THE FREE TRADE DOCTRINE, REGIONALISM, THE ASEAN FREE TRADE AREA AND THEIR EFFECTS ON TRADE AND TRADE POLICY

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The Free Trade Doctrine, Regionalism, the ASEAN Free Trade Area and Their Effects on Trade and Trade Policy

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DECLARATION

I, Anuar Ariffin, hereby declare that this thesis, submitted to fulfil a requirement for the award of Doctor of Philosophy from Murdoch University, is my own piece of work. This thesis does not contain any pieces of work of other persons, except those that are duly acknowledged and referenced in the text. Also, this thesis has not been submitted for any qualifications at any other academic institutions.

Anuar Ariffin

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ABSTRACT

This thesis examines a number of issues concerning the free trade doctrine, regionalism and Regional Free Trade Areas (FTAs), with a special focus on the ASEAN Free Trade Area (AFTA). This study is broadly divided into three parts. The first part examines the doctrine of free trade from the perspectives of ideological belief as well as theoretical expositions, and how these influence trade policies of many countries throughout the history of trade. The second part of the study analyses the forces that influence the formation of regionalism and regional FTAs all over the world. In the first and second parts, an extensive survey of the existing literature is undertaken to unearth relevant ideas and events, which are important to policy makers and the general public.

The third part of the study deals primarily with empirical investigation of the economic effects brought about by the formation of regional FTAs. Two main issues are examined in this part. The first issue is the assessment of the effects that regional FTAs have on trade of members against other countries that do not become members of any economic groupings. The second issue is the examination of the effect of AFTA on trade of member vis-à-vis non-member countries. In addition, this part also examines the question of whether AFTA “creates” or “diverts” trade. For the purpose of addressing issues grouped in this part of the study, a gravity model is employed to answer the questions of interest. This part of the study covers a period of 24 years (1980-2003). Cross sectional data involving 990 pairs of countries, which trade with each other, are used in regression analysis based on the Ordinary Least Square technique.

Findings from the first and second parts of the study indicate that trade between countries during the era of mercantilism (1500s-1750s) was carried out under enormous restrictions in consonance with the thinking of that time. However, by the end of eighteenth century the economic arguments in favour of free trade began to be accepted, resulting in the adoption of the free trade idea into the commercial policies of many countries, particularly in Europe in the middle of nineteenth century. The period characterized by unilateral free trade regimes lasted only about three decades, as protectionist elements made a return into trade policy formulation in the 1870s. The period of liberal trade policy regimes came to a complete end at the breakout of the First World War in 1914, and the protectionist trade policies of many countries continued to strengthen their grip until the Second World War.
After WW2 ended in 1945, many countries realised that security and the orderly conduct of international trade were important to ensure continuous prosperity of the world. This led to series of negotiations involving major trading countries that resulted in the establishment of the GATT in 1947. The main thrust behind this initiative was that all trading nations must cooperate to liberalize their trade policies, reflecting the idea that countries should move towards adopting “freer” trade policy than the regime they adopted in the 1930s and the early 1940s.

At the end of 1990s the world once again observed agreement amongst prominent trade economists for the case of pursuing free trade policy. This is due to the renewed recognition by economists of two important propositions: (1) if market failures remain unfixed, then pursuing free trade policy can harm rather that help, and (2) if market failures are fixed through suitable policy interventions, then free trade can be used to exploit the potential gains from trade. Within the second proposition, economists emphasis that if market failures arise in domestic markets, then the most appropriate policy interventions would be to devise policies targeting at correcting those domestic market failures, while free trade is maintained externally.

Findings from empirical assessment of the effects of regional FTAs on trade indicate that economic theory might be able to approximate reality. One important result of this part of the study suggests that three regional FTAs, AFTA, CER and MERCUSOR have had an intra-bloc trade intensifying effect in recent years, particularly since the early 2000s. This implies that trade among members of these economic groupings is higher than their trade with other countries. Meanwhile, the EU and NAFTA do not show an intra-bloc trade intensifying effect for any part of the study period. The other important result obtained by this study suggests that although AFTA member countries trade with each other, comparatively, more than their trade with the rest of the world, the intensity of trade between them is less pronounced for the period after the formation of AFTA. This implies that AFTA has the characteristic of an “open trading bloc”. Lastly, the finding of this part of the study also suggests that AFTA essentially creates rather than diverts trade. This means that AFTA’s establishment does not only increase trade among member countries but it also boosts trade with the rest of the world.
ABBREVIATIONS

AAC – Association of African Countries
AFTA – ASEAN Free Trade Area
AIC – ASEAN Industrial Complementation/Alkaike Information Criteria
AIJV – ASEAN Industrial Joint Venture
AIP – ASEAN Industrial Project
ANCOVA – Analysis of Covariance
ANDEAN – Andean Pact
APEC – Asia Pacific Economic Cooperation
ASEAN – Association of South East Asian Countries
BA – Bangkok Agreement
BFT – Bilateral Free Trade
BFTA – Bilateral Free Trade Area
CACM – Central American Common Market
CAP – Common Agriculture Policy
CEAO – Communauté Economique de l’ Afrique Occidentale
CEPT – Common Effective Preferential Tariff
CER – Closer Economic Relations
CES – Constant Elasticity of Substitution
CGE – Computable General Equilibrium
COMESA – Common Market of Eastern and Southern Africa
CRS – Constant Return to Scale
CU – Customs Union
CUSFTA – Canada-US Free Trade Agreement
DC – Developing Countries
EC – European Community
ECOWAS – Economic Community of Western Africa States
EEC – European Economic Community
EFTA – European Free Trade Area
EMU – Economic and Monetary Union
EOI – Export Oriented Industrialisation
EU – European Union
FBM – Federation of British Manufacturers
FDI – Foreign Direct Investment
FTA – Free Trade Area
FTAA – Free Trade Area of the Americas
GATT – General Agreement on Tariffs and Trade
GCC – Gulf Cooperation Council
GDP – Gross Domestic Product
GECA – General Equilibrium Counterfactual Analysis
GNP – Gross National Product
GSP – Generalised System of Preferences
GTC – Gross Trade Creation
HAC – Heterocedasticity and Autocorrelation Consistent
IMF – International Monetary Fund
IRS – Increasing Return to Scale
ISI – Import Substitution Industrialisation
ITO – International Trade Organisation
LAFTA – Latin America Free Trade Area
LAIA – Latin American Integration Association
LDC – Least Developed Countries
MERCUSOR – Common Market of the South
MFN – Most Favoured Nation
MFT – Multilateral Free Trade
MTN – Multilateral Trade Negotiations
NAFTA – North America Free Trade Area
NEDA – National Economic Development Authority
NESDB – National Economic and Social Development Board
NFIS – National Federation of Iron and Steel
NIC – Newly Industrialised Countries
NUM – National Union of Manufacturers
OECD – Organization for Economic Cooperation and Development
OLS – Ordinary Least Square
PECA – Partial Equilibrium Counterfactual Analysis
PTA – Preferential Trading Arrangement
RFTA – Regional Free Trade Area
ROW – Rest of the World
RPTA – Regional Preferential Trading Arrangement
RTA – Regional Trading Arrangement
SBC – Schwarz Bayesian Criterion
SFT – Sectoral Free Trade
SMP – Single Market Program
SPSS – Statistical Package for Social Sciences
TD – Trade Diversion
UDEAC – Union Douaniere et Economique de l’ African Centrale
UEMOA – Union Economique et Monetaire Ouest Africaine
UFT – Unilateral Free Trade
UNCOMTRADE – United Nation Commodity Trade Statistic Database
UNICOM – United Coconut Oil Mills
WTO – World Trade Organisation
WW1 – First World War
WW2 – Second World War
CHAPTER ONE

