

The Role of Entrepreneurship in the Future Economic Development of Taiwan

Abstract:

Historically, entrepreneurship played a central role in the economic development of Taiwan. Therefore small and medium sized enterprises are considered the backbone of the Taiwanese economy. The purpose of this study is to define and elaborate the role of small and medium sized enterprises (SMEs) in terms of non-technical innovation of SMEs, human resource productivity of SMEs and government policies regarding SMEs in the future economic development of Taiwan. The additional objective is to analyze the SMEs role in terms of its social and economic impact and finally to produce conclusive statements based on the final observations. This research is based on transaction cost theory and it was conducted in Bangkok, Thailand. The research is qualitative with an inductive approach in nature. Final findings are based on the five observations; the first three observations show that there is a definite relationship between non-technical innovation, human resource productivity and government policies regarding SMEs with the future economic development of Taiwan and the remaining mentioned that the annual sales share of SMEs in Taiwan is only 30% in 2012 and export sales share is only 17.74% but on the social front, SMEs accommodate more than 79% of workforce in Taiwan. These observations are combined to produce final statement of this research.

Keyword: Entrepreneurship, economic development, non-technical innovation, human resource productivity, government policies regarding SMEs

Introduction

This study explains the real roles of non-technical innovation, human resource productivity and government policies with respect to small and medium enterprises (SMEs) and their relationship with the future economic development of Taiwan. It also elaborates the role of human resources and how government policies facilitate the economic development of Taiwan. Taiwan ranks as one of the innovation-driven economies in East Asia and that innovation is produced mostly by SMEs in Taiwan. So this study will anticipate the future effects of entrepreneurship on the economic development of Taiwan in terms of its innovation capacity and capability, productivity and government policies. This study has an important role to play in the formulation of government policies and decision making at the organizational level because SMEs are considered to be a backbone of the Taiwanese economy so their future role could be a decisive factor for the continued economic development of Taiwan.

The successful development of Taiwanese small and medium-sized enterprises (SMEs) has become the most important part of Taiwan's economic legend. Taiwan experienced spectacular development with rapid growth as well as an ongoing transformation from a traditional agricultural-oriented to a modern industrial and service-oriented economy (Veselka, 2005).

The intention of this study is to explore the relationship between the characteristics of entrepreneurship with the future economic development of Taiwan. The word “entrepreneurship” literally means “to take or carry between” in the sense of economic transaction (Goldsmith, 2008). Ahmad and G. Seymour (2008) argued that entrepreneurship is a phenomenon of entrepreneurial activity. Economic development usually refers to the adoption of new technology, skills and business processes in order to improve production facilitates and move from one economic stage into another that produces an important effect on the life of people in that country (Lima, 2008). According to economics, there are three main economic development stages, namely; factors-driven economy, efficiency-driven economy and innovation-driven economy (Global Competitiveness report, 2013). According to the *global competitive index report-2012-2013*, Taiwan is ranked as an innovation-driven economy because of the fact that Taiwan has high educational standards and the adaptation rate of new technology and sophisticated business processes are also appreciable. Taiwan attained 13th position in the index, showing Taiwanese intellectual capability and capacity for innovation and adaptation of new technology (Global Competitiveness report 2013). The main pillar of Taiwan’s economy was the production capacity of small and medium sized enterprises (SMEs) that played a vital role in the economic success of Taiwan in the past (Sanyang and Huang, 2013, p1). The journey of SMEs in Taiwan started after the Second World War when each country started to place more value and importance on venture capital (Kenney, Han and Tanaka, 2002, p11). The global arena was created and globalization became fundamental to each and every economy (Wu & Huang, 2003, pp5&6). At that crucial time period, Taiwan produced “black hand bosses” who were supposed to be the key players in the Taiwanese economy (Wu & Huang, 2000, p. 1). Black Hand bosses were those people who had skills, practical experience and enough social networking skills to start their own business. Surprisingly, the wives of those bosses also played a crucial role in the success of the Black Hand bosses (Wu & Huang, 2003, p. 1).

The development of Taiwan’s economy can be characterized by structural change in favor of more capital- and technology-intensive industries as well as the continued upgrading of the economy in general and these industries in particular (Veselka, 2005). Taiwan has been an economic success since 1992; Taiwan’s GDP growth has averaged 4.5 percent. This raised real per capita income from \$9,116 in 1992 to \$19,762 in 2012, with the result that today Taiwan is the 28th wealthiest country globally, and 6th richest country in Asia. In addition, along the way Taiwan has transformed itself from a dictatorship into a vibrant democracy (Rigger, 2011, p. 59). Fuelling this growth in Taiwan has been a rapid expansion in international trade. In 1992, Taiwan’s total trade was over \$180 billion and represented 82 percent of GDP. In 2012, Taiwan’s trade represented 140 percent of GDP and was valued at over \$650 billion, making it the world’s 19th largest trader even though it is only the 28th largest economy in the world (Meltzer, 2014).

The Taiwan economic success is obviously related to the effective and efficient institutionalization that has been inherited by the Taiwanese government and it played a crucial role in economic development of Taiwan (Ranis, 2008). “What gets measured gets managed” is

an axiom in the business world (Mc Canna, Colby, Easter, Kasterined & Kuperan, 2005). This is perfectly followed by Taiwanese entrepreneurs through reducing their transaction costs of information sharing, contract implementation and uncertainty cost, as argued by Williamson (1985) and Coase (1937) who empirically demonstrated that transaction cost minimization can help explain industry structure and decision-making by economic agents in the context of market transactions (Globerman & Schwindt, 1986; Pittman, 1991; Leffler & Rucker, 1991; Lyons, 1994; Moss et al., 2001).

Taiwan's emergence as a newly industrialized nation is not just a miracle but it is evidence of how socio-economic bondage and thinking can change the fate of the country which is also illustrated by the researcher through this research. This is argued with the statement: "Better to be the head of a chicken than the tail of an ox" which describes this feature of Taiwan's ideology, especially in the business field. Such thinking drives machinists or apprentices to create their own businesses and become "black hands" bosses. These individuals, instead of learning from school, learned their skills through apprenticeship within factories. They learn by doing. Combining skills and experience, "black hands" set up their own businesses and create opportunities for success (Wu & Huang, 2003). Taiwan is not accepted as a sovereign state by the international community and it somehow hinders economic growth and development of Taiwan as argued by Riegl (2014) who claims that lack of international recognition and international isolation prevents unrecognized states from joining the ranks of sovereign states, as the world's most exclusive political club, and thus cannot enjoy all the benefits of political and economic globalization. An unrecognized state is defined by Pegg (1998) as 'places that don't exist' in international relations.

This study will cover three elements of entrepreneurship, namely; non-technical innovation, government policies regarding SMEs and human resource productivity, and it will define their contribution to the future economic development of Taiwan. This study has limitations in terms of data usage, financial resources and the researcher's exclusive dependence only on secondary data regarding the subject at hand. The objectives of this research are to find out the relationships between non-technical innovation, human resource productivity and government policies with regards to SMEs and the future economic development of Taiwan. Another possible objective is to find out the social impact of SMEs as well as their economic impacts and then to make a final conclusive statement.

Ronald Coase, Theory of the Firm (1937):

This study has used transaction cost theory which is also called "Theory of the Firm" by Ronald Coase (1937) in order to elaborate the role of entrepreneurship in the future economic development of Taiwan. This theory mainly claims that firms exist not because of carrying out the functions of production, marketing and distribution of goods and services on a large scale but that firms exist because of the internal transaction costs of carrying those operations are less than the outside world where this is defined by Coase (1937) as "It began to be seen that there was something more important than the relations inside each factory or unit captured by an

undertaker; there were the relations of the undertaker with the rest of the economic world outside his immediate sphere. The undertaker busies himself with the division of labour inside each firm and he plans and organizes consciously,” but “he is related to the much larger economic specialization, of which he himself is merely one specialized unit. Here, he plays his part as a single cell in a larger organism, mainly unconscious of the wider role he fills.”(Coase, 1937, p. 20). It is convenient if, in searching for a definition of a firm, the economic system as it is normally treated by the economist is taken for granted. “The normal economic system works itself and for its current operation it is under no central control, it needs no central survey. Over the whole range of human activity and human need, supply is adjusted to demand, and production to consumption, by a process that is automatic, elastic and responsive.” An economist thinks of the economic system as being coordinated by the price mechanism and society becomes not an organization but an organism (Coase, 1937, p. 2).

