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**Reagan McLaurin**
**Editor**
*University of Sharjah, United Arab Emirates*

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# INTERNATIONAL JOURNAL OF ENTREPRENEURSHIP

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# LETTER FROM THE EDITOR

Welcome to the *International Journal of Entrepreneurship.* We are extremely pleased to be able to present what we intend to become a primary vehicle for communication of entrepreneurship research throughout the world.

The Academy of Entrepreneurship® is a non-profit association of scholars and practitioners in entrepreneurship whose purpose is to encourage and support the advancement of knowledge, understanding and teaching of entrepreneurship throughout the world. The *International Journal of Entrepreneurship* is a principal vehicle for achieving the objectives of the organization. The editorial mission of this journal is to publish empirical and theoretical manuscripts which advance the entrepreneurship discipline. To learn more about the Academy, its affiliates, and upcoming conferences, please check our website: www.alliedacademies.org.

Manuscript submissions will be handled through our website, as described in the Submission Instructions included in this volume. We would like to express our appreciation for the financial support provided to this Journal by the American University of Sharjah and its Dean of Business. We look forward to having you share your work with us.

Reagan McLaurin
American University of Sharjah
United Arab Emirates

# MANUSCRIPTS

# WHAT CHALLENGES DO INTERNATIONAL ENTREPRENEURS FACE?

**William Perry, Western Carolina University**

## INVITED COMMENTARY

*An entrepreneur who wishes to operate in the international arena faces numerous challenges. Among them are varied political environments, cultural differences, and incongruity between legal environments, language differences, diverse financial structures as well as conflicting perceptions and expectations.*

*Gaining access to foreign markets and taking advantage of economic dis-intermediations can produce tremendous profits. However, the entrepreneur must avoid being blinded by opportunity and be realistic. The intensity of the problems faced by an international entrepreneur is directly related to the degree of familiarity the entrepreneur has with the with the host nation(s) in which business is to be conducted.*

## BACKGROUND INFORMATION AND A CASE IN POINT

The Chinese American Commercial Agency began its operations in the early 1990's. The primary purpose of the business venture was to introduce Chinese enterprise group managers to American business practices and to promote trade. Formal training, on-site visits to industry and government sites in the U.S. and tours were among the methods used to promote business goals. The agency hoped to bring together potential investors from both sides of the Pacific and to foster trade.

The people of China experienced a tragedy in the latter part of the 1980's when student protests on Tiananmin Square escalated into a violent confrontation with the government. An immediate cooling of relations between Western democracies and the Peoples Republic of China resulted but soon normal relations resumed.

A movement was initiated by various organizations in the PRC to analyze the business systems and practices of two modern industrial giants, the United States and Japan. The Chinese government wished to supercharge its economy and to improve the cumbersome operations of its giant state-owned enterprises. A government edict was issued that state owned enterprise groups were to become more efficient.

A delegation from both Japan and the United States was invited to Beijing to lecture at the Advanced Institute for Enterprise Group Managers. Among the group of Americans was the founder of the Chinese American Commercial Agency. The founder quickly discovered the learning process was destined to be a significant two-way street. The experience of the Chinese

American Commercial Agency might well serve as an illustration of the unique challenges faced by a fledgling organization attempting to conduct business across international boundaries. The challenges can be roughly grouped into the following categories.

**The Political Structure**

An entrepreneur could hardly expect to experience success in a foreign country without being familiar with the host country's political system. The Chinese American Commercial Agency knew little of the intricate structure of the Chinese political system. Many lessons were hard won yet the surface was hardly scratched.

Among the lessons learned was the stark realization that when doing business with China an entrepreneur is doing business with "China, Inc.". In the early 90's a foreigner didn't conduct business with a private or autonomous business entity. The entrepreneur did business with a branch office of the Communist Chinese Government.

Regardless of protestations to the contrary, all levels of commercial activity were accountable to the Chinese Government. The Chinese American Commercial Agency came to refer to the system used by the Chinese as "Retail Communism". It's main objective was to bolster China's foreign exchange reserves and to acquire technical knowledge and "know how" at the expense of nation(s) with whom China had commercial dealings. All agreements and arrangements had to be approved by multiple levels of government bureaucracy.

**Employees, Raw Materials and Suppliers**

Consider that you want to manufacture electronic circuit boards in China. You would only have one source for employees. China. Unless circumstances change radically, manufacturers' in China would be allowed to enter into a "joint venture". Or the newly established joint venture would be allowed to outsource, Chinese-style.

The entrepreneur would be allowed to import their proprietary technology to a Chinese company or a quasi branch of Chinese Government. The Chinese would be the primary supplier of employees unless the foreign company had its own Mandarin speaking human resources department capable of recruiting Chinese citizens to employ. The Chinese business partner might supply the raw materials (acquired from another branch of China, Inc.) or the foreign company could import the raw materials at a higher cost and pay high Chinese tariffs.

The Chinese American Commercial Agency came to the understand that "joint venture" was merely a euphemism for a system of doing business that merely assured that the competitive advantage would consistently go to China.

Undoubtedly some foreign companies have succeeded in China with joint ventures. However, these companies understood the rules of the game and weren't dazzled with the size of the Chinese market or the low costs of production.

**Foreign Exchange**

Assume for a moment that you have been successful in your foreign business operations. You have made a profit. Now, how are you going to get your profits out of the country? The manner in which currencies are moved in and out of a host country would be key to the success of the international entrepreneur.

At the time that The Chinese American Commercial Agency dealt with China there were two types of money. One was for Chinese citizens and the other was reserved for dealing with foreign visitors and businesses.

A foreigner is required to possess a thorough understanding of how foreign exchange occurs in the country of choice. You may be able to contractually control currency issues by indexing the local currency system to another. A person conducting business in a foreign country must be familiar with the laws and policies of foreign exchange.

The Chinese American Commercial Agency had to be concerned with what type of currency would be used to pay to Chinese workers and Chinese suppliers. We also had to be aware of what currency in which we would be paid if we sold items into the Chinese market and how would profits be taken out of the host nation? Overlay the vagaries of the international currency market and you get a flavor of the details that must be considered when doing business in the international realm.

**Importing and Exporting**

Shipping products out of the country in which you manufacture is a primary concern. The entrepreneur must be aware of any tariffs and duties that may be levied on finished products for export or raw materials that must be imported to support the manufacturing process. You may even be subject to paying exorbitant charges to "import" your own technology. The international entrepreneur must have a full understanding of the import and export policies of the host country.

**Security and Espionage**

An aspiring international businessperson must take steps to protect proprietary technology, equipment and information. Your competitors, by definition, will try to gather business intelligence on your operations. Competitive intelligence gathering is a reality whether in your country of origin or in a foreign country. Some nations, however, have raised the art of amassing competitive intelligence to the level of espionage.

The Chinese American Commercial Agency was completely unprepared to confront the issue of gathering of competitive information. We first realized the scope of the challenge when

an American-based (but Japanese owned company) declined our request to allow a visiting with a delegation of Chinese managers to tour a facility.

The management of a new U.S. based mini-steel mill eventually revealed that the reason denying our request was to prevent the possibility of loss of technology to China. An international entrepreneur should at least be aware of the potential for being on the losing end of business intelligence gathering.

**Taxes**

A business operating internationally must be concerned with the issue of taxation. It's a true double-edged sword. The challenges exist in the home country of the entrepreneur and host country. Real profits can be eroded by unknown, excessive or dynamically changing tax rules. Taxes can be charged by a national government, a state government, a provincial government or municipality or port authority.

The Chinese American Commercial Agency gained perspective on the taxation issue by observing the Chinese managers as they investigated business opportunities in the United States. We went to great lengths to familiarize visiting Chinese managers about local, state and Federal taxation and to answer any questions. Delegation members were naturally inquisitive as they analyzed potential profitability of any U.S. based business dealings.

In one formal session on taxation we briefed delegation members on Federal income taxes, state, local and city property taxes and licensing fees. We were asked, "Are those all of the taxes?" We confidently responded "yes".

One astute member of the visiting delegation asked, "How about sales taxes and the tax that you occasionally place on the rich when they buy luxury items?" We re-wrote our lesson plan. When considering commerce in a foreign country you must possess a comprehensive understanding of that country's complete taxation policies.

**Local and Regional Economic Conditions**

The economic health of a country, region or locale is a major challenge faced by the international entrepreneur. An upswing in an economy can have a positive effect on operations and profit. Economic conditions must assessed and factored into business operations.

The coastal cities in China, for example, have a different economy than areas in the interior. The cost of real estate as one factor could be radically different. The availability of resources and potential viability of new enterprises are major considerations.

The Chinese American Commercial agency, for example, avoided promoting investment in the regions to be affected by the giant Three-Gorge Dam project in China. Millions of people are to be displaced by the flooding of vast areas. The upheaval that would be caused by the

dislocation of huge segments of the population could drive significant economic realities about which the international entrepreneur should be aware.

**Culture**

Cultural differences can have a dramatic effect on an international entrepreneur's success. Business deals could be established or wrecked based upon cultural perspectives. One official of the Chinese American Commercial Agency related being singled out for a distinct honor by his Chinese host at a banquet by being offered the head of a roasted duck to eat. The thought of eating the duck's head was unpleasant to the U.S. official. But an individual doing business in a foreign land must be prepared to culture shocks. Keeping your emotions under control and trying to avoid offending potential customers and business partners can be a challenge.

Unspoken cultural rules apply as well. In China, if you have satisfied your appetite and wish to decline further helpings, stop eating and leave food on your plate. If you "clean your plate" as many in the western world were extolled in childhood it is a sign to a Chinese host that you are still hungry and desire more to eat.

If a Chinese host enthusiastically comments to a guest "You look fat," that's a compliment. The cultural perspective is that you appear to be a prosperous individual because only people who are successful can afford to eat well.

The author recalls committing an egregious error in etiquette and protocol. Reservations were made in an U.S. hotel for a senior Chinese manager for a room that was on a lower floor than his employees. That act was considered to be inappropriate and discourteous by the Chinese. The older gentleman had only been assigned a room on the lower floor as a matter of convenience and out of respect for his age. The manager was promptly assigned a room located on a floor above all of his lower ranking employees.

International entrepreneurs need to be aware of cultural subtleties and rules of behavior that carry can significant weight. Ignorance can unintentionally produce disastrous results.

**Fulfilling Operational Needs**

The international businessperson must realize that methods or techniques of problems solving and getting work done in the country of origin may be impossible to follow in a host country. Everything associated with doing business can be different.

In China, for example, the power supply available to Western visitors was of a different type. The traveler had to have their own electrical power adapter in order to be able to use a razor or a portable computer. Indeed, the more power adapters that you possessed the more effective you could be.

The Chinese American Commercial Agency carried a portable computer to China but left the printer because the hotel was equipped with a "business center". There was only one problem, connecting the foreign computer to the Chinese printer was viewed as a security risk.

Days of negotiations were necessary to get permission to connect so that a hard copy print out could be obtained. The international entrepreneur should bring solutions with them to the host country and avoid having to solve the problem once on site.

**Rule of Law**

Many nations fail to operate with a solid rule of law. Contractual law, for example, may be drastically different from one country to the next. A person wishing to do business in a foreign country must take the prevailing laws into account. Agreement should be reached on what country's rules or mixture of rules apply.

Being in a host country and trying to secure legal redress can be a nightmare. The entrepreneur quickly learns that the rules of the host country dominate. The rules and laws of the host country might be as "hit and miss" as the person interpreting the law or as illegal as bribery.

**Infrastructure**

Ports, roads, airports, river traffic, trucks, air travel and more can be different from what the entrepreneur is familiar within his own country of origin. Healthcare, banks, finding places to eat and sleep are also among the challenges faced by the international entrepreneur. You might find a supplier of a rare root, for example, in the interior of China. Now, how are you going to get it out on a regular basis? Can you depend upon regularly scheduled air travel? The Chinese American Commercial Agency learned that Air China flew only when the plane was full. Schedules meant little.

Can you depend upon fuel for your vehicles if you are transporting with private or leased vehicles? What if someone in your group becomes ill? The infrastructure of a host nation may be very different from what the entrepreneur is used to or anticipates. All factors that relate to supporting international business must be considered.

## SUMMARY

Doing business in a foreign land can produce huge profits for the entrepreneur. He or she, however, must be astute and forewarned as to the conditions to be encountered. A vast number of factors can influence the success of an international venture. The possibilities range from cultural differences and rule of law to the host country's infrastructure or system of taxation.

The safest route for the international entrepreneur to follow is to arrive in the host country with as many of the problems likely to be faced having been solved and to be prepared.

Take notes. Learn from mistakes. Adapt and overcome.

| ADDITIONAL RESOURCES | | |
|---|---|---|
| 1. | Business Advisor | International Trade. www.business.gov/busadv/maincat.cfm?catid=22 |
| | | This site contains extensive resources and links on country research, government resources, export directories and more. |
| 2. | Business and International Trade Online Bookstore. | http://tradecenter.ntis.gov |
| | | This site contains references to 20,000 books that is maintained by the National Technical Information Service of the U.S. Department of Commerce. |
| 3. | Executive Planet.com. | www.executiveplanet.com/community |
| | | This site is a guide to international business etiquette and culture in U.S. top trading partner nations. Intercultural slant. |
| 4. | International Trade Administration. | www.ita.doc.gov |
| | | Trade assistance resources for international business. Exports, foreign markets and more. The site is maintained by the U.S. Department of Commerce. |
| 5. | Office of the Chief Counsel for International Commerce. | www.ita.doc.gov/legal. |
| | | Information available on international trade and investment law. Links to comprehensive legal documents. |
| 6. | Overseas Security Advisory Council. | www.ds-osac.org. |
| | | A site dedicated to providing security related information between the U.S. Government and private American companies abroad. News, databases and publications. |
| 7. | U.S. Department of State. | www.state.gov. |
| | | The U.S. Department of State web site which contains assessments and information for Americans traveling and living abroad. |
| 8. | WorldVu | International Information for Travelers and businesses. www.worldvu.com/Wvu/tips.html |
| | | Tips on Travel and International Business. Information on everything from managing documents through medications. |
| 9. | WWW Virtual Library | International Affairs Resources--International Business www.etown.edu./vl/intlbus.html |
| | | Ten pages of links related to international business. Links include business practices to banking practices and much more. Many government sites that related to international interests are included. Private resources, too. |

# ENTREPRENEURSHIP IN A DEVELOPING ECONOMY: EMPIRICAL EVIDENCE FROM NIGERIAN BUSINESS ORGANISATIONS

**Linus Osuagwu, Federal University of Technology, Owerri, Nigeria**


## ABSTRACT

*Normative and anecdotal pieces of evidence abound concerning the importance of entrepreneurship in most economies of the world. A research study was, therefore, designed to determine, empirically, the emphases on dimensions of entrepreneurship, the impacts of environmental factors on the practice of entrepreneurship, and the efficacy of entrepreneurship practices in Nigerian business organisations. Results implicated determination of capital requirements as the most emphasized dimension of entrepreneurship, while consideration of patents was the least emphasized entrepreneurship issue in Nigerian organizations. Market needs and wants had the highest impact on entrepreneurship practice, while cultural factor showed the least influence on the entrepreneurship tendencies of Nigerian business organisations. Return on investment was the most achieve performance measure via entrepreneurship practices. These findings were discussed with regard to extant literature and experience in the Nigerian business environment, and managerial recommendations made. Areas for further research were suggested in order to acquire comprehensive knowledge of entrepreneurship practices in Nigerian business organisations.*


## INTRODUCTION

To be efficient and effective in contemporary business operations, organizations have to evolve strategies, policies, and practices different from those of yore years. According to Kemelgor (2002), companies in non-clement and rapidly-changing business environments should innovate continuously in order to be efficient and effective. This is because of the dynamic and near-unpredictable nature of present business environments. Contemporary business environment has created opportunities, which can only be exploited by prepared, and forward-looking individuals and organizations. This demands a well-thought- out strategies, policies and approaches.

Entrepreneurship activities have existed over time in many countries of the world. The concept of entrepreneurship has, however, grown from a token intellectual and practical area to a full-scale study area, benefiting from cognate disciplines such as economics, sociology, psychology, anthropology and management, among others, with the view to improving

managerial practices in organizations. The outcome, in many economics, had been a more efficient and effective practice of entrepreneurship over time. In such situations, goods and services have been cheaper, progressively of higher quality, productivity improvements recorded, and search for improved entrepreneurship practices continued.

Many environmental forces have influenced the Nigerian economy. For example, most of the country's balance of payment problems have continued to affect, adversely, the economic activities of nation. Also, most of the country's industries and companies are experiencing resource acquisition difficulties from an economy that substantially depends on oil exports. In addition, the dwindling purchasing power of the naira, the high level of inflation and unemployment, the high preference for imported goods to locally-produced goods, poor and inadequate infrastructural facilities, and the high-level of poverty, among other relevant indices of human development, have conspired to complicated business policies and strategies in Nigeria. Therefore, it is only those individuals and organizations with sound entrepreneurial policies and strategies, and that can anticipate and respond to opportunities and environmental changes would be able to operate efficiently and effectively.

Some researchers have made efforts to investigate the relevant dimensions of the construct called entrepreneurship (Covin & Slevin, 1989; Miller & Friesen, 1983; Davis, Morris & Allen, 1991, among others). Also, some researchers have investigated the environmental situations that aid entrepreneurship (Gartner, 1985; Macmillan, Block & Narasimha, 1986, among others). Relatedly, some researchers have seen entrepreneurship as a variable (Covin & Slevin, 1991; Kuratko, Montagno & Hornsby, 1990, Morris & Paul, 1987, among others). According to Morris and Sexton (1996), if entrepreneurship a variable construct, what are the factors that determine the degree of entreprenurship in an organization at any particular situation?. It may, therefore, be posited that entreprenurship is an issue, which exists in most organizations. But the extent to which entrepreneurship exists varies from one organization to the other (Morris & Sexton, 1996). In the light of the above scenario, the major questions guiding this research, therefore, are:

| | |
|---|---|
| *a.* | *What is the extent of entrepreneurial practices of Nigerian companies?* |
| *b.* | *To what extent have environmental factors influenced entrepreneurial practices in Nigerian companies? and,* |
| *c.* | *What is the extent of effectiveness of entrepreneurial practices in Nigerian companies?* |

It is the purpose of this research to provide empirically - based answers to the above broad questions. It should be noted that business entrepreneurship, whether in Nigeria or any other country, is a continuous effort geared towards increasing efficiency and effectiveness in business operations. This research is aimed at establishing the emphases placed on different dimensions of entrepreneurship and strategies, the environmental impacts on such entrepreneurship strategies, and the efficacy of entrepreneurship strategies in Nigerian business organizations. Such research endeavour, it is hoped, would enable Nigerian businessmen and

organizations improve their entrepreneurship strategies. Also, designers of government policies in entrepreneurship would benefit from this research, as it would highlight salient areas that need governmental attention. Finally, researchers and education curriculum designers would figure the findings of this research into their relevant areas and programmes. All these, it is hoped, would finally culminate into improved entrepreneurship strategies in the Nigerian business environment.

The limitations of this research effort should be noted so that its findings and discussions could then be better situated. Some of the limitations relate to the mixture of companies both in size, industry and ownership. Secondly, arid methods of research may not be always relevant in studying small business entrepreneurship, which formed part of this research. Thirdly, the usual limitations associated with the survey research methodology (used in this research) may have coloured the findings and conclusions of this research. However, the relevance of entrepreneurship in the Nigerian economy, the reliability and validity associated with this research, the managerial and empirical relevance of this research, and the expected research stimulations arising from this present research effort are enough reasons to engage in managerial and academic reflections and considerations on the findings and conclusions of this research.

## LITERATURE REVIEW

The concept of entrepreneurship emanated along with industrialization, was first conceived by Say and Cantillon, experienced further development by Adam smith and his followers, with Joseph Schumpeter isolating innovation as its core (Paula, 1996). Entrepreneurship is linked to the processes of creating a business concern. According to Agbonifoh et al. (1999), entrepreneurship is an essential variable in any nation's economic growth and development, and as a result has been substantially documented in such disciplines as psychology, sociology, economics, business and political science literature, among others. Entrepreneurship is practised by entrepreneurs, and entrepreneurs have, traditionally, been seen as persons having a high level of drive for individualism and autonomy (Shaw, 1999).

Entrepreneurship can, also, be seen as a process, which involves the efforts of an individual (or individuals) in identifying viable opportunities in a business environment and obtaining and managing the resources needed to exploit those opportunities (Hill & McGowan, 1999). Therefore, any managerial action by a business organization geared towards having and maintaining a balance between these opportunities and the relevant environmental issues will assist in the growth and development of the organization.

Entrepreneurship has been likened and linked to many issues. For example, Zahra and Covin (1995) have linked entrepreneurship with superior organizational performance, while Covin and Miles (1999) see entrepreneurship as the pursuit of competitive advantage. The study of entrepreneurship has even been extended to multinational companies (Birkinshaw, 1997; Parboteeah, 2000). According to Stevenson and Sahlman (1990), entrepreneurship is the relentless pursuit of business opportunity without minding the resources presently controlled by

the person (entrepreneur) pursuing the opportunity. This means that business opportunity is the major issue that unlocks the entrepreneurial process along the dimensions of strategy, strategic orientation or philosophy, commitment to business opportunity, commitment of relevant resources, control of relevant resources, the idea of management structure, and employee compensation or reward system These dimensions of entrepreneurial process distinguish entrepreneurship from administrative management behaviour.

There are many entrepreneurship schools of thought, and these include those that associate entrepreneurship with an economic function, those that associate entrepreneurship with an individual, and those that perceive entrepreneurship in behavioural dimension (Stevenson & Sahlman, 1990). Specifically, Paula (1996) posits that the traditional approaches used in classifying entrepreneurship include economic, sociological, and psychological or social-psychological, and these approaches follow chronological order. According to Stearns and Hills (1996), there are many models of entrepreneurship, and these include the environment/economic system, the individuals engaged in entrepreneurship, entrepreneurial behaviour or tendency, an institution or organization, business innovation, taking calculated risks, marshalling relevant resources, and creating and generating values (from goods and services) for persons, organizations, and society. However, Churchill and Muzyka (1994) posit that models of entrepreneurship generated from developed countries may not be totally relevant in developing countries (such as Nigeria). Therefore, empirical and normative works in entrepreneurship should consider specific environmental situations (Stearns & Hills, 1996).

Entrepreneurial intent shapes strategic tendencies and decision-making in organizations, and assists in the understanding of business relationships, and human and non-human resources. Jones (1997) submits that entrepreneurial intent is a matrix of personal and environmental factors. The personal factors may include entrepreneurial experience, abilities and personality peculiarities, while environmental factors may include social, political, changes in markets, technological innovations, government policies, among others (Bird, 1988). The ability to perceive a business opportunity is, also, a function of deep personal knowledge and experience in products/services and market segments of interest in the relevant business environment. Also, the desire to pursue a business opportunity depends on a complex balancing of risk and reward (Stevenson & Sahlman, 1990). According to McClelland (1961), well-performing entrepreneurs are also reasonable risk-takers, self confident, hard working, goal-setters, accountable, and innovative. However, Siropolis (1977) argues that these entrepreneurial traits defy clear-cut separation because each of these entrepreneurial traits shades into another trait.

Entrepreneurship is substantially a behavioural activity and orientation, and the entrepreneur is that person who perceives business opportunities, and therefore creates and develops business ventures to exploit the opportunities (Timmons, 1994; Barton-Cunningham & Lischeron, 1991; Gartner, 1989). This approach to business creation and development recognizes the relevance of the entrepreneur in the complex process of business enterprise development from inception to maturity, and implicit in this approach to business conceptualization and development is the need for efficient and effective management (Hill & McGowan, 1996; Chell et al., 1991; McGowan & Rocks, 1995; Carsrud & Johnson, 1989; Gibb & Scot, 1985; Stewart,

1983; Stanworth & Curan, 1986; Hill & McGowan, 1999). To succeed in entrepreneurship management activities, therefore, entrepreneurs need a combination of inherent personal traits, a propensity for creativity and innovation, a good understanding of relevant environmental issues, and appropriate managerial know how; after all, entrepreneurship is concerned with change, and the entrepreneur is the major agent of change (Hill & McGowan, 1999).

Some entrepreneurs acquire entrepreneurial experience by working for other entrepreneurs before starting their own businesses. Some entrepreneurs, however, initiate new entrepreneurial ventures in the organisations where they work. This entrepreneurial practice is known as intrapreneurship or corporate entrepreneurship (Stoner & Freeman, 1995). Generally, corporate entrepreneurship may be seen as an extension of strategies and practices which involve participation of organizational staff, and the instilling of entrepreneurial strategies and practices which generate or absorb new products/services/ideas, and manage the entrepreneurial process efficiently and effectively (Hitt et al., 1995; Kemelgor, 2002).

Generally, entrepreneurs are sensitive to change. They look for change, react to it, and exploit the available opportunity through the provision of goods, services, and ideas. Intrapreneurship or corporate entrepreneurship is the process whereby, for example, a Nigerian organisation seeks to expand or enlarge its horizon of business portfolio by exploring new opportunities (business needs, wants, and gaps) through efficient, effective, and new combinations of its existing resources of time, money, machines and materials.

Because the personal characteristics of an entrepreneur are a dominant factor in the management of business enterprises, the management of a business enterprise relies substantially on the managerial competency of the entrepreneur (Stokes, 2000). This led Carson et al (1995) to operationalize an aspect of entrepreneurial management in terms of experience, knowledge, communication abilities, and judgment of the entrepreneur. These are the variables that determine managerial effectiveness in business entrepreneurship, and since business entrepreneurs have different ratings on these variables, the managerial effectiveness of their different firms will also vary from one firm to another (Stokes, 2000). It should, however, be noted that not all managerial activities in a business organisation can be thought of in terms of the entrepreneur alone; managerial behaviour is not exclusive to entrepreneurs, nor can all business enterprises be considered as entrepreneurial (Chell et al., 1991).

Stoner and Freeman (1993) posit that any organization or business is a living thing, which is born, grows, ages and dies. Entrepreneurship exists at the birth of an organization or business, which unfolds into two stages. The first of these two stages concerns some kind of change. This change creates needs and wants for new goods and services. The second of these two stages is the "idea stage", which deals with the source of entrepreneurship ideas. According to Oghojafor (1996), those engaged in entrepreneurship get idea about a certain business venture by working for someone else, and use their acquired / received knowledge or idea by looking for new business opportunities within and without these ideas. In order to be efficient and effective in business operations, organizational activities must be anchored on managerial vision directed towards exploitation of business opportunities (Drucker, 1986).

Entrepreneurship is practised within the context of a given environment. The relevant issue is to determine the components of business environment that impact on entrepreneurship strategies, and the degree of these impacts. According to Enworom (1994), the variable assisting or constraining entrepreneurial practices can be categorized into economic and non-economic factors. The economic factors include market, capital availability, demand for industrial goods, availability of required labour, raw materials, degree of inflation, level of taxation, and the ease of importing or acquiring required resources. The non-economic factors influencing entrepreneurship practices include social mobility, social integration, security and ideology, general attitudes towards entrepreneurship, among others. Relatedly, Armstrong (1961) contends that success in entrepreneurship strategies, at the individual level, is a function of having the right attitude, having the right amount of education, having good health, possessing internal drive, exhibiting resourcefulness and maintaining perseverance, among others.

With reference to entrepreneurship in Nigeria, the factors that have impacted negatively on it include inadequate know-how, negative values, motivations and behavioural peculiarities of the individuals concerned, deficiencies in the entrepreneurial and managerial services available to existing indigenous firms, difficulties inherent in the Nigerian business environment, scarcity of profitable investment opportunities, deficiencies in the conception and operation of relevant government programmes and policies expected to encourage indigenous entrepreneurship, among others (Akeredolu - Ale, 1972; 1975; Kilby, 1969; Harris, 1967). According to Harris (1967), Nigerian entrepreneurs seem to be more successful in isolating business opportunities and controlling resources than they have been in the efficient and effective management of the business enterprises, which they have established. To achieve entrepreneurial efficiency and effectiveness requires a good environmental setting and the development of positive government policies and programmes to encourage the emergence of small and medium business entrepreneurs.

According to Akeredolu - Ale (1975), the underdevelopment of indigenous entrepreneurship in Nigeria is a function of environmental and beavioural factors. On the motivational aspect, for example, Nigerian entrepreneurs seem yet to cultivate the tendency of conserving more than they consume. In addition, very limited entrepreneurial ambitions, conspicuous consumption behaviour, the tendency to invest in many uncoordinated ventures, and the aversion to partnering with other entrepreneurs are some of the factors constraining entrepreneurship development in Nigeria (Akeredolu - Ale, 1975).

Many studies have addressed (both quantitatively and qualitatively) important and basic issues such as entrepreneurs, their abilities and behaviour, as well as the impact of the environment on entrepreneurship practices and success. For example, Drucker (1985), Geogrey et al. (1996), Donaldson (1985), Helgriegel et al. (1989), among others, have elaborated on the roles of entrepreneurs, their key peculiarities, their differences with managers, and the market functions of entrepreneurship.

The environment for business plays a key role in the affairs of any organization. Therefore, the discussion of organizational entrepreneurship should involve the environmental factors that relate to the organization in question. No business organization is self-sufficient.