INTRODUCTION

1.1 The Context of the Study

International trade has a long historical record, not only from the perspective of the actual trade that has been carried out between politically independent countries around the world, but also from the perspective of the evolution and debates about trade as an ideological belief which influenced economists, policy makers and the general public. The evolution and debates over trade as an ideological belief, which subsequently have greatly influenced on trade policies of many countries, may broadly be divided into three main eras: (1) the era of mercantilism, which was dominant from the 1500s through 1750s, (2) the era of classical economics (from the 1770s until 1870s) and (3) the era of neoclassical economics (from 1870s up to the present).

Since international trade has been given great emphasis (in part because of its importance to help improving economic wellbeing of many countries), it is imperative to investigate how the thinking about trade has evolved (and changed) over these three eras encompassing the past five centuries. Against this backdrop, this thesis attempts to examine the evolution of thinking about trade as an ideological belief as well as its influence over trade policy formulation across many countries of the world. In addition, this thesis also attempts to empirically examine the economic effects brought about by the formation of economic regionalism and regional free trade areas, two concepts that revolve around the idea of free trade, which have been pervasive in the twentieth century with a special emphasis on the ASEAN Free Trade Area (AFTA).
1.2 Background

Trade between countries can be traced to the early period of the first century in which trading activities were carried out intensively among cities around the Mediterranean Sea.¹ During these early trading years the social position of traders was, however, low due to negative perception about commerce in the eyes of moral philosophers and Christian theologians, who viewed trade as having potentially harmful effects on human morality.

The early Christian Fathers, like the Greek and Roman philosophers before them, treated economics as a branch of ethics.² Viner (1978, 35) noted that they were hostile to commerce as it was “associated with fraud and avarice, catering to luxury, and a potential source of moral corruption and deterioration of manners”. They were even more hostile to foreign trade. St. Ambrose wrote: “God did not make the sea to be sailed over, but for the sake of the beauty of the element. The sea is tossed by storms; you ought, therefore, to fear it, not to use it … use it for purposes of food, not for purposes of commerce” (cited in Irwin 1996, 17). The negative view on merchants, in particular, and trade in general, lessened towards the beginning of the sixteenth century as the contribution of trade to economic wellbeing was gradually accepted by the majority of the people.

Economic thinking on international trade may broadly be categorised into two contrasting perspectives. One is mercantilist economics, which was at one time dominant, especially during

¹ Plutarch (1927, 299) wrote around A.D. 100 indicating the existence of intensive trade during the Greco-Roman empire: “…the sea brought the Greeks the wine from India, from Greece transmitted the use of grain across the sea, from Pheonicia imported letters as a memorial against forgetfulness, thus preventing the greater part of mankind from being wineless, grainless, and letterless.”

² For example, Aristotle (1932, 51) wrote in Politics in 310 BC condemning the use of money arose from exports and imports and treated such non-barter trade as “justly discredited for it is not in accordance with nature, but involves men taking things from one another”.

the sixteenth and seventeenth centuries; the other is orthodox classical-neoclassical economics. Fundamentally, mercantilists argue that international trade is indispensable and important because it improves national prosperity by creating wealth and richness. These could be achieved by instituting policies aimed at promoting exports to foreign countries while at the same time restraining imports. They argue that exports improve the prosperity and economic wealth whereas imports impoverish the people and nation (Child 1693, 160; Pollexfen 1697, 40). Meanwhile, mercantilists strongly disfavour the importation of processed goods from foreign countries, arguing that it is more beneficial to produce them at home using either local or imported raw materials or a combination of both.

While mercantilists assign too much weight towards exports in their thinking, arguing that exports are good but imports are bad, “orthodox” economists in contrast, give an equal weight to both exports and imports, expounding that both are equally good. Economists argue that both exports and imports are good because they contribute equally to increase economic wealth. The exposition that both exports and imports are not only good but also important for economic well-being is, essentially, the main force behind the idea that all countries in the world should embrace free trade.

The emergence of the idea of free trade is primarily associated with Adam Smith. Since the emergence of this idea, which Smith convincingly argued through the use of abstract analysis and reasoning in the Wealth of Nations (1776), discussion on international trade among economists has been elevated to the level of a doctrine. Since the era of Smith, the doctrine of

---

3 There is no unique definition of free trade. However, a definition provided by Irwin (1996, 5) is fairly comprehensive: “In theoretical terms, free trade generally means that there are no artificial impediments to the exchange of good across national markets and that therefore the prices faced by domestic producers and consumers are the same as those determined by the world market (allowing for transportation and other transaction costs). In practical terms, free trade describes a policy of the nation-state toward international commerce in which trade barriers are absent, implying no restrictions on the import of goods from other countries or restraints on the export of domestic goods to other markets”.

---
free trade has not only been well-accepted by economists, but for many it has an “iconic status” (Krugman 1998, 22). Although the doctrine of free trade has established itself as the orthodoxy in the field of economics since the era of classical economics, the opponents of free trade, ranging from hostile protectionists to mere market sceptics, emerged time and again with new objections (Bhagwati 1998, 1). Moreover, since the period where mercantilist economics was dominant until the present time, free trade has faced enormous obstacles to gaining acceptance by politicians and policy makers, who influence trade policy formulation of governments in many parts of the world.

