REVEALED COMPARATIVE ADVANTAGE (RCA), EXPORT DIVERSIFICATION, AND ECONOMIC PERFORMANCE IN SELECTED ASIAN COUNTRIES

Faiznur Binti Yusuf
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Faculty of Economics and Business
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2012
ABSTRACT

REVEALED COMPARATIVE ADVANTAGE (RCA), EXPORT DIVERSIFICATION, AND ECONOMIC PERFORMANCE IN SELECTED ASIAN COUNTRIES

By

Faiznur Binti Yusuf

This study aims to investigate the Revealed Comparative Advantage (RCA) for the Asian five countries which are Malaysia, Indonesia, Singapore, China and Japan and their export diversification which can help to generate a high economics performance. The RCA index is applied in this study to generate the standard deviation of RCA so that it can be used to analyze the export diversification from the year 1976 until 2010. The finding indicates that Japan is the most diversify exports country followed by Singapore, Malaysia, China and Indonesia. For the economic performance, it shows that these selected Asian have achieve a high economic performance since an export is a major component in computing the economic income. Although the country export is competitive, it does not mean that the export is diversified.
ABSTRAK

KEUNGGULAN KOMPARATIF TERUNGKAP (RCA), KEPELBAGAIAN EKSPORT DAN PRESTASI EKONOMI TERHADAP NEGARA ASIA YANG TERPILIH

Oleh

Faiznur Binti Yusuf

Kajian ini dilakukan bertujuan untuk mengkaji Keunggulan Komparatif Terungkap (RCA) terhadap lima negara Asia yang terpilih iaitu Malaysia, Indonesia, Singapura, China dan Jepun serta mengenalpasti kepelbagaian ekspor di negara mereka yang telah membantu menjana prestasi ekonomi mereka. Indeks RCA digunakan dalam kajian ini untuk menentukan sisihan piawai RCA bagi membantu untuk menganalisis kepelbagaian ekspor dari tahun 1976 sehingga 2010. Hasil kajian menunjukkan bahawa Jepun adalah negara yang paling tinggi dalam kepelbagaian ekspor dan diikuti oleh Singapura, Malaysia, China dan Indonesia. Bagi prestasi ekonomi pula, hasil menunjukkan bahawa kelima-lima negara Asia tersebut telah mencapai prestasi ekonomi yang baik kerana ekspor merupakan salah satu komponen utama dalam pengiraan pendapatan ekonomi. Walaupun ekspor sesuatu negara itu berdaya saing, tetapi itu tidak bermakna negara tersebut telah mencapai kepelbagaian di dalam ekspor mereka.
Statement of Originality

The work described in this Final Year Project, entitled "Revealed Comparative Advantage (RCA), Export Diversification and Economic Performance in Selected Asian Countries" is to the best of author's knowledge that of the author except where due reference is made.

19/6/2012

Date Submitted

Faiznur Binti Yusuf
23454
ACKNOWLEDGMENT

Firstly I would like to express my gratitude to God the most gracious and merciful because I have finally done my final year project.

Next is my special thanks to my supervisor, Dr. Mohammad Affendy Arip for his willingness in supervising me along the writing of this final year project. I am thankful to him because of his advice, guideline, and the most important is the information which have been delivered to me. Without his support and guidance, I will not able to complete my final year project.

Furthermore, I would like to thank to my beloved family who always support me since I was born until now and for my friends who have helping me a lot in completing my project.

Finally, this special thank will be given to the staffs in Faculty of Economics and Business (FEB) who have assist me and providing a guideline to complete my final year project.
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CHAPTER 1

INTRODUCTION

1.0 Background of Study

Asian economic performance has grown rapidly since the year of 1960 especially in East Asian countries such as Malaysia, Indonesia, Singapore, China and Japan. Each of the countries has their own way to manage the economic activity based on its specialization. A country which is specialize in a production of certain goods or services usually is an export oriented country.

Export is a major tool for every country to rise up the economic performance. If an export is diversified, it will lead to the increasing of economic performance. Radelet, Sachs and Jong (1997) stated that the high-performing of East Asian countries recognized the imperative of joining the world economy through the promotion of labor-intensive manufactured exports. The exports promoted through a combination of policies—relatively free trade, convertible currencies, and macroeconomic stability—and through a set of innovative institutions which are export processing zones, duty exemption schemes, and incentive packages for foreign direct investment.

