EXPORT-LED GROWTH HYPOTHESIS : EMPIRICAL EVIDENCE FROM INDIA, PHILIPPINES, NIGERIA AND MALAYSIA

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DECLARATION FORM

I hereby declare that the thesis is based on my original work except for quotations and citations, which have been duly acknowledged . I also declare that it has nor been previously or concurrently submitted for any other degree at UPM or other institutions.

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ABSTRACT

The relationship between exports and economic growth has been fully analyzed by a large number of recent empirical paper. Nevertheless, the evidence is rather mixed. This study re-examine the export-led growth hypothesis (ELG) in four developing countries i.e., India, Philippines, Nigeria and Malaysia using Johansen Multivariate cointegration approach and Vector error Correction Model (VECM). The results obtained suggest that the ELG hypothesis is valid for Indian and Malaysian economy in both short and long-run. Besides, our results indicate that the growth rate of imports and government expenditure have a positive impact on economic growth for both countries.

ABSTRAK

Kajian tentang hubungan antara export dan pertumbuhan ekonomi telah diperbincangkan oleh ramai pengkaji. Walau bagaimanapun, bukti tentang *hipotesis export mempengaruhi pertumbuhan ekonomi* masih kabur. Malah terdapat percanggahan pendapat dikalangan para pengkaji mengenainya. Kajian ini antara lain bertujuan melihat semula hipotesis ini dengan menggunakan Ujian Kointegrasi Berbilang Johansen berserta Model Vektor Pembetulan-ralat (VECM). Berdasarkan keputusan empirikal dari kajian ini, didapati *hipotesis export mempengaruhi pertumbuhan ekonomi* berlaku di dua negara yang dikaji iaitu India dan Malaysia bagi jangka masa panjang dan jangka masa pendek. Selain itu, pertumbuhan import dan perbelanjaan kerajaan juga memberi impak positif kepada pertumbuhan ekonomi di kedua-dua negara.

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CHAPTER ONE

INTRODUCTION

1.1 Export-led Growth Hypothesis

The nature of the relationship between exports and national output growth has been one of the most debated in the recent past, yet with little consensus. Central to this debate is the question of whether strong economic performance is export-led or growth-driven. This question is important because the determination of the causal pattern between export and growth has important implications for policy-maker's decisions about the appropriate growth and development strategies and policies to adopt. The fact that strong correlation exists between exports and real GDP growth has been well documented in the literature. But previous empirical studies had produced mixed and conflicting results on the nature and direction of the causal relationship between export growth and output growth.

There are two principal arguments in favor of the *export-led growth* hypothesis, i.e., economies of scale and the theory of comparative advantage. In *The Wealth of Nations*, Adam Smith recognized that export markets would permit factories to produce larger quantities of any single item and thus to achieve a higher degree of specialization than if they produced for the home market only. Longer production runs reduce the set-up costs of switching from one product to another and specialization permits each firm to learn more about manufacturing its products efficiently. It permits the realization of economies of scale.

The theory of comparative advantage, developed by David Ricardo during the nineteenth century represents yet a further argument in favor of an export promotion strategy. This theory states that nations with different endowments of capital, labor and natural resources gain by specializing in those areas where their relative production costs are low and importing in those areas where their relative production costs are high.

Besides Smith and Ricardo, there are many other theoretical literatures about trade and growth. Although some of the literatures find that growth can affect patterns of international trade, there is no clear evidence about the causal relation between these variables. Empirical literature relating trade and growth has been dedicated to assess the pattern of trade policy on growth, basically trying to find a causal relationship between openness and growth, or more specially, if trade causes growth. Some authors such as (Sachs and Warner, 1995; Krueger, 1997; Ben-David and Kimhi, 2000) try to demonstrate that open economies tend to converge faster to steady state growth than the close ones. Others like McCombie and Thirlwall (1999) have found that trade can prevent economic growth due to the harmful effects on infant industries, or due to balance-of payments constraint, in a demand-led approach. Empirical evidence in several countries, mainly in developing ones, seems to support these studies. Still, others like (Rodriguez and Rodrik, 1999) are skeptical about the power of trade in pushing up economic growth even using similar methodology that those who advocates the benefits of opening up to growth.

