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This Issue

Fourteen Departments in four different colleges of California State University, Fresno cooperated to create a comprehensive, interdisciplinary Professional Science Master's (PSM) in Biotechnology degree, which creates graduates who are educated in scientific and technical skills with special emphasis in agricultural biotechnology, prominent in the region, as well as innovation management. This degree not only allows students to explore specific areas of biotechnology interest and expertise, but also provides a curriculum that is industry-responsive by including formal coursework in entrepreneurial skills with an additional industrial internship. The ultimate outcome is an enhanced level of interdisciplinary innovation and pedagogical sophistication.

Cuba is approaching a crossroads regarding the future of its economic system. The paper begins with an overview of Cuba's vital statistics and then discusses the country's changing political landscape that has already triggered some selected -- albeit very modest -- changes. We review the long history of foreign country involvement in Cuba's affairs in order to put the tortured relations with the United States into sharper focus. Part 3 describes the methodological framework used to highlight Cuba's major weaknesses, and we conclude that the distortions that have been compounded over fifty years can be unwound only by introducing a comprehensive reform program that embraces new leadership and new thinking.

Recognizing market opportunities and then developing responsive marketing strategies and tactics are critical for any enterprise. Entrepreneurs, in particular, continually search for and seek to develop opportunities in the marketplace. We present a framework for opportunity recognition and marketing strategy development, designed to integrate marketing theory and practice.

With the 2002 passage of the McCain-Feingold Campaign Finance Law, Congress made political speech a felony for one class of speakers – corporations and unions. Corporations and unions were now prohibited from spending their own funds in support of or against candidates for political office. Opponents of the law believed it was incompatible with the First Amendment. In 2010, the U.S. Supreme Court weighed in the issue in Citizens United v. Federal Elections Commission. This decision has unleashed a myriad of questions and concerns about what is allowed in the area of corporate involvement in the political process.

The sustained economic expansion in the mid 1990s and the subsequent economic downturn in the early 2000s had the potential to significantly change retirement decisions of older workers. This paper examines the expected retirement age of 50 and older Kansas Regents faculty from survey data collected in 1996 and 2003. Our results suggest a significant difference in expected retirement age between the two time periods, in particular, about 6 months earlier in a period of expansion relative to contraction. We also find evidence that non-monetary job-related factors delay retirement age and is more evident in an expansion.

This article examines whether store-related environment cues can be standardized across countries. Based on the characteristics of stores, this research tries to understand what kind of environment cues will influence consumer purchase intention in comparison with two countries. Samples were conducted in Taiwan and United States. The research findings that store environment cues are positively related on purchase intention. The results suggest that each store environment cue may vary across two countries, describe the implications on business transactions and decision making, and provide a set of recommendations on how to succeed in cross-national transactions.

This paper examines evidence that government regulators have been captured by the Big 4 accounting firms. Economists characterize the auditing services marketplace as an oligopoly. The collapse of Arthur Anderson in 2002 reduced the then Big 5 accounting firms to the Big 4. Government regulators acknowledge that the increased market power of the Big 4 firms has negative implications. They have, however, failed to indict any of the Big 4 for known criminal actions. A skeptic might question whether government regulators have been captured by these key market players. One outcome of this "capture" is moral hazard, which implies that the Big 4 accounting firms may place less emphasis on quality audits. Such an approach to the audit function places the self-interests of the audit firm above the public interest. The paper provides suggestions to protect the public interest and to help rectify the market power of the Big 4.

According to the classical economics theory, consumers are sovereign economic entities motivated to maximise their wellbeing. One strategy used to rationalise credit choices is through consultation of information intermediaries. While the literature recognises the notion that financial information intermediaries are exogenous in form and substance, the distinct influence of each information intermediary on consumer financial rationalisation has not been examined a priori - an objective of this study. Using a sample drawn from Melbourne residents, a proposed theoretical model was empirically tested. The results were suggestive that financial information intermediaries significantly influenced consumers' vehicle finance rationalisation. Furthermore, different financial information intermediaries seemed to have distinct influence on borrowers' vehicle finance decisions. The implications of the study findings are discussed.

Globalization brings its own challenges and opportunities for public accountants, especially for local public accounting firm. This research studied of public accountants who work in Surabaya, Indonesia. Analysis organized from a set of data, which involve 109 respondents from 19 local public accounting firms. The analysis confirms some degree of positive association between the readiness and four qualities of globalization. The result of this research showed that 52% of the readiness of public accounting firm driven by four qualities, which are organization, client, human resource and standard. Public accountants can learn about the characteristic of accounting firms which are ready to face globalization.

GUIDELINES FOR SUBMISSION

Journal of Applied Business and Economics
(JABE)

Domain Statement

The *Journal of Applied Business and Economics* is dedicated to the advancement and dissemination of business and economic knowledge by publishing, through a blind, refereed process, ongoing results of research in accordance with international scientific or scholarly standards. Articles are written by business leaders, policy analysts and active researchers for an audience of specialists, practitioners and students. Articles of regional interest are welcome, especially those dealing with lessons that may be applied in other regions around the world. This would include, but not limited to areas of marketing, management, finance, accounting, management information systems, human resource management, organizational theory and behavior, operations management, economics and econometrics, or any of these disciplines in an international context.

Focus of the articles should be on applications and implications of business, management and economics. Theoretical articles are welcome as long as their focus is in keeping with *JABE's* applied nature.

Objectives

- Generate an exchange of ideas between scholars, practitioners and industry specialists

- Enhance the development of the Business and Economic disciplines

- Acknowledge and disseminate achievement in regional business and economic development thinking

- Provide an additional outlet for scholars and experts to contribute their ongoing work in the area of applied cross-functional business and economic topics.

Submission Format

Articles should be submitted following the American Psychological Association format. Articles should not be more than 30 double-spaced, typed pages in length including all figures, graphs, references, and appendices. Submit two hard copies of manuscript along with a disk typed in MS-Word.

Make main sections and subsections easily identifiable by inserting appropriate headings and sub-headings. Type all first-level headings flush with the left margin, bold and capitalized. Second-level headings are also typed flush with the left margin but should only be bold. Third-level headings, if any, should also be flush with the left margin and italicized.

Include a title page with manuscript which includes the full names, affiliations, address, phone, fax, and e-mail addresses of all authors and identifies one person as the Primary Contact. Put the submission date on the bottom of the title page. On a separate sheet, include the title and an abstract of 200 words or less. Do not include authors' names on this sheet. A final page, "About the authors," should include a brief biographical sketch of 100 words or less on each author. Include current place of employment and degrees held.

References must be written in APA style. It is the responsibility of the author(s) to ensure that the paper is thoroughly and accurately reviewed for spelling, grammar and referencing.

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Interdisciplinary "Creative Destruction": A Pedagogical Approach

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Fourteen Departments in four different colleges of California State University, Fresno cooperated to create a comprehensive, interdisciplinary Professional Science Master's (PSM) in Biotechnology degree, which creates graduates who are educated in scientific and technical skills with special emphasis in agricultural biotechnology, prominent in the region, as well as innovation management. This degree not only allows students to explore specific areas of biotechnology interest and expertise, but also provides a curriculum that is industry-responsive by including formal coursework in entrepreneurial skills with an additional industrial internship. The ultimate outcome is an enhanced level of interdisciplinary innovation and pedagogical sophistication.

INTRODUCTION

There is an increasing awareness that a region's economic well-being is directly related to the innovation and growth associated with its distinctive strengths and heritage (Center for the Study of Rural America, 2004). Regions must nourish a sense of "place" and find a niche in a globalizing economy by playing to their distinct strengths. One method of achieving this outcome is growing a "grass roots" regional constituency of a new generation of entrepreneurs. Successful regional economic development should be dependent upon the educational and training programs that serve each region's unique strengths and goals (Drabestoot, et al., 2004).

Colleges and universities are responding to that need by developing and offering more educational opportunities in innovation and entrepreneurship (Zacharakis, et al., 2002). Assessments of these programs in terms of entrepreneurship-team (e-team) satisfaction by many universities have demonstrated that students generally find them to be satisfying and beneficial (Mason, 2002; Bracken, 2002; Rzasa, 2004). Students usually enjoy the "real world" experience of product development, and student outcomes often go beyond what accrediting agencies and institutions require (Mason, 2002). It is clear that interdisciplinary programs have value, are challenging and informative, and offer a holistic view of the innovation process (Vozikis & Cornell, 2006). Experiential and interdisciplinary learning, especially integrating scientific and engineering innovation with entrepreneurship, provides students with an asset that is highly valued in today's job market and that will strongly differentiate these students from other college graduates.

In academia, the rate of success of bringing professionally engineered products to market has been hindered by the lack of business expertise on the projects. Okudan and Zappe (2006) observed that recent college graduates are rarely prepared to effectively perform in such environments because of a lack of experience with multidisciplinary teams. In response to this concern, diverse multidisciplinary approaches in the educational setting have emerged to introduce engineering students to the basic business fundamentals and, in turn, confer non-engineering and non-technical students with a working knowledge of the design process (Crismond, 2001; Okudan and Zappe, 2006). These recent trends have contributed to the establishment of multidisciplinary instruction among marketing, finance, and legal topics with various technical, scientific, and engineering stages in the prototype development process. The multidisciplinary approaches also have contributed to building critical skills which can benefit technical and nontechnical entrepreneurial inventors, educators, consultants, and small business owner/managers, as well as those who are interested in applied research.

Interdisciplinary collaboration between academic programs and a focus on opportunity creation are the two key drivers of innovation and problem solving. Interdisciplinary teams bring together business students who can develop distinctive “what if” scenarios and logistical concerns to prod technology students to consider issues they might otherwise delay or perceive as being minor. Likewise, technology students bring their problem solving skills, knowledge of materials and tools, and the “scientific method” to develop and test effective innovations. Interdisciplinary teams can combine the different experiences of their members through exposure to each other’s reading materials, conceptualizations, points of view, and life expectations, so that each member begins to appreciate a broader range of concerns. For example, in an interview with students after a project presentation, not one engineering student was subscribing to the free email newsletters from *INC Magazine* nor had ever heard of *entreworld.org*. Similarly, business students were unfamiliar with high-impact technology publications, and usually assumed that issues related to production costs “would somehow work out” or be lower than the technical proposal indicated. Neither group seemed to understand pricing and distribution costs or their impact on the potential venture’s success (Ballon, 1998).

Entrepreneurship is widely regarded as instrumental in economic growth. Community institutions, colleges, and universities have an incentive to partner in outreach activities that promote economic development. Technology transfer activities serve as one important mechanism to achieve such engagement. Ideally, colleges and universities can foster new product and process technologies that might be converted into business startups with a business generating (BG) education and technology model (Laukkanen, 2000). According to Ronstadt’s (1988) terminology, a BG educational model should open a subjective entrepreneurial corridor, i.e., produce innovations as viable business concepts or at least as business launches within the university. Consequently, a second academic revolution is under way as universities combine teaching and research with technology transfer that seeks to transform academic science to entrepreneurial science (Etzkowitz, 2001). One of the most significant arenas for this type of technology transfer is in the molecular life sciences, or biotechnology, where job opportunities for students blending science and business expertise continue to grow (Sheft, 2008).

In response to the distinctive regional economic development needs of the San Joaquin Valley, the PSM in Biotechnology degree at California State University, Fresno (or Fresno State, as is commonly known in the region), was established in fall 2005. This multidisciplinary endeavor requires fluency and competency in both science and business to allow development of new technologies and products based on applications of the cellular and molecular life sciences, with special emphasis placed on agricultural biotechnology to align with the predominant commercial and governmental enterprises in the region. The PSM in Biotechnology degree offers students who are educated in various scientific disciplines, the opportunity to acquire the knowledge and skills necessary to comprehend and commercialize these emerging technologies and/or their products. Consequently, it is not a research-focused degree but rather a degree conceived through the Alfred P. Sloan Foundation to develop the competitiveness of science students for direct entry into corporate/public sector jobs and prepare them for entry into mid-level, industrial/agency careers (National Research Council, 2008). The PSM in Biotechnology degree program provides a blend of components from science and business that truly distinguishes it both from a traditional Master of Science in Natural Science and from a Master of Business Administration.

The PSM in Biotechnology degree program provides top-performing business and biotechnology graduate students the opportunity to interact with others having similar interests in innovation, invention, and entrepreneurship. The interdisciplinary curriculum and its faculty guide students through both high-level scientific thoughts and processes and the entrepreneurial evaluation, selection, development, management, funding, and, most importantly, the nurturing of promising technological developments that are critical for California's San Joaquin Valley. Within the program are crucial entrepreneurship core courses designed to:

1. Involve interdisciplinary teams in the principles necessary for development of patentable product innovations from the tools and processes of biotechnology that could lead to commercialization, and;
2. "Sensitize" students from different colleges and disciplines to innovation tools from the legal, business, scientific, and liberal arts perspectives.

For example, in the "New Ventures Creation" course, e-teams, with the help of internal and external mentors, brainstorm and collectively select their entrepreneurial ideas; apply innovative solutions to the technical and scientific feasibility; and apply in-depth market and entrepreneurial research in determining the target market feasibility. Next they defend the scientific rationale and its innovativeness at a presentation of their business plans to a panel of venture capitalists and entrepreneurs, who will be given the first opportunity for investing in any of the projects viewed as commercially viable and worthy. The program's assessment process uses a qualitative methodology to obtain useful feedback for program improvement (Rzasa, et al., 2004).

Our goal is to train students for the demanding interdisciplinary field of biotechnology and to prepare a workforce the developing biotechnology industry in central California. To accomplish this we developed a unique interdisciplinary degree concept designed for students interested in entering the workforce, to promote the development and production of new products and processes from a practical understanding of the molecular and cellular life sciences. The degree program is designed to provide students with an appreciation of the breadth of biotechnology's commercial potential and with a familiarity and working knowledge of all components of a business enterprise. This will, in turn, prepare graduates for leadership roles in the biotechnology industry. Communication and critical thinking skills are emphasized throughout the program providing students a greater applications-based experience than is traditional for a disciplinary Master of Science degree.

The PSM in Biotechnology degree is administered through the College of Science and Mathematics. It is a two-year program allowing students to explore, in the context of entrepreneurship and commercialization, the molecular and cellular life processes that promote, for example, pharmaceuticals development, crop and livestock improvements, industrial processing, diagnostic and therapeutic medicine, forensic identification, genomics and bioinformatics. The PSM in Biotechnology degree is considered a terminal graduate degree and is not recommended for students interested in continuing their graduate education with research doctoral programs.

The PSM in Biotechnology degree at California State University, Fresno encompasses two key drivers: innovation and problem solving. The interdisciplinary nature of the program, as framed by the College of Science and Mathematics, the Jordan College of Agricultural Sciences and Technology and the Craig School of Business, constitutes a marriage between theory and practice, with a focus on the opportunities emerging from positive outcomes of interdisciplinary teams, and by taking into consideration the existing academic political realities, resources, and curricula, as well as real-world industry needs and practical necessities.

DEMAND FOR A MASTER OF SCIENCE DEGREE IN BIOTECHNOLOGY

The 2008 report from the Biotechnology Industry Organization clearly details California's preeminence in this industry as well as predicting that the convergence of genomics, information technology, and nanotechnologies will radically alter every aspect of the health care system. Additionally, the report confirmed that the demand for bioethanol, biodiesel, and other alternative energy sources is driving technological innovation in biotechnology and that biotech crop acreage grew 12 percent, and 12 million farmers around the world are benefiting, especially in China and India (Burrill, 2008). The Ernst & Young Accounting report "Beyond Borders: Global Biotechnology Report 2008" presents the geographic distribution of the 386 public biotech companies in the United States distributed in 16 regions, three of which are metropolitan areas within California. California's most notable cluster and the nation's No. 1 biotechnology region in the country is the San Francisco Bay Area. In 2007, this region had 77 public companies, a 5% gain over 2006. San Diego is the nation's No. 3 region with 42 companies, also a 5% increase over 2006. Los Angeles/Orange County is the nation's No. 10 region with 21 companies, a 24% increase over 2006. That means that as of 2007, 140 (36.3%) of the nation's 386 public biotechnology companies are located in California, representing some of the largest and most successful in the nation. This is indicated by their market capitalization on December 31, 2007 ($230.6 billion), which represented 62.2% of the total national biotechnology industry market capitalization ($370.7 billion). In addition, there are other industrial entities, not solely identified as biotechnology companies, which operate biotechnology research and development activities within the state. This indicates that California has a large, and growing, interest and commitment to biotechnology.

For more than 20 years, California has established a number of initiatives among its state-supported institutions of higher education to promote science and innovation for this important economic sector. Examples of these initiatives include:

1) California State University Program for Education and Research in Biotechnology (CSUPERB), established in 1987 as a system wide program for the 23 campuses of the California State University (CSU);
2) Biotechnology Education Consortium, established in 1995, led by the Community College system (110 campuses) in partnership with the CSU and the University of California (UC) programs (10 campuses); and
3) UC Centers for Excellence. One example is the Institute for Bioengineering, Biotechnology and Quantitative Biomedical Research, which formed in 2001 as a consortium between UC Berkeley, UC Santa Cruz and UC San Francisco.

The Community College programs offer certificates or associate in arts degrees that are largely oriented toward students entering the biotechnology industry as production technicians, particularly for the biopharmaceutical companies in the Bay Area and Southern California. Many of these students are re-entry professionals displaced from other careers. Within the UC, biotechnology pervades the curriculum; but formal degrees are scarce. At UC Irvine, the Master of Science in Biotechnology combines coursework with a research master's degree through the Biology Department, and UC Davis offers an "emphasis" in biotechnology, i.e., a small number of formal biotechnology courses that accompany doctoral degrees in a variety of disciplines.

BIOTECHNOLOGY AS AN ACADEMIC DISCIPLINE AT CSU, FRESNO

In 1988, Fresno State began offering a formal graduate program in biotechnology. The Certificate of Advanced Studies in Biotechnology (biotechnology certificate program) is a laboratory-intensive program and the fourth CSU biotechnology certificate program. Further, this biotechnology certificate program is the first to be interdisciplinary between multiple colleges of Fresno State, which include the College of Science and Mathematics (Biology and Chemistry departments), and the College of Agricultural Sciences and Technology (Plant Science Department). Students with undergraduate degrees in Biology, Chemistry, Plant Science and Animal Science have all completed the Fresno State biotechnology certificate program.

As of May 2008, the Fresno State biotechnology certificate program has graduated 64 students, 50% of which have entered private industrial or government agency careers. The other half have entered professional training for health care (38.5%, medicine, pharmacy, dentistry) or education (34.5%, teaching at the community college or high-school level), while six (9.5%) went on to doctorate programs (three have entered the biotechnology industry rather than academia). Three certificate graduates entered Master of Business Administration programs (11.5%), while four entered law programs/careers (15.5%). Half of the certificate graduates also have completed a disciplinary master's degree (91% through the Biology Department), especially those graduates who have entered the research side of the biotechnology industry. However, graduates of the certificate program/master's program also have pursued industrial careers, as well, in development (e.g., Berlex Biosciences, Richmond, Calif.) and production (e.g., IDEC Pharmaceuticals [now Genentech], San Diego, Calif.).

While several other CSU campuses have since instituted biotechnology certificate programs, mainly at the graduate level, the California State Polytechnic University, Pomona, became the first to offer an undergraduate degree through the Biological Sciences Department, which includes options in four sub disciplines—biology or biochemistry, agriculture, and business. A few CSU campuses offer undergraduate minors in biotechnology. In 1998, San Diego State University began offering a Master of Science in Regulatory Affairs, primarily directed at biotechnology industry professionals. San Jose State University became the first CSU campus to establish in 2003 a recognized PSM in Biotechnology degree with business college-affiliated components and funding by the Alfred P. Sloan Foundation.

Origins of Fresno State's PSM in Biotechnology Degree

In 1997, the Alfred P. Sloan Foundation (Sloan), a charitable foundation with interests in science education, developed a special initiative (Sloan Initiative) to encourage the development of a relatively new degree concept—the Professional Science Master's (PSM) degree. The PSM degree is expected to prepare students who have been educated in the sciences to enter industry careers directly rather than continuing their graduate education into more research-focused doctorate programs. The Sloan Initiative concept expects a strong industry-centered approach in the curriculum, including familiarity with business practices and culture. Most of the Sloan Initiative awards had been granted to Research 1 Universities. But in spring 2002, Sloan partnered with the Council of Graduate Schools (CGS) to explore establishing PSM degree programs at institutions that traditionally grant master's degrees, such as Fresno State. Almost simultaneously, the CSUPERB organization offered special workforce initiative grants to develop curricula that more appropriately prepared CSU graduates for entry into the biotechnology workforce. The Biotechnology Program at Fresno State applied for and received funding from both CGS/Sloan Initiative and CSUPERB to conduct a feasibility study in spring/summer 2002 on the establishment of a Professional Science Master's in Biotechnology degree (PSM in Biotechnology degree). The initial degree program developed was the product of those grants and is particularly distinctive by its inclusion of Master of Business Administration (MBA) curricula (taken with MBA students), as well as graduate level science (taken with the Master of Science students). By virtue of the award for the feasibility study, Fresno State was eligible to submit a proposal for an implementation award to CGS/Sloan Initiative in November 2002. Fresno State's proposed PSM degree programs, including a forensic science degree as part of the package, were selected for an implementation award (one of only eight universities in the nation from 70 applicants). The funds from this implementation award, plus some matching funding from the institution, supported development of a campus "presence" for these professional degrees and have sustained recruiting and development efforts directly connecting the science and technology components of the university with community business/service projects. The implementation funding was for two distinct PSM degrees in biotechnology and in forensic science that were separated because of the need for disparate non-science, courses—biotechnology required the business perspective, forensic science needed the legal perspective. The biotechnology degree was approved in 2005 and began accepting students in the fall 2005 semester. The forensic science degree did not have the benefit of a pre-existing certificate but was approved in 2006 and began accepting students the fall semester.

Professional master's degrees have been a component of academic curricula for some time, particularly in the health care, business, and special education disciplines. Frequently, these degrees require a larger number of course units than can be accommodated in a traditional 30-unit master's program. These programs often function, however, under the auspices of national accreditation requirements, which can make these programs attractive to student clientele. The interdisciplinary nature of biotechnology does not have such an accreditation process. Therefore, the benefits of this new degree can seem more illusory to students while the feasibility of engaging sufficient students to support such a graduate program may often be less assured. The dilemma is finding a cadre of students adequately prepared, in what have traditionally been fairly divergent disciplines, to pursue a biotechnology program that is formatted within a master's degree program model. The approach used in the Fresno State PSM in Biotechnology degree was to meet the spirit and skills requirements of a professional master's degree within the parameters of a traditional 30-unit master's degree. Also, to revisit the possibility of a more expanded degree, but only as the biotechnology discipline and industry developed and as our own program's success became more defined.

The dilemma, and also the caveat, of any biotechnology degree is its interdisciplinary nature (even without a business perspective). Students need opportunities to become familiar with the many facets of biotechnology; but they also need a chance to develop some specialization (as with the options of the undergraduate degree at California State Polytechnic University, Pomona), so flexibility within the curriculum is desirable. However, there are few graduate educational programs that are either funded or functionally assimilated outside the traditional disciplinary realm of the university, which can complicate both the degree's sustenance and its approval process. In addition, to begin graduate level work with both the advanced science and business students, there is an expectation that student academic backgrounds should have provided appropriate foundations and breadth of experience for these advanced classes.

The Fresno State program was developed to address these issues with an array of science prerequisites, provide the consistent foundation among the cohorts and, by utilizing existing university courses across the disciplines, draw on existing expertise in a breadth of biotechnology applications, and provide opportunities for some unique educational specializations. The PSM in Biotechnology degree program requires core courses for a cohesive structure, including formal courses in molecular biology, biotechnology and entrepreneurship. In addition, individual interests and expertise can be discovered and developed through both an industrial/agency internship and an applied project or thesis, plus elective courses selected from not only the traditional natural science disciplines, e.g., biology or biochemistry, but also from those associated with the university's science and technology professional schools and colleges, e.g., plant sciences, food sciences, health sciences, computer sciences, and engineering. The Fresno State program engages students with this diverse faculty and helps to build the sensitivity for the capabilities and contributions of distinct disciplines to specific problems among both the students and the faculty members. In comparison to the Fresno State biotechnology certificate program, the new PSM in Biotechnology degree: 1) provides familiarity with business culture; 2) strengthens team-building skills; 3) provides more direct application experiences; 4) includes an opportunity for a biotechnology specialty; 5) invigorates the program with elements most responsive to industry concerns; and 6) does more to enhance the student's communication and critical thinking skills.

THE PSM IN BIOTECHNOLOGY PROGRAM

The primary departments participating in the PSM in Biotechnology program are: Biology, Chemistry, Computer Science, Plant Science, Food Science and Nutrition, Viticulture and Enology, Philosophy, and Management. The College of Science and Mathematics has the primary responsibility for this interdisciplinary degree, while the Biology Department is its formal home. The PSM in Biotechnology degree program has an interdisciplinary curriculum contained in the following academic units: College of Science and Mathematics (CSM), College of Agricultural Sciences and Technology (CAST), College of Arts and Humanities (CAH), and the Craig School of Business (CSB). A program committee consisting of representatives from all participating departments makes recommendations about the program and selects the Program Director/Graduate Coordinator for the PSM in Biotechnology degree. An Advisory Board, consisting of university administrative representatives and, more importantly, regional industry and agency leaders from institutions incorporating biotechnology tools and processes in their operations, advises the Program Director. These Advisory Board's industry/agency leaders provide crucial insights to keep the program current from the employer's perspective and promote university-industry connections for developing student internships and applied projects.

The program originally arose from a strong cross-disciplinary effort among campus faculty and the results of a biotechnology industry survey regarding the need for this degree in the region. In 2002, faculty collaborators from the departments of Management, Biology, Food Science and Nutrition, and Chemistry formed biotechnology working groups (e.g., Current Biotechnology, Business, Bioinformatics, Bioprocessing, Agriculture, and Forensics) to collect ideas about the skills and curricula that were available and desirable to prepare students for a professionally focused master's degree in biotechnology. The extensive online survey of 250 statewide and regional biotechnology industry and agency units was conducted in summer 2002 to ascertain the appropriate required skills and knowledge for a professional biotechnology master's degree education. The results were used for the formulation of the initial degree proposal. Despite an exhaustive attempt to secure survey results, only 32 companies completed the entire survey, but the group responding represented a good diversity of business and specialization emphases. Among the nearly 30 categories, the survey highlighted six types of skills and knowledge that were identified by nearly all responding companies or agencies as being either priority No.1 ("essential") or priority No.2 ("highly desirable"). In late August 2002, the online survey was supplemented with a face-to-face workshop/discussion between industry/agency representatives from the San Joaquin Valley region and the Fresno State faculty closely affiliated with biotechnology education. In this workshop, the six critical skills and knowledge sets identified in the survey were confirmed for their importance, with immunological skills (next highest category) also cited; flexibility in electives also was mentioned as key in preparing students for employment among the broad diversity of biotechnology businesses. These guidelines significantly shaped the curricular components and prerequisites for the overall program, ensuring these cited, employment-relevant requirements would be included and reinforced throughout the program.

Program Mission, Goals, and Objectives

The mission of the PSM in Biotechnology degree at Fresno State was stated as one that *"offers students who are educated in various scientific disciplines the opportunities to acquire the knowledge and skills required to comprehend and commercialize emerging technologies and/or the products related to their field,"* and was considered a priori a multidisciplinary endeavor that would produce professionals fluent in science and business, who would engage in the development of new technologies and products based on the unique applications of the cellular and molecular life sciences. The corresponding PSM goals and objectives are as follows:

1. To educate students in the current knowledge and skills of the cellular and molecular life sciences.
    a. Comprehend current scientific literature presenting the concepts and technologies of molecular/cellular life sciences.
    b. Demonstrate knowledge of information resources for biotechnology including scientific journals, databases and biotechnology Internet resources.
    c. Demonstrate hands-on comprehension of scientific methodology and analysis.
2. To develop student familiarity with business practices and culture. Specifically:
    a. Comprehend the broad aspects of business operations and development, from product/process conception to commercialization.
    b. Demonstrate the ability to work collaboratively on projects involving typical business time lines.
    c. Demonstrate ethics, leadership and consensus-building skills relevant to the scientific aspects of a business enterprise.
3. To help students develop effective oral and written communication skills in both scientific and business settings. Specifically:
    a. Effectively disseminate technical information using written progress reports, strategic reports, formal scientific written communications, and operations and procedures manuals.

   b. Organize and give both informal summaries and professional written and oral presentations.
   c. Organize presentations and demonstrate listening/networking skills for unique professional situations, e.g., posters or equipment demonstrations.
4. To develop student effectiveness as liaison between the research, development, and production staff of a biotechnology enterprise and/or the scientific components and the management and marketing components of a biotechnology enterprise. Specifically:
   a. Demonstrate comprehension of a breadth of biotechnology processes and applications.
   b. Develop expertise in a coherent area of biotechnology enterprise.
5. To develop a master's program that can promote biotechnology industry development within the Fresno State region. Specifically:
   a. Successfully engage regional representatives of the biotechnology industry sector in the ongoing development and evaluation of the program
   b. Develop and sustain project and internship collaborations with regional industries.

Program Coursework

The courses used to launch the PSM in Biotechnology degree were already available within the curriculum, except for the required courses of an Internship (BIOTC 275) and the Interdisciplinary Culminating Experience (BIOTC 298 or BIOTC 299). A concentration or emphasis is developed from the particular array of electives selected; but the volatility of biotechnology as a field of study argued against formal concentrations that may necessarily change in very short time frames. The realms of biotechnology that can be studied under this curriculum are extensive, but its areas of excellence in biotechnology include: Agricultural; Medical and Medical Diagnostics; Environmental and Industrial, including Biofuels; Regulatory, and Quality Control; International Business; and Forensics. The program coursework with the required and approved elective courses are presented in Table 1.

Written and oral communication skills are emphasized throughout the program; assessments of these skills also serve as formative evaluation tools for the program's components. Team-building components are a recurring theme within the program, as are completion of tasks meeting business-related time lines and performance standards. The unique properties of this professional degree include both the interdisciplinary nature of study and the strong applications approach expected in the thesis or project serving as the culminating experience. Current science disciplinary master's programs at Fresno State, which can involve biotechnology skills, typically require a research thesis designed to prepare the student for further graduate study to pursue a doctorate program rather than for entry into the business world. The PSM in Biotechnology degree offers students the option to acquire advanced skills, but within the context of a program designed for direct career entry.

TABLE 1
PROGRAM COURSEWORK

		Units	Required
I.	**Core Curriculum**		
A.	Molecular Biology Lecture (BIOL/CHEM 241A-B)	3-3	**6**
B.	Biotechnology Seminar (BIOL/CHEM 248)	1	**2**
C.	Seminar in New Ventures (MBA 270)	3	**3**
D.	Seminar in New Venture Management (MBA 272)	3	**3**
	Or New Venture Creation (MBA 273)		
E.	Industrial Experience (BIOTC 275)	3	**3**
F.	Culminating Experience with an Oral Defense Required	4	**4**
	1. *Thesis (*BIOTC 299) An Interdisciplinary Research Project		
	OR		
	2. *Project* (BIOTC 298) Written Report as a Science Leader for a Team-Based Project		
II.	**Approved Additional Courses (Electives):**		**9**
	(Elective courses could include a maximum of one undergraduate course)		
A.	Protein Purification Techniques (BIOL/CHEM 242)	3	
B.	Nucleic Acid Techniques (BIOL/CHEM 243)	3	
C.	Cell Culture Techniques (BIOL/CHEM 244)	3	
D.	Industrial Biotechnology (BIOL/CHEM 245)	3	
E.	Biometric Statistics (AGRI 200 or BIOL 274)	3	
F.	Bioethics (PHIL 123)	3	
G.	Plant Micropropagation (PLANT 108)	3	
H.	Computational Foundations Bioinformatics (CSCI 101)	3	
I.	Analytical Instrumentation (CHEM 106)	4	
J.	Quality Assurance in the Food Industry (FSC 120)	2	
K.	Food Laws, Regs, Inspection & Grading (FSC 178)	3	
L.	New Venture Management (MBA 272),	3	
	And/or New Venture Creation (MBA 273), And/or Seminar in Business Ventures (MBA 270)	3	
M.	Relevant Topics Courses, e.g. Computational Biophysical Chemistry (CHEM 2XX) or Unit Operations in Food/Bio Processing (FSC 2XX)	3	
	Total Program		**30**

Course Prerequisites and Admission Standards

1. Completion of specific coursework requirements of equivalent courses at Fresno State (see listing below; courses are in parentheses). It should be noted that the industrial survey from regional biotech firms and the industry-faculty workshop revealed a strong interest in specific prospective employee qualifications: communication skills; application of the scientific method; laboratory/field instrumentation; laboratory/field management; business management; and molecular biology knowledge. The core courses met many of these goals but seemed lacking in laboratory instrumentation skills largely associated with analytical chemistry activities and statistical tools for interpretation of scientific data and experimental design. Thus, the new prerequisites were added to the list required for the Fresno State biotechnology certificate program to ensure all our graduates meet basic qualifications in these areas. Because the students entering the program come largely from classical disciplinary undergraduate degrees, admission to the program requires a minimum of three categories of prerequisites and requires that all six categories of courses be completed for a degree award:
   a. General Genetics (BIOL 102)
   b. Microbiology including a laboratory (BIOL 120)
   c. Biochemistry (CHEM 150 or 155) with a laboratory (CHEM 156)
   d. Immunology with a laboratory (BIOL 157 and 157L)
   e. Analytical Chemistry (CHEM 105 or CHEM 102)
   f. Statistics (MATH 101)
2. Appropriate undergraduate science degree with a minimum 3.0 grade point average in science and math coursework.
3. Graduate Division admission requirements, including satisfactory general exam of the Graduate Record Exam (GRE) and, when appropriate, the Test for English as a Foreign Language (TOEFL) exam scores.