Each business organization offers something to its environment, and depends, in turn, on the environment for its operations, survival and growth. For an entrepreneurial organization to operate efficiently and effectively, therefore, it must study and understand how the relevant business environments relate to both its entrepreneurship strategies and measures of organizational performance. In this way, the organization would be able to evolve corrective strategies towards threats to its operations. The degree of entrepreneurial practices and strategies is a function of its external and internal environments (Kemelgor, 2002; Morris, 1998; Naman & Slevin, 1993; Zahra, 1991).

In some contemporary business operations, top corporate managers monitor their relevant business environment for environmental variables that may affect their company's operations. Middle level mangers monitor the environment for changes that may influence the particular organic business function that they manage, and a first- line supervisor is concerned about the business environment that will affect his unit in the organization. Therefore, for the survival and growth of modern business organizations, modern entrepreneurs should evolve strategies and practices which provide vision, mission, goals and objectives, and inspiration to other organizational personnel in relation to the relevant business environment (Cogness 1989, 1991; Hardy, 1989; Kotler, 1998). According to Meredith et al. (1991), organizations exhibiting entrepreneurship practices tend to be entrepreneurial, possessing leadership qualities, risk taking, decision making, business planning, effective use of time, have concise financial action plans, developing value attitude towards resources, measuring and controlling financial strategies and results, achieving financial resources through people, ensuring adequate management of information, commanding scarce resources, perceiving market opportunities marketing the product or service, making good use of outside resources, and dealing successfully with governmental agencies and other environmental factors.

Extant literature on entrepreneurship in developing countries offers neither a predictive theory of entrepreneurship psychology nor a clear-cut guidance that may assist the practice of entrepreneurship. However, direction in this regard may be derived from the entrepreneurship orientation, which is substantially empirical, comparative and actively involved in finding practical solutions to entrepreneurship problems via organized research (McClelland, 1961; Palmers 1971; Timmons 1978; Welsh & White, 1981). It is this new orientation in entrepreneurship theory that has, partly, provided the stimulation for the present research.

The Nigerian economy has witnessed substantial corporate failure in the last century. These corporate failures have been, partly, attributed to unfavourable business environment. However, it is worthy of note that even within the same unfavourable business environment in Nigeria, some companies have performed successfully as a result of their entrepreneurial strategies. Therefore, the present research attempts to determine the extent of entrepreneurship practices in Nigerian business organizations, the environmental influences on such strategies, and the relations of entrepreneurship practices, environmental factors and organizational performance measures.

Although much of the research works in entrepreneurship deals with peculiarities of the founder/entrepreneur (Greene & Butler, 1996), Gartner (1989) has suggested that the more useful

emphasis on entrepreneurship research should focus on the creation of entrepreneurship business. In the case of Nigeria, some research efforts have been made to study entrepreneurship in Nigeria. Some of these studies include Harris (1967) Olakampo (1968), Akeredolu - Ale (1972; 1975, Owuala (1999), Ifechukwu (2000) and Osuagwu (2001), among others. Some of these studies are either dated, normative, or do not have serious theoretical and managerial relevance in Nigeria's contemporary erratic business environment. This situation, also, stimulated the need for the present research.

This study was conceived with the intellectual ambition to meet the dire need for knowledge of the dynamics (operational, environmental and performance) of entrepreneurship practices in Nigeria. The study will, hopefully, serve partly as the spin for further extensive and intensive research efforts with regard to entrepreneurship tendencies in Nigerian business organizations. Such studies in addition to the present study would hopefully go a long way in tackling the recalcitrant, perturbing, and doubtful entrepreneurship problems in the Nigerian economy. Afterall, successful entrepreneurship in Nigeria would lead to successful conduct of business in Nigeria, and this depends on adequate understanding of entrepreneurship tendencies and environments, which would ultimately lead to economic, social and political growth, and development of Nigeria.

## METHODOLOGY

The data for this research study were collected through self-administered questionnaires from companies operating in Lagos state of Nigeria. The study utilized descriptive survey research design, which involved describing the nature of existing entrepreneurship situation in sampled Nigerian small, medium and large organizations. The research instrument used was a structured questionnaire, which was designed after some preliminary qualitative research activities via focus group discussion with a convenience sample of organizational executives. In addition, the design of the questionnaire benefited from extent literature dealing with entrepreneurship in small and medium scale firms. The Likert scale was used in this research because of its simplicity, ease in being understood by respondents, and its efficacy as a research approach for self-administered interviews as used in the present research (Barksdale & Darden, 1972).

The research instrument (questionnaire) sought to isolate, among others, emphases on entrepreneurship issues / strategies, factors influencing entrepreneurship practices / strategies, and effectiveness of entrepreneurship practices / strategies using quantitative and qualitative performance measures. The questionnaire was relevantly divided into three major sections of A, B, C, comprising twenty-nine (29), twelve (12) and thirty-three (33) issues / questions, respectively. Section A dealt with emphases on the entrepreneurship strategies; section B dealt with degree of influence of certain factors on entrepreneurship strategies, while section C sought for the degree of effectiveness of entrepreneurship strategies using quantitative performance measures.

In section A of the research instrument, the respondents were provided with a six-point likert scale ranging from "very high emphasis (6) to "no emphasis at all (1)". Section B had a six-point likert scale ranging from "very high extent (6)" to "no extent at all (1)". Also, section C had a six-point likert scale ranging from "very high effectiveness (6)" to "no effectiveness at all (1)". In all these options, the respondent was not given the option of "undecided" because such an option, according to Barksdale and Darden (1972), would have created difficult research meanings.

The final section of the questionnaire (Section D) required respondents to provide some background information (such as address of respondents, working experience, educational / professional qualifications). In addition, respondents were asked to list five managerial problems confronting entrepreneurial strategies in their companies, and the associated solutions to the listed managerial problems.

Entrepreneurship practices construct was operationalized into twenty-nine items using extant relevant literature (Baumack, 1992; Bygrave, 1997; Agbonifoh et al., 1999; Osuagwu, 2001; Owuala, 1999; Stearns & Hills, 1996; Morris & Sexton, 1996 among others). Factors influencing entrepreneurship strategies were operationalized into twelve items using the works of Kotler (1998), Okoroafo (1993), Gartner (1985), Child (1987), and Bygrave (1997), among others. Also, entrepreneurship effectiveness was operationalized using extant literature on corporate strategy performance (Okike, 1986; Agu, 1988; Smith, Arnold & Bizzell, 1985; Morris & Sexton, 1996; Murphy, Trailer & Hill, 1996; Sharma, 1999, among others).

The entire questionnaire was subjected to expert opinion validity. Five Senior University academics specializing in general management, marketing, finance, production management and psychology validated the research instrument, in addition to expert opinion from some top-level organisational executives. Before the administration of the research instrument, a pre-test of the instrument with a small group of respondents (who were not part of the final respondents) was undertaken to improve the quality of the research instrument, and the results from the pre-test were satisfactory. Also, following the research suggestions of McColl-Kennedy and Fetter (1999), Cronbach's alpha coefficients were calculated for the three major research measures, and these coefficients served as additional evidence of convergent validity.

A total of two thousand (2000) copies of the research instrument were administered to a convenient sample of relevant organisational executives representing the entrepreneurial interests of their companies in Lagos state of Nigeria. Of this number, only 879 copies were found reasonably completed by the respondents and useable for this study, resulting in an effective response rate of 44 per cent. The companies were made up of service, manufacturing, small, medium, and large-scale organisations. The respondents were sufficiently educated with cognate working experiences in the organic business functions of production, marketing personnel, and finance/accounting management.

The analysis of the data generated from completed copies of the research instrument utilized the SPSS computer package/software. Data on dimensions of entrepreneurship practices, influences on entrepreneurship practices, and effectiveness of entrepreneurship practices were analyzed

using descriptive statistics. The suitability of the data on entrepreneurship practices measure for factor analysis was assessed using the Bartlett test of sphericity (p=0.000) and the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy (0.925). This means that the data set for this measure was adequate enough for the application of factor analysis (Stewart, 1981; Kaiser, 1970; Kaiser & Rice, 1974; Hart, Webb & Jones, 1994). Also, data on the three major research measures were subjected to Cronbach's alpha analysis. The results of these analyses are shown as tables 1 to 5.

## RESULTS AND DISCUSSION

Table 1.0 shows that the surveyed firms showed reasonable levels of emphases on dimensions of entrepreneurship. Determination of capital requirements (A1; mean = 5.3) experienced the highest emphasis, while consideration of patents or rights to be held (A16, mean = 3.90) was the least emphasized entrepreneurship practice among the surveyed companies. The finding in table 1.0 with respect to placing the highest emphasis on determination of capital requirements is expected, especially in a developing economy such as Nigeria where financing of entrepreneurship has been the salient issue confronting Nigerian entrepreneurs. According to Grieco (1975), one of the major considerations for efficient and effective entrepreneurship management is determination of capital requirements. In a developing country such as Nigeria, capital requirements have often posed problems in the efficient and effective management of entrepreneurship, and these problems have been compounded by the inability of Nigerian banks to assist entrepreneurship via friendly and favorable loan terms. Pedro (1992) laments that the performance of Nigerian banks with respect to assisting entrepreneurship growth and development via financing is substantially discouraging.

A disturbing finding in table 1.0 is the relatively low emphasis placed on patents/intellectual property rights by entrepreneurs. This finding seems to suggest that Nigerian entrepreneurs have not seriously appreciated the importance of patents/intellectual property rights in their entrepreneurship practices. This finding seems to support the normative work of Osuagwu (2001), which posits that what obtains in most developing countries (such as Nigeria) is that, even though laws dealing with copy rights exist in the statute books, most business entrepreneurs either lack knowledge of such laws or are not enthusiastic about enforcing infringements of such rights. However, the finding in table 1.0 pertaining to emphasis on copyrights is at variance with the empirical work of Kortum and Lerner (1997), which posits that there is increase in copyright and intellectual prpoperty rights among small and large organisations; this may be the case in developing economies with appreciable levels of educational, business and legal systems.

Nigerian business organisations have a lot of benefits to derive from knowing and using intellectual property system, both locally and internationally. Generally, there are many challenges and opportunities associated with intellectual property protection for business entrepreneurs. According to Ficsor (2001), good copyright regulations and intellectual property

rights protection and appreciation can contribute to the efficiency and effectiveness in the management of entrepreneurship in business organisations. According to Alikhan (2000), business organisations should be encouraged to appreciate and utilize intellectual property rights.

Table 2.0 shows the descriptive statistics of the factors influencing entrepreneurship practices among the surveyed firms. All the factors were reported to have reasonably impacted on the surveyed firms' entrepreneurship practices, with "market needs and wants to be satisfied"(B1, mean = 4.87) having the highest impact, while "cultural factor" (B7, mean = 3.63) showed the least influence on entrepreneurship practices of the surveyed Nigerian companies.

Expectedly, to be efficient and effective in entrepreneurship practices, Nigerian business organisations should perceive business opportunities (i.e. needs and wants), find the pursuit of the identified needs and wants desirable regarding the prevailing situations in the business environment, and believe in the possibility of entrepreneurship success. According to Stevenson and Sahlman (1990), these are the salient ingredients that distinguish successful business entrepreneurs from the crowd. Relatedly, Baumback (1992) posits that knowing and satisfying customers'/clients' needs and wants beneficially is one of the key factors leading to success in business entrepreneurship. Also, Siropolis (1977) has implicated identification and satisfaction of customer needs and wants as the major goal of a business entrepreneur. The submissions by these cited authors seem to support the findings in table 2.0 regarding the influence of the needs and wants of customers on entrepreneurship tendencies.

In some countries of the world such as USA, Japan, the Asian Tigers, India, and Germany, among others, entrepreneurship is a way of life (culture). This means that nationals and organisations are naturally (culturally) motivated to engage in entrepreneurship tendencies. However, table 2.0 shows culture as having the least impact (motivation) on entrepreneurship practices in Nigerian organisations. This finding seems to support Enworom (1994) who posits that many of the so-called Nigerian entrepreneurs engage only in buying and selling finished products from other countries.

Table 3.0 shows the descriptive statistics of entrepreneurship effectiveness. The results in this table show that the surveyed firms have been effective in their entrepreneurship practices. The most achieved performance measure was "return on investment" (C1, mean = 4.69), while "change in owner's compensation" (C10, mean = 3.59) was seen to be the least achieved performance measure through entrepreneurship practices. Most Nigerian entrepreneurs are more interested in business ventures that have reasonable and immediate return on investment, even when such ventures do not have long-term benefit to the Nigerian economy. However, Stokes (2000) posits that entrepreneurship effectiveness varies across business organisations because of the different managerial variables used in assessing organisational effectiveness.

Relatedly Daily and Dalton (1992) have submitted that it is not likely that any one index could adequately measure entrepreneurial performance. In the same vein, Venkatraman and Ramanujam (1986) have posited, via empirical evidence, that organisational performance measures are multi-dimensional. Although financial measures are necessary indices for determining corporate entrepreneurship performance, they are not sufficient to explain all the

dimensions of organisational performance (Murphy, Trailer & Hill, 1996). Therefore, both financial and non-financial measures, in addition to qualitative and quantitative indices of performance, should be utilized in determining the efficacy, or otherwise, of entrepreneurship performance in Nigerian organisations.

Table 4.0 shows the results of the principal components (Factor) analysis of the entrepreneurship practices variables. All the Eigen values in table 4.0 are greater than one, thereby confirming evidence of convergent validity in line with the research suggestions of Kim and Mueller (1978).

Table 5.0 shows the reliability coefficients of the three major research measures used in this study. All the Cronbach's alpha coefficients in table 5.0 meet Nunnally's (1978) recommended "greater-than-or-equal to 0.70" level of reliability. It can then be assumed that the items used, respectively, in each of the three major research constructs of entrepreneurship practices, factors influencing entrepreneurship practices, and effectiveness of entrepreneurship practices measured the same construct (Kucukemiroglu, 1999). Therefore, relying on the pieces of evidence in tables 4.0 and 5.0, it may be concluded that these research constructs met reliability and validity conditions.

The findings from the present research have managerial and research implications. Entrepreneurs and managers in Nigerian business organisations should note that the general business environment has implications for their managerial strategies, efficiency and effectiveness (Joyce, 1995; Osborne, 1994; Brown, 1991). For example, the general business environment confronts the entrepreneur in Nigerian business organization with market opportunities (in form of needs and wants) and challenges, regulations and fiscal policies, technological innovations, competition, and infrastructural difficulties, among others. Such environmental issues affect managerial and entrepreneurial efforts, in addition to the growth of business organisations (Neilson, 1995; Covin & Slevin, 1989; Bracker & Pearson, 1986). According to Hill and McGowan (1999), the higher the degree of entrepreneurial activity in business organisations, the more dynamic the operating business environment. Therefore, the entrepreneur in Nigerian business organisations should study, understand, and monitor the relevant business environments for efficient and effective business management strategies and policies. The findings of this study, generally, offer managerial and public policy implications that may facilitate the development of better entrepreneurship practices, strategies, and support programmes for developing countries such as Nigeria.

Entrepreneurship is an all-encompassing area of study. The findings in this study are limited in a number of ways, thereby giving potential for further research. Future researchers are well advised to look at the issue of entrepreneurship management from other perspectives. Such perspectives may include management activities in the organic business functions of marketing, finance, personnel, and production, among others. Also, the impact of information technology on Nigerian entrepreneurship is a good candidate for future research. In addition, since the small business enterprises have their unique peculiarities different from large-scale organisations, it is advised that future research should investigate the differences between entrepreneurship in small and large-scale organisations. Again, this research is limited by its relatively small sample size

and cross-sectional and descriptive nature. In this regard, future longitudinal research that tracks entrepreneurial practices of Nigerian business organisations is suggested. Finally, future research should enlarge the geographical scope of investigation (for example, the six geopolitical zones in Nigeria; the major cities of Lagos, Port Harcourt, Kaduna, Enugu, Aba, Kano, and Onitsha, among others). Although the present research may have provided some insights into entrepreneurship tendencies in Nigerian organizations, some issues have been raised which would provide fertile grounds for future research. These suggested areas of research would go a long way in clarifying the grey areas in the study and practice of entrepreneurship in Nigeria.

| KEY TO RESEARCH VARIABLES | | | |
|---|---|---|---|
| A1 | Determination of capital requirements; | A2 | Obtaining legal assistance. |
| A3 | Researching relevant market segments; | A4 | Setting the business enterprise. |
| A5 | Securing human resources; | A6 | Provision of physical facilities. |
| A7 | Determination of accounting procedures; | A8 | Determination of risk insurance coverages; |
| A9 | Determination of data and information needs. | A10 | Consideration of business vision and mission; |
| A11 | Consideration of business market peculiarities; | A12 | Consideration of competitors; |
| A13 | Consideration of prices of products; | A14 | Consideration of product characteristics; |
| A15 | Consideration of technology required; | A16 | Consideration of patents/rights to be held; |
| A17 | Consideration of distribution options; | A18 | Consideration of business ownership structure; |
| A19 | New products introduction; | A20 | Introduction of new product processes. |
| A21 | Opening new market; | A22 | Utilization of new sources of supply. |
| A23 | Carrying-out new organizational reforms; | A24 | Engaging in top-level innovative decisions; |
| A25 | Engaging in top-level risk-taking decisions; | A26 | Engaging in top-level proactive decisions; |
| A27 | Ensuring that firm's innovations are new globally. | A28 | Ensuring that firm's innovations are new to its market; |
| A29 | Ensuring that firm's innovations are business extensions; | B1 | Market influences; |
| B2 | Economic influences. | B3 | Social influences; |
| B4 | Legal influences; B5 =Business ideology influences. | B6 | Entrepreneur's personal influences; |
| B7 | Cultural influences; | B8 | Competitive influences; |
| B9 | Technological influences; | B10 | Geographical influences. |
| B11 | Influences of firm's distinctive competence; | B12 | Influences of the firm's industry structure; |
| C1 | Return on investment; | C2 | Return on equity; |
| C3 | Return on assets. | C4 | Return on net worth; |
| C5 | Gross revenue per employee; | C6 | Change in sales volume; |
| C7 | Change in employee turnover; | C8 | Change in Market share; |
| C9 | Change in Net income margin; | C10 | Change in labour expenses / revenue ratio; |
| C12 | Return on sales; | C13 | Net profit margin; |
| C14 | Gross profit margin; | C15 | Net profit level. |
| C16 | Pre-tax profit; | C17 | Sales volume; |
| C18 | Cash flow level; | C19 | Ability to fund company growth; |
| C20 | Current ratio; | C21 | Quick ratio; |
| C 22 | Total asset turnover; | C 23 | General success of the company; |
| C24 | Company sales / industry sales ratio. | C25 | Debt/equity ratio; |
| C26 | Interest earned; | C27 | Efficiency objective; |
| C 28 | Growth objective; | C29 | General profit objective; |
| C30 | Organizational size objective; | C31 | Liquidity objective; |

| | | | |
|---|---|---|---|
| C32 | Market share objective; | C33 | Leverage objective. |

**Table 1.0: Descriptive Statistics Of Entrepreneurship Practices (N = 879)**

| Variable | Mean | Standard Deviation | Variance | Skewness |
|---|---|---|---|---|
| A1 | 5.23 | 1.11 | 1.22 | -2.30 |
| A2 | 4.11 | 1.44 | 2.06 | -67 |
| A3 | 4.69 | 1.23 | 1.51 | -1.20 |
| A4 | 4.60 | 1.28 | 1.64 | -1.17 |
| A5 | 4.79 | 1.22 | 1.49 | -1.49 |
| A6 | 4.59 | 1.21 | 1.46 | -1.06 |
| A7 | 4.50 | 1.34 | 1.80 | -1.13 |
| A8 | 4.18 | 1.44 | 2.08 | -.77 |
| A9 | 4.53 | 1.20 | 1.44 | -.95 |
| A10 | 5.08 | 1.10 | 1.20 | -1.76 |
| A11 | 4.76 | 1.17 | 1.36 | -1.20 |
| A12 | 4.62 | 1.28 | 1.63 | -1.07 |
| A13 | 4.64 | 1.25 | 1.56 | -1.10 |
| A14 | 4.66 | 1.16 | 1.34 | -1.56 |
| A15 | 4.70 | 1.18 | 1.40 | -1.42 |
| A16 | 3.90 | 1.51 | 2.28 | -.64 |
| A17 | 4.33 | 1.31 | 1.71 | -1.02 |
| A18 | 4.17 | 1.45 | 2.10 | -.70 |
| A19 | 4.33 | 1.35 | 1.82 | -.93 |
| A20 | 4.21 | 1.28 | 1.65 | -.79 |
| A21 | 4.34 | 1.37 | 1.87 | -.98 |
| A22 | 4.19 | 1.23 | 1.52 | -1.01 |
| A23 | 4.06 | 1.28 | 1.64 | -.84 |
| A24 | 4.63 | 1.25 | 1.55 | -1.23 |
| A25 | 4.26 | 1.32 | 1.75 | -.82 |
| A26 | 4.46 | 1.24 | 1.54 | -1.02 |
| A27 | 4.11 | 1.35 | 1.83 | -.76 |

| | | | | |
|---|---|---|---|---|
| A28 | 4.30 | 1.29 | 1.66 | -.89 |
| A29 | 4.51 | 1.21 | 1.47 | -.1.15 |

**Table 2.0: Descriptive Statistics Of Factors Influencing**

Entrepreneurship Practices (N = 879)

| Variable | Mean | Standard Deviation | Variance | Skewness |
|---|---|---|---|---|
| B1 | 4.87 | 1.27 | 1.62 | -1.53 |
| B2 | 4.79 | 1.27 | 1.61 | -1.54 |
| B3 | 4.15 | 1.33 | 1.78 | -.78 |
| B4 | 3.88 | 1.44 | 2.08 | -.46 |
| B5 | 4.28 | 1.42 | 2.01 | -.89 |
| B6 | 3.84 | 1.41 | 1.99 | -.52 |
| B7 | 3.63 | 1.46 | 2.14 | -.39 |
| B8 | 4.61 | 1.27 | 1.61 | - 1.42 |
| B9 | 4.38 | 1.46 | 2.14 | -1.18 |
| B10 | 3.95 | 1.43 | 2.04 | -.62 |
| B11 | 4.57 | 1.31 | 1.72 | -1.12 |
| B12 | 4.29 | 1.42 | 2.02 | -.89 |

**Table 3.0: Descriptive Statistics Of Entrepreneurship**

Effectiveness Measures (N = 879)

| Variable | Mean | Standard Deviation | Variance | Skewness |
|---|---|---|---|---|
| C1 | 4.69 | 1.37 | 1.89 | -1.44 |
| C2 | 4.36 | 1.39 | 1.92 | - 1.04 |
| C3 | 4.26 | 1.38 | 1.90 | -1.05 |
| C4 | 4.16 | 1.32 | 1.74 | -.88 |
| C5 | 4.00 | 1.33 | 1.76 | -.73 |
| C6 | 4.34 | 1.21 | 1.47 | -1.09 |
| C7 | 4.06 | 1.34 | 1.81 | -.75 |
| C8 | 4.28 | 1.27 | 1.60 | -.93 |
| C9 | 4.19 | 1.32 | 1.74 | -.99 |
| C10 | 3.59 | 1.51 | 2.27 | -.42 |
| C11 | 4.03 | 1.34 | 1.79 | -56 |
| C12 | 4.46 | 1.22 | 1.50 | -1.21 |
| C13 | 4.24 | 1.34 | 1.81 | -.93 |
| C14 | 4.36 | 1.18 | 1.38 | -1.21 |
| C15 | 4.32 | 1.36 | 1.84 | -1.11 |
| C16 | 4.01 | 1.37 | 1.86 | -.76 |
| C17 | 4.44 | 1.22 | 1.50 | -1.08 |
| C18 | 4.32 | 1.28 | 1.64 | -.79 |
| C19 | 4.36 | 1.27 | 1.62 | -.86 |
| C20 | 4.14 | 1.32 | 1.73 | -1.00 |
| C21 | 4.01 | 1.28 | 1.64 | -.80 |
| C22 | 4.17 | 1.29 | 1.66 | -.90 |
| C23 | 4.53 | 1.21 | 1.47 | -1.02 |
| C24 | 3.97 | 1.38 | 1.92 | -.67 |
| C25 | 3.90 | 1.37 | 1.87 | -.60 |
| C26 | 3.90 | 1.31 | 1.71 | -.60 |
| C27 | 4.40 | 1.26 | 1.59 | -1.19 |
| C28 | 4.50 | 1.17 | 1.37 | -1.18 |
| C29 | 4.45 | 1.24 | 1.54 | -1.01 |
| C30 | 4.22 | 1.23 | 1.50 | -.83 |
| C31 | 4.15 | 1.36 | 1.85 | -.63 |
| C32 | 4.16 | 1.43 | 2.05 | -.62 |
| C33 | 3.90 | 1.40 | 1.95 | -.55 |

**Table 4.0: Principal Component (Factor) Analysis Of Entrepreneurship Practices Variables**

| | Factor 1 | Factor 2 | Factor 3 | Factor 4 | Factor 5 | Factor 6 | Communality |
|---|---|---|---|---|---|---|---|
| A1 | .61 | -.35 | -.07 | -.24 | -.14 | .01 | .58 |
| A2 | .50 | 53 | .06 | -.12 | .24 | -.15 | 63 |
| A3 | .65 | .03 | -.26 | -.14 | -.14 | -.14 | .54 |
| A4 | .62 | .23 | .05 | .04 | -.34 | .15 | .60 |
| A5 | .61 | -.00 | .42 | -.16 | -.16 | -.05 | .58 |
| A6 | .59 | -.06 | -.13 | .08 | -.12 | .05 | .57 |
| A7 | .61 | .49 | .08 | .42 | .07 | -.02 | .62 |
| A8 | .56 | .47 | .21 | .05 | -.17 | .11 | .62 |
| A9 | .61 | .07 | -.03 | .13 | -.02 | -.24 | .73 |
| A10 | .68 | -.03 | .28 | .54 | -.16 | -.22 | .64 |
| A11 | .67 | -.05 | .28 | .14 | -.19 | -.09 | .57 |
| A12 | .67 | -.17 | -.17 | .03 | -.29 | -.12 | .61 |
| A13 | .57 | .02 | .03 | .07 | -.17 | .15 | .51 |
| A14 | .69 | .03 | .01 | -.35 | -.22 | .24 | .65 |
| A15 | .53 | .07 | .08 | -.25 | -.26 | .15 | .50 |
| A16 | .53 | .45 | -.37 | .34 | .13 | -.09 | .65 |
| A17 | .64 | .38 | -.14 | -.10 | -.13 | -.23 | .67 |
| A18 | .59 | .18 | -.10 | -.15 | -.24 | -.16 | .48 |
| A19 | .68 | -.32 | -.17 | -.10 | .17 | -.09 | .62 |
| A20 | .57 | .16 | .14 | ..01 | .38 | .13 | .59 |
| A21 | .64 | -.36 | -.22 | .24 | .11 | .24 | .67 |
| A22 | .55 | -.29 | .03 | .08 | .05 | -.56 | .70 |
| A23 | .51 | -.17 | .02 | .05 | .43 | .29 | .60 |
| A24 | .63 | -.26 | .41 | .19 | .01 | -.09 | .65 |
| A25 | .57 | -.35 | .33 | -.10 | .20 | -.08 | .64 |
| A26 | .65 | -.12 | .28 | - .22 | 22 | -.13 | .66 |
| A27 | .65 | .10 | -.11 | -.28 | .31 | -.17 | .69 |
| A28 | .67 | -.18 | -.37 | -.35 | .18 | -.28 | .72 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| A29 | .71 | -.22 | -.33 | -.02 | .04 | -.18 | .71 |
| EigenValue | 10.96 | 1.99 | 1.41 | 1.34 | 1.26 | 1.05 | |

**Table: 5.0: Reliability Coefficients Of Major Research Measures (Cronbach Alpha)**

| RESEARCH MEASURES | COEFFICIENTS |
|---|---|
| 1. Entrepreneurship Practices. | 0.94 |
| 2. Factors Affecting Entrepreneurship Practices | 0.87 |
| 3. Entrepreneurship Performance Measures/Effectiveness | 0.96 |

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# EFFECT OF NURSE WORK CLIMATE ON PATIENT QUALITY OUTCOMES: AN ENTREPRENEURIAL THEORETICAL FRAMEWORK

**Thomas F. McIlwain, Medical University of South Carolina**
**David S. Snyder, Medical University of South Carolina**

## ABSTRACT

*This paper examines the relationship between employee work climate issues and customer perceptions of quality outcomes in the health care sector. It proposes a model to explain the following issues: (1) the relative effects of work climate, employee satisfaction, and quality outcome variables on the dimensions of patient satisfaction; (2) exploration of the direct effects of quality outcomes on patient satisfaction; and (3) whether there are relative effects of work climate and employee satisfaction on quality outcomes.*

## INTRODUCTION

This paper will discuss the theoretical relationships of whether nurses' work climate and work satisfaction are related to patient satisfaction and other selected quality outcomes, and whether there are intervening or organization structure variables that influence patient satisfaction. We propose a theoretical model that will enable advancement of knowledge about how nurses' work climate, employee satisfaction, and clinical quality outcomes affect patients' perceptions of care. Previous studies have not considered the combined multivariate nature of work climate, employee satisfaction, quality outcomes, and patient satisfaction. Based on a review of literature, the investigators hypothesize that nurses who work in supportive environments are more satisfied, and that this satisfaction impacts on their ability to provide quality care. Patients perceive this quality and are more satisfied with the inpatient stay. The goal of any entrepreneurial endeavor is to satisfy customers while considering the financial viability of the firm. Health care organizations, no matter what size, share this entrepreneurial goal.