According to Coase (1937), the firm exists because it is profitable to organize certain specialized operations through entrepreneurial efforts based on a transaction cost mechanism. He further explains that it is the cost that defines what the firm will produce or what can't be produced based on its internal specialization that can reduce the costs of one commodity as compared to another. He also explains that “The entrepreneur has to carry out his function at less cost, taking into account the fact that he may get factors of production at a lower price than the market transactions which he supersedes, because it is always possible to revert to the open market if he fails to do this” (Coase, 1937).

The main points of why firms exist are defined by Coase (1937) as follows:

1. The less the costs of organizing and the slower these costs rise with an increase in the transactions organized;
2. The less likely the entrepreneur is to make mistakes and the smaller the increase in mistakes with an increase in the transactions organized;
3. The greater the lowering (or the less the rise) in the supply price of factors of production to firms of larger size.

The aim of this study is find out how the SMEs used this transaction cost mechanism in order to be effective and efficient at the same time and how non-technical innovation, human resource productivity and government policies facilitate SMEs in reducing their transaction cost and play their role for the economic development of Taiwan.

Statement of Problem:

This study is intended to explore factors that contribute to entrepreneurial activities and the relationship between those factors and the future economic development of Taiwan. The study is carried out based on evidence from the past when SMEs played a central role in the economic development of Taiwan. Therefore; this study will explore SMSs role in future economic development. It is essential to discuss the definition of entrepreneurship in order to explain the problem more deeply.

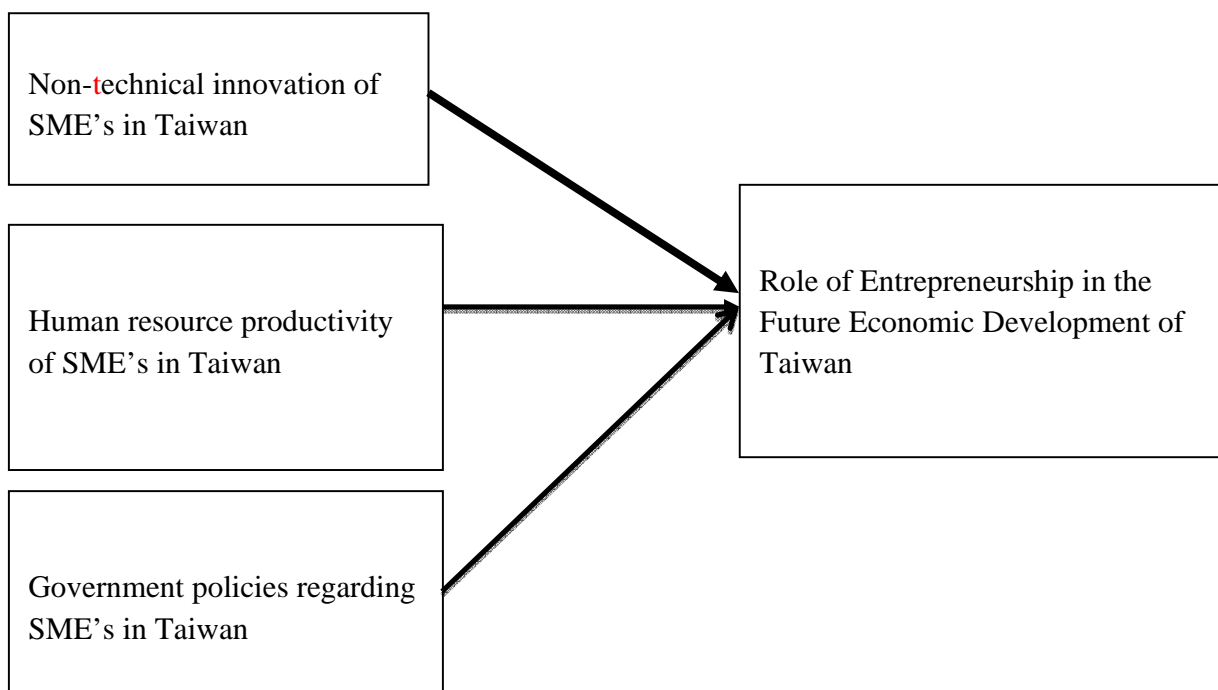
Facts about Entrepreneurship (Wu and Huang, 2003)

1. Entrepreneurship needs adequate knowledge and skills to operate in the business cycle.
2. Entrepreneurship must produce innovation and add value rather than focusing on price alone.
3. Entrepreneurship should have enough resources to survive the initial stage of business.
4. Entrepreneurship needs creative and innovative human resources to make a difference.

This study will show the relationship between entrepreneurship and future economic development of Taiwan and how entrepreneurship can impact the economic development of Taiwan in the future.

Conceptual Framework:

Miles and Huberman (1994) defined a conceptual framework as a visual or written product, one that “explains, either graphically or in narrative form, the main things to be studied – the key factors, concepts, or variables – and the presumed relationships among them” (p. 18). The conceptual model of this study has followed the theory of the firm (1937) as its basis in order to explain the relationship between factors of entrepreneurship and future economic development of Taiwan. Then the researcher developed the following model and chosen three independent variables in order to define entrepreneurship.



Economic development is mostly characterized by increasing gross domestic product GDP in nations and GDP per capita (Rautakivi, 2012). It also means the distribution of income (Coleman & Nixon, 1985). Economic development ideally refers to the sustained, concerted actions of communities and policymakers that improve the standard of living and economic health of a specific locality (OECD Report, 2008). The terms “economic development” and “economic

growth” are often used interchangeably but in fact there is a very big difference between the two. Economic growth can be viewed as a sub category of economic development (Strange & Bayley, 2008). When social mobilization increases expectations and ambitions, economic development increases the capacity of society to satisfy their ambitions and therefore should tend to reduce social frustrations and any resulting political instability (Huntington, 1968). Economic development can also be referred to as the quantitative and qualitative changes in an existing economy (Todaro & Smith, 2011). Economic development involves development of human capital, increasing the literacy ratio, improving important infrastructure, improvement of health and safety and other areas that aim at increasing the general welfare of the citizens (Todaro & Smith, 2011).

Taiwan started its journey of economic development after the Second World War in the 1940s. The government of Taiwan had focused at that time on the agricultural sector, making it efficient and producing infrastructural development to promote industrialization in the country (Verma, 2013). According to Ranis (2008), Taiwan's colonial heritage undoubtedly made an important contribution to subsequent economic growth. The Japanese colonial administration – if for its own selfish reasons, such as its need for sugar and rice – expended substantial resources and attention on Taiwan's rural sector, in the form of roads, drainage, irrigation and power construction projects.

A critically important, often neglected, part of the success story was the early mobilization of Taiwan's agricultural sector, which provided the required domestic savings and became the first focus of Taiwan's export orientation (Ranis, 2008). Policies played a very important part in this outcome, building on the system's favorable initial conditions by converting farmers' associations (the origins of which can be found in the period of Japanese colonialism) into bottom-up institutions that undertook local infrastructural decisions, created cooperative banking networks, and helped diffuse both agricultural and food processing-related non-agricultural technology (Ranis, 2008). Economic development today involves far more than just traditional manufacturing industry; the key drivers of growth for Taiwan in the future will be the innovation economy and environmental protection-related demand. The last few years have seen a pronounced trend towards the formation of multilateral and bilateral free trade agreements (FTAs) and comprehensive economic partnership agreements (CEPAs) within the Asia region (White Paper on SMEs, 2008).

During the Asian financial crisis in the late 1990s, Taiwan's SMEs won international acclaim for the way in which they stood up to the impact of the crisis (Ministry of Economic Affairs, SME Management, Taiwan). The current understanding of economic growth is largely based on the neoclassical growth model developed by Robert Solow (1956). In the Solow model, capital accumulation is a major factor contributing to economic growth. Taiwanese economic growth models from the 1970's are chosen based on the previous and current sovereignty status as argued by Achjian (2014) that, starting from the 1970's, Taiwan's main objective was to expel the China-enforced international isolation; thus, Taiwanese economic strategies were made to

serve its foreign policies by approaching partners who could potentially convert economic compliance into diplomatic relations.