Suggested Program of Study

The two-year program of study presented below represents a suggested pattern, including some opportunities for prerequisites. No specific program prerequisites were deemed necessary in business, but the rigor of graduate level business courses has prompted the suggested program of study to provide adequate time to assimilate business concepts. However, for entry into this curriculum model, students will need to have completed both the genetics and biochemistry prerequisites.

Limiting the course load for the first year provides additional time to study research concepts and practices of biotechnology and business, as well as additional opportunities to fulfill any program prerequisites. In addition, by having all the students engage in the core courses in unison, a cohort of students is established to strengthen peer group networking. Such networking is expected both to reinforce the team approach to problem solving that dominates business organizational cultures and to provide the positive peer pressure that often helps students through the more rigorous elements of a program. Another advantage of the first-year program is that nearly all courses are offered in the evening to accommodate students with daytime employment or student assistantships, until the certainty of a specific career direction is established.

The complete sequence of the two year program leading to this interdisciplinary Professional Science Master's (PSM) in biotechnology/ business degree is presented in Table 2.

A recent change in the suggested program's sequencing has been a delay in the onset of the core MBA course sequence. This semester delay allows the students some time to identify scientific examples which might be ripe for commercialization. To heighten this awareness, the first installment of Biotechnology Seminar (BIOL/CHEM 248) now centers on presentations of individual biotechnology company "case studies" associated with a specific product and focusing on the positive and negative aspects, both scientific and commercial. This framework should improve the student's understanding of what is required for an effective business plan, a main focus of Seminar in New Ventures (MBA 270).

TABLE 2
PROGRAM OF STUDY

Fall Semester of First Year	Spring Semester of First Year
Molecular Biology I (BIOL/CHEM 241A)	Molecular Biology II (BIOL/CHEM 241B)
Biotech Seminar (BIOL/CHEM 248)	Biotech Seminar (BIOL/CHEM 248)
Prerequisite or Approved Elective	Seminar in New Ventures (MBA 270)
Identify Graduate Thesis/Project Advisor	Prerequisite or Approved Elective
	Skills training for Thesis/Project
First Summer	
Thesis/Project Investigations and Activities; Complete Graduate Writing Requirement	
Fall Semester of Second Year	**Spring Semester of Second Year**
Seminar in New Venture Management or Creation (MBA 272 or 273)	Approved Elective (if necessary)
	Internship (BIOTC 275)
Approved Elective	Culminating Experience (BIOTC 298 or 299)
Approved Elective	
Advancement to Candidacy	
Second Summer	
Final Completion of Internship/Culminating Experience Written and Oral Reports	

The Industrial Experience (BIOTC 275), the internship segment of the program, was originally conceived for the first summer, when many industrial organizations offer specific internship programs. However, because the length of many industrial internships has grown from a few months to sometimes 6-12 months, and because of a desire to strengthen the student's overall science and business skills before moving into the industrial setting, it is suggested the internship should occur nearer the end of the program of study. Flexibility is imperative, although the internship is listed at the very end of the program to meet opportunity availability and to make good student-industry matches. The enrollment listing in the last formal semester of the program represents the semester in which each student will participate in the "Internship Forum" event, showcasing their experiences through oral presentations before their industry partners, current and prospective biotechnology students, university faculty and administrators, and the interested public.

Changes in fulfilling the Culminating Experience–Biotechnology Project (BIOTC 298) or Biotechnology Thesis (BIOTC 299) are also being considered. The biotechnology faculty now considers a team-based project as more relevant to a professional program, even if a thesis has an applications focus. A five-year program review, which may further resolve this concern, is currently under way.

Status of the Program and the Program Graduates

New student enrollments in the program have continued to climb from seven students in the inaugural 2005-2006 academic year to 19 students entering with the 2010-2011 academic year. The desired program size is 20 new students entering the program each year. There has been a strong interest in the program among international students (more than 100 applicants per year), and consequently, the program has been composed of roughly one-third domestic students and two-thirds international students. Biotechnology program students have won entrepreneurship competitions through Fresno State's Craig School of Business with teams of scientists and MBA students. Internship partnerships continue to grow, primarily with agricultural and health care organizations in the Central Valley or with biopharmaceutical companies across California and the nation.

Industry satisfaction in the program's students is demonstrable from the strong evaluations received by those completing their internship. In addition, the post-graduate employment of five of the 10 program graduates, either directly with the company/agency where the student served as an intern, or with a similar company or agency in a position secured through the direct recommendation of the supervisor of the internship, reveals the positive impact of our students on their industry supervisors. The industry/agency Advisory Board meets annually to receive updates and provide insights for program improvement. The biotechnology program faculty (from all eight campus departments) also meets annually to discuss logistical issues and implementation of industry-relevant components into the curriculum. In addition, numerous formal program assessment activities have been conducted, including the aforementioned evaluation of each student intern by the industry. Much of the assessment effort centers on evaluating communication skills, written and oral, as the most critical area identified prior to formation of the degree and continuing in citations from the industry evaluations. These assessment activities have identified areas for improvement to enhance student success, e.g., by requesting inclusion of organizational charts and background information for the oral internship presentations and by incorporating stronger mentoring activities prior to the internship forum to improve comfort, enthusiasm and content scores. In addition, scrutiny of a wide variety of variables, e.g. GRE or GMAT scores, numbers and types of prerequisites completed, biotechnology faculty input on productivity, and the varied curricular elective pathways taken by the matriculated students, have identified some elements that seems to determine who will be successful or not in completing the program. This analysis has led to revisions in admission decisions, e.g. requiring stronger writing scores for the standardized entrance exams for consideration, as well as prompting earlier connections between incoming students and prospective mentoring faculty for the Project or Thesis component of the program. Additionally, comments from the students in Exit Interviews prompted the need for additional networking opportunities with regional industries, in order to improve appropriate social and communication skills and to also expand the breadth of internship placements. Our efforts to press the students to complete the Graduate Writing Requirement early, has significantly decreased the time to degree completion from the onset of the program. Students are now regularly finishing within the expected two-year time frame. In the rapidly changing world of biotechnology, continuous assessment and updating of our program are indeed critical.

The program is still new but is beginning to "gel" more extensively with local start-up industries, particularly in biofuel technologies. The nature of life sciences research, which lacks much of the mathematical predictability inherent in the physical sciences and engineering, can frustrate the classic approaches to the entrepreneurial process. But, the potential rewards of unique, and innovative positive outcomes ensure that advances and originality in commercialization processes can be found, and the cooperative interactions between biotechnology and entrepreneurship faculty in a university setting can serve as a platform to negotiate any inhibiting hurdles.

CONCLUDING REMARKS

Entrepreneurship is the way the economy and society take advantage of new wealth-creating opportunities that arise from constant change. However, when change accelerates, as it does during periods of rapid technological change such as during the rise of the industrial revolution or the rise of the information or knowledge age, entrepreneurship and enterprise development also tend to increase (Stough, 2000). Therefore, technological change creates new, exploitable possibilities and opportunities; and one of the main reasons entrepreneurship and interdisciplinary entrepreneurship education has been increasing is rapid technology change and the associated increasing innovation rates. The Genetics and Biotechnology Revolution is an especially exemplary example such an opportunity, and it is critical for the universities to take steps to improve the chances that such opportunities come to fruition by integrating science and entrepreneurship mindsets. However, conflicts of interest and conflicts of values sometimes stand between university-based research and commercialization of that knowledge, which can often delay or deter the commercial application of research (Bird, Hayward & Allen, 1993). Regardless of this inherent conflict, fostering entrepreneurial attitudes among university scientists creates a dynamic mental landscape within the university walls, in which application possibilities constantly respond to user needs to yield a stream of new product concepts by fostering a "what-could-you-do-with-it?" attitude (Armstrong & Tomes, 2000).

Within the context of the Professional Science Master's Degree in Biotechnology at California State University, Fresno, there have been unique benefits not always enjoyed by other similar programs. The Management Department faculty have invited the biotechnology science graduate students into their regular classrooms, and students who were undergraduate business majors have found access through the program to the graduate science classes. Master's Degree-granting institutions, such as Fresno State, tend to nurture more Teacher/Scholar and Service orientation among the faculty themselves than at traditional Research Universities, so the spirit to link programs was more easily attained even during the first visits between Science and Business faculty interested in considering an interdisciplinary program. The fact that the strong agricultural college and industry in the Fresno region is supportive, and that the industry and discipline routinely integrate both business and science, further nurtures this cooperative aspect of the Fresno State experience.

Entrepreneurship programs across the United States have demonstrated that the appropriate intellectual environment can produce successful start-up companies, combining the best of university-developed technologies and student interests with competent and professional managerial and financial advice. A Technological Entrepreneurship Certificate program at the University of Iowa requires the completion of a minimum of six entrepreneurship courses. Its 1,200 engineering undergraduate students take at least one such course during their engineering program; otherwise, according to its College of Engineering Dean Richard K. Miller, "too many engineers will end up in a white coat in the back room of some organization" (Ballon, 1998). George Mason University also has implemented a new university wide curriculum that fuses entrepreneurship skills into Education, Arts, Engineering, Public Administration, Liberal Arts, and Health/Nursing programs of study that already exist. This establishes synergistic and cooperative networks challenging the resourcefulness of students (Stough, 2000).

A similar successful program offered at Swinburne University of Technology in Melbourne, Australia, tracks the entrepreneurial performance and activities of graduates, over time (McMullan & Gillin, 1998). Even smaller colleges can develop creative entrepreneurial programs. Hope College in Holland, Mich., established a collaborative research, education, and entrepreneurship program in its chemistry curriculum that relies on an interactive, web-based discussion board (Polik, 2000). As some universities have discovered, it takes creativity on the part of administrators to foster innovative thinking in students and to knock down the barriers between disciplines (Rae-Dupree, 2002). Furthermore, it takes more than technology to be successful. A Stanford Technology Ventures Co-Op Program quickly found a "doable" technology is intriguing but also needs to address a customer's problems (Bellinger, 1996).

The developing biotechnology industry needs entrepreneurial leaders. The industry is quickly changing and growing, without continuing entrepreneurial efforts businesses fail. The PSM in Biotechnology Program at Fresno State has been developed to meet this growing demand. Though most of our students have become employed by existing enterprises, their entrepreneurial and business skills are needed by these industries. Our program prepares students to take on the challenges of this demanding and exciting industry.

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The Old Men of C(uba): Will the Sun Also Rise (on Cuba)?

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Cuba is approaching a crossroads regarding the future of its economic system. The paper begins with an overview of Cuba's vital statistics and then discusses the country's changing political landscape that has already triggered some selected -- albeit very modest -- changes. We review the long history of foreign country involvement in Cuba's affairs in order to put the tortured relations with the United States into sharper focus. Part 3 describes the methodological framework used to highlight Cuba's major weaknesses, and we conclude that the distortions that have been compounded over fifty years can be unwound only by introducing a comprehensive reform program that embraces new leadership and new thinking.

INTRODUCTION

Stabilizing the global economy from the impact of the financial and economic meltdown which was triggered in the fall of 2008 and that caused the worst economic recession in the United States since the Great Depression in the 1930s, along with developing and implementing regulatory reforms in the financial sector to reduce the risk of recurrence, in addition to adopting policies to lower the nearly double-digit US unemployment rate have all rightly over-shadowed many other important developments that have recently taken place in the Western hemisphere. For example, since the turn of the century, with the exception of Colombia and (until very recently) Mexico and Chile, most of the countries in Latin America have voted in left-of-center, populist governments.

With regard to Latin America, a favorable international economic environment until 2008 along with more responsible economic policies and/or improvements in the legal and tax environments for business in some countries, i.e., Brazil and Chile (and most recently in Peru), resulted in higher economic growth rates and improved living standards. In fact, " the five years to 2008 were Latin America's best since the 1960s, with economic growth averaging 5.5% per year and inflation generally in single digits" (Reid, 2010). In other countries such as Argentina, Bolivia, Ecuador, and, of course Venezuela, ideologically left and populist policies have raised political tensions and have triggered discontent among large swaths of the population. While these policies may have contributed to short-term gains for some segments of the population, they have introduced some deep-rooted distortions into the economy which are unfavorable for long-term growth, and that are likely to impair the improvement in future living standards. The most obvious example of this is Venezuela where, throughout the last decade, annual inflation, every year, has been in double digits, and net foreign direct investment has been negligible, and even negative in three out of the last four years (United Nations, 2009).

Another important development that occurred in the Western hemisphere was the announcement in July 2006 by Fidel Castro, in office since 1959, to temporarily step aside as president of Cuba because of illness. His brother, Raúl, replaced him on an interim basis and in early 2008 the change was made permanent. Needless to say, this development provides both opportunities and challenges for the people of Cuba, as old age and infirmity "bring down the curtain" on the Castro brothers and their aging associates.

Will Cuba continue down the populist, Socialist path charted during the Cold War of the 1960s, sustained by continuing dollops of financial and political support from Venezuela's Hugo Chávez, which replaced the long-term aid provided by the Soviet Union that collapsed in the 1990s? Or will Cuba adopt a market economy such as Brazil and Chile, requiring liberalized political institutions and fundamental political reforms to improve human rights and guarantee political freedoms unknown in Cuba since the 1950s? This, of course, would mean an end to the monopoly of political power by the ruling Partido Comunista de Cuba (PCC).

Perhaps, as some observers have suggested, Cuba will choose a middle-way by opting for a China-like (or Vietnam-like) model that is characterized by continued liberalization toward a market economy but without the critical political reforms that would encourage Western-type political institutions and personal freedoms.

Before speculating on the road that will ultimately be chosen by Cubans over the next decade, this paper assesses the current state of the Cuban economy, identifies some of the major weaknesses that will need to be addressed, and highlights some of the opportunities that Cuba can seize as the Castro era comes to an end. To be sure, throughout the paper, the policies of the United States towards the Cuban government are highlighted because of the critical and central role Cuba's behemoth northern neighbor plays in influencing Cuba's economic growth (or stagnation) and living standards.

Part 1 begins with an overview of Cuba's vital statistics that provide some measures of the island nation's relative material wellbeing as compared with some of its regional neighbors. In addition, we review the current -- domestic and international -- political landscape that influences the performance of the Cuban economy, as well as some of the major economic and political events of the last few years that may have served as a catalyst for the modest reforms already introduced by Raúl Castro since he assumed his position in 2006.

Part 2 provides a short summary of the history of US involvement in Cuba since Fidel Castro became prime minister in February 1959, emphasizing the tortured relations between the two countries since the Cuban Revolution at the height of the Cold War, the tougher measures implemented by the Bush administration, and the recent overtures announced by the Obama administration since taking office a little more than two years ago.

Part 3 provides a review of some recent research regarding some of the "ingredients" judged to be important for a well-performing national economy that is participating in the wider global economy in the second decade of the 21st century. These "ingredients" are used in the next section to assess the current state of the Cuban economy. We conclude by enumerating some of the strengths that Cuba can draw on as it begins a program of serious economic reform and adhesion to the global economy that will require a fundamental break with its current economic model if the country is to improve the performance of its economy and increase living standards for all segments of the population.

PART 1. VITAL STATISTICS, THE POLITICAL LANDSCAPE, AND RECENT ECONOMIC AND POLITICAL HIGHLIGHTS

Cuba, an island nation between the Caribbean Sea and the Atlantic Ocean -- 150km south of Key West, Florida -- is located in the tropics, approximately 21-23 degrees north of the equator. The country has a total area of around 11,000 sq km, slightly smaller than the US state of Pennsylvania. The island stretches about 800 km from the northwest to the southeast, and it is the largest island in the Caribbean. In

2009, Cuba's population was about 11.5 million people, its population growth rate was estimated at 0.23% per annum (p.a.) -- well below the Latin America average of 1.6% p.a.-- and the country continues to experience annual net **out** migration of approximately 30,000 people, some legal and some illegal. At this time there are two ways for Cuban migrants to gain US residency: by obtaining one of the 20,000 visas issued annually for Cubans by the US authorities, or by applying for refugee status after arriving in the US (by whatever means). Cuba has a Diaspora estimated at 1.5m people (The Economist, 2008a).

Life expectancy was reported at 77.5 years and Cuban infant mortality rates are below those in the US (DePalma, 2007). More than three-quarters of Cubans live in urban areas. The country's ethnic breakdown is 65% white, 25% mulatto and mestizo, and 10% black. Cuba boasts near universal literacy for those 15 and older; 94% of Cuban children complete high school, a higher percentage than in the US (Cohen, 2008); and, in 2007, the country spent more than 14% of its GDP on education (EIU, 2008).

It is important to note at the outset that "the quality of the information on countries such as Cuba is so poor that analysis often seems more of an art than a science" (Financial Times, 2008). For example, with the price system so distorted because of controls (including access to foreign currency), there is a very large discrepancy between the estimated 2009 nominal level of Gross Domestic Product (GDP) and the GDP on a purchasing power parity (ppp) basis: \$56.68bn versus \$110.86bn, respectively, and estimated 2009 nominal GDP per capita was approximately \$5,000 while GDP per capita (ppp) was estimated at approximately \$9,898 (using 2009 US dollars) (EIU, 2010).

With respect to the composition of GDP, in 2008 agriculture accounted for 4.5% of GDP (but employed 18% of the approximately 5.2m people in the labor force); industry for 23% of GDP; and services for approximately 73% of GDP. Official unemployment was only 1.8%, but this rate is surely artificially suppressed because of political considerations, as we shall see below. Gross fixed investment as a percentage of 2008 GDP was reported at only 11.6%, well below the rate that would be consistent for increased growth in future living standards. It is important to recall that in 1959 Cuba had the third highest GDP per capita in Latin America and was one of the five leading countries in Latin America in socio-economic indicators (The Wall Street Journal, 2008; The Wall Street Journal, 2010; The Economist, 2008a). Today, fifty years on, Cuba is outranked in the United Nations Human Development Index by democracies such as Argentina, Chile, Costa Rica, and Uruguay, and basic foods such as milk, sugar, and eggs, and basic services such as electricity are rationed, and mundane necessities such as soap and toilet paper are luxuries (O'Grady, 2010). According to one recent report on Cuba, "life is not improving in Cuba, and the quality and quantity of material well being is declining" (Frank, 2009b).

The Political Landscape

Since July 2006 public soul-searching for Cuba's future direction has been acknowledged at the highest political level. After temporarily assuming the presidency when Fidel Castro stepped aside due to illness, Raúl Castro called for an "open debate" on the country's economic policies, and one year later he acknowledged that not everything is right, that is, structural and conceptual changes are needed, specifically citing the inefficiency of the farm sector, low public sector salaries of around \$20 US per month (O'Grady, 2007), and wide-spread inefficiencies and corruption at state-controlled companies (DePalma, 2008). The Financial Times reported," Cuba has an inefficient domestic model due to its extreme centralization and waste, where a dysfunctional bureaucracy resistant to change has prospered" (Frank, 2009b).

In August 2010, while being interviewed by Jeffrey Goldberg of the Atlantic Monthly, Fidel Castro conceded that Cuba's economic model no longer worked (Dombey, 2010), providing, in effect, a "green light" for Raúl Castro to reform the economy. Within a week of this admission, Raúl Castro announced that 20% of the state labor force – about 1 million people – will lose their jobs or be transferred to the private sector over the next five years. In 2011 alone, 500,000 workers from the state payroll are to be shifted to the private sector (Frank, 2010a). It is important to note the significance of this important reform: at the end of 2009 about 4.4 million people – or 85% of the labor force – worked for the state. The official statement regarding this change was: "Cuba cannot continue to be the only country in the world where one can live without working", a veritable "Garden of Eden" (Malkin, 2010).

While it is difficult to discern the extent of the turmoil these pronouncements are causing to the political leadership in Cuba, it is worth noting that the congress of the Partido Comunista de Cuba that last convened in 1997 -- which, in theory, exercises control over government policy -- and that had planned to meet in late 2009 was again postponed, and is now expected to meet in late April 2011 (Associated Press, 2010).

Conditions in Cuba have always been strongly influenced by other countries, most notably by the US, Russia (or more precisely the former Soviet Union), and more recently by Venezuela and China. We discuss the influence of Russia and Venezuela on Cuba in this part of the paper, defer a discussion of the strained relations between the US and Cuba to Part 2, and the expanding role of China in the Cuban economy is discussed in Part 4.

A Brief Review of 20th Century Foreign Involvement in Cuba (and Vice Versa)

Cuba was under Spanish rule from 1492 almost without interruption until the conclusion of the Spanish-American War in 1898. The war was preceded by more than 60 years of protest and civil unrest in favor of independence, following the successes for independence by many countries on the South American mainland earlier in the century. Many Cubans favored annexation by the United States as early as the turn of the 19th century, which was supported by the US government. In 1823, US president James Monroe delivered his eponymous "Monroe Doctrine", warning European countries to leave "America for the Americans". The disturbances in 1898 were sufficiently threatening to the Americans then residing in Cuba for the US government to dispatch the USS Maine to Havana Harbor. After a mysterious accident sank the Maine, with the loss of 268 sailors, an official report issued after the investigation of the explosion blamed Spain, which led to a declaration of war.

The Spanish-American War lasted 10 weeks and ended with the Treaty of Paris, signed in late 1898, that recognized Cuban independence, though the Cubans did not participate in the peace talks and did not sign the treaty that gave the United States temporary control over Cuba, and other Spanish possessions such as Puerto Rico and the Philippines. Less than a year after the passage of the Platt Amendment in 1901, Cuba gained (partial) independence since there were contingencies written into the Amendment that permitted the US to intervene militarily in the island's affairs (along with a perpetual lease of the Guantanamo Bay Naval Base). It is worth noting that a more serious inquiry into the nature and the cause of the sinking of the Maine that was undertaken by Admiral Hyman Rickover in 1974 concluded that the accident was the result of an internal explosion and not an act of war by Spain.

During the first decades of the 20th century there were a series of coups until 1940 when Fulgencio Batista was democratically elected as president. His administration included several members of the Communist party that established numerous pro-union policies and implemented major social reforms. In the 1930s-40s the flow into Cuba of American investments in sugar, tobacco, and mining assets as well as an influx of Mafia mobsters fueled an economic boom which increased living standards for all segments of society and created a prosperous middle class in most urban areas but also widened the gap between the rich and the poor. According to the International Labor Organization, the average industrial salary in Cuba was the world's 8th highest in 1958. Agricultural wages were higher than in West Germany or France, and even though a third of the population still lived in poverty, Cuba was one of the most developed countries in Latin America (The Economist, 2009a).

Former-president Batista, running a distant third as a candidate in the 1952 presidential elections, staged a coup after he concluded that he had little chance of winning the election. In 1953, Fidel Castro, a young lawyer from a rich family, led an armed -- though failed -- revolt to depose Batista, losing 60 companions in a daring attack on a military barracks. In the wake of the failed revolt Mr. Castro was jailed for 19 months, and after receiving an amnesty decamped to Mexico to regroup.

A US-imposed arms embargo in 1958 weakened the Batista government as it fought an armed resistance movement led by Fidel Castro. The successes of Castro's resistance movement culminated in Batista fleeing the country and Fidel Castro becoming prime minister in February 1959, a post he continued to hold for half a century. It is important to note that when Castro attempted to arrange a general strike in 1958, he did <u>not</u> have the support of the Communists or the labor unions (Lewis, 2005).

Castro exhibited a deep hatred of the United States because of its historical involvement in Cuban affairs, and especially for its support of the Batista dictatorship, and, as a result, Cuban relations with the US deteriorated quickly as he embraced the Soviet Union. (Please see Part 2 below for a more detailed overview of Cuban-American relations in the second half of the 20th century). In October 1960 the Castro government confiscated all of Cuba's large businesses, all opposition newspapers were closed down, and all radio and television stations were placed under state control, triggering the first wave of Cuban émigrés. The failure of the CIA-sponsored Bay of Pigs invasion in April 1961 by 1500 Cuban exiles strengthened his ties to the Soviet Union at a time that was arguably the height of the Cold War. After defeating the exiles, Mr. Castro consolidated his power, arresting, imprisoning, and executing thousands of political opponents and former supporters. In addition, hundreds of thousands left Cuba as exiles.

For the next two decades Mr. Castro supported guerilla movements throughout Latin America including Argentina, Venezuela, Guatemala, Paraguay, Colombia, Honduras, Haiti, El Salvador, Nicaragua, and Uruguay. In addition, Cuban intelligence officials established close ties with the Irish Republican Army, the Basque ETA, and the Palestine Liberation Organization. Cuba also supported 17 liberation movements or leftist governments on the African continent including Angola, Ethiopia, Guinea-Bissau, Mozambique, the FLN in Algeria against France, and the Congo.

Needless to say those activities were anathema to the United States, spawning a half-century of tortured relations between the two countries. Arguably, the greatest shock to Cuba's increasingly centralized economy in more than two decades of Soviet support came when Mikhail Gorbachev came to power, that eventually led to the 1991 implosion of the Soviet Union and the collapse of Soviet military and economic support, resulting in a drop in Cuba's economic output of at least 35% from 1989-93 (De Córdoba, 2008).

Relations with the Soviet Union

As early as September 1959 the Soviet Intelligence Agency, the KGB, was operating in Cuba, and the Soviet Union saw the new revolutionary government in Cuba as a valuable asset both in promoting Soviet interests in the Southern Hemisphere and in waging its "cold war" against the United States. In the aftermath of the Bay of Pigs invasion in April 1961, Cuba turned to the Soviet Union for military protection and trade. The Soviet attempt to install nuclear missiles in Cuba ended with an agreement with the US in 1962 that brought the crisis to a conclusion and also assured Cuba's protection from military attack by the United States. In 1972, Cuba became a full-fledged member of the then Soviet trading bloc (the Council for Mutual Economic Assistance (CMEA)), further increasing US-Cuban tensions.

With the dissolution of the Soviet Union and the CMEA in 1991 along with the loss of Soviet economic and political support, the resulting economic emergency forced the Cuban government to abandon its traditional five-year plans and triggered the adoption of a set of reforms that included an effort to secure new sources of hard currency, a suspension of all state investment that did not generate hard currency receipts, limited agricultural reform to reduce Cuba's dependence on food imports and encourage domestic output, drastic cuts in oil and electricity use, an opening to direct foreign investment in joint ventures, the development of the tourism sector, and the legalization (until October 2004) of the use of the US dollar. This period was known as the "special period in peace time" that ended in February 2008.

One unwelcome by-product of the new policies introduced during this interval -- and, in particular, of the legal use of the US dollar -- was a large increase in income-inequality that undermined one of the mainstays of the Cuban Revolution of a half-a-century ago. The legal use of US dollars spawned special stores that were reserved for "dollar only" purchases with no official exchange rate. (This issue is discussed in more detail in Part 4, below).

The Role of Venezuela in Cuba

With the dissolution of the Soviet Union, its "empire", and its associated "clubs", e.g., CMEA, at the beginning of the 1990s, and the advent of the "special period in peace time" because of the loss of Soviet economic support, Cuba benefited from the ascent of Hugo Chávez to the Venezuelan presidency in early

1999. It would not be an exaggeration to say that the limited and short-lived reforms implemented during this "special period" were reversed with the arrival of Hugo Chávez and his deep pockets, and that the Venezuelan support that followed boosted Cuban economic growth (The Economist, 2008b).

Chávez made no secret that his "spiritual leader" was Fidel Castro as he began to transform Venezuela with his self-proclaimed "Bolivarian Revolution". By using ongoing legislative and constitutional maneuverings, Chávez continues to centralize power, reign in individual freedoms, and subject the economy to distortions that result from years of populist policies. Simultaneously, Cuba has forged close ties with Venezuela in order to replace the lost Soviet aid. In return for subsidized Venezuelan oil of up to 100 thousand barrels per day worth as much as $6bn a year in cash payments, Cuba has sent sports trainers, political organizers, and more than 20,000 doctors, dentists, and other medical personnel to Venezuela to improve Venezuelans' access to health care (De Córdoba, 2008; Caldwell, 2008). Venezuela has also announced plans to build a liquefied natural gas plant in Cubato, a petrochemical plant in Cienfuegos, and is financing an oil refinery in Santiago after Cuba's announcement of estimated offshore oil reserves of 20m barrels (Romero, 2008). In addition Cuba has tight ties with Venezuela's military and intelligence systems with an estimated 500 Cuban military advisors in Venezuela being used to further strengthen Chávez's grip on power.

PART 2. US-CUBAN RELATIONS SINCE THE CUBAN REVOLUTION

As was mentioned above because of Fidel Castro's deep hatred of the United States relations between the two countries quickly deteriorated as Castro consolidated his power after becoming prime minister in February 1959. The failed CIA-sponsored Bay of Pigs invasion by Cuban exiles strained relations with the US to the breaking point. With Cold War tensions at their highest level at that time, the Soviet Union was willing and able to support Cuba politically, militarily, and economically. The "end-game" of the Soviet attempt to install nuclear weapons in Cuba resulted in an agreement between the US and the Soviets that assured Cuba's future as a Soviet ally in the US's backyard.

Diplomatic relations between the US and Cuba have been severed since 1961, and Cuba was expelled from the Organization of American States in 1962 as a result of US financial pressure on the organization. Also in 1962, the US declared a trade embargo against Cuba, which lasts to this day with certain qualifications that are discussed below. In addition, the US imposed a travel ban on US citizens wishing to travel to Cuba. It is important to note that the US trade embargo is enshrined in Federal law, with only limited modifications permitted at the discretion of the President's executive orders.

Interests sections were established in 1977 in each other's capitals but efforts towards a normalization of relations have repeatedly failed because of irreconcilable differences over issues related to Cuba's ongoing support for third-world revolutionary movements (see Part 1, above), the special status accorded Cuban exiles in the US, and the continuing US control of the Guantanamo naval base in Cuba. Since the fall of the Soviet empire the US has focused its displeasure with Cuba less on the national security threat that Cuba poses to the US mainland and more on the political and economic shortcomings in Cuba. The politically influential anti-Castro lobby in the US has, for the most part, prevailed over the years to maintain the economic sanctions that were imposed on Cuba almost half a century ago.

In 1996, the Cuban Liberty and Democratic Solidarity Act (also known as the Helms-Burton Act), the governing statute that dictates US policy on Cuba, extended the trade embargo against Cuba to include foreign companies and individuals, and refuses them entry into the US if they are doing business with Cuba. It is of interest to cite some of the main features of this Act. The law prohibits the President from lifting trade restrictions until Cuba legalizes political activity, makes a commitment to free and fair elections, and as long as Fidel and Raúl Castro remain in office (Steinberg and Wilkenson, 2010). In the aftermath of the 9/11 terrorist attacks, tightened US banking regulations also increased the impediments to those contemplating doing business in Cuba (The Economist, 2008c).

Conflicting US Interests: Cuban Émigrés vs. the US Business Community

US policy toward Cuba has been carefully guided -- some would say governed -- by hard-line émigrés from Cuba, and as these émigrés age polls indicate that an increasing majority of Cuban-Americans favor a dialogue with Cuba (The Economist, 2007a; De Córdoba and Luhnow, 2008). In fact Barack Obama promised he would move toward normalizing relations with Cuba if Cuba made some improvements on human rights issues. Though he received only 35% of the total Cuban-American vote in Florida in 2008, he captured a majority of that group's 18-29-age cohort (Perez, 2008). Furthermore, by early 2009, the Cuban-American National Foundation -- the leading organization for Cuban exiles -- called on President Obama to expand relations with the Cuban people (Cave, 2009).

In stark contrast to the hard-core early émigrés from Cuba are some segments of the US business community who are eager, for obvious reasons, to see an end to the trade embargo imposed on Cuba. They include agricultural and food exporters, and companies in the airline, telecoms, and tourism sectors, and the oil industry that would like to drill for oil in Cuban waters. A 2001 report prepared by the US International Trade Commission, which favors US business interests, estimated that the US trade embargo against Cuba cost US businesses up to $1.2bn a year in lost sales (Dombey, 2009a). In fact, since 2000, US companies have been able to sell food and agricultural products to Cuba to non-governmental entities for cash. By 2009, the US exported $710m of food products to Cuba (Levine, 2009), and by mid-2010 the US was already Cuba's fifth largest trade partner (Financial Times, 2010).

The Bush Administration tightened the long-standing ban on travel and imposed more onerous restrictions on remittances to Cuba from the US. Though the Bush Administration maintained the agricultural waiver, travel to Cuba was severely curtailed from the approximately 80,000 American tourists in 2000 to just a trickle by the end of 2007 (McKinley, 2007). Family visits were restricted to once every three years and remittances sent from the US were capped at $300 per quarter for the receiving household, though both of these sanctions were reversed early in 2009 -- and again extended in January 2011 -- by the Obama administration (Schmitt and Cave, 2009; Thompson, 2011). It is important to point out the importance of remittances from the US to Cuba: In 2005, remittances from the US accounted for 80% of Cuba's total remittances, which comprised about 50% of Cuba's total foreign currency receipts (Millman, 2009). Furthermore, the Cuban government extracts 20% of the value of the dollar remittances in addition to imposing large price mark-ups when these dollars are used in the hard currency shops (Frank, 2009a).

There are other measures that the US president can take without approval from Congress but the administration is unlikely to move towards normalizing relations with Cuba until there are palpable moves towards democratic reform in Cuba such as the release of political prisoners and introducing freedom of the press (Stolberg and Barrionuevo, 2009; Dombey, 2009b). Ironically, the state of human rights in Cuba appears to have worsened since the arrival of the Obama administration in January 2009. For example, the death of Orlando Zapata, who starved himself to death in February 2010, makes it difficult for the US to move forward with Cuba. It appears that only after the meeting of the long-delayed Communist Party congress -- now due to convene in late April 2011 -- can we expect to see any serious moves by Cuba to address US concerns that would enable the US to begin normalizing relations with Cuba.