Throughout history, the conduct of trade between nations has frequently been interspersed with periods heavily influenced by protectionism. In the sixteenth and seventeenth centuries, when mercantilist thinking was dominant, trade policy regimes all over the world were heavily characterized by protectionist elements. The grip of protectionism loosened somewhat by the end of eighteenth century after many people were convinced that free trade was essentially a good idea, due in part to the work of economists such as Smith, David Ricardo and John Stuart Mill. Consequently, one of the most notable events which occurred in the history of trade was probably the adoption of the free trade idea into the commercial policy of Britain in the middle of nineteenth century, in particular when the country successfully repealed the protectionist Corn Laws in 1846.

The economic prosperity enjoyed by Britain in the years following its adoption of free trade policy induced other countries in Europe to adopt similar trade policy regimes. In particular many European countries undertook initiatives to form bilateral trade arrangements with other countries aimed at encouraging and promoting trade. Therefore, between 1861 and 1868, almost all countries in Western and Central Europe embraced interlocking trade agreements, popularly known as the “network of Cobden treaty” (Bairoch 1993, 23; Gomes 2003, 255). One important
feature of all these agreements was the incorporation of the Most-Favoured-Nation (MFN) clause, which entitled a party to the lowest duties granted to any other party to any other agreements.

The liberal trade regime in the middle of nineteenth century lasted only about three decades as the 1870s saw the return of protectionist elements in commercial policies of many countries. The strengthening trend of protectionism continued from the 1870s until the out break of the First World War (WW1) in 1914 (Capie 1994, 10). Although WW1 ended in 1918, protectionism continued to strengthen its grip in commercial policy formulation as many countries leaned towards inward looking and “beggar-my-neighbour” attitudes as regard to economic affairs with foreign countries. Ever increasing tension over the conduct of trade among many countries especially in Europe in this period was arguably one of the factors which contributed to the occurrence of the Second World War (WW2) which broke out in 1939 (Penrose 1953).

After WW2 ended in 1945, many countries realised that the security and orderly conduct of international trade were a necessity in order to ensure sustained economic prosperity for the world. Soon after the conclusion of WW2, negotiations on trade relations began to ensure the expansion of world trade, this time under the stewardship of the United States.⁴ One of the most important negotiations was the one that took place in Geneva in 1947 which aimed at coming up with a harmonized international order for the conduct of trade. The negotiations reached agreement on some core principles over the conduct of international trade such as non-discrimination, national treatment, and common rules governing anti-dumping and custom

⁴ The US emerged form WW2 as the most powerful country in the world both in terms of economic and military powers replacing Great Britain. Naturally, therefore, the US was expected to take a leadership role in world economic affairs by many other countries.
valuation, whereby, these elements were then incorporated into the General Agreement on Tariffs and Trade (GATT).

Another important initiative undertaken by a number of countries with the purpose of, among others, promoting trade between countries after WW2 was the establishment of regional trading arrangements. The signing of regional trading agreements arguably occurred in two waves. The first wave began in the 1950s and lasted until the beginning of the 1970s while the second started in the mid-1980s (Bhagwati 1993, 22-51). The first wave emerged in Europe with the signing of the Treaty of Rome in 1957 involving Belgium, France, the Federal Republic of West Germany, Italy, Luxembourg and the Netherlands to establish the European Economic Community (EEC).

In contrast to the first wave of regionalism which started in Europe, the second wave of regionalism started in the American continents, following a change in the attitude of the US in relation to international trade affairs. In the middle of 1980s the US made a conversion from pursuing a multilateral-only trade policy it adopted since the formation of the GATT into extensive involvement in all facets of trade relations with other countries – multilateral, regional and bilateral. This was indeed a major change since during the first wave of regionalism two specific proposals were advanced for the formation of free trade areas on a regional basis involving the US. These two proposals were the establishment of the North Atlantic Free Trade Area and the Pacific Free Trade Area. But none of these materialized because the US opposed the proposals. The change came in 1985, when the US signed a free trade agreement with Israel and this was followed by the signing of a similar agreement with Canada in 1988.

Thereafter, regionalism has proliferated in many parts of the world. In Latin America, the new Common Market of the South (MERCOSUR) was created in 1991 while old preferential
trade agreements (PTAs) like the Andean Pact (ANDEAN) and the Central American Common Market (CACM) started a process of renewal in the late 1980s and early 1990s. In Africa new PTAs were formed on the basis of old ones. For example, in 1994 the Union Economique et Moretaire Quest, Africaine (UEMOA) was created out of the Communaute Economique de l’ Afrique Occideutale (CEAO), and the Common Market of Eastern and Southern Africa (COMESA) was revived, expanding preferential trade areas for Eastern and Southern Africa States (Soloaga and Winters 2001, 2). In Asia the members of the Association of Southeast Asian Nations (ASEAN) formed the ASEAN Free Trade Area (AFTA) in 1992, and it soon became a prominent regional FTA.

AFTA is probably the most active economic grouping in the whole of Asia. Since its establishment AFTA member countries have made considerable progress towards achieving a complete economic integration although at times it faced problems and obstacles primarily due to unwillingness of some member countries to honour their commitments agreed to under the AFTA agreement. The original goal of AFTA was to progressively reduce tariffs on goods traded among members to between zero and 5 percent within 15 years starting from January 1993. Under AFTA, trade liberalization activities are implemented through a mechanism called Common Effective Preferential Tariff (CEPT).

The CEPT divides goods into two categories: (1) fast-track goods for which tariffs would be reduced to 0 to 5 percent within 7 or 10 years depending on whether the prevailing tariff was below or above 20 percent, and (2) normal-track goods for which tariffs would be reduced more slowly within the 15-years timeframe. Subsequently, during the 1993 and 1994 ASEAN Summit Meetings, tariff liberalization programs were accelerated. Member countries agreed that the liberalization of tariffs on goods in the fast-track should be completed by 2000, and goods in the normal-track by 2003 instead of 2008. These trade liberalization schedules apply equally to the
original six ASEAN members, Brunei, Indonesia, Malaysia, the Philippines, Thailand and Singapore. Four newer member countries of ASEAN, Cambodia, Laos, Myanmar and Vietnam are allowed longer time frames for their tariff liberalization schedules.