Non-Technical Innovation:

Entrepreneurship can contribute in important ways to economic development. One way it does this is through innovation, which involves the development of new products, new processes, new sources of supply, but also the exploitation of new markets and the development of new ways to organize business (Szirmai, Naudé, & Goedhuys, 2011). Non-technical innovation is an integral part of the innovation process and it supports and complements technical innovation (Armbruster, Bikfalvi, Kinkel, Lay, 2008). Technological innovation is usually seen as encompassing product and process innovation. However, the distinction between product and process innovation, frequently used in manufacturing, is less clear-cut, or even meaningless, in services (Gallouj and Weinstein, 1997; Evangelista, 2000), even though non-technical innovation is considered to be innovation in business processes (mainly organizational innovation and marketing innovation). This is also mentioned by the Oslo manual (2005 Edition): “This non-technological character is reflected in the definition of the two new types of innovation introduced to the definition of innovation in the third (i.e.2005) edition of the Oslo Manual. They are defined as follows: “A marketing innovation is the implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing.” (OECD, 2005: p. 172).

An organizational innovation is the implementation of a new organizational method in the firm’s business practices, workplace organization or external relations.” (OECD 2005: p. 180). According to Schumpeter (1939) innovation can be considered to be a complex phenomenon including technical (e.g. new products, new production machinery) and non-technical aspects (e.g., new markets, production methods, and new forms of organization). The technological and non-technological aspects of innovation are both of importance in constituting an innovative firm (Chandler, 1962; Nelson, 1991). It is essential to consider non-technical innovation factors in order to implement technical innovation effectively and efficiently as argued by two scholars: “Among innovative firms, process innovation and organizational changes are the most significant innovating strategies” (O’Sullivan & Doodley, 2009). If not accompanied by organizational change, the effort to implement technological innovation will meet only restricted success and vice versa, as they are interdependent (Freeman, 1995). Therefore, it is considered important in this research to reveal the linkage of non-technical factors contributing to the economic development of Taiwan.

The researcher of this study has chosen the non-technical innovation aspect to define its relationship with the economic development of Taiwan because of the following statement made by Pereira & Romero (2013): “Innovation can be considered to be a complex phenomenon including technical and non-technical aspects. A remarkable increase in the interdisciplinary attention devoted to innovation has been noticed over the recent decades but the formal

technological and economic aspects of innovation have received much more attention and have been taken into account in a far greater number of analyses, despite the great importance of the non-technological dimension of innovation". According to other scholars, "Technological and non-technological aspects of innovation are both of importance in constituting an innovative firm" (Chandler, 1962; Nelson, 1991).

Most of the time, the tendency is for innovation to be reduced to the area of technology and scientific paradigms but non-technical innovation plays a very important, crucial and decisive role in technological innovation growth and development (Freeman, 1982). This is confirmed by the statement "Nowadays, it seems insufficient to see innovation only through the lens of new product development and process innovation or traditional R & D. Recent literature on innovation highlights the iterative character of innovation processes where non-technological activities play a crucial role, stressing that non-technological factors are a requirement for getting the most of firms' capacity for technological innovation" (Sawhney *et al.*, p. 2, 2006).

Human Resource Productivity

This research includes human resource productivity of SMEs as an element of the economic development of Taiwan because the researcher's concept is also reinforced by Mallick (2013) who states that human resource productivity has a close relationship with economic growth and is a determinant of economic stability. The entrepreneurship of human resources has contributed immensely to the economic development of Taiwan as argued by Wu and Huang (2003), claiming that the key players are the many Taiwanese businessmen, sometimes called "black-hand bosses," who were once machinists and apprentices but eventually became successful employers. They embody the dreams and stories of blue-collar workers who may be undereducated and short of capital but can gain fortune through hard work in untidy and uncomfortable factories (Wu & Huang, 2003). The spirit of entrepreneurship among skilled employees has led to the establishment of millions of SMEs that fulfill this dream. It is important to define the term "human resource" and "productivity" and then put them together in order to understand their collective meaning and implication (ILO, Report, 2008).

Human resource productivity is a revealing component of several economic indicators as it offers a dynamic measure of economic growth, competitiveness, and living standards within an economy. It is the measure of human resource productivity (and all that this measure takes into account) which helps explain the principal economic foundations that are necessary for both economic growth and social development (OECD, 2008). The concept of 'human capital' was first introduced in 1961 at the University of Chicago by Professor Theodore W. Schultz. At that time, the amount of human capital possessed by a person was equated to that person's years of formal education (Schultz 1961). Later on, other theorists added on-the-job training, informal learning, language ability, personal traits and a variety of other facets to the factors influencing a person's human capital (Becker 1993). Human resource development (HRD) is the integral part of human resource productivity because accumulation of knowledge and required skills make human resources more productive, effective and efficient. The reason for the increased

importance of HRD in achieving socioeconomic development lies largely in the emergence of knowledge work, technological advances and the demand for information and their relationship to globalization (Silva, 1997).

Human resource productivity is a challenging task for many countries because as they move from an agrarian economy to a knowledge-based economy, social changes also occur (like low fertility rate and low mortality rate), implying that they would eventually have a high aging population. This is also discussed in many studies advocating that it is now essential for every country to find ways to increase labor productivity to offset the diminishing proportion of working-age population so that the smaller labour force can still lead to economic growth and a better standard of living for people in the country (Fisher & Hostland, 2002; Shaw, 2002 and Deiwert *et al.*, 2009). Human resource productivity is dependent on certain factors that actually contribute to the productivity of human resources by a certain percentage. It is necessary to examine the factors determining labor productivity growth to identify the appropriate factors which really contribute to labor productivity growth (Yunhua *et al.*, 2000; Duryea & Pages, 2002, Razzak & Timmins, 2007).

Government Policies regarding SMEs

This research has included government policies as an essential element in the role of SMEs in the economic development of Taiwan as it is also included in a small and medium enterprise report (2005) that a large part of the reason for SME growth in Taiwan is the many government-based development initiatives created over the years. To achieve this, these government initiatives have played several very important roles. These initiatives act as formulators of policy, guiders of programs, problem -solving brokers, and supporters of innovative SMEs. Their roles are also spread across a large spectrum; activities start off from the very basic concept of defining SMEs to the more complex management of incubator platforms.

East Asian and Latin American governments have an important role to play in supporting the economic development of SMEs across the region (MOFA, Japan). Small and medium enterprises have long been recognized as important to the economy in terms of their considerable contribution to GDP and employment creation (Storey, 1994). SMEs have a more significant role in improving economic growth and the industrial development of nations by contributing to the creation of employment, income generation opportunities and wealth, promotion of entrepreneurship and enhancing of exports (Mutambi, K. Byaruhanga, Trojer & B. Buhwezi, 2010). The literature existing on SMEs shows that government policies on the development of SMEs and economic growth are positively related to each other. Therefore, policies to promote the development of SMEs are common in both developed and developing countries (Storey, 1994; Levitsky, 1996; Hallberg, 2000). Government policy should be directed at establishing a level playing field for SME development and operation (MOFA, Japan).

Small and medium enterprises are playing a crucial role in the economic development of many countries because they are easier to operate and individuals can groom their career and financial stability through their solely-owned enterprises. Small and medium enterprises are central to economic development; they are the backbone of a country which wants to project itself as a fully-developed nation with equitable socio-economic growth (YES SME, 2012). Interestingly, 95% of all registered firms across the world are SMEs, and the number is as high as 99% for regions like Europe. Therefore SMEs play an integral role in fueling the progress of any country (YES SME, 2012). Government policies actually determine the success and failure of SMEs because SMEs require external financial and legal support to compete and grow in the competitive environment as argued by world bank (1994, 2002, 2004) that “The pro-SME policy is based on three core arguments; first it argues that SMEs enhance competition and entrepreneurship and hence have external benefits on economy-wide efficiency, innovation, and aggregate productivity growth. From this perspective, direct government support of SMEs will help countries exploit the social benefits from greater competition and entrepreneurship.”