Broadly speaking, export growth can promote economic growth and vice-versa. From the growth-theory literature point of view, export expansion is the key factor promoting economic growth. There are various explanations that have been put forward to relate these two variables to each other. First, the growth of exports has a stimulating effect on total factor productivity growth through its positive impact on higher rates of capital formation. Second, the growth of exports helps relax the foreign exchange constraints, thereby facilitating imports of capital goods and hence faster growth. Third, competition from overseas ensures an efficient price mechanism that fosters optimum resource allocation and increases the pressure on industries that export goods to keep costs relatively low and to improve technological change, thereby promoting economic growth. Clearly, these arguments lead us to hypothesize that exports contribute positively to economic progress.

In contrast to the export-led growth hypothesis, it can also be argued that causality runs from the growth of output to the growth of exports. When we consider a growing economy, some industries face substantial changes in terms of learning and technological innovation, which are related to the accumulation of human capital, manufacturing experiences and the technology transfer or real capital accumulation arising from foreign direct investment. Such unbalanced growth has nothing to do with outward-oriented policies, i.e., output will still continue to grow even in the absence of these policies. Under such unbalanced growth, the growth of domestic demand will lag behind the growth of output in these prosperous industries and it is likely that the producers will sell their goods in overseas markets. Therefore, economic growth will promote the growth of exports.

Another plausible hypothesis is that negative causality runs from output growth to export growth. This would be likely to occur if consumer demand were concentrated in exportable and non-traded goods in which case an increase in domestic demand would induce an increase in output but a decrease in exports. As a result, output growth will lead to a reduction in the growth of exports. If an increase in exports arises as a result of inward foreign direct investment, the growth of exports will reduce the growth of output due to various distortions (Bhagwati (1979)), and it is therefore easier to identify the negative relationship between the growth of output and the growth of exports.

1.2 Problem Statement

The relationship between exports, economic growth and development has long been a subject of much interest in development literature. Theoretical consensus on export-led growth emerged among neoclassical economists in the 1970s and 1980s after the successful story of newly industrialized countries (NICs). The export-led growth hypothesis has not only been widely accepted among academic scholars (see, for example, Feder 1982, and Krueger, 1990) and evolved into a "new conventional wisdom" (Tyler, 1981), but also has shaped the development policies of a number of countries and the World Bank (see World Bank Development Report 1987).

Despite the popularity of the ELG hypothesis, the empirical evidence is rather mixed. The recent time-series evidence fail to provide uniform support for the ELG hypothesis whereas a substantial literature, applying a range of cross-section type methodologies, supports an association between exports and growth. As a result, the validity of the ELG hypothesis has been brought into question, contrary to the robust earlier support. Balassa (1978), Feder (1982), Jung and Marshall (1985), Ram (1987), Kunst and Marin (1989), Ahmad and Kwan (1991), Greenaway and Sapsford (1994) and Dutt and Gosh (1996), to name only a few, found mixed results either supporting or rejecting the export-led growth hypothesis.

The reasons for these different observations have been discussed in some recent studies (e.g. Moschos, 1989; Boulding, 1992; Greenaway and Sapsford, 1994; Poon, 1995, Yaghmaian and Ghorashi 1995). They argue that the relationship between exports and economic growth depends on the level of development and economic structure. At a very low level of development, export expansion may not be able to affect economic growth effectively. On the other hand, when economic development reaches a high level, the contribution of exports to economic growth will be less significant compared to middle income countries. For exports to effectively affect economic growth, a country should attain a minimum level of development, with an outward-oriented development policy. This is the so called minimum development level hypothesis. Furthermore, some authors (e.g. Yaghmaian and Ghorashi 1995) maintain that both exports and economic growth are preceded by a long and complex process of structural change and economic development. These indicate that the differential impact of exports on economic growth across different countries and regions depends on the level of development and economic structure and is subjected to a dynamic interactive process of economic development and structural change.