PART 3. THE METHODOLOGICAL FRAMEWORK

Before discussing the areas in which reform will be needed to improve the long-term performance of the Cuban economy to the end of raising living standards, it is worthwhile reviewing some of the alternative "paths to prosperity" that have been proposed by the leading development experts -- individuals and institutions -- over the last half century.

The ideas of Raúl Prebisch (1959) and Hans Singer (1964) provided the intellectual firepower for the development blueprint anchored in "import substitution" because their thesis was based on the declining terms of trade for primary products and the dynamic benefits to the economy of a vibrant manufacturing sector. These concepts became operational policy in most of South America in the 1960s-70s, ensuring a large and growing role of the state in the economy through supportive taxes and subsidies if not direct ownership of productive capacity.

The role of state involvement in the economy for development purposes that is a corollary of the Prebisch-Singer thesis was actually the foundation of the work proposed earlier by Paul Rosenstein-Rodan (1943) and P.C. Mahalanobis (1955), which stressed increasing returns to scale and kick-starting growth through large-scale investments, and accelerating economic development by government encouragement of heavy industry, respectively.

These “inward” winds of economic development shifted in favor of more “outward” and “market-oriented” strategies that were advanced during the 1970s by Balassa (1971), Bhagwati (1978), Krueger (1978), and Little, Scitovsky, and Scott (1970). The “market-based” approach to improving the performance of the economy and to enhancing living standards reached its zenith with the views of a group of Latin American economists and policymakers, the World Bank (1991), and various academic and “think tank” development experts such as John Williamson (1994) with the so called “Washington Consensus” of the 1990s.

For example, in its 1991 World Development Report, the World Bank articulated four broad requirements that characterize a national economy as "battle ready" to meet the challenges of the fiercely competitive world economy. They included:

A. A stable macro-economy characterized by both fiscal and external balance and low and stable inflation;
B. the adoption of a competitive micro-economy that includes a substantial reduction in state ownership and management of productive assets and the elimination of price distorting subsidies and taxes;
C. strong global linkages that include adherence to GATT (now the WTO), low and uniform tariff rates, absence of non-tariff barriers, a uniform and market-determined exchange rate, a liberalization of the rules governing capital flows and direct foreign investment, and;
D. an active government policy that promotes social and economic investment, especially in the areas of education, infrastructure, and health.

In its 1997 World Development Report (World Bank, 1997), the Bank expanded the reach of the fourth requirement to include the promotion and enforcement of property rights, reducing the level of corruption in the country, and ensuring a reliable legal system -- some of the so-called “second tier” reforms.

The “Washington Consensus” (WC), which was originally compiled in 1990 and published by John Williamson (1994), enumerated a list of desirable conditions that, if adopted and adhered to, would, over time, put reforming countries on the path to success in the global economy. (Please see Table 1, below, for a list of its main points). Since the late 1990s, because of its alleged failure to address the issue of poverty reduction directly, the Washington Consensus was subjected to heated intellectual debate within academia and the major international organizations such as the World Bank (Beattie, 2000). Nevertheless, this framework continued to assume a central role in the debate on development strategies for low- and middle-income developing countries during the first decade of the 21st century. (Readers interested in this debate are referred to (Rodrik, 2010) for an up-to-date review of this subject).

In light of the experience of the late 1990s (increasing poverty rates and stalled economic growth due to an adverse external environment), proponents of the Washington Consensus amended the original framework to ensure that fiscal policy is counter-cyclical to support economic growth in an economic downturn, and to focus on reducing income inequality by ensuring that the poor have access to assets, i.e., education, land titling, micro-credit and land reform, that will enable them to work themselves out of poverty (Williamson, 2003).

TABLE 1
MODIFIED "WASHINGTON CONSENSUS"

A. Fiscal and monetary discipline
B. Redirection of public expenditure priorities towards health, education, and infrastructure
C. Tax reform and improved tax administration
D. Unified and competitive exchange rates
E. Modernization of government and "quasi" government institutions
F. Deregulation
G. Trade liberalization and regional integration
H. Privatization
I. Elimination of barriers to direct foreign investment
J. Banking reform and financial liberalization

While the “reform decade” of the 1990s did restore growth in GDP and GDP per capita in Latin America when compared with the “lost decade” of the 1980s -- growth in GDP and GDP per capita from 1991-98 was 3.5% and 1.7% p.a., respectively compared with 1.0% and -1.0% p.a. in the 1980s (United Nations, 1998) -- many observers of Latin America contended that the “neo-liberal” reforms of the 1990s have not only “failed to deliver sustained growth, but have made the region more vulnerable and increased unemployment, poverty and inequality. As a result of all this, some political pundits assert that Latin America is sinking back into populism and/or anti-market leftist nationalism” (The Economist, 2003). At the end of 2010, this last statement is borne out for most countries in Latin America, particularly for Argentina, Bolivia, Ecuador, and Venezuela.

In a recent review article of economic development blueprints, Dani Rodrik (2010) reviews the experience of China, which over the last three decades arguably has had the most successful growth and poverty reduction program in recorded history, and notes that there does not appear to be any single orthodox Western economic plan that was adhered to by Chinese economists and policymakers. Rodrik also observes that even in (now prosperous) Chile -- which was recently admitted to the Paris-based club of “rich” countries, the Organization of Economic Cooperation and Development (OECD) -- during the 1970s-80s a strict universally scripted development plan was abandoned and a more heterodox (and indigenously articulated) strategy was adopted even during the tense Pinochet era.

It now appears, according to Rodrik, that a more fruitful approach to prescribing a successful path to economic growth and development is one that is based on “diagnostics’, as proposed recently by Hausmann, Rodrik, and Velasco (2008) and Hausmann, Klinger, and Wagner (2008). In place of a “boiler plate” set of rules and a rigid, unyielding approach to growth these development economists propose to identify a country’s binding constraints and then prioritize the policy reforms given the political and social realities of the country involved. These authors argue that the earlier, carefully scripted paths to growth and development have not lived up to their expectations:

> “The currently prevailing view, as reflected in the World Bank’s (2005) report on the lessons from the 1990s or by the blue-ribbon Commission on Growth and Development (2008), accepts the importance of outward orientation but places much less emphasis on trade liberalization and is much more willing to condone a measure of industrial promotion in order to achieve and sustain high growth” (Rodrik, 2010; p. 40).

Rodrik praises China’s so-far successful development approach of grafting a market system on top of a heavily regulated state sector (that was the orthodoxy of an abandoned Communist economic system) with China’s development plan evolving over time as their binding constraints change: first in agriculture; then in industry; then in foreign trade; and eventually in finance, the environment, and pension reform.

It is important to note that despite its impressive poverty reduction cum economic growth program now in its fourth decade, China enjoys enormous leverage in the world because of its population of 1.4bn people -- almost 20% of the world's population -- that is increasingly willing and able to become "21st century consumers". China's voracious appetite for fuel and nonfuel minerals (Sohn, 2008a; Sohn, 2008b), "first world" foods and diets, electricity and other infrastructure goods, along with its abundant and still relatively inexpensive labor force provides it with enormous "monopoly-like" and "monopsony-like" power on world resource, factor, and product markets. For example, China's policy regarding "local content" requirements for equipment used in the production of wind energy, the "Notice 1204" directive, is certain to be in violation of World Trading Organizations rules. The directive has since been revoked, but not before its major objectives were achieved (Bradsher, 2010). The market access that it provides for the goods and services of global companies confers on China tremendous leverage regarding the terms it dictates for foreign (inward and outward) investment, the aid programs it operates, its foreign exchange and capital account regimes, and, above all, its (lightly criticized and) stunted state of political and human rights best exemplified by the official treatment of Chinese dissident Liu Xiaobo, the 2010 recipient of the Nobel Peace Prize.

To be sure, particularly in the wake of the 2008-9 global financial crisis and the need for substantial global rebalancing, China's trade, savings, investment, capital account, and exchange rate policies are exacerbating the adjustments that are needed and increasing the political and diplomatic tensions in the world. The jury is still out as to whether China's one-party political system can be maintained in light of ongoing globalization and technological change.

In the next section which takes the measure of the Cuban economy we continue to rely heavily on the "ingredients" prescribed in the market-based and outward-looking approach to economic growth and development noted in the above-mentioned World Bank reports, while at the same time being mindful to incorporate the contributions made by those advocating a more tailored approach to development that identifies binding national constraints and priorities in the quest for economic modernization over the next two decades. Given the size and importance of the Cuban economy in the world, it is doubtful that Cuba will be able to apply similar leverage on issues such as maintaining a closed capital account, or enjoy an exchange rate regime of its choosing, and so on, as was the case for China.

PART 4. THE ROAD TO REFORM: THE STATE OF THE CUBAN ECONOMY

Macroeconomic Stability

With a view toward improving the performance of the Cuban economy during the next decade it is useful to take the measure of the current state of the economy following the World's Bank "recipe" articulated in the early 1990s and described in Part 3, above. The first of the four broad requirements needed for a well performing national economy is macro economic stability, generally characterized by both fiscal and external balance, low and stable inflation, and high levels of employment.

Before examining the above macroeconomic variables over the last five years it would be of interest to note how the Cuban economy actually performed over the time frame, that is, actual GDP growth from 2005-9. According to the data reported by the United Nations (2009) and the Economist Intelligence Unit (2010), real GDP growth slowed dramatically over the 2005-9 interval. (Please see Table 2, below). The double digit growth rates reported for 2005-06 are no doubt due to the booming world economy, and in particular the strong demand for industrial metals in Asia, that resulted in the run-up in the price of nickel -- Cuba's main export in terms of revenues -- over this interval. GDP growth began slowing in 2007 with the onset of the US and global slowdown, and growth continued to slow in the 2008-9 period as sluggish global growth continued in the aftermath of the financial sector problems in the US and the EU, and the "knock-on" effects of the disastrous 2008 hurricanes negatively impacted growth in the Cuban economy during these years.

Examining some of the GDP components in more detail reveals some of the problems. Reported Gross Investment as a percentage of GDP stands out in particular. Cuba's investment ratio is consistently the lowest in the list of 22 countries in the Latin America and Caribbean region reported by the United Nations (2009). (Please Table 2, above, and Table A-4 in (United Nations, 2009)).

The ratios, which normally range from 17% - 23% of GDP for the region, in Cuba are often reported as one-third to one-half of the regional averages throughout the first decade of the 21st century. (Please see Table A-4 of (United Nations, 2009)). These ratios suggest an economy that is hardly expanding its capital stock, and may even be depleting it after adjusting for normal depreciation of capital. The ratios over the decade certainly attest to the unwillingness (and/or inability) of the international business community to operate in Cuba because of the poor legal, tax, and regulatory framework. Needless to say, Table A-10 of (United Nations, 2009), which reports the region's net foreign direct investment, country by country, for 2000-09, omits Cuba entirely. On the other hand, the meager investment ratios also underscore the inability (and/or unwillingness) of the Cuban State to allocate resources for the purposes of economic modernization that would lead to higher future economic growth and enhanced living standards.

TABLE 2
RECENT MACROECONOMIC DATA: CUBA AND LATIN AMERICA, 2005-2009

Macroeconomic Variable		2005	2006	2007	2008	2009	
Gross Domestic Product (annual % change)							
	Cuba	11.2	12.1	7.3	4.1	1.0	
	Latin America and the Caribbean	5.0	5.8	5.8	4.1	-1.8	
Gross Fixed Capital Formation (% of GDP)							
	Cuba	6.7	8.6	8.2	8.5	-16.0	A
	Latin America	18.5	19.7	20.9	21.9	20.3	
Central Government Balance (% of GDP)							
	Cuba	-4.6	-3.2	-3.2	-6.7	-4.8	A
	Latin America	-1.1	0.1	0.3	-0.8	-2.8	
Consumer Prices (annual % change)							
	Cuba	3.7	5.7	10.6	-0.1	-1.7	
	Latin America	6.1	5.0	6.5	8.2	4.5	
Trade Deficit [A] (US$ bn)							
	Cuba	-5.24	-6.33	-6.39	-10.6	-6.52	
Urban Unemployment Rate (average annual %)							
	Cuba	1.9	1.9	1.8	1.6	1.7	A
	Latin America	9.1	8.6	7.9	7.4	8.3	
Employment Rate[B] (average annual rate)							
	Cuba	70.7	70.7	72.4	73.6	NA	

[A] These data are from EIU (2010)
[B] Employed population as a percentage of working age population
Sources: United Nations (2009); EIU (2010)

With respect to Cuba's fiscal balances during the five years ending in 2009, Cuba was one of only two countries -- Honduras was the other -- in the United Nations' list of 20 Latin American countries that recorded annual public sector deficits on both a "primary balance" and "overall balance" basis for all five years. (It is worthwhile to mention that Cuba's annual deficits, as a percentage of GDP, were much higher than those reported for Honduras (United Nations, 2009; Table A-22)). According to the Economist

Intelligence Unit (2010), since 2005, annual Cuban public sector deficits as a percentage of GDP have ranged between 3.2% and 6.7%. The large 2008 and 2009 deficits, 6.7% and 4.8% of GDP, respectively, can be explained, in part, by the need to finance increased food imports (and maintain the heavily subsidized food prices) in the wake of the above-mentioned weather-related agricultural sector failures in 2008.

Turning to annual variations in consumer prices, inflation in Cuba has been more moderate but at the same time more volatile than annual inflation in the region as a whole as reported by the United Nations (2009). For example, in the decade ending in 2009, Cuba experienced negative inflation in four of the 10 years versus none for the region as a whole, while Cuba's annual inflation rate exceeded the region's average in only three years out of ten (United Nations, 2009; Table A-21). It would be reasonable to assume that Cuba's inflation rate -- both its magnitude and volatility -- is heavily influenced by political considerations given the centralized price system administered by the State. However, with a view toward the future, a reduction in the volatility of inflation is a necessary condition to encourage increased private sector investment to enhance growth prospects and private sector employment.

According to the Economist Intelligence Unit (2010), Cuba's annual trade deficits from 2005-09 have ranged from 12% - 19% of GDP, which highlights the critical role filled by remittances as a substitute for insufficient foreign investment capital to finance the chronic trade deficits despite the substantial credits extended to Cuba by both Venezuela and China in one form or another (Frank, 2010c). In recent years Cuba has been importing about 80% of its annual food requirements and, despite having abundant land, the growing food deficit certainly attests to the need to remove the deep distortions in agricultural and land-use policy that beg for reform even after allowing for the large crop losses and damage resulting from the powerful hurricanes that struck the island in 2008.

On the export side of the trade account, the 2008-09 world financial and economic crisis hit Cuba hard as the price of Cuba's leading export, nickel, declined dramatically as a result of the economic recession. The revenues from Cuban nickel exports make-up 40 - 60% of total export revenues, depending on international nickel prices. This underscores the vulnerability of Cuba's hard currency earnings to the volatility of world economic activity levels in general, and commodity prices in particular. Hard currency earnings from increased tourism have also helped to mitigate the chronic trade deficits but this source of hard currency is also very sensitive to economic conditions, especially in the rich, developed world. Reported tourist visits to Cuba increased from 340,000 in 1990 to 2.3m in 2005 (Smith, 2008).

With regard to the various employment measures reported by the United Nations, unsurprisingly, Cuba's participation and employment rates for the 2000-09 intervals are consistently the highest in the region, and Cuba's urban unemployment rates, over the same time period, are, not unexpectedly, the lowest in the region. (Please see Tables A-15, A-16, and A-17 of (United Nations, 2009)). In the wake of the announcement in September 2010 by President Raúl Castro regarding the intention of the State to reduce public sector employment by 1 million people over the next five years, the Cuban employment measures are likely to begin resembling the more conventional rates characteristic of the region as a whole. Needless to say, the extent to which displaced public sector employees are absorbed into the private sector -- that would maintain the high employment ratios -- will no doubt depend on creating the appropriate legal, tax, regulatory, economic, and financial environment to attract private sector investment, from both domestic and foreign sources.

The Adoption of a Competitive Micro-Economic Environment

According to the World Bank (1991), improving the micro-economic foundation of the national economy includes, among other things, a substantial reduction in state ownership and management of productive assets, and the elimination of price distorting subsidies and taxes.

To better understand how and to what degree the micro-economic substructure of Cuba's economy became so disconnected from the most basic concepts that underpin a modern economic system -- maximizing national well-being by the efficient use of nation's stock of resources -- requires a look back at the promises made at the inception of the Cuban revolution by Fidel Castro in 1959: By signing on to his revolution Cubans would be guaranteed jobs, food, education, and health care, and heavily subsidized housing and transport. But 50 years on the reality of life in Cuba is somewhat different: 85% of the labor force (or 4.4m people) are employed in an increasingly dysfunctional and change-resistant public sector receiving an average monthly wage of US $20; there is an array of strict rationing of the most basic necessities of life including rice, eggs, chicken, fish, beans, sugar, soap, and tooth paste (The Economist, 2009b); there are serious and growing shortages in public transport; two or three generations of Cuban families are living in the same cramped apartment, there is an acute housing shortage of at least 500,000 units (Smith, 2008); and power shortages have led to the introduction of rationing of air-conditioning to five hours a day (The Economist, 2009b). In 2009, estimates indicate that 20% of the population is impoverished and 50% have been left behind (Frank, 2009c). Even Cuba's much-touted health care sector has not been spared: medicines are in short supply, and hospital patients must provide their own syringes, towels, and bed sheets (Stephens, 2010).

Needless to say, given the strict rations imposed on basic goods and services, in conjunction with the low average monthly wage, black markets, corruption, and bribes are flourishing, and everyone seems to have a "night job" to supplement salaries provided by State "day jobs". For example, the use of the Internet is restricted to government offices, so government workers rent out nighttime access for a fee (The Economist, 2008a).

Until recently, it was illegal to own a computer, a DVD player, a microwave oven, and even more basic appliances such as a toaster. Now that purchases of these appliances are legal, it is not clear where the money will come from to buy these products. Remittances from abroad of between US$ 500 million – US $1 billion a year make up some of the shortfall (The Economist, 2007a).

Given the above circumstances of daily life for the average Cuban citizen, official announcements to begin reforming the system that spawned these surreal distortions resulting in unnecessary hardships inflicted on the average Cuban citizen for more than half a century should be greeted by universal approval. But Cubans know better, and are suspicious of the very modest micro-economic reforms introduced to date since Fidel Castro stepped aside as president.

Raúl Castro, with a view toward providing incentives to increase domestic food output (which meets only about 20% of domestic food consumption), is gradually raising milk and meat prices paid to farmers and will provide more freedom for farmers to enable them to control their decisions on farm inputs, outputs, and land-use. That is, the government now recognizes that there is a great need to decentralize decision-making in the farm sector to raise agricultural productivity by reducing the role of the State in all matters of agricultural and land-use policy. By 2009 farmers were permitted to lease fallowed State land and buy their own tools -- such as shovels and boots -- but farmers complain that the State still has a monopoly over most of the critical farm inputs -- such as fertilizers and pesticides -- and agricultural distribution networks.

The official announcement, made in September 2010, that 20% of the State labor force -- about 1 million employees -- would be removed from the State's payroll over the next five years and transferred to the private sector, if actually implemented, virtually ensures that a major liberalization of the country's large retail sector that was nationalized in 1968 -- barber shops, cafeterias, bakeries, car repair services, restaurants, beauty parlors, etc. -- is the next stage in reducing the role of the State in the economy. It goes without saying that both the prices charged for the goods and services in this sector, along with the salaries and rents paid, will have to be market-based.

Shedding 20% of State employees, if realized, is, to be sure, the biggest step toward liberalizing the economy. The consequences of this policy are daunting for the "Cuban system": a likely short-term increase in unemployment, and growing wage (and income) inequality between the State and private sectors on the one hand, and the growing and stagnant sectors, on the other. Also, the success or failure of this major policy shift will depend heavily on the mix of incentives/disincentives that is finally adopted: tax rates, regulations, access to, and cost of, credit, and, over the longer term, on establishing an appropriate system of property rights to facilitate the purchase and sale of assets in order to encourage long-term investment (De Córdoba and Casey, 2010).

In addition to a gradual phase-out of subsidies on food, education, health care, housing, and transport, public sector wages too will have to increase, and so will taxes across the spectrum -- on income, sales, property, and to pay for social security.

Many critics of Cuba are still not convinced that the very modest reforms introduced by Raúl Castro so far are based entirely on conviction, rather than on expediency. That is, the reforms introduced to date are not really intended to address the deep-rooted inconsistencies in the Cuban economy, but rather, to take some of the pressure off the dire state of the public finances. Consequently, some see similarities between these reforms and some of the changes that were introduced, but later reversed, by Fidel Castro during the "special period" of austerity in the mid-1990s in response to the collapse of the Soviet Union and the elimination of the decades of automatic financial supports that accompanied the Cuban-Soviet alliance. From 1989-93, the Cuban economy contracted by 35%, and that led to the introduction of a package of reforms that included encouraging mass tourism, and opening up foreign investment in hotels, mining, telecoms, and oil exploration.

In addition, the government permitted farmers' markets to operate in order to supplement official rations, licensed (small scale) family businesses such as restaurants, legalized the use of the US dollar, and gave State companies more latitude to manage their businesses. However, once the largesse provided by Venezuela was in place, many of the changes introduced in the "special period" were reversed. For example, many of the licenses for small businesses were withdrawn, and other businesses were either regulated or taxed to death (Frank, 2010b).

Only time will tell if Cuba's so far modest reforms announced to date -- and their gradual implementation -- will trigger a real break with the past and lead to a dismantling of the State's iron grip on the economy or whether these announced reforms are being used to extract concessions from the international community.

Global Linkages

Adhesion of the national economy to the larger global economy is becoming indispensible to improving a nation's material well being. It is without doubt that the successful development model implemented by China over the last three decades is, in part, due to China's re-engagement with the world economy after decades of economic autarky. Consumers benefit from liberalized trade by having more choice of goods, often at lower prices and/or with higher quality. More competition faced by domestic producers from imported goods reduces domestic producers' pricing power, and provides crucial incentives to enhance efficiency and productivity. The prospects of higher exports (in part to pay for increased imports) raise both national employment and income.

Liberalization of the capital account, provided the domestic banking system is sufficiently strong, along with a unitary and market-based exchange rate, can confer benefits to both borrowers and investors alike. Lower interest rates for borrowers, and improved risk/reward tradeoffs for investors, as well as greater discipline on the public finances imposed by these open capital markets complement the benefits provided by a liberalized trade account. It is important to note that policy experts are still debating the cost/benefit calculus for developing countries of full capital account liberalization in light of the Asian financial crisis at the end of the 1990s and the financial meltdown in the US and Europe a decade later (Beattie, 2011).

Finally, providing a "state-of-the-art" legal, tax, and regulatory environment for foreign investment is critical for attracting and maintaining much-needed financial capital, new technology, and managerial talent for the national economy. For example, as a part of the new austerity measures instituted by the Cuban government in response to the need to conserve scarce hard currency to pay for food imports, many foreign business partners in Cuba were waiting months for permission to transfer abroad hundreds of millions of dollars in profits from joint ventures (The Economist, 2009c).

Because of the continuing poisoned US-Cuban relations, Cuban membership in regional organizations is limited to those organizations not subject to a US veto. For example, Cuba was expelled from the Organization of American States (OAS) in 1962, and will not be permitted to be rejoin it until Cuba satisfies the demands of the US -- which provides 60% of OAS funding -- that include permitting multi-party elections and allowing a free press (De Córdoba and Luhnow, 2009; Thompson, 2009). Cuba is similarly excluded from membership in the Inter-American Development Bank, and from (the now dormant) negotiations on the Free Trade of the Americas (FTAA) initiative. Cuba is not a member of the World Bank or of the International Monetary Fund but is a member of all the agencies of the United Nations, including the World Trade Organization. In addition, unsurprisingly, Cuba participates in the fledgling organization spearheaded by Venezuelan president, Hugo Chávez, the Alternativa Bolivariana para las Americas (ALBA) that is designed to be a counter-point to the US-sponsored FTAA.

With the recent removal of the ban on purchasing electronic goods such as television, cell phones, and DVDs, and on owning more modest household appliances such as microwave ovens and toasters, Cuba will need considerably more foreign exchange to pay for these imports. Consequently, Cuba has aggressively been looking for ways to attract foreign investment that will help increase hard currency receipts. These ventures include a partnership with Sherritt International, a Canadian mining company, to develop nickel and oil assets, and the Spanish hotel operator, Sol Melia, has opened a number of properties (Cohen, 2008).

The obstacles to attracting foreign investment are formidable: on the one hand, the Cuban government is trying to attract foreign companies without abandoning the "socialist model", and has been providing trade and investment preferences to key allies such as China and Venezuela. Some observers of Cuba believe the Cuban government would like to adopt a China-like model of foreign investment whereby Cuba grants market access for foreign capital and technology in exchange for only minority foreign ownership (O'Grady, 2007).

On the other hand, foreign investors have to jump through hoops to accommodate US trade and investment restrictions imposed by the US-imposed trade embargo. In anticipating an end to the US trade embargo, after two years of negotiations, in late 2007 Dubai Ports World, a partly state-owned company in the United Arab Emirates, agreed to invest $250m in upgrading the aging port in Mariel into a modern container facility that is due to open in 2012 (The Economist, 2007b).

Cuba's peculiar domestic dual-currency regime -- the Cuban peso, CUP, for which prices and wages are denominated in the domestic economy and a convertible peso, CUC, which is used in "hard currency" retail establishments -- has its provenance in the legalization in the use of the US dollar that was part of the government's response to the economic crisis in the 1990s that was spawned by the earlier collapse of the Soviet Union. By the end of the "special period" of austerity the ban on the use of the US dollar was reinstated, and the convertible peso, CUC, replaced the US dollar for all transactions between Cuban entities operating in hard currency, and also replaced the US dollar in all domestic hard currency retail outlets. In addition, there is a 10% surcharge when exchanging US dollars into CUCs.

Even though the "official" -- and fictional -- exchange rate is fixed at parity between the CUP and the CUC (as is the rate of 93 CUCs equal to a US dollar), the "unofficial" (though legal and more realistic) exchange rate for personal transactions is approximately 24 CUPs equal to 1 CUC (EIU, 2010). The social and political consequences of this dual-currency system are not negligible: it has impoverished hundreds of thousands of Cubans. The government pays salaries with nearly worthless CUPs that can be used to purchase heavily subsidized -- though tightly rationed -- monthly staples, while severely restricting the distribution of CUCs that can be used in the "hard currency" shops to purchase much sought after "luxury" goods such as shampoo, household appliances, and electronic goods, all at premium prices. As a result, Cuban society is being divided into "have's" and "have not's": Those who, by virtue of their job (or through some extra-legal way), have access to tourists (with hard currency that can be exchanged for CUCs) versus those being paid -- the overwhelming majority of Cubans -- in CUPs. Maintaining this detested dual-currency system has become one of the most glaring irritants of Cuba's failed economic system.

An Active Government Policy to Promote Social and Economic Investment

The last of the four World Bank "ingredients" to be included in a well-managed national economy that is ready to meet the challenges of -- and reap the benefits from -- the global economy of the 21st century is an active government policy that promotes social and economic investment, especially in the areas of health, education, and physical infrastructure, including transport, telecommunications, and energy.

In addition to guaranteeing basic nutritional needs and employment, the Cuban Revolution raised the provision of health care and education to almost mythical levels for Cubans. After years of emphasizing the universal provision of basic food needs and health care, Cuba's health statistics are comparable to those that characterize industrialized countries, especially in measures such as life expectancy and infant mortality (EIU, 2008).

Even though the economic crisis in the early 1990s adversely affected public health because of shortages in food, medicines, and equipment, with the recovery of the economy, caloric intake levels increased. In 2007, State spending on health was 12.5% of GDP, so the focus for assessing the program should be directed at the efficiency of the system, a subject that goes beyond the scope of this paper. (Similar questions can, and are, being raised regarding the celebrated -- and, in some instances, the much criticized -- US health care system). With an eventual lifting of the US trade embargo, Cuba has signaled interest in developing the potential for "health care tourism" as another source of critical foreign exchange in the future.

As recently as 2008 Cuba boasted the highest literacy level and the highest levels of educational attainment in Latin America (EIU, 2008). However, as in the case of the health care sector, the serious fiscal problems and the acute shortage of foreign exchange since the early 1990s resulted in a very visible deterioration in the condition of the education "physical plant" as funding for modernization and maintenance were drastically reduced. In addition, low wages for educational professionals (along with competition for labor in the higher paying tourism and informal sectors) resulted in a shortage of qualified teachers. In 2007 spending on education was estimated at 14% of GDP, an increase from 6.3% in 1998, and spending on education is expected to grow in the future as Cuba installs "state-of-the-art" information technology in its schools (EIU, 2008).

As was the case for the other "infrastructure goods", the Cuban road network suffered similar degrading during the economic depression of the early 1990s that resulted from the shortage in funds for road maintenance. Because of the (continuing) restrictions on private car ownership, automobile density rates and miles driven remain low by international standards. However, bus travel and the condition of the road network have improved measurably from 1998-2004 as a result of a joint venture with a Brazilian company, Busscar, and, more recently, thanks to Chinese financing that facilitated imports of Chinese buses, and funding that provided for road repairs.

Chinese and Venezuelan credits are playing a critical role in modernizing Cuba's rail sector, both track and rolling stock. The rail system fell into disrepair after the decline of the sugar industry, which was the major client of the Cuban railway. With financial support from Venezuela, Cuba is planning to modernize the system so that average rail speeds will triple over the current average of 34 km/hour (EIU, 2008).

With respect to Cuba's communications infrastructure, the chronic under-investment in telecommunications began to be addressed in 1994 as joint ventures were formed between the state telecoms provider and a Mexican, and later, an Italian company, leading to an improvement in service reliability. However, in 2007, telephone density was only 100 lines per 1000 population, half the average of the Latin American and Caribbean region (EIU, 2008). Cellular services were extended to individuals for personal use in 2003, but mobile subscriptions are low because bills must be settled in expensive CUCs (convertible pesos). Since 2009, US telecoms companies may invest in Cuba (Levine, 2009).

Since Cuba is not yet connected to an international cable link -- US legislation prohibits connection at the US end of the fiber-optic cable to Florida -- and the US has blocked a Cuban link to Jamaica, Cuba's international access is dependent on a limited-bandwidth satellite link. Ironically, this serves the interests of the government since without strong international linkages the government can continue to restrict Cubans' access to information other than that provided by the State-owned press. As was mentioned above, access to the Internet is still restricted to government offices, research and educational institutes, and enterprises. A <u>national</u> fiber-optic network was completed in 2004, and, again with the help of

Venezuela, there is a plan to lay a 1500 km cable to link Cuba with the rest of Latin America and the Caribbean (EIU, 2008).

Turning to Cuba's energy infrastructure, electricity is overwhelmingly generated from domestically produced (heavy crude) oil and from natural gas produced as a by-product of oil output. During the austerity years in the 1990s, a shortage of feedstock caused severe disruptions in the provision of adequate supplies of electricity. In 2006, Cuba launched an "energy revolution", the centerpiece of which was a much more decentralized network (with local generators and back-up facilities) to reduce dependence on a few large generating plants that were previously used as the core of the system (EIU, 2008). However, despite the fact that the grid modernization was financed, in part, by a substantial increase in electricity prices at the end of 2005, as recently as late 2009 Cuba was rationing air-conditioning to five hours a day (The Economist, 2009b).

CONCLUSION

Despite the "laundry list" of weaknesses in the Cuban model enumerated in Part 4, above, and the concession made last year by Fidel Castro, himself, that the Cuban model no longer worked, to date serious economic reform has remained elusive (Azel, 2011).

To be sure, Cuba is a small country in both geography and population, especially when contrasted with its behemoth neighbor 150km to the north. Nevertheless, Cuba does have "economic assets" that, if properly developed and managed, can be deployed for the purposes of increasing economic growth, employment, and living standards. Some of Cuba's strengths are "God-given", such as its nickel and potentially large offshore petroleum deposits. Some are "geographical", such as its proximity to the (still) richest consumer market in the world that can be served by a "state-of-the-art" container port, a modern liquefied natural gas terminal in Cubato, and a potentially "world-class" tourist "get-away" for millions of winter-weary northern hemisphere affluent consumers. And finally, some are anchored in the "human capital" of its population through the educational and medical services they can offer to developing countries.

However, under Cuba's current leadership and its ossified mindset with regard to human, political, and technological – that includes press and Internet -- freedoms, Cuba's continuing ostracism from regional, hemispheric, and in some cases, global institutions contributes to preventing Cuba from "unlocking" its valuable assets -- including the large and successful Cuban Diaspora in the US -- for the benefit of all the Cuban people.

It is important to note for the purposes of context that there are many "small" countries in the world that are vulnerable to the pressures of large, powerful, and, often, aggressive neighbors. Examples abound: Uruguay, wedged between Brazil and Argentina; Finland and the Baltic States, historically exposed to the seemingly unbounded expansionary designs of Russia; as well as some of the "small" Asian countries such as Nepal, lodged between China and India. Somehow, some way, most of them have found a "modus operandi" to live with their oversized -- and often oppressive -- neighbors, something that the Cuban leadership, to date, has been either unwilling or unable to do.

Because of the Castros' long-lived personal animosity toward the US, Cuba has consistently (and disastrously) been forced to "depend on the kindness of strangers", first the Russians, then the Venezuelans, and, most recently, the Chinese, to provide for the shortfall in the basic ingredients of living standards – food and energy – and financial credits.