Analysis of the “Theory of the Firm”

The transaction cost model is used in this research in order to analyze economic development of Taiwan because the researcher has chosen transaction cost theory as promulgated by Ronald Coase in 1937 as the main theory for this research. Transaction costs, according to Coase (1960) are mainly made up of information acquisition costs and negotiation costs. Information costs are evidently representative and intuitive, and are related, for instance, to seeking information about a job candidate in the labor market. However, negotiation costs cannot be underestimated as they are present at all times in the economy. Transaction costs may thus be classified as follows: the cost of drawing up contracts, which is related to the cost of research and information; the cost of signing contracts, which is related to negotiation and decision-making costs, and the cost of monitoring and enforcing contracts (Wink Junior, Sheng & Junior, 2011).

Furubotn and Richter (1997) believe that, most of the time, there are great differences between prices of similar – sometimes identical – products. Be that as it may, consumers prefer not to seek information regarding the price of products in other shops. The authors state that the difference between the observed price and the average price is a measure of the scale of the transaction cost. They also consider that the final stage transaction costs of the production process are equal to 10% of the final price paid by the consumer. Therefore, they argue that, when one takes into account all the different links in the production chain, transaction costs may represent as much as 60% of the final price of the product. Thus, Furubotn and Richter (1997) define transaction costs as being those that result from the creation, operation, maintenance and modification of institutions. According to Arrow (1969), transaction costs are the costs of the economy’s operating system. More recently, they have been given a wider interpretation that includes some costs that exhibit international traits. Dunning (1994) states that during the 1990s, countries and firms underwent structural changes which were aimed at making foreign direct

investment more attractive. Such changes relate to greater equilibrium between domestic and foreign accounts, a strong privatization program with the purpose of reducing bureaucracy and increasing market share in the supply of goods and services and, finally, a stimulus towards greater autonomy for the Central Bank. The aforementioned changes ended up promoting the reduction of transaction costs (Wink Junior, Sheng & Junior, 2011). According to Dunning (1994), these changes would enable a greater capital flow and the financing of the balance of payments of several countries. The transaction cost theory has recently been applied to many other areas, both inside and outside the economy. According to Macher & Richman (2008), among the areas to which this theory has been applied are accounting, finance, marketing and industrial organization. In relation to accounting, Cooper and Slagmulder (2004) argue that, by detecting transaction costs and establishing organizational innovations, it is possible to reduce production costs.

Transaction costs arise due to incomplete and asymmetric information. When information is perfect, costlessly operating markets mediate away any externalities (Maitland & Nickolas, 2009). Further, transaction costs arise from human behavioral assumptions: bounded rationality and opportunism. Governance structures safeguard transactions through contract provisions, credible commitments and dispute resolution. Contract provisions are promises about how parties behave during economic exchange. Due to bounded rationality and asymmetric information, contract provisions are incomplete, which means contracts are designed before both the behavior of the parties and all future events are known (MacNeil, 1981; Williamson, 1975, 1979, Luo, 2005). It can be quite clear and eye-opening that transaction cost is increased due to lack of trust, sincerity and complete interdependence and the fear of losing one's assets. Taiwan through its peculiar social structure made it possible to create an environment where transaction cost can be reduced through trust, diffusion of sincerity and integrity. This previous statement is supported by Wu & Huang (2003) who claim that when an emerging economy is competing for global market share, network production gives firms the ability to effectively adjust the scale of production to feed the market's needs within a reasonable time and take advantage of business opportunities. Meanwhile, such network production is the base for regional proximity. The pricing factor in Taiwanese SMEs contributed a bigger share of their competitive advantage in the international arena as they use this marketing innovation to grow and compete.

North (1990) argued that in the approach towards institutions and economic performance, the significance of transaction costs comes as a continuation of a simple idea, gradually promoted as a scientific postulate: economic performance depends on low transaction costs. Such a theorem, apparently self-sufficient, still raises the issue of its own empirical consistency (North, D.C, 1990). The transaction cost perspective rests on the assumption that utility-maximizing individuals seek efficient solutions to organizational problems by contractual exchange of property rights (Dlugos, Dorow, Weiermair, 1998). Labor markets in all economies are subject to transaction costs associated with recruiting, monitoring and supervising workers (Evenson, Kimhi, De Silva, 2000).

Research Methodology:

This research is inductive qualitative research which used secondary data from different sources to analyze the research problem. Inductive reasoning begins with specific observations and concludes with broader generalizations and theories (Trochim, 2002). One begins with specific observations (data), notes any patterns in those data, formulates one or more tentative hypotheses, and finally develops general conclusions and theories. It is important to note that, in some cases, the purpose of qualitative research is not to analyze data in order to form hypotheses or theories. Rather, in these cases, the purpose may simply be to provide a “thick description” of what is going on in the particular setting being studied (Trochim, 2002). Qualitative research uses a naturalistic approach that seeks to understand phenomena in context-specific settings, such as "real world setting [where] the researcher does not attempt to manipulate the phenomenon of interest" (Patton, 2001, p. 39). This research is applied research because it was carried out to understand a particular business phenomenon and its effect on the future. As the applied research definition suggests “*Applied research* is done to solve specific, practical questions; for policy formulation, administration and understanding of a phenomenon. It can be exploratory, but is usually descriptive (Kothari, 1985)”. The research has been carried out in natural settings and therefore it is non-contrived. The research has used qualitative data analysis software in order to analyze the data through coding and then applying text search and word frequency query at the end.

Final Results

This research is carried out on the topic of the role of entrepreneurship in the future economic development of Taiwan and strived to answer three research questions related to this topic. As a matter of fact, entrepreneurship is an individualistic quality and it is linked with SMEs in Taiwan because most SMEs are sole proprietorship in Taiwan, therefore the most part of this research is done on the SMEs of Taiwan. The variables used to investigate entrepreneurship were non-technical innovation, human resource productivity and government policies. This research asked the following questions to be answered by the research process:

1. What is the role of non-technical innovations of SMEs in terms of entrepreneurship and its relationship with the future economic development of Taiwan?

In the pursuit to find the answer to this first question, the researcher has found immense data and literature that supported conclusions such as that economic growth can occur in two ways: (1) improvement in technical knowledge (neoclassical studies largely focus on this aspect of research), and/or (2) increased awareness of the availability of opportunities. Hence, economic growth occurs not only “because of the availability of new opportunities, but because of expanded awareness of existing opportunities” (Kirzner 1985, p. 74). It is the job of an entrepreneur to exploit existing opportunities and create new opportunities as well. Innovation is considered a very important factor in the economic development of any country because organizational innovation actually decides the future of that country one way or another as Lin & Chen (2007) argued, noting that innovation has been identified as the major factor in economic

growth and the expansion of wealth and of an enterprise in the era of the knowledge-based economy depending on how it improves its organizational innovation capability. Porter (1990) described how companies achieve competitive advantage through acts of innovation. Lin & Chen (2007) give the idea that innovation is the creation of new products, processes, knowledge or services, using new or existing scientific or technological knowledge. This indicates that innovation is not only technical but includes non-technical innovation which complements and supplements the vast area of technological innovation as mentioned by Wu (2009) in which he says that “Non-technological innovation is an important element of companies’ innovation activities that both supplement and complement technological innovation, i.e. the introduction of new products and new processes”. His idea is reinforced by other scholars as well; innovation in firms is not just about developing and applying new technologies but also to adopt and re-organize business routines, internal organization, external relations and marketing (Baranano, 2003; Boer and During 2001). Non-technical innovation is considered to be innovation of business processes (mainly organizational innovation and marketing innovation). This is also mentioned by the Oslo manual (2005 Edition), “This non-technological character is reflected in the definition of the two new types of innovation introduced to the definition of innovation in the third (i.e. 2005) edition of the Oslo Manual. They are defined as follows:

“A marketing innovation is the implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing.” (OECD, 2005: p. 172). An organizational innovation is the implementation of a new organizational method in the firm’s business practices, workplace organization or external Relations.” (OECD 2005: pp 180)”. “Scholars have noted that SMEs are often more fertile than larger firms in terms of innovation (Afuah, 1998). Their comparative advantages over large firms in innovation are their flexibility and speed of response (Acs and Audretsch, 1990; Dodgson, 1993). As a result, SMEs generally make a valuable economic and social contribution because of their innovative capacities”.

