.	Corporation. Listed on the stock exchange.
YEAR CREATED	1993	1924
TOTAL Nº JOBS (31/12/2009)	The firm's total workforce numbered 26.175 people	Physical workforce of over 264.000 professionals
PRIVATIZATION PROCESS	1995: Direct sale (24.99%) 1999: PSO (66.09%)	1987: PSO (6%) 1995: PSO (12%) 1997: PSO (20.9%)
MAIN SHAREHOLDERS (31/12/ 2009)	• CASA GRANDE DE CARTAGENA (5%) • CAJA MADRID (20%) • C. DE AH. DE ASTURIAS (5%) • CORPORACIÓN FINANCIERA ALBA (10,02%)	BANCO BILBAO VIZCAYA ARGENTARIA (BBVA) (5,543%) • C. DE AHORROS Y PENSIONES DE BARCELONA ("LA CAIXA") (5,170%) • BLACKROCK, INC (3,884%) • CAPITAL RESEARCH AND MANAGEMENT COMPANY (3,168%)

This table presents different aspects of the four firms under study that allow a detailed profile of each one to be drawn up. Source:author

Explanation building consists of providing reasoned, detailed explanations for statements and data on the phenomenon (Chiva, 2001, p. 123). This technique is iterative in nature, thus, the final explanation is the result of following a series of stages that may differ from considerations originally contained in the pattern. Explanation building includes analyzing evidence from case studies, reviewing theoretical propositions and re-examining evidence from a new perspective in an iterative cycle (Sosa, 2006, p. 165).

The rigor and quality of the empirical study is based on its, internal and external construction, validity and reliability (Yin, 1994, 1998; Gibbert *et al*, 2008). Table 3 presents different tests that evaluate this study's rigor and quality with the corresponding tactics and phases in which they take place.

Table 3: Tests to Evaluate the Study's Rigor and Quality

Test	Tactic	Research Stage
Construct Validity	Analysis of the conceptual concept and theoretical framework (theoretical triangulation)	Literature review
	Development of initial propositions	
	Use of different evidence collection methods (methodological triangulation):	Research design
	1. Documentation.	Evidence collection
	2. Consultation with experts	
	3. Questionnaires	
	4. In-depth interviews	
	Use of multiple information sources (data triangulation) to confirm evidence in different sources:	
	1. Internal and external, direct (primary) and indirect (secondary)	Evidence collection
	2. Diverse typologie: documentation, files, interviews, questionnaires, data bases, real physique contexte	
	3. Diversity of key informants on the same questions	
	4. Critical evaluation of comparative evidence according to source	
	Almost simultaneous and unified evidence collection and analysis process	
	Establishment of chain of evidence	Collection and analysis
	Feedback and interactive contact with informants	
	Review of case reports by key informants	Composition
	Instrumental and general flexibility of the research through the cyclical review of the field study and the original structural model	All
Internal Validity	Common behavior pattern (supported by theoretical propositions)	Global and individual analysis
	Explanation creation (systematic comparison of the structured literature in the proposed model).	Global and individual analysis
External Validity	Use of rival theories in the original model (theoretical triangulation)	General design
	Establishment of the unit of analysis and case selection according to the potential for information on the phenomenon under study	Unit of analysis and case selection
	Selection of data collection methods (methodological triangulation) and information sources (data triangulation) according to the potential for knowledge on the phenomenon under study	General design and evidence collection
	Application of the replication logic (multiple case studies) to achieve analytical generalisation	
	Consideration of part of the research results as the baseline hypothesis for future lines of research	Global analysis and conclusions
		Composition and conclusions
Reliability	Draft of a study protocol and follow-up of its guidelines as an action guide	General design and evidence collection
	Confection of a database that organizes, integrates and synthesises the information obtained from the different sources of evidence	General design and evidence collection

This table shows the different tests that evaluate the study's rigor and quality with the corresponding tactics and phases in which they take place. Source: author.

EMPIRICAL RESULTS

The propositions were ranked on a Likert scale with regard to their degree of relevance in explaining the phenomenon. The analysis of these values led to the results shown in Table 4.

Below, we highlight the comparative analysis of the cases studied with respect to each key factor in the corresponding propositions. The coincidence or similarity of explanatory factors gives rise to an exploratory factorial behavior pattern among the analyzed firms. To achieve this, we compared the evaluation obtained through the Likert scale in each case studied by examining each key factor involved in its corresponding proposition. The graphic representation of factorial profiles allows us to establish an x-ray of the factorial behavior of the firms studied. Figure 1 presents the profiles of the four firms studied in order to graphically depict the differences or similarities that exist in their factorial behavior patterns.

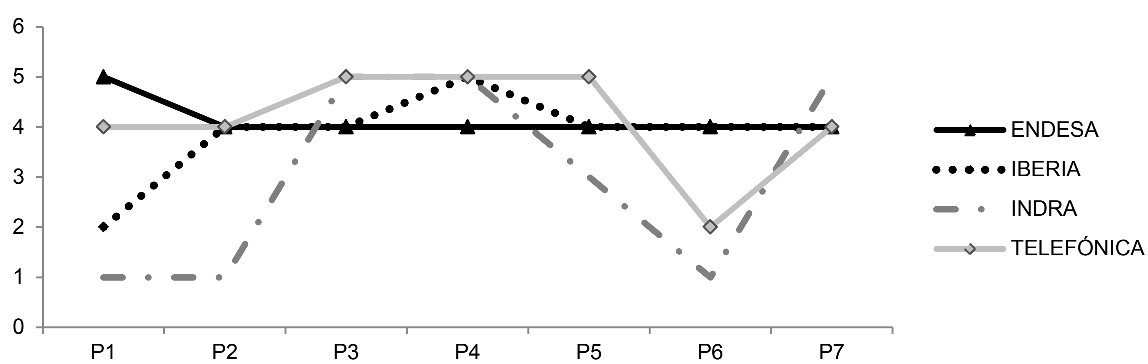
Table 4: Results Obtained In Relation to the Propositions Posed

Areas and propositions		ENDESA (Case 1)	IBERIA (Case 2)	INDRA (Case 3)	TELEFÓNICA (Case 4)	Degree of confirmation
LOCATION	P1.	Confirmed	Not confirmed	Not confirmed	Confirmed	Bipolarity between confirmation and non-confirmation
	P2.	Confirmed	Confirmed	Not confirmed	Confirmed	Multiple positions with a confirmatory tendency
QUALITY	P3.	Confirmed	Confirmed	Confirmed	Confirmed	UNANIMOUS CONFIRMATION
PRODUCTION PROCESS	P4.	Confirmed	Confirmed	Confirmed	Confirmed	UNANIMOUS CONFIRMATION
	P5.	Confirmed	Confirmed	Not confirmed	Confirmed	Multiple positions with a confirmatory tendency
	P6.	Confirmed	Confirmed	Not confirmed	Not confirmed	Bipolarity between confirmation and non-confirmation
INNOVATION	P7.	Confirmed	Confirmed	Confirmed	Confirmed	UNANIMOUS CONFIRMATION

This table presents a summary of the main results in relation with the propositions posed in the four cases obtained through a pattern-matching analysis. Source: author.

