UNIVERSITI PUTRA MALAYSIA

TRADING SYSTEMS AND GROWTH PROCESS IN ASEAN-5 ECONOMICES

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By

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Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfillment of Requirements for the Degree of Doctor of Philosophy

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UPM

DEDICATION

DEDICATED TO
MY MOTHER AND MY LATE FATHER
MY BROTHERS AND SISTERS
THOSE WHO HAVE CONTRIBUTED SOMETHING INTO MY LIFE
HOWEVER TRIVIAL IT MAY SEEM

Abstracts of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Doctor of Philosophy

TRADING SYSTEM AND GROWTH PROCESS IN ASEAN-5 ECONOMIES

By

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October 2004

Chairman: Professor Ahmad Zubaidi Baharumshah, Ph.D.

Faculty: Economics and Management

This study centres on the analysis of effect of two main trade relations – multilateral and regional trade liberalisations, on the macroeconomic variables (GDP growth rates, foreign direct investment, and wage rate) of five ASEAN countries namely Malaysia, Indonesia, the Philippines, Singapore and Thailand. The study covers the period 1976- 2000.

Endogenous growth model built on the framework of Bronsztein *et al.* (1998) is utilized and Generalised Least Square (GLS) fixed effects estimation technique is applied to estimate the parameters. Convergence hypothesis is also tested in the data. Four measures of trade liberalisation – trade share, Dollar's exchange rate distortion, average tariff and regional trade arrangement (RTA) dummy for participation regional trade arrangements, are constructed.

The main results are that multilateral trade liberalisation and participation in regional trade arrangement lead to faster growth rate. This implies that maintaining stable exchange rate, tariff on selected key products, and high trade share boost economic

growth in ASEAN region. Regional groupings could be utilized to achieve stable economic growth. Other important determinants of the cross-country growth rates are wage rate, employment level and FDI emphasizing the importance of incentives to workers and technology to improve total factor productivity per worker.

Also multilateral trade liberalisation accelerates FDI, while regional trade liberalisation decelerates it. Other factors that influence the location of FDI in the regional economies are wage rate (low labour cost), employment level, human capital and initial GDP. Market size is not an important factor in the location of FDI in ASEAN countries in the regional and multilateral trading system. Where it is significant, its effect is negative.

There is no noticeable effect of multilateral trading system on wage rate but regional trade liberalisation has. The most important determinants of wage rate in ASEAN region are GDP growth rates and FDI and employment level in both trade liberalisations. The impact of multilateral trading system on total factor productivity is positive with exchange rate distortion index and negative with average tariff. Regional trade liberalisation leads to low total factor productivity. The factors influencing total factor productivity are FDI, wage rate and export intensity in both trade liberalisations.

Our data detect unconditional and conditional β-convergence. The conditional β-convergences in either trade liberalisation are similar. This shows that ASEAN countries can follow either of trading system to achieve the long run steady state equilibrium.

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Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia Sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

PERDAGANGAN SISTEM DAN PEMBANGUNAN EKONOMI NEGARA ASEAN-5

Oleh

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Kajian ini tertumpu kepada analisis kesan daripada dua perhubungan perdagangan utama – perdagangan bebas pelbagai hala dan perdagangan bebas serantau, ke atas pemboleh ubah-pemboleh ubah makro ekonomi (kadar peningkatan KDNK, pelaburan wang asing, dan kadar upah) di lima negara ASEAN iaitu Malaysia, Indonesia, Filipina, Singapura dan Thailand. Kajian ini meliputi jangka masa dari tahun 1976 – 2000.

Model peningkatan "endogenous", yang diambil daripada kerangka yang dibangunkan oleh Bronsztein *et al.* (1998) telah digunakan, dan teknik ramalan kesan tetap GLS telah diaplikasikan untuk menganggarkan parameter-parameter. Hipotesis konvergens juga turut diuji. Empat unjuran perdagangan bebas – syer perdagangan, gangguan pertukaran Dollar, purata cukai dan pemboleh ubah dumi RTA untuk penyertaan di dalam perdagangan serantau, telah dibangunkan.