Along with this obvious and clear evidence, the researcher has found a link between non-technical innovation of SMEs and economic development of Taiwan by using Nvivo 10 software.

It was concluded by the two queries (namely word frequency and text search query through qualitative software Nvivo) that there is a definite relationship between the role of non-technical innovation of SMEs and the future economic development of Taiwan.

2. What is the role of human resource productivity of SMEs in terms of entrepreneurship and its relationship with future economic development of Taiwan?

The researcher found that there is a strong relationship between human resource productivity and the economic development of Taiwan, based on the fact that Taiwanese SMEs accommodate more than 75% of the total workforce in Taiwan as shown in Figure no. 4. The researcher also concluded with other scholars like Sriyan de Silva (1997) and (Becker *et al*, 1990) that human capital is an endogenous driver for economic growth and economic growth is necessary for

economic development. Economic development implies the development of social, economic and political dimensions of a country, but economic growth is the key to achieve economic development as Rautakivi (2012) mentioned when claiming that economic development is mostly characterized by increasing gross domestic product GDP in nations and GDP per capita. Economic growth boils down to three factors: capital, labour, and how they are used – i.e., productivity. While economists may have widely differing views on economic growth, they all agree on the importance of productivity. Strong and increasing productivity is vital to drive wealth creation and create a successful and sustainable economy. Capital is vital for any economy, particularly at the early stages of development, supported by a growing and increasingly skilled labour force (Mann, Lee, Ng, Henderson, & Devesh 2014). The researcher has also found that productivity of human resources is closely connected with the education system and skills development programs of any country as it was also confirmed by Ministry of Education report (2011) on Taiwanese education when it stated that: “Taiwan’s vocational education has actually provided a basis for human resource productivity in Taiwan from the last six decades and it does continue to play its role for the economic development of Taiwan”.

The researcher has also found that GDP per capita is increasing and it implies that productivity is translated into GDP per capita as shown in the below table:

Year	Taiwan GDP Per Capita
1999	16,100
2000	17,400
2001	17,200
2002	18,000
2003	23,400
2004	25,300
2005	27,500
2006	29,500
2007	30,100
2008	31,100
2009	32,000
2010	35,700
2011	38,200

Source: <http://www.indexmundi.com/g/g.aspx?c=tw&v=67>

The researcher has used two queries by qualitative software in order to reveal the relationship and role of human resource productivity of SMEs in the future economic development of Taiwan and concluded that:

There is a definite relationship between the role of human resource productivity of SMEs and the future economic development of Taiwan.

3. What is the role of government policies regarding SMEs in terms of entrepreneurship and its relationship with future economic development of Taiwan?

The researcher has found that government policies were central in entrepreneurship growth and development in Taiwan because without pro-SME policies, they could never have grown and prospered to this stage. This was also supported by other authors like the World Bank report (1994, 2002, 2004) which stated that “The government policies actually determine the success and failure of SMEs because SMEs require external financial and legal support to compete and grow in the competitive environment”. This was also mentioned by Taiwan’s Ministry of Economic Affairs in that “The emergence of Taiwan's SMEs is closely related to the economic, social and educational policies adopted by the government in the past: The "Land to the Tiller" program and the Economic Construction Plan”.

The above transcripts and other scholars related with this subject supported the researcher’s idea that government policies regarding SMEs have a relationship with and play a role in the economic development of Taiwan. Small and medium enterprises play a crucial role in the economic development of any country because they are easier to operate and individuals can groom their careers and financial stability through their solely-owned enterprises. Small and

medium enterprises are central to economic development; they are the backbone of a country which wants to project itself as a fully developed nation with equitable socio-economic growth (YES SME, 2012). Interestingly, 95% of all registered firms across the world are SMEs, and the number is as high as 99% for regions like Europe. Therefore SMEs play an integral role in fueling the progress of any country (YES SME, 2012).

It is concluded by coding all data on the subject and analyzing it through Nvivo software word query and text search query that “There is a definite relationship between the role of government policies regarding SMEs and the future economic development of Taiwan”.

Therefore, the analysis concludes that:

It is concluded by the two queries namely word frequency and text search query through Nvivo that there is a definite relationship between role of non-technical innovation of SMEs and the future economic development of Taiwan.

- *Two queries (namely word frequency and text search query through Nvivo) revealed that there is a definite relationship between the role of Non-technical innovation of SMEs and the future economic development of Taiwan.*
- *Two queries (namely word frequency and text search query through Nvivo) revealed that there is a definite relationship between the role of human resource productivity of SMEs and the future economic development of Taiwan.*
- *Two queries (namely word frequency and text search query through Nvivo) revealed that there is a definite relationship between the role of government policies regarding SMEs and the future economic development of Taiwan.*

Conclusions and Discussions

The final findings have achieved the five objectives of this study and the fifth objective of this research was to produce a final statement based on the observations concluded by the final findings of the research. It is descriptive qualitative research that used secondary data and it is one of the characteristics of qualitative study to make final findings based on the observations of the research. So this research has finally based its conclusion on the following five observations about the role of entrepreneurship in future economic development of Taiwan.

Observation No. 1

It was observed by the researcher that there is a relationship or there is a connection between non-technical innovation in SMEs and the role of entrepreneurship in the future economic development of Taiwan. This result concluded by using word frequency analysis and text search query in qualitative software. This can also be seen in the data used in this research e.g. “Scholars have noted that SMEs are often more fertile than larger firms in terms of innovation (Afuah, 1998). Pereira & Romero (2013) argued that non-technological innovation is an important element of firms’ innovation activities that both supplement and complement technological innovation. Some scholars have pointed out that innovation in firms is not just

about developing and applying new technologies but also adopting and re-organizing business routines, internal organization, external relations and marketing.

Observation No. 2

It was observed by the researcher that there is a relationship or there is a connection between human resource productivity in SMEs and the role of entrepreneurship in the future economic development of Taiwan. This result concluded by using word frequency analysis and text search query in qualitative software. This can also be seen in the data used in this research e.g. the spirit of entrepreneurship among skilled employees which has led to the establishment of millions of SMEs that fulfill this dream. It is important to define the term human resources and productivity and then put them together in order to understand their collective meaning and implication (ILO Report, 2008). Becker *et al*, 1990 argued that human capital is an endogenous driver for economic growth and economic growth is necessary for economic development. The researcher has found that the human resource productivity of SMEs plays a very important role in the economic development of Taiwan as argued by Chen (2003) who states that human resource development has historically made a large contribution to Taiwan's economic growth. Furthermore, The Taiwanese economy has achieved its enviable labor market record by establishing policies conducive to the smooth functioning of labor markets. Supply and demand have largely been allowed to set wages and working conditions for Taiwan's work force (Fields, 1992). The four East Asian NIEs [Hong Kong, Korea, Singapore, and Taiwan] are frequently grouped together in the literature. Indeed, we would note certain similarities about wage-setting institutions among these four economies (Fields, 1992).

Observation No. 3

It was observed by the researcher that there is a relationship or there is a connection between government policies regarding SMEs and the role of entrepreneurship in the future economic development of Taiwan. This result was concluded by using word frequency analysis and text search query in qualitative software. This can also be seen in the data used in this research e.g. East Asian and Latin American governments have an important role to play in supporting the economic development of SMEs across the region (MOFA, Japan). Entrepreneurial policies made by governments are essential for small and medium sized firms to become competitive in the internal and external environment in order to promote economic growth in the country (Stevenson & Lundström, 2001). The World Bank report (1994, 2002, 2004) stated that "The government policies actually determine the success and failure of SMEs because SMEs require external financial and legal support to compete and grow in the competitive environment". "The emergence of Taiwan's SMEs is closely related to the economic, social and educational policies adopted by the government in the past (The "Land to the Tiller" program and the Economic Construction Plan, MOE, Taiwan).

Observation No. 4

There is also evidence found in this research about the economic impact of Taiwanese SMEs in terms of its GDP portion which is less than 20%, annual sales share (30%), and export sales share (17.74%) in 2012. Taiwan's economy mostly consists of the service industry (68.19%) but Taiwanese SMEs do not feature strongly in the service industry (less than 10%) in 2012. It was also found that most of Taiwan's workforce is dependent on SME operations. Therefore, the social cost of not supporting SMEs can be as high as 79% of the total work force of Taiwan. The productivity index of Taiwan is also high – 103.6p in 2014 as compared to 99.37p in 2013. It is also a fact that most new organizations that are opened in Taiwan are SMEs with the ratio of SMEs to total enterprises increasing to 97.64%.