Different countries have different area of specialization and not all countries around the world have this specialization. The degree of specialization from each country can be identifying by looking at the standard deviation from Revealed Comparative Advantage (RCA) index which have been introduce by Balassa (1989). From the standard deviation of the RCA index, we will know which country is competitive in the production of goods and services based on their availability of the
factor of productions. When the standard deviation of RCA index is high, it shows that the country has achieved a specialization and the lower value of standard deviation explains the higher degree of export diversification.

1.1 Definition of Term:

1.1.1 Export Diversification

Samen (2010) defined export diversification is a moving away from a limited basket of exports in order to decrease the economic and political risks of dependence upon a few primary commodity exports. In simply, export diversification is a variety of products exported by one country to another country. Recently, many countries practised export diversification and it shows that the country is competitive in their trade activities.

1.1.2 Revealed Comparative Advantage (RCA)

According to Balassa (1989) from Arif (2008), RCA model has been developed to calculate the relative export ratio for the particular commodity against the total export of one country to the relative ratio of total export of the same commodity against the total export of the world. Furthermore, RCA index is used to compute the standard deviation to measure the degree of specialization and export diversification gain by a country.
1.1.3 Economic Performance

Economic performance can be referring as an economic growth which used Gross Domestic Product (GDP) to measure it. GDP is a market value of all output produced in the country for a one whole year. The production of the goods depends on the four factors of production which are land, labor, capital and entrepreneur. The most factor influence the economic growth is export activity. For example, Malaysia is an export oriented country and export activity is a major contributor to boost up the economic performance.

1.2 The Trend of Export Performance and Economics Growth

In this study, the export of goods and services data for the countries of Malaysia, Indonesia, Singapore, China and Japan, obtained from the United Nations Commodity Trade (UN COMTRADE) database. As we know, export is a major activity to increase the economic growth but an export performance does not always increases every year. This is because, many factor have influence the export performance such as economic crisis, political factor and environmental factor. The illustration of Figure 1 and Figure 2 shows the trend of export and economic growth from the year of 1976 until 2010 for the five Asian countries.
Figure 1: The Trend for Export of Goods and Services

From Figure 1, we can see the fluctuation flows of exports for the countries of Malaysia, Indonesia, Singapore, China and Japan. The actual amount for the exports of goods and services are in billion US dollar and to see a clear comparison of the exports between the countries, the data have been log by using the natural log. Between these five countries, we can see that the highest export of goods and services has gained by China. After the accession to the World Trade Organization (WTO), China’s economy start to emerge and the export activity has extremely growing starting from the year of 2001. For the lowest export country is Indonesia. Although the export performance has increase throughout the year, but the gain are still below the others countries and it shows that Indonesia has poor export strategy. For Malaysia, Singapore and Japan, their export activity is still in average condition.
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Figure 2 shows the flows of economic growth in Malaysia, Indonesia, Singapore, China and Japan. The logarithm method which is natural log has been applied to the data of GDP. As we can see, the highest GDP gains are China and Japan. For China, the economic growth has increased throughout the year and it shows that China has successfully improved their economic growth. One of the factors influencing China’s economic growth is export activity. For Japan, the economic growth in that country shows a fluctuate condition but it is still the highest among the countries of Malaysia, Indonesia and Singapore. The lowest economic growth among these five Asian countries is Singapore. This is because Singapore’s productivity is less due to the lack of resources.
In general, a country that gains a high performance in export has contribute to the increasing of economic growth. But, some of the country like Singapore do not depending much its export but they are depending on the investment that made by a foreign country to their country. For the countries like China and Japan, we can see these both countries are depending much on their export and that is why China and Japan have successfully located itself to the global market.

1.3 Problem Statement

The rapid spreading of the globalization over the world have make export diversification as an important tool to boost up the economic performance. Asian countries such as Malaysia, Indonesia, Singapore, China and Japan have become the famous countries in exporting activity. Each of the country has its own specialization in export. With this, government for each of the country have allocating much budget to help their industry to bare some of the production cost.

For example in our country Malaysia, government have provided much incentive for the producer or entrepreneur who wants to join the global market by giving a subsidy. This subsidy can help the producer to lowering the cost that they need to bare especially while entering the global market. For other countries such as China, Japan, Indonesia and Singapore, their government also have their own way in helping the local industry to get a place in a global market.