Keputusan utama kajian ini adalah perdagangan bebas pelbagai hala dan penyertaan di dalam perdagangan serantau menjurus ke arah peningkatan pembangunan yang lebih pesat. Ini, secara tidak langsung memberi gambaran bahawa mempertahankan

kadar pertukaran wang asing yang stabil, cukai ke atas barang-barang terpilih, dan syer dagangan yang tinggi menggalakkan pembangunan ekonomi di rantau ASEAN. Perikatan serantau juga boleh digunakan untuk mencapai peningkatan ekonomi yang stabil. Lain-lain penentu bagi kadar peningkatan rentas-negara termasuklah kadar upah, kadar tingkat guna tenaga, dan pelaburan asing, yang menekankan bahawa betapa pentingnya insentif kepada para pekerja dan teknologi untuk mempertingkatkan faktor produktiviti bagi seorang pekerja.

Namun begitu, perdagangan pelbagai hala didapati mempercepatkan pelaburan asing, manakala perdagangan bebas serantau mengurangkannya. Faktor-faktor lain yang turut mempengaruhi lokasi pelaburan wang asing di ekonomi serantau adalah kadar upah (kos buruh yang rendah), kadar tingkat guna tenaga, sumber manusia dan KDNK pada peringkat awal. Saiz pasaran bukanlah satu faktor yang penting dalam menentukan lokasi pelaburan wang asing di negara-negara ASEAN di dalam sistem perdagangan pelbagai hala dan perdagangan serantau. Apabila saiz pasaran adalah penting, kesannya adalah negatif.

Sistem perdagangan pelbagai hala tidak mempunyai kesan yang signifikan terhadap kadar upah tetapi sistem perdagangan serantau memberi kesan yang signifikan. Faktor yang paling penting dalam menentukan kadar upah untuk kedua-dua sistem perdagangan di rantau ASEAN adalah kadar peningkatan KDNK dan pelaburan wang asing, dan kadar tingkat guna tenaga. Sistem perdagangan pelbagai hala membawa kesan yang positif ke atas faktor produktiviti keseluruhan dengan indeks gangguan kadar pertukaran wang tetapi kesan faktor produktiviti keseluruhan yang negatif dengan purata cukai. Sistem perdagangan serantau membawa kepada faktor

produktiviti keseluruhan yang rendah. Faktor-faktor yang mempengaruhi faktor produktiviti keseluruhan termasuklah pelaburan wang asing, kadar upah dan intensiti eksport kedua-dua sistem perdagangan ini.

Data kajian ini dapat melihat konvergens ß bersyarat dan tidak bersyarat. Konvergens ß bersyarat bagi kedua-dua sistem perdagangan adalah sama. Ini menunjukkan bahawa negara-negara ASEAN boleh mengguna pakai mana-mana sistem perdagangan ini untuk mencapai keseimbangan yang stabil untuk jangka masa panjang.

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CHAPTER I

INTRODUCTION

1.1 Overview of the Study

Looking over the past century and more, the process of increased global integration has been erratic. It has been marred by periodic crisis, formation of regional trade blocks and shifting world leadership. One of the most controversial issues in international economics over the years has been whether international trade liberalisation fosters or hinders economic growth. In other words, does trade liberalisation or increased openness lead to higher economic growth? This controversy is based on the impact of turbulent multilateral trading system on world trade and output. According to Kitson and Michie (2000), there are cyclical variations in world trade and output, and significant differences in growth rates associated with each trading system.