Observation No. 5

The net operating profit of SMEs (4.79p) as compared to large corporations is lower than large corporations (5.19p) in 2012 and only 23% of SMEs survive for more than 20 years as compared to 38% for large corporations in 2012. The “planning to expand figures” depict SMEs as less willing to expand their business (15.56p) in the future as compared to large corporations (21.92p) in 2012. Taiwanese SMEs are still dominated by the manufacturing sector (38.44% of sales are generated by manufacturing firms while 36.39% of sales are generated by the wholesale and retailing sector in 2012). It is interesting to note that wholesale and retailing is the major GDP generator of the Taiwanese service industry (19.31%) in 2012. It is astonishing to see that a major portion of wealth creation through GDP is done by large corporations (63% of wholesale sales confirmed this evidence).

Discussion:

This research concludes that there is definitely a relationship between entrepreneurship and the economic development of Taiwan considering that fact that SMEs contribute to the absorption of human resources and produce competition in the market, but it is also a fact that SMEs are not capable of producing a substantial economic impact on the future economic development of Taiwan. This research was based on the assumption that entrepreneurship plays a substantial role in the present economic development of Taiwan. This assumption was also confirmed by the Ministry of Economic Affairs (MOEA), Taiwan, in that small and medium-sized enterprises (SMEs) are the backbone of the economy and SMEs in Taiwan numbered about 1.33 million at the end of 2013, accounting for 97.64 percent of all enterprises. This assumption was partially falsified by the data gathered by the researcher during this research, but the relationship between entrepreneurship and economic development does exist. This research has enough evidence to prove the relationship between each independent and dependent variable by using Nvivo 10 computer software. But the relationship between non-technical innovations in terms of entrepreneurship with economic development can also be inferred from the following statements by different authors. “Entrepreneurship can contribute in important ways to economic

development. One way it does this is through innovation, which involves the development of new products, new processes, new sources of supply, but also the exploitation of new markets and the development of new ways to organize business (Szirmai, Naudé, & Goedhuys, 2011).” “It can be inferred from the preceding research on non-technical innovation that Taiwan’s success and economic development in the last six to seven (1940-2014) decades is not because of only technical innovation but also non-technical innovation like the transaction costs among organizations that contributed a very significant role in the profit-cost nexus among small SMEs in Taiwan. Governance of economic exchange or transactions is at the core of the growth and development of the economy. Sharing similar intellectual heritages, transaction cost economics (TCE) and new institutional economics (NIE) both seek to understand how exchange is conducted. An economy can be conceptualized as a range of organizations, within each and between each there are a nexus of transaction (Maitland, Nicholas & Boyce, 2009).”

The researcher found that there is a huge amount of data available to explore the relationship between human resource productivity and the economic development of Taiwan as this is reinforced by the following literature. Solow (1956) argues that “human resource productivity is the most important determinant influencing the nation’s level of income.” Meanwhile, according to Englander and Gurney (1994), “low labour productivity will be a barrier to income increment rate and can also increase the incidence of conflicts in income distribution.” Education levels are linked to productivity growth, as argued in Schultz (1975), Welch (1975), Benhabib and Spiegel (1992). “In general, an educated, motivated and flexible labour force will be able to adapt more easily to new processes and new industries, and hence allow productivity to rise more rapidly. Where the average level of human capital is high, the incidence of learning from others will be higher, and it is likely that there will be greater productivity gains to be derived from exchanging ideas (Lucas, 1988).”

Subsequently, the researcher also found that there is a relationship between government policies regarding SMEs and the economic development of Taiwan by considering the following evidence from the literature: “small and medium enterprises have a more significant role in improving economic growth and industrial development of nations by contributing to the creation of employment, income generation opportunities and wealth, promotion of entrepreneurship and enhancing of exports (Mutambi, K. Byaruhanga, Trojer & B. Buhwezi, 2010).” The literature existing on SMEs shows that government policies on the development of SMEs and economic growth are positively related with each other. Therefore, policies to promote the development of SMEs are common in both developed and developing countries (Storey, 1994; Levitsky, 1996; Hallberg, 2000). Government policy should be directed at establishing a level playing field for SME development and operation (MOFA, Japan).

Eventually, this research was based on the transaction cost theory model which maintains that firms exist because they are competitive to produce products or services by reducing their internal and external transaction costs that otherwise remained unavailable for the consumer or

was produced at very high cost. The success factor of Taiwanese SMEs was transaction cost because they reduced the negotiation and contract cost by internal arrangements supported by the Chinese cultural fabric as can be reinforced by the following:

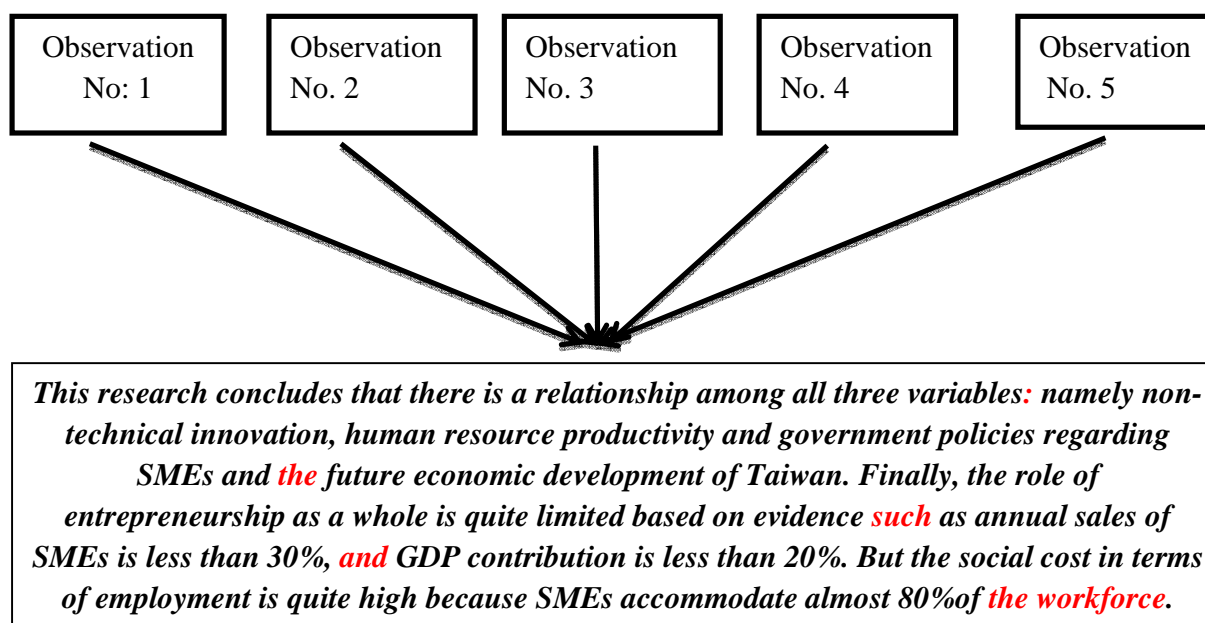
“Transaction costs arise due to incomplete and asymmetric information. When information is perfect, costlessly operating markets mediate away any externalities (Maitland & Nickolas, 2009). Further, transaction costs arise from human behavioral assumptions: bounded rationality and opportunism. Due to bounded rationality and asymmetric information, contract provisions are incomplete, which means contracts are designed before both the behavior of the parties and all future events are known (MacNeil, 1981; Williamson, 1975, 1979, Luo, 2005). It can be quite clear and eye opening that transaction cost is increased due to lack of trust, sincerity and complete interdependence and the fear of losing one’s assets. Taiwan, through its peculiar social structure, made it possible to create an environment where transaction cost can be reduced through trust, diffusion of sincerity and integrity (Wu & Huang, 2003)”.