## BACKGROUND AND LITERATURE

### Patient Satisfaction

In the political and economic environments of doing more, with less money, and doing it better, measuring patients' perceptions of the quality of services has become quite prevalent in health care organizations over the past decade. Satisfying patients has been accepted as a fundamental principle of quality management (JCAHO, 1993; Malcolm Baldrige National Quality Award, 1995; Dansky & Brannon, 1996). Consumer involvement in health care decisions coupled with the reduction in the increasing rate of government spending on health care has created a competitive environment where organizations must stay in constant touch with the perceptions patients have of the quality of care provided.

Patient satisfaction is an outcome that results from the performance of processes in a health care organization. It is an outcome measurement from the patient's perspective that represents the effect of one or more processes on that patient at a defined point in time (JCAHO, 1993; Krowinski & Steiber, 1996). Patient satisfaction measures provide organizations with information to direct resources to improving processes within the organization. Not only can resources be directed to improving processes, patient satisfaction information can help organizations prioritize those resources. Furthermore, when an organization makes a change in a process, patient satisfaction as an outcome measure can be used to measure the effect of those changes (JCAHO, 1993).

Satisfaction is an essential concept whereby consumers judge the outcome of the patient-provider exchange relationship (Ware, Snyder, Wright & Davies, 1983; Sitzia & Wood, 1997). The patient-provider relationship is an exchange relationship where patients exchange time and money for better health, a sense of security, safety, and quality of care from providers. Providing utility to customers is core to the survival of any organization. In an exchange relationship, providers and customers are involved in a process of evaluating the utility gained from the exchange. If the relationship does not satisfy both parties, one or both have a choice of terminating the exchange relationship. In health care organizations, that would mean losing patients to the competition. On the other hand, in some cases, one party may not be in a position to terminate the relationship. When this occurs, such as might be argued is that case for certain categories of health care consumers such as those enrolled in HMOs, certain regulations and evaluations must be in place to ensure quality, fairness, and equity. In both instances, measuring patients' levels of satisfaction can provide an understanding of the level of utility provided by the organization.

Although early studies dealt with the issue of the "meaning of the patient satisfaction construct," work by Ware, et al. (1983) helped to create a theoretical framework for describing the dimensions of patient satisfaction. Ware and his colleagues defined the differences between satisfaction reports about providers and care (waiting times, length of interaction with provider, ease of getting an appointment, etc.), and satisfaction ratings, that "attempt to capture a personal evaluation of care that cannot be known by observing care directly (Ware, et al., 1983)." Satisfaction ratings are explained by three variables, the consumer's preferences, expectations, and reality of the care received. Because of the interaction of these three variables, satisfaction is both a result of the care provided and the perception of the patient (Ware, et al., 1983).

Patient satisfaction has drawn the attention of numerous researchers. Cleary and McNeil (1988), Rubin (1989), and Aharony and Strasser (1993) review most of the conceptual, theoretical, and methodological approaches that have been employed in studying this concept. These reviews identify that much of the work has centered on determining the major dimensions of patient satisfaction. As with all attitudinal measure studies, the core issues in these works is those of reliability and validity.

Linder-Pelz (1982) conducted a content analysis of satisfaction studies and identified five variables as determinants of satisfaction. Those determinants are: occurrences of events, value or the evaluation, either good or bad of the event, expectations or the beliefs about the outcome of the occurrence, interpersonal comparisons which are the person's comparison of the occurrences with previous encounters, and entitlement, described as the individual's belief that they deserve or are justified in expecting a certain outcome. These determinants are very similar to the categories theorized by Ware. She identified ten attributes that can be used to assess satisfaction from the patient's point of view. They are: 1) accessibility/convenience, 2) availability of resources, 3) continuity of care, 4) efficacy/outcomes of care, 5) finances, 6) humaneness, 7) information gathering, 8) information giving, 9) pleasantness of surroundings, and 10) quality/competence.

Others (Fitzpatrick, 1984; Jain, et al., 1985; Wensing, et al, 1994; Ben-Sira, 1976) proposed similar models. These models identify dimensions that affect overall patient satisfaction. The similarity of these studies suggest that there are generally accepted dimensions of patient satisfaction and that the patient-provider encounter involves a set of similar circumstances that define the inpatient health care service.

Several works have centered on the idea that satisfaction is the fulfillment of expectations (Stimson & Webb, 1975; Fitzpatrick, 1984; Abramowitz, et al, 1987; Bond & Thomas, 1992). Expectations are the result of previous encounters, knowledge, information from friends and family, or just about any source of information that an individual might use to form an expectation. Therefore, patient expectations and thus patient satisfaction should exhibit high variability. However, high levels of satisfaction are constantly being reported which suggests that patients are either satisfied with care or that expectations are generally very low (Sitzia & Wood, 1997). Even with these levels of satisfaction reported, Sitzia and Wood support the notion that patient satisfaction is a construct that must be continually monitored. If patient feedback is integrated in the modification of processes, the organization has a better chance of improving quality (Malcolm Baldrige National Quality Award, 1995).

Ware, et al. (1983), identified and discussed a comprehensive set of dimensions of patient satisfaction as presented in Table 1.

These dimensions have been the focus and have been confirmed in a multitude of studies (Abramowitz, et al., 1987; Baker, 1991; Rubin, 1990). Of all the dimensions included in patient satisfaction studies, overall satisfaction was consistently most strongly related to nursing care (Abramowitz, et al., 1987; Rubin, 1990; Fitzpatrick, While & Roberts, 1992). Ware's dimensions continue to be the core factors used to measure patient satisfaction.

The relationship between quality outcomes and patient satisfaction in the inpatient setting has not received widespread attention. Dansky and Brannon (1996) used discriminate analysis to identify dimensions between "excellent" and "good" quality and "satisfactory" and "unsatisfactory" quality in home health services that could be used in continuous quality improvement initiatives. They identified a method of determining which dimensions of patient satisfaction had the most impact on patients' perceptions of quality of services provided. However, their study did not use a conceptual framework that compared actual measures of quality of care with patients' perceptions. Our model hypothesizes the relative importance of work climate and nurse satisfaction dimensions to quality outcome measures and patient satisfaction dimensions.

**Table 1. Dimensions of Patient Satisfaction.**

| Dimension | Definition |
|---|---|
| *Interpersonal Manner* | Features of the way in which providers interact personally with patients (e.g., rudeness, respect, concern, friendliness, courtesy) |
| *Technical Quality of Care* | Competence of providers and adherence to highly standards of diagnosis and treatment (e.g., thoroughness, accuracy, unnecessary risks, making mistakes) |
| *Accessibility/Convenience* | Time and effort required to receive medical care (e.g., waiting times, ease of reaching provider) |
| *Finances* | Factors involved in paying for medical services (reasonable costs, alternative payment arrangements, comprehensive insurance coverage) |
| *Efficacy/Outcomes of Care* | The results of medical care encounters (e.g., helpfulness of medical care providers in improving or maintaining health) |
| *Continuity of Care* | Sameness of provider and/or location of care (e.g., see same physician) |
| *Physical Environment* | Features of setting in which care is delivered (e.g., clarity of signs and directions, orderly facilities and equipment, pleasantness of atmosphere) |
| *Availability* | Presence of medical care resources (e.g., enough medical facilities and providers) |

## Work Climate and Nurse Job Satisfaction.

Numerous studies reportedly have explored the relationships between work climate and nurse job satisfaction. Work climate refers to those conditions, structures and policies that form

an environment in which the objectives of an organization are accomplished. It is understood that the objectives of a health care organization center on the delivery of patient related services at the expected quality standard. Nurse job satisfaction refers to the level of self-reported contentment or agreement of nurses with the requirements of their job (Song, Daly, Rudy, Douglas & Dyer, 1997). Nurse job satisfaction is a complex, layered aggregate of subjective and objective factors (Newman, Maylor & Chansarkar, 2001). Numerous dimensions related to work climate have been reported to affect nurse job satisfaction.

Weisman and Nathanson (1985) reported that organizational structure and policies influence both nurse job satisfaction and nurse retention. Blegan's (1993) meta-analysis stated that job satisfaction was negatively correlated with stress and positively correlated with commitment to the organization. Other factors correlated with job satisfaction included communication with supervisors and peers, autonomy, recognition, routinization, fairness, and locus of control. Organizations that allow for greater nurse autonomy are reported to have higher levels of nurse job satisfaction and patient satisfaction (Greenley & Schoenherr, 1981). Dobos (1992) reported that nurses working in environments in which personal risk taking is encouraged are more satisfied with their jobs and perhaps better patient advocates.

Jain, Lall, McLaughlin & Johnson (1996) evaluated the effects of locus of control, perceived job stress, and psychological distress on nurse job satisfaction. Predictably, job stress and psychological distress were negatively correlated with job satisfaction while external locus of control demonstrated a negative relationship to job satisfaction. Song and colleagues (1997) isolated seven objective characteristics in their effort to measure personal affective outcomes such as general and specific job satisfaction, growth satisfaction, and internal work motivation. These seven characteristics included skill variety, task identity, task significance, autonomy, feedback from job, feedback from agents, and dealing with others. These were combined into a single index called the motivating potential score. When nurses worked in an environment that limited technology, used a case management practice model and a shared governance management model to foster autonomy, and allowed greater self-regulation, they reported greater job satisfaction along the dimensions of payment and supervision than their colleagues employed in more traditional settings. No significant differences were found across other measures of job satisfaction.

Decker (1997) reviewed the relationship of seventeen occupational and non-occupational variables among 376 female nurses employed full time at an urban university teaching hospital. Independent variables head nurse, job/non-job conflict, coworkers, unit tenure, physicians, and other units/departments were significant predictors of job satisfaction. Independent variables head nurse, job/non-job conflict, unit tenure, and physicians were significant predictors of psychological distress among these nurses. Decker (1997) concludes that relationships associated with occupational roles are more important predictors of job satisfaction. Nurses can be said to be in various job stages based upon their time on the job, skill development and attitudes. Using a survey of nurses, McNeese-Smith (2000) matched personal and job characteristics, and attitudes with descriptors for each of three job stages entry, mastery, and disengagement. Mastery was considered the stage of optimal performance and organizational

commitment was reported to be the strongest predictor of reaching this stage. Those nurses with higher job satisfaction and commitment to their organizations were least likely to be in the stage of disengagement. Conceptually, higher nurse job satisfaction is reflected in higher morale, a stronger commitment to an organization and its objectives, increased job tenure, and increased commitment to patient care (Newman, Maylor &Chansarkar, 2001). Schaefer and Moos (1996) showed that "specific work stressors and the overall work climate have a significant independent impact on staff's job morale and functioning." Schaefer demonstrated that nurses who were allowed to concentrate efforts on the delivery of patient care would view their work climate more favorably than those required to also accomplish less patient-related tasks.

It makes intuitive sense that staff members who are more satisfied perform better and deliver higher levels of quality care to patients. To make that link the conceptual relationship between motivation, satisfaction and organizational characteristics must be explored. Motivation has been described as the incentive through which a person acts to accomplish a task or a goal, or to behave in a particular way. Content theories of motivation are indifferent about whether the source is internal or external. Classical content theories are divided into those focusing on internal and situational factors (Maslow), and those related to job factors (Herzberg).

Process theories tend to relate organizational action or climate to the initiation of behavior (Stamps, 1997). Expectancy theory suggests that the process of being rewarded sets in motion required performance behaviors. A person desiring a particular reward will engage in those behaviors most likely to return such a reward. Other expectancy theorists suggest that previous experience, personality and skill help create expectations of accomplishment. Persons who accomplish that which is expected tend to be more satisfied. These theories are represented in two principle theories that dominate the literature when defining nurse job satisfaction. One theory is tied to personal fulfillment of job values that match personal needs. Those environments in which a fit exists between work job values and nurse job values tend to yield nurses who are more satisfied. The second centers on workplace conditions such as recognition of performance, adequate staffing, appreciation, autonomy, and the ability to deliver quality patient care (Stamps, 1997). These dimensions appear to impact more as dissatisfiers that ultimately lead to turnover than motivators.

Hinshaw et al. (1987) state, "An environment within which nurses can grow and thrive professionally will positively impact the quality of patient care as well as how nurses perceive themselves and are perceived by others." Their five stage theoretical model outlines the organizational and individual factors that serve as predictors of job satisfaction, and anticipated and actual job turnover. Stage I included expectations of tenure and mobility factors as two factors that predisposed nurses to anticipated turnover. Stage II clustered those organizational characteristics considered to have significant influence over job satisfaction. These characteristics were group cohesion, job stress, control over nursing practice, and autonomy. Stage III included measures of organizational satisfaction and professional/occupational satisfaction. The authors concluded that both types of satisfaction influenced anticipated turnover (Stage IV) and actual turnover (Stage V). Higher levels of satisfaction were associated

with lower anticipated turnover. They also demonstrated that job stress could be buffered by higher levels of job satisfaction and lead to lower anticipated turnover. Job stress factors were job dissatisfiers while professional status and general enjoyment in one's position were job satisfiers. Overall, organizational job satisfaction was associated with lower anticipated turnover among the majority of nurses included in their study. Hinshaw's et al. (1987) satisfiers and stressors by clinical service are summarized in Table 2.

Leveck and Jones (1996) enhanced the work of Hinshaw et al. using a larger sample and a structural equation model. They added a management style variable, variables associated with the quality of care, and nursing staff retention data. No significant relationships were found between the variables of unit experience, type of clinical service and management style. Management style explained group cohesion and job stress with units using participative management reporting lower stress. Organizational job satisfaction was explained by three variables: management style, group cohesion, and job stress. Professional job satisfaction was explained by the variables: type of the employment unit, group cohesion, and job stress. Management style had no direct effect on professional job satisfaction but did have an indirect effect through group cohesion. Of interest was the finding that measures of quality of care were related to employment in intensive care units and other specialty units, and units where nurses reported lower job stress.

While conflicting results and some vagueness continues regarding those specific dimensions within work climate that affect nurse job satisfaction, it appears that these are more the result of an inability to agree on terminology and to standardize measurement than lingering uncertainty that work climate and nurse job satisfaction are related. Sufficient evidence exists that an assessment of the influence of work climate on overall nurse job satisfaction score is attainable. Specifically, these work climate dimensions can be characterized as involvement, peer cohesion, supervisory support, autonomy, task orientation, work pressure, clarity, control, innovation, and physical comfort.

**Table 2. Comparison of Satisfiers and Stressors by Clinical Service**

| Comparison of Satisfiers and Stressors by Clinical Science | |
|---|---|
| Critical Care Nurses | General Medical-Surgical Nurses |
| Satisfiers | |
| Organizational job satisfaction | Group cohesion |
| Administrative style | Professional job satisfaction |
| Professional status | Organizational job satisfaction |
| Control over personal | Administrative style |

| | |
|---|---|
| Resources for practice | Professional status |
| | Control over practice through committees |
| Stressors | |
| Team respect | Feelings of competence |

## THE THEORETICAL FRAMEWORK

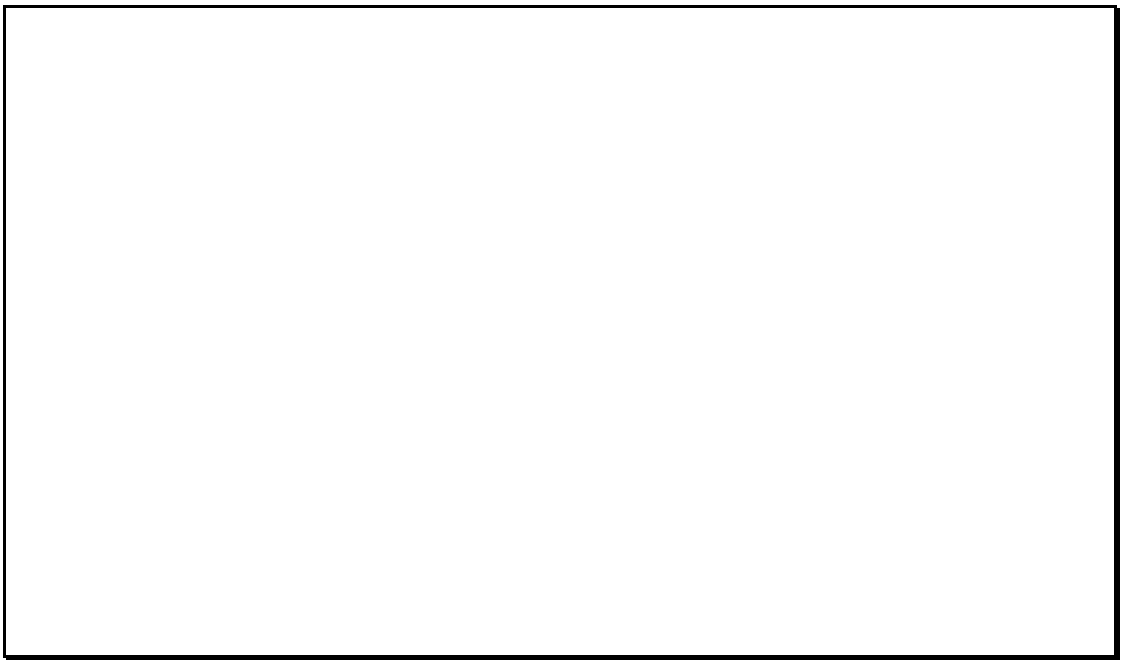
This paper proposes a theoretical framework that focuses on systems for interactions of work climate, nurse satisfaction, patient satisfaction, and quality outcomes. The model describes the effects of organizational climate and nurse work satisfaction on inpatient satisfaction and quality outcomes. The framework hypothesizes that nurse satisfaction/dissatisfaction and patient satisfaction/dissatisfaction are related. Addressing the relationships in this model should prove useful in predicting nursing and patient responses as a function of organizational work climate forces and provide health service organizations a basis for making process changes to improve quality outcomes.

Health care organizational researchers are well aware of the complicated dynamics that simple low-dimensional systems can exhibit. The present challenge is to better understand the dynamics of high-dimensional, multivariate, systems of nurse and patient satisfaction and their rich interplay with environmental work climate fluctuations (Shi, 1997). Researchers should be able to reduce these complexities by exploiting relationships between the organizational variables and these multivariate satisfaction dimensions using structural equation modeling (such as LISREL) (Hair, Anderson, Tatham, & Black, 1998). This modeling is important for understanding and predicting organizational dynamics, and ultimately, for better managing human interactions within the health care service organization.

Complexity in health care organization systems results not only from a large number of components, but also from multivariate interactions among its component, multiple parts, and sub-systems. The effects of high-dimensionality lead to fundamental challenges in our ability to model, understand, and predict the spatio-temporal dynamics of health care organizational systems. This paper recommends a method of describing inpatient satisfaction outcomes as a function of complex nursing psycho-behavioral phenomenon. A fluctuation of the organizational environment and the internal work climate of the hospital eventually have an impact on nurse job satisfaction and nurse commitment to the organization. These relationships have been demonstrated in the literature (Blegan, 1993; Borda & Norman, 1997; Stamps, 1997). What has not been demonstrated in the literature is that these internal variables of work climate such as staffing levels, communication, and organizational support may produce a response with variability in both nursing and patient satisfaction and quality outcome variables. A

consequence is that nurse job satisfaction and nurse commitment has an impact on patients' perceptions of quality of care received and health outcomes.

Our proposed theoretical framework is presented in Figure 1. This conceptual framework is one adapted from a model by Newman, Maylor, and Chansarkar (2001) that describes the relationships between nurse and patient satisfaction in the National Health Service in Great Britain. Newman, et al., described an integrated approach to examining and dealing with the complex issues of nurse recruitment, retention, healthcare quality and patient satisfaction. Their framework, or "chain," is derived from a review of the literature on nurse recruitment and retention, service quality and human resource management. Our adapted model depicts a holistic picture of how work climate affects nurses, who in turn affect the quality and patient satisfaction outcomes of inpatient care. Work climate is a perceptual measure of what nurses believe about the internal organizational environment. It involves the report of the quality of processes and delivery of services including the organization's focus on patient safety, the culture of the organization, and issues related to working relationships, teamwork, and equipment. Work climate directly affects nurse satisfaction, and nurse satisfaction directly affects nurse retention, patient satisfaction, and quality of patient care. Quality of patient care has a direct



affect on patient satisfaction.

## CONCLUSIONS

The delivery of quality patient care that achieves positive clinical outcomes is the goal of all who deliver health care. Nurses are instrumental in this process and the attainment of these goals. Our unique, interdependent model provides a theoretical framework that suggests that

nurses who work in supportive environments are more satisfied. This satisfaction impacts their perceptions of quality work life including stress, burnout, and longevity that affect their ability to provide quality care. Patients perceive the enhanced level of quality and are thus more satisfied with the inpatient care.

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# INTERSECTORAL INTEGRATION AND DEVELOPMENT: LESSONS FOR LARGE AND SMALL MANUFACTURING INDUSTRIES IN DEVELOPING ECONOMIES

**Charles Jabani Mambula, Suffolk University**


## ABSTRACT

*An often neglected, misunderstood and costly practice that could hamper economic growth and entrepreneurial development in countries is the existence of rivalry between large and small firms operating in the same sector and economy. Large and small manufacturing firms sometimes, work against one another to their mutual disadvantage. This article examined various examples of cooperative links between large and small firms as being beneficial, complementary, or even destructive. When meaningful relationships are created, various sectors in an economy understand how to co-exist interdependently by networking and supporting one another in working harmony. This study suggests how different intersectoral links could be created supported by examples as lessons of successful applications in other economies and countries.*


## EXECUTIVE SUMMARY

As much as large and small firms can exist and operate in separation of each other, they can equally co-exist for the mutual benefit of one another. Rather than maintain a complementary relationship, it can be observed that large and small firms in certain economies dis-engage themselves or compete against one another to their overall dis-advantage even when they belong in the same sector. The absence of complementary industrial links is most damaging to lesser-developed economies, where the level of industrial development is still embryonic. The survival rate for small businesses in such underdeveloped economies is already constrained by many factors in addition to lack of inter-sectoral connections. For instance, many opportunities that could have been cultivated through say, industrial linkages from subcontracting or backward and forward integration are lost because the sub-sectors distance themselves from each other. However, there is evidence to prove that complementary relationships between large and small firms in developed countries have significantly contributed to gross domestic product (gdp), business growth and employment. The links between large and small businesses in countries like Japan, Wales, Germany, Israel and the United States are relevant examples. Where such relationships exist in lesser-developed economies on the other hand, they tend to be more exploitative in nature and offer hardly any gains for small businesses.

Employment benefits, revenue generation, cost saving, inventory control, innovation, experience, training and exchange of useful information have been among the rewards gained from complementary relationships between large and small firms in the developed countries cited above as examples. From the onset, anomalies and flaws have been identified in the industrial policies and approaches taken by most African economies especially in sub-Saharan Africa. Most attention for industrial development in sub-Saharan Africa has been supported by huge amounts of borrowed funds and largely concentrated on large-scale industrial development, which yielded little benefits. The almost complete attention given to large firms' as a development strategy in most of the sub-Saharan region neglected the development of small industrial sector firms and entreprenuership. It is also evident that a plethora of natural resources exists in the sub-Saharan region of Africa. In addition, these resources provide opportunities for manufacturing value added (MVA) products for exports as well as creating avenues for employment, wealth creation through sub-contracting and higher living standards for small business owners. These opportunities however are wasted and not realized due to inappropriate and deficient development policies. In view of the foregoing background information, this article examined the opportunities that lie downstream in the lucrative petrochemical industry for plastics manufacturing and sub-contracting relationships between small and large firms in Nigeria. Ideas from developed countries were used as examples to explain how approaches to complementary and progressive industrial development could be taken to ameliorate the industrial landscape and development of countries in the sub-Saharan region.

## INTRODUCTION

Industrial growth in the sub-Saharan African region generally is poor due to the decline of aid donations, poor terms of trade, growing debt and inappropriate structural adjustment polices (Ihonvbere, 1996). Current industrial growth in Sub-Saharan Africa is poor and getting poorer (Hewitt, et. al., 1992). By the 90's, industrial growth was 10 per cent worse off, in per capita GDP, than in 1980 as per the recent UN report on African Economic Development. (Mosley, 1995; BBC Internet Service, April 24th 1999). Some factors have been blamed for the lethargic growth of industrialization in the region. These factors include the growth and domination of multinational corporations over the past thirty years in collaboration with a few indigenous businesses and the small number of competent entrepreneurs (Ale, 1975; Ekuerhare, 1985; Ohorhenuan & Adeniran, 1983). Previous exploitation by colonial governments did not set firm foundations for capital accumulation and industrial development either (Lewis, 1994). Rather, the colonized exported raw materials, without any manufactured value added (MVA) thus, providing meager income to the producers and offering restraint on industrialization in this region (Ekuerhare, 1985; Toye, 1995; Deremy, 2000). This practice among others, is what led to the dependence on the 'rentier' system for economic development in Nigeria. A rentier system, is when a country depends on external aid and economic rent rather than on the production of manufactured goods and services for its citizens (Mahdavy, 1970; Ihonvbere, 1993; Lewis, 1994). In addition, these practices are linked to the encouragement of

import dependency (Mamdani, 1994), in which the African raw material exporters simply made markets from the same products they had exported (Toye, 1995). Corruption and embezzlement, which saw the diversion of funds originally meant to be used for development purposes to other unrelated purposes have as well been blamed for diminished economic growth (Ihonvbere, 1996; Industrial policy, 1989).

However, there is yet another dimension to the problem that offers a possible explanation to the lethargic growth of industrial development in the sub-Saharan region and Nigeria. One explanation is to be found in the attitude and practice of the industrialists themselves, and can be described as the lack of cohesive unity in the sectors in which industrialists' operate.

Nigeria's economic and social development is far below the minimum expectations of the population. Per capita income amounted to only US$240 in 1997, substantially below the level at the time of independence in real terms. The country's social indicators have slipped below the average for developing countries where half the population lives in absolute poverty, life expectancy is only 52 years and the infant mortality rate is as high as 84 per 1,000 live births. Mismanagement of resources, over-regulations of the economy and price and exchange rate distortions have been at the root of the country's economic crisis (newafrica.com, 1999).

**Table 1: Nigeria's Industrial Growth of Output (%) 1980-1997**

| Sector | 1980-90 | 1990-97 |
|---|---|---|
| Gross Domestic Product | 1.6 | 2.8 |
| Agriculture | 3.3 | 2.9 |
| Industry | -1.1 | 1.2 |
| Manufacturing | 0.7 | 1.8 |
| Services | 3.7 | 3.5 |

Source: www.newafrica.com, (02/22/99)

## LARGE INDUSTRY AND SMALL AND MEDIUM ENTERPRISES

Particular types of relationships can either encourage or retard the growth and progress of small and medium enterprises (SMEs). In building healthy relationships, large firms are especially useful to the development of the small firm. Otherwise would be more vulnerable to large firms' constraining factors due to its size disadvantages when competing in the overall marketplace. A discussion of the relationship between large and small firms can generate ideas and lessons for the plastics sector in Nigeria, which is dominated by a few large-scale industries and few small plastics manufacturing firms (SPMFs). The Plastics industry in Africa comprises of polymer producers, polymer processors, plastics converters and plastics recyclers although not

all countries are equally well developed in all stages of the industry chain. It's difficult to get current information on plastics industry on Nigeria. So far there's only one major study that has been done in this area (Mambula, 1997). Examples about the industry's development can be traced form South Africa. The plastics industry is well developed in the country where it comprises of polymer products and up to date polymer processors and plastic converters. In 1998, plastics contributed 0.8 per cent to total GDP in South Africa. The industry is diverse supplying products to almost every sector of the economy. Products include film and sheet, synthetic sausage casings and kitchenware, furniture pipes, footwear and a wide range of industrial products (Mbendi.com web page). Nigeria has enormous availability of plastic raw materials such as polyethylene (PE); polyvinyl chloride (PVC) and the polypropylene (PP) (Mambula, 1997). Nigeria's petro-chemical complex, which produces plastic raw materials, will be the third largest in the world when it starts to operate at full capacity and is the largest in Africa (Mambula, 1997). These plastic resins offer hundreds of entrepreneurial opportunities for plastics manufacturing downstream and for creating numerous means of employment and generating income (Mambula, 1997).

Aside from medical and pharmaceutical industries, automobile industries, cosmetics, packaging, agricultural, educational and other sectors who can patronize the services of small plastic manufacturers, the government itself could be another chief customer of the cost-effective ventures. Unfortunately, none of these is the case in Nigerian plastics industry at this moment.

A complementary relationship, rather than an inimical one, between large and small businesses has been discovered to encourage growth, performance, and survival of weaker firms, as well as to attract new entrants to the industry. For instance, subcontracting of sections of projects by large firms to small ones, and support from the bigger firms to the smaller can result in saving operational costs for both by taking advantage of the small firms' inherent strength (flexibility) (Donckels & Segers, 1990). It can also create market niche income opportunities for small firms by supplying large firms as well as helping to fight layoffs for employees of smaller firms. On the other hand, however, a hostile relationship between large and small firms can lead to the destruction and mortality of the existing anemic firms and therefore discourage new entrants.