A factorial pattern (see Figure 1) can be induced among Endesa (case 1), Iberia (case 2) and Telefónica (case 4) with two totally coinciding positions and three approximate ones for a total of seven factors. Furthermore, there is absolute unanimity in propositions P3, P4, and P7. All cases fairly or completely coincide with the consideration outlined in the proposition. It is noteworthy that the largest disparity occurs in Indra's case (case 3), which maintains two clearly differentiated positions - P2 and P5 - and only coincides with the other cases in the three unanimous factors cited. A final point to note is that except for propositions P1 and P6, confirmed in half the cases, the rest are ratified by at least three of the four cases analyzed (positions 4 and 5 on the Likert scale).

Figure 1: Profiles of Factors Studied



This figure shows the profiles of the factors studied in the production area of the four firms in question (Likert scale). Source: author.

CONCLUSION

The goal of this paper was to explore changes in operations management that take place after a public firm is privatized and to determine whether it is possible to identify common patterns among four cases of Spanish privatized firms analyzed in our study. To do that we formulated seven theoretical propositions regarding potentially relevant changes in some fields of operations management: location, quality, production process and innovation. To confirm those theoretical propositions, we used contemporary multiple case studies as a research methodology. Data were obtained from reliable methods and sources: documentation, files, databases, real physical context, consultation with experts, questionnaires and in-depth interviews with a diversity of key informants. This was necessary to insure that the information used was of the highest quality.

Most of the theoretical propositions posed were confirmed or tend towards confirmation, according to the evidence shown by the firms in the sample. The graphical profiles show a certain similarity among some of the corporate factors studied. Disparities among some cases prevent us from drawing sound conclusions on the possibility of pattern confirmation. The comparative analysis of behaviour, analyzed according to the structure constructed through each area indicated, allows us to conclude that all areas are relevant in the process of change in operations management in the privatized firms.

The study suggests a number of implications for both theory and practice. For the former, the theoretical framework defined in the study offers an integrated view of key factors in operations management that must be studied in the privatization process. For the latter, the study allows managers of privatized enterprises and society in general to ascertain privatization policies' practical consequences for a firm's operations management. Perhaps the most interesting aspect of the study is that it shed lights on internal changes, allowing other public companies to apply them without waiting for privatization.

Two limitations of the study must be noted. First, it is not possible to draw any type of statistical inference to generalize the results. However, case studies allow for analytical generalization, i.e., the extension of existing theoretical arguments based on the analysis of evidence obtained through the logic of constructing an explanation. Furthermore, if we consider this study's reasons and objectives, these limitations are overcome by the advantages case studies contribute. Second, the study was restricted to analyzing changes in behavior before and after privatization, without monitoring the possible impact of other factors. Specifically, the study does not take into account the effect of the economic cycle and evolution of the competitive framework or other sectorial factors that all firms, privatized or not, may have in common and can notably influence changes produced in management.

Lastly, we note that theoretical integration should be paired with a factorial purification after the empirical study. Nevertheless, the results obtained in our study allow for little significant discarding. Likewise, further research could consider a larger sample size and the use of other quantitative research techniques that allow for statistical generalization. In addition the incorporation of different research methodologies, such as the use of expert consensus techniques (Delphi method), to reduce the subjectivity of factor discrimination in developing theoretical propositions would be beneficial. Finally, conducting the study using a controlled sample of similar-sized public and private companies from the same sector would offer interesting insights. A comparison of these future studies to the results presented here would be beneficial. Replicating the study in other countries also represents a useful path forward.

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INTELLECTUAL CAPITAL MANAGEMENT IN LOCAL PUBLIC UTILITIES

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ABSTRACT

The competitive advantage of companies is increasingly focused on Intellectual Capital (IC) and on its management. Factors such as skills, innovation, stakeholders' relation, development and sharing of knowledge have become key success factors. These aspects are important for Local Public Utilities. These organizations produce goods and services operating in competitive markets in a utility function for the local community using technological and organizational infrastructure resources. In the past, in these organizations, IC was critical to reach objectives such as to satisfy citizen needs. Local Public Utilities focused their assets on the technical components of management including plant equipment, technical expertise, professionalism, and quality control and security systems. The introduction of the economic efficiency logic and competitiveness led to a rethinking of the IC role. The production of public services becomes competitive in the market according to logic of economic efficiency. The relationship with the community begins to be formalized in "service contracts"; new management structures are introduced and companies need to remunerate the capital invested. Consequently, companies must implement strategic and organizational changes and focus on intangible assets as knowledge, skills and operational mechanisms. In the new scenario IC becomes an important strategic tool both in the company and in the outside environment. Proper IC management can improve company value.

JEL: E24; I23; J24; O15

KEYWORDS: Intellectual capital, Intellectual capital management, Local Public Utilities.

INTRODUCTION

Knowledge is a strategic resource and, for a competitive business, organizations are increasingly knowledge based and more often concerned about intellectual capital (IC) rather than tangible assets (Guthrie and Petty, 2000; Carmeli and Tishler, 2004; Schiuma et al, 2007). Intellectual capital is a company's softer assets such as professional experience, skills, knowledge, organizational structure and routine and internal/external relationship. The intellectual capital framework classifies these characteristics into human capital, organizational or structural capital and relational or customer capital (Edvisson and Malone, 1997; Stewart, 1997; Guthrie and Petty, 2000; Youndt and Snell, 2004). Human capital refers to the knowledge, skill and experience of employees and managers; relational capital consisting of knowledge resources derived from networks of relationships between peer, customers, suppliers and business associates; and organizational capital represent institutionalized knowledge and codified experience stored in databases, routines, patents, manuals and the like (Bontis, 1998; Stewart 1997). These three new forms of capital capture a company in movement as it transforms its skills and knowledge into competitiveness. Therefore, companies must maintain and develop the existing capital structure and also acquire know-how, skills and professionalism, train and develop employees by emphasizing their business skills and capital to focus on trading and customers.

In service companies, intellectual capital and knowledge management are as important as they can be in production-oriented companies. There is a lack of systematic research on whether there are fundamental differences in the IC of service-oriented versus product-oriented companies. For this reason this paper aims to examine the IC stocks, creation and management mechanisms in service-oriented firms. The paper examines these items for Italian Local Public Utilities. The Local Public Utilities (LPU) are companies operating in the services sector, established as limited companies in which the shareholder is public. The aim of LPU is to create value for stakeholders. LPU stakeholders are not only the contributors of resources but also the community for which services are produced (Catturi, 2004). An LPU, therefore, creates value for stakeholders to adequately compensate all the factors used in the production process and meet, at the same time, the needs of local communities (Grossi, 2005). The LPU, like all other businesses, must act to create value not only from material aspects but also from intangible elements, namely the acquisition, maintenance and enhancement of intellectual capital in its three dimensions of human capital, structural and customer relational. In the past, however, those companies were focused only on one IC aspect, structural capital.