Pursuing “freer” trade through the establishment of regional FTAs reflects a general thinking among economic policy makers to favour a more open and liberal trade policy regimes. The emergence of this idea is, however, far from being able to be equated with the idea of free trade as originally expounded by Smith. While the idea of free trade is essentially a unilateral action, in which it is to its own benefit for a country to pursue free trade with others, the idea of freer trade underpinning regionalism initiatives is hinged on the principles of reciprocity between members and discrimination against non members. In addition, regionalism initiatives are viewed, albeit to a lesser extent, as posing a threat to multilateralism initiatives pursued under the auspices of the GATT (and since 1995 WTO) with the aim of achieving freer trading regimes based on the principle of non discrimination for all member countries.

The establishment of a regional FTA carries with it welfare implication not only for members who join the grouping but also for the rest of the world. There is a continuing debate over the effects that regional FTAs have on members as well as non members. The received wisdom among economists is that non member countries have nothing to gain (instead, they might lose out) from the formation of a regional FTA, but opinions are divided whether such initiatives improve the welfare of members.

The welfare implication of regional FTAs was first theorized by Viner (1950). In his examination over the formation of customs unions, Viner expounds the concept of “trade creation” and “trade diversion”. According to him the establishment of custom unions would bring different welfare implication to members as compared to non members. Under Viner’s
framework, trade creation is associated with welfare gains to member countries through the expansion of trade between partners in accordance with comparative advantage due to a shift in the location of production from a high cost member country to a lower cost member country. In contrast, trade diversion could result in welfare lost not only to non members but members as well because of a shift in the location of production from a low cost third country to a higher cost member country.

1.3 Objectives

This thesis aims to examine a number of economic issues concerning free trade doctrine, regionalism and regional FTAs, in which a specific focus is given to the ASEAN Free Trade Area (AFTA). Broadly categorised, this study can be divided into three parts. The first part examines the evolution and changes of thinking on trade as an ideological belief and its influence over trade policy formulation throughout the history of trade. In this part four issues are analysed and examined:

1) Analysing the mercantilist thinking of trade (between countries) in the sixteenth and seventeenth centuries, when mercantilist economics was dominant;

2) Examining the emergence of free trade idea in the middle of eighteenth century, especially the expositions of free trade theory by such prominent classical economists as Adam Smith, David Ricardo and John Stuart Mill;

3) Analysing the theoretical advancements of free trade doctrine as well as debates over its virtues in neoclassical economics beginning from the era of Alfred Marshall up to the present time;

4) Examining actual trade policies and practices across countries during the eras of mercantilism, classical and neoclassical economics;
The second part of the study analyses the forces that influence the formation of regionalism and regional FTAs as well as examines their economic effects as documented by prominent empirical research. Specifically another four broad issues are examined in this second part:

1) Scrutinizing historical evolution and proliferation of regionalism and regional trading arrangements;

2) Discussing the issue of regionalism versus multilateralism. This includes the position of the General Agreement of Tariff and Trade (GATT) on regional trading arrangements including those in existence prior to the signing of the agreement as well as arrangements to be established in future;

3) Surveying empirical research on the economic effects of regionalism and regional FTAs;

4) Examining the forces that influence the thinking of leaders of ASEAN countries in agreeing to the formation of AFTA in 1992.

The third part of the study deals primarily with the empirical investigation of the economic effects brought about by the formation of regional FTAs. Two main problems are examined in this part. The first problem is the assessment of the effects that regional FTAs have on trade of member vis-à-vis other countries that do not become members to any economic groupings. The second problem of interest is the examination of the effects of AFTA on trade of member against non member countries. In addition, this study also examines whether the establishment of AFTA results in trade creation or diversion, the two concepts expounded by Viner (1950).

1.4 Approach of the Study

In order to shed some light to the issues and questions highlighted in Section 1.3, a specific approach is adopted in undertaking this study. For the purpose of examining issues
identified as the first and second parts of the study, an extensive literature survey is undertaken to analyse the problems of interest. The main aim and focus of the literature research is to synthesize the evolution and changes in the thinking of trade in the past five centuries. In addition, the two parts of the study also attempt to unearth relevant ideas and events in the history of trade which are, perhaps not very familiar to many people, but of importance (implicitly if not explicitly), especially to politicians, policy makers and the general public. In the case of the doctrine of free trade as an ideological belief, for example, this study not only discusses the virtues of free trade but also examines the questions of how and why a number of countries in Europe, especially Britain, adopted unilateral free trade policies in the middle of nineteenth century.

Following a common approach to undertaking empirical research, this study employs econometric methodology to answer questions grouped in the third part of the study. In this regard, the study makes use of econometric modelling techniques to develop econometric models that are thought to be the most appropriate for assessing the effects of regional FTAs on trade. To this end, structurally, the first part of the study is presented in three chapters (Chapter 2 through Chapter 4), the second part is organised into four chapters (Chapter 5-8), while the following two chapters (Chapter 9 and Chapter 10) aim to answer questions grouped as the third part of the study.

1.5 Significance of the Study

Although the virtues of pursuing free trade policy is crystal clear especially among trade economists, this idea is not well accepted by politicians, policy makers as well as the general public in many countries. Since one important objective of this study is to examine the historical evolution of the free trade idea and how it managed to influence trade policy formulation in the
past, it is hopeful that this study can provide a demonstration that free trade is not merely a matter of theoretical exposition but it can essentially be incorporated into the commercial policy of all countries for the benefit of the whole world.

The other important objective of this study is to assess the forces that influence the thinking of ASEAN leaders in agreeing to the establishment of AFTA and to examine economic benefits to be gained by member countries due to its establishment. It is hopeful that this study will provide insightful information over the forces at work at the time when AFTA was negotiated as well as provide an indication as to whether or not AFTA will benefit its members.

Past studies investigating the effects of regional FTAs produced inconclusive findings over the welfare implications that they have on members as compared to non members. It is hoped that this study is able to shed some additional light over this issue with the use of a different approach and econometric models. In addition, it is expected that this study would be able to provide an answer to the question of whether AFTA creates or diverts trade. The answer to this question should be of interest not only to trade economists but also to politicians, policy makers and the general public. In short, it is hoped that this study contributes to the enrichment of literature on international trade.

1.6 Outline of the Thesis

In attempting to answer all issues and questions detailed out in Section 1.3, this thesis proceeds as follows. Chapter 2 examines the position of trade during the era of mercantilist economics. Mercantilism was a dominant force in commercial policy formulation for about two-and-half centuries between the 1500s and 1750s. This chapter examines the mercantilists’ view that international trade is important because it is a vehicle to achieve multiple objectives including the accumulation of treasures, the enrichment of national wealth, attaining a favourable
balance of trade and creating employment opportunities. This chapter also describes the reasons behind the mercantilists’ argument that exports are good, imports are bad.