To conclude, over the last half-century geopolitical alignments, technology, human rights norms, and financial conditions have all undergone profound change throughout the world. As this paper has argued, one of the few countries still frozen in the mindset of another age is Cuba. It appears that in order to unlock the country's considerable physical and human assets, first the "curtain will have to fall" on the Castro era.

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Entrepreneurial Marketing: A Framework for Creating Opportunity with Competitive Angles

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Recognizing market opportunities and then developing responsive marketing strategies and tactics are critical for any enterprise. Entrepreneurs, in particular, continually search for and seek to develop opportunities in the marketplace. We present a framework for opportunity recognition and marketing strategy development, designed to integrate marketing theory and practice.

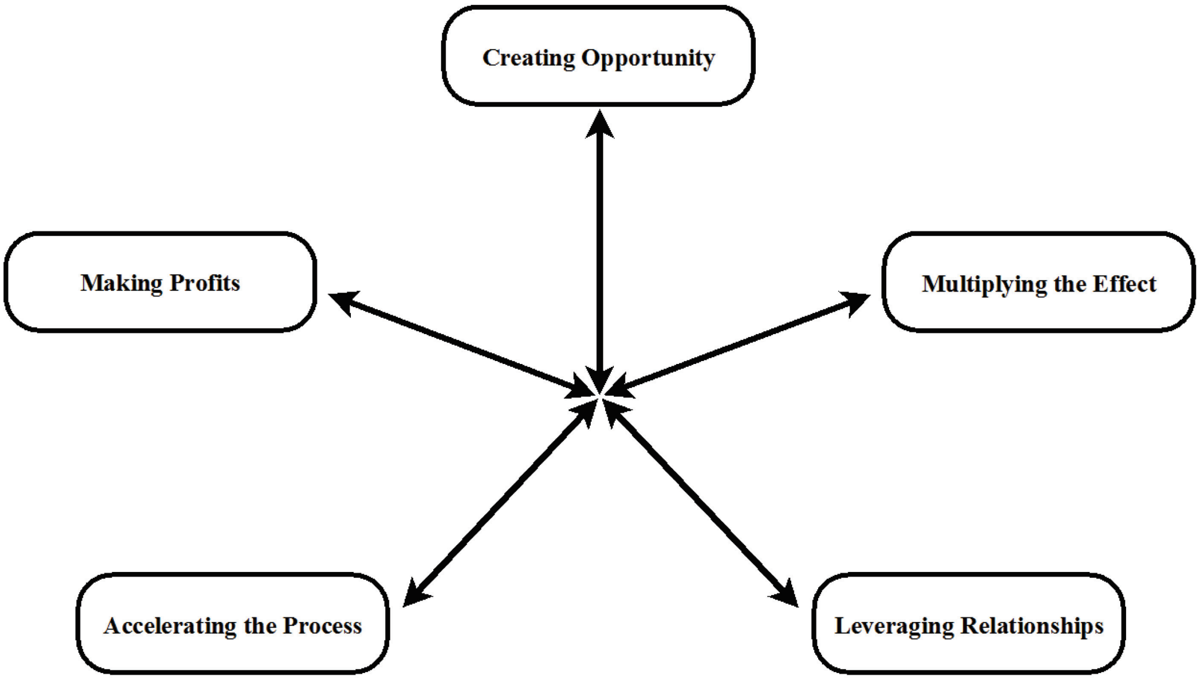
INTRODUCTION

In recent years, the search for entrepreneurial relevance in business schools has been given additional impetus. Entrepreneurs complain that business schools often fail to meet their needs. Their major concern is that the traditional marketing strategies and tactics of Fortune 500 companies simply don't work for start-up companies. Because of this, entrepreneurs have given additional stimulus to the search for managerial relevance in business schools. The purpose of our paper is to present a framework for opportunity recognition and marketing strategy development, designed for entrepreneurs.

The framework for opportunity recognition and marketing strategy evolves from the relevant marketing literature, from field interviews and observations that identify best marketing practices of successful entrepreneurs as well as pitfalls of startup failures. This research initiates a process of identifying and categorizing various approaches, techniques, tactics, and methods that might be useful in guiding entrepreneurs in recognizing market opportunities and then developing responsive marketing strategies. Furthermore, the classification framework provides a means of organizing strategic decision-making activities into groups that are amenable to systematic investigation.

The basic premise of the framework is that information about the marketplace has value to entrepreneurs in competitive markets. The resulting framework, delineated in Figure 1, presents a systematic approach to evaluate and execute entrepreneurial marketing: (1) creating opportunity; (2) multiplying the effect; (3) leveraging relationships; (4) accelerating the process; (5) making profits. The framework has been tested with graduate and undergraduate business students, would-be entrepreneurs, and practicing entrepreneurs.

FIGURE 1
ENTREPRENEURIAL MARKETING FRAMEWORK



CREATING OPPORTUNITY—COMPETITIVE ANGLES

Opportunities are hard to spot because, often, they look like simple tactics or angles. For startups, the choice of competitive angle is what really determines winners and losers. Successful products and services have competitive angles. The first test in evaluating a business idea or opportunity is to look for the competitive angle. We define a competitive angle by its components. A competitive angle has five facets, dimensions or qualities. These are (1) need to believe, (2) reason to believe, (3) blows away expectations, (4) quantifiable support, and (5) unique product claim (Rhoads, Swenson, and Whitlark, 2010).

Need to Believe

First, is there a need to believe? Is there enough pain (or pleasure) to make people really want to purchase the product? If there is no need or problem (opportunity) for consumers, then there is no solution, and with no solution, there is no company. So, the first facet of identifying a competitive angle is to understand the consumers' need to believe that there is enough pain (pleasure) to motivate them to purchase the new product.

Reason to Believe

The desire to believe that there is a better product to ease pain or increase pleasure is a powerful force. This leads to the next element of a competitive angle—reason to believe. Does the product touch the human sense of believability? That is, will consumers "believe" that the product can deliver on its claims? Said another way, is there reason to believe that the product will deliver value to consumers?

Blows Away Expectations

The next facet of competitive angle is "blows away expectations." Does the product's uniqueness actually meet or exceed expectations? To blow away or exceed what people think a product is capable of doing, entrepreneurs must resist human nature to go after the entire market. Instead, entrepreneurs should focus on particular buyers in a specific usage situation and then dominate the situation.

Quantifiable Support

A related element to "desire to believe" is quantifiable support. What facts and figures enhance the product's claims? What is the quantifiable support for product distinctions? This is a must for the analytical buyer and for risky, big-ticket purchases.

Unique Product Claim

Finally, does the product have a unique claim? What is it that gets people "fired up" and passionate about a product? What really is unique about the product? Certainly many, if not all, entrepreneurs claim that their product is unique? Indeed, marketers have long been advised to differentiate their product offerings from competitors' products, that is, show that the product is distinct or different on one or more dimensions. Competitive advantage is a company's ability to perform on dimensions that customers value and competitors cannot or will not match. Delivering value, on a unique claim, leads to repeat purchases and ultimately profitability (Barwise, 2004).

So, knowing and understanding the competitive angle are the first steps in creating opportunity. Without an angle, there is no opportunity. These facets or components make up a litmus test for competitive angle:

1. Need to believe—It addresses pain!
2. Reason to believe—I know it works!
3. Blows away expectations—I get real value!
4. Quantifiable support—Value is measured!
5. Unique product claim—It all adds up to a unique product claim that creates passion!

MULTIPLYING THE EFFECT

For entrepreneurs, the notion of the multiplying effect is to identify and partner with people who have a significant influence over the target market and who can catapult the entrepreneur's idea to the forefront. Certainly, entrepreneurs have two generic choices about how to grow and develop the business. They can do it on their own or they can solicit help from others. The age-old adage of "If you want something done right, do it yourself" has two qualifiers: (1) only if you can do it well, and (2) only if you have the bandwidth and energy to do it well. Many entrepreneurs try, at first, to do it on their own. They want complete control of market research, product design, finance, accounting, production, marketing, sales, distribution, etc. Some can do it all, many cannot. Our experience as researchers, marketers, and entrepreneurs suggests that finding the right people to help grow the business is an important determinant of success for entrepreneurs. This is particularly true in the marketing function.

An entrepreneur increases the probability of success when he/she connects with people who are connected to and have influence over the target market (e.g., Gladwell, 2002). Such connections provide introductions and recommendations that lend credibility to the entrepreneur and to his/her product offering (e.g., Heiman and Sanchez, 1987).

LEVERAGING RELATIONSHIPS

Leveraging relationships with advisors, suppliers, and customers has the potential to increase business success. Entrepreneurs are counseled to find company advisors as soon as possible to save time, frustration, and headaches in the early stages (Lusk and Harrison, 2002). Advisors with experience and knowledge may provide strategic and tactical guidance. Furthermore, entrepreneurs should leverage advisors' experience and connections to create a network of capabilities and counsel, attract supportive investors, and craft a successful company image.

Early adopter customers keep the new venture going and provide a platform for growth. They can demonstrate the value of the entrepreneur's product offering and reassure the market that the product works—reason to believe. Moreover, they highlight specific usage situations for potential customers. With reference customers, the entrepreneur builds credibility within the target market and increases the rate of sales or customer acquisition and significantly decreases the sales cycle time (Rhoads, Swenson, and Whitlark, 2010). Furthermore, these early adopter customers may provide funding for the startup because of the value they derive from the product offerings.

New businesses need evangelists to spread the message—the good news about the company and products. Of course the ultimate credibility source is customer to customer or customer to new prospect. Entrepreneurs can leverage these relationships so that customers buy more and customers sell products to each other and to new prospects. The objective is to connect customers with other customers and with new prospects, in person or in virtual mode, to learn, share, enjoy and celebrate personal connections to the company and products (Rhoads, Swenson, and Whitlark, 2010). Entrepreneurs do this with owners' groups, marketing events, classes, BLOGS, and any other activity or event that brings customers together.

ACCELERATING THE PROCESS

To accelerate the process, entrepreneurs must target their efforts and resources and drive the market. There are a number of ways to segment a market into manageable chunks. The mainstream marketing textbooks promote the usual dividing lines separating groups of people. Things like demographics, psychographics, lifestyles, benefits sought, product usage, etc. Our favorite segmentation approach, however, is borrowed from politics. Political strategists and candidates look at the world and their task in very simple terms. Voters are separated into three groups—Pro, Swing, and Anti. Just to make things a little more interesting, we refer to the groups as Love, Swing, and Hate. A key step in accelerating the process is to discover what the Love Group loves about the product and take this message to the undecided or to the Swing Group. We call this selling to the Swing Group through the eyes of the Love Group.

We frequently ask marketing managers, "Who is in your Love Group?" We rarely receive a satisfactory answer, however. The fact is that most companies can't identify who faithfully purchases their products beyond offering up a few demographics like average age, gender split, and regional sales percentages. Entrepreneurs can't afford to be that cavalier. The Love Group is their lifeblood. Just like a political candidate, entrepreneurs must know and retain their Love Group while at the same time help the fence sitters see their product through the eyes of the Love Group. Entrepreneurs don't need 50 percent of the popular vote to succeed, but nevertheless need a strong core audience that they thoroughly understand. By thoroughly understand, we are talking about drawing together a customer profile that looks more like a Mona Lisa than a stick figure. What do customers look like, how do they express themselves, what do they read and watch, where do they live, what vehicles do they drive, what are their hopes and aspirations, and most important, which of our product features and benefits really get them going?

Entrepreneurs like the simple Love-Swing-Hate approach to attacking the marketplace, but often point out that their new products, many of which are just in the idea stage, don't have a Love Group. They raise an important point and put themselves on the threshold of discovering what really sets a successful entrepreneur apart from a frustrated, would-be entrepreneur. Successful entrepreneurs don't expect their Love Group to find them; they aggressively seek out their Love Group. "Build it and they will come," rarely works in today's world of information overload and product proliferation. Realizing we don't have a Love Group is the first step in beginning to prospect to find a Love Group.

There are many ways to prospect for a Love Group, but we suggest bringing eight to twelve people together that should benefit from the new product, feed them pizza, and solicit their impressions. After explaining the product concept, the researcher asks questions like, "Who would love this product; what would they love about it; where and how would they use it?" Or if a little more adventuresome, the researcher might hand out some paper and crayons and ask everyone to draw a picture of someone really loving the product. Then as people show off their artwork, the researcher may ask questions like, "Who are they; what are they doing; why are they so happy?" Listening and noting the responses, but more importantly observing the participants and looking for those few who are completely engaged and articulate, enables the researcher to build the Love Group. We have observed that about three to five prospecting sessions are needed to identify and understand the Love Group.

To accelerate, we advise entrepreneurs to carve out new space in the market by chasing and driving customers, not competitors. Drive the market. This means reinventing the marketing concept. Most companies know the marketing concept is to (1) analyze the stated needs of customers and (2) make decisions to satisfy those stated needs, and (3) do it better than the competition. However, "too many companies are expending enormous energy simply to reproduce the cost and quality advantages their global competitors already enjoy. Imitation may be the sincerest form of flattery, but it will not lead to competitive revitalization" (Hamel and Prahalad, 2005, p.148). To be successful, the reinvented marketing concept is the philosophy that firms should (1) analyze the latent needs of customers and then (2) make decisions to satisfy those latent needs with their own strengths, and (3) create new market space (Rhoads, Swenson, and Whitlark, 2010). Latent needs are needs the customer does not state explicitly. Latent needs must be discovered by careful observation of customer behaviors to identify customer problems and opportunities and the possible solutions. Accordingly, "the strategist's goal is not to find a niche within the existing industry space, but to create a space that is uniquely suited to the company's own strengths—space that is off the map" (Hamel and Prahalad, 2005, p.157). Additional research in new product development underscores this point. "For if in developing its new products a business relies solely on what customers state as their new product needs, the business is very vulnerable economically. Such a business is vulnerable not only for relying on customers' best guesses for new products…but also to competitor's parallel new product responses and the inevitable resulting price competition. A business that relies solely on customers' expressed needs to develop its new products creates no new insights into value-added opportunities for the customer and thereby creates little or no customer dependence and foundation for customer loyalty" (Narver, Slater, and MacLachlan, 2004, p.334). As a result, entrepreneurs must do more that merely listen to customers stated or expressed needs. To stay ahead of the competition, entrepreneurs should discover and satisfy customers' latent needs.

MAKING PROFITS

To drive profits, successful entrepreneurs get products and ideas out quickly, involve early-adopting customers, identify specific buying and usage situations, tap into revenue streams that complement core products, and learn to sell.

Most new products fail. Starting with the Booz Allen Hamilton study in the 1980s, research shows again and again that new products have about a one in ten chance of success (Booz Allen Hamilton, 1980). We are not alarmed by the low percent of success. There is a lot of failure in the marketplace, but there also is a lot of success.

Entrepreneurs cannot afford to spend years perfecting a product idea. To identify a winner, they need to get the ideas out quickly and involve early-adopting customers in the design process. We admit the thought of putting out a less-than-perfect product is painful, but the prospect of never striking gold, when gold is all around us, is even more painful.

Perfect products don't guarantee entrepreneurial success. Combining a good product with the right angle or high-value application is more important than finding absolute perfection out of the starting gate. Most customers, particularly early adopters, are surprisingly forgiving when a fresh idea appears to have real merit.

Successful entrepreneurs often turn good ideas into great ideas by fine-tuning the details to address a specific usage situation. They find a situation to dominate. By understanding the usage situation, the entrepreneur can easily understand needs, wants, and how to deliver value. Consumers look for products and make purchase decisions based on situational needs not according to some demographic profile. The best marketing approaches usually are an outgrowth of understanding the customer and the usage situation triggering the customer's need to purchase. Understanding the buying and usage situations can lead to ideas about augmented products that complement the core product, provide additional revenue streams, and afford new profit pools for the entrepreneurial venture (Gadiesh and Gilbert, 1998).

An interesting study by the Harvard Business School (Bhid, 1998) examined, among other things, the determinants of success for entrepreneurs. The sample included 87 Harvard Business School entrepreneurs and 100 entrepreneurs from the Inc. 500 companies. One of the key findings from the study and recommendations to entrepreneurs is: learn to sell. "The data suggest that face-to-face selling is a crucial skill: for most ventures to have any chance of success the entrepreneur has to be able to call on a customer and secure an order for a product or service" (Bhid, 1998, p.4). So, entrepreneurs must learn to sell or find someone who can sell for them.

Calling on a customer and securing an order means selling. It means asking the right questions and listening to customers to understand their needs and wants. It means matching the benefits of the product offering to the needs and wants of the customer. It means getting commitment from the customer for the order—closing the deal. It means delivering on commitments. It means meeting, even exceeding, customer expectations. Successful entrepreneurs know how to sell. They know how to close.

DISCUSSION

At this stage we are not claiming that our framework is complete. Our purpose is to initiate a process of identifying and categorizing various approaches, techniques, and methods that might be useful in guiding entrepreneurs in recognizing market opportunities and then developing responsive marketing strategies. Furthermore, the classification framework provides a means for organizing strategic decision-making activities into groups that are amenable to systematic investigation.

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Corporate Expenditures in Support of, or Against Political Candidates: Has the Legal Landscape Changed After the BCRA and *Citizens United*

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With the 2002 passage of the McCain-Feingold Campaign Finance Law, Congress made political speech a felony for one class of speakers – corporations and unions. Corporations and unions were now prohibited from spending their own funds in support of or against candidates for political office. Opponents of the law believed it was incompatible with the First Amendment. In 2010, the U.S. Supreme Court weighed in the issue in Citizens United v. Federal Elections Commission. This decision has unleashed a myriad of questions and concerns about what is allowed in the area of corporate involvement in the political process.

INTRODUCTION

The public's ability to participate in the discussion and debate about the character and fitness of candidates for political office is at the core of the First Amendment's prohibition that, "Congress shall make no law…abridging the Freedom of Speech" (U.S. Const., amend I). The public is comprised not just of individuals, but also of associations and groups of individuals, including corporations and unions. Since free speech applies to all citizens regardless of form, outlawing political speech based on the identity of the speaker would appear to be as unconstitutional as if speech in general were banned. Despite this fundamental principle, in November 2002, Congress made political speech a felony for one class of speakers – corporations and unions. The passage of the Bipartisan Campaign Reform Act ("McCain Feingold law") meant corporations and unions could face monetary penalties and up to five years in prison for speaking in support of or against candidates for political office.

According to many campaign finance critics, one of the great political evils is the apparent hold on political parties which business interests and certain organizations seek and sometimes obtain by reason of liberal campaign contributions (Potter, 2002). Many of these observers believe that when an individual or association of individuals makes large contributions to candidates of political parties, they expect, and sometimes demand, and occasionally receive, consideration by the candidate or political party, which on occasion is harmful to the interests of the general public. As a result, the McCain-Feingold law was initially believed to be a critical component to solving the perceived problem of excessive corporate political influence.

On January 10, 2010, the United States Supreme Court addressed this collision in *Citizens United v. Federal Elections Commission*. In one of the most controversial decisions in decades, the Supreme Court, in *Citizens United*, invalidated the portions of the McCain-Feingold law that dealt directly with corporate expenditures in support of political candidates. This decision set off an eruption of political debate and fierce partisanship (Barnes, 2010). Some legal scholars and journalists called the decision "wrongheaded" and claimed the decision was made in "bad faith" (Dworkin, 2010). Still others characterized Justice Kennedy's majority opinion as "more like the ranting of a right-wing talk show host than the rational view of a justice with a sense of political realism" (Hansen, 2010). The *New York Times*, in several editorials, blasted the Court and called the decision "disastrous," "terrible," and "reckless." In fact, the decision sparked so much controversy that President Obama "called out" the Court and specifically referred to *Citizens United* during his State of the Union Address in January 2009. According to President Obama, "the Supreme Court reversed a century of law that I believe will open the floodgates for special interests – including foreign corporations – to spend without limit in our elections. I don't think American elections should be bankrolled by America's most powerful interests, or worse, by foreign entities…" (Obama, 2010).

The Court's decision in *Citizens United* unleashed a torrential wave of criticism from the media along with raising new questions and concerns from corporations who were unsure about how this decision impacted the rules governing the area of corporate expenditures and it left many companies afraid to run afoul of the law since there are criminal penalties at stake. Businesses are afraid to use their funds in support of candidates since they are unsure what, if anything, the Court invalidated and what restrictions remain in place when it comes to corporations expending their own funds in support of political parties and/or campaigns.

In order to effectively analyze the impact of the Court's holding in this controversial 5-4 decision, this article will discuss the case law and regulatory history of campaign finance law in the United States over the past one-hundred years. Next, it will look at the campaign finance law at issue in *Citizens United* (the McCain-Feingold law) and some of its critical components, along with the background and holding of the *Citizens United* case and some of its practical implications. Finally, it will examine some lesser-discussed aspects of the decision as well as the issues that have been misinterpreted by the media.

THE MCCAIN-FEINGOLD CAMPAIGN FINANCE REFORM LAW

In 2002, Congress passed the Bipartisan Campaign Reform Act ("BCRA"), otherwise known as the McCain-Feingold Act. The McCain-Feingold Act was one of the most far-reaching overhauls of campaign finance law since the 1970's and in broad terms, it banned unlimited corporate donations to national political party committees, put limitations on advertising by organizations not affiliated with parties, and banned the use of corporate and union money for "electioneering communications" – ads that name a federal candidate – within 30 days of a primary election or 60 days of a general election. The sponsor of the bill, John McCain, stated that the BCRA,

> "…seeks to reform the way we finance campaigns for federal office in three major ways. First, BCRA prohibits the national political parties from raising or spending "soft money" (large contributions, often from corporations or labor unions, not permitted in federal elections), and it generally bans state parties from using soft money to finance federal election campaign activity. Second, it increases the hard money contribution limits set by the 1974 amendments to the Federal Election Campaign Act ("FECA"). Finally, the new law prohibits corporations and unions from using soft money to finance broadcast campaign ads close to federal elections (though corporations and unions can finance these ads with hard money through their political action committees), and it requires individuals and unincorporated groups to disclose their spending on these ads. The law represents the most comprehensive congressional reform of our federal campaign finance system since FECA was enacted and amended in the 1970s" (McCain, 2002, p.1017).

By passing the BCRA, Congress was hoping to stop the unregulated flow of soft money and return the world of campaign finance regulation to its pre-Watergate position where there were defined prohibitions and limits on contributions to political parties. The BCRA was the end result of a protracted six-year legislative and political struggle; however, as President Bush was signing the bill into law, the first wave of more than a dozen lawsuits challenging its constitutionality were already crashing upon the Supreme Court's shores. Since the BCRA's enactment, the Supreme Court has heard several cases addressing various campaign finance issues regulated therein, but none of these cases have been as controversial or had the impact on campaign finance law as *Citizens United*.

The specific BCRA provisions at issue in *Citizens United* were sections 201, 203 and 311, all of which served as amendments to the Federal Election Campaign Act of 1971 ("FECA"). Section 203 of BCRA regulates using corporate funds for "electioneering communications." In general, an electioneering communication was identified as a "broadcast, cable, or satellite" communications made within 60 days of a general election or 30 days of a primary election. Section 203 continues by restricting corporations and labor unions from funding electioneering communications from their general funds except under certain specific circumstances, such as get-out-the-vote campaigns. Even though certain types of "electioneering communications" are permissible, they are subject to BCRA's disclosure and disclaimer requirements that are delineated under sections 201 and 311.

Section 201 of BCRA contains a donor disclosure provision for electioneering communications. Persons who disburse an aggregate of $10,000 or more a year for the production and airing of electioneering communications are required to file a statement with the Federal Election Commission (FEC). The statement must include the names and addresses of persons who have contributed in excess of $1,000 to accounts funding the communication.

BCRA's section 311 contains a disclaimer provision for electioneering communications. If the candidate or the candidate's political committee did not authorize the electioneering communication at issue, then the organization responsible for the communication must disclosure that the organization is responsible for the content of this advertising.

CITIZENS UNITED & *HILLARY: THE MOVIE*

Citizens United is a non-profit corporation with an annual budget of about $12 million. The corporation acquires the majority of these funds via donations from individuals; however, it receives donations from for-profit corporations as well. In January 2008, Citizens United released a 90-minute documentary examining the record, policies, and character of the then-Presidential Democrat primary candidate Hillary Clinton. The documentary, called *Hillary: The Movie*, examined Hillary Clinton's political background in a critical light and mainly focused on "five aspects of Hillary's political career: (1) the firing of certain White House staff during her husband's presidency, (2) retaliation against a woman who accused her husband of sexual harassment, (3) violations of finance restrictions during her Senate campaign, (4) her husband's abuse of presidential pardon power, and (5) her record on various political issues" (Harmon, A. 2009). The film was to be released in theaters and on DVD; however, Citizens United desired a broader distribution and arranged to have the movie broadcast on cable through video-on-demand.

Since the documentary was to be broadcast during Clinton's presidential primary campaign, Citizens United was aware that its movie and advertising might be considered electioneering communications and would be subject to BCRA's sections 201, 203 and 311. As a preemptive strike, Citizens United sought an injunction to block the FEC from enforcing those sections on the grounds they violated the First Amendment to the U.S. Constitution. To Citizens United's disappointment, the broadcast was banned when the Federal Elections Commission declared that the broadcast would violate various provisions of the BCRA. Since the BCRA's drafters anticipated the likelihood of lawsuits questioning its validity, it contains a provision that specifically addresses constitutional challenges to its various prohibitions. This provision requires that these claims be brought before a three-judge panel of the United States District Court for the District of Columbia. Appeals from this court go directly to the United States Supreme Court. As a result of these jurisdictional restrictions, Citizens United went to the District Court for injunctive relief but its application was denied. Citizens United immediately appealed to the Supreme Court.

When analyzing the numerous arguments presented in *Citizens United*, the Court determined that "in the exercise of judicial responsibility," it needed to examine the validity of the BCRA on its face, and not on the narrower grounds suggested by the litigants and the holdings of earlier decisions, because to do so would lead to further litigation and, in the interim, political speech would be chilled (Citizens United, 130 S. Ct. at 888-94). The Court rejected Citizens United's as-applied challenges based on the finding that the documentary *Hillary The Movie* was the functional equivalent of express advocacy because it was essentially a "feature-length negative advertisement that urged viewers to vote against Senator Clinton for President" (Id. at 889-90). The Court further rejected the contention that it should create an as-applied exception for documentary films because to do so would require it to redraw constitutional lines for different types of media, which could have the unintended result of chilling political speech.

The Court correctly noted that if it applied the test established in *Austin* (the anti-distortion test), instead of examining the statute on its face, it could "produce the dangerous, and unacceptable, consequence" of banning political speech emanating from media corporations (Id. at 789). While noting that media corporations were technically exempt from the corporate expenditure ban set forth in section 441b, the Court observed that media corporations also accumulate immense wealth with the help of the corporate form and that "the views expressed by media corporations often 'have little or no correlation to the public's support' for those views" (Id. at 790). As the Court went on to observe, the "line between the media and others who wish to comment on political and social issues has become far more blurred" with the advent of the Internet, blogs, and cable television, and the decline of traditional print and broadcast media (Id. at 905-06). Within the context of this dilemma, the Court recognized that making distinctions between media corporations and non-media corporations would be difficult at best. Analyzing the statute on case-by-case basis could have the unfortunate result of exempting a corporation that owns both media and non-media businesses, while simultaneously, a wholly non-media corporation could be forbidden to speak even though it may have the same interests. Such a result cannot be squared with the First Amendment.

Last, after the Court examined the morass of existing legislation, FEC advisory opinions, explanations and justifications, and FEC regulations governing the universe of campaign finance, it concluded that the existing complicated regulatory scheme acted as a prior restraint on speech in the harshest of terms. As such, the Court determined that the proper adjudication required it to finally consider the facial validity of section 441b of the BCRA, and whether courts should continue to adhere to *Austin* and the relevant portion of *McConnell*.

The First Amendment provides that, "Congress shall make no law…abridging the freedom of speech" (U.S. Const., amend I). It is undisputable that free speech is an "essential mechanism of democracy" because one of its many benefits is that it affords citizens the opportunity to hold their elected officials accountable (Citizens United, 130 S. Ct. at 898). As such, the "*First Amendment* 'has its fullest and most urgent application' to speech uttered during a campaign for political office" (Id.). The Supreme Court has already recognized that the "discussion of public issues and debate on the qualifications of candidates are integral to the operation of the system of government established by our Constitution" (Buckley, 424 U.S. at 14). Thus, in this context, if the First Amendment is to mean anything, it must mean that the government is not permitted to fine or imprison citizens or associations of citizens merely for engaging in political speech.

Recognizing the above to be true, it is a natural progression to hold that political speech must be protected from laws that are designed to either intentionally suppress it, or do so inadvertently. For it is political speech, emanating from diverse sources, that provides the voters with some of the information necessary to decide which candidates to support. Every first-year law student learns that laws that burden speech, even political speech, will be subject to "strict scrutiny" review by the Court. In order to successfully make it past this review the government will be required demonstrate that the law "furthers a compelling interest and is narrowly tailored" to promote that interest (Wisconsin Right to Life, Inc. v. Federal Election Commission, 546 U.S. 410 (2006)). In *Citizens United*, the Supreme Court recognized that on rare occasions it has upheld a narrow class of speech restrictions that do infringe on a speaker's First Amendment rights; however, in all these cases, the Court found a compelling governmental interest.

The Court did not find a compelling interest in *Citizens United*. Justice Kennedy observed that the Court has a long history of holding that corporations are entitled to the rights recognized under the First Amendment. These rights include political speech. First Amendment protections do not vanish merely because the speaker is a corporation. As the Court correctly recognized, "speech restrictions based on the identity of the speaker are all too often simply a means to control content" (Citizens United, 130 S. Ct. at 899). "The concept that the government may restrict the speech of some elements of our society in order to enhance the relative voice of others is wholly foreign to the First Amendment" (Automobile Workers, 352 U.S. at 597). Here, the Court recognized that the FEC set in place a complicated process whereby it, and it alone, would select what political speech is safe for dissemination to the public, and in so deciding, it employed a series of subjective and ambiguous tests. Such a scheme would act as a prior restraint and an unprecedented governmental intrusion on the right to speak, the likes of which cannot be sustained.

By taking the right to speak from some and giving it to others, the Government deprives the disadvantaged person or class of the right to use speech to strive to establish worth, standing, and respect for the speaker's voice. "The Government may not by these means deprive the public of the right and privilege to determine for itself what speech and speakers are worthy of consideration" (Citizens United, 130 S. Ct. at 899). Moreover, the Court recognized that upholding the statute and allowing the government to ban corporations from engaging in political speech could result in suppression of speech in other media such as books, blogs, or social networking websites. The government's interest in leveling the political influence playing field between individuals and corporations was unconvincing when one considers that a "mere 24 individuals contributed an astounding total of $142 million" during the 2008 election (Id. at 908). Simultaneously, other like-minded citizens who have organized under the corporate form were prohibited from having their voices heard. The Court rightly concluded that the First Amendment is part of the foundation for the freedom to exchange ideas, and the public must be able to use all kinds of forums to share those ideas without fear of governmental reprisal.

CAMPAIGN FINANCE LEGAL LANDSCAPE POST-*CITIZENS UNITED*

As mentioned at the outset of this article, *Citizens United* caused an eruption of criticism about the holding's impact on the world of campaign finance and the potential corruptive influence of corporations and unions on the political process. Critics of the decision should take some comfort in the reality that *Citizens United* will likely have less of a negative impact, if at all, than originally feared.

First, while some early supporters of the BCRA touted that its provisions barred corporations and unions from funding political ads, in reality, the BCRA merely required that corporations and unions finance the ads through their PACs or similar voluntarily financed segregated funds. PAC's were exempted under the BCRA, and even though they were complicated to create and manage, they did afford corporations a forum to participate in the political process. So, as long as corporations and unions collected campaign funds from their members with the member's informed consent, these entities could continue to influence elections and some experts even expected the number of ads to increase after the passage of the BCRA. Moreover, even though corporations and unions are no longer prohibited from engaging in independent expenditures in support of or against political candidates, their participation in elections remains highly regulated. For example, direct contributions by corporations and unions are still prohibited under federal law and under the laws of 24 states. A corporation or union still cannot donate corporate money directly to, or coordinate their political spending with, candidates for political office. The laws requiring specific notices or disclaimers on political advertising remains untouched by *Citizens United*. There is still a myriad of disclosure laws governing independent expenditures and electioneering communications on the part of corporations and unions. Thus, even if a corporation or union were to independently expend funds in support of a candidate, money that is donated to the corporation for the purpose of financing said expenditures would be subject to the disclosure laws. And last, despite President Obama's declaration that foreign entities will now have greater influence on American elections, foreign corporations and their subsidiaries are still subject to the existing spending bans.

What has not been widely discussed is that *Citizens United* has spawned a new wave of litigation concerning several other aspects of the BCRA. For example, two federal courts issued campaign finance law decisions in the spring of 2010 that can trace their origins back to *Citizens United*. In *SpeechNow.Org v. FEC*, the D.C. Circuit Court of Appeals was asked to weigh in on the constitutionality of the BCRA's contribution limitations and disclosure requirements as applied to contributions to a PAC. The court held that, since the expenditures themselves do not corrupt, it should follow that; contributions to groups that plan to make those expenditures will not lead to corruption either. But this unfettered right to donate to a group like SpeechNow does not extend to the right to donate to an actual political party. As such, "under current law, outside groups – unlike candidates and political parties – may receive unlimited donations to both advocate in favor of political candidates and to sponsor issue ads" (Republican National Committee v. Federal Election Commission, 698 F. Supp. 2d 150 (D.C.D.C. 2010)). This particular dilemma was raised in the second case – *Republican National Committee v. FEC*. In the *Republican National Committee* case, the RNC challenged the BCRA's soft-money ban claiming that it had the right to raise and spend unlimited amounts of money on all kinds of election-related issues and that the ban discriminates against the national political parties. The court held that plaintiffs' claims were at odds with the Supreme Court's holding in *McConnell* and that the Court's recent decision in *Citizens United* did not disturb the part of *McConnell's* holding that addressed the constitutionality of BCRA's limits on contributions to political parties.