Controversy concerning the role of large firms in relation to SMEs lies in the examples of both success and failure in different countries. For instance, wherever small businesses are seen to be able to help offset economic decline, especially by generating employment, then the small business sector is likely to be viewed as a critical strategic opportunity and a priority (Morgan, 1996:13-15; Zimmerer & Scarborough, 2000; Donckels & Segers, 1990; Watanabe, 1983). An example of this is the successful adaptation of the Indian, Italian and Japanese clothing industry to competition from developing countries (UNIDO, 1989:19-20; Zimmerer & Scarborough, 2000). However, because large firms are more able to disperse production globally than small firms are, it is argued that they should be given more attention in policy (Christerson et al, 1995:1363-1374) for example in Sweden, South Africa and Japan in the automotive industry.

Due to its relatively lower wage costs, the small business is expected to have certain advantages over large firms. Yet, because small businesses have a higher ratio of labor to output,

this advantage is lost and the higher productivity of large firms gives them an advantage over small firms in this respect as well (Miller, 1986:389-402). Although small firms inherently have more potential to create jobs than large firms (Robson et al., 1994:299-312), large firms have been proven to show higher degree of employment security than small firms (Taira Koji, 1986:35-37). Recently however, it is believed that small firms have replaced large firms in certain areas of business and economic activity (Fortune, International Magazine, 1993).

Small firms For instance, are seen as the primary source of technological innovation, international competitiveness and job creation (Harrison, 1994:142-158; Timmons cited in Longenecker, et. al.; Donckels & Segers, 1990; Raporport, 1990, 1997; Allen, 1999, Zimmerer& Scarborough, 2000). For instance, Raporport (1990) notes that, despite the large importance of corporate R&D labs, the small firm surprisingly often turns out to be the source of new technology. However, there is still little evidence to support the beliefs that the economic importance of large firms to both national and global economy has certainly not diminished.

Anderson (1982) in another research notes that large firms tend to predominate over small firms for a variety of reasons, including economies of scale with respect to management and marketing. Large firms have the advantage of possibly superior technical and management efficiency; preferential access to supporting infrastructure, services, external finance; concessionary finance and investment incentives and tariff structures. Although neutral in theory between large and small firms, in practice most of the mentioned factors above tend to bend in favor of large firms (Anderson, 1982:918-948). Yet, small firms have advantages as well: they are able to operate more economically than large firms with lower overhead costs. Small firms are flexible and less strike prone because they have lower rates of trade union membership. Another advantage to small firms is that they don't require the type of costly and sophisticated managerial and technical techniques required by larger enterprises. Small firms are able to avoid the complex structure of large firms, which is sometimes influenced by bureaucratic red tape, cumbersome administrative policies, rigid procedures and strict regulations. For the fact that highly qualified technical skills is required for employment in large firms, many people are marginalized, especially in regions where there is low technical education (Hewitt, et.al., 1992; Watanabe, 1983). The SME sector is most of the time recognized as being characterized by relatively free entry and exit mainly due to its minimal educational requirement and its lean size advantage. The points that are most useful for the SME's case are the ease of formation, management and cost effective nature of the SMEs for employment creation.

## INDUSTRIAL APPROACH AND DEVELOPMENT POLICIES

Donors and other multi-lateral lending agencies have long pressured a number of African governments; to sell-off, their unproductive large scale and capital intensive state enterprises. This recommendation has been made with the intent of helping reduce huge budget deficits and introducing more modern management techniques into strategic industries like SMEs. SME's are considered to be more flexible as models for industrial growth (Anon, 1995:8-9; Juma, 1991; Rondinelli, 1990).

A few examples based on other countries can show the dual importance of both small and large industries to overall industrial/economic development. The great wave of growth and industrialization that France witnessed until the mid-1970s as an example was largely based on the growth of large companies. Such large companies in France are like Textiles de France, AC Nielsen, Acheson Industries, Peugeot, Renault, Aerospatiale and Dassault (Raveyre, et. al., 1990-1991:72-92). The same is true of the growth of the 'Cheabols' in Korea in the 1970s, Daewoo, Hyundai, Samsung, Sambo and others, (Anon, 1993:14). Other economies where large firm growth has predominated include Japan such as Sony, Toshiba, Toyota, Honda, Mitsubishi and Matsushita (Regnier, 1993:23-36), Germany Krupp, Thyssen, Beyer (Shell UK, 1980; Levicki, 1984), Brazil (Hewitt, 1991), Britain and India.

Small firms have as well been equally significant in the economies of Taiwan and Italy (Orru, 1991:3-28; Brautigam, 1994), India (Obot, 1989:1-65), and Japan (Nishigushi, 1989; Brautigam, 1994; Schermerhorn, 1997). In the United States of America, companies such as Bose, Texas Instruments, John Deere, Ben & Jerry's, Southwest Airlines and others began their business ventures from humble beginnings on a small scale.

Unlike in other countries where the importance of one sector predominated over the other, a good mix of both large and small sectors can be noticed in the countries mentioned above. This is true because a complementary relationship supported by government policies existed, especially under the infant industry protection principle that provides tax abatements, incentives and support to start-ups (Dereskey, 2000; Hewitt, et.al, 1992; Orru, 1991; Levicki, 1984). It is also evident that the importance of both sectors was recognized, rather than placing priorities on one sector over the other in those countries (Hewitt, et. al, 1992). This observation however, has not been true with most African countries especially under the import substitution approach as strategy for industrialization, via large capital-intensive industries (Nigeria Industrial Guidelines, 1989; Juma, 1991). Mixtures of the two sectors in the same economy as complimenting one another were respectably well regarded as equally important for the industrial/economic development of the developed countries from the given examples above (Storey, 1985).

Micro informal enterprises account for a very significant proportion of aggregate employment and output in third world towns and cities (Fafchamps, 1994). Nigeria's informal sector alone, which includes small businesses and where most Nigerians make their living account for between 40 to 45 per cent of gross domestic product (GDP), (BBC Internet Service, 2001). The same is particularly true in most of sub-Saharan Africa where few jobs have been created in large firms and administrations during the last decade (Fafchamps, 1994:1). According to Juma (1991), what could partly explain for the upsurge in the number of recorded informal small firms in sub-Saharan Africa, in the past decade results from the realization of flaws made by policy makers. Policy makers in sub-Saharan Africa came to realize their mistake in investing in large-scale capital intensive projects. These gigantic and expensive investments, which yielded little benefits overall had a high percentage of foreign input. Such projects have mostly failed to pull African countries out of their economic predicament. Most such costly projects, some of which are now abandoned white elephants, were financed by aid and borrowed money. The

consequential result of this approach to industrial development on borrowed money is now the debt-crisis situation faced by many African countries (IC&S publication, 1991; Abashiya, 1993; Ihonvbere, 1993; Nelson, 1993; Nigeria Industrial Policy Guidelines, 1988). The origin of the debt crisis began in mid 1970s when many members of the organizations of Petroleum Exporting Countries (OPEC, e.g. Saudi Arabia, Kuwait, Nigeria, Iran) got a lot of wealth. Banks were eager to lend billions of dollars to OPEC nations as well as other developing countries. These countries borrowed large sums of money at low, but floating interest rates. They borrowed this money to start up big development projects, but failed due to several factors. Some of the factors that further contributed to the problem are such as the rise in world interest rates, a global recession, and low commodity prices. In addition to mis-management of funds embezzlement and corruption (Ihonvbere, 1996) the size of these debts started growing fast and hence the developing countries concerned failed to pay promptly (Vanessa, 1998). Nigeria at present for instance has a staggering $32 bn in debt and is seeking external support for relief.

From these experiences, one can agree with Juma (1991), Pack, (1993), and Hyden (1983) that the potential for adopting an inappropriate development path is high and economic change can be costly, irreversible and long term in nature. Juma, Pack and Hyden therefore, conclude that, considering the inexperience and backwardness of African countries in scientific and technological knowledge, economic experiments need to be undertaken on a small scale as a start-up. This resulted in the shift to focus on small industrial development. Pack (1993), suggested that an area as poor as sub-Saharan Africa should not engage in large-scale industrial production for a while. Reasons given by Pack for his suggestions were in view of limited capital availability and lack of relevant technical skills in the region. There is general deficiency and scarcity of industrial managers who are perceptive with systematic knowledge in large-scale industrial sector and the technology of production. There is simply inadequate general industrial experience. Furthermore, Pack notes that some of the relatively robust prescriptions for small firms are not available for the large-scale industrial sector development in sub-Saharan Africa. Such prescriptions include among others; programs for improvement in productivity, local research, expanded improved extension system, improved rural infrastructure, and a price structure designed to provide incentives rather than discourage production. These programs are not easily implemented for the large-scale sector especially in third world economies. Another explanation for the drawback in industrial development in Africa is found in the study of Sutcliffe (1970).

As early as the 1970s, Sutcliffe noted a general tendency for small-scale enterprises to be relatively more important in the less developed countries than in the developed industrialized economies (Sutcliffe, 1971). Sutcliffe pointed to the fact that, while the average size of enterprises was smaller in less developed countries; the size distribution was very uneven, with the result that a few large firms dominated the markets for particular products. One possible reason that could explain for the lethargic growth of small businesses in Africa therefore, may be the type of relationship that exists between the large and small firms. The kind of links between industries in most of Africa is unlike the complementary type of examples that is seen in most developed countries.

It is quite common to expect that a small firm eventually grow into a medium sized firm and gradually into a large firm. This has been explained by the theory of growth of the firm economies based on scale (Cannon, 1991). In sub-Saharan Africa however, most small firms do not even graduate into the medium scale level and the mortality rate of both old and new small businesses is high. It has been estimated that in Nigeria less than five out of every twenty businesses established survive through the first year of operation (Oshagbemi, 1983; Frischman, 1988; Business Times, 1990; Bangura, 1991; Onyeiwu, 1992). In many less developed countries like Nigeria, a large number of weak informal micro enterprises, which tend to be short lived, coexist with a small number of very robust large firms. Some of these large firms may be publicly owned, are multi-national corporations or joint ventures between foreign expatriates and a few elite well-to-do indigenous business nationals (Sutcliffe, 1971).

In Nigeria's case, the large number of small firms can partly be explained by the lack of financial capital. Financial capital is not available to most Nigerians who can only afford to go into less capital intensive ventures to earn basic living for survival (Gerry, 1987:100; Fafchamps, 1994; Mambula, 1997). See table 2 below. This constraint on growth (a lack of financial capital) may explain why there is a shortage or near lack of medium-sized industries in lesser developed countries, but which is common in more highly industrialized countries (Sutcliffe, 1971).

**Table 2: Main Growth and Performance Constraints of SMEs in Nigeria.**

| Number of Respondents | Remark | Percentage |
|---|---|---|
| 23(n=32) | Finance | 72 |
| 13(n=32) | Machines & Spare Parts | 41 |
| 11(n=32) | Raw Materials | 34 |
| 14(n=32) | Infrastructure | 44 |

Source: Mambula (1997)

## THE RELATIONSHIP BETWEEN LARGE AND SMALL FIRMS

It is important to understand the type of beneficial relationship that can exist between large and small firms. To reiterate again, certain type of relationships between large and small firms can either encourage or discourage their growth and performance. This would in turn, affect the economy in general. A few examples of the type of relationship that can lead to growth/non-growth between large and small firms will be discussed below.

### Large and Small Firm Competition

In a situation where both small and large firms produce competing products, the large firms will tend to drive out the small firms (Kirkpatrick, et al., 1986). In terms of the plastic industry in Nigeria, this may be mainly because large firms are more advantaged in terms of obtaining finance and raw materials (Mambula, 1997). Other advantages in favor of large firms include innovation of products through research and development and the capability of updating machines to produce better quality products (Rapoport, 1990). It should be realized however, that there are certain types of products that are only appropriate with large capital intensive production (Pack, 1993). Products like petrochemicals, fertilizer and steel would be examples (Pack, 1993) Large firms can also sell at lower production cost due to mass production. The situation of large firms' advantage over small firms should not be viewed negatively or seen to be a hopeless situation however. It should be expected as part of conventional business culture that when competition exists, it would encourage and challenge adept small firm entrepreneurs to adapt and improve on their performances or create niches.

Another competitive advantage of large firms over smaller firms according to Schmitz (1982:429-450) lies in the existence of very advanced technologies and in their control, which large firms exercise over product markets. In addition, large firms have easier access to raw materials due to their bulk buying ability and towards obtaining better credit facilities (Mambula, 2002).

In another vein, Quijano (1974:403-404) observed the domination of large firms over small firm counterparts, that in the Latin American experience, there is a continual loss of control of productive resources and markets by the small firms. This loss occurs most especially to multi national foreign companies. Quijano's observation also relates to Bienefield's work in East Africa, where he observed that, many small-scale operators are engaged in a process of production and technological development but their ability to develop cumulatively over extended periods is limited by their dependence on large-scale industry for inputs (often illegally obtained). When the markets they serve grow beyond a certain size, this will not be a gradual stimulus to further development of the forces of production, which will incorporate this market by virtue of its efficiency and/or its market power. This power is based on nearly the unlimited access to capital and on the establishment of brand name products through heavy advertising. The net result of this situation is the appearance of virtual stagnation among small producers (Bienefield, 1975:55-60; Entrepreneur, 2002).

Nevertheless, while agreeing with the advantages in favor of large-scale industries, including some of the points mentioned earlier and in the quotation above, King (1974) and Lipton (1980) maintain that there are also regional and sectional exceptions, which sometimes favor small firms. For instance, in giving the example of a clothing manufacturer, Schmitz (1980) shows that the industry is faced with an unpredictable market due to the influence of seasons, fashions and a very diffuse distribution network. Under these conditions, small firms appear to have an advantage by finding it easier to cope with the enormous flexibility that is required in such unpredictable periods of production and can even save costs.

In Calcutta, Bose (1978) and more recently Bhattacharya (1996) also gave some evidence that small firms fail to secure or are losing markets to large firms competition. Bose's study on

the slum industries revealed that the market for small producers is effectively controlled by large firms. The only way small firms can gain access to this market is by selling to the large industrial or commercial houses, which sell these products under their brand names, while holding the small producers to ransom through various mechanisms. When large firms are in a monopoly position, SMEs could be charged costs for handling their products. Notwithstanding, as in the example above small firms can still gain from this type of relationship, since they don't have to worry about advertising, marketing and selling costs, which will be handled for them by the large firm. Although for a fee, this type of marketing arrangement will still help the small firms not only in lowering their operational costs but also to learn from the experience of relating with large firms, before they become responsible for handling their own total costs independently.

Competition in business between small and large firms can be made more amicable, especially when operating within the same sector or economy. Competition between large and small firms can take various forms and depending on how it is seen, can similarly work for or against the small firm. Storey (1985:42) states that, "the small firms' role and contribution to development is more complex than many studies have indicated". Storey argues that where small firms are numerous as in Japan, they are not viewed as competitors but as complementary units. Storey added that, competitions between large and small firms are neither necessary nor sufficient conditions for economic growth in a country, on the extent of generation of employment by the small firms.

Storey's observations about the complementary relationship witnessed between large and small firms in Japan are further explained by Schermerhorn (1997) and, Hewitt (1992). In Japan according to Schermerhorn, large and small firms form themselves in a network of strategic alliances referred to as the 'Kieretsu' (Cullen, 1998; Dereskey, 2000; Hill, 1999). In this type of networking relationship, firms often support and meet the needs of each other in order to remain competitive (Turpin, 1988). Such needs that are met could be in terms of raw material supplies, vital information sharing, support of financial and credit facilities, provision of equipment and training skills or even jobs that are often subcontracted. This type of alliance have been objected to in other countries like the US by the use of antitrust laws (Farrell, 2000) as promoting monopoly and unfair competition to other firms' outside of the alliance. On the other hand however, the alliance could be seen as a tool for promoting healthy relationships and co-existence between large and small firms in operating in an economy. Another practice of the networking relationship between large and small firms in Japan is that of the just in time (JIT) operation (Schermerhorn, 1997; Hewitt, et. al., 1992). JIT delivery allows large firms to continue subcontracting to small firms to produce certain products for them just in time of need and on regular basis as the need arises.

JIT system has certain advantages to both the large and small firm. Small firms deliver the specified products, just in time before the ordering large firm runs out of stock. This practice constantly provides regular work and income at different periods for small producers to sustain their businesses. Overtime this provides enough profits for small manufacturers to expand to the point that they can even supply to larger customers (Entrepreneur, January 2002). This approach

to inventory control via JIT in Japan involves minimizing carrying costs and maintaining almost no excess inventories, which may end up being obsolete.

In a similar process to the JIT in Japan, small firms in Wales can be favored for a preferred supplier status (PSS). A particular small firm qualifies for a PSS relationship and is favored by a large firm over other similar firms as the sole supplier of that particular large firm's specified product needs (Imrie & Morris, 1988). A small firm will qualify for a PSS relationship when it demonstrates it's superior ability to produce quality and standard products. In addition, through practices like the JIT and PSS, small firms will be able to learn, improve and acquire the advantage of 'flexible specialization' in the products they produce (Hewitt, et. al., 1992.

When competition is considered as mutual and challenging rather than independent and destructive therefore, it tends to up-lift by bringing out the best in performers. This at the same time would encourage learning and creativity towards solving the problems of exploitation and domination by large firms.

**Large and Small Firm Subcontracting**

The subcontracting relationship between large and small firms is again a matter of controversy and can be regarded as positive, negative or both. Some forms of subcontracting are considered as purely exploitative (Fafchamps, 1994) while others are considered progressive (Storey, 1985; Sharp, 1987; Unger, 1988; Nishigushi, 1989; Pack, 1993; Panayiotopoulos & Eljedian, 1996). Subcontracting is regarded as any agreement (other than one involving an employer-employee relationship) entered into by a prime contractor for supplies of products and or services required for performance of a contract, modification or subcontract. Subcontracting involves working for a specified time with a company that has a contract for a specific project, for example motor assembling plants. This can include any type of work and service or productions. The most popular types of contracting are in the construction or computer software fields (see web page, Instructions for Subcontracting Checklist).

Developing a subcontracting relationship can be difficult with any company, but taking the right steps in the right direction can improve the chances of getting noticed whether in a small business or large company. Such steps would include developing a networking system, establishing good relationships and reputation and offering information and brochures about the company. The advantages of a successful subcontracting relationship are more than worth the effort because of the benefits of gaining invaluable experience, business expansion, and open the doors to more big businesses and government contract relationships (The Entrepreneur Magazine, 1999). There are different types of subcontracting. The two extreme types of subcontracting will be described here. Exploitative types of sub-contracting tend to take advantage of the contractor as a small, relatively powerless and individualized producer. In a highly competitive market, giving out contracts to small firms is seen as providing such firms with a favor. Bigger firms can use their leverage to maximize benefits at the expense of the small businesses, while the small one can do nothing about it (Schmitz, 1982:429-450). Some worst

forms of this type of exploitation have been observed where companies take advantage of cheap child labor in third world countries (Anti Slavery Society, in Bromley (ed.,) 1985; Dereskey, 2000). A BBC television program for instance had reported exploitation by Marks and Spencer through the sub-contracting of shoe production to Burma and Brazil for meager income and involving child labor. This took place in the UK when Baroness Margaret Thatcher was Prime Minister. Similar allegations have been made against Levi's Strauss, Nike and Reebok for using sweatshop facilities in third world countries (Dereskey, 2000).

More progressive types of subcontracting to the small firm on the other hand would be those that are fairly arranged, and negotiated. These would be similar like the ones observed in Japan with the JIT system, in Wales with the PSS system or in Israel. Another form of progressive intersectoral sub-contracting that could be developed between large and small firms is that of forward and backward linkages. Productive forward linkage is where an increase in production by other industries leads to additional out put required from another industry to supply inputs to meet the increased demand. On the other hand, backward linkage means an increase in production leads to an increase in demand (Miller & Blair, 1998; Lussier, 2000). The 'reserved army' of the unemployed labor force could find opportunities through the 'chain like' process of the link network. For instance, rather than import them, local metal smiths can make moulds for small firm manufacturers to produce the products required by large firms. In addition, the currently unemployed could pick waste plastics for recycling, as cheaper raw materials to produce the goods needed. Small firms take the challenge of producing quality products at low costs to the large firm in order to develop continuing business relationships. In the process, small firms will get ideas from large firms on how to produce quality goods of high standards that meets their specifications, just like under the JIT and PSS systems. Such links will therefore tend to discourage importing of products that could be produced at cheaper rates at home and encourage employment. Most commonly, fairer practice is the result of government intervention in support of small firm promotion and development (See Watanabe, 1983; 1971:71; Nishigushi, 1989; Porter, 2000).

In Germany and Japan as earlier mentioned, subcontracting is a very common practice between large and smaller firms, primarily because of the requirement by government that large firms subcontract a certain percentage of work to small firms (Nishigushi, 1989; Brautigam, 1994; Porter, 2000). The subcontracting relationship between large and small firms is also significant in Korea (Huat, 1988:57-60), Malaysia (Lim, 1985:12-25), Singapore (Kee & Yun, 1985/86:25-36), the USA (Oakey et. al., 1988) and India (Carr, 1984). However, unless governmental intervention is protective of SMEs, as in the case of Japan Korea or Germany, the subcontracting relationship tends towards an exploitative one. This is primarily because large firms may be reluctant or not be interested in developing such relationships. In Dakar, (Senegal) small firms are subcontracted work using their own laborers and equipment at lower costs for very low remuneration, with no pension schemes or social benefits of any kind (Le Brun & Gerry, 1975:27-28).

Within the United States however, a more progressive type of subcontracting relationship appears to exist between large and small firms. Unger (1988:12) notes that even without any

government intervention more major US corporations have the benefits of subcontracting. These US corps are, letting start-up companies do the job of inventing new ideas for them through research experiments. Organizations like Xerox Corp., WR. Grace & Co. and AT&T have set up venture capital divisions to search for and help finance smaller, entrepreneurial firms that are developing new products or technology of interest to the big companies.

Finally, Schmitz (1982:429-450) notes that in other respects very little is known about the growth potential of small subcontractors in less developed countries. There is no clear picture of the extent to which sub-contracting practices operate in less developed countries. As earlier mentioned and as shown by the World Development reports of the World Bank (1992-1995), industrial development in sub-Saharan Africa is backward especially in terms of manufacturing value added.

A common illustration of Schmitz's observation above in terms, of the absence of a sub contracting culture in Africa is provided with the case of the plastics industry in Nigeria. Nigeria has up to about three motor assembly plants. These include the German Steyr and Volks wagon and the French Peugeot. Professional reports revealed that up to 60 per cent of the interior content of such vehicles is plastic. This move would have been an opportunity for the Nigerian plastic manufacturers to benefit, but it was discovered that even the tiny door safety caps have to be imported from the countries specified by the MNCs. It could be assumed that the MNC's being foreign based would not to be in support of their host country industries (Dereskey, 2000) or supply because they do not acknowledge the quality of production standards in these countries. These deficiencies in small firms' production standards could be trained however (Pack, 1993).

The type of practice that denies SMEs in Nigeria the opportunity to sub-contract does not occur in the motor vehicle industry alone. Such lost opportunities are common in other sectors as well, including the agricultural (pipes, containers), medical (syringes, bottles, containers, urinal tubes, gloves), educational (instructional aids) marketing (packaging) and sports fields (sports equipment). A lack of sub-contracting is a great problem and might even be worse than exploitative sub-contracting in the development of SMEs.

It is evident that an institutionally regulated (not free market) relationship between large and small firms operating in the same economy can be helpful for the industrial growth and development of both. This is especially evident when healthy competition and practices like the creation of opportunities for subcontracting and the sharing of helpful information and advice is encouraged. The importance of both sectors in industrial development as complementary can be acknowledged and should be emphasized.

**Large Industries and the Smes/spmfs in Nigeria**

It has already been noted that large firms dominate the industrial structure in most of sub-Saharan Africa, including Nigeria, though they are fewer in number than the numerous small informal sector firms (Sutcliffe, 1971; Fafchamps, 1994). In Nigeria, one possible explanation for this is that right from the beginning after independence, the strategy adopted for national industrial development was that of import substitution via large firms (Nixson et al., 1988;

Industrial Policy Guidelines, 1988; Juma, 1991; Pack, 1993). Furthermore, larger firms have received most of government support and protection. This included such measures as: import tariffs; tax holidays of five to ten years; concessionary and external finance along with investment incentives; access to infrastructure services, and preferential banking and credit facilities (Teriba et al., 1977; Anderson, 1982; Barber et al., 1989; Industrial Policy Guidelines, 1989). This initial bias in favor of large firms conflicted with any commitments to encourage the development of small firms, especially small, capital-intensive manufacturing firms. The growth of an entrepreneurial culture in Nigeria was limited to people applying for jobs in large firms, or seeking to distribute and sell the products of such firms (Ale, 1975). It is still true today that most of the larger industries in Nigeria are either publicly owned or partially owned by multinationals (Ohorhenuan & Adeniran, 1983). Most are made up of partnerships as joint ventures between wealthy Nigerians and foreign companies usually based on the 60/40 (Nigerian) splitting formula. Small firm development received much less attention initially, and rarely went beyond the craft, marginal or artisan level of village industries. Such ventures are made of professions like smiths, shoemakers, garment makers, handicrafts, masons, road side mechanics, carpenters, builders and crop processing (Kilby, 1971; Lewis, 1977; Filley & Adalg, 1978; Longenecker, 1997).

As earlier mentioned, policies were in place from independence (October 1st 1960) to promote small firms and micro-entrepreneurial activities, but they were never fully implemented or pursued with much vigor (Fatunla, 1989; Kilby, 1969). The promotion of large firms was in effect regarded as a national priority. The attention to large-scale Import Substitution type of industries as mentioned earlier, was quite distinctive to many African economies after independence. Import Substitution refers to situations where regions (existing or new economic activities within regions) take-up the production of goods or services that were formerly imported, but now can be produced within the region. An example where the strategy of import substitution worked to some successful degree in lesser-developed economies in the later years is perhaps India and Kenya.

The rapid growth in manufacturing industries during the first decade is attributed to the import substitution strategy. This strategy, however, was supported by high levels of protection habits and attitude that later bred inefficiency and slower industrial growth. The high levels of protection resulted in 'anti-export biases by making production for the domestic market more profitable than exporting. A cost-permissive atmosphere did not encourage efficiency and international competitiveness. The policy instruments chosen to promote this strategy in India and Kenya had included high levels of protection that's to say high tariffs and import quotas enforced through strict foreign exchange allocation. The protection was supported by an exchange rate policy that produced an overvalued currency that in turn discouraged exports and kept the prices of imported capital goods and intermediate inputs relatively low. Such industries include the food, beverages, tobacco, footwear, textiles, cement, metal, paper industries and various chemical firms. Kenya has now turned important attention towards the development of small firms 'jua kali' with high level governmental support and foreign investment (King, 1996).

By contrast, in countries like Germany (after WW 11), Taiwan, Italy and Japan, equal attention was given to SMEs at an early stage in industrial growth. In Nigeria, it was not until quite recently that serious attention was given to SME promotion (see: Fatunla, 1989). This was largely because of the disappointing results of previous huge investments in large-scale industries (Lewis, 1977; Juma, 1991; Industrial Policy of Nigeria, 1989; Aryeetey, 1996).

One of the consequences of the World Bank initiated structural adjustment program and of the overall restructuring of the economy that it implied, was to focus some attention once more on small and medium-sized firms, especially manufacturing firms in Nigeria. The importance of SMEs has constantly been emphasized by many presidents in Africa, e.g. President Arap Moi in Kenya (King, 1996). In Nigeria, the then President, Ibrahim Babangida, in the 1988 budget speech broadcast made clear his points over national radio. In this broadcast, he stated: "small-scale industries have a vital role to play in achieving sustainable growth. Not only are they capable of generating more employment per unit of capital input [i.e. than large firms] generate, they provide the best chance of industrializing our rural areas" (Page & Steel, 1984). It was then that serious steps were taken to revitalize the small business sector.

In spite of the emergence of many more small firms in Nigeria in recent years, there remains a situation of 'stand-off' between SMEs and larger firms. This fact was noted from some plastics manufacturing entrepreneurs in a research study conducted in Nigeria (1992-1994) on 32 small plastic manufacturing firms. According to the small plastics manufacturing entrepreneurs, "the large firms only see us small firms as a threat and would want to see us out of business (Mambula, 1997). To put this differently, it is important to remember that dancing with elephants can get you squashed (Entrepreneur, January 2000). There is little cooperation, and competition for markets is more common than such generally widely observed arrangements as integration or subcontracting. This may not only be because of the dominance of large foreign firms; most of, which import their raw materials from overseas and therefore can make do without the small firms. It could also be due to the inexperience and inability of the Nigerian manufacturers to produce required products of standard specified quality (Kilby, 1969; Harris & Rowe, 1966). In this context, governmental policies supportive of subcontracting, as in Japan or Germany, could prove useful incentives for greater co-operation between small and large firms within particular sectors, like the plastics manufacturing sector in Nigeria. It was in view of the observations that Lewis remarked that, the only way to industrialize Nigeria adequately is to produce a large class of Nigerian entrepreneurs with industrial experience via small enterprises. Thus looking ahead, it is more important to lay the foundations of an industrial class by helping small entrepreneurs grow and develop than it is to build a few large factories with low productivity (Lewis, 1977:335; Pack, 1993).

