EXAMINING THE FINANCE GROWTH NEXUS IN THE FOUR ASIAN TIGERS

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EXAMINING THE FINANCE GROWTH NEXUS IN THE FOUR ASIAN TIGERS

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DECLARATION OF ORIGINAL WORK

CORPORATE MASTER IN BUSINESS ADMINISTRATION (CMBA)

FACULTY OF ECONOMICS AND BUSINESS

UNIVERSITI MALAYSIA SARAWAK

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I, Christine Silenie Babu, (IC Number: 841211-13-5674)

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- This work has not previously been accepted in substance for any degree, locally or overseas, and is not concurrently submitted for this degree or any other degrees.
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LETTER OF SUBMISSION

29th May 2015

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Dear Sir,

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Attached is the project paper titled “EXAMINING THE FINANCE GROWTH NEXUS IN THE FOUR ASIAN TIGERS” to fulfil the requirement as needed by the Faculty of Economics and Business, Universiti Malaysia Sarawak.

Thank you.

Yours sincerely,

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GDP       Gross Domestic Product
FDI       Foreign Direct Investment
M3        Money Supply that includes M2
SPSS      Statistical Package for the Social Sciences
LIST OF DEFINITION OF TERMS

1. **Gross Domestic Product**

   The GDP of a country is defined as the total market value of all final goods and services produced within a country in a given period of time. It is also considered the sum of value added at every stage of production of all final goods and services produced within a country in a given period of time. The GDP reflects the country’s current economic condition.

2. **Foreign Direct Investment**

   A foreign direct investment (FDI) is a controlling ownership in a business enterprise in one country by an entity based in another country which includes mergers and acquisitions, building new facilities, reinvesting profits earned from overseas operations and intra company loans.

3. **Money Supply**

   Money supply is the entire stock of currency and other liquid instruments in a country's economy as of a particular time. The money supply can include cash, coins and balances held in checking and savings accounts. The various types of money in the money supply are generally classified as "M"s such as M0, M1, M2 and M3 in accordance to the type and size of the account in which the instrument is kept.
4. **Private Credit**

It is the domestic credit to private sector whereby financial resources are provided to the private sector, such as through loans, purchases of non-equity securities, trade credits and other accounts receivables that establish a claim for repayment.

5. **Four Asian Tigers**

The Four Asian Tigers is a term used in reference to the highly free and developed economies of Hong Kong, Singapore, South Korea, and Taiwan. These nations were notable for maintaining exceptionally high growth rates and rapid industrialization by the early 1960s and have now developed into advanced income economies.

6. **Finance Growth Nexus**

The finance growth nexus is the link between financial development and economic growth based on the Schumpeterian view that the financial system can promote economic growth and industrialization to the country. It is a causal relationship whereby financial development is said to cause economic growth in a country.
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ABSTRACT

A large theoretical and empirical literature has focused on the impact of financial deepening on the economic growth throughout the world. Financial deepening is the increased provision of financial services with a wider choice of services available to the society. It also reflects the macro effects of financial deepening on the larger economy. This study aims to investigate the finance growth nexus and its impact in the Four Asian Tigers which comprises of Singapore, Hong Kong, South Korea and Taiwan. This will be done using a dataset from these four countries for the period 1998 – 2014. As is done from various similar studies, the results suggest beneficial effect of financial deepening on economic growth and further analysis resulted in differences which may have come from underlying factors such as regulations and government interventions with its ability to provide widespread access to financial services. Thus, this study aims to identify and investigate the existence of finance growth nexus in the Four Asian Tigers and its implications on its economy.
CHAPTER 1

INTRODUCTION
CHAPTER 1

1.1 INTRODUCTION

The publications and written works on finance and economic growth have been proven to be linked and gone through a period of enormous change in the last few decades. The World Bank dataset has been constructed based on this study which covers almost the second half of the twentieth century to facilitate a large number of cross-country studies.

Economists such as Rousseau and Sylla (2004) began to construct datasets which reveals time-series outcomes of countries that has gone through a period of both financial and industrial revolution. In order to explain why finance may have caused economic growth, the theory on finance and growth has been developed in line with cross-section empirical studies. It is a result of these empirical studies that financial institutions can demonstrate a role in the level of sustained growth. In another study conducted by economists King and Levine (1993), they argue that certain financial depth can predict economic growth over the long run in time. Not only have they found a concrete predictive component, but also a consistent relationship between aggregate measures of financial depth and growth. Better financial systems stimulate faster productivity growth and growth in per capita output by funnelling society’s resources to promising productivity-enhancing endeavours (King and Levine, 1993).