Non-technical innovation, human resource productivity and government policies regarding SMEs all played their roles to enforce entrepreneurship in SMEs and reduce transaction costs in institutional frameworks which enhances the economic development of Taiwan as this can be confirmed by North(1990) in that “the approach towards institutions and economic performance, the significance of transaction costs comes as a continuation of a simple idea, gradually promoted as a scientific postulate: economic performance depends on low transaction costs. Such a theorem, apparently self-sufficient, still raises the issue of its own empirical consistency.”

Finally, the research concluded that although there is a role of entrepreneurship in the future economic development of Taiwan, the role is not substantial as the evidence gathered by the researcher, such as in annual sales share (30%), and export sales share (17.74%) in 2012. Taiwan’s economy mostly consists of the service sector (68.19%) but Taiwanese SMEs don’t put a heavy share in the service industry (less than 10%) in 2012. The net operating profit of SMEs (4.79p) as compared to large corporations is lower than large corporations (5.19p) in 2012 and the proportion of SMEs that survive for more than 20 years is only 23% as compared to 38% of large corporations in 2012. The planning to expand figure depicts that SMEs are less willing to expand their business (15.56p) in the future as compared to large corporations (21.92p) in 2012. These are all evidence, as many more suggest, that the economic impact of SMEs in Taiwan would not be as substantial as before, but the social impact in terms of employment will remain high because it’s also a fact that Taiwanese SMEs accommodate almost 80% of Taiwan’s workforce.

The results can be illustrated as follows:

Conclusive Statement of this research



Recommendations for Future Research:

This research only covers three components of entrepreneurship and their impact and role in the future economic development of Taiwan. There could be more components that are not covered by this research, like culture, non-technical and technical education, and financial institutions supporting SMEs in Taiwan. Other areas of study might be E-entrepreneurship and its role in economic development, or comparison of growth and development of SMEs with large corporations of Taiwan.

References:

- A.Szirmai, W.A. Naudé and M. Goedhuys (2011) *Entrepreneurship, Innovation, and Economic Development*. Oxford: Oxford University Press.
- Acs, Z.J., Audretsch, D.B. (1990), *Innovation and Small Firms*, The MIT Press, Cambridge.
- Achjian A.(2014), *The Prime Mover of Taiwan's Trade With Russia and its Development*, Lund University Publication , School of Economics and Management, Sweden.
- Afuah, A. (1998), *Innovation Management: Strategies, Implementation and Profits*, Oxford University Press, New York, NY.
- Ahmad N., Seymour R.G (2008), *Defining Entrepreneurial Activity: Definitions Supporting Frameworks for Data Collection* OECD Statistics Working Paper, 5-6, France.
- Armbruster H., Bikfalvi A., Kinkela S., Lay G.(2008), *Organizational innovation: The challenge of measuring non-Technical innovation in large-scale surveys*, *Technovation* 28 (2008) 644–657, University of Girona, Spain.
- Arrow, K. J. (1969), *the organization of economic activity: Issues pertinent to the choice of Market versus non-market allocation*. In *The analysis and evaluation of public expenditures: The PBB-System*, U.S. Joint Economic Committee, 91st Session, v. 1, Government Printing Office, Washington, D.C, 1969.
- Baranano, A.M. (2003), “The non-technological side of technological innovation: state-of-Theart and guidelines for further empirical research”, *International Journal of Entrepreneurship and Innovation Management*, No. 3, pp. 107-125.
- Becker G.S. (1993), *Human Capital*, 2nd Edition, Columbia University Press, NY, USA
- Boer, H., W.E. Daring (2001), “Innovation, what innovation? A comparison between Product, process and organizational innovation”, *International Journal of Technology Management*, No 22, pp. 83-107.
- Chandler, A., (1962) *Strategy and Structure*. Cambridge, Massachusetts: MIT Press
- Chen H.C, (2003), *Cross Cultural Construct Validation of the learning transfer system Inventory in Taiwan*, The School of Human Resource Education and Workforce Development, LA, USA
- Coase, R.H., (1937). *The nature of the firm*. *Economica*, the Nature of the Firm: Origins, Evolution and Development. Oxford University Press, New York, pp. 18–33.
- Coleman, D., & Nixon, F. (1985). *Economics of change in less developing countries*. Oxford, England: Philip Allen.
- Diewert, W.E., H. Mizobuchi and K. Nomura (2009). *On Measuring the Productivity and the Standard of Living in Japan, 1955- 2006*. KEO Discussion Paper No. 115, Keio University, Tokyo.
- Dlugos G., Dorow D., Weiermair K. Danesy F.C (1998), *Management Under differing Labour Market and Employment system.*, Walter de Gruyter , Berlin, New York 1988.
- Dodgson, M. (1993), *Technological Collaboration in Industry: Strategy, Policy and Internationalization in Innovation*, Routledge Publication, London.
- Dunning, J. (1994), *Re-evaluating the benefits of foreign direct investment*. *Transnational*

- Corporations*, v. 3, n. 1, 1994.
- Evangelista, R.(2000). Sectoral Patterns of Technological Change in Services. *Economics of Innovation and New Technology* 9: 183-221
- Evenson, R.E., Kimhi A., and DeSilva S. (2000), “Supervision and Transaction Costs: Evidence from Rice Farms in Bicol, the Philippines.”Center Discussion Paper No. 814. Economic Growth Center: Yale University.
- Englander, S and Gurney, A. (1994), “OECD productivity growth: medium-term trends”, *OECD Economics Studies*, 22:111-129.
- Fisher, T. and D. Hostland (2002). *The Long View: Labor Productivity, Labor Income and Living Standards in Canada*. In A. Sharpe and F. St. Hilaire (eds.), *The Review of Economic Performance and Social Progress 2002: Towards a Social Understanding of Productivity*.
- Fields, G. S. (1992). *Living standards, labor markets and human resources in Taiwan*, Cornell University, NY, USA
- Freeman, C., 1982,. *The Economics of Industrial Innovation*, 2nd edition, Frances Pinter, London, UK.
- Freeman, C., (1995) *the National System of Innovation in Historical Perspective*. *Cambridge Journal of Economics*, 19, 5–24.
- Furubotn, Eirik G. and Rudolf Richter (1997),*Institutions and Economic Theory: The Contribution of the New Institutional Economics* , Ann Arbor: The University of Michigan Press, USA.
- Gallouj, F., and O. Weinstein. 1997. *Innovation in services*. *Research Policy* 26: 537-556.
- Globerman, S., Schwindt, R.(1986). *The organization of vertically related transaction in the Canadian forest products industries*. *J. Econ. Behav.Organ.* 7, 199 – 212
- Global Competitiveness Report (2013)* issued by World Economic Forum, Geneva, Switzerland
- Goldsmith P. (2000), *what is Entrepreneurship?* University of Illinois Extension.
- Hallberg K.(2000), “A Market-Oriented Strategy for Small and Medium-Scale Enterprises”, Discussion Paper No. 40, International Finance Corporation, The World Bank.
- Huntington, S. P. (1968). *Political order in changing societies*. New Haven: Yale University Press.
- ILO (2008), *Skills for improved productivity, employment growth and development*, International labor conference, 97th session 2008, Geneva Switzerland.
- Junior M.V.W, & Sheng H.H, Junior W.E, (2011),*Transaction Costs: An Empirical Analysis of their relationship with investment and foreign direct investment (FDI)*.,Fundação deEconomia e Estatística do Rio Grande do Sul - Porto Alegre - RS, Brazil,
- Kenney M. Han K. and Tanaka S. (2002), *the globalization of venture capital: the cases of Taiwan and Japan*, *World Journal of Agricultural Sciences* 4 (S): 884-890, 2008.
- Kirzner, I.M. (1973) *Competition and Entrepreneurship*: University of Chicago Press 1973, USA
- Kothari, C.R. (1985), *Research Methodology- Methods and Techniques*, New Delhi, Wiley Eastern Limited, India.