The value of paper is enlargement of the literature because the analysis is carried out with reference to a economic subset for which studies are lacking. With this in mind the following section summarizes the previous studies on intellectual capital management. Then we discuss the current features of new LPU highlighting differences from the old LPU and how this change is reflected on the role of intellectual capital. In the contribution we followed the deductive approach and methodology is descriptive, which aimed to identify how, and explanatory, why. The last section concludes the paper. The analysis highlights the correct management of the human and relational capital IC components.

LITERATURE REVIEW

In the knowledge era, firms need to redefine their strategies and function to compete because non observable factor have impact on firms performance (Blackler, 2002; McEvily and Chakravarthy, 2002). Those factors include management capabilities and competence, technical knowledge or tacit organizational routines.

Knowledge can be tacit or external (Nonaka, 1994; Nonaka & Nishguchi, 2001; Sharma & Wickramasinghe, 2004). External or explicit knowledge are readily available and involve high acquisition costs to the firm. Tacit, specific and complex knowledge is developed inside the organization. External knowledge is available to competitors while tacit knowledge is exclusive to firms and is difficult to imitate generating a long advantage (McEvily and Chakravarthy, 2002). The firm absorbs internal and external knowledge, combines them and creates new knowledge, a multiplicative effect, which may result new and exclusive knowledge (Zack, 2002; Gratton and Ghoshal, 2003, Vargo and Lusch 2004).

The stock of knowledge that exists in an organization represents the intellectual capital (IC) (Bontis et al., 2002). The literature on intellectual capital has deployed a variety of different classification (Edvinsson and Malone, 1997). The more widely adopted schemes divide intellectual capital into three categories: human capital, structural capital and relational capital (Stewart, 1997; Bontis, 1998, Roos et al., 1997 and 2005, Sveiby, 1997). Human capital is the overall knowledge, generally in tacit form, of all persons working within an organization. This knowledge does not remain in the organization when the individuals leave. Structural capital, consist of the stock of knowledge that stays in the organizations. Structural capital is the tacit and explicit knowledge that is contained in document, routines and organizational culture. Relational capital, mainly tacit knowledge, is understood as all knowledge arising from the interaction between the firm and its stakeholders. Relational capital is the source of reputation, credibility, consent and image of organization.

Recent scholars argue that intellectual capital is more likely than other tangible or intangible resources to be a source of competitive advantage (Bontis and Fitz-enz, 2002; Ng, 2006; Swart, 2006). They suggested also that investments in intellectual capital are crucial to service business (Bontis and Fitz-enz, 2002; Namasivayam and Denizci, 2006) such as financial services, accounting firms and law firms that employ highly trained professionals (Andreissen, 2005; Goldstein and Ward, 2004; Hitt et al., 2001; Ng, 2006; Wang, 2005). Other studies (Wiklund and Stepherd, 2003) reveal that knowledge influences a firm's entrepreneurial orientation and ultimately performance. These findings suggest that the value of an enterprise is a function of its investment in intellectual capital (Carmeli and Tishler, 2004). It needs managed intellectual capital because only in this way does the stock of knowledge become intellectual capital. Managing service firms is different from managing other firms (Bowen and Ford, 2002). For service firms knowledge is the key element in competitive differentiation (Gratton and Ghoshal, 2003).

No known studies analyze the current role and management of IC in firms that have operated in the past as a monopoly and now privatized. Our objective is therefore to examine the role and the management of intellectual capital in this organization in the past oriented exclusively at physical capital that today operate in competition with other firms.

<u>The Local Public Utilities</u>

Public services are the complex of goods and services recognized as public utilities to satisfy needs of society (Grossi, 2001). The production, distribution and delivery of public services to all citizens without discrimination is guaranteed, as the guardian of the public interest is the Government (Dezi, et. al. 2005; Mele, 2003). Public services may have an entrepreneurial character. Services highly entrepreneurial are energy services, distribution of natural gas, water cycle management, waste management and mass transit line. The organization providing public services of an economic/business service firms are called Public Utilities. These can operate at the national, regional or local level. This paper examines the production of goods and services in a utility function for the local community using technological and organizational infrastructure resources (Elefanti, 2003).

<u>Local Public Services before the Nineties</u>

The current profile of LPU is the final result of a complex evolutionary path. At the beginning of the last century the production and delivery of public services was entrusted, in general, in concession to private enterprises that carry on its activities and the economic return derived from the application of tariffs for end users (Mussari and Grossi, 2004). Municipalities' licensors, as guardians of the interests of citizens in the process, interact with regulatory legislation and lobbying to achieve price reductions. The necessity to invest continuously and growing demand induces firms to make continuous adjustments in prices and the system of granting individuals equal opportunities to access services (Testa, 2001; Garlatti, 2003). The economic theory in vogue at the time support these choices by arguing that the production of local public services directly to the community ensures quality, reliability and continuity of service and price controls.

In the early years of the last century, with Law 103/1903, we expected to see the direct taking of public services by the municipal form and the local authority's lack of intervene directly with companies such as instrumental entities, the municipal, service management public local application (Elefanti, 2003; Mussari and Grossi, 2004). The municipal form thus becomes the operational arm of the City for the production and management of the public services on the territory (Dezi et. al 2005). The use of public instruments against payments of a price-tariff, usually below the cost of production, is used in order to guarantee and protect the interests and needs of the community managed (Mussari, 1996). The municipal form has no legal personality but has administrative and financial autonomy (Liguori, 2004). The main sources of investment financing are the endowment fund of the municipal form resulting from contributions and internal resources (Cella and Termini, 1999). An administrative commission of political appointees whose acts are subject to be reviewed by the City Council manages the organization. Municipal forms are dominated by the technical aspect (Gozzi and Massarutto, 2002; Petix, 1987) and are mostly focused on specific local conditions and few on the development of expertise, generally acquired outside, and on the total value of company's assets. Municipal forms are production-oriented and provide services of mass not differentiated to the expectations of different market segments (Baccarini et. al. 1989). They are strongly connected with the municipal policy, used as electoral consensus, and management is not accountable for results. This situation is possible as the municipals dominate the market, the environment is stable and competition is virtually absent.