There are also several new issues that have been raised as a result of the holding in *Citizens United*. When President Obama "dressed down" the Supreme Court in his State of the Union address in 2009, he, along with other critics conveniently failed to mention the group that benefitted the most from the decision – labor unions. Skeptics could argue that this is because nine out of ten dollars spent on elections by unions goes to the Democrats – Obama's party. It is interesting that the majority of the criticism of *Citizens United* comes from the political left, and while they lament the decision's impact as it relates to corporations, those same critics often fail to mention the impact on union participation in the electoral process. Unions admittedly spent approximately one half billion dollars in the 2008 election, a figure that dwarfs the spending of corporations.

In addition, while critics of the decision claim the majority "piously claim it's about free speech," they have sat silent, or in some cases applauded, as the Supreme Court relies on First Amendment jurisprudence in cases about Internet pornography, flag burning, topless dancing, cross-burning, and even the creation, sale, or possession of films depicting animal torture for purposes of sexual arousal. To hold that such conduct described in these cases is worthy of constitutional protection, yet simultaneously support the idea that a corporation that expends its funds in support of a political candidate should be exposed to criminal liability seems irreconcilable. Last, while political pundits and scholars have criticized the ability of corporations to use their vast wealth to allegedly influence elections, they rarely express the same concern for the sudden rise of wealthy individuals who are using their own millions to either buy an elected position for themselves or use it to influence the outcome of others. Recent political candidates like Mayor Michael Bloomberg in New York, California Gubernatorial candidates Arnold Schwarzenegger and Meg Whitman, New Jersey Governor John Corzine, the Kennedy and Bush families, Connecticut Senate candidate Linda McMahon and Florida Senate candidate Jeff Greene, and billionaires George Soros and Rupert Murdoch, just to name a few, have all used their own immense financial resources in an effort to influence the electorate.

While many critics focus on corporations making sizable expenditures on behalf of a candidate, they lose focus of the reality that the public's participation in the political process has changed with the advent of the Internet. For example, given the success of Internet fundraising in the 2008 presidential election, it is likely that in future elections, aggregations of smaller individual donations will actually outweigh the spending of corporations. In his 2008 Presidential campaign, Barack Obama raised close to a half-a-billion dollars via Internet donations to his campaign. Of the 6.5 million donations received by Obama, 6 million were for $100 or less, with the average on-line donation being $80. According to the Federal Election Commission, the total sum of individual donations of $200 or less to all political candidates in the 2008 election exceeded that of contributions from individual donors who gave more than $2,000. In fact, to simplify and hopefully enhance this trend, some experts have suggested new ways for individual citizens to contribute to campaigns by way of a tax credit. The proposal provides that each American should be allowed a limited federal tax credit that could only be applied if the money is donated to a federal candidate during election years. It is further posited that, if the tax credit could be collected electronically in the form of a credit card, debit card, or directly from a bank account, the simplicity would increase participation and could result in candidates paying more attention to mainstream issues.

CONCLUSION

Citizens United, while controversial, marks the end of more than twenty years of erosion of the First Amendment rights of corporations and unions, particularly on the issue of political speech. As Justice Kennedy stated, one of the hallmarks of the First Amendment is that it should not be applied based on the identity of the speaker. The idea that a speaker who engages in the political process can be imprisoned for his or her conduct is the antithesis of what freedom of speech is all about and sadly brings to mind regrettably similar acts in our history such as the Alien and Sedition Acts. As noted above, there is likely to be very little change in corporate political activities after *Citizens United* because corporations have been participating in the political process despite the existence of the BCRA. They just had to do so through their PACs. After the dust settles, if Congress still believes that it is wrong to allow corporations and unions to use independent expenditures in support of or in opposition to a candidate for political office, they can certainly take appropriate action to address the problem – so long as that action is not unconstitutional.

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Faculty Retirement in a Period of Economic Expansion vs. Economic Contraction

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The sustained economic expansion in the mid 1990s and the subsequent economic downturn in the early 2000s had the potential to significantly change retirement decisions of older workers. This paper examines the expected retirement age of 50 and older Kansas Regents faculty from survey data collected in 1996 and 2003. Our results suggest a significant difference in expected retirement age between the two time periods, in particular, about 6 months earlier in a period of expansion relative to contraction. We also find evidence that non-monetary job-related factors delay retirement age and is more evident in an expansion.

INTRODUCTION

Retirement decisions are influenced by overall economic conditions. Such decisions may involve when to retire, allocation of retirement portfolio, and potential adjustments related to expected living standards during retirement. The period of near nirvana economy and above average financial market returns in the 1990s followed by a subsequent period of economic downturn in the early 2000s characterized by declines in key economic variables and a tumble in the stock market provide a natural backdrop to examine retirement behavior in periods of economic boom and bust. Workers who are nearing retirement age had most likely been affected by these two polar economic events. This paper investigates and compares the expected retirement age of university faculty in periods of sustained economic expansion versus contraction. After controlling for individual specific variations in selected demographic, economic and job related characteristics, is there a significant difference in retirement behavior in a period of expansion versus contraction? We utilize a cross-section of Kansas Regents faculty age 50 and over surveyed in 1996 and in 2003 to answer this question. Data from near retirees indicates realism as they adjust their retirement decisions in response to a boom and bust economic conditions. Faculty most likely saw their retirement portfolio grow beyond their expectations in the 1990s while the bust in the early 2000s had the opposite effect.

Various studies have examined the factors affecting retirement decisions of workers in general (Hassan and Lawrence, 2007; Vickerstaff, 2006; Hakola and Uusitalo, 2005; Schacklock and Brunetto, 2005; Bulmash, et. al., 2002; Joo and Pauwels, 2002; Lumsdaine, 1995) and faculty in particular (Parker, et. al., 2005; and Bahrami, 2001). These studies examine social, demographic and economic factors that affect retirement decisions. Declining savings, rising health care costs, and uncertainty about Social Security in recent years have also put an emphasis on the financial preparedness of retiring workers.

Another branch of literature which more closely relates to the question we pose is those that examine the impact of wealth shocks and stock market fluctuations on retirement decisions. Evidence from studies on wealth effects is mixed, often compounded by endogeneity issues with respect to retirement timing. For instance, Sevak (2002) find evidence consistent with the normality of leisure with respect to wealth. Using the 1992 and 1998 waves of the Health and Retirement Study (HRS), Sevak estimates that a $50k wealth shock increases retirement probability among individuals age 55-60 by 1.9 percentage point and elasticity of retirement with respect to wealth between 1996 and 1998 to about 0.39 and 0.50 for men. On the other hand, Joulfaian and Wilhelm (1994) using inheritance as a measure of wealth shock from the Michigan Panel Study of Income Dynamics (PSID) find no large reductions in labor supply of men and married women. The strand of literature that explores the relationship between retirement and the stock market also provide a good perspective on this study. The most recent is Gustman, Steinmeier, and Tabatabai's (2010) paper on the effect of stock market decline for the financial security and retirement choices of the "early boomer" cohort in the 2006 wave of the HRS. They estimate an increase of about 3 months on the average length of retirement during the stock market boom in the late 1990s, which translates to a reduction in the average age of retirement by the same amount. The subsequent decline in the stock market however, would have delayed retirement by 1.5 months. Coronado and Perozek (2003) likewise utilized data from the HRS and found that respondents with corporate stocks prior to the bull market of the 1990s retired 7 months earlier. They also found evidence that the wealth effect during this time period were in the 3-5 cents range of long run additional consumption spending for every additional dollar of wealth. In contrast, Coile and Levine (2006, p.409) arguing that "evidence of the impact of the stock market on retirement behavior would require that those who are more likely to own stock are also more likely to retire in booms and less likely to retire in busts" find no evidence that changes in the stock market affect aggregate labor supply. In the UK, Gardner and Orszag (2004) examined how older workers, aged 50 to 64, responded to the bear market from the end of 1999 to the end of 2002. Their results indicated that 25% of the older workers were planning to retire later than they had planned 2 years beforehand. This highlights the need to examine the issue of retirement and stock market decline given that in the UK, defined contribution plans are not even the main form of private pension plan.

This paper makes several contributions to the literature. First, along with Coile and Levine's (2006) study, this paper is among the first few that examine retirement behavior at both the expansionary period of the late 1990s and the contractionary period of the early 2000s. We focus on a more homogenous segment of the labor force – university faculty – which may have unique characteristics as a group that separates them from the overall workforce. For instance, Coile and Levine (2006) assert that the ability of the stock market to drive aggregate labor force patterns may be limited by the number of workers exposed to the stock market through their retirement funds and the size of these balances. Our sample participates in a defined contribution (DC) retirement plan and is close to retirement age and would have accumulated larger balances in their retirement funds. As such, their overall exposure and consequently response to stock market fluctuations are likely larger and more significant. We are also able to capture job-related factors into the retirement decision which have not been extensively investigated previously. Our emphasis is not on the relationship between wealth shocks and retirement per se bur rather on the potential differences in retirement behavior in an overall period of positive economic condition and period of declining economic condition. We also provide some insights from the most recent economic turmoil from preliminary data.

DATA

Data from two surveys on all tenure-track faculty age 50 and over at all Kansas Regents institutions were utilized. The first survey was conducted in 1996, a period of near nirvana economy and above average financial returns while the second survey was conducted in 2003 towards the end of an economic downturn. Demographic, financial, and job related information were collected from the surveys. Faculty who are 50 years old and over nearing retirement age is an ideal sample to use to examine the effect of overall economic conditions to retirement behavior since these individuals are more likely reaching their peak in terms of their net worth.

Although the use of faculty from a particular state may not be representative of overall US workers, our data provides us a greater degree of homogeneity which can help control for factors in the retirement decision that may otherwise be difficult to capture. First, all Regents system faculty face the same pension plans – a defined contribution plan (DC) with identical required faculty contribution levels and percentage of retirement funds matched by the state. Kansas Regents faculty chooses from authorized companies that offer similar options and services. The investment options reflect a typical menu that includes money market funds, real estate funds, bond funds, income funds, and international funds. Each company includes a social choice/awareness fund in which investments may represent, partially, a non-financial objective. Overall, the pension plan "rules" faced by Kansas Regents faculty do not significantly limit choices of faculty with respect to individual investment allocation strategies. The fact that all Kansas faculty participate in a DC plan likewise increases the susceptibility of retirement funds to overall economic conditions, ultimately affecting retirement decisions. The homogeneity of occupation and investment in human capital control for the possibility that retirement behavior is influenced by access to more information and greater ability to process information related to financial preparation for retirement.

Faculty in the 1996 data set have participated in the Kansas Regents pension plan for an average of 25 years, 18% are female and have an average age of 57 years. In the 2003 survey, faculty have participated an average of 19 years in the pension plan, 25% are female, and have an average age of 58 years[1].

EMPIRICAL MODEL

The empirical measure of retirement behavior that we examine is expected retirement age (RETAGE). The theoretical basis for the empirical model deals mainly with retirement timing. There is empirical evidence to support the notion that planned retirement correlates reasonably well with actual retirement decisions. The appropriate theoretical framework for the choice of retirement age is a life-cycle model. A life-cycle model assumes workers plan their consumption, savings, and retirement to maximize expected utility for the remainder of their life. In general, the optimal retirement age is when the marginal benefits from working an additional year is equal to the marginal costs of lost utility from less leisure time and disutility from work, if any. For a university faculty, the absence of a mandatory retirement age makes the retirement decision more of a personal preference and deliberative, influenced by a set of personal financial, job related, and demographic factors, in addition to overall economic climate at the time the decision is being made which is the main empirical question of the paper.

The specific variables that are expected to influence the benefits and costs of working and/or leisure are discussed below:

(1) Financial Factors. Financial factors affect an individual's financial ability to afford retirement. Two measures are utilized, current salary and expected retirement wealth. Current salary (captured by dummy variables INC_low and INC_mid) may have two opposing effects on retirement age and its net effect is therefore an empirical question. The substitution effect increases the opportunity cost of leisure (retirement) as income increases while the income effect increases the consumption of leisure (a normal good). A backward bending labor supply curve implies a stronger income effect relative to substitution effect for high levels of income, which is probably an appropriate depiction for our sample. Adequate retirement wealth (represented by dummy variables RW_low and RW_mid) to sustain a desired post-retirement flow of income is most likely a necessary condition for retirement. Our measure of retirement wealth is the faculty's self-reported value of all personal savings, investments, and retirement funds. We previously noted that empirical results of the impact of wealth on labor supply in general are mixed and maybe endogenous in the retirement timing model (i.e., in the life-cycle model, one of the major reasons for saving is retirement). The challenge is to use exogenous variation in wealth across faculty otherwise the wealth effect will be biased. We are able to partially address this issue in the

sense that our data was collected in the bull market of the mid 1990s (1996 in particular) when faculty likely had large capital gains that were unexpected; and the subsequent bear market in the early 2000s (2003 in particular) when unexpected losses likely occurred. Assuming the theoretical prediction of the normality of leisure, a higher expected retirement wealth is likely to lead into a younger retirement age.

(2) Job-Related Factors. Job-related factors (other than financial compensation) likewise affect the marginal benefits and marginal costs of working. Overall satisfaction with the progress of the academic career (DACAD) maybe an indicator of job match and raises the utility from working and may increase the expected retirement age. The type of academic institution (TEACH) be it predominantly teaching or research may also influence retirement behavior. Despite homogeneity in occupation in the sample, there may still be a certain degree of variability in terms of overall utility. A predominantly teaching institution may provide the relatively "routine" or "stable" aspect of an academic institution that may be very important to some individuals while a predominantly research institution may provide a greater variety of intellectual activities and stimulation which may be more important to some individuals. Again, this affects the overall utility from working and will therefore affect retirement behavior.

(3) Demographic Factors. The last group of factors is demographic. Marital status (MAR) and gender (MALE) are mainly control variables. Marital status may capture joint decision making when it comes to retirement. Health status (HS) may affect expected retirement age under the assumption that poor health will result in earlier retirement. There might be some degree of ambiguity in the sense that poor health decreases the utility from working but might likewise require increased consumption of health care goods which necessitates work (from financial benefits of working). Evidence from empirical studies tends to confirm the initial hypothesis. Dwyer and Mitchell (1999) find about one to two years reduction in retirement age relative to the average retirement age for individuals who report poor health. An earlier study by Sammartino (1987) finds similar results in that workers in "poor health" retire one to three years earlier than healthy workers in similar circumstances. An individual's expectation of how long they expect to live should also influence expected retirement age. This is captured by the variable LONG, calculated as the difference between the respondent's estimate of the average life expectancy for someone of their age and gender, and their age. The prediction from the basic utility maximization model for work and leisure is that a decrease in life expectancy results in the consumption of more leisure, and thus, other things equal, an earlier retirement age.

Estimation

The study's main objective is to examine if expected retirement age (RETAGE) is significantly different in a period of sustained economic expansion relative to a period of economic downturn. When regression analysis is used to model such economic relationships, the question of whether these relationships remain stable for two periods of time, or if the same relationship holds for two groups of observations, arises. This involves testing whether these two sets of observations can be combined into a single regression model utilizing the Chow test for structural change (Chow, 1960).

To perform the Chow test, we first estimate two separate regression models for RETAGE which correspond to the two time periods, followed by a pooled regression for the combined time period. The first period (SAMPLE_96) reflects the period of sustained economic expansion while the second period (SAMPLE_03) corresponds to a period of economic downturn. The model for RETAGE[2] is specified as:

FIGURE 1
EXPECTED RETIREMENT AGE EQUATION

$$RETAGE = \beta_0 + \beta_1 INC\_low + \beta_2 INC\_mid + \beta_3 RW\_low + \beta_4 RW\_mid + \beta_5 DACAD + \beta_6 TEACH + \beta_7 MAR + \beta_8 MALE + \beta_9 HS + \beta_{10} LONG + \varepsilon$$

Definitions of variables from Figure 1 with summary statistics are in Table 1 below.

TABLE 1
VARIABLE DEFINITION AND MEANS

Variable	Definition	Mean*		
RETAGE MODEL (FIGURE 1)				
		SAMPLE_96	**SAMPLE_03**	**N****
RETAGE	Expected retirement age	65.53	66.11	65.72
INC_low	=1 if current university salary for the academic year is $55,000 or less , =0 otherwise	0.53	0.22	0.43
INC_mid	= 1 if current university salary for the academic year is $55,001 to $85,000 , =0 otherwise	0.38	0.51	0.42
INC_high	=1 if current university salary for the academic year is > $85,000, =0 otherwise (dropped category)	0.09	0.27	0.15
RW_low	=1 if retirement wealth from faculty's estimate of total value of all personal savings, investments, and retirement funds is $600,000 or less, =0 otherwise	0.44	0.34	0.41
RW_mid	=1 if retirement wealth from faculty's estimate of total value of all personal savings, investments, and retirement funds is $600,001 - $1,000,000, =0 otherwise	0.35	0.35	0.35
RW_high	=1 if retirement wealth from faculty's estimate of total value of all personal savings, investments, and retirement funds is > $1,000,000 (dropped category), =0 otherwise	0.21	0.31	0.24
DACAD	=1 if faculty is satisfied with progress of overall academic career, =0 otherwise	0.86	0.87	0.86
TEACH	=1 if mainly teaching institution, = 0 if research	0.23	0.21	0.23
MAR	= 1 if married, =0 otherwise	0.83	0.83	0.83
MALE	=1 if male, =0 otherwise	0.78	0.80	0.79
HS	=1 if reported health status as good, =0 if poor/very poor	0.98	0.97	0.98
LONG	estimate of the average life expectancy for someone their age and gender – age	23.34	22.39	23.02

*means of dummy variables are interpreted as the percentage of the "1s" in the sample
**N = SAMPLE_96+SAMPLE_03

RESULTS

The empirical results are presented in Table 2. The Chow test for structural change between the periods of economic expansion vs. economic downturn indicates that the expected retirement age models between the two time periods are significantly different. Thus, (1) was estimated separately for the two time periods. To allow for an estimate of the difference between the RETAGE in SAMPLE_96 vs. SAMPLE_03 after controlling for financial, job-related, and demographic factors, a pooled model was estimated with the inclusion of a dummy variable SAMPLE (=1 if period of expansion and = if period of contraction). The descriptive statistics reported from Table 1 indicate that the average expected retirement age for SAMPLE_96 is slightly lower than for SAMPLE_03 (65.53 yrs vs. 66.11 years). The parameter estimate for the variable SAMPLE on the fourth column of Table 2 further confirms the difference. Ceteris paribus, the expected retirement age in the period of economic expansion in 1996 was on average, about half a year (6 months) lower relative to the economic contraction of 2003. This estimate tracks closely with Coronado and Perozek's (2003) finding using a broader sample from the HRS where those with stocks prior to the recovery of the 1990s retired 7 months earlier.

TABLE 2
OLS PARAMETER ESTIMATES FOR RETAGE (STANDARD ERRORS IN PARENTHESES)

Variable	Expansion (SAMPLE_96)	Contraction (SAMPLE_03)	Pooled with dummy (N)
SAMPLE			-0.482**
			(0.249)
MAR	-0.490	-0.638	-0.591***
	(0.382)	(0.537)	(0.312)
MALE	1.192*	0.303	0.999*
	(0.365)	(0.543)	(0.303)
HS	2.265*	2.040	2.220*
	(0.857)	(1.420)	(0.735)
LONG	-0.037***	-0.153*	-0.079*
	(0.019)	(0.029)	(0.016)
DACAD	0.663***	0.795	0.732**
	(0.394)	(0.586)	(0.327)
TEACH	-1.186*	-0.977**	-1.117*
	(0.326)	(0.488)	(0.272)
INC_low	-0.538	0452	-0.094
	(0.536)	(0.609)	(0.385)
INC_mid	-0.534	-0.233	-0.355
	(0.519)	(0.472)	(0.348)
RW_low	1.057*	-0.740	0.305
	(0.391)	(0.530)	(0.311)
RW_mid	0.862**	-0.457	0.272
	(0.381)	(0.486)	(0.299)
F stat (p-value)	4.99 (0.00)	4.85 (0.00)	7.58 (0.00)
N	941	473	1414

***Significant at 1%; **Significant at 5%; and *Significant at 10%

Out of the two general measures of financial factors, only expected retirement wealth had a significant effect on expected retirement age, and only during the period of economic expansion (results from 2nd column). Those with retirement wealth valued equal to or less than $600k (RW_low) will retire on average 1.057 years later than those with more than $1 million in retirement wealth (RW_high). Faculty with a slightly higher retirement wealth as captured by RW_mid will retire 0.862 years later relative to faculty with more than a million in retirement wealth. These results provide evidence for the normality of leisure for university faculty. An important finding however is that expected retirement wealth is a significant predictor of RETAGE in a period of economic expansion but not in a period of a downturn.

In terms of job-related factors other than financial benefits, overall satisfaction with the academic career increases the retirement age by about 8 months in a period of economic expansion. This implies DACAD has a significant effect on the marginal benefit of working. Faculty in a predominantly teaching institution retires about 1.2 years and 0.98 year earlier, relative to faculty in a research institution, in an economic expansion and contraction, respectively. Thus, the overall utility of working is lower for faculty in predominantly teaching institutions as opposed to primarily research schools. Moreover, the earlier retirement that occurs for teaching schools is more pronounced in an economic expansion which is to be expected as more opportunities may be available.

The longer the estimated life longevity (LONG) for a faculty, the earlier is the expected retirement age. This holds for both the periods of expansion and contraction, although the inverse relationship is larger in an economic contraction. In an atmosphere of economic downturn, all things equal, each additional year of added life expectancy influences the faculty to retire about 1.8 months earlier (0.153 years), as opposed to almost half a month (0.037 years) in good economic conditions. This demonstrates a general preference for leisure and may be a reflection of certainty on planned post retirement standard of living, either reflecting adequate post retirement wealth or the expectation of a lower standard of living to support a longer period of consumption post retirement. A good health status increases retirement age by 2.27 years in an economic expansion but has no significant effect in a period of contraction.

A closer look at how expected retirement age has changed as brought about by the overall economic conditions at the time of the surveys is shown in Table 3. About 35.9% of faculty expected to retire later than they had planned in the 2003 survey (contraction) compared to only 9.7% of faculty in the 1996 survey (expansion). The percentage of faculty retiring later than their previous expectation in response to a declining stock market and overall economic condition (35.9%) is slightly higher than the estimate from the UK examining a similar age group of workers in the same time period. Gardner and Orszag's finding (2004) from the UK was 25% of workers planned to retire later than they had planned two years prior. The greater percentage for our sample (Kansas Regents faculty) is to be expected given that retirement funds in our data are in a defined contribution plan whereas in the UK, defined benefits plan was more predominant.

In symmetry to the discussion above, a larger proportion of faculty expected to retire earlier in good economic conditions as opposed to adverse economic conditions. Faculty tended to be more certain of their expected retirement age during a period of expansion, with 73.6% responding not changing the age they expect to retire vs. 55.6% during a downturn in the economy.

TABLE 3
DISTRIBUTION OF FACULTY RESPONDING TO "*HAVE YOU CHANGED YOUR MIND RECENTLY (LAST 2 OR 3 YRS) ABOUT THE AGE AT WHICH YOU EXPECT TO RETIRE*?"

Category	Expansion (SAMPLE_96)	Contraction (SAMPLE_03)	Pooled
Yes, now expect to retire at an older age	9.7%	35.9%	20.6%
Yes, now expect to retire at a younger age	16.7%	8.5%	13.3%
No	73.6%	55.6%	66.1%
n	879	626	1505

DISCUSSION AND CONCLUDING COMMENTS

The economic expansion of the 1990s and the subsequent downturn in the early 2000s provided an excellent opportunity to examine retirement behavior in periods of actual economic expansion and contraction. Rather than dealing with hypothetical circumstances, these events allowed us to study university faculty responses from an actual and experienced event. Faculty who were nearing retirement around the aforementioned economic times have most likely altered their retirement plans to adjust to the existing economic conditions. This paper explored faculty expected retirement age in the context of these two distinct economic times.

The results indicate an overall structural difference in faculty expected retirement age in an economic expansion versus in an economic downturn. Even after controlling for cross-section variation in financial, job-related and demographic factors, we find evidence that faculty retire on average 6 months earlier in positive economic times relative to unfavorable economic conditions. There is likewise evidence of delayed retirement for faculty who were satisfied with the overall progress of their academic career. On the other hand, faculty in predominantly teaching institutions expects to retire earlier relative to their counterpart in primarily research institutions. Also, the growing number of dual-income households places the retirement decisions in a family or in a joint decision-making context in which the couple must coordinate retirements with consideration of joint retirement dates and retirement incomes. We find evidence of earlier expected retirement age for married faculty. Lastly, all else equal, males retire about a year later relative to females.

These results are valuable for possibly predicting the likely response of faculty who are near retirement in future periods of economic shocks, be it an expansion or contraction. Granted that these future potential events may have distinct characteristics from the economic events in this study, our empirical model does provide some perspective on the likely behavioral response of faculty in comparable economic times. For instance, the results of this research with respect to the 2003 economic downturn data can also provide insights as to the likely effect of the more recent adverse financial market performance on faculty retirement. The most recent downturn has significantly diminished family wealth, plunging about 18 percent or about $11 trillion in 2008. Along with about 50 million other Americans who have 401(K) plans, university faculty as a group has likewise experienced substantial losses in their retirement portfolios. These losses will likely affect many individual university faculty retirement decisions now and in the near future. Even the selection of a date to retire may involve reconsideration and may no longer be an "all or nothing" decision. Phased retirement, which is available to all Kansas Regents faculty, may become a more popular option.

The events within the past ten years have exposed the faculty and their retirement funds to two significant adverse financial markets conditions. The first market downturn as captured by our 2003 survey was from about August 2000 until February 2003, when the S & P fell from 1517.68 to 841.15, a reduction in the index amounting to 44.6 percent. The second downturn in financial markets was from about October 2007 to February 2009 when the S & P fell from 1549.38 to 735.09 which was a 52.6 percent drop. Certainly both events affected faculty retirement portfolios and likely their retirement decisions. Since all faculties in Kansas Board of Regents schools face the same mandatory defined contribution plan, changes in portfolio allocations across fund options are individual faculty decisions. The following table shows the distribution of funds across available fund categories prior to the recent down turn (Sept. 30, 2007) and close to the bottom of the financial downturn (Feb. 2, 2009).

TABLE 4
RETIREMENT FUNDS DISTRIBUTION FROM 2007-2009*

ING and TIAA-CREF	9/30/07	% Distribution	2/16/09	% Distribution	Change in %
Balanced	$94,539,030	4.2%	$80,903,305	4.4%	-14.42%
Equity	$1,195,899,477	53.1%	$656,315,539	36.0%	-45.12%
Fixed Income	$72,670,877	3.2%	$98,983,170	5.4%	36.21%
Money Market/Stable Value	$785,364,373	34.9%	$924,727,026	50.7%	17.74%
Real Estate	$102,220,189	4.5%	$62,591,033	3.4%	-38.77%
Totals	**$2,250,693,946**	**100.0%**	**$1,823,520,073**	**100.0%**	**-18.98%**

* Data provided by the Kansas Board of Regents. Includes all participants in the state regardless of age. Dollars for each category are combined for similar categories and for the two companies, ING and TIAA-CREF.

The reduction in the total amount of funds between these two dates does not reflect only the market effect since State and individual contributions continued to be made during this period. Also over this period, individuals made reallocation decisions among the different investment categories. Nevertheless, total dollars in State retirement funds decreased by 18.98 percent, with the largest percentage change among individual funds occurring in the equity funds and in the real estate funds.

The economic downturn data utilized in this study was collected in October 2003 when the financial markets were close to the bottom of a three-year decline. Five categories of investment options were identified for the sample -- stocks, fixed (bonds), money market, real estate, and other. Each faculty member in the sample was asked, “How are your university pension or retirement funds currently invested or distributed?” The survey also asked: “How were your university retirement funds invested or distributed in 2000? The average distribution of faculty retirement funds across the investment categories is shown in Table 5.

TABLE 5
RETIREMENT FUNDS DISTRIBUTION FROM 2000 – 2003

	2000	2003
Stock	53.60%	46.50%
Fixed (Bonds)	40.00%	44.30%
Money Market	3.20%	4.30%
Real Estate	1.90%	3.60%
Other	1.30%	1.30%
Total	**100%**	**100%**

As in the case of the more recent financial market downturn, there was some movement away from the more risky investment options (stocks) during this period. Since there are fairly large standard deviations associated with these mean values, a frequency distribution provides a better profile of the adjustment in faculty stock holdings as shown in Table 6 below.

TABLE 6
FREQUENCY DISTRIBUTION OF STOCKS ALLOCATION FROM 2000-2003

2003 Percent of Faculty Holding Different Percentage of Stock in Retirement Portfolio				
	2000		**2003**	
% of Portfolio in Stocks	% of Faculty	Cumulative %	% of Faculty	Cumulative %
0	13.8	13.8	14.9	14.9
25	3.5	21.9	5.0	29.5
50	20	51.4	18.6	62.8
75	9.5	76.7	6.1	83.8
100	11.8	100	8.5	100

Table 6 shows that in 2000, 13.8 percent of faculty held no stock in their retirement portfolio, while 3.5 percent held exactly 25 percent in stock giving 21.9 percent of faculty holding from 0 to 25 percent in stock. The cumulative percent includes faculty holding varying percentages between 0 and 25 percent. It is interesting to note that 20 percent of faculty held exactly 50 percent of assets in stock with 51.4 percent of faculty holding this percentage or less. The comparison with 2003 reflects a decision of many faculties to adjust their retirement portfolio to hold a smaller percentage in stock.

Given that the recent market downturn is more severe than the 2003 scenario, its effects on retirement decisions may likely be larger in magnitude as well. Additional data collection relative to the more recent events is therefore warranted.

ENDNOTES

[1]The response rate for the 1996 survey was 58% which yielded 1208 returned surveys while the 2003 survey response rate was lower at 35% or 648 returned surveys. This may raise the issue of non-random selection in terms of fewer people opting to respond to the survey in 2003. However basic demographic characteristics of the sample between the two periods are relatively comparable. The final samples for the empirical model are lower upon consideration of complete responses to variables utilized.

[2]If the result of the Chow test leads to the rejection of "pooling" the 2 periods, this implies that the relationships between RETAGE and the explanatory variables included in (1) are structurally different between a period of economic expansion and a period of economic downturn. This implies 2 separate models for the two periods for equation (1) are appropriate. Alternatively, the two periods can be pooled into one regression model but with the inclusion of a dummy variable to differentiate the observations from SAMPLE_96 (economic expansion) to those from SAMPLE_03 (economic downturn).

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A Cross-Cultural Examination of Store Environment Cues and Purchase Intention in Taiwan and the United States

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This article examines whether store-related environment cues can be standardized across countries. Based on the characteristics of stores, this research tries to understand what kind of environment cues will influence consumer purchase intention in comparison with two countries. Samples were conducted in Taiwan and United States. The research findings that store environment cues are positively related on purchase intention. The results suggest that each store environment cue may vary across two countries, describe the implications on business transactions and decision making, and provide a set of recommendations on how to succeed in cross-national transactions.

INTRODUCTION

In the past few decades, enterprises faced fierce competition, leading to a swift introduction of innovative store concept and style into the market. The fiercer the competition between stores, it would be more difficult for the stores to distinguish themselves from the others using their competitive advantages such as goods, prices, sales promotion, and location (Baker et al., 1994). To draw consumer's attention, the operation managers consider other important cues. When the consumers shop in the retail stores, the store environment cues often influence consumer's decision and purchasing behavior. The store environment has already been considered as important marketing tool recently, it could also prove the market differentiation. Store environment is an important marketing link of direct contact between the consumers and the store, so effective store environment management has already been considered as a practical management strategy. In addition, the industry and academia have great interest towards the store environment now (Seock, 2009).

When the consumers choose a store to shop for products or service, how to create the greatest value of the consumers is very crucial. Consumer's perceived value involves a lot of areas (such as products attribute preference, the formation of attribute performance evaluation), and these evaluation results are based on the consumer's objective and the purpose of use context (Woodruff, 1997). To create higher consumer perceived value, the enterprises must consider market-oriented objective and focus on the store's consumers to provide the important cues that are needed; these store environment cues are closely related with consumer's objective. Store environment cue provides significant customer purchase intention because the store environment influences the customer's potential benefits and overall perceived value. Therefore, the understanding of customer dynamic purchase intention could be carried out through store environment cue, and the manager should explain the influence of store environment towards the customer purchase intention.

Store attributes include functional and psychological attributes (Martineau, 1958), such as location, quality, temperature, lighting, music, types of products, symbolization, color, price, advertisement, sales force, display, and building construction. These attributes are closely linked with the store environment cue, Berman and Evans (1995) indicated that the consumers would perceive the functional and sentimental characteristics of the store, and then decide the expectation of the overall strategy and practice of the store. Therefore, the retailers understand the importance of store environment cue and attempt to develop effective store atmosphere so as to attract their target consumers (Seock, 2009). This study focused on coffee chain stores to discuss the influence of multiple store environment cues towards the customer's purchase intention. Currently, a lot of coffee chain stores make use of such environment cues as color tone arrangement, decoration, relaxed music, comfortable sofa, neat and convenient environment, and space design to attract consumers; the vision, hearing, sense of smell, and sense of touch match with each other harmoniously, so as to provide good consumption experience. Consequently, the store environment cues are contributive to distinguishing customer's purchase intention.