## CONCLUSION

This paper has attempted to show the benefits of developing healthy relationships and the drawbacks for not developing such relations between large and small firms in a particular sector of an economy. Both large and small sector firms should see themselves as partners in progress

because complementary and mutual relationships can be very rewarding, not only to one sector alone but also, to the economy in general. The potentials that exist by developing such relationships from the lucrative Nigerian petrochemical industry that supplies raw materials for the plastics manufacturing sector has been used as a case in point. The Manufacturers Association of Nigeria, the Association of Plastic Manufacturers in Nigeria, the National Association of Small Scale Industries in collaboration with the Federal Ministry of Industries, the petrochemical industry, relevant research and other establishments should combine efforts to strengthen links between large and small plastic manufacturing firms in Nigeria.

These institutions could address the problem that hinders successful relationships between large and small firms in Nigeria and strengthen the already anemic economy. In addition, problems identified from research such as that of financial constraint, inadequate infrastructural facilities, paucity of raw materials and shortage of machines and spare parts should be tackled for business and entrepreneurial development. The framework for action from relevant institutions for ameliorating inter-sectoral linkages in addition should include the encouragement of productive forward and backward linkages, to help create employment and generate wealth for higher living standards and alleviation of poverty. Sectoral cooperation between large and small firms can create a powerful voice when presenting their concerns to the authorities. Together, firms across the large-small divide could make demands for support or appeal against unfavorable government policies or regulations that affect their performance negatively.

Unity of large and small firms in any particular sector is good for the economy in general if consistent healthy progressive links are practiced and maintained. Cooperative sectoral links between large and small firms could be practiced in almost any industrial sector. The example of the Nigerian petrochemical industry should be seen as a tonic for Nigeria's economic and industrial development because of its immense potential (Ekone, 1995) for large and small firms development. Employment benefits, revenue generation, cost saving, product quality, inventory control, innovation, increased technical knowledge, experience, training and exchange of useful information have been among the rewards gained from complementary relationships between large and small firms in the developed countries cited as examples. Perhaps the success of countries like the United States, Japan, Germany and other industrialized countries in international competitiveness could in part be attributed to the synergy from the strong links existing between their large and small firms. These and many other benefits that emanate, from intersectoral links between large and small firms should be incorporated as part of Industrial policy and taken as an important instrument for industrial and economic development. Right from the beginning, anomalies and flaws have been detected in the industrial policies and approaches taken by most African economies especially in sub-Saharan Africa. The approach concentrated mainly on large industrial sector development. Rather than focus on one industrial sector approach as strategy for industrial development therefore, as most of the sub-Saharan African countries have done, it is recommended that a mixture of both approaches to industrialization with strong working links be adopted. It should be taken from this study as an accepted fact that no one method for industrial approach as a strategy for development is ever

sufficient. A single industrial sector should not be considered more important than another should either. Rather than focus on one industrial sector approach as strategy for industrial development, a mixture of both approaches to industrialization with strong working links should be adopted. Equal importance and attention to each sector for integration and overall development should be rendered and expedited, most especially to the lesser-developed economies.

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# FEMALE ENTREPRENEURS IN THE UNITED ARAB EMIRATES: AN UNTAPPED ECONOMIC RESOURCE

**Kathryn Dobie, North Carolina A&T State University**


## ABSTRACT

*There is presently a changing emphasis occurring regarding economic growth. Increasing levels of interest are being focused on the contribution that entrepreneurs are making in the economies of countries at all stages of their economic growth. From developed to undeveloped nations, capitalist economies to those that are in a state of transformation, small to mid-sized business enterprises are making a significant contribution to the growth and stability of the economy and to the standard of living of those who are directly and indirectly affected by those enterprises. Considering the positive contribution that small-businesses contribute to the economy, and the fact that a rapidly increasing percentage of those businesses are owned by women, it is important that countries that have traditionally restricted the role of women in the marketplace consider the positive impact that a change in this position might have on the economic growth of the nation.*


## INTRODUCTION

Numerous studies in developed and developing nations have affirmed that small businesses make a significant contribution to the strength and stability of the national economy. The importance of small businesses to the economy is often overlooked because the preponderance of public attention is focused on the largest publically held companies. As an example of the impact that small businesses can have on economic growth, businesses in the US grew at a rate of 26% from 1987 to 1992. In this same period, Hispanic-owned small business growth was 83%, and African-American-owned small business firms grew 46%. Receipts for African-American-owned firms grew at a rate of 63%, and Hispanic-owned firms grew at a rate of 134% during this same time period.

The growth of female-owned businesses has provided a substantial contribution to national economies. In the US, the growth of female-owned businesses was 56% between 1985 and 1992, and 16% between 1992 and 1997, when overall business growth was only 6% (Census Bureau, 2001). While these small business firms tended to be smaller, they made a significant contribution to the economy representing $1.6 trillion in revenue and employing in excess of 13 million people (US Dept of Commerce,1996). Similarly, over the past four years, the percentage of women entrepreneurs starting their own businesses in the UK has increased 22%.

One third of business start-ups in 2000 were owned by women (Management Services, 2001). In 1998, 30% of firms were owned and operated by women (Orhan, 2001).

Similar growth in the private small business arena has been recorded in Poland where over 70% of the 1998 GDP was attributable to small businesses, a significant number of which were owned by women (Bliss & Garratt, 2001). While men still outnumber women, the growth rates in the number of women entrepreneurs is greater than that of men (Mroczkowsk, 1997). Women in Russia have increasingly turned to entrepreneurial activities since 1991. In 2000 it was estimated that over 3 million women, a full one third of women in the workforce, were operating their own businesses (Izyumov & Razumnova, 2000; Rzhanitsyna, 2000). In Norway, self-employed women represent 24% of total employment (Spilling & Berg, 2000)

The increase in the numbers of small business owners, and especially women entrepreneurs has not always enjoyed the success of the previous examples. In Australia, Aboriginal peoples have not enjoyed the same measure of success as the non-aaboriginal population (Schaper, 1999). Only 3.8% of Aboriginal women reported that they were self-employed or owner-operators of business ventures in 1994.

The purpose of this study is to examine the propensity of women in the United Arab Emirates to engage in entrepreneurial enterprises. This is accomplished through an examination of established contributing factors; motivation, education, and social context.

## PREVIOUS RESEARCH

### Motivation

Women's motivations for establishing entrepreneurial ventures are primarily the desire for independence (Hisrich & Rush,1986; Lee-Gosselin & Grise,1990; Teo,1996), the need to put knowledge and/or skills to use and a desire for recognition (Lee-Gosselin & Grise,1990; Teo,1996). There is great similarity across studies and their representative national populations regarding th factors that motivate women to start their own businesses. The primary motivating factors appear to be the desire for independence, financial and personal, and the belief that they can do things a better way (Capowski, 1992; Fisher, Reuber & Dyke, 1997; Kalleberg & Leicht, 1991; Carter, Williams & Reynolds, 1997).

Results of a study of women entrepreneurs in Poland by Zapalski (1997) showed that the respondents in this study were motivated to start their own business in response to the need to be independent, controlling their own fate. They also felt that they could do a better job than their previous employers. Russian women, however, stated that the need for self-fulfilment and the need to generate a higher income were the primary motivating factors leading to their entry into entrepreneurial activities (Izyumov & Razumnova, 2000).

In a study of French women who owned and operated their own business (Orhan, 2001), results indicated that women were more interested in being involved in economic development than in the absolute level of profits generated.

## Education

Education is a primary factor in the establishment and growth of entrepreneurial ventures. In those instances where education levels are low, there is a limited pool of available talent. The skills needed to establish and run a business are a prerequisite for obtaining access to financing and other necessary resources for venture success. Low levels of education are reflected in low levels of entrepreneurial activity (Schaper, 1999)

Women business owners from the US, Canada, the UK, and Singapore are generally well educated and have business experience which may or may not be in the same industry in which they have established their own business (Maysami & Goby, 1999). Eighty percent of women entrepreneurs in Poland have college degrees. In fact they are more likely to be better educated than their male counterparts (Zapalska, 1997). Similarly, women engaged in entrpreneurial activities in France are likely to have equivalent or higher levels of education than their male counterparts (Orhan, 2001).

In the case of women in Russia, the generally high level of education has not held the key to the ability to freely enter into entrepreneurial ventures. Until the legalization of small private businesses in 1987, it was not possible to start a small business. In fact, it was only after 1991 that women in Russia really started to take advantage of the opportunities afforded to them through the ability to engage in entrepreneurial activities.

## Social context

A focus on the family and community ownership of wealth may result in entrepreneurial activities which, when measured by western standards, are not successful. However, these endeavors my meet the needs of the affected group or community (Schaper, 1999). Another factor which have a profound affect on the likelihood that women will engage in entrpreneurial activities is cultural expectations regarding the role of women. These cultural norms may be reflected in restrictions placed on women being able to engage in entrepreneurial activity (Stevenson, 1986). The cultural barriers experienced by women can be found at the domestic, workplace and state policy levels (Browne, 2001)

When women are regarded as being responsible for childcare and household activities, they have little incentive to engage in entrpreneurial ventures and limited access to necessary resources (Aldrich, 1989; Sekarun & Leong, 1992). It is common in developing countries where women have been forced by economic necessity to engage in entrepreneurial activity, for those endeavors to focus on providing for household survival rather than growth (Bruce & Dwyer, 1988; Downing, 1990).

In American and European developed countries, social support systems and networks are well developed, giving women access to training, and other resources necessary for enterprise survival and growth (Brush & Hisrich, 1991). However, even in countries where the presence of women who own and run their own enterprises is accepted, women face problems resolving the conflict between family and work (Neider, 1987; Breen, Calvert & Oliver, 1995)

## THE STUDY

The first phase of the study consisted of the distribution of surveys to women who were currently employed. Four hundred surveys were distributed at various locations including banks, shopping areas, and businesses. Surveys were distributed by national citizens in an effort to avoid any cultural- or language-based constraints. Two hundred and twenty-seven usable surveys were collected.

The majority, 61%, of the respondents were 30-45 years of age. Those respondents who were 20-29 years old comprised 26% of the sample, and the remaining 13% of the sample was made up of 45-55 year olds. Sixty-three percent of the sample was married and 30% percent were single. Six percent of respondents either did not answer the question or indicated that they were divorced.

Respondents were initially asked if they would rather be employed in a firm or have their own business. Their responses indicated that 70% preferred being employed in a firm while 30% would be interested in having their own business.

Respondents were then asked what motivational factors were the most important to them when contemplating starting their own business. They were asked to indicate all that applied. The primary reasons expressed were personal achievement, opportunity to utilize skills, and monetary rewards. The desire to make a better product or service was also an important factor. Money rewards, independence and flexibility, and family concerns were not indicated to be factors which would encourage women to engage in an entrepreneurial pursuit.

**Table 1: Motivational Factors**

| Motivators | Percent |
|---|---|
| Personal achievement | 86 |
| Opportunity to utilize skills | 86 |
| Money | 86 |
| To make a better product or service | 14 |

The final question sought to determine what respondents thought would be most important to the success of an entrpreneurial effort.

**Table 2: Factors for Entrepreneurial Success**

| Factor | Rank |
|---|---|
| Hard Work | 5 |
| Education | 4 |
| Experience | 1 |

| | |
|---|---|
| Luck | 2 |
| Marketing skills | 3 |

## DISCUSSION

The results of the study indicate that given the opportunity, approximately a third of the women in the workforce in the United Arab Emirates (UAE) would be interested in engaging in the creation of an entrepreneurial enterprise. This figure corresponds favorably to the results of research conducted in numerous other countries.

Reasons expressed for the women's interest in engaging in an entrpreneurial endeavor are very similar to those expressed by women of many national origins in countries of varying stages of economic development. The literacy rate for women in the Emirates, 79%, is higher than that of the male population, 74% (World Bank, 2002). The high literacy rate may help to explain the importance of the self-actualization goal, personal achievement, as a motivator for engaging in entrepreneurial activity. This is closely linked to the expressed goal of utilizing existing skills.

Interestingly, the women surveyed did not express a strong desire for independence, which was a strong motivator revealed in other studies. This may be explained by the historically restrictive Emirate social structure. However, the highly rated motivation to make money, would indicate that financial independence is a desired goal.

One of the unique qualities that women have brought into the business arena when they participate in entrepreneurial endeavors is the desire to produce a better product or service. The desire to produce a better product or service that was expressed by the women who participated in the survey is reflective of the results of previous studies. Women entrepreneurs from many different countries and cultures have demonstrated that their innovative approaches, with an emphasis on the creation of new products and services, and quality result in more successful businesses.

The respondents were asked which factors they perceived to be important for the success of an entrepreneurial venture. The most important factor by far was deemed to be experience. This factor highlights the difficulty that women often encounter when attempting to start their own businesses within a restrictive culture. Embedded in the fabric of experience are factors such as having different job experiences including opportunities for managerial positions, networking opportunities, and access to informational and financial resources. Women often have limited access to these resources and are less prepared to engage in entrepreneurial ventures than their male counterparts.

The factors of hard work and education were not ranked as being instrumental to entrepreneurial success. This response is decidedly different from what was encountered in previous research. In fact, many studies emphasized the importance of education and access to information for the success of small business enterprises. This reinforces the previous finding that experience was perceived to be the most important factor. The perceptions of the respondents appear to be that no amount of hard work or education can overcome the lack of

experience and all that it represents. This may be based on reality. Or, just as plausibly, the expression of those who have historically not had the opportunity to pursue their dream of starting their own business due to cultural and political constraints and are unsure of their ability to achieve success if they did.

## IMPLICATIONS FOR PUBLIC POLICY

Economic growth is a goal of countries no matter their geographic location, stage of economic development, or cultural orientation. Economic growth has historically translated into higher literacy rates, better health standards, higher levels of employment, and a generally higher standard of living. Certainly, a substantial level of growth may be gained through foreign investment and trade. However, the growing number of entrepreneurs establishing small business enterprises has also contributed significantly to the growth of national economies.

Studies show that small businesses owned by women tend to be concentrated in the areas of the service and retail trade (Kessler, 2001; Teo 1996; Maysami & Goby, 1999; Goedhuys & Sleuwaegen, 2000; Izyumov & Razumnova, 2000; Orhan, 2001). These results are common across countries and stages of economic development. One of the reasons that these markets are more attractive is that they are less dynamic and require lower levels of investment and technology. This allows for the use of more self-financing and less dependence on external sources of capital and information.

The trend across countries is that greater numbers of women are establishing small businesses, outpacing their male counterparts. Thus it would be beneficial to encourage women to engage in this type of entrepreneurial activity. Encouragement must occur at many levels in order to be effective. At the most elemental level, there is a need for family support (Hisrich & O'Brien, 1981; Deng, Hassan & Jivan, 1995; Browne, 2001). This involves recognition of the contribution that women make in the marketplace and an evolution in the stratification of gender roles in the family and society as a whole.

There must also be support at the governmental level for this to occur. There have been increased efforts in the UAE to encourage the efforts of individual entrepreneurs. Efforts range from encouraging students to become informed about business concepts to encouraging and supporting business women in the private sector to meet global challenges. There is also an initiative underway to encourage collaboration between universities and scientific institutions, and businesses to develop programs which will benefit all segments of society. These programs signal the start of what will undoubtedly be a long period of evolution.

Membership in the Chamber of Commerce has grown by over 275% between1970 and 2001, reflecting a growing number of business enterprises of all sizes. It has been estimated that approximately 30% of small businesses are owned by women. Though individual business sectors' share of GDP in the UAE may vary across the individual independent municipalities, in 1999 approximately 10-14% of GDP was attributable to the service and retail segments of the economy which are historically the strength of the small business entrepreneur.

It is apparent that the UAE has recognized the need to encourage the establishment and growth of small business enterprises. There is special effort to avoid underutilization of the unique contribution that women bring to the economic growth of the country. This area of business growth has represented a lost opportunity and every effort is being made to capture that missing element.

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# BACKGROUND DIFFERENCES AND ENTREPRENEURIAL TRAITS AMONG WOMEN ENTREPRENEURS

**R. Ganesan, Indian Institute of Technology, Delhi**
**Sujata Satapathy, Indian Institute of Technology, Delhi**

## ABSTRACT

*The significance of mean differences between locus of control, conceptual understanding of entrepreneurship, and entrepreneurship awareness and technical know-how skills were identified for women entrepreneurs with different background variables in food processing enterprises. Differences were identified on the basis of age, educational level, social category, year of experience, monthly income, membership of association, entrepreneurship and technical training, place of enterprise, father's occupation and husband's education. A total of 32 women (16 each from Chennai and Bangalore) were included in this study. Rao's (1985) 'Locus of Control Scale' was used along with two other scales (self-devised) to measure the conceptual understanding of entrepreneurship and entrepreneurship awareness and technical know-how skills. Results showed that the t' was found to be significant for age, social category and entrepreneurship and technical training on locus of control, indicating that elderly women, women in higher social category and those not having any entrepreneurship and technical training were having internal perceptions about their success/failure. Interestingly, women who had low monthly income and were members of the associations had more conceptual understanding of entrepreneurship, however, women from the general category showed more understanding than the other group. Though social category differences were not found on entrepreneurship awareness and technical know-how skills, findings on this variable was also in the same line of the previous finding indicating women having less monthly income and whose fathers were not presently occupied had more entrepreneurship awareness and technical know-how skills than their counterparts. Issues like gender sensitization, awareness and training*

*programmes in rural as well as in urban areas has been discussed on the basis of the present findings.*

## INTRODUCTION

The issue of women's empowerment has continued to surface time and again, particularly in the last few years. Entrepreneurship being identified as the main route to social as well as economic development of the women and the country both, many researchers have tried to attach many psychosocial characteristics to a successful women entrepreneur (Rachana & Anjali, 2002). Personal and social characteristics like, personality influences and motivations (Singh, 1997); need for achievement, affiliation, autonomy and power (Rajagopalan, 1989; Pujar, 1989); business skills (Hisrich, 1986); inherent female inhibition (Kaza, 1996); and societal expectations (Vinze, 1987) have been highlighted in the awareness and training programmes to spread the concept of women entrepreneurship. Social factors like, marital status, age group, family background, education of self, husband and/or father, socialization process, community, etc. were found to influence entrepreneurship development (Lalitha, 1996). However, though few but all studies have shown the importance of the family and personal background for the women to become an entrepreneur and in running the start-up successfully.

Thus, the entrepreneurial personality is a composite of the person, his/her perceptions, skills, alertness about the environment and motives. Amongst the traits and qualities of a successful entrepreneur internal locus of control, understanding of the fundamentals of entrepreneurship, persistent problem solving, awareness of the surroundings and technical know-how play vital role in success as well as in failures. In a developing country like India, where gender role differences, sex stereotypes and gender inequalities are embedded in the society from when the socialization process starts, the influence of the familial and social factors become more obvious to affect these traits. Bharat and Krishna (1998) also substantiated this by adding the family background's direct influence on the success of a women entrepreneur. In a study of a group of Bangladesh women entrepreneurs by Anwar (1998) also focused on the impact of social norms and their negative impact on these women's mobility, training opportunity for skill formation, and interaction and information exchange in business connection. As the research in this field is still in its embryonic stage, this study tried to fill some of the gaps with a gender specific study. The findings of the study would specially help the policy makers and training schemes to identify the behavioural disposition and the it's impact on the entrepreneurial behaviour of women, so that training programmes should include a specific gender aspect in its facilitating process.

## METHODOLOGY

### Sample

Thirty-two (32) women entrepreneurs were selected randomly from two metro cities (16 each, from Bangalore and Chennai) in India. The women were between 30 - 59 years of age, a majority of them were graduates, and all were married.

### Hypotheses

There will be significant differences between the background variables and psychosocial variables.

### Procedure

Initially, about 80 women entrepreneurs were contacted out of which only 32 entrepreneurs agreed to participate in the study. Measuring tools along with the instructions were administered individually in the enterprise setting only. The language of all scales was English only and each scale was administered after the previous scale was finished and returned back to the investigators.

## VARIABLES AND TOOLS

### Demographic Variables

A personal proforma including age, education, social category, previous occupation, year of experience, family income, membership in associations, entrepreneurship and technical training received, place of enterprise, husband's education and father's occupation, was prepared to collect demographic information.

### Locus of Control

Locus of control scale by (Rao, T.V., 1985), consisting of 20 inventory out of which 10 have been selected was used. Score less than 1.0 indicates that entrepreneurs have more external locus of control orientation, score between 1.0 - 3.0 indicates that the entrepreneurs are tending towards internal orientation and score more than 3.0 indicates the entrepreneurs have more internal locus of control. The scale had a high reliability coefficient of 0.89.

### Conceptual Understanding of Entrepreneurship

The conceptual understanding of entrepreneurship scale has been devised by the researchers consisting of 11 questions with five responses. The higher score indicates that higher

conceptual understanding (range 11-55). High score is '5' and low score is '1', for each response. The total part consists of eleven questions, the maximum score being '55' and the minimum score being '11'(range 11-55), indicating the higher the score better the conceptual understanding. The split-half reliability coefficient of this scale was 0.68.

**Entrepreneurship Awareness and Technical Know-how Skills**

Entrepreneurship and technical know-how skills have been devised by the researchers consisting of 20 questions with a five-point scale, i.e., strongly agree,……., strongly disagree. The higher score indicates higher entrepreneurship awareness and technical know-how skills (range 20-100). The high score is '5' and the low score is '1' for each response. The total part consists of twenty questions; hence the maximum score being '100' and the minimum score being '20'(range 20-100). Higher score indicates better entrepreneurship awareness and technical know-how skills. The split-half reliability of this scale was 0.72

## STATISTICAL ANALYSIS

To compare women belonging to different socio-economic backgrounds on some psychological parameters, t' tests were made through the computer package called SPSS-10.0v.v. (Statistical Package for Social Sciences- 10.0 version) The background variables taken for the t' analysis (comparable groups) are age, education, category, previous occupation, years of experience, family income, membership in associations, entrepreneurship and technical training, place of enterprise, father's occupation and husbands education. Mean differences by these variables on locus of control, conceptual understanding of entrepreneurship and entrepreneurship awareness/technical know-how skills were found out.

## RESULTS

Distribution of locus of control, conceptual understanding of entrepreneurship and entrepreneurship awareness and technical know-how skill characteristics among the respondents was presented in Table-1, Table-2, and Table-3.

**Table 1: Locus of Control (N = 32)**

| Locus of Control | No. of Entrepreneurs | Percentage |
|---|---|---|
| < 1.0 | 1 | 3.13 |
| 1.0 - 3.0 | 31 | 96.87 |
| > 3.0 | - | 0.00 |

| Table 2: Conceptual Understanding of Entrepreneurship (N = 32) | | | |
|---|---|---|---|
| Scores on Conceptual Understanding of Entrepreneurship | | No. of Entrepreneurs | Percentage |
| 11-25 | (Low) | - | 0.00 |
| 26-40 | (Medium) | 4 | 12.50 |
| 41-55 | (High) | 28 | 87.50 |
| Range | (11-55) | | |

| Table 3: Entrepreneurship Awareness and Technical Know-how (N = 32) | | | |
|---|---|---|---|
| Scores on Entrepreneurship and Technical Know-how | | No. of Entrepreneurs | Percentage |
| £ 40 | (Poor) | - | 0.00 |
| 41-60 | (Low) | - | 0.00 |
| 61-80 | (Medium) | 28 | 87.50 |
| 81-100 | (High) | 4 | 12.50 |
| Range | (20-100) | | |

It appeared from table I-III that 31(96.87%) women were in a transit stage of neither totally external nor internal perceptions of locus of control, rather they were moving more to internal locus of control, the score ranging between 1.0-3.0. Similarly, 28 (87.5%) women had high conceptual understanding about entrepreneurship ranging a score between 41-55 and had medium level of awareness and technical know-how skills (score ranging from 61 to 80). Results on t' test on locus of control (Table-IV) revealed that only significant mean differences were found by age, social category and entrepreneurial technical training.

It was found that the women in the age group of 45-59 years had significantly more internal locus of control (M=2.09) than the women in the age group of 30-44 years (M=1.7) ('t'=2.46, $p < .05$). This indicated that internal perceptions of locus of control increased with age, hence, the elder women groups showed more internal orientations towards their success/ failure. It seemed that the percentage of women in higher age group was more in the higher side of the range.

It was also found that women entrepreneurs in two social categories i.e., general and other backward categories differed significantly in terms of their locus of control. This indicated that women belonging to general category had more internal orientation in their perception of locus of control (M=1.99) than the socially backward women (M=1.49) ('t' = 2.80, $p = .01$). This indicated that general category women groups are having more internal locus of control orientations.

It was also found that woman entrepreneurs undergone entrepreneurship and technical training differed significantly in terms of locus of control. This indicated that women entrepreneurs undergone entrepreneurship and technical training had less internal orientation in their perception of locus of control (M=1.77) than the women entrepreneurs without entrepreneurship and technical training (M=2.17) ('t' = 2.17, $p < .05$).

Results on t' test on conceptual understanding of entrepreneurship (Table-V) revealed that only significant mean differences were found by social category, family income and membership in associations.

**Table 4**

't' test on Locus of Control (LOC): Differences by Background Variables

| Background Variable | Mean | S.D. | 't' Value | Probability |
|---|---|---|---|---|
| 30-44 years | 1.69 | .45 | 2.46 | (p < .05) |
| 45-59 years | 2.08 | .43 | | |
| Graduate | 1.84 | .44 | .53 | (NS) |
| Non-graduate | 1.94 | .58 | | |
| General Category | 1.99 | .43 | 2.80 | (p < .01) |
| Other Backward Class | 1.49 | .45 | | |
| (O) Salaried | 1.85 | .45 | .34 | (NS) |
| House Wife | 1.91 | .56 | | |
| Experience ≤ 5 years | 1.97 | .47 | 1.29 | (NS) |
| >5 years | 1.76 | .47 | | |
| Income ≤ 4500 Rs. | 1.93 | .49 | 1.06 | (NS) |
| >4501 Rs. | 1.74 | .42 | | |
| (MA) Yes | 1.80 | .44 | 1.32 | (NS) |
| No | 2.04 | .55 | | |
| (ETTT) Yes | 1.77 | .47 | 2.17 | (p < .05) |
| No | 2.17 | .38 | | |
| P Chennai | 1.86 | .40 | 1.5 | (NS) |
| | | | | |

| | | | | | |
|---|---|---|---|---|---|
| | Bangalore | 1.88 | .56 | | |
| FOPR | Nil | 1.84 | .49 | .58 | (NS) |
| | Business | 1.96 | .43 | | |
| HE | Graduate | 1.82 | .41 | 1.00 | (NS) |
| | Post Graduate | 2.00 | .63 | | |

O- Self Previous Occupation; ETTT- Entrepreneurship and Technical Training; MA- Membership in Associations; P- Place of Enterprise; FOPR- Father's Present Occupation; HE- Husband's Education

Table-4 included the t' values on locus of control by using different background variables, like, age, education, category, previous occupation, experience, family income, membership in associations, entrepreneurship and technical training and place of enterprise, fathers present occupation and husband's education

**Table 5**

't' test on Conceptual Understanding of Entrepreneurship (COU): Differences by Background Variables

| Background Variable | Mean | S.D. | 't' Value | Probability |
|---|---|---|---|---|
| 30-44 years | 47.44 | 4.33 | .41 | (NS) |
| 45-59 years | 46.78 | 4.84 | | |
| Graduate | 46.39 | 4.81 | 1.57 | (NS) |
| Non-graduate | 49.11 | 2.93 | | |
| General Category | 48.13 | 4.17 | 2.25 | (p < .05) |
| Other Backward Class | 44.25 | 4.40 | | |
| (O) Salaried | 47.91 | 4.35 | 1.43 | (NS) |
| House Wife | 45.50 | 4.57 | | |
| Experience ≤ 5 years | 47.00 | 4.44 | .19 | (NS) |
| > 5 years | 47.31 | 4.68 | | |
| Income ≤ 4500 Rs. | 48.27 | 3.43 | 2.21 | (p < .05) |
| >4501 Rs. | 44.70 | 5.69 | | |
| (MA) Yes | 48.65 | 3.38 | 3.52 | (p< .01) |
| No | 43.33 | 4.90 | | |
| (ETTT) Yes | 47.37 | 3.91 | .47 | (NS) |
| | | | | |

| | | | | | |
|---|---|---|---|---|---|
| | No | 46.50 | 6.21 | | |
| P | Chennai | 46.13 | 4.78 | 9.33 | (NS) |
| | Bangalore | 47.56 | 3.88 | | |
| FOPR | Nil | 47.63 | 3.29 | 1.02 | (NS) |
| | Business | 45.75 | 7.13 | | |
| HE | Graduate | 47.26 | 4.74 | | |
| | Post Graduate | 46.89 | 4.04 | .21 | (NS) |

O- Self Previous Occupation; ETTT- Entrepreneurship and Technical Training; MA- Membership in Associations; P- Place of Enterprise; FOPR- Father's Present Occupation; HE- Husband's Education

Women from two social categories, i.e., general and other backward categories differed significantly in terms of their conceptual understanding of entrepreneurship. This indicated that women belonging to general category had more conceptual understanding of entrepreneurship (M=48.13) than the socially backward women (M=44.25) ('t' = 2.25, $p < .05$). This throws a new light to the entrepreneurship research that women belonging to general category are more opportunistic than the women belonging backward class, which enhanced their conceptual understanding of entrepreneurship.