The role of the municipal form remains in vogue and remained valid until the early 90s. Meanwhile, urban centers expand, information flows, allowing citizens to better assess the quality of services received thereby increasing the welfare and development technology and eliminating barriers in some areas. Soon, the inefficiency of public services leads us to consider whether to replace the public works with private structures that move according to market rules and are potentially more efficient. All this assumes even greater importance following the consolidation and extension of Community Law and the principle of competition. At this point, this represents a factor that can threaten the distribution, reliability, continuity and quality of local public services. The principles of New Public Management have spread internationally (Meneguzzo, 1995) on the belief that recovery of ability to satisfy expectations of the community should occur through the introduction of logic and principles of a business nature.

Local Public Services after the Nineties

The early 90's witnessed talk about privatization and liberalization. In recent years the municipal, following the reduction of transfers from the central government, can benefit from lower transfers to local authorities. More stringent rules, require the need to recover efficiency. The European Union expressly requires introduction of market liberalization (Article 86 of the Treaty establishing the European Community). These forces lead even the Italian legislature to start the process public services modernization (Mussari, 1996; Pozzoli, 2009). New ways of managing public services were introduced as contracting importance. In alternative to economic management the possibility of doing business with public companies constituted as special or as a joint-stock companies exists (Elefanti, 2003).

The Special Agency form supersedes the municipal form. This organization is, like the municipal, an instrumental entity of the local authority carrying out activities for the exclusive benefit of the locality but have legal personality and corporate autonomy (Law 142/90). It thus implements a separation of steering and control and management that has been concentrated in public administration. In other words, the City Council directs and checks the work of the managing body but leaves it to the management activity. The management body carries out its activities by implementing the instructions given by the political and administrative actors. Although the approach is most entrepreneurial, the Special Agency is totally dependent on local governments. These organization are focalized on developing the skills and know-how in relation to particular problems encountered in the area served and that and rarely internalize skills to engineering (Gozzi, 2002).

In the late '90s, following the guidelines of the European community a strong push to the process of privatization and market liberalization occurred. The objective was to achieve greater efficiency by entrusting management of the public services to a subject, which by its legal form, needs to operate the business efficiently (Liguori, 2004). The main references are L. 142/90 and subsequent modifications to the consolidated order and the laws and institutional arrangements of local authorities in 2000. These local authorities mandate that management arrangements between limited capital companies also cited the minority-owned. The opening to competition arrives with art. 35 of L. 448/2001, that differentiates between relevant services on the industrial side and those without such importance. The adoption of the company's legal form of capital allows the entry of private shareholders to the team who bring new capital, technological know-how, skills and knowledge of human capital, philosophies and tools of corporate management's private world. The other, a legal obligation guarantees that subjects providing capital receive adequate economic resources and an increase in the value of capital shares held by them.

Value creation also becomes an issue in LPU. They begin to look at achieving a satisfying level of profitability and become autonomous in defining strategies. The mission of new LPU, especially if listed, is not so much anchored to the objectives to promote the territory as to the enhancement of corporate capital. It is in this context that the main objective is to create value, regardless of the sector, taking advantage of their skills, their assets, their competitive advantages. The main objective of the new LPU is to create value for all stakeholders and not only for the territory. The organization must be rationalized and the traditional services offered reorganized according to logic of efficiency and productivity.

The local authority does not disappear, even if its decision-making power is reduced. The local government's purpose is to reconcile the public interest with the demands of efficiency, effectiveness and cost-effectiveness and value creation (Valotti, 1994). Today the municipality has multiples roles. It directs the activities plans and programs, regulates the activity of LPU, defines specific guarantees to protect the public and monitors the evolution of technology and knowledge to select the best companies to configure and push the same yield response consistent with the changing service needs.

INTELLECTUAL CAPITAL IN LOCAL PUBLIC UTILITIES

The new LPU differs from other companies because of higher complexity. The LPU provides public services according to collective logical response to individual needs. They may suffer in their management of political interference and their goals are economic and as a social enterprise. Managing new LPU requires an attention to IC essentially different from that of the old LPU for two main reasons.

First, the production of public services is being mediated by the market resulting in the enhancement of businesses. The relationship between the municipalities became objectified by contracts so that the survival of firms is conditioned on their ability to adequately remunerate the capital invested, expressing an independent economic viability. This involves the need for companies to regain control of the economic-financial management and to achieve adequate levels of profitability as a condition of access to credit themselves, open their capital to private partners, appease the stock exchange and a source financial resources for municipalities through the payment of dividends and concession fees or through the sale of shares to new partners or the financial markets.

Second, liberalization and competition in the market or the market determines a new framework for opportunities and leads companies to reconfigure their business according to new designs. Logic of economy, enhancement of competitiveness and business lead to enhancement of the role of the productivity of the resources and the selectivity in the choice of investment are criteria to impress the management. This focus on productivity and cost control through policies pursued rationalization of labor and supplies, coverage of fixed costs through the development of activities, optimization of financial resources and enhancement of the customer as strategic asset. These contexts require cultural change. Today the company's success depends on the ability to recognize constraints, know how to exploit opportunities offered by the environment, meet user needs and make innovation processes and products.

Intellectual Capital Management in Local Public Utilities

Is not possible to acquire the IC once and for all and organizations must manage and maintain IC to enhance and protect (Brooking, 1997; Bonani, 2002; Edvinsson, 1997; Edvinsson and Malone, 1997; Roos, et al. 1997; Stewart, 1997; Sveiby, 1997). The need to manage the LPU using not only material resources as assets but also other component of IC is evident in many of the same demands in the newly competitive environment. LPU's need IC for a reorganization of processes, functions, streamlining the one hand and develop the business portfolio on the other; improve productivity, defines plan and control their business and identify opportunities for development.

The enhancement (upgrading) of existing human capital can be accomplished through training such as learning by doing and learning by networking, industry experience and or groups of learning (Stweart, 1997). For example, the gap between new strategy and in serving LPU control can be overcome with training and experience in the field while the competence to define the corporate structure and the optimal financial structure can be transferred from other sectors. To retain and expand the customer base, the organization can be bridged through training and experience in the sector (ie market analysis). In other cases, the organization can fill gaps through a process of transfer of skills to other sectors, for example with regard to technical sales (Dezi et al., 2005). Useful for building human capital is also the team appreciation of the talent it exploits into something shared and therefore less dependent on the individual. In new LPU the protection of human capital is important. This requires taking action in order to motivate and involve employees in order to strengthen their bond with the corporate structure. The ability to attract and retain competent and motivated people, more efficiently than their competitors, improve decision making and is the source of competitive advantage (Mauritsen and Larsen 2005).

Human capital produces innovation and growth, but these need to be integrated into the structure (Ross, et al. 1997; Stweart, 1997). The function of structural capital is to accumulate stocks of knowledge and accelerate the flow of such knowledge within the company (Borgonovi , 2001). Today LPU should promote a continuous technology level increase and knowledge and must monitor the development of technologies and expertise to select companies that can move on this front and to communicate with companies to urge them to set up consistent production responses to the evolving needs of services. Structural capital is the company's intranet and its power a form of knowledge management. Through it you try to gather information and turn it into organizational knowledge by connecting those in need of experience with its owner. Tools such as email and video conferencing allow people to work together while being physically distant and almost independent of corporate or departmental barriers.