Chapter 3 analyses the position of trade in the era of classical economics (between the 1770s and 1870s). This chapter emphasizes that this era saw the emergence of the free trade idea primarily due to Smith’s (1776) *Wealth of Nations*. This Chapter also examines Smith’s criticisms of the mercantilists’ thinking about international trade. In addition, it also analyses various theoretical expositions of free trade doctrine as promulgated by other prominent economists such as Benjamin Vaughan, David Ricardo, Robert Torrens, John Stuart Mill and Nassau Senior. Additionally, this chapter highlights the debates among economists over the protectionist British Corn Law.

Chapter 4 analyses the theoretical advancements of free trade doctrine in the period of neoclassical economics starting from the 1870s up to the present time. This includes the examination of theoretical debates among economists on the virtues of free trade as well as their debates over the superiority of the two main competing trade theories; comparative cost advantage originally expounded by Ricardo (1817) and factor proportion theory expounded primarily by Eli Heckscher and Bertil Ohlin (1933). In addition, this chapter also analyses actual trade policies and practices across countries during this period.

Chapter 5 examines the evolution of regionalism and regional trading arrangements that have occurred all over the world throughout history. This chapter does not only document the historical record of economic regionalism in the twentieth century, but also of such arrangements which were initiated in parallel with the formation of nation-states at the beginning of the eighteenth century.
Chapter 6 analyses the issue of regionalism versus multilateralism. This includes the discussion on various GATT provisions in relation to treatments to be given to regional trading arrangements. In addition, this chapter also examines literature on theoretical research concerning the issue of regionalism versus multilateralism.

Chapter 7 examines literature on empirical research concerning the economic effects of regionalism and regional FTAs. Various methodologies and techniques of analysis used by researchers as well as their findings are examined and discussed in detail. This is done in an effort to build a foundation for this study to proceed to the last part, that is, the examination of the effects that regional FTAs have on trade of member in comparison to non member countries.

Chapter 8 examines the forces which influenced the thinking of the leaders of ASEAN countries in agreeing to the formation of AFTA. In addition, this chapter also analyses the political economy of AFTA establishment as well as assessing economic benefits to be gained by its member countries.

Chapter 9 and 10 are designed to provide answers to research questions grouped as the third part of the study. Specifically, Chapter 9 discusses the methodology and technique of analysis to be used for assessing the effects of regional FTAs on trade. The findings of the this part of this the study concerning the effects of regional FTAs on trade and the effects of AFTA on member vis-à-vis non member countries are presented in Chapter 10. Finally, the summary and conclusions of this study are presented in Chapter 11.
CHAPTER TWO

FREE TRADE IN THE ERA OF MERCANTILIST ECONOMICS

2.1 Overview

This chapter examines the mercantilists’ thinking on trade especially during the period when mercantilist economics was dominant – during the 1500s until 1750s. It also emphasizes that mercantilist economics, which viewed foreign trade as a vehicle to accumulate treasures, enhance national wealth, achieve favourable balance of trade, maximize employment opportunities and protect domestic industries, was in stark contrast to “orthodox economics”. According to mercantilists, these objectives could only be achieved through state interventions in trade affairs aimed at promoting exports and restraining imports. In addition, this chapter also analyses actual trade policies and practices adopted by countries across the world during this period.

2.2 Free Trade in Mercantilist Economics

Mercantilism is a term used to explain economic thinking and practice, which was pronounced for the period of about two-and-a-half centuries between the 1500s and 1750s (Backhouse 2002, 58; Landreth and Colander 1994, 36; Magnusson 2003, 46). According to Roger Backhouse (2002, 58), this terminology was invented by Marquis de Mirabeau in 1763. It became popular when Smith attacked mercantilist economics in his book, the Wealth of Nation (1776). Although mercantilist economics touches also other issues – such as individualism and the value of profits – the most striking thought of mercantilism is on international trade. There

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5 There exists a variation of definitions of mercantilism provided by historian economists. Generally, this term is used to explain the economic system that uses state power for the purpose of accumulating precious metals, increasing the surplus of exports over imports and building up certain industries. Charles Wilson (1957, 16) for example defined mercantilism as “a complex of ideas and policies designed to achieve national power, and ostensibly wealth”.

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existed many writers associated with mercantilist economics during this time, of whose ideas were translated into the commercial policies of many countries in Europe. Important among them included Thomas Smith, Thomas Mun, William Petyt, John Pollexfen, Gerard Malynes, John Cary, Richard Cantillon, John Asgill and Charles King. Actually, these were mercantilists based in Britain, the centre of the discussions and debates on the thinking of economic affairs. Elsewhere in Europe, mercantilist economics was also dominant during this time.\footnote{Mercantilist writings in other parts of Europe can be found in the works of Charles W. Cole (1931) for France, Lars Magnusson (1987) for Sweden and Marjorie Grice-Hutchinson (1978) for Spain.}

Fundamentally, mercantilists view international trade as important and indispensable. Mercantilists argued that trade is an important means to achieve multiple interrelated objectives: (1) accumulating treasure or bullions, (2) enhancing national wealth or economic growth, (3) achieving favourable balance of trade, (4) maximizing employment opportunities, (5) protecting home industry and (6) enhancing state power (Coats 1992, 46). In order to achieve these objectives the conduct of international trade must hinge on one important principle; exports must be promoted while imports must be restrained (Backhouse 2002, 58; Roll 1992, 64; Viner [1937] 1975, 3).

2.2.1 Accumulation of Treasures or Bullions

The aim to accumulate treasures or bullions (precious metals) was the earliest argument of mercantilism, which originated in the 1500s (Viner [1937] 1975, 3). During this time many nation-states in Europe experienced a shortage of gold and silver bullions, therefore they found it difficult to service the expanding volume of trade (Hunt 2002, 20). However, the “bullionist doctrine” of early mercantilist thinking could be distinguished from the later “balance-of-trade doctrine”, which started to become prevalent in early seventeenth century. While the former stressed “on the importance of a favourable balance in each transaction of each merchant”, the
latter “emphasized on the aggregate or national balance of trade” (Viner [1937] 1975, 3). The policy to restrict the export of bullions was then introduced not only to attract the flow of gold and silver into a country but also to keep them there by prohibiting their exports. In some places these restrictions lasted from the late Middle Ages into the sixteenth and seventeenth centuries. In England, “foreign gold and silver” accumulated through trade were finally allowed to be exported in 1663, but “English coin or bullion” could only be legally exported in 1819 (Viner [1937] 1975, 4)). Spain, the country into which most gold from the Americas, particularly Mexico and Peru flowed (Robertson 1973, 31), imposed a ban on the export of gold over the longest period of time with “death penalty” for the persons who disregard this rule (Hunt 2002, 20).