It was also found that women entrepreneurs with family income is less than Rs.4500/- are having more conceptual understanding of entrepreneurship (M=48.27) than women entrepreneurs with family income more than Rs.4500/- (M=44.70) ('t' = 2.21, $p < .05$). It is quite significant from the above statement that, persons with low family income are more conscious about financial stability being in metropolitan cities. Thus, it is clear from the table-5 women entrepreneurs with income less than Rs. 4500/- are more in exploring the possibilities to find an alternative income, for which, more conceptual understanding of entrepreneurship is required.

It was revealed from the table that women entrepreneurs with membership in associations differed significantly with conceptual understanding of entrepreneurship. This indicated that women entrepreneur with membership in associations had more conceptual understanding (M=48.65) than women entrepreneurs without membership in associations (M=43.33) ('t' = 3.52, $p < .01$). It is indicated that membership in associations is required for exchanging ideas and new vistas in the women entrepreneurship which enhances the conceptual understanding of entrepreneurship indirectly and it was clear that women with more number of membership in associations are possessing more conceptual understanding of entrepreneurship.

Results on t' test on entrepreneurship awareness/technical know-how (Table-VI) revealed that only significant mean difference was found by family income.

From table-6, it was found that entrepreneurship awareness/technical know-how differed significantly between two women groups having different monthly family income. This indicated that women entrepreneurs with family income less than Rs. 4500/- possess more

entrepreneurship awareness/technical know-how (M=78.14) than the women entrepreneurs with family income more than Rs. 4500/- (M=75.60) ('t' = 1.99, $p < .05$). It is indicated that women entrepreneurs with income less than Rs.4500/- are aware with entrepreneurship and technical know-how. The reason being, the family income is insufficient to meet their basic needs in an urban area, created third option i.e., becoming an entrepreneur for which they update themselves with the entrepreneurship awareness and technical know-how of food processing which is mandatory for an entrepreneur.

It was found that father's present occupation differed significantly with entrepreneurship awareness/technical know-how. This indicated that woman entrepreneur's father's present occupation is nil have more entrepreneurship awareness and technical know-how (M=78.08) than woman entrepreneur's father's present occupation is business (M=75.13) ('t'=2.21, $p < .05$). This signifies that women entrepreneurs whose father's present occupation is nil is a major source of motivation to know the strategy of making money through entrepreneurship and hence, entrepreneurship awareness and technical know-how skills are more in comparison with father's whose present occupation is business.

**Table 6: 't' test on Entrepreneurship Awareness and Technical Know-how (EAT): Differences by Background Variables**

| Background Variable | Mean | S.D. | 't' Value | Probability |
|---|---|---|---|---|
| 30-44 years | 77.22 | 2.53 | .22 | (NS) |
| 45-59 years | 77.50 | 4.54 | | |
| Graduate | 77.83 | 3.64 | 1.26 | (NS) |
| Non-graduate | 76.11 | 2.89 | | |
| General Category | 77.04 | 2.91 | .84 | (NS) |
| Other Backward Class | 78.25 | 4.97 | | |
| (O) Salaried | 77.59 | 2.71 | .59 | (NS) |
| House Wife | 76.80 | 4.92 | | |
| Experience ≤ 5 years | 76.50 | 2.71 | 1.39 | (NS) |
| > 5 years | 78.18 | 4.04 | | |
| Income ≤ 4500 Rs. | 78.14 | 2.71 | 1.99 | ($p < .05$) |
| >4501 Rs. | 75.60 | 4.04 | | |
| (MA) Yes | 77.74 | 3.47 | 1.03 | (NS) |
| No | 76.33 | 3.54 | | |

| | | | | | |
|---|---|---|---|---|---|
| (ETTT) | Yes | 77.67 | 2.58 | .90 | (NS) |
| | No | 76.37 | 5.53 | | |
| P | Chennai | 78.13 | 4.24 | 1.28 | (NS) |
| | Bangalore | 76.56 | 2.42 | | |
| FOPR | Nil | 78.08 | 3.20 | 2.20 | (p<.05) |
| | Business | 75.13 | 3.56 | | |
| HE | Graduate | 77.35 | 4.01 | .01 | (NS) |
| | Post Graduate | 77.33 | 1.73 | | |

O- Self Previous Occupation; ETTT- Entrepreneurship and Technical Training; MA- Membership in Associations; P- Place of Enterprise; FOPR- Father's Present Occupation; HE- Husband's Education

## DISCUSSION

The finding of more internal locus of control perceptions among elderly women group could be attributed to several factors. Firstly, due to their experience (duration of experience and type of experience) and expertise in the food processing areas their problem solving skills could have been more effective than the other group of women in 30- 40 year of age group. This might have helped them to perceive their internal worth in solving day to day problem in the enterprise, which in turn fostered their internal locus of control perception. Secondly, as they were in the higher age group, due to their social maturity and habitation effect of handling similar situations in their daily activities in the enterprise as well home they could have encountered low social role conflict in their families, which again could have strengthened their internal control perception. In India women between 45-59 age group are considerably free out of familial responsibilities, from this finding is also in time with the social learning theory of Bandura (1968) and locus of control theory of Rotter (1966). Though research findings in this area of locus of control have been mixed (Box, Watts & Hisrich, 1994), this finding presented a new direction in the entrepreneurial behavior researches especially on females. The study undertaken by Box, Beisel and Watts (1995) did not show any significant role of age on locus of control, hence was different from this finding. It was because of the age group range used in both the studies, as Box et.al. (1995) included women between 21- 78 years old, while in this study the age range was 30-59 years. It could also be due to the scale used to measure locus of control and gender of the sample included for the study. Above all Thailand is a developed country while India is a developing one. However the present finding was supported by some Indian researchers, such as Rani (1986), Anna (1990) and Nigam (1995) suggesting that the ideal age for women to start up

any venture is 30 years and majority of their sample was between 30-40 years of age. Nevertheless, in a developing country like India this finding gives a new direction to all the training programmers, workshop, and facilities available to women entrepreneurs focusing more on socialisation, women and role-conflict.

Another interesting finding was the difference found on locus of control by caste, which was probably a genuine picture of India society where the upper caste people have been in an advantageous position. The finding of women entrepreneurs belonging to general caste (upper caste) showed more positive / internal locus of control than their counterparts in the other back ward caste. Even the finding on conceptual understanding supported this above finding, showing that women in upper caste had significantly better conceptual understanding of ABC of entrepreneurship. This could be due to various factors like, education, gender equality in the community, socialization, training exposure, entrepreneurial activities already existed in the family, etc., which perhaps imbibed better entrepreneurial activities (Anna, 1990) and enhanced their internal control perceptions about their performance. The study by Manimekalai (1998) also reported caste as an important factor for the growth of entrepreneurs especially for females in a developing country like India, where gender inequality and suppression is more prevalent in lower caste communities. The second possible explanation could be the Government's (especially, south Indian) policy on job reservations for the lower caste, which left no choice for the upper to become self-employed though small-scale enterprises. This struggle for existence in each stage such as getting finance, space, subsidy etc. perhaps fostered their internal locus of control perceptions and enhanced conceptual understanding. Thirdly, as the results on frequencies and percentages showed maximum number of women had high level of conceptual understanding and the sample size in the higher caste group was more than the other group, the group mean contributed to the present finding.

The finding of women entrepreneurs who had a monthly family income of INR 4500/ and less possessed significantly better conceptual understanding and awareness and technical know how skills than from INR 4501 to 10,000. This could be due to the fact that mounting financial compulsions and hardship during the self and the family management for the lower class group in metro cities compelled them to understand in a more detailed way about what they were doing and how they were doing it, as they cannot afford to take chance to loose money anywhere. They could have been more opportunists which helped them to have better conceptual understanding and technical know how skills about their small-scale enterprise. As low family income is generally considered as a barrier to entrepreneurship, Brush (1992) has rightly associated other factors like lack of socialization to entrepreneurship in the home, school and society, financial aspects of venture start-up and management. However, the striving to over come these barriers perhaps enhanced their concept of entrepreneurship and technical know how about their venture.

The finding of differences by membership association on conceptual understanding was quite expected as the exposures and contacts of the women who were the members of different professional societies on small and large scale enterprises must have better than those who did not have any membership in association. These exposures and contacts in turn, could help them

in clarifying doubts in previously faced problem and exchange of thoughts and research finding discussed during workshops and conferences could help them to take steps to control expected and possible problems in the enterprise.

Another unexpected finding was that the women who had entrepreneurial and technical training showed more external orientation in their control perceptions as compared to the women who did not undergo any such formal training. However, this finding needs to be further investigated comprising some basic quires in view such as, how many years back they took the training, the nature of training and whether the impact of that training programme is still working. As social mobility and change are rapid in metro cities training programmes on new technology, machinery, demand and supply equation, marketing skills, personnel, financial facilities available, and changes in government policy and planning should be updated very frequently. Nonetheless, self-training through one's own experience in the field always have positive impact on self-esteem and control perceptions. This could have been true in case of the female who did not have any formal training on entrepreneurship.

## CONCLUSION, LIMITATION AND SUGGESTION

The following conclusions were drawn from the present study:

| | |
|---|---|
| 1. | Women entrepreneurs in the older age group, those belonged to higher caste and those did not have any formal training on entrepreneurship had significantly more internal locus of control than their comparative counterparts. |
| 2. | Women belonged to higher caste, those who had lower family monthly income and those who having more membership in professional societies had significantly better conceptual understanding. |
| 3. | Women hailing from lower family income group had significantly more entrepreneurial awareness and technical know-how skills than those with formal training on entrepreneurs. |

Thus, it appeared that in developing countries caste and classes do play vital roles in the controlling entrepreneurial behaviour and personality traits. However, more number of researches with a larger sample should be done in this area to widen the scope of generalization of the present findings. Future researches could also focus on a comparative cross-cultural sample from other developing countries to see the variations in female entrepreneurial behaviour and the impact of background variables on it.

The implication of the findings could be more appropriate for designing the training programme for the entrepreneurs frequently and should have a gender reference in it, where the societal hindrances and how to overcome those should be highlighted. The findings had also implications for women rural entrepreneurship and different Governmental policies on finance,

subsidy, marketing, lace allotment, etc, for them to reduce the impact of some important background variables.

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# SOCIOECONOMIC AND FINANCIAL FACTORS AFFECTING THE EXPECTED LIFE TERM OF MICROENTERPRISES IN MEXICO

**Heikki Heino, Governors State University**


## ABSTRACT

*Microenterprises account for roughly 20 percent of Mexico's workforce, the owners of the microenterprises represent an increasing economic significance coupled with the electoral importance of the owners, and the microenterprises contribute to employment creation irrespectively of the business cycle makes it important for policy makers to try to understand the factors which affect the expected life term of a microenterprise. Furthermore, it is beneficial to understand the factors which extend the expected life term. By applying the Cox proportional hazard model and using the observation data from the National Survey of Microenterprises in Mexico, I found that the characteristics of the owner, characteristics of the microenterprise, sector of operation, and the need of borrowed start-up capital help to predict the survival rate of the life term of the microenterprise and based on the results I make recommendations for the policy makers.*


## INTRODUCTION

The overall political and economic environment of a country affects how microfinance is provided (Ledgerwood, 1998). In particular, policymakers have become increasingly interested in understanding the factors associated with the provision of loans to microenterprises in developing countries, primarily because credit access has been recognized as an important tool for small business economic development and the overall reduction of poverty (World Bank, 1996). The term microfinance is used[1] to describe the sector of financial institutions that provides loans and other forms of financial assistance to microenterprises.

The economic significance of microenterprises in the contribution they make to the overall employment level is increasing both in developing and developed countries (de Wit, 1993). This economic significance-coupled with the electoral importance of the microenterprise owners-is contributing to the increasing political power that microenterprise owners collectively have in lobbying for, say, a favorable tax climate or other beneficial policies (de Wit, 1993). Understanding these factors and how they affect microentrepreneurs allows for the development of policy recommendations for the microenterprise sector that take into account the financial sector and the legal environment. The idea is that these policy recommendations related to microenterprises lead to economic stability and growth.

It is also recognized that microenterprises represent the "backbone" of the local economies in less developed countries such as Mexico. In particular, the economic and social role of microenterprises is the more important the less developed a country is (Liargovas, 1997). Thus, the role of microenterprises in economic development is crucial, particularly in Mexico, a country with a 1997 per capita Gross Domestic Product (GDP) of $7,700, a population of approximately 98.5 million and a working age population (WAP) of about 63.9 million[2].

In 1995 about 6.6 million microenterprises existed in Mexico, having grown from about 5.7 million (or 15.7 percent) since 1991 (Sánchez, 1998). Furthermore, microenterprises accounted for 20 percent of Mexico's workforce. The agricultural sector employs 21.8 percent, the service sector 28.8 percent, the trade sector 16.1 percent, construction 5.2 percent, public administration and national defense sectors 4.4 percent, and the transportation and communications sectors employ 4.1 percent of the economically active population. The agricultural sector produces only 8 percent of GDP, the combined industry sectors produce 33 percent, and the combined services sectors account for 59 percent of GDP.

The importance of microenterprises for the local economies in Mexico and the availability of microdata with demographic, financial and economic information on microenterprise owners and their businesses allows for a detailed analysis of the most relevant financing issues faced by microenterprises. The National Survey of Microenterprises (ENAMIN, Encuesta Nacional de Micronegocios ) contains detailed economic and financial data on microenterprise owners. The ENAMIN defines a microenterprise as a business with less than six employees (16 in manufacturing). This definition is consistent with that employed in other studies in the development and microfinance literature (Sánchez, 1998; Otero & Rhyne, 1994). The surveyed microenterprises operate in four major economic sectors (manufacturing, construction, commerce and services). The aggregate output of these sectors accounts for about 92 percent of the 1997 GDP [3]. The ENAMIN includes financial and economic information on microenterprise owners operating in the main urban areas of 34 urban areas and, as such, the results can only be generalized to these urban areas[4]. Nonetheless, about 60 percent of the population resides in these urban areas.

The role of microenterprises in employment creation derives from the fact that they use labor intensively rather than capital. This hypothesis has been tested empirically by Birch (1979, 1987), Daly et al. (1991), and Storey (1994). The results showed that small enterprises, both in the U.S. and in the U.K., make a disproportional large contribution to job creation in the economy. Daly et al. (1991) found that U.K. firms employing fewer than 10 people created over half a million jobs during 1987-1989 which accounts for almost half of the total net job growth in that period. Also, they found that, unlike large firms-which make weak or no contributions to employment when there is a downturn-small enterprises contribute to employment creation irrespectively of the business cycle.

Evans and Leighton (1989) conclude from their empirical analysis that relatively poor workers-that is, workers with low wages and history of instability in employment-are most likely to enter self-employment[5]. It could be assumed that Mexico-with its large number of very poor workers-has a suitable environment for workers to enter into the entrepreneurial sector. In

Mexico, 6.6 million inhabitants (in 1995), or about 7 percent of the total population, are owners of microenterprises. When the owners of small, medium, and large enterprises are taken into account, the self-employed percentage of the total population increases above the comparable percentage in most developed countries. An average Mexican microenterprise across the sectors of operation employs two workers (Maloney & Cunnigham, 1998). Thus, with this job creation ability, the sector clearly represents an important source of wealth creation in Mexico.

The National Survey of Microenterprises of (Encuesta Nacional de Micronegocios, ENAMIN) asked the micorenterprise owners why they started the business. The sample is weighted and they are equivalent to the responses of 3,060,243 microenterprise owners. When asked about the reasons to become entrepreneurs, about 24 percent of microenterprise owners said that they became self-employed in order to gain more independence, and 37 percent became entrepreneurs because the expected income from self-employment is greater than the income from a salaried position. Almost 36 percent went into business to complement family income, 10 percent started a business to follow family tradition, and 8 percent became entrepreneurs because there were no other employment opportunities available[6]. In 1995, according to data from the National Employment Survey (Encuesta Nacional de Empleo, ENE), 38.7 percent of employed individuals worked in firms employing 51 or more workers, 7.9 percent were employed in firms with 16 to 50 employees, 3 percent in firms employing 11 to 15 workers, 6 percent in firms with 6 to 10 employees, 27.7 percent in firms with 2 to 5 employees, and 16.7 percent in firms with one worker (the owner) only. In other words, 53.4 percent of those employed are working for microenterprises. This high employee concentration in microenterprises underscores the importance of microenterprises for the economy of Mexico.

The small size of Mexican enterprises generates problems for owners, most of them associated with investment financing and survival rates (Sánchez, 1998). With regard to bank lending, microenterprises are at a disadvantage relative to large firms due to the fact that they face relatively high interest rates on short-term bank loans[7] . In 1990, before the financial reforms which returned most of Mexico's banking system to the hands of private owners starting in 1991, there were 18 state-owned banks (McCrary, 1991). Since 1991 Mexico has been following policies of financial liberalization which have had a profound effect on the way in which banks allocate domestic credit (Edwards, 1995).

Financial liberalization consists in the elimination of quantitative and price controls on domestic banking. The allocation of funds becomes more competitive and the relaxation of institutional regulations and restraints makes it possible for large Mexican enterprises to bypass domestic credit markets and undertake liabilities denominated in foreign currencies directly in foreign markets. In this context, the relative disadvantages faced by small and medium-sized enterprises are evident (Liargovas, 1998).

Two core issues characterize the competitive enterprise system: How to get started in business and how to survive in business. Lack of access to credit services-as pointed out by Evans and Jovanovic (1989)-might be an impediment for starting up a microenterprise and for sustained growth. Perhaps the main rationale for government assistance programs for small

businesses is the belief that capital markets do not provide sufficient funds for adequate business development (Evans & Jovanovic, 1989).

The success or failure of the entrepreneur has been a subject of interest in many business disciplines. Studies analyzing the causes of small business failure find that undercapitalization and poor cash flow management are important predictors of impeding liquidity problems (Clute, 1979; Larson & Clute, 1979; O'Neill & Duker, 1986; Peterson et al., 1983; Wichmann, 1983; Gaskill et al., 1993). A natural research question that arises is then how microenterprises' survival rates behave under credit market imperfections; that is, which financial and economic factors are related to a firm's lifetime and what role does borrowed start-up capital play on firm survival? Thus, developing a general model for microenterprise survival in Mexico-in which owner's socioeconomic and financial characteristics are controlled for-would enrich our understanding of entrepreneurial life expectancy. The main purpose of this research is to analyze theoretically and empirically the factors associated with the success/failure of microenterprises in Mexico.

Evans and Leighton (1989) find seven key results that can serve as benchmarks to help us evaluate theories of entrepreneurship. For U.S. small firms, they find that the probability of departing from self-employment decreases with duration in self-employment, falling from about 10 percent in the early years to 0 by the eleventh year. They also find that U.S. small firms face substantial liquidity constraints. In other industrialized countries, the existence of credit constraints is well documented. Maloney and Cunningham (1998) suggest that the existence of substantial credit constraints on entrepreneurial activities is also extremely likely in less developed countries.

"The financial system[8] includes all savings and financing opportunities and the financial institutions that provide savings and financing opportunities, as well as the valid norms and modes of behavior related to these institutions and their operations. Financial markets are the markets-supply, demand, and the coordination thereof-for services provided by the financial institutions to the non-financial sectors of the economy." (Krahnen & Schmidt, 1994; Ledgerwood, 1998) Understanding a country's financial system allows microfinance providers to identify areas in which services or products for microentrepreneurs are inadequate or nonexistent. Financial systems can generally be divided into the formal, semiformal and informal sectors (Ledgerwood, 1998). In developing countries, market separation between formal and informal credit sectors is commonly observed (Sánchez, 1998; World Bank, 1999; Nabi, 1989).

The formal sector consists of formal financial institutions, which are chartered by the government and are subject to banking regulations and supervision. This sector includes public and private banks, insurance firms, and finance companies. When these institutions serve smaller businesses or farmers there is the potential for them to move into the microfinance sector. Public institutions generally serve both urban and rural areas, whereas private institutions focus mostly on urban areas. Commercial, merchant, savings and development banks, insurance companies, pension funds, together with the central bank (Banco de México) and with the

financial markets (stocks and bonds), form the formal sector. These institutions typically serve large customers.

Semiformal institutions are not generally regulated by banking authorities but are usually licensed and supervised by some government agency. Examples are credit unions and cooperative banks. These financial institutions, which vary in size, typically serve midrange clients associated with a profession or geographic location.

Informal financial intermediaries operate outside the structure of government regulation and supervision. The sector consists of firms or individuals-moneylenders, pawnbrokers, self-help groups and NGO's, friends and relatives, shop-owners and traders-which provide credit services such as cash loans, commercial credit and advances to production outside the supervision of financial authorities. The informal institutions concentrate on the informal sector providing loans, mainly short-term, and taking deposits from microenterprises and households.

It has been estimated that there are 500 million economically active poor people around the globe operating microenterprises (Ledgerwood, 1998). Most of them do not have access to adequate financial services. To meet this substantial demand for financial services, a long-term microfinance perspective need to be adopted by policymakers.

The term microfinance is used to describe the operations of microfinance institutions. The institution providing microfinance services can be regulated or unregulated, in other words, it can operate in the formal, semiformal, or informal sector. The activities in which microfinance institutions engage include: small loans for start-up or working capital, collateral substitutes (such as group guarantees), and access to repeat and larger loans based on repayment performance. Thus, microfinance is not simply banking but it could also serve as a development tool. For example, NGO's in Mexico facilitate financial services to microenterprises with the overall objective of economic development and poverty reduction (World Bank, 1996).

In a World Bank study of lending for microenterprise projects, three objectives were most frequently cited (World Bank, 1996). The First objective is to create employment and income opportunities through the creation and expansion of microenterprises. Second, to increase productivity and the incomes of targeted demographic groups, especially the poor and women. Third, to reduce the dependence of rural families on drought-prone crops through the diversification of income generating activities.

Even when the borrowing microenterprise is a start-up business and is owned by a very poor person, equity contribution before granting a loan has been identified as a crucial part of the process[9]. While the equity contribution is sometimes financially insignificant from the lender's point of view, they carry financial and psychological weight for the prospective borrowers (Ledgerwood, 1998). World Bank (1999) finds that there are substantial advantages for credit institutions to operate in urban rather than rural areas. First, since in an urban area the clients are located within narrowly defined geographical areas, lower transaction costs could be potentially achieved. Second, there is a higher chance that clients are financially literate in urban areas. Finally, the probability of loan repayment is higher in urban rather than rural areas since interactions with clients tend to be more frequent.

In identifying the target market the lending institution needs to consider whether it will focus on existing microenterprises or potential microenterprise owners who need financial services to start a business. There are many advantages working with existing microenterprises, since they have a history of success and this in turn reduces the default risk to the lending institution. In targeting potential start-up microenterprises, the lending institutions often, according to Ledgerwood (1998), have poverty alleviation as an objective, besides the more traditional objectives of a lending institution[10]. In Mexico, as in many other less developed countries, the objectives of many of the financial institutions in the informal sector are focused in poverty alleviation, employment creation, and increasing the living standards of the population (World Bank, 1996). Thus, following the rationale of the objectives of these institutions, I focus on the most relevant socioeconomic and financial factors faced by start-up microenterprises and their owners and how these factors affect the sustainability of microenterprises and can these factors reasonably predict their survival.

With these general themes in mind, I propose to test whether the economic and financial characteristics of a microenterprise help to predict its survival or failure as well as the average life term of the microenterprise or not.

## DATA AND BASIC DESCRIPTIVE STATISTICS

I will test the research questions introduced above using microdata from the National Survey of Microenterprises (Encuesta Nacional de Micronegocios, ENAMIN) for the first quarter of 1994. The ENAMIN survey is conducted every two years by the Mexican National Statistical Institute (Instituto Nacional de Estadística, Geografía e Informática, INEGI) and the survey was constructed by selecting 12,243 owners of microenterprises from urban areas (defined as an area with at least 100,000 inhabitants). Microenterprises employing six or less individuals-16 for manufacturing firms-were selected randomly from the last quarter of the 1993 National Urban Employment Survey (Encuesta Nacional de Empleo Urbano, ENEU).

The ENEU is representative of about 92 percent of the urban employed population that was at least 12 years of age. The 16 urban areas surveyed in both the ENEU and the ENAMIN were: Cd. Júarez, Chihuahua, Cd. México, Guadalajara, León, Matamoros, Mérida, Monterrey, Nuevo Laredo, Orizaba, Puebla, San Luis Potosí, Tampico, Tijuana, Torreón and Veracruz. A total of 10,434 individuals/business-from a total of 41,389 households-were identified in these urban areas. In addition, 386 individuals/businesses-from a total of 1,080 households-were selected from a supplemental sample of 18 smaller urban areas[11].

A stratified random sample probability method was used to select the 12,243 self-employed and microenterprise owners. In both the ENEU and the ENAMIN, the sampling unit is the household and they are selected through a three-step process. In the first stage, households are grouped according to socioeconomic status (high, medium or low) into segments (usually composed of five households). This is done for each Basic Geostatistical Area (Áreas Geoestadísticas Básicas, AGEB's). Within each strata, the number of Primary Sampling Units (Unidades Primarias de Muestreo, UPM) are distributed proportionally to the number of

households. Each UPM consists of an AGEB with between 240 and 480 households, two or more AGEB's with at least 240 households, or part of an AGEB with at least 240 and no more than 480 households. UPM's are then selected according to the number of households in each urban area.

The Secondary Sampling Units (Unidades Secundarias de Muestreo, USM) are then selected based on the number of blocks with between 20 and 50 households, two contiguous blocks with at least 20 households, or part of a block with betweeen 20 and 50 households. Six USM's are selected from each UPM based on the proportion of households within each UPM. After enumerating every household within each selected USM, a segment of about five households is then surveyed. Thus, each survey unit has an equal probability of being selected at the UPM level and, therefore, with the proper weighting factors, the results of statistical analyses can be generalized to the general population in the urban areas selected. Lastly, households with self-employed individuals and microenterprise owners are then selected and surveyed, either at the individual's home or in the business premises.

For the purposes of conducting statistical analyses and the testing of hypotheses-and following Sánchez (1998) and Maloney and Cuningham (1998)-variables can be constructed and classified into four broad categories[12].

Table 1 reports some basic descriptive statistics of microenterprise owners by sector of economic activity. The average age of the microenterprise owner is 43.5 years, having an average 7.2 years of education and an average monthly income of 967 pesos[13]. The average microenterprise owner reports to work 45 hours a week. The highest average age of an owner (44.7 years) is found in the commerce sector and the lowest (42 years) in construction. The average manufacturing sector owner has 6.7 years of schooling, in the construction sector the average owner has 5.4 years of education, and the highest mean of schooling (8.1 years) is reported by business owners in the service sector. The mean years of potential experience of microentrepreneurs are 30.4 years. About three-fourths of microenterprise owners in the manufacturing sector are married compared to only about two-thirds of owners in the service sector. Not surprisingly, all respondents in the construction sector were males, and the highest concentration of female owners is the commerce sector where 39 percent of the owners are females[14].

About 21 percent of microenterprise owners reported to have needed outside credit to start their business. The highest percentage, 54 percent, is in the construction sector. At the same time, practically none of the microenterprise owners in the commerce sector were in need of start-up credit.

Table 2. reports the start-up source of financing. In the manufacturing sector, 4.8 percent of microenterprise owners report to have obtained a start-up loan from a bank or a cooperative financial institution (formal sector). The largest percentage of owners initiated their business using personal savings (66.8 percent). Loans from friends and relatives, using severance pay funds, credit from clients or vendors, and loans from other informal sources account for the remaining 33.2 percent. In the construction sector, personal savings represent the main source for start-up capital (83.8 percent). Within the commerce sector, relatives and friends account for

more than one fifth of the sources for start up capital. Overall, start-up loans from the formal sector represent a small share of the total loans employed by microentrepreneurs when starting their business. The lowest percentage of firms borrowing from the formal sector (.5 percent) is found in the construction sector.