Relational capital expresses the result generated by the use of intangible assets relating to human and organizational capital. Relational capital is the whole of relations that develop between the company and its stakeholders. Today essential in LPU is the management of relationships with new customers. Relational capital can be created for clients by talking to customers who can provide feedback to the company, before it can make mistakes. These customers allow the company to increase the information on its market. To transform this knowledge into capital clients need the ability to react flexibly to the needs of individual customers. The information gathered by the client must be used to provide an indispensable service to the customer and put in a position so they cannot switch to another supplier. This requires that companies be freed from the mentality of mass production. The LPU must gain confidence to radically change their relationship with consumers. Sometimes these objectives, in the absence of appropriate expertise, may be achieved through agreements between companies. The agreements enable access to technology and knowledge as well as a relationship with larger entities with large investment capacity. Technological innovation and the increasingly fungible technological knowledge requires LPU a greater ability to interact effectively with individuals with specific expertise in order to achieve application solutions consistent with the peculiar characteristics of geographical areas in which they operate. The increasing globalization of the technology market then, calls for the ability to monitor a much wider and dynamic market than traditional, but also the development of specific know-how of adapting technology to local needs and to select those most suitable to meet these needs.

CONCLUDING COMMENTS

Companies operate in a turbulent environment characterized by technological development, the diffusion of new technologies and the push for innovation. In this context LPU companies have changed the way they operate. Customers have become more important. Demands, needs and expectations have become important aspects in LPU management. As a consequence they have adapted their organizational and operational structures. In the era of knowledge management, the economy is based on communication skills. Tangible assets produce a moderate return on investment. High profits and dominant competitive positions are only available with the intelligent use of intangible assets (Lev, 2001). Today intellectual capital forms the basis for competitive advantage. In LPU, openness to competition and innovation in information and technology has given a new role to intellectual capital. Particularly important is the way, and speed, with which information and innovation are incorporated. These companies must not only excel but need to be able to innovate faster than competitors. Innovation passes through information sharing and knowledge creation. These are aimed, at devising ways to provide advanced services and products to customers. An organization that is able to increase the skills of its work, in real time, to transform in internal solutions (processes) is able to meet the real needs of customers. With the arrival of new technologies, business structure changes radically and shifts the focus of value creation activities, from material resources to intangible assets. Even today companies information and knowledge play a vital role in management, since they allow the firm to improve, affordability, quality, and therefore the usefulness of services rendered. Overall, intellectual capital is a competitive advantage that can create value.

In the past LPU are characterized by a low degree of openness, based on the alleged stability of the competitive environment and the absence of a competitive push, which place the company in a state of organizational torpor. In this context value creation coincided with the creation of value for the area in which they operated. To the substantial inertia follows a developmental process that starts from the conviction that quality recovery and the search for greater efficiency in public services must necessarily be a result of opening the competition field. Gradually management models have been developed that provide for the custody of public service to corporate entities that are fully competitive. In these firms, the ultimate objective of profit faces the need to provide this service in conditions, which are not economically profitable. Changing opportunities and strategic constraints push LPU to examine structural aspects as well as immaterial factors. The new LPU, unlike the old, do not live independently from their successes but only if they create value for all stakeholders and especially for public customers.

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BEAUTY IN THE AGE OF MARKETING

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ABSTRACT

Research has repeatedly demonstrated that beauty is positively related to a number of important outcomes including social and personal power, self-esteem, and preferential treatment from others (Bloch and Richins, 1992; cf. Adams, 1977; Goldman and Lewis, 1977). Moreover, studies consistently suggest that the use of physically attractive models results in positive effects (Berscheid and Walster, 1974; Bower, 2011; Buunk and Dijkstra, 2011; Landy and Sigall, 1974). Accordingly, advertisers utilize attractive models to promote a wide array of products ranging from cosmetics to electronics. Despite the emergence of physical attractiveness as a major component of consumer marketing, there is little cohesive theoretical development in this area. This oversight ignores a marketplace dominated by global marketing initiatives which cross nation-state and cultural boundaries. We have no coherent language system for the study of beauty, nor has there been a systematic attempt to develop a theory of beauty that is robust enough to be useful to marketing and advertising practitioners. The purpose of this paper is to contribute to that theoretical development. First, we refine terminology. Second, we review the marketing literature related to the subject area. Finally, we tentatively suggest how socio-cultural factors may affect consumer perceptions of beauty.

JEL: M31

KEYWORDS: marketing, beauty, consumer behavior, cross-cultural research

INTRODUCTION

Beauty, it is said, is in the eye of the beholder. It is, accordingly, subjective and both socially and culturally influenced. For marketers, this is a less than useful perspective, for beauty *sells*. A body of research suggests, for example, that physically attractive models used in advertising produce consumer expectations of accountability, dynamism and trustworthiness; therefore, marketers tend to use these models to enhance and strengthen the appeal of their advertisements and products (Atkin and Block 1983; Kamins and Gupta 1994). Physically attractive people are known to be perceived by consumers as friendly, warm, dominant, sociable, outgoing, responsive, and possessing both self-esteem and intelligence (Adams, 1977; Adams and Read, 1983; Berscheid and Walster, 1974; Bloch and Richins, 1992; Cann, Siegfried, and Pearce, 1981; Dion and Dion ,1987; Goldman and Lewis, 1977). Individuals favor and are favorably disposed towards physically attractive people (Caballero, Lumpkin and Madden, 1989). More broadly, research in other fields finds physical attractiveness both a determinant and moderator of various processes including heterosexual liking (Berscheid, Dion, Walster, and Walster, 1971; Walster, Aronson, Abrahams, and Rottman, 1966), individuals' perception and evaluation (Sigall and Landy, 1973; Sigall and Aronson, 1969; Sigall, Page, and Brown, 1971), persuasion effectiveness (Mills and Aronson, 1965) and attributions of personal characteristics and future success (Clifford *and* Walster, in press; Dion, Berscheid, and Walster, 1972; Miller, 1970). It is therefore not surprising that physical attractiveness has become a major component of consumer marketing, Beauty is power.

What *is* surprising is the lack of theoretical development in the field, and that becomes apparent when beauty is conceptualized not as an independent variable but as a marketing construct. Understanding consumers' perceptions of beauty, particularly in a complex, global marketplace, has become increasingly strategically important.