2.2.2 The Promotion of National Wealth

The notion that international trade will improve national wellbeing as well as act as a vehicle to achieve wealth and richness was found even in the early writings of mercantilists. In the middle of sixteenth century Thomas Smith ([1581] 1969, 62) wrote:

God has ordained that no country should have all commodities, but that one lacks, another bring forth, and that one country lacks this year, another has plenty thereof commonly that same year, to the intent men may know that they have need one of another’s help.

Although some early mercantilist writers such as Thomas Smith recounted natural endowment of a country as given by the “Providence”, but these individuals were only ordinary persons interested in economics affairs and commercial policies. They were neither theologians nor natural law philosophers, thus their writings on economic issues were “amoral and practical, not ethical or legalistic” (Irwin 1996, 27).

The primary thinking of mercantilists in relation to international trade is that foreign trade is indispensable and important because it will improve national prosperity by creating wealth and
richness. This can be achieved by encouraging exports to foreign countries while at the same time restraining imports. Mercantilists argued that exports improve prosperity and economic wealth whereas imports impoverish a nation and its people (Child 1693, 160; Pollexfen 1697, 40). Additionally, Mercantilists strongly reject the importation of processed products from other countries arguing that it is more beneficial to produce processed goods at home using either local or imported raw materials.

Producing processed products domestically is more preferable than importing them because these products, after undergoing some transformation will result in more value added content thus fetch higher prices. Another reason advanced by mercantilists was that manufacturing activities will be able to provide much higher employment opportunities for the public as compared to primary activities. In this regard Thomas Smith ([1581] 1969, 65) argued that processed products form other countries will “make our own commodities and send it us again, whereby they set their people a work and do exhaust much treasure out of realm”; therefore “better for us to pay more to our people for these wares than less to strangers”.

There was a divergence of views, however, among mercantilists over the question of whether individual merchants’ pursuit for wealth through involvement in trading activities is beneficial or detrimental to a nation. A few writers complained that while on one hand trade yields benefits and welfare to merchants, but on the other it will be hurtful and can impoverish the nation at large (Malynes 1601, 4; Petyt 1680, 11). On this Petyt (1680, 11) argued that “a private trade may be very beneficial to the private trader, but of hurtful, nay of very ruinous consequences to the whole nation … particular men may grow rich by trade, whereby the nation is impoverished”. The conflict between the interests of traders and the interests of nation formed the primary basis for the mercantilists’ support for state interventions and regulations over trading activities. Thus for the purpose of ensuring the benefits of trade are accrued not only to traders
but also to the state, state control and intervention over trade are thought to be a necessity (Irwin 1996, 32).

2.2.3 Favourable Balance of Trade

For most part of the seventeenth century, mercantilists held that the main purpose of trade should be to achieve a favourable balance of trade. Trade with another country was viewed as profitable if the value of exports exceeded the value of imports. Hence, the resulting trade surplus would augment the accumulation of precious metals and treasure in the country. A favourable balance of trade is considered desirable not only based on economic but also on political grounds. It is important from the perspective of mercantilist economics because the inflow of precious metal will improve liquidity and availability of credit domestically, whereas from political standpoint, the accumulation of specie will be useful as a security in times of national emergency such as war (Irwin 1996, 35). Mun (1664, 11), an influential mercantilist noted that: “The ordinary means therefore to increase our wealth and treasure is by foreign trade, wherein we must ever observe this rule; to sell more to strangers yearly than we consume of theirs in value.”

Recognising the interdependence of exports and imports, especially of barter trade – whereby trade is a two-way process of exchanging exports for imports – few mercantilists were cautious in proposing measures to restrict imports as a way to achieve favourable balance of trade. With this interdependence in mind, mercantilists found it hard to believe that restricting imports will improve the balance of trade (Paxton 1704, 61; Robinson 1641, 8). For example Henry Robinson (1641, 8) cautioned that “here is worth remembrance that a great part of foreign commodities brought for England are taken into barter of ours, and we should have not vented ours in so great quantity without taking them”.
In addition to state’s measures and interventions aimed at restricting imports, mercantilists also resorted to moral suasion in persuading people to reduce imports, especially of expensive luxury items (Mun 1621, 56; Pollexfen 1697, 58). Few mercantilists, however, argued that state’s interventions should be used as the last resort, particularly if efforts undertaken to discourage the public from importing failed. Pollexfen (1697, 58), for example argued that:

When the balance of trade is against us, if we cannot alter it by increasing the expense of our goods there, or by spending in the room of theirs like goods taken from another country, from where we may have them on better terms, then the safest way (if we can be without such goods) is to discourage the use and expense of them by example: if that be not likely to have any effect, then high customs or prohibitions may be used, but prohibitions should always be the last remedy, when no other way can be found out.

2.2.4 Maximizing Employment Opportunities and Protecting Home Industries

By the end of seventeenth century mercantilists argued that economic activities generating high value added products and involving extensive processing should be located in the home country because they help creating employment opportunities for the people, therefore economic activities should be oriented towards exporting manufactured goods rather than raw materials (Cary 1695, 130; Petyt 1680, 24). In this connection Petyt (1680, 24) argued that:

If any nation hath naturally any materials of manufacture, it is far more advantageous to export them in manufacture, rather than the raw materials, because the manufacture is much more valuable, and will make a return of five, ten or twenty times more treasure to the nation than the raw materials. Besides it is most dangerous to export the materials of manufacture, since it may transfer the manufacture itself into some neighbouring nations…. But if foreigners will vend their raw materials of manufacture, it is necessary, or highly convenient, for a nation to import them, and put them into manufacture at home.

This line of argument exemplified the thinking of mercantilists, which supported the imposition of export taxes on (exported) raw materials while at the same time argued in favour of liberalising imports of raw materials to be used in manufacturing processes. Fortrey (1663, 28-
contented that “all foreign commodities that are useful to improve our own manufactures and trade abroad, and cannot be raised here, should be brought into us under easy customs” whereas imported goods, especially luxury and consumption items “should pay extraordinary customs, but should not be forbidden to be brought in”.