Even though these five Asian countries have successfully show their improvement in competitiveness, employment, standard of leaving and the production productivity, but in fact there have two different types of countries and the impact of export diversification towards the economic growth also different.
Malaysia, Indonesia and China are still in a category of developing countries but Singapore and Japan are classified as developed countries. In conclusion, the impact on export diversification towards economic growth is significantly different among the countries. Besides that, although most of the countries practised export diversification but not all of the countries are specializing. Thus, the study of revealed comparative advantage (RCA) which measures the specialization, export diversification and economics performance on the countries of Malaysia, Indonesia, Singapore, China and Japan will be an interesting subject by itself.

1.4 Objectives of the Study

1.4.1 General Objective

Based on the problem statement, this study aims to investigate the relationship of RCA for Asian five countries which are Malaysia, Indonesia, Singapore, China and Japan and their export diversification which can help to generate high economics performance.

1.4.2 Specific Objective

a) To measure the RCA index for Malaysia, Indonesia, Singapore, China and Japan for their commodities production.

b) To identify the most specialize product produced by each of the selected Asian countries.
1.5 Significant of the Study

Generally, exports activity is important as it is a major contributor for economic growth of Malaysia, Indonesia, Singapore, China and Japan. The competitiveness which is a specialization for each of the country also depends on its diversification of export.

Therefore, this research can contribute to give clear information on the relationship between the specialization export diversification and economics performance. Thus, the understanding from this research can be used by the policy maker as a reference or information to do a further study so that this further study will have a significant result.

Furthermore, this study also can be used by local industries to enhance their production based on the information given so that more specialization on the diversification of export will be created. The Increases in export diversification will increase the specialization and the economic performance also will rapidly increase.

1.6 Scope of the Study

The scope of this study will emphasize on specialization which is measured by RCA index, export diversification and economic performance in Malaysia, Indonesia, Singapore, China and Japan. The observation period for this study is starting from the year of 1976 until 2010 which mean 35 years of observation.

This study is divided into five chapters which are introduction, literature review, methodology, the empirical result and the conclusion and recommendation. In chapter two, a discussion on the past studies from the different researchers on the RCA, export diversification and economic performance will be discussed. While in
chapter three is explained about the method used to run the analysis for the study. For chapter four, it is focused on the empirical result which is the finding obtained by the RCA, export diversification and economic performance. Lastly is a conclusion, recommendation and the limitation of the study will be discussed in chapter five.
CHAPTER TWO
LITERATURE REVIEW

2.0 Introduction

Many studies have been conducted by the researchers all over the world regarding on the Revealed Comparative Advantage (RCA), export diversification and economic performance. In fact, several studies have used the concept of RCA in measuring export diversification and from the export diversification we will know level of the economic performance.

Every country has their own specialization in producing goods. When the country is specializing, it will lead the country to have an export diversification. Hence, greater economic performance will achieve.

To give a clear picture on the topic of Revealed Comparative Advantage, export diversification and economic performance in Malaysia, this chapter will divided the reviews on three different parts which are the reviews on RCA, the reviews on export diversification, and the reviews on the export diversification and economic performance.
2.1 Reviews on the Revealed Comparative Advantage (RCA)

Recently, Gong and Gu (2011) has studied about the RCA and structural complementarities of export products of Xinjiang and its neighbouring countries by using the RCA index and the trade complementarities index in the year of 2005 to 2007. The result shows that Xinjiang have significant comparative advantages in the electronic products and machinery, and miscellaneous manufactured products. Besides that, the study indicates that the trade structure between Xinjiang and its neighbouring economies is complementary and subsidiary competitive. Hence, it shows that Xinjiang has a good trade structure and cooperation between its neighbouring countries.

Burange and Chaddha (2008) conducted an analysis to assess India’s RCA in merchandise trade over the ten years period from 1996 to 2005. The RCA index has been used to measure the various levels of aggregation for exports and imports. The finding from the analysis is India has gained a comparative advantage in import and export of labor intensive item such as textiles and scale intensive items like chemicals and iron and steel. An advanced technology in India still not arrived, so the RCA index for product cycle goods is less. Hence, advancement in production should be practice to achieve a high comparative advantage.

Serin and Civan (2008) has conducted a study on Turkey whether it has a comparative advantage in tomato, olive oil and fruits juice industry and the flow of this industry since the period of 1995 until 2005 in European Union market. RCA and comparative export performance (CEP) index has been used to analyse this study. The result from the study is Turkey has gain a comparative advantage in