The pursuit of beauty is apparent throughout centuries and across cultures. Consumers, especially female consumers, use cosmetics, adornments, clothes, and even plastic surgery to increase and enhance their physical attractiveness (Bloch and Richins, 1992). In daily life, consumers are confronted with advertisements in which products -- varying from cosmetics and clothes to cars and television sets -- are promoted by attractive models and studies provide empirical support for the validity of this marketing approach (Berscheid and Walster, 1974; Belch, Belch and Villareal 1987; Bower 2001; Buunk and Dijkstra, 2011; Clifford and Walster,1973; Chaiken, 1979; Dion, Berscheid, and Walster, 1972; Horai, Naccari and Fatoullah, 1974; Joseph 1982; Landy and Sigall, 1974; Miller, 1970).

Taken as a whole, the literature offers substantial evidence that beauty is an important construct. The literature also suggests areas of general consensus. One, beauty is usefully employed in the promotion of products, both in mass advertising and at point of purchase. Two, consumer attributions related to beauty are multidimensional and favorable. Three, these two axioms hold true across the globe. From a theoretical viewpoint, the literature on beauty has made several key contributions. It has developed a set of important outcome variables. It has tested relationships in a variety of contexts and through a variety of methodological approaches and effectively established nomological validity that allows us to accept these results as robust. Some work has explored cultural differences in consumer perceptions of work, laying the foundations for future work in this area. Other work has established a broad understanding of the features which contribute to human physical beauty.

However, there is a relative paucity of work which sets out to provide a coherent theory of beauty. We lack, for example, a common language with which to work. The proliferation of inexact and variable usage of terms such as beauty, physical attractiveness, aesthetics, and other similar words confounds our task. The purpose of this paper is to begin to examine beauty as a complex marketing construct in order to provide the basis for theoretical development in this area. The paper is organized as follows. We begin the process of defining terms, each of which may present its own avenue for future theoretical development. These include beauty, attractiveness, and aesthetics. We then focus more narrowly on physical attractive and review findings in the literature, in order to suggest how the extant research might be assimilated to begin the process of construct development. Finally, we suggest how research may wish to undertake the task of exploring beauty in the age of marketing.

LITERATURE REVIEW

Defining Beauty, Attractiveness, and Aesthetics

Beauty is commonly considered a characteristic of individuals, objects, and places that is perceived pleasurably. It is studied in diverse fields such as sociology and anthropology (people and animals), art and aesthetics (objects), and tourism studies (places). It is a term which is unique and independent from other related terms, such as attractiveness and aesthetic.

Beauty is colloquially defined as “attractiveness” in advertising and marketing research, and has been measured on a continuum from attractive to unattractive (Langmeyer and shank 1994). Arguably, beauty is, however, more than a simple judgment of attractiveness. Beauty is psychologically complex and reflects multiple dimensions which provide for the inclusion of facets of beauty that are described by consumers in varied terms, such as cute, elegant, sexy, etc. (Solomon, Ashmore and Longo, 1992). This multiplex conceptualization makes the continuum approach problematic. Physical attractiveness generally includes the individual’s analysis of specific characteristics including facial image, body proportion and shape and skin tone (Langmeyer and Shank 1994). For practical purposes, a common categorization in the field of advertising assessing physical attractiveness across six interrelated psycho-logical distinctions or differentiations including (1) Classic Beauty/ Feminine, (2) Sensual/Exotic, (3) Sex-Kitten, (4) Trendy,

(5) Cute, and (6) Girl-Next-Door" (Solomon, Ashmore and Longo 1992).Physical attractiveness, then, is a term related to, but unique from, beauty.

The term aesthetics concerns the nature of beauty, creation, and appreciation of beauty. Parsing the term aesthetics from that of beauty may be particularly theoretically important in marketing from a global perspective. It is common to allude to, for example, the Western aesthetic, the Islamic aesthetic, or the post-modern aesthetic.

Material Adornments Use and Tattoos

Throughout centuries and across cultures, people have used adornments in their pursuit of beauty (Bloch and Richins, 1992), and people adorn their bodies in various ways by covering fashionable or desirable parts graciously to achieve beauty or for aesthetic effect (Scott,n.d.). Empirical studies have shown that adornment usage, which is positively related to physical beauty, enhances attractiveness and perceptions of femininity (Cash, 1988; Cash and Cash 1982; Graham and Jouhar, 1981; Guthrie, Kim and Jung, 2006; Hoult 1954; Hamid 1972). Moreover, adornment usage affects self –esteem and social power (Adams and Read, 1983).

Adornments such as nail items, tattoos, hair styles, jewels, shoes and other grooming and beauty enhancing products have flooded the beauty market. Hundreds of millions of dollars are spent every year by companies to persuade customers to remain fashionable in order to fulfill their desire of both of material level of self-satisfaction and physical level of attractiveness. In addition to financial expenditures, consumers – particularly women -- are willing to suffer physical pain to fit a certain type of social expectation of beauty (Bloch and Richins, 1992). For example, women wear uncomfortable high heels to fit the social standard of beauty and enhance feelings of confidence and attractiveness (Solmon and Schopler, 1982).

As one of the major components in the pursuit of beauty, clothing presents an individual's image. Fashion appeal is a non-verbal communication (Vanderholf 1988) that presents an individual's personality (Behlingand Williams, 1991), through which the observer can assume the wearer's emotional, educational, moral, economic and social status (Faiola and Pullen, 1982). Appeal acts as an adaptive function (Creekmore, 1974) that can help improve an individual's self-image.

Tattoos serve as a special and unique way to express beauty and have been favored by people from different regions and cultures (Busch, 1995; Bell, 1999). Historically, tattoos have been associated with criminals, those of lower socioeconomic status, "freaks", sailors and exotic "savages" (Govenar, 2000; Orend and Gagné, 2009). In the 1960s and 1970s, the popularity of tattoos increased. These period became known as the "Tattoo Renaissance" due to the efforts of a number of respected and skilled artists (Rubin, 1988; Vail, 2000). Today in western society, the tattoo has become a widespread phenomenon with nearly 15% of Americans from all walks of life using tattoos for self-expression (Armstrong, 1991; Sever, 2003; Orend and Gagné, 2009). People get tattoos for many different reasons, but the common theme is to be exotic, unique and special (Armstrong, 1991; Armstrong, Owen, Roberts and Koch, 2002).