The studies conducted by Demirguc-Kunt and Levine (2001) on the other hand, cover vast area dealing with the empirics using many types of econometric techniques that ranges from the micro level data to an international level data for comparison. All these studies support the argument that there is a connection between finance leading to economic growth in various senses. For instance, results and outcome found in studies
conducted by Levine and Zervos (1998) concluded that a one percent per annum increase in growth rates can be achieved if developing countries increase their financial development level on par with those countries which are more successful. This study will involve the Four Asian Tigers which consist of the four developing countries that are now declared as the countries with advanced economies. The theoretical models of the finance-growth nexus were generated along three main aspects which are dependable on the type of endogenous growth, the finance mechanisms and the treatment of asymmetric information.

The Four Asian Tigers which are also known as Asian Dragons are the four countries in Asia that holds the record for maintaining high growth rates (Hernandez, 2011). These four countries are Singapore, Taiwan, South Korea and Hong Kong. This means that they have an excess of 7% growth rates per year and are very fast in terms of industrialization which has enabled their countries to advance into high-income earning countries. In an argument, John Schumpeter presumed that services provided by financial intermediaries such as mobilizing savings, evaluating projects and facilitating transactions are essential for technological innovation and economic development (King and Levine, 2004).

The Four Asian Tigers has been among the top four countries in Asia to portray a strong and stable economy together with its vast expansion in industrialization. However, its major setback was the period when these countries experienced the Asian financial crisis back in the year 1997. Hong Kong was coming down wildly with stock markets crashing down against speculative attacks its currency underwent devaluation which was almost beyond help until help was brought in intervened by the Hong Kong Monetary Authority. While Taiwan and Singapore were not really affected by the Asian
financial crisis, South Korea however was undergoing a mega crash from its stock market due to a huge number of defaults from corporate loans.

The question in this research is how did these four countries managed to attain a high growth rate throughout the post 1997 financial crisis and economic downfall. This brings to the believe that there may be strong indicators coming from the finance and growth nexus of these four Asian Tigers which may be the factors for influencing their rapid economic growth rate. There has yet a study being conducted in the Four Asian Tigers to examine the finance growth nexus of these four high growth rate countries. This belief seeks further study to discover the financial variables which may directly or indirectly influence their economic growth. Thus, this research aims to study the causality and cointegration of the nexus between financial development and economic growth in these Four Asian Tigers by empirically measuring the panel of time-series data from the post 1997 financial crisis onwards.
1.2 RESEARCH BACKGROUND

Hong Kong, Singapore, South Korea and Taiwan are known as the four Asian Tigers or sometimes Four Dragons due to the fact that these countries have been sustaining their economic growth rates especially notable during times of crisis such as the 1997 financial crisis and not forgetting the credit or subprime crisis in 2008. Despite these events, all four Asian Tigers were able to withstand these crises which lead to the curiosity on whether there are links suggesting that strong financial indicators may have led to a higher economic growth in a country.

Hong Kong is a booming country by which their economic history has been long determined by the nature of their geographical location. Its territory comprises of two main lands that has been used as a port for trade in Southeast China. Until today, Hong Kong still holds its position as an international commercial port for China’s regional and global trade and thus underwent a rapid revolution of industrialization which boosted their economy since the 1960s onwards (Schenk, 2008).

Figure 1.1: The GDP Growth in Hong Kong

![GDP Growth in Hong Kong](image)
In July 1997, Hong Kong has returned to the Chinese rule and has since carefully protected the territory’s separate economic characteristics for the benefit of the Chinese economy. During the Opium Wars, the British used Hong Kong as a location for earning money and as a result became the financial capital of Asia.

The most advanced of all the four countries is Singapore in its early stages. Once released from the ties with Malaysia 1965, Li Guangyao took control and has very much lead Singapore to its success due to his vision and leadership. Singapore experienced a dramatic change in the 1970s when its economic structure focused heavily on the manufacturing and heavy industry (Marshall, 2014). Singapore became a developing country as marked by the fulfilment of the original vision for Singapore which is to become the trading and financial hub for Southeast Asia. Its unique location also transforms into a position that allows for Singapore to serve as a high-level industry and holds its position as a full developed country.