Manufacturing and commerce sector microenterprise owners received almost 70 percent of bank loans for start-up capital. Commerce sector microenterprises received almost two thirds of their financing needs from cooperative financial institutions. Relatives and friends provide loans to microentrepreneurs in the commerce, service and manufacturing sectors, but friends and relatives provided a very small portion of the start-up capital needed by construction firms. The commerce sector microenterprise owners received most of the credit extended by clients and vendors. This finding is not surprising since having adequate inventories are a major investment when starting-up a microenterprise in the commerce sector.

| **Variables by Category** | | |
|---|---|---|
| A. | Characteristics of the owner. | |
| | 1. | Weekly hours worked by the owner. |
| | 2. | Years of schooling. |
| | 3. | Age. |
| | 4. | Age squared/100. |
| | 5. | Marital status (1=yes). |
| | 6. | Gender (1=Female). |
| | 7. | Migrant (1=yes). |
| | 8. | Years since migration. |
| | 9. | Years since migration squared/100. |
| | 10. | Involuntary entry into the microenterprise sector (1=voluntary). |
| B. | Characteristics of the microenterprise. | |
| | 1. | Capital/equipment (in Pesos). |
| | 2. | Labor (number of employees). |
| C. | Sector of operation. | |
| | 1. | Commerce (1=yes). |
| | 2. | Service (1=yes). |
| D. | Microenterprise dynamics: Since the sample does not permit the explicit testing of dynamics (i.e., plans to expand, contingency plans, etc.), I rely on the owner's statements of his plans and needs for financing (Maloney and Cunnigham, 1998). | |
| | 1. | Permanence in the sector (Move/stay). Whether the owner plans to close the firm and look for salaried work. |
| | 2. | Plans to Expand (Expand). Whether the owner plans to go out of business, remain in business |

| | | |
|---|---|---|
| | | but not expand, or expand. |
| | 3. | Sells directly to the public. Captures the nature of clientele. |
| | 4. | Initial financing for the firm (Initial Finance). Captures the source of start up capital. |
| | 5. | Compliance with tax authorities (ranges from being unregistered to being registered locally, and being fully registered) . |
| D. | Location of residence/operation. | |
| | 1. | Center (1=yes). |
| | 2. | South (1=yes) |
| | 3. | North (1=yes). |
| | 4. | border (1=yes). |

**Table 1: Basic Descriptive Statistics of the ENAMIN Sample, by Sector of Economic Activity (Weighted and Unweighted)**

| SECTOR | | AGE | EDUC | EXPR | MAR | FEM | INC | HRS | WORKERS | FINANC |
|---|---|---|---|---|---|---|---|---|---|---|
| Manufacturing | Mean | 43.1493 | 6.8444 | 30.3126 | .7440 | .3044 | 594.8282 | 42.1274 | 1.2101 | .1232 |
| | N | 360348 | 360348 | 360348 | 360348 | 360348 | 360348 | 360348 | 360348 | 360348 |
| | Std. Dev. | 12.5823 | 5.0409 | 14.8194 | .4364 | .4602 | 092.8229 | 18.9913 | 2.1959 | .3287 |
| Construction | Mean | 42.0483 | 5.3958 | 30.6524 | .7370 | .0000 | 589.3722 | 49.6799 | .6882 | .5460 |
| | N | 117975 | 117975 | 117975 | 117975 | 117975 | 117975 | 117975 | 117975 | 117975 |
| | Std. Dev. | 11.0806 | 4.7773 | 12.4687 | .4402 | .0000 | 686.6120 | 9.3848 | 1.1684 | .4979 |
| Commerce | Mean | 44.6914 | 6.6733 | 32.0281 | .6766 | .3922 | 287.9377 | 48.7640 | .8173 | .004E-02 |
| | N | 907482 | 907482 | 907482 | 907482 | 907482 | 907482 | 907482 | 907482 | 907482 |
| | Std. Dev. | 14.3755 | 4.8862 | 17.1278 | .4678 | .4882 | 28491.77 | 23.5581 | 1.0139 | .2552 |
| Services | Mean | 42.7221 | 8.0875 | 28.6405 | .6519 | .1964 | 357.5407 | 41.6619 | .4693 | .3450 |
| | N | 888307 | 888307 | 888307 | 888307 | 888307 | 888307 | 888307 | 888307 | 888307 |
| | Std..Dev.. | 12.7574 | 5.7102 | 14.9505 | .4764 | .3973 | 27039.16 | 20.4621 | .9007 | .4754 |
| Total | Mean | 43.5407 | 7.1865 | 30.3617 | .6808 | .2815 | 967.1562 | 44.9857 | .7369 | .2106 |
| | N | 2274112 | 2274112 | 2274112 | 2274112 | 2274112 | 2274112 | 2274112 | 2274112 | 2274112 |
| | Std. Dev. | 13.3575 | 5.2992 | 15.7958 | .4662 | .4497 | 24778.17 | 21.4286 | 1.2760 | .4077 |
| SECTOR | | AGE | EDUC | EXPR | MAR | FEM | INC | HRS | WORKERS | FINANC |
| Manufacturing | Mean | 43.3267 | 6.8472 | 30.4905 | .6913 | .2647 | 456.6224 | 41.9341 | 1.0949 | .1399 |
| | N | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 | 1001 |
| | Std. Dev. | 13.5734 | 4.6511 | 15.9921 | .4622 | .4414 | 381.8944 | 18.7013 | 2.0489 | .3470 |
| Construction | Mean | 41.8394 | 5.3565 | 30.4829 | .7152 | .0000 | 927.9293 | 47.3854 | .5439 | .3169 |
| | N | 467 | 467 | 467 | 467 | 467 | 467 | 467 | 467 | 467 |
| | Std. Dev. | 12.5259 | 4.2856 | 14.5095 | .4518 | .0000 | 6/82.1261 | 10.8705 | .9715 | .4658 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Commerce | Mean | 44.7173 | 6.5713 | 32.1534 | .6778 | .3585 | 252.5345 | 50.1491 | .7629 | .545E-02 |
| | N | 3113 | 3113 | 3113 | 3113 | 3113 | 3113 | 3113 | 3113 | 3113 |
| | Std. Dev. | 14.4930 | 5.0145 | 17.2520 | .4674 | .4796 | 21230.96 | 22.4293 | 1.0426 | .2796 |
| Services | Mean | 42.1087 | 8.3605 | 27.7611 | .6686 | .1872 | 987.5796 | 41.6434 | .4461 | .3167 |
| | N | 3183 | 3183 | 3183 | 3183 | 3183 | 3183 | 3183 | 3183 | 3183 |
| | Std..Dev.. | 13.268/2 | 5.9008 | 15.7998 | .4708 | .3902 | 16357.24 | 19.0402 | .9301 | .4653 |
| Total | Mean | 43.2955 | 7.2673 | 30.0378 | .6780 | .2546 | 021.7707 | 45.4366 | .6627 | .2012 |
| | N | 7764 | 7764 | 7764 | 7764 | 7764 | 7764 | 7764 | 7764 | 7764 |
| | Std. Dev. | 13.8213 | 5.4007 | 16.4674 | .4673 | .4357 | 17227.55 | 20.4702 | 1.1983 | .4009 |

**Table 2.: Start-Up Source of Financing by Sector of Economic Activity**

| | | | SECTOR | | | | |
|---|---|---|---|---|---|---|---|
| | | | Manufacturing | Construction | Commerce | Services | Total |
| FINCSOUR | Bank(s) | Count | 13794 | 283 | 13871 | 11957 | 39905 |
| | | % within SECTOR | 4.4% | 5% | 1.6% | 2.1% | 2.2% |
| | Cooperative | Count | 1138 | | 4014 | 1094 | 6246 |
| | | % within SECTOR | .4% | | .5% | .2% | .3% |
| | Relatives/Friends | Count | 54879 | 3709 | 186707 | 89348 | 334643 |
| | | % within SECTOR | 17.4% | 6.9% | 22.1% | 15.4% | 18.6% |
| | Informal Leanders | Count | 10205 | | 20501 | 14874 | 45580 |
| | | % within SECTOR | 3.2% | | 2.4% | 2.6% | 2.5% |
| | Personal Savings | Count | 210979 | 44887 | 517997 | 400799 | 1174662 |
| | | % within SECTOR | 66.8% | 83.8% | 61.4% | 68.9% | 65.4% |
| | Severance Pay Last Employement | Count | 15813 | 272 | 54393 | 45737 | 116215 |
| | | % within SECTOR | 5.0% | .5% | 6.4% | 7.9% | 6.5% |
| | Credit from Clients | Count | 810 | 106 | 3071 | 1854 | 5841 |
| | | % within SECTOR | .3% | .2% | .4% | .3% | .3% |
| | Credit from Vendors | Count | 6691 | 4273 | 37579 | 1827 | 50370 |
| | | % within SECTOR | 2.1% | 8.0% | 4.5% | .3% | 2.8% |
| | Other source(s) | Count | 1640 | 36 | 5791 | 14359 | 21826 |
| | | % within SECTOR | .5% | .1% | .7% | 2.5% | 1.2% |
| Total | | Count | 315949 | 53566 | 843924 | 581849 | 581849 |
| | | % within SECTOR | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

**Table 2. (continued):** **Start-Up Source of Financing by Sector of Economic Activity**

| | | | SECTOR | | | | |
|---|---|---|---|---|---|---|---|
| | | | Manufacturing | Construction | Commerce | Services | Total |
| FINCSOUR | Bank(s) | Count | 13794 | 283 | 13871 | 11957 | 39905 |
| | | % within FINSOUR | 34.6% | .7% | 34.8% | 30.0% | 100.0% |
| | Cooperative | Count | 1138 | | 4014 | 1094 | 6246 |
| | | % within FINSOUR | 18.2% | | 64.3% | 17.5% | 100.0% |
| | Relatives/Friends | Count | 54879 | 3709 | 186707 | 89348 | 334643 |
| | | % within FINSOUR | 16.4% | 1.1% | 55.8% | 26.7% | 100.0% |
| | Informal Leanders | Count | 10205 | | 20501 | 14874 | 45580 |
| | | % within FINSOUR | 22.4% | | 45.0% | 32.6% | 100.0% |
| | Personal Savings | Count | 210979 | 44887 | 517997 | 400799 | 1174662 |
| | | % within FINSOUR | 18.0% | 3.8% | 44.1% | 34.1% | 100.0% |
| | Severance Pay Last Employement | Count | 15813 | 272 | 54393 | 45737 | 116215 |
| | | % within FINSOUR | 5.0% | .5% | 6.4% | 7.9% | 6.5% |
| | Credit from Clients | Count | 810 | 106 | 3071 | 1854 | 5841 |
| | | % within FINSOUR | 13.9% | 1.8% | 52.6% | 31.7% | 100.0% |
| | Credit from Vendors | Count | 6691 | 4273 | 37579 | 1827 | 50370 |
| | | % within FINSOUR | 13.3% | 8.5% | 74.6% | 3.6% | 100.0% |
| | Other source(s) | Count | 1640 | 36 | 5791 | 14359 | 21826 |
| | | % within FINSOUR | 7.5% | .2% | 26.5% | 65.8% | 100.0% |
| Total | | Count | 315949 | 53566 | 843924 | 581849 | 581849 |
| | | % within FINSOUR | 17.6% | 3.0% | 47.0% | 32.4% | 100.0% |

## METHODOLOGY

To test whether the characteristics of the owner of the microenterprise, the characteristics of the microenterprise itself, the sector of operation, the location of the microenterprise, the dynamics of the microenterprise, and especially the need for outside start-up capital help to predict the average life term of the microenterprise the proportional hazard model is applied using the ENAMIN survey observations.

The proportional hazards model, which is estimated using the partial likelihood approach suggested by Cox (1972, 1975) is based on the idea that the microenterprise hazard rate or survival function depends on a set of covariates. The independent variables used in this model

are factors that are theoretically related to the chances of a firm's survival or failure. The empirical specification is based on the hazard rate at time *t*,

$$(9) \qquad h(t_i X_i) = h(t_i,0)\exp(X^1{}_i\beta),$$

where $h(t_i,0)$ is the baseline hazard rate at time *t* for covariate vector *0*, and it captures microenterprise heterogeneity. The baseline hazard function is essentially the hazard function for an individual whose covariates take the value of zero.

The variables included in *X* are: the characteristics of the microenterprise owner (years of experience, schooling, marital status, gender, and degree of illiteracy), the characteristics of the microenterprise (number of years in business, capital-labor ratio, earnings, number of workers, permanence of place of operations, industrial sector, region of residence and operations, and average hours worked by the owner per week), and a measure on whether the business owner have had access to credit from the formal sector for both start-up capital and continuing operations[15].

The proportional hazards model can also be used to estimate the hazard of microenterprise survival stratified by any of the factors related to survival such as, for example, the sector of operations and the source of borrowing. When stratifying by sector of operation or source of borrowing, separate baseline hazards are estimated by partial likelihood estimation (Kiefer, 1988, Greene, 1997).

## RESULTS

Table 3 presents the definitions of the explanatory variables and the results of the Cox proportional hazards model for the expected firm life of microenterprises. The sample consists of 5,818 owners of microenterprises from the ENAMIN dataset. The analysis begins with the overall test of the hypothesis that all parameters are zero. The Cox proportional hazard model fits the data well, as can be deduced from a Chi-square statistic of 36.401. This suggests that the null hypothesis of a zero vector of coefficients can be rejected at the five percent level of significance.

The estimation method used in the Cox regression procedure depends on maximizing the partial likelihood function, and comparing changes in the values of the log likelihood functions (restricted and unrestricted) is the basis for the Chi-square test.

The explanatory variables are grouped into five categories: the characteristics of the microenterprise owner, characteristics of the microenterprise, sector of operation, location of residence/operation, and the microenterprise dynamics. The years of schooling, the age of the owner, the gender variable, and the mode of entry into self-employment variable (involuntary) are all statistically significant at the one percent level. The more years of schooling the owner has the more likely it is that the firm life is extended. Similarly, female entrepreneurs are more likely to have extended firm lives compared to the male entrepreneurs, ceteris paribus.

The owners who indicated that they started the business because of the lack of other opportunities for earning money or because they were dismissed from their salaried jobs are also more likely to survive longer in the current business compared to those entrepreneurs who entered self-employment for any other reason. Surprisingly, the older the owner is the less likely his or her business is to survive. One could assume that older entrepreneurs have the experience and "wisdom" to weather the storms in the business world compared to more novice business owners. Moreover, relatively older business owners may have the connections and business contacts necessary to succeed. However, it is possible that the age variable could also be capturing differences in age cohorts across the lifecycle. That is, younger cohorts may be more likely to survive in the business world than older cohorts, and thus, this can lead to a negative coefficient in the age variable that might not be necessarily related to the impact of age on firm survival but instead might be capturing cohort-specific relative success.

The coefficient for business capital and equipment is positive and statistically significant, but the coefficient for the number of paid employees is negative and significant. The fewer paid employees the firm has the greater the predicted firm life. This finding is similar to the findings of Liargovas (1998), Lyberaki and Pesmazoglou (1994) and others who have found that one of the key competitiveness factors of the European small and medium size enterprises is their small size and high capital/labor ratio. Smaller firms tend to be more flexible and responsive to changes in the market place and, therefore, can be expected to compete more efficiently and survive in a risky business environment.

Firms operating in the commerce sector of operation are more likely to survive compared to firms (everything else being equal) in other sectors of operation. The geographic location of the firm is not found to be statistically significant factor in predicting the firm life of a microenterprise.

Three of the dynamism variables are statistically significant. Owners indicating plans to stay in the selected sector of operation are less likely to survive compared to the rest of the owners. Similarly, owners indicating that they have plans to expand are more likely to expect a shorter survival span than a long survival span. Both of these findings could be a reflection of structural problems in the Mexican markets rather being indicative of the owners' entrepreneurial abilities (Maloney & Cunnigham, 1998).

The coefficient for the need for outside start-up financing variable is statistically significant at one percent level. The results of the Cox proportional hazard model negatively link the length of the expected firm life and the need for the outside start-up capital. This important finding implies that increasing the availability and participation of the formal and informal lenders in the creation of microenterprises in Mexico may not be as effective as "advertised" in the long run. It further implies, that increasing the availability of financial start-up capital services, without structural changes (improvements) in the capital markets, stability of the political environment supported by a cohesive monetary operation of the Mexican central bank, may have a negligent effect in the long run in promoting longevity of the Mexican microenterprises. The result of a negative coefficient may also arise due to unmeasured ability

differences between those who reported the need for out side financing, as well as to sorting effects.

| Table 3: Cox Proportional Hazard Model: Firm Life | | | |
|---|---|---|---|
| Variable | | Coefficient | Std Error |
| Characteristics of the owner | | | |
| | Weekly hours worked by the owner | -0.001 | 0.001 |
| | Years of schooling | 0.013*** | 0.003 |
| | Age | -0.036*** | 0.006 |
| | Age squared/100 | 0.006 | 0.006 |
| | Married (1 = yes) | 0.050 | 0.031 |
| | Female (1 = yes) | 0.285*** | 0.036 |
| | Migrant (1 = yes) | 0.078 | 0.085 |
| | Years since migration | 0.000 | 0.005 |
| | Years since migration squared/100 | -0.001 | 0.005 |
| | Involuntary entry into self-employment (1= yes) | 0.180*** | 0.037 |
| Characteristics of the microenterprise | | | |
| | Capital/equipment (in Pesos) | 0.000*** | 0.000 |
| | Labor (number of employees) | -0.022* | 0.012 |
| Sector of operation | | | |
| | Commerce (1 = yes) | 0.219*** | 0.038 |
| | Service (1 = yes) | 0.030 | 0.037 |
| Location of residence/operation | | | |
| | Center (1 = yes) | 0.059 | 0.045 |
| | South (1 = yes) | 0.008 | 0.067 |
| | North (1 = yes) | -0.068 | 0.062 |
| | Border (1 = yes) | 0.003 | 0.045 |
| Microenterprise dynamics | | | |
| | Permanence in the sector (1 =yes) | -0.070** | 0.031 |
| | Plans to expand (1 = yes) | -0.294*** | 0.033 |
| | Sells directly to public (1 = yes) | -0.061 | 0.044 |
| | Compliance with tax authorities (1 = yes) | -0.009 | 0.034 |
| | Needed start-up financing (1 = yes) | -0.174*** | 0.028 |
| N | | 5,818 | |
| Chi-squared (df = 23) | | 36.401** | |
| * / ** / *** significant at the .10%, .05% and .01% levels, respectively | | | |

Figure 1 explains further how firms survive over time. The x-axis is indicative of the survival ratio and the y-axis shows the expected the length of survival for each firm. These were estimated at the means of the regressors. The results show that after one year of expected life

term the business has approximately 91 percent likelihood of surviving for another year. Similarly, after five years of expected operation the likelihood probability is roughly 54 percent. This finding is consistent with the theoretical models and empirical results of earlier studies (see, Evans & Leighton, 1989) which find that the exit from self-employment depends on the length of time in business. The longer one is in business, the higher the chance that one remains in business.

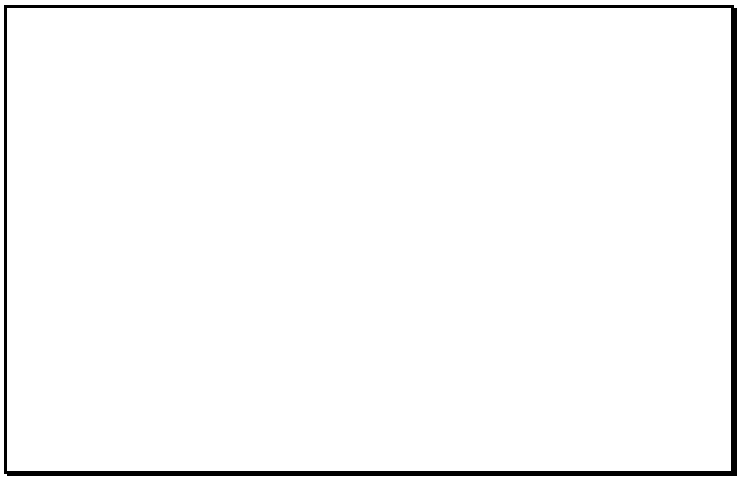
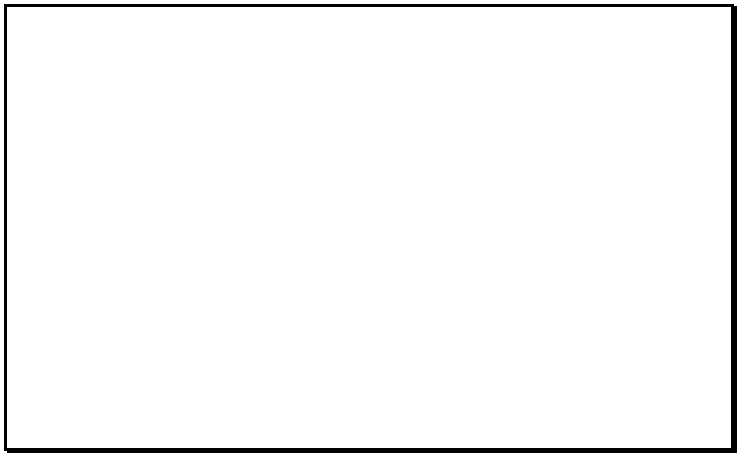


Figure 2 plots the estimated integrated hazard function for firm life. The hazard rate is the rate at which spells are completed after a given duration time, assuming that the firm has lasted until that year. Evans and Leighton (1989) found that the hazard rate decreased to zero after only eleven years in self-employment, the ENAMIN data suggests that the hazard rate will drop to zero after the 53rd year in self-employment.



The figure shows the integrated hazard function of the microenterprise. The integrated hazard rate is increased with the increase in the duration in self-employment. The figure and results once again fortify the findings discussed earlier in this section. In summary, the research question that the economic and financial characteristics of a microenterprise help to predict the survival rate (hazard rate) of the life term of the microenterprise is advanced.

## CONCLUDING REMARKS AND POLICY IMPLICATIONS

The main purpose of this research paper is to analyze empirically the factors associated with the success or failure of microenterprises in Mexico and to identify and formulate policy mechanism and investment strategies related to microenterprises that government agencies and private sector entities can pursue to increase the survival rate of Mexican microenterprises. The idea is that theses policy recommendations lead to economic stability and growth.

The largest percentage (66.8) of the individuals entering into self-employment through the creation of a microenterprise used personal savings to do so. From the remaining 33.2 percent of the individuals entering into self-employment in Mexico, roughly five percent obtained the start-up capital from the formal credit market and the rest relied on loans from the informal credit markets (Heino, 2000).

The fact that there is a positive relationship between the probability of starting a microenterprise and needing to largely finance it using personal savings implies that liquidity constraints hinder the creation of microenterprises in Mexico. The results indicate furthermore, that only small number of the owners starting up a microenterprise were able to rely on the formal sector institutions to provide them the start-up loan implies that liquidity constraints hinder many individuals from creating a business. The results indicate that the use of outside start-up financing (largely from informal sector) negatively link the expected firm life and the need to use the outside start-up capital. This important finding implies that increasing the availability and participation of the formal and informal lenders in the creation of microenterprises in Mexico is maybe not as effective in the long run unless there are changes in the capital markets supported by a cohesive monetary policy of the Mexican central bank. Policymakers in less developed countries seem to use two basic policy measures toward fueling the creation of microenterprises. The two policy tools used are relying on a variation of capital assistance for seed capital programs, guaranty schemes, and direct financial support to Non-governmental Organizations and on fiscal policy tools (e.g., tax incentives, organizing educational seminars, and other entrepreneurial training opportunities) (Heino, 2000). The direct financial assistance approach without the increase in supportive policy actions focusing on incentives and services, structural improvements in the capital markets (to increase the market efficiency), and cooperation between governmental and non-governmental organizations on all levels seems to be the recommended approach. Furthermore, macro level policy measures aimed to increase the competitiveness of the institutions in the informal credit sector in order to provide

the same services as formal credit sector institutions provide, at a more affordable price (interest rates, loan terms and loan maturities) and with greater flexibility would result in a more homogeneous credit environment to all start-up microenterprises. Theoretically, this should increase the expected life term of the firm, which would lead to increased economic benefits to the surrounding communities if and when the cost of start-up capital incrementally approaches the cost of starting a microenterprise with personal savings (the opportunity cost of savings).

The result that individuals find refuge in entering into self-employment (individuals entering involuntarily, and older first time entrepreneurs) is an interesting finding and policy makers could aim some of their action toward securing special incentives toward these groups of individuals. Female owners of the microenterprises are also expected to have a longer survival spell in self-employment than their male counterparts, ceteris paribus. The policy makers should aim efforts to increase the expected survival rates further by training and educational seminars and offering governmental contracts to the groups above.

The recommendations above should, theoretically close the gap that exists between the expected survival rate by the self-employed in the United States and Mexico. To research the reasons for the existence of this roughly 42 year gap (the hazard rate drops to zero in the USA after 11 years of self-employment and it approaches zero in Mexico in 53 years) will provide a further opportunity for advancing our understanding of microenterprises and their owners.

## ENDNOTES

1 More than 20 case studies (as of the end of 1998) of microfinance activity have been published in the 1990s.

2 In Mexico, the population of 12 years old or older is considered as the working age population in spite of the fact that, legally, the minimum working age is 14 years (with restrictions up until 16 years).

3 It is recognized that the aggregate output of microenterprises does not represent 92 percent of the GDP since microenterprises do not represent 100 percent of the industries in the five sectors.

4 The urban areas sampled in the ENAMIN are those included in the National Urban Employment Survey: Ciudad Júarez, Chihuahua, Cd. México, Guadalajara, León, Matamoros, Mérida, Monterrey, Nuevo Laredo, Orizaba, Puebla, San Luis Potosí, Tampico, Tijuana, Torreón and Veracruz. The ENAMIN also includes a supplemental sample of 18 smaller urban areas.

5 Evans and Leighton (1989) used data from the U.S. National Longitudinal Survey of Young Men in their cross-section analysis.

6 Multiple responses possible.

7 The higher rates are due to the fact that in the presence of market imperfections, banks face greater default risks, since small and medium enterprises do not have enough collateral. Therefore, they will be often unable to obtain access to funding, even if the projects bring higher returns than those of large enterprises (see Cressy, 1992).

8 Financial system, financial sector and financial infrastructure are all used interchangeably

9 In a strict form the equity contribution refers to a financial asset. However, other forms of equity can be considered and include pledging a household asset, membership fees, and loan application fees (Ledgerwood, 1998).

10 The belief is that by aiding potential entrepreneurs to start up their own businesses, the lending institution will increase their incomes and consequently reduce their level of poverty (von Pischke, 1991).

11 These include: Acapulco, Aguascalientes, Campeche, Coatzacoalcos, Colima, Cuernavaca, Culiacán, Durango, Hermosillo, Manzanillo, Morelia, Oaxaca, Saltillo, Tepic, Toluca, Tuxla Gutiérrez, Villahermosa and Zacatecas.

12 This list includes all the dependent and independent variables that will be used in the empirical modeling and hypothesis testing.

13 In 1994 3.4 pesos = 1 US$.

14 The commerce sector includes retail and wholesale trade of many different goods (agricultural goods, clothing, household goods, etc.).

15 See Warren (1997) for an application of the proportional hazards model to unemployment duration.

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# THE BOYS IN THE BUBBLE: INTERNET ENTREPRENEURS AND STOCK MARKET VALUE

**William Forbes, Riijk Universiteit Groningen, The Netherlands**


## ABSTRACT

*This paper expands the set of non-financial indictors of internet stock value to include that attributable to the retention of the founding entrepreneur. The failure of traditional financial value metrics to adequately explain the Internet stock boom has already provoked much research on non-financial indicators of firms value. The current paper adds to this trend of seeking "intangible" sources of Internet stocks value, by focussing on the role of the founding entrepreneur.*


## INTRODUCTION

The wild frontiers of the "new economy" are being charted by colourful characters. No business section of a bookstore is complete without a handful of biographies, or autobiographies of E-entrepreneurs painted as saviors or cowboys. Feted by the media during the stock market bubble of late 1999 early 2000 dot-com's are now run to ground, waiting to re-emerge in the sunlight of a new dawn. These individuals served as just one of the players in the tragi-comedy that is now known as the late 90's internet bubble (Cassidy, 2002).

A sudden stream of papers have emerged relating US internet stock prices to traditional measures of value, such as earnings and book value and/or webtraffic data. This literature might be seen as part of a larger literature seeking to capture a company's "intangible" sources of value using non-financial measures (e.g., Amir & Lev, 1996; Ittner & Larcker, 1998; Demers & Lev, 2000; Lev, 2001). One early strand of the literature has focussed upon the use of web-traffic data as a predictor of future revenues. This paper seeks to advance the debate by considering the role of another clear source of intangible value, the presence of a clear leading (often founding) figure within the firm.

But while theories of entrepreneurship abound, reliable evidence is more scant (Bhidé, 2000), particularly in the area of E-entrepreneurs. This paper seeks to improve understanding in this area by examining the effect on firm value of the retention of the founder of the firm. It does so by means of an extension of an existing popular model of Internet stock pricing.

The rest of the paper is organised as follows. In the next section, we discuss why the presence and background of a founding entrepreneur may be important for valuing Internet stocks. In the second section, we present a test framework for establishing whether the presence and background of the founding entrepreneur does add value. A third section discusses the

sample and data used. A fourth section presents the results of the tests. A final section concludes the paper.

## INTERNET STOCK VALUE AND THE FOUNDING ENTREPRENEUR

A brief perusal of coverage of Internet stocks suggests colourful characters are not in short-supply, witness Steve Case at AOL, Jeff Bezos of Amazon.com, Ernst Malmsten and Kaja Leander of Boo.com, (see, Stross, 2000; Wolff, 1998; Swisher, 1999; Malmsten, Portanger & Drazin, 2000) or Martha Lane-Fox of Lastminute.com[1]. In this paper, we ask can such leadership figures add value as well as a little excitement to corporate life for Internet firms.

In addition to anecdotal evidence, the role of the individual entrepreneur has been considered pivotal to economic success by leading academic authorities and has given birth to the "who" area of academic study entitled Entrepreneurship. Even an entirely altruistic leader can serve a function of both ensuring co-operative behaviour and encouraging the belief others will behave co-operatively (Casson, 1991; Casson, 2000).