- Leffler, K.B., Rucker, R.R., (1991). Transaction costs and the efficient organization of Production: a study of timber-harvesting contracts. *J. Polit. Econ.* 99 (5), 1060 – 1087
- Levitsky J. (1996), “Support Systems for SMEs in Developing Countries: A Review”, Paper Commissioned by the Small and Medium Industries Branch, United Nations Industrial Development Organization, March.
- Lima J. M. D.C.(2008),Patterns of Internationalization for Developing Country Enterprises (Alliances and Joint Ventures)”, prepared for UNIDO (United Nations Industrial Development Organization), Wien, 2008.
- Lucas R. (1988), “On the mechanics of economic development”, *Journal of Monetary Economics*, No. 22, July 1988.
- Luo Y. (2005), Transactional characteristics, institutional environment and joint venture Contracts, *Journal of International Business Studies* 36, 209–230, 1 March 2005.
- Lyons, B.R.,(1994). Contracts and specific investment: an empirical test of transaction Theory. *J. Econ. Manage. Strategy* 3 (2), 257 – 278.
- McCann, L., Colby, B., Easter, K.W., Kasterine, A., Kuperan, K.V., (2005). Transaction Costs measurement for evaluating environmental policies. *Ecol. Econ.* 52, 527–542.*China Economic Review* 9(1): 47–58
- Mache J, Richman, B. (2008), Transaction cost economics: An assessment of empirical Research in the social sciences. *Business and Politics*, v. 10, n. 1, 2008.
- Macneil, I.R. (1974) 'The many futures of contract', *Southern California Law Review*, 47: 691-816.
- Maitland E., Nicholas S., Boyce G.(2009), The Economics of Governance: Transaction Cost Economics and New Institutional Economics. Australian School of Business, UNSW, Faculty of Business and Law University of Newcastle, Australia
- Mallick J., (2013), Globalization and Labor Productivity in OECD Regions ,Faculty of Economics and Administration, Paper prepared for “Regional Development Conference” May 2013, University of Pardubice, Czech Republic.
- Mann D, Lee E., Ng J., Henderson C. & Devesh D. (2014), Asia Productivity Report, FICC Research Standard Chartered Bank, Singapore Branch, **2014**
- Meltzer J. (2014), Taiwan's Economic Opportunities and Challenges and the Importance of The Trans-Pacific Partnership. East Asia Policy Paper Series, Washington D.C Ministry of Foreign Affairs (MOFA) Japan, Policies to support small and medium sized Enterprises (SMEs) for economic development: retrieved from <http://www.mofa.go.jp/region/latin/fealac/sme.html>.
- Ministry of Economic Affairs(MOEA), Taiwan,
- Moss, L.E., Barry, P.J., Schnitkey, G.D., Westgren, R.E.,(2001). A transaction cost Economics and property rights theory approach to farmland lease preferences. Paper Presented at the AAEA Annual Meeting, Chicago, IL.
- Mutambi J, Byaruhanga J.K, Trojer L, Buhwezi K.B.(2010),Research on the State of Business Incubation Systems in Different Countries: Lessons for Uganda, *African Journal of Science, Technology, Innovation & Development*.

- Nelson, R. R., (1991) Why do firms differ, and how does it matter? *Strategic Management Journal*, Winter Special Issue, 12, 61–74.
- North D.C (1990), Institutions institutional change and economic performance, *The Journal of Economic Perspectives*, Vol. 5, No. 1. (winter, 1991), pp. 97-112, Missouri, USA.
- OECD(2005),Oslo Manual. Guidelines for Collecting and Interpreting Innovation Data. Third edition: 172,182, Geneva, Switzerland
- OECD (2008), OECD Insights Sustainable Development Linking Economy, Society, Environment, OECD Report, 2008.
- O’Sullivan D., Dooley, L., (2009) *Applying Innovation*, Sage Publications, NY.
- Patton, M. Q. (2002). *Qualitative evaluation and research methods*, (3rd ed.). Thousand Oaks,CA: Sage Publications, Inc
- Pereira C. Romero F. (2013), Non-Technological Innovation Current Issues and Perspectives, Production and Systems Department, School of Engineering University of Minho, Portugal.
- Pegg J. (1998), De Facto States in the International System Institute of International Relations, University of British Columbia Working Paper, No. 21, February 1998.
- Pittman, R., (1991) Specific investments, contracts, and opportunism: the evolution of Railroad sidetracks agreements. *J. Law Econ.* 34, 565 – 589.
- Ranis G. (2008), *Taiwan's success and vulnerability*, Yale University, published by Routledge, Oxon OX14 4RN, USA
- Rautakivi T. (2012), “Impact of Foreign Direct Investment (FDI) on economic growth in Asia’s newly industrialized Countries- 3- 4, Burapha University, Thailand
- Riegl M.M(2014),Prospects and limits of Economic development of Unrecognized States: Between Organized Hypocrisy and Private Interests, Department of Political Science, Institute of Political Studies, Faculty of Social Sciences, Charles University in Prague,European Scientific Journal, Feb 2014.
- Rigger S. (2011),*Why Taiwan Matters - Small Island, Global Powerhouse*, 59-94,Rowman& Littlefield Publishers. NY.
- Sanyang S.E, Huang W.C (2008). Small and Medium Enterprise for women entrepreneurs in Taiwan. *World Journal of Agricultural Sciences*, 2008.
- Sawhney M., Wolcott R. C., Arroniz I., (2006), The 12 Different Ways for Companies to Innovate, *MIT Sloan Management Review*, 47(3).
- Shaw, D.J. (2002). Canada’s Productivity and Standard of Living: Past, Present and Future. Depository Services Program. Available from: <http://dsp-psd.tpsgc.gc.ca/CollectionR/LoPBdP/BP/prb0223-e.htm>, accessed March 5, 2009.
- Schultz T.W. (1961), Investment in human capital, *American Economic Review*, 51, 1-17.
- Schumpeter, J A. (1934). *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*. Cambridge, MA. Harvard University Press.
- Schumpeter, J. A., (1939) *Business Cycles: A Theoretical, Historical and Statistical Analysis*

of the Capitalist Process. New York. Taylor & Francis.

Small and Medium Enterprises Administration, Ministry of Economic Affairs, Taiwan Economic Development

<http://www.moeasmea.gov.tw/ct.asp?xItem=72&CtNode=263&mp=2>

Silva S.D (1997), Human Resource Development for Competitiveness: A priority for Employers. International Labour Office, Geneva, Switzerland

Solow, R.M. (1956). A contribution to the theory of economic growth. Quarterly Journal of Economics 70(2): 65 – 94

Strange T. & Bayley A. (2008), OECD Insights Sustainable Development Linking Economy, Society, Environment, OECD Report, 2008, Geneva, Switzerland.

Storey, D.J. (1994), Understanding the Small Business Sector, London: Routledge.

Technological and Vocational Education in Taiwan (2011) issued by Ministry of Education, August 2011, Taiwan

Todaro, M.P & Smith, S.C. 2004. Economic Development 8th Edition. P. 110, Longman Publication, NY.

Trochim, W. M. K. (2002). The research methods knowledge base (2nd Ed.). Cornell University, NY, USA

White Paper on SMEs (2008), Small and Medium Enterprise Administration, Ministry of Economic Affairs, Taiwan.

White Paper on SMEs (2012), Small and Medium Enterprise Administration, Ministry of Economic Affairs, Taiwan.

Williamson O.E.(1975), Markets and Hierarchies: Analysis and Antitrust Implications: A Study in the Economics of Internal Organization, University of California, Berkeley - Business & Public Policy Group, 1975.

Williamson, O.E. (1979) 'Transaction-cost economics: The governance of contractual Relations', Journal of Law and Economics, 22(2): 233-61.

Williamson, O.E.(1985). The Economic Institutions of Capitalism. Free Press, New York.

World Bank Report (1994): Infrastructure for development, 1994

World Bank Report (2002): Building Institutions for Markets, 2002

World Bank Report (2004): Making services work for poor people, 2004

Wu, R.I, Huang, C.C. (2003) Entrepreneurship in Taiwan: Turning Point to restart: 1, 5-6 Mansfield Foundation.

YES SME Publication (2012), Role of the Government in SME Financing, India.

Verma R. (2013), A Neoclassical Realist perspective of India and China in the oil industry in West Africa, The London School of Economics and Political Science, London, April 2013

Veselka M. (2005). "Taiwan's Economic Development: The Role of Small and Medium-Sized Enterprises beyond the Statistics," Paper presented at the Second Conference Of the European Association of Taiwan Studies, Ruhr University Bochum, Germany, April, 1-2.

Yunhua, L., C.S.Beng and L. Wenzhi (2000). Education, Experience and Productivity of Labor in China's Township and Village Enterprises: The Case of Jiangsu Province.