Cosmetics Use

Consumers, typically women, use cosmetic products to enhance their appearance and create a "positive declaration of the self," and "inscribe attributes to [one's] personality" (Craik, 1993) and promote self-esteem (Creekmore, 1974). The application of make-up allows consumers to quickly and temporarily change their appearance. Commonly used cosmetics such as eyeliner, mascara, foundation, eye shadow and blush serve as a quick, easy and means to improve facial attractiveness and hence strengthen self-confidence (Miller and Cox, 1982). Improving physical attractiveness is one of the main reasons women apply cosmetics (Guthrie, Kim and Jung, 2006). According to research, women wearing make-up express a more positive body and self-image and show more confidence than women not wearing make-up (Cash and Cash, 1982). Certain cultural and social standards of beauty and the perceived rewards for being physical attractive have pressured more and more women to apply cosmetics to change their appearance in order to conform to idealized social and cultural beauty standards and expectations (Kelson, Kearney-Cooke, and Lansky, 1990). With the promise that cosmetics present an ideal image, women believe that cosmetics will transform them and lift their self-confidence to a higher level (Bloch and Richins, 1992). For example, using cosmetics such as foundation or concealer can help women conceal blemishes, using eyeliner and eye shadow can give eyes more definition, using lip gloss can enhance the color of lips to make them look fuller and more sensuous. Researchers have found out that women who identify with more traditional roles are more likely to apply cosmetics to achieve beauty (Forbes, Jung and Haas, n.d.), cosmetic usage is positively correlated with facial satisfaction (Cash and Cash, 1982), and that females who wear make-up have more overall appearance satisfaction, believe that they receive more attention than they would otherwise receive, and are also more likely to overestimate their attractiveness when wearing make-up and underestimate their attractiveness when they do not apply make-up (Cash, Dawson, Davis and Bowen, 1989).

Cosmetic brands adopt commonly understood and culturally embedded beauty standard to express to targeted groups' desirable images of beauty (Guthrie, Kim and Jung, 2006.). The influence of these brands and their advertising has been felt globally. For example, before 1910, women in Japan presented a traditional image of covering their face with lead-based white powder, but after 1910, western style transparent white and skin-toned powder become more commonly used (Peiss, 2002). . Increasingly, consumers choose brands in order to reflect social status as well as desired facial image (Wood, 2004). Accordingly, brand managers are advised to relate brand personality to women's' cosmetic purchase behaviors and perceptions of facial image to identify different marketing strategies (Jamal and Goode, 2001).

<u>Facial Image: Facial Proportion, Facial Symmetry and Cultural Facial Preference</u>

Perception of facial beauty are affected by generic, social, cultural and environments factors (Naini, Moss and Gill, 2005). Culturally, socially, and historically subjective, issues related to facial beauty have fascinated scholars for centuries (Rhodes, Proffitt, Crady and Sumich, 1998; Gunes and Piccardi, 2006). Facial beauty may be viewed as a combination of certain qualities which generate a sense of pleasure (Naini, Moss and Gill, 2005). Overall, facial symmetry, facial proportion and facial expression are the significant characteristics in the determination of facial beauty.

Regardless of variables such as race, age and sex, a universal standard of human physical beauty is thought exist, which can be simply expressed as ideal facial proportion (Gunes* and Piccardi, 2006; Farkas et al., 1985; Farkas, 1994; Jefferson, 2004; Landau, 1989; Langlois and Roggman, 1990; Larrabee, 1997). The Divine Proportion (Jefferson, 2004), Golden Proportions (Borissavlievitch, 1985; Huntley, 1970) or the Facial Thirds (Farkas, 1994; Farkas et al., 1985; Farkas and Kolar, 1987) have been widely accepted as ideal facial proportion measurements. Faces with the ideal facial proportions are not just physically attractive but also biologically healthy (; Rhodes etc. 2001; Simposon, 1999).

Researchers have noted that the level of symmetry is one of the fundamental factors that affect human face attractiveness (Gangestad, Thornhill and Yeo, 1994; Thornhill R and Gangestad, 1993). Evolutionary biologists have proposed symmetry as a sign of health and high genetic quality that may be adaptive (Palmer and Strobeck, 1986; Parsons, 1990; Thornhill and Moller, 1997; Watson and Thornhill, 1994). Moreover, facial symmetry is theorized to be a signal of mate quality (Ridley, 1992; Swaddle and Cuthill, 1995; Watson and Thornhill, 1994). Studies by Rhodes et al. (1998) report that by increasing the symmetric level of individual faces, the attractiveness of these faces can be increased and that by reducing the symmetric level, facial attractiveness can be decreased. However, some other related studies have shown that normal levels of asymmetric faces are more attractive than perfectly symmetric versions of the same faces (Kowner, 1996; Langlois, 1994). For example, research by Knowner and Langlois suggests that the average face is more attractive than the *perfectly* symmetric one, which comes to the conclusion that people prefer symmetric faces (perfectly symmetric excluded) than average faces.

Facial symmetry is only one factor important to facial attractiveness (Rhodes et al. 1998). Psychologists and medical scientists have proposed that there is a timeless, ideal beauty based on facial proportion (Gunes* and Piccardi, 2006; Naini, Moss and Gill, 2005). In addition, different cultures hold their own perception of attractive facial image. For example, the ideal face image of beauty in Asian women's perception is a tiny face with large eyes and prominent nose (Kaw 1991). An eyelid without cease and a flat nose indicate "sleepiness," "dullness," and "passivity" (Kaw 1991 p79).

Research demonstrates the extent to which Asian women tend to change their facial features through cosmetic surgery (Turner 1987; Rosenthal 1991; Kaw 1991, Kristof 1991) in order to acquire "symbolic capital" (Bourdieu 1984; Kaw 1991). More and more Asian women seek cosmetic surgery for double eyelids to get wider and bigger eyes and nose bridges for higher and smarter nose to avoid the stereotype oriental look and negative traits in their culture in order to be exotic and outstanding (Millard 1964; McCurdy 1990; Kaw 1991). Many Asian women submit to cosmetic surgeries to align themselves with social expectations and to escape from the racial prejudice correlated with Asian stereotyped facial beauty (Kaw 1991).

<u>Skin Tone</u>

Skin color may be described usefully through four color variants including white, yellow (or carotene), brown (or melanin), red (also sometimes referred to as melanin) (Frisby, 2006). Increases in melanin darken skin tone. Culturally differences exist with respect to how skin color is viewed. In Asia, fair skin is central to understandings of physical beauty and is correlated with a woman's social status, job prospects, and earnings potential (Ashikari 2003b; Goon and Craven 2003; Leslie 2004; Li, Min, Belk, Kimura and Bahl 2008). White skin, especially in south Asia, is considered both noble and aristocratic (Bray, 2002). The saying "one white covers up three ugliness" has passed from one generation after another, and women strive to achieve flawless milky skin to match the Asian beauty standard (Bray, 2002). Skin whitening, traceable to colonialism, (Goon and Craven 2003; Li, Min, Belk, Kimura and Bahl 2008) and views regarding western beauty and nobility (Wagatsum 1967) fuse traditional Asian cultural values with Western aesthetics (Li, Min, Belk, Kimura and Bahl 2008). The ideal of white skin is the interaction of western-centrism and Asian ideologies represented by Confucianism (Russell 1996). Since whiteness remains a significant element, women in Asia use various methods to brighten, whiten and lighten their yellow-toned or dark skin such as skin whitening or skin bleach cream, pearl powder, or skin whitening drugs (Bray, 2002; Jeon 1987).