To mercantilists, the virtue of manufacturing activities is not only because they could produce more valuable products, but also due to their capability to generate employment. The wages of those employed in export-oriented manufacturing activities are argued to be foreign-paid income (Child 1693, 3; Clayton 1719, 18). At the turn of eighteenth century it became clear to mercantilists that commercial policies could be a useful tool to induce the development and extension of the manufacturing sector, which was believed to be of paramount important to the economy. In addition, John Asgill (1719, 10) argued in favour of using trade policies for the “protection and encouragement” of local manufacturing in his writing on how a government could use policies to achieve greater level of domestic employment and output.

The view in favour of using commercial policies to restrict imports which compete directly with locally manufactured goods was pronounced among mercantilists at the end of seventeenth century as could be found in many writings. This kind of propositions continued to be dominant in the first half of eighteenth century. Joshua Gee (1729, 111) contended that “it will be a maxim to observe by all prudent governments who are capable of manufactures within themselves, to lay such duties on foreign as they may favour their own and discourage the importation of any of the like sort from abroad.” David Clayton (1719, 18) was even bolder: “Whatever trade, or branch of trade, bring in any manufactured goods that interfere with what is being made among ourselves, is in its direct tendency and consequences injurious to the nation.” Similarly King (1721, 5) argued that: “trade is eminently bad, which supplied us with the same goods as we manufacture ourselves, especially if we can make enough for our consumption.”
2.3 Trade Policies and Practices during the Era of Mercantilism

In Europe, trading activities during the era of mercantilist economics were conducted under various restrictions in consonance with the prevailing thinking of that time (Hunt 2002, 21). Trade restrictions were pervasive both in prosperous nations (such as England and the Netherlands) as well as poorer countries in Eastern Europe. The mercantilist economics which centred on the competitive struggles between nations, propounded that economic relations with another country was a “zero-sum game”, whereby one country’s gain could only be achieved at the expense of another (Appleyard and Field 1995, 19). This thinking exerted great influence on the setting up of trade policies, of which the primary aim was to acquire sufficient revenue and accumulation of treasure and wealth (Backhouse 2002, 58). The struggle between England and the Netherlands was not only limited to the conduct of trade between them, but also stretched over the control of the “middleman role” of trade in Europe. For most of seventeenth and eighteenth centuries the Dutch was very much in control of the trade (Daunton 1995, 536; Robertson 1973, 30). Daniel Defoe noted in 1728 that the Dutch were “… the Carriers of the World, the middle person in trade, the factors and brokers in Europe” (cited in Daunton 1995, 536).

The control over trade by the Dutch produced lucrative businesses for their companies as many economic activities and related industries such as shipbuilding, freight, marine insurance, warehousing and processing were abundantly available. This prompted English to devise policies aimed at wresting the control of trade from the Dutch, as evident by first, the enactment of the Navigation Law and followed by its subsequent amendments, in 1651, 1660, 1662 and 1663, a span of only twelve years. The laws had various provisions aimed at strengthening English’s involvements as a “middleman” in trade and to deny other countries from getting access to opportunities derived from the growing British Empire in the Atlantic and Asia. Daunton (1995,
537) noted that “the coastal trade was limited to English-owned ship; import from Europe of enumerated articles such as flax and wine had to be carried in ships owned in England or the producing country, which cut out Dutch carriers; there was a ban on the import of goods such as timber and tobacco through Holland or Germany; and long distance import trades from Asia, Africa, and America were confined to English ships which came directly from the country of growth or port of first shipment”. The tussle between English and the Dutch continued for a long period of time, and by the late nineteenth century England had displaced the Netherlands as the “world carrying and entrepot trade” (Daunton 1995, 533). The French were defeated in the competition for worldwide empire and London emerged as the world’s financial centre, obviously an expensive win financed by taxpayers and consumers in Britain.

Trade restrictions were particularly enormous if a country experienced a negative balance of trade. In 1692 Great Britain imposed high import duties on wine, brandy, salt and vinegar coming in from France, a country of which Britain had negative trade balance. The impact of this restriction to France was doubly severe because these goods, if they came into England from Portugal would be subject to lower duties. In addition, the English prohibited the importation of “bonelace”, a material used to manufacture “flankers” as this material was in direct competition with locally produced ones (Smith [1776] 1937, 440). As always, the unfair trade practices imposed by one country invited retaliation from another; therefore France in return, prohibited the importation of English Woollens in 1697. Coincidently, the architect of French commercial policy was Jean Baptiste Colbert, a well-known mercantilist who became the Finance Minister in 1661. Colbert’s trade policy was a truly mercantilist as it was designed to achieve national self sufficiency as well as to accumulate treasures through measures aimed at increasing exports and reducing imports (Backhouse 2002, 90).
Trade disputes in Europe in the middle of seventeenth century were prevalent. Prior to the dispute with the English, the French had been in dispute with the Dutch, when France in 1667 imposed very high duties on a great number of foreign manufactured items. The Netherlands in retaliation imposed a ban in 1671 on the importation of wine, brandy and manufactures from France. The dispute resulted in heavy consequences; the war between France and the Netherlands in 1672 was claimed to be “partly due to this commercial dispute” (Smith [1776] 1937, 434).

In Britain the use of export and import duties as a measure of protection only heightened toward the middle of eighteenth century. Before this period the use of tariffs for protection was considerably selective (Daunton 1995, 537). For example, in 1690 with the exception of woollen products, which were protected with a duty of 20 percent on import from India and China, the average import and export tariff rate was only 5 percent of the official value. During this time both duties were mainly used as a means to maximise revenue to the state; therefore import duties were high on income-elastic items as well as on sugar and wine, which could not be grown in Britain.

But in the following years tariffs were gradually increased reflecting a shift toward protection in addition to efforts undertaken aimed at raising revenue to finance the wars with France and the American colonies. Initially protection was given to woollen industry with the imposition of a ban on imports of silk-cloth as well as printed and dyed calicoes in 1701. Subsequently, import duties on other items were raised in stages to reach the level of 25 percent of official value by 1759. Thereafter import duties continued to increase, initially to finance the war against the Americans who fought for their independence which started in 1775, and later the war against the French which broke out in 1793.
During the era of mercantilism the conduct of trade of colonies – encompassing countries in three continents, America, Africa and Far East Asia – under the colonial powers of Britain, France, Holland, Spain and Portugal, was enormously influenced by the mercantilist policies of the colonials. The colonies, being under the direct control of colonials, found that in most cases, the laws enacted to achieve mercantilist trade policy of the “motherlands” were extended to them. In the case of British colonies for example, laws and regulations were primarily devised to meet the following mercantilist objectives of the motherland: (1) to provide protection and encouragement to colonial shipping business and industry, (2) to make sure that as much as possible imports of colonies from Europe come through British ports and (3) to ascertain that products desired by Britain be send to the motherland (Daunton 1995, 537; Robertson 1973, 88).