Table 1.1: Growth of World Output and Trade, 1870-2001
(Annual % growth rates)

Periods	Output	Trade
Pre-First World War 1870-1913	2.7	3.5
Interwar 1913-37	1.8	1.3
1913-29	2.3	2.2
1929-37	0.8	-0.4
Post-war 1950-99	3.9	5.8
1950-73	4.7	7.2
1973-90	2.8	3.9
1990-99	3.0	6.2
2000-2001	4.1	7.6

Source: Kitson and Michie, (2000) page 47, IMF World Economic Outlook, 2000

World trade and output grew at an average of 3.5 per cent and 2.7 per cent respectively between 1870 and 1913 (pre-First World War or Gold Standard) (See Table 1.1). During 1913 to 1929, world trade grew at an average annual rate of 2.2 per cent and output grew at an average annual rate of 2.3 per cent (interwar era). The relative slow growth was attributed to disruptions and dislocation of the First and Second World Wars. Thus, the multilateral trading system was in such considerable disarray, that by 1924, the volume of world trade was only 7 per cent above the 1913 level; the relative stability of 1920s was followed by the turbulence of 1930s –the Great Depression.

Table 1.2: The Growth and Volatility of World Output and Trade, 1913-1999

Periods	Output			Trade		
	Mean average growth rate (%)	Standard deviation (%)	Coefficient of variation (%)	Mean average growth rate (%)	Standard deviation (%)	Coefficient of variation (%)
Pre-First World War 1870-1913	2.8	2.1	0.75	3.6	2.5	0.71
Interwar 1913-37	2.1	4.8	2.26	2.2	7.5	3.48
1913-29	3.7	0.8	0.22	5.7	2.2	0.39
1929-37	1.3	5.9	4.53	0.5	8.5	16.65
Post-war 1950-99	3.9	1.8	0.45	5.9	4.6	0.78
1950-73	4.7	1.6	0.34	7.5	4.2	0.56
1973-90	3.1	1.6	0.53	4.5	4.9	1.09
1990-99	3.0	0.8	0.27	6.2	2.3	0.37

Source: Kitson and Michie (2000), page 48.

During period 1929 between 1932, the world trade and output declined at an average annual rate of 9.9 per cent and 6.2 per cent respectively. The disintegration of the multilateral trading system during this epoch was reflected in the movement towards a more closed world economy that is a reversal of the 1920s trend towards increased openness. However, the world trade and output failed to reach its 1929 levels, with

growths of only 5.8 per cent and 5.2 per cent respectively. Thus the growth of trade and output was slow and highly volatile (Table 1.2). During the post Second World War, world output and trade grew at a faster rate than in any previous periods. In the Bretton Woods trading system, 1950-1973, the world trade grew at an annual average rate of 7.2 per cent and output an annual average rate of 4.7 per cent. This period is considered to have witnessed a significant rise in the openness of the world economy, which is explained by a catching-up process as the world economy adjusted from the dislocations of the Second World War. It also reflects, however, the increasing integration of the world economy based on an effective and stable international trading system.

In the 1950s and 1960s, the vision that restrictions and protectionist policies would lead to higher growth rates took hold among policymakers. During these periods many governments pursued import-substitution strategies and trade restrictions proliferated. In the 1980s and 1990s, the question of whether or not trade leads to greater economic growth received affirmative answers among policymakers and academicians. The proliferation of free trade zones, trade liberalisation initiatives, and the successful completion of the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) are testimony to the rising faith in trade as an engine of growth. Yet, there is a vocal and influential minority, which continued to assert that trade liberalisation, is deleterious to growth. Sachs (1987) questioned the premise that trade liberalisation is a necessary component of successful outward oriented strategies. He argued that the success of the East Asia countries was to a large extent due to an active role of government in promoting exports in an environment where imports had been fully

liberalised and where macroeconomic equilibrium, especially fiscal policy was fostered. Also Taylor (1991) argued that trade liberalization strategy is intellectually moribund and that there are no great benefits in following open trade and capital market strategies; development strategies oriented internally may be a wise choice towards the country's end.