Skin color bias, especially within the African American community, reflects the difficulty, disadvantage and pain of dark-skinned women (Thurman, 1929; Thomas and Keith, 2001). In African American communities, skin color plays a significant role in class and social status determinations (Thurman, 1929). Research suggests that dark-skinned women are considered on the bottom rungs of the social ladder, least marriageable, with the least education and career opportunities (Parrish, 1994; Warner, Junker and Adams, 1941). The physical attractiveness stereotype "what is beautiful is good" (Dion, Bersheid and Walster, 1972) creates a "Halo" effect to light-skinned women (Thomas and Keith, 2001). Attractive women are perceived to have lighter skin tones than unattractive women, and a darker-skinned woman may feel herself unattractive and think herself unsuccessful no matter how intelligent and inventive she is (Russell, Wilson and Hall, 1992). African Americans have been conditioned to believe in conformity to a beauty standard that equates light skin with an easier and more rewarding life (Bond and Cash, 1992; Gatewood, 1998).

Interestingly, western Caucasians may seek *darker* skin tones. While suntanned skin was once the hallmark of the working-class, farmers and outdoor laborers, and a tanned skin viewed as unattractive and undesirable (Mahler, Beckerley and Vogel, 2010), this aesthetic was entirely reversed due to the efforts of the French designer, CoCo Chanel. American culture quickly adopted Chanel's portrayal of tanned skin as not merely aesthetically pleasing and trendy (Berkeley, Wellness Letter, 1998) but also come to equate it with good health, wealth, and prestige (Bellafante, 2001).

<u>Body Image: Body Shape, Body Proportion and Weight</u>

Studies consistently demonstrate that individuals compare their own levels of attractiveness with those of fashion models (Irving, 1990; Martin and Kennedy, 1993; Richins, 1991). Stereotypes indicate that women's values are judged by their physical attractiveness and the ideal image of attractiveness is considered as a "creditable source" (D'Alessandro and Chitty, 2011) for women. Several researchers over the years have reported that attractive body image, which can generally be represented by body shape, body proportion and weight, is a significant variable when comes to the general standards and judgment of beauty and effectiveness of advertisements (D'Alessandro and Chitty, 2011; Bogin and Varela-Silva, 2010; Westover and Randle, 2009; Puhl and Boland, 2001). Attractive body image is seen as an indicator of interpersonal, material, and career success (Sullivan, 1993).

Singh (1993a) suggests that body fat distribution may be presented by waist-to-hip ratio (WHR.). An indicator of health, youth and fertility usually lies between 0.67 and 0.80 for healthy and reproductively capable women and is correlated with women's physical attractiveness (DeRidder, Bruning, Zonderland, Singh, 1993a, b, 1994; Singh and Luis, 1995; Thijssen, Bon frer, Blankenstein, Huisveld and Erich, 1990; Streeter and McBurney, 2002). Singh (1993a) contends further that the smaller the WHR ratio is, the more attractive the woman will be considered. Further studies have found that both men and women find women with 0.7 WHR as most attractive (Furnham, Lavancy, and McClelland, 2001; Furnham, Tan, and McManus, 1997; Henss, 1995, 2000; Singh, 1993a, 1993b, 1994a, 1994b, 1994c, 1994d, 1995; Singh and Luis, 1994; Singh and Young, 1995).

Highly attractive underweight model images are pervasive (Joseph, 1982; Westover and Randle, 2009). Both in western and eastern cultures, thinness as the ideal woman beauty standard has been stressed in media representations of beauty (Seid, 1994; Wifley and Rodin, 1995). Dalley and Gomez (1980) mentioned in their studies that Slimness has been found to be related to elegance, self-control, social attractiveness, and youth (Dailey and Gomez 1980). Media pressure, socio-cultural pressure, self-dissatisfaction pressure and male preference pressure have delivered the clear message to woman that being thin is perceived more attractive than average weight or overweight (Brownell 1991; Fallon and Rozin 1985; Franzoi and Herzog 1987; Mazur, 1986; Rozin and Fallon 1988; Silverstein, Peterson and Perdue 1986; Spillman and Everington 1989; Stice, Schupak-Neuberg, Westover and Randle, 2009). (Exceptions exist, of course. In Uganda, for example, heavier body shapes are overwhelmingly preferred.) Large numbers of women reify standards of beauty established via media images, striving for reductions in body mass (Borchert and Heinberg, 1996; Butler and Ryckman, 1993; Monteath and McCabe, 1997; Solomon, Ashmore and Longo, 1992). Eating disorders, cosmetic surgery and depression caused by self-dissatisfaction reported negative results of these consumer responses to media presentations of beauty (Singh, 1994b).

THE PATH FORWARD

We argue from the outset of this article that for beauty to be a manageable and measurable feature of marketing and advertising in a global economy, it must be made theoretically meaningful, less subjective, and social and cultural factors accounted for. Admittedly, this poses challenges as the fashion industry is continually reinventing itself, product shelf lives are shortening, and beauty itself is malleable and evolving.

While the beauty industry as a whole tends to be economically resilient, many firms are having difficulties understanding the global consumer and effectively capitalizing on growth opportunities. The *Wall Street Journal* (Karp, 2011) recently reported, for example, that the American cosmetics firm, Avon, draws nearly two-thirds of its business from rapidly expanding emerging markets. Despite this growth, Avon has had difficulties with a broad range of issues including inventory management, supply chain management, demand models, labor, and consumer preferences.

CONCLUSION

This article seeks to establish beauty as a complex, meaningful, and relevant marketing construct in order to provide the basis for further theoretical development. It is by no means a comprehensive examination of the construct of beauty, nor is it intended to be a critique or presentation of media representations. We approached our survey of the literature by systematically examining key research journals in the area of marketing, searching on the terms beauty, aesthetics, and attractiveness. When these searches netted relevant articles in related disciplines, we incorporated external ideas.

The literature suggests that beauty is a multidimensional construct and includes attributes such as material adornments and cosmetics use, facial and body image, and skin tone. Moreover, each of these is potentially mediated by culture, gender, and age.

This work is designed to be suggestive of the breadth and depth of knowledge needed in the field of marketing to develop a theory of beauty useful to practitioners. It suggests, for example, the types of variables that interplay with the construct of beauty. It also suggests the variable nature of the construct. It acknowledges that social and cultural factors contribute to perceptions and beliefs about beauty. Finally, it attempts to hint at the magnitude of importance of understanding beauty. Such an understanding will contribute to the field by assisting advertisers, consumers, and consumer advocates.

The paucity of work on beauty as a marketing construct makes possible a dizzying array of research avenues and approaches. Additional foundational work should be pursued that identifies clear domains for investigation. While in this article, we identify several key terms and the general areas previously investigated, a great deal more may be done to provide research clarity. In addition, our own review suggests several very specific broad areas of investigation, including beauty as power and beauty as capital. Finally, researchers may wish to undertake cross-cultural and gender studies of beauty.

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