Since market competition has already become borderless, different cultures would influence consumer's purchase intention and perceived value. Understanding different cultural influences is considered to be a new challenge, in which the characteristics of consumers from different regions must be considered and distinguished in order to find out the preferences of target customers. The economy, politics, and culture of Taiwan are deeply affected by U.S.A. even coffee chain store is introduced and driven by U.S.A. The coffee drinking habit of Taiwanese consumers is influenced by America profoundly. However, the consumption culture of the two countries is somewhat different, so the retailers must consider the consumer's purchase intention cautiously, and whether it is consistent with the purchase intention that the consumers have towards the store environment. This study aimed to discuss the influence of store environment cues towards the purchase intention of Taiwanese and American consumers; this is significant different from the past studies that only focused on one single market as the study subject (Bruner, 1990; Milliman, 1982). In addition, the economical developments of these two regions are good, which is contributive to the process of the experiment. In recent years, the economy in Asia develops vigorously and becomes one of the three biggest economic systems in the world; the cultures and habits in Asia are somewhat different from Europe and America. Hence, this study helps to understand the perceived value that consumers from different regions have when considering the store environment cues. This study made use of cross-national viewpoints to discuss the influence of coffee chain store environment cues towards the customers' purchase intention, so that the managers could understand how to position their stores, how to arrange resources to create attraction, and how to be able to use the best store environment to attract consumers from different regions among coffee chain stores.

CONSUMPTION DIFFERENCES IN AMERICA AND TAIWAN

In different cultures, racial differences often lead to different behaviors. One race is a kind of difference, which means having the characteristic of significantly different behavior (Lee et al., 2002; Steenkamp et al., 1999; Torres and Briggs, 2005). In an ethnic group, its people share common norms and beliefs, they keep the original cultural characteristics of their country, and every ethnic group constructs a unique social group and specific cultural value. In different consumer behaviors, race is an important characteristic, especially regarding purchase (Seock, 2009). Taiwan and U.S.A. have different cultures, so the ethnic differences would cause important influence towards purchase behavior. Understanding the consumer behavior of different regions is contributive to the retailers to set up appropriate marketing strategy. Currently, the annual consumption of coffee beverages in America accounts for more than 22.2% worldwide, which is the second highest coffee consumption country (Views Wire, 2011). In 2011, coffee drinking frequency has become the highest among the beverages in America for the first time, with consumers quaffing coffee on an average of 6.2 times per week (AlixPartners, 2011). Daily consumption of coffee beverages among consumers remained unchanged as compared to 2009, with 56% of adults partaking (The National Coffee Association of U.S.A., Inc., 2010). The coffee shop industry domestically includes 20,000 stores with a combined annual revenue of about 11 billion dollars (IMCR Case Studies and Management Resources, 2007). The stronger the American consumers could feel that the shop provides personalized services, the better the American consumer's impression towards the shop and the easier the American consumers would purchase in this kind of shops. If a lot of diagrams with social significance are displayed in the shop, the consumers would like to purchase in this kind of shops as well (Hu and Jasper, 2006). Besides, colors of the shop and background music would also influence the purchase behavior of American consumers (Bellizzi and Kite, 1992; Bruner, 1990; Milliman, 1982).

About 5.7 million Taiwanese consume coffee beverages, and the sales in coffee beverage market is about NT$13.5 billion annually, where fresh-brewed coffee accounts for about 50%; thus, the growing potential and space of coffee beverage market in Taiwan is quite big. When consuming in coffee chain store, Taiwanese consumers would consider service quality, aesthetic feeling, and interest, these factors would influence consumer's purchase behavior and attitude **(**Lin et al., 2007). Consumer's preferences towards coffee chain store environment are bright, modern, having European feeling, playing pleasant music, and providing comfortable seats (Wu, 2009). The cultures in America and Taiwan are different, but consumers pay attention to the environment of coffee chain stores. Consequently, establishing multiple store environment cues is contributive to promoting the perceived preferences of the consumers and then their purchase intention could be influenced. How much Taiwanese and American consumers care about the store environment cues would further influence the construction of store image; thus, discussing the purchase intention of the consumers from these two regions towards coffee chain store environment would be contributive to the store owners to understand consumer's preferences and draft market operating strategy.

STORE ENVIRONMENT CUES AND PURCHASE INTENSION

The retailers would underestimate the importance of purchase experience sometimes, and they prefer to use sales promotion to attract the consumers to enter the store. However, sales promotion is not a cure-all, overusing it would make the consumers have bad store impression such as bad quality and negative store impression. The retailers start to understand the importance of environment cues and try to develop effective store atmosphere so as to increase the profit by attracting the target consumer (Seock, 2009). Donovan and Rossiter (1982) indicated that an environment could change the consumer's mood, and it could influence the behavior of retailing or service provider's performance. In the past, most of the store environment studies focused on store impression, how consumers evaluate the products, and improving the perception towards the quality of products and service (Baker et al., 1994; Darden and Babin, 1994). The current studies have not discussed how multiple store environment cues shape the consumer's perceived value and how these perceptions influence consumer's purchase behaviors yet (Baker et al., 2002); discussing store environment cues would be contributive to designing appropriate environment to satisfy consumer preferences. Baker (1986) presented a typology categorizing the elements of store environment into three categories: social, design and ambient factors. Social factors relate to salespeople in the store, ambient factors relate to the non-visual elements of a store's environment, and design factors are visual in nature (e.g. layout, color, cleanliness, clusters, space, etc.). Social cue means that the existence of human beings is one of the important parts of environment; social cues include the number of salespersons, crowdedness of the environment, sales style, and the interaction between the consumers and salespersons. Atmospheric cues refer to the intangible factors in the environment and background, including temperature, light, music, and scent (Yalch and Spangenberg, 1990). Design factor refers to the convenience that can satisfy the consumers, including how to get in and out the shop fast and find the desired products fast. Considering the social, atmospheric, and design cues of the store environment could help the store owners to design proper cues based on customer's needs, which could be the reference for evaluating the values of the products or services provided by the store. Consumers thus look for cues from the store environment to make sure that they will not experience a loss when making a purchase decision.

Fushbein and Ajzen (1975) believed consumer's purchase intention includes the attitude towards a certain product and other external factors, referring to the consumer's subjective tendency to a certain product, and that tendency was proved to be the important indicator to forecast consumer behavior. Gulas and Bloch (1995) suggested a small change of an environment could increase the perceived novelty and joyfulness of this environment, therefore better evaluation could be created and the consumer behavior could be promoted. Kotler (1973) stated that the design of purchase environment could make the consumers produce certain specific feelings, so that the opportunity for the consumers to purchase would be promoted. Similar studies also discussed other stimuli, for example, color could increase the consumer's intention to enter the store to look around (Crowley, 1993). Similarly, strong and smooth music is shown to be able to change the consumer's time perception (Kellaris and Altsech, 1992) and the time that the consumer is willing to spend in the retail environment is longer (Milliman, 1982; Yalch and Spangenberg, 1988). Spangenberg et al. (1996) also pointed out that if the store presents acceptable scent would be contributive to promoting the purchase intention of the products. What deserves to be mentioned is that for the consumers with low information sensitivity, the product display in the store plays an important role in consumer's purchase intention, the sales skill of the salesperson should be adjusted according to this kind of consumers, and the pictures in the store should also consider the need of this kind of consumers (Hu and Jasper, 2006). Presenting attractive environment cue in a store should be able to promote environmental arousal function; therefore the consumers would feel interested and joyful to this store. The atmosphere or environment of the store would influence the shopper's mood, and the relationship between the product varieties, sales and after-sales services of the salespersons, and store atmosphere and the mood would influence the consumer's attitude towards the store. According to the above mentioned points, the following hypotheses are proposed:

H1: The higher the perception of the consumers towards the social cues in the store environment, the stronger the purchase intention would be produced.
H2: The higher the perception of the consumers towards the atmospheric cues in the store environment, the stronger the purchase intention would be produced.
H3: The higher the perception of the consumers towards the design cues in the store environment, the stronger the purchase intention would be produced.

METHOD

This study made use of documents and study hypotheses to establish a causal relationship model based on the social, atmospheric, and design cues of the store environment, so as to discuss whether the consumer's perception towards the social, atmospheric, and design cues of the coffee chain store would influence the consumer's purchase intention or not. For coffee chain stores selection, since this study cannot proceed with the study in accordance with various coffees and stores, therefore the widely different and representative Starbucks is conducted as the study object. This store classification is used to understand whether the store environment cue will influence consumer's evaluation towards purchase behaviour. Because the chain stores with high fame and store cue has higher interests, so that the consumers can apply the store cues and it is also easier to gain consumers' acceptance. So the store selection is mainly according to the store that has high fame in consumers' mind and the consumers are willing and able to purchase.

Sample and Procedures

The sample consists of 570 subjects, 200 subjects from Taiwan, representing a response rate of 77 percent, and 132 from American, with a response rate of 66 percent. Survey data in American was collected from California consumers during summer 2010. This study focuses on consumers in Taiwan and American. The reason for choosing these countries as the study population is mainly because a study of buyer-seller relationships can bridge different systems and environments in the same industry, and because it can control certain extrinsic changes (Dyer and Chu, 2000). Second, carrying out a survey of quality perception under different economic systems is contributive to understanding whether the product attributes that consumers of each country rely on is the same or different. The sampling method this study adopts is "convenience sampling." Since the sample sources of American are difficult to master, this study entrusted students who are now studying in American to conduct the investigate. Before the investigation, the investigators were trained. Training content included explanations on questionnaire investigations and methods of investigation so as to ensure the validity of questionnaire retrieval. In addition, questionnaire items were translated into American by two American students. To ensure an accurate translation, this study empowered one Starbucks manager (U.S.A) to do a back-up translation. The completion of these questionnaires was entirely voluntary and responses were anonymous. In Table 1, we present the sample characteristics.

TABLE 1
SAMPLE CHARACTERISTICS

Characteristics	Taiwan (%)	U.S.A (%)	Total (%)
Gender			
Male	187(42.0%)	55(41.7%)	242(42.2%)
Female	255(58.0%)	77(58.3%)	332(57.8%)
Education			
College	297(67.2%)	52(39.4%)	349(60.8%)
Over Graduate School	145(32.8%)	80(60.6%)	225(39.2%)
Income			
Under $5000	84(19.0%)	70(53.0%)	154(26.8%)
$5,001～$10,000	278(62.9%)	21(15.9%)	299(52.1%)
$10,001～$15,000	55(12.4%)	15(11.4%)	70(12.2%)
Over $15,001	25(5.7%)	26(19.7%)	51(8.9%)
Purchase frequency			
Once a week	55(12.4%)	35(26.5%)	90(15.7%)
Once a month	157(35.5%)	60(45.5%)	217(37.8%)
Once a half-year	230(52.1%)	37(28.0%)	267(46.5%)

Scales and Measurement

The measure of social cue is an adapted version of Saxe and Weitz (1982). The operational measures describe the overall perception that the salesperson brings to the consumers when consumer interacts with the salesperson. There are 12 items in this questionnaire and they are measured on a 5-point Likert scale (1= strongly disagree, 5= strongly agree). A five-item scale of atmospheric cues, developed by Macinnis and Park (1991); Baker et al., (1992), is used. The operational measures describe the background music cue that a store offers could arouse consumer's sentimental responses. For the design cues, we used three items to measure store environment design cues, developed by Dawson, Bloch and Ridgway (1990); Dickson and MacLachlan (1990). The operational measures describe the convenience perception that the space and arrangement provided by the store could bring to the consumers. To assess their purchase intension, the respondents responded to three items (Dodds et al., 1991; Baker et al., 1992) after reading a short description of Coffee Chain Stores. The operational measures describe the consumer's intention to purchase from that store again and recommend to friends. The questionnaire is based on a five-point Likert scales (1 = strongly disagree, 5 = strongly agree).

Reliability and Validity

To assess the validity and unidimensionality of the scale, this study employs CFA (Joreskog and Sorbom, 1993), whereas the assessment of convergent validity relies on *t*-tests for the factor loadings (Hatcher, 1994). The CFA results confirm convergent validity (all *t*-values exceed 1.65 at $p = .05$) and show that each factor is a unidimensional construct. The Cronbach's alphas for social cue, atmospheric cue, design cue, and purchase intension are .77, .83, .71, and .74, respectively, which indicate high reliability. Thus, the model appears to achieve adequate reliability and convergent validity.

RESULTS

Descriptive Statistics

Table 2 shows the means and standard deviations of social cues, atmospheric cues, and design cues that the Taiwanese and American consumers have towards the store. Taiwanese consumers focus on the store's social cues the most, where atmospheric cues and design cues come the second and the third. American consumers focus on the store's design cues the most, where atmospheric cues and social cues come the second and the third. In this study, countries are the independent variables while store environment cues are the dependent variables, and then average analysis is carried. The analysis result shows that there is significant difference between Taiwanese and American consumers towards store environment. Taiwanese consumer's perception of social cues towards coffee chain stores is different from America, and the salespersons in Taiwan's coffee chain stores bring higher positive perception to the consumers than in America. However, for the atmospheric and design cues of the store environment, Taiwanese and American consumer's perception towards the salespersons does not show significant difference. Table 3 shows the relationship of store social cues, atmospheric cues, design cues, and consumer's purchase intention, where store social cues, atmospheric cues, and design cues are significantly related with the consumer's purchase intention.

TABLE 2
DESCRIPTIVE STATISTICS

Variable	Taiwan		U.S.A		t-value
	Mean	SD	Mean	SD	
1. Social cues	3.95	1.04	3.53	0.97	3.26***
2. Atmospheric cues	3.87	0.96	3.77	1.04	0.36
3. Design cues	3.78	0.99	3.78	1.06	0.56

***P<0.01; **P<0.05; *P<0.01

TABLE 3
DESCRIPTIVE STATISTICS CORRELATION BETWEEN MAIN VARIABLES

Variable	Mean	SD	1	2	3	4
1.Purchase intension	3.34	0.75	1.00			
2. Social cues	3.82	0.63	**0.34**	1.00		
3. Atmospheric cues	3.84	0.65	**0.37**	**0.47**	1.00	
4. Design cues	3.78	0.63	**0.42**	**0.44**	**0.52**	1.00

Bold indicates the level of significance p<0.01

Regression Analysis

This study carried out regression analysis regarding the influence of how Taiwanese and American consumers experience about the coffee chain store environment cues towards the purchase intention. In the regression model, store social cues, atmospheric cues, and design cues were the independent variables, gender and purchase frequency were the control variables, and purchase intention was the dependent variable, and then two regression equations were established. The result of regression analysis (as shown in Table 4) showed that the variance inflation factors (VIF) of both regression equations are smaller than 10 with no collinearity, the values of F reached the significant level, and the adjusted coefficients of determination were 0.29 and 0.43 respectively. This showed that the use of social cues, atmospheric cues, and design cues to explain purchase intention provide a certain degree of properness. In Table 4, one could know that regardless of American or Taiwanese consumers, they believed store social, atmospheric, and design cues have positive and significant influence towards purchase intention. Namely, when the customer feels that the interaction with the store salesperson is greater, the purchase intention produced because of the social cues that are provided by the store would be stronger; thus, H1 is valid. For store atmosphere, Taiwanese and American consumers perceive that the background music provided by the store could cheer up the consumption mood, so the higher the store atmospheric cues the stronger the consumer's purchase intention would be; thus, H2 is valid. For the store design, Taiwanese and American consumers perceive that if the convenience of the entire store arrangement and shopping is higher, the consumer's purchase intention produced because of the store design cues would be stronger; thus, H3 is valid. This study believes that coffee chain stores are very popular, so the consumers could master the store environment cues easily. As a result, the study pointed out that the customers would have high purchase intention with regards to different store environment cue perception, the owners of coffee chain store should try to develop store social, atmospheric, and design cues to influence consumer's purchase intention.

TABLE 4
REGRESSION ANALYSES: EFFECTS OF ENVIRONMENT CUE AND PURCHASE INTENSION

Variable	Taiwan		U.S.A	
	β	t-value	β	t-value
Sex	0.25	3.57***	0.07	1.12
Purchase frequency	0.14	6.16***	0.09	1.41
Social cues	0.14	2.90***	0.32	4.34***
Atmospheric cues	0.11	2.22**	0.25	3.11***
Design cues	0.27	5.46***	0.29	3.86***
Adj.R2	0.29		0.43	
F-value	37.31		20.78	

*** $P<0.01$; ** $P<0.05$; * $P<0.01$

DISCUSSION

This study focused on the influence of coffee chain store environment cue (social, atmospheric, and design) perception and store environment cues towards the consumer's purchase intention. Taiwanese and American consumers have different perception towards coffee chain store environment (see Table 1): The order of the store environment cues that Taiwanese consumers pay attention to is social cues, atmospheric cues, and design cues; while store design cue is the most important store environment cue for American consumers, where atmospheric cue and social cue come the second and the third accordingly. This result shows that Taiwanese consumers think the salespersons of coffee chain stores should interact with consumers cordially and bring good perception to the consumers; this is the cue that the consumers value the most. Secondly, the background music that the store provides makes the consumers forget themselves in the joyful atmosphere, making them feel relaxed and comfortable and then their perceived value is influenced. Finally, hardware and space arrangement should allow the consumers to get in and out of the store conveniently and should be neat and tidy as well. American consumers think design cues (convenience of hardware and space arrangement) are the most important, the second is atmospheric cue (background music makes people feel joyful) and the third is social cue (the salesperson should interact with the consumers cordially), this is consistent with the analytical result concluded by Seock (2009). Because of different eastern and western cultures, the perception cues provided by the store environment should suit the measure to local conditions and adjust timely so as to strengthen consumer's purchase intention. This study result shows that the environment cues provided by coffee chain stores are contributive to promoting the consumer's purchase intention, and the store environment cues would still promote the customer's purchase intention even though under different cultures. After comparing the influence of three kinds of store cues towards consumer's purchase intention cross-nationally (see Table 4), the result shows that Taiwanese and U.S.A consumers would evaluate the purchase intention according to the social, atmospheric, and design cues provided by the store, and the result is consistent. If the consumers perceive that the social interaction that the store presents is higher, then their purchase intention would be stronger; this shows that Taiwanese and American consumers believe that the overall interaction perception between the store salesperson and the consumers could promote personal purchase intention. This result is different from the number of salesperson that Baker at al. (1994) claimed to be a must to the store social cues, instead the interaction between the consumers and the salesperson should be considered further. If this key element is missing, then the consumers are unable to experience the clear socialized process, which is a serious impact to the store impression and thus the consumer's purchase intention would be influenced.

When the consumers perceive that the atmosphere of the store could change their mood and make them feel happy, then their purchase intention would be promoted. The store design could often bring novel and convenient feeling to the consumers, especially the space and entire shopping arrangement. The higher the convenience that store design presents, the better the customer's purchase intention could be promoted. These results implied that the presentation of store environment cues is contributive to promoting the customer's purchase intention, if the chain store owner hopes that the store could deliver a valuable purchase experience to the customers, then understanding the customer's need is very important. However, the store environment cue that every consumer needs during the purchase time is different, which involves different value judgment; thus, the researchers must plan specific purchase experience carefully, and different kinds of cues could be presented in the brick-and-mortar store after communicating with the consumers.

FUTURE RESEARCH

The fact that this research's focus on the single coffee chain store -- Starbucks -- with self-evaluation may limit the generalizability of the findings. The current results reflect the nature of the measures used, especially those related to purchase intention. However, the importance of sub-dimension factors underlying purchase intention, such as personal pride, warranties, and country-of-origin of products, are perceived in varying degrees due to cultural constructs. Future studies might benefit from exploring other indicators of purchase intention, in the context of a specific measure setting. In addition, future study should amplify and verify the cultural impact on the store environment cues as well as customers' perceived quality using more heterogeneous consumer samples. Moreover, this study only focused on examining whether the store environment cues can influence purchase intention across different cultures. Future research should utilize other relevant function attributes to compare with those impacts of product characteristics.

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The Capture of Government Regulators by the Big 4 Accounting Firms: Some Evidence

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This paper examines evidence that government regulators have been captured by the Big 4 accounting firms. Economists characterize the auditing services marketplace as an oligopoly. The collapse of Arthur Anderson in 2002 reduced the then Big 5 accounting firms to the Big 4. Government regulators acknowledge that the increased market power of the Big 4 firms has negative implications. They have, however, failed to indict any of the Big 4 for known criminal actions. A skeptic might question whether government regulators have been captured by these key market players. One outcome of this "capture" is moral hazard, which implies that the Big 4 accounting firms may place less emphasis on quality audits. Such an approach to the audit function places the self-interests of the audit firm above the public interest. The paper provides suggestions to protect the public interest and to help rectify the market power of the Big 4.

INTRODUCTION

Regulation of business has always been a topic of considerable debate. Regulatory proponents call for more regulation of the private sector in order to protect the public good, while regulatory opponents claim that additional regulation further damages a free-market economy by unduly constraining business. The theory of regulatory capture posits that regulators, including government bureaucrats who oversee the regulatory process and legislators who write the regulations, are routinely and predictably "captured" and manipulated to serve the interests of those who are supposed to be subject to them.

For public choice theorists, regulatory capture occurs because groups or individuals with a high-stakes interest in the outcome of policy or regulatory decisions can be expected to focus their resources and energies to gain their preferential policy. Meanwhile, members of the public, each with an insignificant individual stake in the regulatory outcome, will either ignore or pay scant attention to the regulatory process altogether. Regulatory capture results when this imbalance of focused resources devoted to a particular policy outcome is successful at "capturing" influence with elected officials or regulatory agency bureaucrats so that the preferred policy outcomes of the special interest(s) are implemented. A captured regulatory agency serving the interests of its invested patrons and wielding the power of the government behind its decisions is often worse than no regulation. Galbraith (1955) posited that captured regulators were part of the problem rather than the solution. He suggested that regulators were vigorous in their youth, moving to complacency in middle age, until they became in old age either senile or arms of the sector they are supposed to regulate.

Ample evidence suggests that regulatory capture is indeed widespread and takes a variety of forms. For example, the U.S. Department of Transportation enacted a rule, according to industry watchdogs, which was actually written by railroad lobbyists, and the coal industry convinced federal regulators to lift federal environmental restrictions on waste dumping (Etzioni, 2009). Etzioni (2009) pointed out that when Countrywide Financial, a national commercial bank, felt pressured by federal regulators at the Office of the Comptroller of the Currency it simply redefined itself in 2007 as a "thrift." The newly defined Countrywide became regulated by the Office of Thrift Supervision (OTS), which had a reputation of being a more "flexible" regulator. Unfortunately, over the next couple of years OTS proved to be too flexible in its oversight of Countrywide's mortgage lending, as well as in its regulation of IndyMac, Washington Mutual and other major lenders. In hindsight, Countrywide's regulator swap played a key role in the subprime mortgage crisis that followed. Given the evidence that regulatory capture appears to be evasive throughout the economy, a skeptic might question how accounting regulators have escaped a similar fate. This paper proffers that they have not escaped regulatory capture.

The Big 5 accounting firms were reduced to the Big 4 with the criminal indictment of Arthur Andersen in 2002 and the firm's ultimate collapse. The vacuum created by the demise of Arthur Andersen and, ironically, the constraints of the Sarbanes-Oxley Act of 2002 (SOX), i.e., the unlinking of audit and consulting services, have contributed to increased market power for the remaining Big 4 firms. One negative aspect of this increased market power is the reluctance of government regulators to indict any of the Big 4 for criminal actions, creating moral hazard. Corporate executives, government regulators and politicians have all expressed concerns about the lack of choices that large public companies have when selecting a public accounting firm. In response to these concerns, the U.S. Congress, as part of SOX, required the General Accounting Office, now the General Accountability Office (GAO), to examine the effects of consolidation in the public accounting industry on competitive forces, audit costs and quality, and audit independence.

As a result of its mandate, the GAO has issued two reports: (1) *Public Accounting Firms: Mandated Study on Consolidation and Competition* (GAO 2003), and (2) *Audits of Public Companies: Continued Concentration in Audit Market for Large Public Companies Does Not Call for Immediate Action* (GAO 2008). Among other findings, both of these reports stated that the Big 4 audited 97% of all U.S. public companies with sales between $250 million and $5 billion dollars (GAO 2003, 2008). This Big 4 dominance is global in scope, not just a U.S. phenomenon. Affiliates of the Big 4 are also the largest auditing firms in Turkey, South Korea, India and the Philippines. The Big 4 audit all of the FTSE 100 companies in England (Simms 2002). They also audit more than 80% of the public companies in Japan, two-thirds of those in Canada and, according to the International Accounting Bulletin, they hold over 70% of the European market by fee income (*Economist*, 2004).

In both its reports on the accounting profession, the GAO expressed concern about the lack of competition between the Big 4 in the large public company segment. The GAO, however, failed to recommend either antitrust legislation to break up the Big 4 into smaller firms or a strategy to provide the next largest public accounting firms the resources to compete with the Big 4. Even though the GAO deferred to call for legislative or regulatory action, the report included a discussion about the possible negative impact on the financial markets of the failure of one of the Big 4 accounting firms.

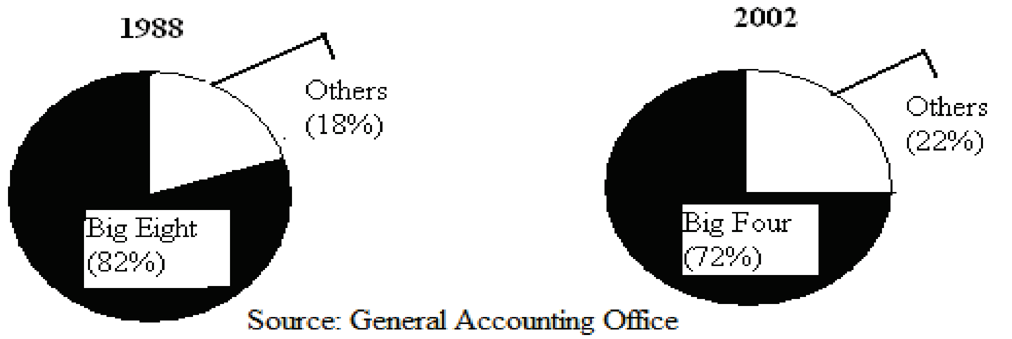
Although the collapse of one of the Big 4 firms could have dire consequences for participants in the financial markets, it appears that the GAO has discounted the impact of not only the current lack of competition facing the Big 4 but also the possible capture by the Big 4 of government regulators charged with the oversight of the accounting profession. In the section that follows, this paper examines the oligopolistic nature of the audit services market. In the next section of this paper, the authors review the relationship between oligopoly and consumer surplus. The paper then briefly discusses the role of reputation in the auditing services marketplace. Next, the authors provide anecdotal evidence that special interests have captured the accounting regulators. In the last section, the authors discuss the implications for the public interest and propose alternatives for accounting regulators and their "captured" mindset.

OLIGOPOLISTIC NATURE OF THE AUDIT SERVICES MARKET

An oligopoly can be defined as a market dominated by a small number of strategically interdependent firms. Economists define a "tight oligopoly" as a market structure where the top four providers in the industry have captured at least 60% of the market and smaller providers encounter significant barriers to entry (GAO 2003, 2008). The public accounting services market can be classified as a "tight oligopoly". For example, a "tight oligopoly" exists in the petroleum and coal products industry, where Ernst and Young and PriceWaterhouseCoopers conduct 94% of the audits. "Tight oligopolies" are also found in the air transport sector, where Ernst and Young and Deloitte Touche Kohmatsu carry out 86% of the audits, and in the building sector, where Ernst and Young and Deloitte Touche Kohmatsu conduct 80% of the audits (GAO 2008). A key characteristic of oligopolies is interdependence. Interdependence implies that each of the Big 4 firms must consider the reaction of their Big 4 rivals when pricing their products or when offering new services.

Additional measures may be used to illustrate the level of concentration within public accounting. For example, the 2002 revenues of the fourth largest firm, KPMG, were eight times greater than those of the fifth largest firm, Grant Thornton. KPMG had five times as many staff members as Grant Thornton (GAO 2003a: 17, table 1). In 2002 KPMG had total audit revenues of $2.016 billion. The combined audit revenues for the next 21 firms were $1.231 billion (GAO 2003a: 17, table 1). Figure 1 below depicts the concentration in the public company audit market by number of clients.

FIGURE 1
PERCENTAGE OF PUBLIC COMPANY AUDIT MARKET (BY NUMBER OF CLIENTS)



Another measure that can be used is the Herfindahl-Hirschman Index (HHI) — a metric commonly used by the US Department of Justice to assess the potentially anti-competitive effects of concentration within an industry. In 1998, the year of the last great merger within the industry—the combination of PriceWaterhouse with Coopers Lybrand— the HHI score for the accounting industry was more than 10 per cent above the level normally associated with a score that is likely to permit industry participants to maintain prices above competitive periods for significant periods of time. Following the demise of Arthur Andersen in 2002, the HHI increased to more than 40 per cent above this anti-competitive warning level (Cox, 2006).

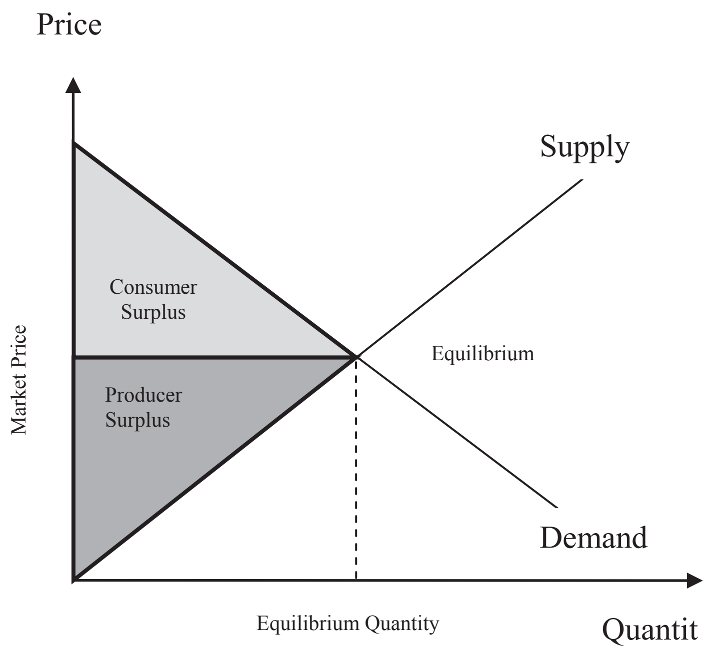
In some industries, market concentration for accounting services has become even more significant and reaches the dominant firm market structure, defined as one provider with over 60% of the market and no significant competitors (GAO 2008). For example, Ernst and Young accounts for 77 percent of the audit fees generated in the agricultural sector, with the next largest firm generating 12 percent of the audit revenue in that market. Both tight oligopoly and dominant firm market structures create the potential for the Big 4 to use their market power, either unilaterally or through collusion, to their advantage. When one firm has a dominant position in the market, the result may be price leadership. The firms with lower market shares may simply follow the pricing changes prompted by the dominant firm. If all oligopolists in a particular market follow the lead of one firm in raising prices, the result is the same as if they had all agreed to raise prices simultaneously (Schiller, 2008).

OLIGOPOLY AND ECONOMIC SURPLUS

When markets are not perfectly competitive, or when they fail to function in other ways, they are inefficient. By comparing the actual benefits in an inefficient market with its potential benefits we can estimate what we lose from this inefficiency. While defining an oligopoly in theory is straight-forward, applying the definition to real-world markets raises a host of problems, making regulation more complex.

Economic surplus is the overall benefit a society composed of consumers and producers receives when a good or service is bought or sold, given a quantity provided and a price attached. Economic surplus is divided into two parts: consumer and producer surplus. A buyer's consumer surplus on a unit of a good is the difference between its value to the buyer and what the buyer actually pays for that unit. The total consumer surplus enjoyed by all consumers in a market is called market consumer surplus, the sum of the consumer surplus on all units. An individual seller's producer surplus on a unit of a good is the difference between what the seller actually gets and the additional cost of providing it. The total producer surplus gained by all sellers in the market is called market producer surplus. A market is said to be efficient when the sum of producer and consumer surplus is maximized in that market. See Figure 2 below.

FIGURE 2
CONSUMER AND PRODUCER SURPLUS



An oligopoly leads to deadweight loss. Whenever quantity is below the perfectly competitive quantity and price is above perfectly competitive price, there is a loss in total economic surplus. The firms will have a higher producer surplus, but the consumer and the total surplus are lower. When oligopolistic firms act collectively and behave like a monopoly, the market demand curve is strongly elastic like a monopoly's leading to a reduction in total and consumer surplus.

Sakai and Yamato (1989) investigated how and to what extent information sharing influences the welfare of producers, consumers, and society as a whole. They demonstrated that the welfare implications of information exchange are quite sensitive to the number of firms in an industry. They showed that if the number of firms in a market is small, then information pooling among firms is likely to harm consumers although it increases social surplus. Under such circumstances, it appears that we encounter a dilemma, since consumer protection is often regarded by antitrust policy makers as their main objective. Therefore, when the government decides to adopt public policies for information transfer, they recommended that they be supplemented with income distribution policies so that some of the increased social surplus may be shifted to consumers .

THE ROLE OF AUDITOR REPUTATION

Adam Smith argued that when like-minded managers operate in the same industry and band together they usually engage in activities that are detrimental to the public interest (Elliott 2002). Proponents of Smith's philosophy argue that the small number of large competitors associated with an oligopoly have the market power to influence price and to pass market risk on to other, usually smaller, entities. Standard economic theory suggests that consumers make rational economic decisions based on cost or efficiency. Because the market for professional accounting services fails to provide consumers with cost or efficiency information, consumers make their choices based on reputation.