Figure 1.2: The GDP Growth in Singapore

![GDP Growth in Singapore Chart](image-url)
Singapore has managed to maintain a stable GDP rate which indicates that they managed to overcome the 1997 financial crisis. From the graph shown, the GDP for Singapore in went down from 8% in 1997 to a deficit 2% in 1998. Yet, the aftermath of the crisis shows that Singapore was quick to bounce back and gain a GDP of 6% by 1999. Singapore is now an example of a liberal market-led development given its nominal democracy as it is now a principal mover in the development of Singapore’s economy, with liberal elements being introduced in the late phases of development to pave the way to a financial and trade hub (Marshall, 2014).

In the 1990s, South Korea experienced significant changes to its economy as they were in the phase of development pushing into high tech industry. Back then, high technology exports could reach up to 15% of total export, yet this figure increased to almost double the following year. The international demand for Korean goods caused an increase in domestic consumption and higher living standards across the society.

Throughout the history of Korea, four phases of development were identified which is a period of Import Substitution Industrialization, the development of light industry and export-led growth while reinvesting in and protecting heavy industry, the development of heavy industry which increases in labour quality through education and degrees of foreign capital; and the development of high-tech industry which requires skilled labour for stimulating domestic consumption. From the second till the fourth phase of the economic development, a steady and remarkable GDP growth was seen in all years except during the year of Park’s assassination, the 1997 financial crisis and the 2008 subprime crisis.
In the year 1979 when Park Chung-Hee, the president of South Korea then was assassinated, South Korea starts to see a slump in their GDP which slowly drops from 8.8% to a lowest 5.7% by 1982 before its economy starts picking up again. From then on, South Korea started experiencing a boom again especially in their high-tech industry exports. The GDP rose to as high as 9.6% in 1990. However, it starts to slump again in 1997 during the world financial crisis where its GDP was only 4.2%. Despite the fall in 1997, South Korea was quick to make a comeback from its fall as the GDP rose slightly the following year. The same follows in 2008 when the subprime crisis hit
the entire world. Yet South Korea was similar to Singapore and Hong Kong when immediately the following year its economy still continues to grow.

Taiwan shares similar traits with South Korea but with a different and less humble origin. In the 1950s, Taiwan’s primary sector which is the agriculture and fishery industry accounted for almost one third of its GDP before rapidly dropping to 7% in the industrial combust (Marshall, 2014). By the time it was the 1980s, Taiwan experienced a boom in its economy due to their light industry which composed mainly of textiles.

Figure 1.4: The GDP Growth in Taiwan

Taiwan also has a similar progression like South Korea through its four distinct phases of development. However, during the 1997 financial crisis, their GDP dropped just slightly from a rate of 6% to 5.6%. Taiwan was not so much affected at all by the crisis given that it affected the entire world. Then in 2008, Taiwan experienced its worst
drop to a deficit of 4% GDP rate but was then very quick to overcome the slump and rise up again to a surprising GDP rate of 4%.

1.3 PROBLEM STATEMENT

Quantitative and qualitative improvements reflected in a country’s financial dataset have long been positively and closely linked to the progress of a country’s economic growth and development. Yet, there are some scholars who question whether finance really do cause growth. In a Schumpeterian view, economic growth is driven by innovation which is then driven by credit. However, according to economist such as Joan Robinson, they suggested instead that finance followed growth, not leading growth. In this viewpoint, growth is driven by capital, labour, human capital and technology.

Metrics of financial development have been traditionally focused on economic depth which was usually proxied by M1 over GDP or credit to the private sector over GDP. In regards to countries with non-availability data issues, especially regarding low income countries, there are efforts by different scholars to reveal a more detailed phenomenon of the gap and lacuna in the finance growth nexus. The results were worrisome as most low income countries’ financial data were internationally compared regarding economic stability (Campos and Dercon, 2014). The literature on finance growth nexus is supported mainly by cross-country growth regressions, time-series analyses, panel-data studies, industry and firm-level studies, and historical evidence. There are so many studies that support the relationship between finance and growth is indeed causal and unidirectional. However, one of the main gap that exist in the finance