Previous studies on ELG hypothesis in developing countries is quite limited and the evidence is mixed. In case of India, there were few studies on this subject. However, the empirical evidence fail to provide uniform support for ELG hypothesis. For example, Nidugala (2001) concluded that the ELG hypothesis was valid for India. In contrast, Anwer and Sampath (2001) and Asafu-Adjaye (1999) did not find any evidence to support the ELG hypothesis. Dhawan and Biswal (1999) claimed that there existed unidirectional causality from export to the GDP for India.

In recent years India's percentage share in world exports has been increasing. Furthermore, there are indication that India is building up new areas of strength in export markets by moving to computer software export, exports of pharmaceuticals and engineering manufactures in additional to traditional export strengths in gems, jewelry, textiles and primary products (NASSCOM, 2002). Therefore, study in this subject for India become crucial in order to assist Government and policy makers in making decision.

Malaysia and Philippines among of the developing countries which had been growing very rapidly with a widely held view that such growth is export-led. The empirical evidence however, is mixed and inconclusive. For example, Dodaro (1993) concluded that export growth has had a negative effect on the Malaysian economic development, while Bahmani-Oskooee and Alse (1993) contended that there was no long-run relationship between exports and economic growth in the Malaysian context. However, Doraisami (1996) claimed that her results show a two way causality between export growth and economic development. Ekanayake (1999) in his study on "Export and Economic Growth in Asian Developing Countries" concluded that there exist bi-directional causal relationship between export and economic growth in Philippines. In contrast, Ahmad and Harnhirun (1996) had reported no relationship between export and growth for Philippines.

Nigerian economy is the largest in Sub-Saharan, Africa (after South Africa) with total GDP in 2002 of US$ 42.73 billion. Export of crude oil as well as agricultural commodities playing a major role in pushing up the economic growth. With its large reserve of natural resources especially oil, Nigeria has potential to built highly prosperous economy. Nevertheless, the study in this subject for Nigeria is quite limited.

1.3 Significance of the Study

Export promotion is one of the important strategy to improve economic growth and many countries adopt certain strategic trade measures such as export subsidies and domestic currency devaluation to promote their exports. The role of the exports influencing economic growth are obvious in East Asia where this region has achieved higher rate of economic growth before the financial crisis. In addition, several cross country studies also have revealed that openness to trade promotes growth.

However, many developing countries still pursued with the strategy of import substitution, despite there is evidence of supporting export-led growth strategy. The assumption behind the import substitution strategy was export pessimism-that exports from developing countries would not grow, and even if they did, the terms of trade would go against their interests.

There are numerous studies has been done to examine the relationship between export and growth. However, very limited study were found in Sub-Saharan and South Asia. Therefore, we are hoping this paper can give some guidance to the policy makers as well as the Government planners when making decision.

1.4 Objectives

The main objective of the study is to examine the relationship between export and output growth. The specific objectives of the study are:

1. To examine the relationship between export, import, government expenditure, exchange rate, foreign income and GDP via Johansen procedure.
2. To examine the role of export growth in affecting the economic growth in India, Philippines, Nigeria and Malaysia.
3. To derive the appropriate exports policies and then suggested to the governments.

1.5 Statement of The Hypothesis

Based on the trade and development theory and the past studies, several hypotheses can be developed to show the anticipated relationship between export and GDP growth. The hypotheses are:

1. Export has a positive relationship with the output growth.
2. Import has a positive relationship with the output growth
3. The relationship between Government expenditure and output growth can be either positive or negative depends on the Government policies.
4. Exchange rate has a positive relationship with the output growth
5. Foreign income has a positive relationship with the output growth

1.6 Organization of the Study

This project paper is organized as follows: Chapter 2 presents some economic background of the countries that involve in this research. Chapter 3 describes empirical literature review on the relationship between export and growth as well as theoretical literature. In Chapter 4 we discuss the research methodology. In this section, we deals with some econometrics approaches such as unit root test, Johansen Multivariate cointegration test and error correction model. Chapter 5 offers a discussion on the results obtained in this study. Chapter 6 end with summaries of the main findings, policy implication as well as limitation of the study and recommendations for further studies