The economics literature suggests that auditors' loss of reputational capital is incentive enough to prevent auditors from colluding with management. The marketplace reality is less favorable than the theory suggests. In response to a Harvard Business School article entitled "*Are conditions right for the next accounting scandal?"* (James Heskett, 2003), Dr. B. V. Krishnamurthy, Executive Vice-President and Professor of Strategy, Alliance Business Academy, Bangalore, India stated, "The service providers and their clients have a vested interest, as their survival depends on each other. Due diligence becomes another buzzword to be used at every seminar or symposium and quickly forgotten thereafter. The relationship between service providers and clients, unfortunate as it might sound, is likely to be in the nature of 'You scratch my back and I'll scratch yours.'"

Accounting researchers have long posited that loss of reputation would result in a loss of clients. No single transaction or unethical act would provide a return to the auditors greater than their diminished reputation. Thus, rational audit firms would not participate in or condone any activity that might tarnish their reputational capital. Obviously, more than just a few auditors at Arthur Andersen engaged in "irrational" thought. The threat of loss of reputational capital and clients failed to check the unethical behavior of too many Arthur Andersen auditors.

EVIDENCE OF REGULATORY CAPTURE: TOO CONCENTRATED TO INDICT

When the U.S. government deems that a company's failure would have significant ramifications for the national economy, elected officials make the argument that the company is "too big to fail." This reasoning is used to justify government bailouts and, in some cases, the loosening or repeal of regulatory policies. The bailouts of Chrysler in the late 1970s and Long Term Capital Management in the late 1990s provide examples (Cunningham 2006). More recently, the U.S. Treasury loaned in excess of $700 billion to several of the nation's largest financial institutions and other large non-banking companies such as American Insurance Group, General Motors and Chrysler. Once again, government officials argued that the failure of these large corporations, either together or individually, would have a dire negative impact on the economy. Once the "too big to fail" mentality becomes the modus operands of government, large firms may get a "leg up" on their smaller competitors. In other words, government regulators give the special interests favorable differential treatment.

In August of 2004, documents released by a Senate subcommittee revealed that KPMG had engaged in rigorous and extensive efforts to create and sell dozens of tax shelters from the mid-1990s until 2003. KPMG stated that it earned $124 million from the sale of these shelters, which government officials classified as aggressive relative to a reading of the tax code (Browning 2004). The subcommittee investigators stated that the dispute over KPMG was more than just a linguistic difference examining a benign tax solution versus an illegal tax shelter; rather the real issue was whether a here-to-fore respected professional services firm had crossed the line of acceptable conduct (Senate Committee on Government Affairs, Permanent Subcommittee on Investigations, Minority Staff, 2003). The evidence supports the committee's contention that KPMG knowingly broke the law and was uncooperative with federal investigators. Internal e-mail messages at the firm disclosed that KPMG developed a large bureaucracy to engage in an exhaustive analysis of rulings by tax and civil courts and the IRS to find loopholes in the tax code that would justify its "abusive" shelters (Browning 2004). The company created a cold-call center in Fort Wayne, Indiana, for the purpose of aggressively selling its tax shelters (Reilly 2007). In spite of the implosion of Arthur Andersen and the emergence of a "populist" environment that created conditions hostile to big business and big accounting, internal e-mails indicated that KPMG dragged its feet in cooperating with federal investigators.

Records show that the other firms in the Big 4 abandoned these types of tax shelters and settled with the government. For several months, KPMG lawyers argued that the firm had only given tax advice and had not committed an illegal act. In May of 2005, prosecutors at the U.S. Department of Justice communicated to KPMG CEO Timothy Flynn that the firm faced imminent criminal indictment over the tax shelters that it once sold to wealthy clients. After discussing the possible indictment with several members of KPMG's management team and the firm's legal counsel, Flynn attended a meeting with Justice Department officials. During that meeting, Flynn reversed KPMG's stance and admitted wrongdoing. Eventually, the firm settled with the Justice Department for $456 million plus other stipulations such as federal monitoring through 2008. Justice Department officials noted that that they were aware that a criminal indictment of KPMG could harm the financial markets (Reilly 2007).

It appears that in the case of the Big 4 accounting firms, the U.S. government considered the negative impact of an enforcement action against KPMG and substituted "too concentrated to indict" for "too big to fail." Both mentalities reflect the mindset of "captured regulators" and create the potential for moral hazard behavior. Coffee (2005, p. 1) noted that the government's mentality of "too concentrated to indict" gave KPMG a "strange kind of immunity." He suggested that although prosecutors in principle wield the club of possible indictment, Big 4 firms know that they are unlikely to be put in a criminal dock. As a result, the firms gain an undue leverage in marketplace negotiations. Critics of the Big 4 suggest that such market power produces moral hazard behavior.

On January 7, 2009, Satyam Computer Services, one of India's largest software and services companies, disclosed a $1.47 billion fraud on its balance sheet. B. Ramalinga Raju, the company's founder and chairman, confessed that he and his brother had hid financial information from the company's board, senior managers and auditors for several years. For the third quarter, Satyam reported 50.4 billion rupees ($1.03 billion) of cash and 3.76 billion rupees of earned interest that were fictitious. Receivables were overstated and liabilities were understated by 4.9 billion rupees and 12.3 billion rupees, respectively.[1]

The firm, which trades on the New York and Bombay Stock Exchanges, is required to file financial reports with the SEC. Price Waterhouse of India, the local member of PricewaterhouseCoopers (PWCP), serves as its auditor. After news of the scandal hit the airwaves, Price Waterhouse of India issued a press release and stated that its audit was conducted in accordance with applicable auditing standards and was supported by sufficient audit evidence. In 2008, the Public Company Accounting Oversight Board of the U.S. (PCAOB) had inspected selected audits of Price Waterhouse of India, but the PCAOB's findings were not released.[2]

Cash is one of the easiest accounts to audit. The question of how the audit of a cash account failed to disclose a shortage of $1.03 billion dollars remains unanswered. Further compounding PWC's troubles is the business relationship between PWC and Satyam in the U.S. Both firms worked on a major IT contract for Idearc, a spinoff of telecom firm Verizon. Because Satyam shares are quoted on Wall Street, SEC rules prohibit auditors from having business relations with their clients. U.S. regulators have yet to take action against PWC. Is this lack of enforcement related to PWC's size and the impact that the failure of a Big 4 firm would have on the global financial marketplace?

Recently, global financial markets were sent into a tailspin by the subprime mortgage crisis. One of the first investment banks to fail as a result of this crisis was Lehman Brothers. On December 21, 2010, Andrew Cuomo, New York Attorney General, filed a lawsuit accusing Ernst & Young (E&Y) of helping Lehman Brothers hide its declining financial health for several months before its implosion in September 2008. Cuomo's suit against E&Y is a civil suit, not a criminal indictment like the one brought against Arthur Andersen, and may, as many suggest, be settled out of court. E&Y responded by stating that the Lehman bankruptcy resulted from a series of unprecedented adverse events in the financial markets. A spokesman stated that E&Y stood by its December 31, 2007 audit of the company (Frean and Spence, 2010).

A couple of observations are in order. First, the Arthur Andersen (AA) effect appears to be impacting regulators. Once AA was served with a criminal indictment, SEC rules prohibited the firm from auditing SEC registered companies. As a result, most of its large clients (and some partners) left AA in search of one of the other four international audit firms. Regulators learned their lesson. Repetition of this scenario with E&Y would create turmoil in global financial markets which are just now beginning to show signs of recovery from the subprime mortgage crises. Regulators have decided to bring a civil indictment against E&Y rather than a criminal indictment, allowing the firm to continue auditing its SEC clients. Second, the disintegration of one of the remaining Big 4 firms would result in an audit services market that would be even more concentrated than it is today. An increase of just 50 points in the Herfindahl-Hirschman Index (HHI) would put the accounting industry in violation of antitrust guidelines (Sloan 2010). Feldman (2010) estimated that the failure of E&Y would add 733 points to the HHI, unacceptable to the Department of Justice's Antitrust Division. Regulators may punish E&Y with significant monetary fines and perhaps suspend them from accepting new clients for a short period of time, but regulators and those clients seeking the services of one of the Big 4 accounting firms want E&Y to survive. Once again, it appears that one of the Big 4 accounting firms is too big for a regulator to protect the public interest, i.e., serve E&Y a criminal indictment.

CONSUMER WELFARE AND SOCIETAL IMPLICATIONS

The attitude of the Big 4 toward their social responsibility for quality audits or alerting a board of directors to an unhealthy level of financial management risk is more than just about the reputational capital of the Big 4 or captured government regulators. It has implications for world-wide financial stability. Commenting on the great financial crash of 1929 in the United States, J.K. Galbraith (1955) saw the crash as a symptom of a wider problem. He believed that the world of finance was incapable of expressing even the most basic and necessary self-criticism. "The sense of responsibility in the financial community for the community as a whole is not small," he observed, "It is nearly nil." (Galbraith, 1955). Turner (2006, p. 395) noted the fact that Big 4 firm-on-firm peer reviews "never resulted in a negative or qualified report on one of the major international accounting firms, and had engrained a culture in which one firm had agreed not to tell on the other. When Galbraith's observation is combined with Turner's statement, marketplace stakeholders could question if the Big 4 view audit quality with a critical eye.

A major concern in the marketplace is over the possible demise of one of the remaining Big 4 firms, especially if one of the firms faces a criminal indictment. While such concern has some validity, neither the global community nor government regulators can afford for the Big 4 to disregard legal, regulatory and ethical standards. Friedland (2004) noted that the break-up of Arthur Andersen unfolded in a relatively smooth manner. With this in mind, we posit that rather than forming the mentality of "too concentrated to indict," government agencies, particularly the Securities and Exchange Commission (SEC), should inform the Big 4 and large corporations that the agency has formed a mentality of "here is the plan" in case one or more of the Big 4 are brought to court on criminal charges.

International Financial Reporting Standards (IFRS) are a set of accounting standards developed by the International Accounting Standards Board (IASB) that is becoming the global standard for the preparation of public company financial statements. With the Securities and Exchange Commission (SEC) likely to set a date for voluntary or even mandatory adoption of IFRS by all U.S. public companies, there will be a huge increase in the demand for accounting and audit services. The Big 4 firms are considered experts in the area and have been using IFRS in other countries for years. Does that imply that this increase in demand has to be met by these existing 4 firms, thereby allowing consumers little to no choice? What can we do now to encourage more competition? Perhaps, a solution is to allow the next 5 largest firms to become more competitive in the arena. This increased competition will not be possible without some form of incentive or tax subsidy by the Government since the resources at the disposal of the next 5 largest firms are very miniscule compared to those at the disposal of the Big 4. Perhaps the SEC could set a fee in place, the receipts of which could be used to provide smaller firms the opportunity to get training and compete with the Big 4.

We also suggest that regulators revisit mandatory rotation of audit firms. Opponents to mandatory rotation of audit firms argue that a new audit firm would face a steep learning curve. This in turn would increase audit staffing requirements, resulting in higher audit fees. While the basic premise of this argument is correct, the concern may be an overstatement. Hundreds of companies change auditors each year. In 2003, 905 companies changed auditors, while in 2004, 1,609 companies made an auditor switch. Of these companies, 69% in 2003 and 59% in 2004 were "mum" in their explanation to their shareholders as to the reason for the change (Turner et al., 2005)

Currently, approximately 17,000 companies file audit reports with the SEC. If the SEC required mandatory audit firm rotations every ten years, approximately 1,700 companies would change audit firms each year. Thus, mandatory rotations every ten years would result in an annual total approximately double the number of auditor changes that occurred in 2003 and nearly equal to the number of auditor changes in 2004. With such a rotation requirement in place, other accounting firms, particularly the second-tier accounting firms, may take the necessary steps to obtain audit staff and partner expertise to compete with the Big 4 for the clients that are required to rotate audit firms.

Another suggestion addresses the issue of audit quality. Information asymmetry exists between the consumers and providers of audit services. Consumers lack the information necessary to arrive at an informed decision when they are in the market to purchase an audit. While The Public Company Accounting Oversight Board (PCAOB) conducts annual inspections of all audit firms that perform 100 or more audits of public companies, the PCAOB shares little of its findings with the public. The PCAOB states that to comply with Sections 104(g)(2) and 105(b)(5)(A) of the Sarbanes-Oxley Act of 2002:

> "A substantial portion of the Board's criticisms of a firm (specifically criticisms of the firm's quality control system), and the Board's dialogue with the firm about those criticisms, occurs out of public view, unless the firm fails to make progress to the Board's satisfaction in addressing those criticisms. In addition, the Board generally does not disclose otherwise nonpublic information, learned through inspections, about the firm or its clients. Accordingly, information in those categories generally does not appear in the publicly available portion of an inspection report." (PCAOB, 2008, p5)

Such a policy fails to provide for greater transparency within the accounting profession. We believe that when the PCAOB finds a weakness or weaknesses in its review of selected audits of an audit firm, the details of the resulting inspection report should be public information, regardless of the size and reputation of the audit firm. Audit committees of publicly traded companies could examine these reports for evidence of systemic weakness associated with the audit process of any public accounting firm. Armed with such public information, audit committees could bring pressure on any audit firm to eliminate such weaknesses from the audit of their companies. Investors would also have the opportunity to monitor such PCAOB reports. At stockholder meetings, investors could make sure that a company's audit committee was practicing due diligence with respect to canvassing PCAOB reports.

In conclusion, a strong accounting profession provides global capital markets an invaluable service. The public interest, however, is not served by either the lack of competition in the auditing services marketplace or the capture of government regulators by special interests. A focus on publicly available information related to audit quality is long overdue. Increased competition via audit quality and mandatory audit firm rotation would be a move in the right direction to eliminating the oligopoly that the authors believe exists in the auditing services marketplace. An accounting industry characterized by several firms competing with the Big 4 for large clients would free regulators and allow them to take actions that protect the public interest. When increased competition is combined with an SEC that has a "game plan" for the possible demise of one or more of the Big 4 accounting firms and a PCAOB that provides audit quality information to all capital market stakeholders, the global interest in the efficiency and sustainability of capital markets will be better served.

ENDNOTES

[1] http://www.economist.com/businessfinance/displayStory.cfm?story_id=12898777
[2] http://www.bloomberg.com/apps/news?sid=aov_laRpSmno&pid=20601109

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The Distinct Influences of Financial Information Intermediaries on Consumer Rationalisation of Vehicle Finance

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According to the classical economics theory, consumers are sovereign economic entities motivated to maximise their wellbeing. One strategy used to rationalise credit choices is through consultation of information intermediaries. While the literature recognises the notion that financial information intermediaries are exogenous in form and substance, the distinct influence of each information intermediary on consumer financial rationalisation has not been examined a priori - an objective of this study. Using a sample drawn from Melbourne residents, a proposed theoretical model was empirically tested. The results were suggestive that financial information intermediaries significantly influenced consumers' vehicle finance rationalisation. Furthermore, different financial information intermediaries seemed to have distinct influence on borrowers' vehicle finance decisions. The implications of the study findings are discussed.

INTRODUCTION

The economics approach views individuals as sovereign economic entities directed at judiciously matching their consumption needs to offers in the market (Rischkowsky & Doring, 2008). Following from this argument, individuals are projected to behave in a manner which maximises their net expected gains, construed from estimates of the difference between expected positive and negative utility (Kulviwat, Guo, & Engchanil, 2004). Credit rationalisation plays a critical role in maximising the personal economic utility function and thereby maximising financial wellness (Klein & Ford, 2003; Kulviwat et al., 2004). A rational borrower, for example, optimises credit utility by choosing a debt portfolio that minimises the expected cost of financing a targeted level of debt through a judicious choice of credit instruments and lending terms (Lee & Hogarth, 1999a; Santomero, 2001; Zhu & Meeks, 1994). Financial aptitude, skill base and the knowledge of the costs and benefits of alternative credit choices available in the market is the cornerstone of any credit rationalisation strategy. Consumers gather information from different financial information intermediaries to augment their 'banked' knowledge in order to optimise their financial decisions and choices. There are several benefits attributable to credit rationalisation. Increased returns per dollar invested and low interest rate and finance charges are the most obvious short-term benefits. The larger the amount being borrowed the higher will be the interest rate and finance charge dispersion in the market, hence the higher will be the magnitude of benefits of a rationalisation process (Stigler, 1961). Long-term benefits include gains in financial knowledge for future applications, better financial management skills, greater savings and realising the most out of financial instruments (Chang & Hanna, 1992; Lin & Lee, 2004). Consumers who rationalise their credit acquisitions are therefore expected to maximise their consumption utility by having their credit needs best aligned with the most appropriate credit instrument, a position that provides for enhanced financial wellbeing through, for example, reduced cost of credit, optimal use of credit instruments, increased satisfaction with the outcome and improved credit management skill. For example, Lee and Hogarth (1999b) conducted a study to examine factors that impact on Annual Percentage Rate (APR) returns on consumer mortgage acquisition. In the study, interest rate savings were found to be significantly influenced by information gathering effort, term and source of loan, age and education of a respondent, household size and region and credit experience. Also found was that 'refinancers' who engaged in an extended information search obtained the lowest APR compared with other borrowers, an observation consistent with those of other studies (Chang & Hanna, 1992; Kim, Dunn, & Mumy, 2005; Lee & Hogarth, 1998, 1999b). These study findings demonstrate that credit rationalisation yields benefits to individuals.

Consumers markets provide a myriad of information sources. The literature is replete with studies on (i) the typologies of information sources (Claxton, Fry, & Portis, 1974; Freiden & Goldsmith, 1989; Kiel & Layton, 1981; Urbany, Dickson, & Wilkie, 1989; Westbrook & Fornell, 1979), and (ii) the interdependency in the use of information intermediaries by consumers (Lee & Cho, 2005; Lee & Hogarth, 2000a, 2000b; Murray, 1991; Ratchford, Talukdar, & Lee, 2001). There is general consensus among these studies that information intermediaries are distinct in composite and informational orientation. However, the extent to which each information intermediaries distinctly influences consumer financial decisions and choices is not well understood. Therefore the objective of this paper is to contribute towards a better understanding of this phenomenon by, first, examining the influence of three financial information intermediaries on consumer credit rationalisation and, second, to evaluate the perceived differences in the influence of different information intermediaries on borrower credit decisions.

The structure of the remaining part of the paper is as follows. Next section provides a literature review and an overview of financial information intermediaries and the pattern in which they are used by consumers. Second, the research hypotheses are developed and presented in section three. The research methods and results output are then presented and discussed. Finally, the last section gives a conclusion and a summary of the study implications.

LITERATURE REVIEW: AN OVERVIEW OF INFORMATION INTERMEDIARIES

Information intermediaries are defined as 'economic agents, in either human or unhuman form, whose purpose is to support the production, exchange, and use of information in order to increase the value of the information for its end user or reduce the cost of information acquisition' (Lee & Cho, 2005, pp. 96). In essence, consumers engage information intermediaries as a rationalisation strategy, with a view to optimise on the quality (or value) of their decisions or choices. Some of the benefits accruing from this rationalisation process were briefly identified and discussed. Premised on that consumers are both budgetary constrained and risk averse (Brealey, Myres, & Marcus, 2007; Brigham & Houston, 2004), a contending view argues that individuals are motivated to engage information intermediaries as a strategy to minimise the risk of making uninformed, suboptimal choices (Beatty & Smith, 1987; Heaney & Goldsmith, 1999; Srinivasan & Ratchford, 1991). For example, Chang and Hanna (1992) found that when loan size increased, the savings benefits from search increased and the potential loss from not rationalising credit was correspondingly greater.

Different studies have adopted varying classification schema to classes of information sources. Kiel and Layton (1981) proposed that information source dimensions can be divided into three groups constituting retailer source, media source and interpersonal source. Similarly, Freiden and Goldsmith (1989) clustered sources of information into personal sources, physical search and mass media in their study of information search for professional services. Murray (1991) and Locander and Herman (1979) classified information sources into five groups: (i) impersonal advocates; (ii) impersonal independent; (ii) personal advocates; (iv) personal independent; (v) direct observation/experience. Schmidt and Spreng (1996) remodelled the proposed classification of information intermediaries by Locander and Herman (1979) by placing more emphasis on the connotation of informational content, namely: (i) market controlled sources; (ii) reseller information source; (iii) third party independent organisations; (iv) interpersonal sources; (v) direct inspection. Lee and Hogarth (2000b) and Capon and Lutz (1979) condensed consumer information sources into three principal clusters that effectively espoused most of the perspectives articulated in the other studies, and this is the schema adopted in this study:

i. personal sources, which largely take the form of informal inquiries with personal contacts, for instance friends, relatives, neighbours, acquaintances, co-workers and peers;
ii. independent sources, which encompass various neutral agencies and levels of government, independent rating agencies, and organisations that certify the quality of products;
iii. commercial sources, which include all entities that have a direct economic interest in a product and include manufactures, retailers and trade associations.

The Use of Primary Information Intermediaries by Consumers

Studies have established a trend in the approach adopted by consumers when consulting information intermediaries. On the whole, empirical evidence supports the notion that consumers are 'cognitive misers' who limit the number of information intermediaries consulted when searching for information (Freiden & Goldsmith, 1989). In a study of pre-purchase information search for professional services, Freiden and Goldsmith (1989) found that half of the respondents had consulted only one information intermediary and a quarter had consulted a maximum of two information intermediaries. Westbrook and Fornell (1979, pp. 310) found evidence of 'tradeoffs' being made in the manner consumers used and relied on different information intermediaries when searching for durable goods. Studies on search for financial products reached similar conclusions. In a study of search for mortgages, an average consumer was found to obtain information from two sources (Lee & Hogarth, 2000a). A study of consumer search for credit cards found that at the median, consumers consulted only one source of information (on average, 1.4 sources of information) prior to applying for a credit card (Lee & Hogarth, 2000b).

The reason for consumers to limit the number of information intermediaries that they consult is because information gathering is a costly exercise. These costs include transport expenses, purchase of information materials, the opportunity cost of time, the physical effort required, and the cognitive effort required to search and process the collected data (Chang & Hanna, 1992; Schmidt & Spreng, 1996). Besides, there is no obvious evidence found of an association between consumer satisfaction and the use multiple information intermediaries (Freiden & Goldsmith, 1989).

While all these studies have mapped out the interdependency in the consumer use of alternative financial information intermediaries when rationalising financial decisions, the distinct influence of each information intermediary on consumer financial decision has remained largely unexplored. Next to be discussed are the attributes and traits associated with different financial information intermediaries.

Financial Information Intermediaries

Financial information intermediaries are heterogeneous, particularly on the aspects of form, complexity and informational content (Lee & Hogarth, 1999a; Malbon, 2001; Ratchford et al., 2001). In this regard, each information intermediary has a unique orientation and is expected to influence a borrower's credit acquisition decision and choice in a distinct fashion.

Personal Financial Information Intermediary: Personal sources of financial information constitute personal contacts who represent a body of financial knowledge, by way of banked internal information, gathered and accumulated over time by means of prior exposure and past experience (Lee & Hogarth, 1999a; Schmidt & Spreng, 1996). To the extent that personal contacts are non-experts on personal finance, personal financial information intermediaries have been associated with provision of qualitative and 'soft' information (Capon & Lutz, 1979) and found most unlikely to provide relevant or accurate information on price or other quantitative information (Lee & Hogarth, 1999a). For instance, Malbon (2001) indicated that personal sources find elements of versatility, convenience and simplicity in consumer financial instruments to offer greater pre-purchase evaluation utility than other types of informational data. In this regard, personal financial information intermediary is predisposed to experiential, interpretive and subjective data (Lee & Hogarth, 1999a; Murray, 1991).

Independent Financial Information Intermediary: Consumer advocates attribute consumer over-indebtedness and the subsequent increase in bankruptcy trends to excessive interest rates on loans and socially irresponsible lending practices by some high-street lenders (Bridges & Disney, 2004). Independent financial advisors, constituting independent financial consultants, government agencies and financial institutions that are not a composite of the lending market, are expected to be largely driven by agendas directed at delivering professional and impartial advisory services. For example, independent information sources have been found to provide supplemental information on price and product attributes across sellers, and thereby enhance consumer understanding of the intricacies of credit and provide for product comparison across the financial industry (Lee & Hogarth, 1999a; Mattila & Wirtz, 2002; OECD, 1992). Also, the credibility of independent information sources is held in high esteem by consumers (Mitra, Reiss, & Capella, 1999). Therefore, as a source of information on consumer credit, an independent financial source is expected to be predisposed to facilitating cost-rational credit decisions and optimal credit choices.

Commercial Financial Information Intermediary: Commercial financial information intermediaries are defined as corporate entities that have a direct involvement in the consumer credit supply chain. Commercial sources of financial information constitute consumer credit providers such as banks, and deposit and non-deposit financial institutions. They disseminate information by personal or non-personal modes which include human-interactive consultation, media advertising, product information on packages, and product brochures. Much of the financial information that is available in the public domain is noted for being generated and supplied by commercial sources (OECD, 1992). The economic interest of commercial financial intermediaries in their respective products provides the strong incentive to disseminate information to consumers, especially if the entity is offering competitive terms (Capon & Lutz, 1979; Lee & Hogarth, 1999a; Mattila & Wirtz, 2002) and have been noted for withholding damaging information relating to their products (OECD, 1992). To this end, consumer credit lending institutions have been labelled as providing self-serving information (Krauss, 1990; Lee & Hogarth, 1999b). Overall, the motives and actions of commercial information intermediaries are polarised by the profit-maximisation goal (Chien & DeVaney, 2001; Reserve Bank of Australia, 1999; Shubhasis, 2004), and such motives and actions are not necessarily congruent with the consumption utility maximisation objectives of consumers.

In summary, the literature gives indications that information intermediaries are distinct in composite and informational orientation. As such, it is posited in this study that alternative information intermediaries have a distinct influence on consumer credit decisions and choices. Next to be discussed are the research hypotheses

THE RESEARCH HYPOTHESES

Consultation of financial information intermediaries is a conscious goal-oriented exercise directed at augmenting, clarifying and/or evaluating available information relating to a credit choice decision with a purpose to optimise financial wellbeing (Lee & Cho, 2005; Lee & Hogarth, 2000a, 2000b). Considering that credit rationalisation results in 'outcomes that increase one's utility or provide value by facilitating achievement of higher level goals and values' (Schmidt & Spreng, 1996, pp. 251), borrowers are therefore motivated to consult financial information intermediaries prior to taking decisions (Chang & Hanna, 1992; Lee & Hogarth, 2000a, 2000b; Srinivasan & Ratchford, 1991). It therefore follows that borrowers who engage in an extended and effortful consultation of financial information intermediaries prior to acquiring an instrument of credit intensify their credit rationalisation process. There are three principal classes of financial information intermediaries that were identified from the literature; Personal intermediary, Independent intermediary and Commercial intermediary (Capon & Lutz, 1979; Lee & Hogarth, 2000b). It is hence posited that the degree to which financial information intermediaries are used influence the extent to which borrowers rationalise their credit decisions. Thus, it is hypothesised that consumer credit rationalisation is positively related to the influence of each of the three financial information intermediaries on the choice of credit instrument. Thus:

> *H1: consumer credit rationalisation is positively related to the influence of personal financial information intermediary on the choice of credit instrument.*

> *H2: consumer credit rationalisation is positively related to the influence of independent financial information intermediary on the choice of credit instrument.*

> *H3: consumer credit rationalisation is positively related to the influence of commercial financial information intermediary on the choice of credit instrument.*

Consumers gather information from varied financial information intermediaries that are heterogeneous (Lee & Hogarth, 1999a; Malbon, 2001; Ratchford et al., 2001). Further, financial information intermediaries were found to embody different traits and thereby possess different proficiencies (Lee & Hogarth, 1999a; Schmidt & Spreng, 1996) and advice (Capon & Lutz, 1979; Malbon, 2001; OECD, 1992). In this regard, it is posited that each financial information intermediary has a measurably distinct influence on consumer financial decisions. The interaction among the three identified information intermediaries and their influence on consumer credit decisions is depicted in Figure 1.

It is hypothesised in the proposed model that the influence of the Personal information intermediary on consumer credit decision is significantly different from that of Commercial and Independent intermediaries. Also, that the influence of the Independent information intermediary is significantly different from that of the Commercial intermediary. Thus;

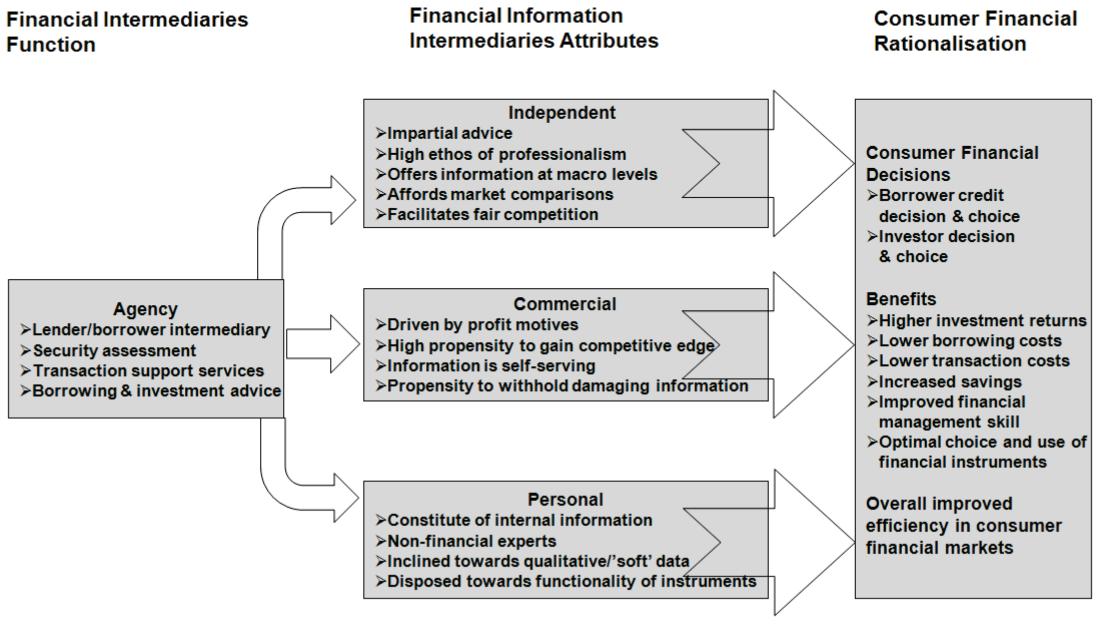
> *H4: There is a difference between the influence of Commercial and Personal information intermediaries towards consumer credit decision.*

> *H5: There is a difference between the influence of Personal and Independent information intermediaries towards consumer credit decision.*

> *H6: There is a difference between the influence of Independent and Commercial information intermediaries towards consumer credit decision.*

The theoretical model depicted in Figure 1 indentifies the element of agency as one of the primary functions of financial intermediaries. The agency function encapsulates the role of production, exchange and use of financial information with a view to add value to the decision and choice of the end-user. There are three primary financial information intermediaries that are identified, each with different traits and proficiencies as relating to informational content. In this regard, consumer financial decisions and choices, and indeed the overall efficiency of the consumer financial markets, are influenced by the degree of dominance of and reliance on each of the financial information intermediaries within a given economic environment.

FIGURE 1
A THEORETICAL MODEL OF THE INFLUENCE OF FINANCIAL INFORMATION INTERMEDIARIES ON CONSUMER CREDIT RATIONALISATION



RESEARCH METHOD, DATA AND MAJOR FINDINGS

A questionnaire survey was conducted to investigate consumer credit behaviour as relating to the rationalisation of vehicle finance and choice of financial instruments and services by individuals. The process of drafting a sampling plan for this research was guided by principles of population representation and research generalisability. To achieve this objective, a quasi-random sampling method was adopted in gathering primary data from the general members of the public (Hair, Babin, Money, & Samouel, 2003). The targeted population were individuals who had acquired credit to purchase a vehicle in the preceding 3-year period. A timeframe was imposed on the period after the acquired credit with a purpose to enhance data validity by, for example, minimising on the effect of selective memory and memory decay on the reliability of measures used (Guo, 2001). Other practical measures taken to enhance data validity included adopting measures oriented toward capturing particular credit acquisition behaviour, as opposed to passive behaviour. Also, the questionnaire placed emphasis on the credit generally considered significant by the respondent. Schmidt and Spreng (1996) argued that such measures enhance data validity.

The study strived to achieve representation across the demographics divide of the targeted population by:

i. conducting the research in the city of Melbourne, Australia. The city offered a population demographic distribution that is diverse and comparable to other Australian major cities (Australian Bureau of Statistics, 2006)
ii. conducting the research over a reasonably large geographic area, covering twelve postal codes;
iii. covering a variety of community centres, including schools, social clubs and a mall.

Potential respondents were randomly intercepted in various locations and requested to complete a questionnaire. In consideration of the sensitivity nature of the subject matter being investigated and the advantages of the personally-administered questionnaire technique, this survey technique was found most appropriate and thus adopted. A total of 600 questionnaires were distributed and completed by respondents, with 176 cases found usable for this research. The questions used were part of a larger survey.

The average credit amount acquired was AU$ 24,621. The sample constituted of 55.5% males and 44.5% females, with many of the respondents (32.1%) falling into the $40,000 - $59,000 annual income before tax bracket. The sample descriptive statistics are shown in Table 1.

Overall, the credit amount acquired was considered substantial to warrant a fairly reasonable degree of financial rationalisation on the part of the respondents. Also, given the substantiality of the amount of credit sourced, coupled with the relatively short time lapse between credit acquisition and participation in the survey, it was reasoned that the potential effect of ‘memory decay’ on the collected data had been minimised.