The slowdown of pace of economic integration among countries in the world economy during the 1970s and 1980s limits the realisation of economic gains from greater consumption, specialisation in production and international trade (DeRosa, 1995). This is attributed to the advent of new forms of protectionism, which inhibits greater expansion of world trade (Salvatore, 1986). To reverse this trend, (slowdown in global economic integration) through multilateral consensus to liberalise world trade on several fronts including trade in agriculture, textiles and apparel, and services, the Uruguay Round of multilateral negotiations was convened in 1986 under the auspices of the General Agreement on Tariffs and Trade (GATT).

Regional economic integration (regionalism) in the form of free trade areas and or the custom unions emerged in world economy in two periods - 1930s and 1980s and has proliferated over the past decades especially in the 1990s in Western Europe, North America, Africa and Asia. The overdue duration of the Uruguay Round negotiations, which were not concluded until 1993, was the reason that encouraged a number of countries to explore bilateral approaches to expanding their economic relations, particularly through the formation of regional trading arrangements (DeRosa, 1995).

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This resurgence of regionalism in world trade is perceived to continue to influence the nature and evolution of world economy. The emergence of regionalism in 1930s was due to chaos in the world markets that led to the use of discriminatory trade policies and *de facto* formation of trading blocs. The trading blocs during this period were centred on a dominant country with their colonies or empires and not based on geographical proximity. These countries like United Kingdom, the Netherlands and Italy conducted most of their trade with their respective colonies (Kitson and Solomou, 1992, 1995 and Kitson and Michie, 2000). Table 1.3 shows the trade blocs in 1930s and trade within the bloc.

Table 1.3: The Emergence of Trade Blocs in 1930s

Country	Economic Bloc	Imports from Economic Bloc as a % of country's imports		Exports to Economic bloc as a % of country's total exports	
		1929	1938	1929	1938
United Kingdom	British Commonwealth, colonies, protectorates,	30	42	44	50
	Other countries of the sterling bloc[1]	12	13	7	12
France	French colonies, protectorates, and mandated territories	12	27	19	27.5
Belgium	Belgian Congo	4	8	3	2
The Netherlands	The Netherlands overseas territories	5.5	9	9	11
Italy	Italian colonies and Ethiopia	0.5	2	2	23
Portugal	Portuguese overseas territories	8	10	13	12
Japan	Korea, Formosa, Kwantung, Manchuria	20	41	24	55
Germany	Eastern Europe[2],	4.5	12	5	13
	Latin America	12	16	8	11.5

Source: Kitson and Michie, 2000, P. 57
Notes: 1 Sweden, Norway, Finland, Denmark, Egypt, Estonia, Latvia, Portugal, Thailand and Iraq
2 Bulgaria, Greece, Hungary, Rumania, Turkey and Yugoslavia.

These economic arrangements are, however discriminating in nature and contradict the fundamental principles of multilateralism and non-discrimination embodied in the General agreement on Tariff and Trade (GATT), which requires its members to lower tariffs or other import restrictions without regard for country of origin and extend equal market access to goods from all exporting countries. However, evidence shows that the intra-regional trade is small compared to extra trade (see Tables 4 and 4a). The intra ASEAN exports was 20.1% in 1990 while extra ASEAN exports was 79.9% in the same year. Also the intra imports stood at 16.2% in 1990, while extra ASEAN was 83.8% in the same year. Although the intra ASEAN exports and imports are increasing but it is small when compared its trade with the World. The only regional economic bloc that trades more within the bloc is the APEC (See Tables, 4 and 4a). Its intra trade is greater than its extra trade. This may be due to its complementary membership, which includes the developing and developed nations. The regional trading arrangements pose a fundamental challenge to the global trading system and objective of achieving economic gains from greater integration of the world economy on a multilateral basis. The recent growth of interest in regional economic arrangements, manifested particularly in agreements to establish a free trade area in North America (NAFTA) and single economic market in Western Europe, is not limited to advanced industrial countries. Among the developing countries, the preferential trading arrangements and related regional investment programs of the Association of South East Asian Nations (ASEAN) are prominent.