The intangible nature of an Internet enterprise at the start-up phase can blur the distinction between the founder entrepreneur and the corporate entity itself. Thus Lewis (2000) describes the next foray into the Internet revolution of Jim Clark, founder of Silicon Graphics and Netscape, as follows:

> *"If he was going to create the most valuable company in America it would need a name. He might as well have written 'Jim Clarke Enterprises' for that is what it amounted to. Instead he wrote 'Healthscape'"* (p.90).

The entrepreneurial function requires the production of an atmosphere of personal commitment to the success of the enterprise. To retain the necessary moral leadership required to steer a successful venture a potential leader requires both consistency and clarity in his or her direction of the firm (Casson, 2000, 6). Such requirements will often conflict with one of the principal characteristics of those willing to found new enterprises, that is an unusually high tolerance for ambiguity in the task. The effect of task ambiguity upon financial decision making has already been explored in a wide-variety of financial decisions (Einhorn & Hogarth, 1982). Both technological and financial pressures require quick wits and an ability to weather setbacks as the firm evolves in its initial phase. Hence the successful entrepreneur will need to marshal high degrees of commitment by others (employees, suppliers, customers) to a goal which is often only loosely defined. Inevitably such skills are rare and hence not easily replaced.

Furthermore the departure of the founding Entrepreneur, often in the run up to or shortly after the initial public offering (IPO), can be interpreted as sending a negative signal about the true value of the underlying firm (Myers & Majluf, 1984). While institutional investors often seek a "heavyweight" to Chair the post IPO firm, some value of the founders charisma is likely to remain.

Whatever the role of the entrepreneur in the average startup, we might regard his/her presence to be particularly central to the success of an Internet start up. This is because of the need to have a physical embodiment of the largely intangible assets that constitute the firm (in the form of brands, organisational and intellectual capital). A strong entrepreneur can help to mitigate some of the costs faced by firms with largely intangible assets (Lev, 2001). We focus upon one such cost in the empirical section of this paper when we focus on the cost of capital of Internet stocks.

**Entrepreneurship and Internet Stock Value: Two Illustrations**

In order to illustrate the centrality of entrepreneurial talent to the success of internet ventures, we take two examples: one of long-term success, Steve Case of AOL; the other a dramatic, if not heroic, failure in the persons of Ernst Malmsten and Kajsa Leander of Boo.com. While this discussion relies on vivid business bookshop bestsellers (Swisher, 1999; Malmsten, Portanger & Drazin, 2000, respectively), it may nevertheless serve to fix ideas of what the exact source of the founding entrepreneur's value is.

The moral leadership of the founding entrepreneur in the Internet startup is tested in maintaining coalitions to both fund the business and develop and retain its technological edge. For Case at AOL, the negotiation of licensing arrangements with both Netscape and Microsoft in March 1996, saw loyalties tested to the breaking point. Similarly, Malmsten/Leander continually managed tensions between the requirements of Merchant bank, JP Morgan and alternative sources of finance, such as Bernard Arnault of LMVH. Further Malmsten/Leander had to negotiate a conflict with their chosen third collaborator and founder, Patrik Hedelin, whose merchant banking background was at odds with their own.

Strangely perhaps neither group of founders has a strong background as computing experts, Case being a marketing manager and Malmsten/Leander starting out in Arts management. This fact serves to underline the strong sense of brand and corporate culture than characterised both AOL and Boo in common with many other Internet start-ups. The respective founders personified that brand by their presence at the helm of the firm.

## DATA

Any study of Internet stocks faces the problem that while many companies have very active web-sites, only a minority can in any real sense be described as "Internet" firms. Hence this paper focuses upon a minority of "pure-play" internet firms. In the United States, we are fortunate to have a commercially accepted definition of what such a "pure-play" firm is. The stocks in this index, ISDEX$^{TM}$, is an acronym for The Internet Stock Index$^{TM}$, a listing of 50 stocks that represent the gamut of publicly-traded Internet companies. It has existed since April 1996, which serves as good a date as any from which to chronicle the Internet "bubble"[2]. Internet.com Corporation believes the ISDEX$^{TM}$ best represents the Internet investment barometer and it is one of the first pure Internet indexes. ISDEX$^{TM}$ is quoted on a regular basis

in leading financial and media including *The Wall Street Journal, Reuters, Dow Jones Newswire, CNBC, SmartMoney* magazine and others. More importantly for the current purpose, the ISDEX™ index has been widely used in previous studies on internet stock valuation. These studies form the underpinning of the empirical methods used in the research presented here.

In defining a "pure-play" internet stock, internet.com relies on generally accepted industry definitions of companies identified through its own and third-party news reporting and company reporting to establish the nature of the companies and their classification. This was necessary because a standard SIC code or other classification system has not been created that properly identifies or is up to date with the burgeoning Internet industry and its diversity. There exists no governmental or other "official" agency that has classified the various sectors of the Internet industry. In addition, the composition and structure of ISDEX™ have met with broad industry acceptance through the licensing of the ISDEX™ on Yahoo Finance, Upside.com and Upside :magazine as well as international licensees.

Internet.com allocates firms to the index using a criteria requiring more than 51% of revenues to be generated from web-related activities. This test was established to distinguish companies which would or would not exist without the Internet. ISDEX™ seeks to provide investors with a representative index of Internet companies that exist because of the Internet. This simple majority test separates "pure play" Internet companies from others who may have Internet products but which would exist (and do exist) without the Internet generating a majority of revenue. Internet.com relies primarily on the 51% test to determine if a company should be listed on ISDEX™. There are no minimum market capitalization, trading volume or shares outstanding qualifications.

The second and third criteria used by Internet.com are market-share leadership (measured by revenues) and whether the company represents the Internet diversity according to our seven subsections of Internet industry enterprises. ISDEX™ is reviewed quarterly on a regular basis to add or delete stocks that best represent the Internet diversity for investors. If a new category debuts intra-quarterly, that stock may be added to ISDEX™ immediately upon IPO or soon after.

Internet.com, using its own and third party data, has determined that 89 stocks in February 1999 met the 51% revenue criteria to be classified as "pure-play" internet stocks. The market capitalization of those 89 stocks on February 12, 1999 was 400 billion U.S. dollars. The market capitalization of the 50 stocks in ISDEX™ was 380 billion dollars on February 12, 1999. Therefore, ISDEX™ represents 95% of the capitalization of the Internet stock universe on that day and well over 90% on an ongoing basis.

What are the seven sub-sectors internet.com classifies? Internet.com's definition of the seven sub-sectors of the Internet industry results in its ongoing knowledge, expertise and leadership as the primary dedicated provider of news and information about the Internet industry to the public.

Internet.com recognizes sub-sectors in the Internet as:

| | |
|---|---|
| 1. | e-tailers and e-commerce - buying, selling of goods and services using the Internet, |
| 2. | software - software that enables companies and individuals to connect, create and control their access to |

| | |
|---|---|
| | and appearance on the Internet; |
| 3. | enablers - create, supply or invest in technologies or services that allow other firms to operate Web sites, services or businesses; |
| 4. | security - software and services that protect Web sites and users from fraud, theft, unauthorized access; |
| 5. | content and portals -information, data and editorial product, |
| 6. | high speed and infrastructure - cable Internet, DSL and other next generation Internet infrastructure and services; and |
| 7. | ISPs and access -Internet service providers and firms providing access to and from the Internet. |

Details of the sector to which each of the sample companies are allocated is given, together with the name of the funding entrepreneur, in Tables 1-3 wherever this information is available.

The ISDEX$^{TM}$ is a modified capitalisation-weighted index. The ISDEX$^{TM}$ restricts the weighting of the largest component stocks to no more than 3.5% of the total capitalization of all 50 index stocks. At the end of each calendar quarter, all "large stocks" within the ISDEX$^{TM}$ are reviewed and reweighted (up or down) to 3.5% of the total capitalization of all stocks within the ISDEX$^{TM}$. The selection of stocks included in the present study was effective as of the close of trade March 6, 2002.

## TEST METHOD

In order to test the hypothesis that the success of a E-business venture hinges on the role of a central entrepreneurial figure, we introduce a role for the entrepreneur into two existing models of the value of E-business ventures. The first draws on a recent, but fast-growing, literature seeking to value internet stocks relative to accounting fundamentals. The second seeks to devise a trading strategy based on selling the stocks of Internet companies whose founder leaves the firm and using the proceeds to purchase Internet stocks where the founder remains in place.

### Entrepreneurship, Price and Accounting Fundamentals

The framework used to relate economic fundamentals to firm value is an amended form of the Ohlson (1995) framework employed in a number of previous papers in the area (e.g., Trueman, Wang & Zhang, 2000b; Trueman, Wang & Zhang, 2000a)[3]. In Ohlson or Ohlson/Feltham (1995), framework price (P) is a function of book value (BV) and a weighted average of earnings relative to a capital charge.

$$P_t = BV_t + E(RE_{t+i}) / (1+r)^i \qquad (1)$$

where E(RE) is expected residual earnings or earnings minus a capital charge, r is the required rate of return on equity capital, and i is the investor's investment horizon. This leads to the estimated form:

$$P = \alpha_o + \alpha_1 BV + \alpha_2 NI + \varepsilon \qquad (2)$$

where NI is net income of the firm and ε is an error term.

Previous literature has often focused upon the role of web-traffic in affecting the underlying relation between market value and accounting fundamentals. Here we simply adapt the same framework to examine the impact of the presence and background of the founding entrepreneur of firm value for Internet stocks. To do this we adapt equation(2) above to read:

$$P = \alpha_o + \alpha_1 FOUNDER + \alpha_2 BV + \alpha_3 FOUNDER.BV + \alpha_4 NI + \alpha_5 FOUNDER.BV + \varepsilon \qquad (3)$$

where FOUNDER is a dummy variable set equal to one if the founder is present within the board of directors of the firm and zero otherwise[4].

Under the null hypothesis that the presence of the founder has no effect on firm value $\alpha_1 = \alpha_3 = \alpha_5 = 0$. If the presence of the founding entrepreneur adds value to the Internet stock, for the reasons given above, then $\alpha_1 > 0$, $\alpha_3 > 0$, $\alpha_5 > 0$.

In a series of papers, John Hand (1999/2000/2001) of the University of North Carolina has tried to address the somewhat torturous relationship of Internet stocks to traditional sources of accounting fundamentals (Hand, 1999; Hand, 2000; Hand, 2001). Internet start-ups seem often to be rewarded for losses incurred as a part of "winner-takes-all" strategy. For example, both of our illustrative firms, AOL and Boo.com, regarded building the brand name of the site as a central plank to their business model. Hence, Hand (1999/ 2000/ 2001) suggests that losses and asset write-downs might be positively priced by the market because they are associated with market-dominance and subsequent sustainable profits. So, Hand (1999/2000/2001) suggests a log-linear transformation of the accounting fundamental, earnings or book-value, as follows:

$$f(eps) = \begin{cases} \log(fundamental + 1) & \text{if } fundamental > 0 \\ \log(-fundamental + 1) & \text{if } fundamental < 0 \end{cases}$$

Having performed this transformation on book value and net income, equations (2 & 4) can be re-estimated with the same parameter restrictions applying as before.

**Entrepreneurship and Trading Profits**

The true test of entrepreneurial value nevertheless remains in creating wealth for shareholders in the post IPO firm. For this reason in a final additional test, we examine the difference between the cumulative abnormal returns to purchasing a portfolio of stocks in which

the founder(s) remain in place after the IPO and those the founder has already left, or does so as part of the IPO process itself.

Obviously investing in Internet start-ups is a lot more risky than investing in a typical blue chip stock. Hence, some control for risk seems appropriate in calculating returns. Sadly, the short trading history of the overwhelming majority of our stocks (only five were quoted in the start of our sample period in January 1995) makes procedures based on prior estimates of beta, etc., infeasible. Similarly, the somewhat speculative nature of the Internet stock market makes equivalent-size-decile adjustments seem unattractive. For this reason, we use a simple market-adjusted return metric using the NASDAQ index. So, we define investor return as follows:

$$AR_{jt} = \left(\frac{P_{j,t}}{P_{j,t-1}} - 1\right) - \left(\frac{NASD_t}{NASD_{t-1}} - 1\right) \quad (4)$$

$$CAR_t = \sum_{j=1,..J}^{t=1,..,T} AR_{jt} \quad (5)$$

and the trading profits/losses to a strategy of buying stocks retaining their entrepreneur and selling short those from which the founder departs are calculated as follows:

$$(AR_t^{FOUNDER} - AR_t^{NOFOUNDER}) \quad (6)$$

where a finding of a positive return to this strategy implies retention of the founding entrepreneur does add value to the firm.

## RESULTS

Table l gives some basic information regarding the sample ISDEX$^{TM}$ firms when their founder remains on the company's board and the sector to which www.internet.com allocates the sector. Table 2 gives some summary statistics regarding the price and accounting data used in our test regressions. As can be seen, the sample contained some firms reporting some very large losses, as great as 140 per share in one case. For this reason, we restrain all data values to remain within three standard deviations of their mean values in order to mitigate the impact of bias arising from the presence of outliers in the data set.

**Table 1: Founding entrepreneurs for firms in the ISDEX index**

| Company | Founder | Founder Name | Company type |
|---|---|---|---|
| Amazon.com, Inc. | Yes | Jeff Bezos | E-tailer |

| Table 1: Founding entrepreneurs for firms in the ISDEX index | | | |
|---|---|---|---|
| Company | Founder | Founder Name | Company type |
| Ameritrade Holding Corp. | Yes | Joe Ricketts | Financial services |
| AOL-Time Warner, Inc. | Yes | Steve Case | Search/Portal |
| Ariba, Inc. | No | | E-commerce Enabler |
| Art Technology Group | Yes | Jeet Singh & Joe Chung | E-commerce Enabler |
| Asia Global Crossing | Yes | Gary Winnick | |
| BEA Systems, Inc. | Yes | Alfred Chuang & William Coleman | |
| Broadcom Corporation | Yes | Henry Nicholas & Henry Samueli | |
| BroadVision, Inc | Yes | Pehong Chen | |
| Check Point Software Tech | Yes | Shlomo kramer & Gil Swed | |
| CIENA Corporation | No | | |
| Cisco Systems, Inc. | No | | Speed & bandwidth |
| CMGI Inc. | Yes | David Weatherall | |
| CNET Networks, Inc. | No | | Content & Community |
| Commerce One, Inc. | No | | |
| DoubleClick, Inc. | No | | Advertising |
| E*TRADE Group, Inc. | No | | Financial services |
| EarthLink, Inc. | No | | ISP/Access |
| eBay Inc. | Yes | Pierre Omidyar | E-tailer |
| EMC Corporation | Yes | | |
| Exodus Communications | No | | Internet services |
| Homestore.com Inc | No | | Content & Community |
| Hotel Reservations Netwk. | Yes | David Litman & Robert Diener | E-tailer |
| I2 Technologies, Inc. | Yes | Sanjiv Sidhu & Ken Sharma | |
| InfoSpace, Inc. | Yes | Naveen Jain | Wireless products/services |
| Inktomi Corporation | Yes | Eric Brewer & Paul Gauthier | Speed & bandwidth |
| Internet Security Systems | Yes | Christopher Klaus | Security |
| Intuit, Inc. | Yes | Scott Cook & Tom Proulx | |
| Juniper Network | Yes | Pradheep Sindhu | Speed & bandwidth |
| Liberate Technologies | No | | |

| Table 1: Founding entrepreneurs for firms in the ISDEX index | | | |
|---|---|---|---|
| Company | Founder | Founder Name | Company type |
| Multex.com, Inc. | Yes | Isaak Kareav | |
| Netegrity, Inc. | No | | Security |
| Net2phone Inc | Yes | Howard Jonas | Performance software |
| Openwave Systems Inc. | No | | Wireless products/services |
| Palm, Inc. | No | | Wireless products/services |
| Portal Software Inc. | Yes | John Little | Performance software |
| RealNetworks, Inc. | Yes | Rob Glaser | Content & Community |
| Red Hat, Inc. | Yes | Bob Young & Marc Ewing | |
| Research In Motion Ltd. | Yes | Mike Lazaridis | Wireless products/services |
| RSA Security Inc. | No | | |
| S1 Corporation | Yes | James Mahan | |
| Sapient Corporation | Yes | Jerry Greenburg & Stuart Moore | |
| Sun Microsystems, Inc. | No | | |
| Sycamore Networks | Yes | Gururaj Deshpande, Eric Swanson & Richard Barry | |
| Symantec Corporation | No | | |
| Terra Networks, S.A. | No | | |
| Tibco Software, Inc. | Yes | Vivek Ranadive | |
| Ticketmaster | No | | |
| Ulticom, Inc. | No | | Wireless products/services |
| VeriSign, Inc. | No | | |
| Vignette Corporation | No | | |
| Wireless Facilities, Inc. | Yes | Massih & Massod Tayeba | Wireless products/services |
| Yahoo! Inc. | Yes | David Filo & Jerry Yang | |

Table 3 gives some basic Pearson correlations between price, earnings-pershare and book values. Price negatively correlated with EPS and positively correlated with book-value. Curiously, the inverse correlation between EPS and book value is somewhat greater than the correlation between either variable and price. This gives some credence to the "winner-takes-all" business model of most Internet start-ups which sink large up-front investments to "Get Big Fast" in the words of Jeff Bezos of Amazon.com. Highly valued

Internet firms already have significant assets in place and are busily spending cash to consolidate their market position.

**Table 2: Summary Statistics for Data Used in Regression Tests Where σ Denotes the Sample Standard Deviation of the Variable**

| Variable | Mean | σ | Maximum | Minimum | N |
|---|---|---|---|---|---|
| Price | 18.28 | 18.81 | 0:47 | 121.66 | 216 |
| Earnings Per Share | -93.86 | 66.65 | -140.68 | 75 | 371 |
| Book Value | 2.02 | 1.05 | -0.27 | 4.15 | 371 |

**Table 3: Correlation Matrix for Accounting Fundamentals**

| | Price | EPS | Book Value |
|---|---|---|---|
| Price | 1 | -0.39 | 0.26 |
| EPS | -0.39 | 1 | -0.43 |
| Book Value | 0.26 | -0.43 | 1 |

Table 4 gives the results of the sample regressions and Table 5 gives the results of imposing linear restrictions on the regression parameters. The failure of traditional accounting fundamentals to explain internet stock price values is clear. In the basic specification including earnings and book values, before introducing a dummy for the founding entrepreneur, earnings per-share is negatively signed. This suggests greater losses increase price for internet stocks. This finding suggests a possible role for Hand's (199/2000/2001 ) log-linear re-specification discussed above. Fundamentals explain only 16% of the distribution of stock prices in the sector, leaving much to be explained by market sentiment or "intangible" sources of value.

**Table 4: Regressions of Internet Stock Prices on Accounting Fundamentals Allowing for the Presence of the Founding Entrepreneur**

| Constant | Dummy | EPS | EPS X Dummy | Book Value | Book Value X Dummy | $R^2$ | DW | Heteroscedasticity |
|---|---|---|---|---|---|---|---|---|
| 4.6 | | -0.11 | | 0.81 | | 0.16 | 1.59 | 17.6 |
| (1.61) | | (-4.75) | | (0.55) | | | | |
| 5.02 | -0.52 | -0.11 | | 0.75 | | 0.16 | 1.59 | 17.9 |
| (1.44) | (0.52) | (-4.74) | | (0.50) | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 6.79 | -2.76 | -0.14 | 0.06 | -1.41 | 4.01 | 0.17 | 1.56 | 16.6 |
| (1.09) | (-0.39) | (-4.02) | (1.24) | (-0.56) | (1.25) | | | |

$P = \sigma_0 + + \sigma_1 .FOUNDER + \sigma_2 BV + \sigma_3 .FOUNDER.BV + \sigma_4 NI + \sigma_5 .FOUNDER.BV + \varepsilon$
*FOUNDER = 1 if founder retained on board and zero otherwise*

One such source of intangible value is the skill and charisma of the founding entrepreneur. Introducing a dummy variable to control for the retention of the founding entrepreneur, FOUNDER, in equation(4) is one attempt to capture such intangible value. However, as the coefficients in Table 4 and the F-tests in Table 5 show, there is little evidence that the retention of founding entrepreneurs within the firm adds value. Indeed, these tests suggest that retention of the founding entrepreneur after the IPO may induce statistically insignificant reductions in firm value. The regression equations show all the signs of a poor specification with evidence of mild autocorrelation and far stronger heteroscedasticity. Residual heteroscedasticity makes determining the significance of observed reduction in firm value, associated with the presence of the entrepreneur far more difficult to judge. Some authors scale equations (2 & 4) by market value to reduce heteroscedasticity, this is not done here because doing so induces strong multi-collinearity between scaled earnings-per-share and book value. This collinearity between the book value and net income is already quite clear in the correlation matrix given in Table 3.

**Table 5: Test of Linear Restrictions to Omit Effect of Founding Entrepreneur on the Relationship of Stock Price to Accounting Fundamentals**

| | |
|---|---|
| Test of Dummy and Shift on EPS Slope | 1.06 |
| Test of Dummy and Shift on Book Value Slope | 0.93 |
| Test of Dummy and Shift on EPS & Book Value Slope | 0.71 |

$\alpha_0 = \alpha_3 = \alpha_5 = 0$
$\alpha_0 > 0, \quad \alpha_3 > 0, \quad \alpha_5 > 0$

Tables 6 and 7 present the results of re-estimating (2 & 4) using the log-linear transformation. While the transformation serves to remove the perverse signing on earnings, it does little to improve either the fit or the specification of the regression. Tests of the linear restrictions necessary to remove the effect of the founding entrepreneur on firm value are accepted at even higher levels of confidence than in the original specification. We cannot reject the hypothesis that the founding entrepreneur's retention on the board has no effect on the Internet stock's value.

**Table 6: Log-Linear Regressions of Internet Stock Prices on Accounting Fundamentals Allowing for the**

| Presence of the Founding Entrepreneur | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Constant | Dummy | EPS | EPS X Dummy | Book Value | Book Value X Dummy | $R^2$ | DW | Heteroscedasticity |
| 2.16 | | 3.42 | | 2.62 | | 0.15 | 1.58 | 16.3 |
| (0.68) | | (4.59) | | (0.84) | | | | |
| 2.66 | -0.60 | 3.43 | | 2.47 | | 0.15 | 1.59 | 17.9 |
| (0.70) | (-0.25) | (4.54) | | (0.70) | | | | |
| 4.59 | -2.61 | 4.44 | -2.03 | -2.78 | 9.24 | 0.16 | 1.56 | 15.7 |
| (0.66) | (-0.33) | (3.97) | (-1.34) | (-0.51) | (1.35) | | | |
| $P = \alpha_0 + + \alpha_1 .FOUNDER + \alpha_2 BV + \alpha_3 .FOUNDER.BV + \alpha_4 NI + \alpha_5 .FOUNDER.BV + \varepsilon$<br>*FOUNDER = 1 if founder retained on board and zero otherwise* | | | | | | | | |

| **Table 7: Test of Linear Restrictions to Omit Effect of Founding Entrepreneur on the Relationship of Stock Price to Accounting Fundamentals** | |
|---|---|
| Test of Dummy and Shift on EPS Slope | 1.28 |
| Test of Dummy and Shift on Book Value Slope | 1.13 |
| Test of Dummy and Shift on EPS & Book Value Slope | 0.86 |
| $\alpha_0 = \alpha_3 = \alpha_5 = 0$<br>$\alpha_0 > 0, \quad \alpha_3 > 0, \quad \alpha_5 > 0$ | |

It appears we have little evidence that retaining the entrepreneur has little effectiveness in raising the value of the firm relative to fundamentals. But we already know that the relationship of Internet stock value to accounting fundamentals is tenuous at best and perverse at worst. So we might draw little economic significance from this finding. In order to capture the effect of entrepreneurial talent on stock market value, regardless of accounting fundamentals, a final test compares the cumulative abnormal returns to holding a portfolio of stocks in which the founding entrepreneur remains on the board compared to a portfolio of stocks where the founder has already left. In the three cases in which a founding entrepreneur left the firm after the IPO, we transfer the stock across portfolios at the end of the calendar year. The results of this test is displayed in Figure 1.

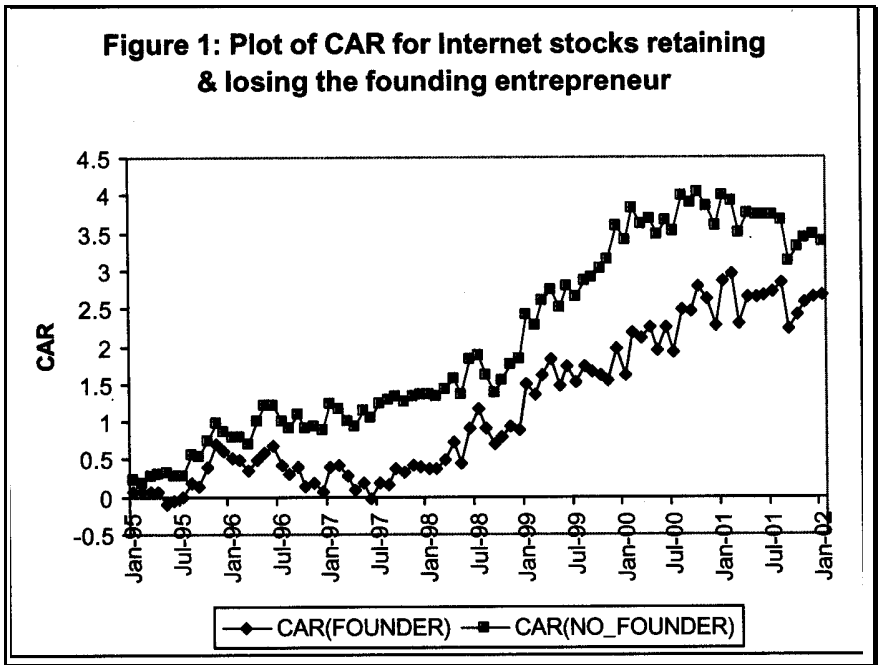
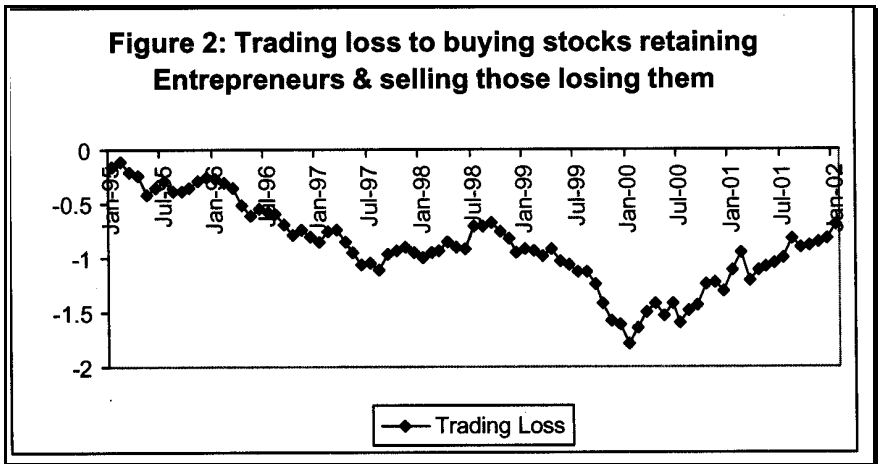



Figure 2 shows the trading losses to a strategy designed to buy stocks in which the founding entrepreneur remains on the board, funding the purchase by selling short Internet stocks in which the founding Entrepreneur has already sold up. In both figures the loss of value associated with the retention of the founding entrepreneur is clear. In statistical tests not reported, it became clear that these losses were not statistically significant. The volatility in Internet stock prices was great within the sample period, and it is not possible to reject the null hypothesis that the retention of the founding entrepreneur on the board of directors has no effect at all on company value.




## CONCLUSION

The stock market value of retaining the founding entrepreneur on the board of directors of Internet firms was investigated for the period 1995-2000. Surprisingly, and somewhat counter-intuitively, in the author's view no evidence of a positive effect and scant evidence of a negative effect of retaining the founding entrepreneur was found. This is puzzling given the clear role of founder in congealing so many elements of the intangible value of the firm. The finding is all the more intriguing given that few entrepreneurs will not sell up if they remain confident regarding the future prospects of the enterprise to which they gave birth.

One possible explanation of the results presented here is that the prevalent "winner-takes all" business model means the fastest growing (most successful?) firms make funding requirements so great that the founder's ownership stake is severely diluted. In this case, success comes at the cost of control of the firm for the founding entrepreneur. To confirm this, we need to know more about the individual business histories of internet firms. The relative youth and turbulent nature of the sector means that such history remains as yet largely unwritten.

## AUTHOR'S NOTE

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## ENDNOTES

1 Indeed the whole history of computing is strewn with strong characters, often having to bear much skepticism and derision on their path to glory (Slater,1989).

2 Cassidy (2002) distinguishes between the earlier boom and the final rush to the cliff, which he regards as having begun in early 1998.

3 Penman (2001) gives a straightforward textbook introduction to the model.

4 Note the founder need not be Chairman or CEO. In fact, pressure from merchant banks and other investors often results in the recruitment of more experienced managers to replace the enthusiasm of the founding entrepreneur.

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