TABLE 1
SAMPLE DESCRIPTIVE STATISTICS

Factor	Categories	Frequency	Percent (%)	Cumulative %
Gender	Male	86	55.5	55.5
	Female	69	44.5	100
Age Group	20 yrs and below	10	5.7	5.7
	21-30 yrs	27	15.4	21.1
	31-40yrs	66	37.7	58.9
	41-50yrs	60	34.3	93.1
	51-60 yrs	10	5.7	98.9
	Over 60 yrs	2	1.1	100
Annual Income Before Tax	Less than $13,000	11	6.9	6.9
	$13,000 - 24,000	8	5.0	11.9
	25,000 - 39,000	36	22.6	34.6
	$40,000 - 59,000	51	32.1	66.7
	$60.000 - 79,000	38	23.9	90.6
	$80,000 - 104,000	10	6.3	96.9
	$105,000 or more	5	3.1	100
Highest Level of Education	Secondary school or less	29	17.0	17.0
	Post-secondary school diploma or certificate	21	12.3	29.2
	Trade qualification	65	38.0	67.3
	University bachelors degree	43	25.1	92.4
	University higher degree	13	7.6	100
Credit amount	$10,000 and less	36	25.7	25.7
	$10,001 - $18,000	21	15.0	40.7
	$18,001 - $25,000	33	23.6	64.3
	$25,001 - $40,000	28	20.0	84.3
	$40,001 and more	22	15.7	100

Measures

Two key guiding principles were used in the development of the key factors. First, to the extent possible, existing measures were adopted and adapted to the study. Second, the factors were measured using multi-item measures. Multi-item measures have the advantage of increasing scale reliability and validity, and of capturing the multiple dimensions associated with a factor (Hair, Black, Babin, Anderson, & Tatham, 2006; Schumacker & Lomax, 2004). All items were measured on the recommended 7-point semantic differential scale (Schumacker & Lomax, 2004; Wong & Merrilees, 2007). The Cronbach's coefficient alpha was used to measure for inter-item stability and consistency (Hair et al., 2006; Pallant, 2001). As a guide, Cronbach's alpha values greater than or equal to 0.6 were considered acceptable (Carmines & Zeller, 1979; Robinson, Shaver, & Writghtsman, 1991), with values greater that 0.7 preferred (Hair et al., 2006). The Cronbach's coefficient alpha ranged 0.62 - 0.91, and thus scale reliability was confirmed. Factors were thereafter computed from their respective items. Table 2 presents the results of the reliability test for each factor and the corrected item-total correlation for each of the items.

TABLE 2
RELIABILITY TEST RESULTS

Factor	Cronbach's Alpha	Items	Corrected Item-Total Correlation	Items References
Consumer Credit Rationalisation	.91			
		Interest Rate	.71	(Adkisson & McFerrin, 2005; Bernthal, Crockett, & Rose, 2005; Lee & Hogarth, 2000a, 2000b)
		Instalment Size	.76	
		Interest Variability	.74	
		Annual Percentage Rate	.77	
		Broker Fees	.69	
		Application Fees	.70	
		Other Credit Terms	.66	
Personal Information Intermediary	n/a	*Friend, Relative or Colleague	n/a	*(Capon & Lutz, 1979; Heaney & Goldsmith, 1999; Lee & Hogarth, 1999a, 2000a)
Independent Information Intermediary	.87			
		*Independent Consultant	.77	
		*Independent Reports	.77	
Commercial Information intermediary	.62			
		*Commercial Adverts	.39	
		*Credit Providers	.47	
		*In-store Information	.43	

Financial Information Intermediaries

Financial Information Intermediaries captured the various sources of information that borrowers used prior to acquiring credit and the extent to which each information source influenced the credit decision thereafter taken. Respondents were asked to indicate the degree to which each information source influenced the decision to choose the credit facility used to finance the purchase of a vehicle. Sources of information were prompted by (Capon & Lutz, 1979; Heaney & Goldsmith, 1999; Lee & Hogarth, 1999a, 2000a):

i. personal financial information intermediary: friend, relative and colleague;
ii. independent financial information intermediary: independent financial consultant, consumer report, article and guide (Cronbach's alpha = 0.87);
iii. commercial financial information intermediary: commercial advert on radio, TV, newspaper, magazine and internet, credit provider, bank, retailer and salesperson (Cronbach's alpha = 0.62).

Overall, a six-item scale was used; one item for the Personal Financial Information Intermediary, two for the Independent Financial Information Intermediary and three for the Commercial Financial Information Intermediary. The distribution of the items across information intermediaries was reflective of their breadth in terms of dimensions, with commercial information intermediary being the most extensive (Beatty & Smith, 1987; Lee & Hogarth, 2000a; Moorthy, Ratchford, & Talukdar, 1997).

Consumer Credit Rationalisation

The concept of Credit Terms Considered was conceptualised using the notion of the price of money, particularly considering the important role played by credit terms on consumer credit decisions and credit cost rationality (Adkisson & McFerrin, 2005; Bridges & Disney, 2004; Brown, Garino, Taylor, & Price, 2005). The extent to which an individual considered specific credit terms prior to acquiring vehicle finance was used as an indicator for consumer credit rationalisation. Credit terms were prompted by:

i. interest rate
ii. instalment size
iii. interest variability
iv. annual percentage rate
v. broker fees
vi. application fees
vii. other credit terms

The seven items captured the dimensions of interest-related and non-interest-related credit properties that different credit users seek (Adkisson & McFerrin, 2005; Bernthal et al., 2005; Lee & Hogarth, 2000a, 2000b). The Consumer Credit Rationalisation factor scored a Cronbach's alpha of 0.91. The research hypotheses were next tested.

Results

The influence of the three financial information intermediaries on consumer credit rationalisation was examined by performing the standard multiple regression analysis, wherein Consumer Credit Rationalisation was the dependent variable and the three financial information intermediaries were the independent variables. The standard multiple regression method was used due to lack of both a priori theoretical knowledge and statistical criteria for weighting or ranking the three independent variables (Green, Salkind, & Akey, 2000; Ho, 2006). In this regard, the independent variables were entered simultaneously into the equation.

The correlation between the independent variables ranged between 0.44 and 0.61, with Personal and Independent information intermediaries reporting the highest correlation. The collinearity statistics of tolerance (range: 0.58 – 0.75) and 'VIF' (range: 1.34 – 1.72) indicated values that were within the recommended ranges of greater than 0.10 and less that 10.0 (Ho, 2006), respectively. Further, the ‘condition index’ indicated values that were within the recommended range of less than 15 (Ho, 2006). It was thus concluded that the multicolinearity assumption of regression was satisfied (Pallant, 2001).

The linear combination of Financial Information Intermediaries was found to be significantly related to Consumer Credit Rationalisation, $F (3, 172) = 14.22$, $p < .001$. The sample multiple correlation coefficient was 0.45, resulting in an adjusted R square of 19%. Table 3 presents the coefficients that indicate the relative strength of the individual predictors.

TABLE 3
STANDARD REGRESSION ANALYSIS RESULTS

Independent Variables	Standardized Regression Coefficients	t-values	Sig.
Commercial	.44	5.59	.00
Personal	-.07	-0.84	.40
Independent	.07	0.80	.43

The Commercial information intermediary was the only predictor variable with a statistically significant relationship, hence the strongest, with Consumer Credit Rationalisation ($B = 0.44$, $t = 5.59$, $p < .01$). Next to be ascertained was the distinction in influence among information intermediaries on consumer credit decisions.

The paired-samples t-test was conducted to evaluate the mean differences in the influence of the different classes of financial information intermediaries on consumer choice of credit instruments. Three pairs of means of the financial information intermediaries were tested; Commercial, Personal and Independent. Table 4 shows the results of the paired-samples t-test.

TABLE 4
PAIRED-SAMPLES T-TEST RESULTS

	Paired Differences							
	Mean	Std. Dev	Std. Error Mean	t-value	Sig.		Mean (M)	Std Dev (SD)
Commercial - Personal	.702	1.91	.14	4.89	.00	Commercial	3.44	1.46
Personal - Independent	-.749	1.68	.13	-5.92	.00	Personal	4.14	2.01
Independent - Commercial	.047	1.67	.13	0.37	.71	Independent	3.40	1.73

The results from the analysis indicate a statistically significant difference between two pairs of means: Commercial ($M = 3.44$, $SD = 1.46$) and Personal ($M = 4.14$, $SD = 2.01$) information intermediaries ($t = 4.89$; $df = 175$); $p < 0.01$) and; between Personal and Independent ($M = 3.40$, $SD = 1.73$) information intermediaries ($t = -5.92$; $df = 175$; $p < 0.01$). The difference in the influence of the Independent information intermediary and the influence of the Commercial information intermediary was found not to be statistically significant ($t = 0.37$; $df = 175$; $p > 0.05$). The eta squared statistic, as a measure of effect size, was computed for the two pairs of means that were found significant. The computed values were 0.12 and 0.17, indicating a moderate to large effect size (Cohen, 1988; Pallant, 2001).

Hypothesis Test Results

Hypothesis 1 proposed that consumer credit rationalisation is positively related to the influence of personal financial information intermediary on the choice of credit instrument. The results indicated a standardised regression path coefficient of -0.07 with a t-value of -0.84 that was non-statistically significant at $p > 0.05$. The hypothesis was therefore not supported.

Hypothesis 2 proposed that consumer credit rationalisation is positively related to the influence of independent financial information intermediary on the choice of credit instrument. The results indicated a standardised regression path coefficient of 0.07 with a t-value of 0.80 that was non-statistically significant at $p > 0.05$. The hypothesis was therefore not supported.

Hypothesis 3 proposed that consumer credit rationalisation is positively related to the influence of commercial financial information intermediary on the choice of credit instrument. The results indicated a standardised regression path coefficient of 0.44 with a t-value of 5.59 that was statistically significant at $p < 0.01$. The hypothesis was therefore supported.

Hypothesis 4 proposed that there was a difference between the influence of Commercial and Personal information intermediaries towards consumer credit decisions. The results indicated a t-value of 4.89 that was statistically significant at $p < 0.01$, thus supporting the hypothesis.

Hypothesis 5 proposed that there was a difference between the influence of Personal and Independent information intermediaries towards consumer credit decisions. The results indicated a t-value of 5.92 that was statistically significant at $p < 0.01$. The hypothesis was therefore supported.

Hypothesis 6 proposed that there was a difference between the influence of Independent and Commercial information intermediaries towards consumer credit decisions. The results indicated a t-value of 0.37 that was not statistically significant at $p > 0.05$, thus the hypothesis was not supported.

Some Analysis

It was established from the literature that financial information intermediaries are heterogeneous in form and substance. There is a replete of studies that have mapped out typologies of information intermediaries and patterns of consumers use of these information intermediaries. However, the extent to which different information intermediaries distinctly influence consumer financial decisions and choices is not well understood. It was the objective of this study to examine this phenomenon.

In this regard, it was first posited that the three distinct classes of information intermediaries, Personal, Independent and Commercial, positively influenced consumer credit rationalisation. The standard regression analysis results indicated the Commercial information intermediary to be the only source that significantly influenced consumer credit rationalisation. Personal and Independent sources did not significantly influence consumer rationalisation of vehicle finance decisions.

Second, to the extent that information intermediaries are heterogeneous, it was posited that different information intermediaries distinctly influence consumer credit decisions. The paired-samples t-test results found two, out of a possible three, pairs of information intermediaries to be significantly distinct in so far as influencing consumer credit decisions. In particular, the influence of the Personal source was found to be distinct from that of the Commercial source. Also, the influence of the Independent source was found to be distinct from that of the Personal source. No significant difference was found between the influence of the Independent and Commercial sources on consumer credit decisions.

The research findings confirm the dominance of the commercial financial information intermediary in the consumer credit markets. The commercial information intermediary was found to be the only source that significantly and strongly influenced consumer credit decisions, congruent with observations made in previous research indicating that much of the financial information in the public domain is generated and supplied by commercial sources (OECD, 1992) and that these entities have a strong commercial motive to disseminate information (Capon & Lutz, 1979; Lee & Hogarth, 1999a; Mattila & Wirtz, 2002).

Another research finding from the study was the evidence to suggest that different financial information intermediaries influence consumer credit decisions and choices in a peculiar fashion, more so between the Personal and Independent source, and between the Personal and Commercial sources. The findings suggested that the respondents did not distinguish between the Independent and Commercial sources in terms of the influence they had on their credit decisions. A possible explanation for this anomaly could lie in the significance of the level of credit investigated on the respondents' welfare. It has been argued in previous studies that the significance of a purchase impacts a consumer's motivation to rationalise their decisions (Fodness & Murray, 1999; Lin & Lee, 2004; Schmidt & Spreng, 1996). Possibly, the level of the credit investigated in this study may have not been large enough, compared to a mortgage acquisition for example, to warrant the highest-order of cognitive engagement that would have forced respondents to distinguish between the influences of the two financial information intermediaries.

CONCLUSIONS AND PRACTICAL IMPLICATIONS

This study expands on the literature in financial information intermediaries and consumer behaviour by proposing and empirically testing the distinct influences of different financial information intermediaries on consumer rationalisation. It emerged from the study findings that information intermediaries disseminate data that has distinct informational content, and hence the different impact on consumer decisions. Therefore, any effort that is directed at addressing challenges in consumer markets, for instance consumer over-indebtedness and bankruptcy in the credit markets (Beder, 2009; Crotty, 2009), should incorporate the impact of these information intermediaries. In particular, financial information intermediaries play a significant role in consumer credit decisions and credit rationality.

In previous studies, consumers have been found to limit the number of information intermediaries they consult during a pre-purchase search activity. This study found that the different financial information intermediaries influence borrowers' credit decisions differently. Following from the above, it therefore becomes imperative for policymakers and other stakeholders to fully comprehend the nature of these financial information intermediaries. An understanding of the workings of financial information intermediaries facilitates the maximisation of the impact of communication/marketing strategies of policymakers/stakeholders on the consumer credit market by, for instance, engaging complementary measures. This is particularly crucial considering that each financial information intermediary has a unique perspective to credit and operates differently (Capon & Lutz, 1979; Lee & Hogarth, 1999a; Murray, 1991; OECD, 1992). Thus, attention should be directed toward:

i. ascertaining the most influential financial information intermediary;
ii. assessing the quality of information disseminated by the information source;
iii. assessing the accessibility and adequacy of the information source;
iv. developing and implementing corrective measures directed at addressing identified shortcomings of the information intermediary.

This approach provides an additional dimension towards a more comprehensive solution in curbing the global problem of consumer over-indebtedness and bankruptcy (Adkisson & McFerrin, 2005; Bridges & Disney, 2004; Brown et al., 2005).

The study had some limitations. First, the sample size was small, an issue that may limit the generalisability of the findings (Hair et al., 2006; Schumacker & Lomax, 2004). There were some hypotheses that were not supported by the data. From a theoretical perspective, there is no apparent a priori explanation for this anomaly. It is not particularly obvious why the Independent and Commercial information intermediaries were not found to have distinct influences on consumer credit choices, more so that literature suggested heterogeneity. Further research is required in this area. Also, research should be conducted on other different credit instruments to ascertain the extent of the generalisability of the study findings across credit instruments.

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The Readiness of Local Public Accounting Firms to Globalization

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Globalization brings its own challenges and opportunities for public accountants, especially for local public accounting firm. This research studied of public accountants who work in Surabaya, Indonesia. Analysis organized from a set of data, which involve 109 respondents from 19 local public accounting firms. The analysis confirms some degree of positive association between the readiness and four qualities of globalization. The result of this research showed that 52% of the readiness of public accounting firm driven by four qualities, which are organization, client, human resource and standard. Public accountants can learn about the characteristic of accounting firms which are ready to face globalization.

INTRODUCTION

The term "globalization" has been widely used to describe the increasing internationalization of markets for goods and services, the financial system, corporations and industries, technology and competition (OECD, 2005). A survey in 1992 conducted by Deloitte International to 400 medium companies in twenty developed countries shows that their reasons for doing business in international markets is because of an opportunity to grow (84%), to reduce economic dependence on domestic (39%), meet the market demand (34%) and operating costs are less expensive (24%) (Iqbal, 1997). The survey shows one of the fact that selling in the domestic market is considered no longer provide the expected benefits, while foreign markets so open to expansion. In addition, globalization makes capital markets grow rapidly supported by progress of information and communication technology to enable transactions in international capital markets take place in real time basis.

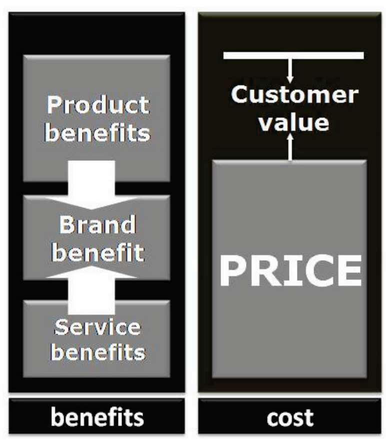
Accounting as a provider of information for decisions making also influenced by the business environment constantly changing because of the globalization. The difference of accounting principles between countries leads to the need for harmonization of accounting standards around the world. Iqbal et al (2007) defines international accounting as the accounting for transactions between countries, comparisons accounting principles in the countries and the harmonization of different accounting standards around the world. International accounting became increasingly important with the number of multinational companies (multinational corporation) or MNC with operations in various countries in the field of production, product development, marketing and distribution. Moreover, globalization brings its own challenges and opportunities for public accountants, especially for local public accounting firm. On one side, there is an opportunity to enter international market, but on the other hand, it creates a professional competition. In addition, with globalization, public demanded that the audit results in comply with international standards. This makes local public accounting firms must be ready to face globalization. This can be done through the enhancement of the quality of the firm, such as the quality of human resources, the use of international standards such as IFRS (International Financial Reporting Standards), SOX (Sarbanes Oxley) or makes an alliance with foreign firms.

In Indonesia context, The Indonesian Institute of Accountants (IAI) has a target to implement the convergence of IFRS on January 1st, 2012. This was decided after the assessment and in-depth review regarding the risks and benefits of IFRS convergence. Through the convergence, company's financial statements of Indonesia will be comparable to financial reports from other countries, therefore the performance of the company can be analyzed clearly. Data from the International Accounting Standards Board (IASB) shows there are 102 countries that have implemented IFRS. There are 23 countries implemented the IFRS on a voluntary basis, 75 countries require on mandatory basis for all domestic firms, and the rest requires the realization of IFRS for certain domestic companies.

Public accountant firm, as a business organization, in the era of globalization can offer the services to foreign countries. In these conditions, local public accountant firm in Indonesia will increasingly face the competition. In the course of time, more foreign public accountant firm operating in Indonesia. Local public accountant firms should anticipate this, in order to maintain their sustainability. Otherwise, the client of local public accountant firm will choose foreign firms. This will be happening, if the foreign firms deliver higher value rather than the local firms.

According to the Best (2005), there are three benefits offered to customers or buyers in a product or service, namely product benefits, service benefits and brand benefits. Value-added will be accepted by consumers when the product or service give greater benefit rather than the sacrifice paid by consumers through price. This concept described as below.

FIGURE 1
BENEFIT VERSUS COST



In the case of a public accounting firm, product benefits offered through audit services, tax, IT-audits or others. Second, service benefit will be obtained after the task was done, such as the client additional questions about the audit results and conclusions. The last benefit is the brand benefits, the benefits obtained through a large accounting firm. There will be differences about the assurance of confidence, whenever the task handed by the Big-Four compared to the Non-Big-Four. These concepts show that the quality of local public accounting firm is important through the value that delivered to the customers. According to the Accounting Office Management and Administration Report (August, 2009), the main reason for clients to stay with the same accounting firm is the quality of the service instead the price factor only. However, Craswell (1992) said that competition and price-cutting could have adverse implications for audit quality (Baskerville, 2006).

This paper is trying to present the qualities which drive the readiness of public accountant firm to globalization. Research found that international standard is the big issue in globalization process. However, researcher proposes another factors that drive the readiness of globalization, such as organization, client and human resource factors. The scope of this study is the public accountants in Surabaya, Indonesia. This study conducted in 19 local public accounting firms, and the total sample is 109 respondents.

PUBLIC ACCOUNTING FIRM AND GLOBALIZATION

Many of literature review, whenever talk about accounting and globalization, it refers to the harmonization process of national accounting standard into IFRS (International Financial Reporting Standard). Researchers such as Anderson (1993); Belkaoui (1994); Berton, Lee (2000); Gary (1999); Iqbal, Melcher and Elmallah (1997); Robert Mednick (1991); Nobes Christopher and Parker, Robert (2002) and O'Malley (1993) discussed about the harmonization as an effect on globalization (Salleh et al, 2007). However, beside harmonization, there is another issue of globalization in local public accounting firm such as organization quality, client quality, human resource quality. These qualities needed by local public accounting firms in order to compete with international public accounting firms. The factors studied before by Salleh et al (2007); Iqbal, Melcher and Elmallah (1997); Saudagaran and Diga (1997) in local public accounting firms. Therefore, local public accounting firm' a readiness factor in meeting globalization challenges proposed using four important qualities:

1. Organization of accountant public firm,
2. Client's profile of the firm,
3. Human resources that owned by the firm,
4. Compliance with international standard.

The detailed findings of each dimension are discussed in the following sections.

Organization Quality

The organization quality in this research is defined as the quality of organization of accountant public firm. This quality can be measured by the following proposed criteria and indicators:

1. Local public accounting firms, which have affiliation with foreign, are better prepared for global market.
2. Local public accounting firms, located in the capital city, Jakarta, are more ready for global market.
3. The age of local public accounting firm will affect the readiness to face globalization.
4. Local public accounting firm, which provides multi-services, will be better prepared to face global market.
5. Number of employees will affect the readiness of local public accounting firm to face global market.

In their study, Salleh et al (2007) found that only firms that offer multi-services can compete in the international market. These criteria can be achieved through alliances, mergers or affiliates. Ireland et al (2002) also found that alliances, mergers and affiliates are the trend for local public accounting firms to survive and compete in globalization. They found that alliances, mergers and affiliates can solve firm's technical resources availability, financial resources limitation problems and improve firm's competitiveness in the provision of new and innovative services in global market.

Client Quality

The second quality that proposed in this research is client quality. The quality defined as client's profile of the firm, which is measured by the following criteria and indicators:

1. Types of client, whether MNC (Multinational Company) or not will affect the readiness of public accounting firm in global market.
2. Industry types of client will affect the readiness of public accounting firm in global market.
3. Types of client whether public company or not will affect the readiness of public accounting firm in global market.
4. The number of clients will influence public accounting firm's readiness to face global market.

Human Resource Quality

The third quality that used in this research is human resource owned by public accounting firm. The quality is measured by the following criteria and indicators:

1. Public accounting firm with foreigner' partner will be better prepared to face global market.
2. Public accounting firms, which have staff of more than one race, will be better prepared to face the global market.
3. Public accounting firms, which have employees with international certification, are better prepared for global market.

International Standard Quality

International standard quality in this research described as the application of accountant public firms regarding international standard. The quality is measured by the following criteria and indicators:

1. Public accounting firm which apply and have skills in IFRS standards will be better prepared to face global market.
2. Public accounting firm which apply and have skills in other international standards such as Sarbanes Oxley, COBIT or ISO will be better prepared to face global market.

Gaffikin (2007) in his research said that not all countries have adopted IRFS as their standards yet. Australia is one of the country that has adopted IFRS which are effectively adopted the IFRS as the Australian standards. In another region, The European Union also requires all listed companies to employ IFRS for their consolidated accounts. Bangladesh is the other country which has already adopted IFRS as national standards. Indonesia moving towards this position, as discussed under IAI (The Indonesian Institute of Accountants), IFRS expected will be implemented in 2012.

RESEARCH METHODOLOGY

Babbie (2007) said that each research method has its strength and weakness but certain methods are more appropriately used than other methods. This research uses the survey method, some particular questions (Babbie, 2007). Furthermore, he said that a survey is particularly well suited to the study of public opinion. However, it does not mean that researcher could not make good use of other methods. This research includes four independent variables, which are organization quality, client quality, human resource quality and international standard quality. The dependent variable in this research is the readiness for globalization. There are two objectives of this study:

1. First, is to test and estimate causal relationships using a combination of statistical data and qualitative causal assumptions. Therefore, Structural Equation Model (SEM) is appropriate for that objective. The data in this research analyzed using the PLS (Partial Least Square) software as one of SEM' application.
2. Second, additionally analysis used to investigate the difference perception about the qualities needed by public accounting firms in global marketplace. The first sample is the "ready" one and the second is the "not ready". There are some indicators used in this research to measure the readiness of "the profile" from local public accounting firm in Surabaya. The researcher observed the readiness through some indicators as follows:
    - Having more clients from MNC (Multinational Company). Local public accounting firm with many clients from MNC will be better in facing the globalization rather than with local client.

Most of the MNC' company will require the audit process and standard according to the international best practice.

- Applying and having skills in international standard such as IFRS, Sarbanes Oxley, ISO and so forth. Definitely, the accounting firms which have skills in international standard can face globalization better than the firms without or lack the skills.
- Having an international staff. The company with international staff will create cross culture organization which is important in facing globalization. Therefore, the local staff will have a tradition to work in international environment.
- Public accounting firm with international' partner. Absolutely we can't say that international' partner always better than local partner. However most of international' partner can bring international atmosphere in the firm, starting from the language in communication, best practice, standard and the knowledge.
- Having an affiliation with an international firm. The affiliation will help the local public firms to face globalization faster. The international firm can transfer some of the methods, best practice and knowledge into the local public accounting firm.

These indicators used to measure the readiness of public accounting firms in Surabaya. Some of the factors studied before by Salleh et al (2007) in Malaysia public accounting firm; Iqbal, Melcher and Elmallah (1997); Saudagaran and Diga (1997). However, the researcher in this study made some additions and adjustment. There are three groups resulted from these indicators:

- Not ready. This group is the firms without five indicators that mentioned before. This research showed that there are four (21%) public accounting firms in this position.
- Beginner. This group is the firms that have more clients from MNC, applying and having skills in international standard. This means, this group use the first and the second indicator. This research showed that there are twelve (63%) public accounting firms in this position. This group still need to enhance their qualities, whether their organization quality, human resource quality, international standard quality or client quality.
- Advance. The last one is the firm more than the "beginner", meaning not only have international client or international standard but also foreign partner, international staff and affiliation with international public accounting. There are three (16%) public accounting firms in this group.

However, in the statistical testing, researcher grouped the "beginner" and "advance" into the firms that ready to face the globalization. Therefore, the result in t-test and the mapping showed the "ready" group as the combination of "beginner" and "advance". The objective of dividing "ready" into "beginner" and "advance" is to identify the status of the readiness. In this case, data breakdown into "ready", "beginner" and "advance" will make researcher easy to observe more regarding the readiness of the firms.

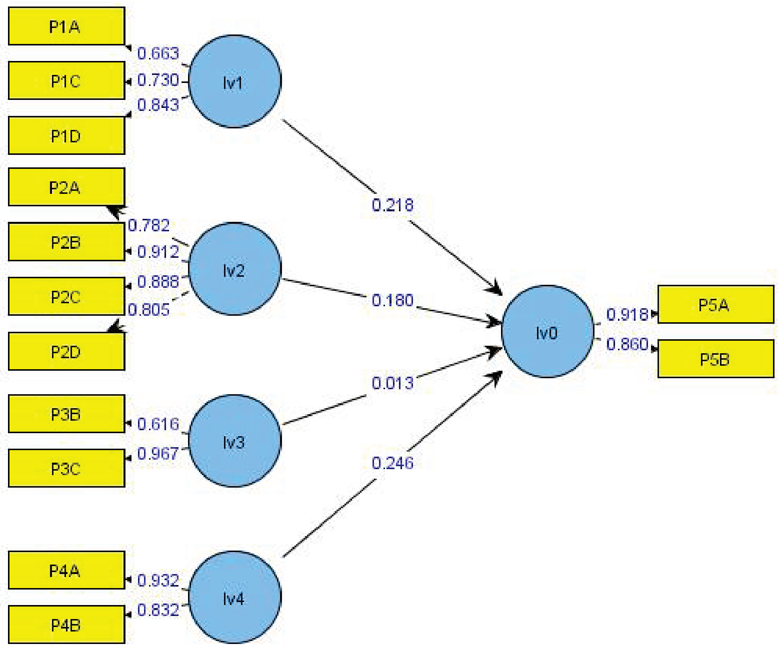
FINDING AND RESEARCH RESULTS

This research studied public accountants who work in Surabaya, Indonesia. The following table shows the facts (in average) from 19 local public accounting firms. The first analysis organized from a set of data, which involve 109 responses from 19 local public accounting firms in Surabaya. The analysis confirms some degree of positive relationship between the readiness and four qualities of globalization. The following figure shows the result from the relationship, which is "lv 0" refers to the readiness for globalization, "lv 1" refer to organization quality, "lv 2" is client quality, "lv 3" is human resource quality and "lv 4" is international standard quality. In this study, there are three item-question results dropped, since the significance is less than 95%. The questions are as follows:

- Local public accounting firms, located in the capital city Jakarta are more ready for global market.

- Number of employees will affect the readiness of local public accounting firms to face global market.
- Public accounting firms with foreigner' partner will be better prepared to face global market.

FIGURE 2
RESEARCH RESULT



The multiple R shows a substantial relationship between the four independent variables and the dependent variable. The R-square value indicates that around 52% of the variance in the dependent variable explained by the four independent variables. This means that four dimensions in this model cannot explain 48% of the variance in the readiness of globalization. Therefore, there must be other variables that have an influence on the readiness for globalization. These factors can be commitments and investments in ICT (Salleh., et al., 2007), regulation bodies support and support from The Indonesian Institute of Accountants (IAI). Based on the result of this study, organization dimension and international standard seem to be important factors in measuring the readiness level of firms in facing globalization.

According to the result of this research, the following lists show the order of the correlation between the qualities of globalization and globalization itself. The points show the order from the most important point.

1. International standard quality
2. Organization quality
3. Client quality
4. Human resource quality

Researcher found that human resource quality is less important for public accounting firm in order to face globalization. However, this result is quite strange, since human resource should be the important factors towards globalization. In order to observe more, researcher compare towards the sample "ready" and "not ready". Researcher found that in sample "ready" the correlation between human resource and globalization is high (0.172). Moreover, in sample "not ready" the correlation is negative (-0.072). Through the explanation, it can be concluded that human resource quality is important for the accounting firms that ready to face globalization. However, this result go with t-test, since there is the difference between sample "ready" and "not ready".

The second analysis is to observe the second objective from this research regarding the difference perception. The following table shown the profile of local accounting firm in Surabaya (average).

FIGURE 3
PROFILE OF LOCAL PUBLIC ACCOUNTANT

Numbers of partner (Avg)	4
Numbers of client (Avg)	41
Numbers of manager (Avg)	6
Numbers of senior auditor (Avg)	16
Numbers of junior (Avg)	14
Establishment (year)	14

The result from the "the profile of the firm" measurement shows that fifteen local public accounting firms in Surabaya are ready to face globalization. The rest, four accounting firms not ready yet to face globalization. After doing the grouping, the researcher tests the second measurement "the perception of the firm" whether there is any difference between both of the sample towards the perception of globalization. The following table shows the test result from t-test of SPSS software, which explains the significance value 99%, meaning that the perception between the two samples is different.

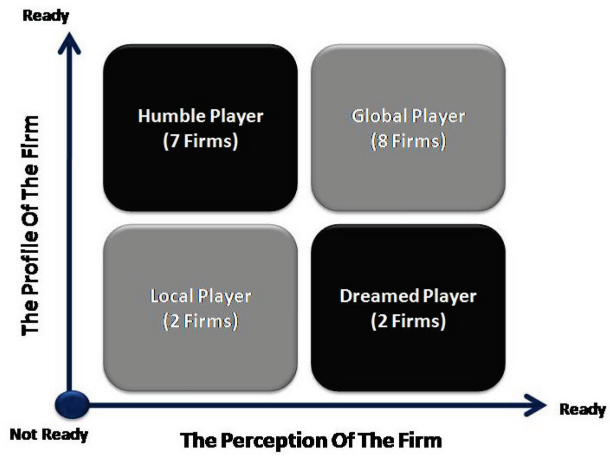
FIGURE 4
T-TEST RESULT

Type	df	Sig (2-tailed)
Ready	86	0.000
Not Ready	21	0.000

The first sample "ready" has the highest mean rather than the second sample "not ready". The implications of these statements are:

- The first sample "ready" has clearer concept about globalization rather than the second sample "not ready".
- The first sample "ready" has more confidence about the readiness to encounter globalization rather than the second sample "not ready".

FIGURE 5
THE MAPPING OF PUBLIC ACCOUNTING FIRM



The matrix shows the collaboration thinking of the research result. Researcher identifies there are two dimensions here to look the readiness of local public accounting firms. Those dimensions are "the profile of the firm" and "the perception of the firm". The dimensions can create the mapping of the local public accounting firm position as the following:

- Global player. This local public firm has a readiness according to "the profile of the firm" and "the perception of the firm". Additionally, researcher found that there are eight local public accounting firms which have positions as global player.
- Dreamed player. This group has a readiness according to "the perception of the firm" but not for "the profile of the firm". Researcher found that there are two local public accounting firms which have positions as dreamed player.
- Local player. This local public firm hasn't been ready yet, according to "the profile of the firm" and "the perception of the firm". In addition, researcher found there are two local public accounting firms that have a position as a local player.
- Humble player. This position has a readiness according to "the profile of the firm" but not for "the perception of the firm". There are seven local public accounting firms that have a position as a humble player.

DISCUSSION, RECOMMENDATION AND IMPLICATIONS

This research studied public accountants who work in Surabaya, Indonesia. The result of this research is valuable for the profession of public accountants. To learn about the characteristic between local public accounting firms which are ready and not ready to face global marketplace. Therefore, they can learn the best practice in order to prepare the firm to face globalization. In addition, in the analysis of both of these groups shown the difference perception about the qualities needed by public accounting firms in global marketplace. The research also proposes the model or mapping regarding the position of local public accounting firm in globalization.

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