2.4 Conclusion

Between the 1500s and mid 1750s, mercantilists exerted great influence over trade policies in many countries. As a result, the conduct of international trade during this period was carried out under enormous restrictions. The main idea behind this is the notion that economic relations between countries were essentially a “zero-sum-game”, whereby one country’s gains could only be achieved at the expense of others.
CHAPTER THREE
FREE TRADE IN THE ERA OF CLASSICAL ECONOMICS

3.1 Overview

This chapter examines thinking about trade during the era of classical economics which encompasses a period of about 100 years. Subsequently, it analyses the expositions of the theory of trade by prominent classical economists, in which among others include Adam Smith, David Ricardo, Benjamin Vaughan, James Mill, Robert Torrens and John Stuart Mill. In addition, this chapter also analyses factors that influenced the thinking of British policy makers in adopting a unilateral free trade policy in the middle of nineteenth century, which resulted in the repeal of protectionist Corn Law in 1946. This chapter also examines what influence that the change in Britain’s trade policy orientation has had over the commercial policy formulation in other countries in Europe. Finally, this chapter analyses trade policies and trade practices across world major trading countries during this period.

3.2 Free Trade Theory in Classical Economics

Classical economics was prevalent for a period of slightly more than one hundred years arguably starting from the publication of Adam Smith’s book, *An Enquiry into the Nature and Causes of the Wealth of Nations (1776)* until the 1890s (Landreth and Colander 1994, 61; O'Brien 2003, 112). The publication of this book as well as the teaching of Smith at the University of Glasgow in the 1760s created a sharp break in the thinking of international trade, from mercantilism to orthodox economics. Additionally, a number of other economists contributed their ideas and analyses for the augmentation of the free trade doctrine, thus firmly established the doctrine as the orthodoxy in the field of economics.
The initial expositions as well as enhancement of the theory of free trade fundamentally began during the time of Adam Smith. In the *Wealth of Nation* Smith expounded a free trade theory when he examined and criticised the effects of mercantilists’ commercial policies on the real value of society (or output). On the issue of the balance of trade, Smith ([1776] 1937, 464) argued that amid mercantilists’ warning of the imminent impoverishment to be faced by a trading nation experiencing a negative balance of trade, the actual evidence indicated the opposite: “Every town and country, on the contrary, in proportion as they have opened their ports to all nations; instead of being ruin by this free trade, as the principle of the commercial system would lead us to expect, have been enriched by it”.

On the protection of domestic industry from foreign competition, he argued that prohibitive duties or outright ban on imports will reduce competition in domestic market, allowing local producers to have a monopoly power of the home market. Subsequently, this induces them to charge higher prices on goods, which finally results in laziness and mismanagement. Smith explained the behaviour and outcome of interactions between individuals and marketplace, whereby, individuals always direct their labour and capital to get the best possible advantage for their own benefits. Coincidently, however, this pursuit leads to a positive outcome for the society. Smith ([1776] 1937, 421) accounted that: “Every individual is continually exerting himself to find out the most advantageous employment for whatever capital he can command. It is his own advantage, indeed, and not that of the society, which he has in view. But the study of his own advantage naturally, or rather necessarily lead him to prefer that employment which most advantageous to the society”.

Smith ([1776] 1937, 421) also explained that the benefits of international trade come from the notion of opportunity cost – the trade offs between alternative activities facing resource constraints. Since at any particular time, the amount of capital and labour available in an
economy is fixed, output in one sector can only be increased at the cost of taking resources from other sectors. Thus, Smith argued against government policy interventions in the economy arguing that government policies will not increase output beyond what the available capital can support. Government interventions can only divert capital to a direction, which otherwise it would not go, and this “artificial direction” is not likely to be more beneficial than it would have gone naturally. Further, Smith ([1776] 1937, 424) strikingly accounted the benefits of trade, basing his analysis on absolute cost advantages:

If a foreign country can supply us with commodity cheaper than we ourselves can make it, better buy it of them with some part of the produce of our own industry, employed in a way in which we have some advantages. It is certainly not employed to the greatest advantage, when it is thus directed towards an object, which it can buy cheaper than it can make. The value of its annual produce is certainly more or less diminished, when it is thus turned away from producing commodities evidently of more value than the commodity, which it is directed to produce. According to supposition, the commodity that could be purchased from foreign countries than it can be made at home. It could, therefore, have been purchased with a part only of the commodities, or, what is the same thing, with a part only of the price of the commodities, which the industry employed by an equal capital, would have been produced at home, had it been left to follow its natural course.

Economists emerged during the era of classical economics continued to refine and enhance the arguments in favour of free trade for the setting up of commercial policies. Benjamin Vaughan (1788, 25) demonstrated a hypothetical example of how a world with two countries and two goods, in which one country specialises in producing one good while another country specialises in another good, then exchanging the goods between them through trade, will result in each country acquiring higher amount of both goods. He expounded that higher amount of goods produced under this situation in comparison to another circumstance, whereby, both countries engage in the production of both goods is due to international specialisation of labour.
In the early nineteenth century classical economists elucidated the benefits of free trade from the perspectives of productivity and efficiency enhancement brought about by the international division of labour (Mill 1808, 38; Torrens 1808, 53). James Mill (1808, 38) argued that the benefits of international division of labour accrued to countries engaging in international trade could hypothetically be envisioned by imagining that the world is a big empire with nations and kingdoms regarded as its provinces. In this big empire each province specialises in producing one product that suits it mostly and another province producing another product. Through trade all provinces will benefit because “by their mutual intercourse they are enable to sort and distribute their labours as most peculiarly suits the genius of each particular spot. The labour of human race thus becomes much more productive, and every species of accommodation is afforded in much greater abundance”.

Up to the early nineteenth century, the arguments of classical economists over the benefits of free trade was hinged on the notion that imported good can be acquired more cheaply abroad due to the absolute lower cost of production, popularly known as “eighteen-century rule” (Gomes 2003, 24; Irwin 1996, 89). Under this rule the case for free trade is obvious if one country has an absolute cost advantage in one product while another country has an absolute cost advantage in another. Specialization and trade then produce a bigger amount of both products to be available for the two countries to consume. This rule is, however, unable to demonstrate the benefit of free trade for a situation in which only one country has the absolute lower costs of production in both products. Fundamentally the “eighteen-century rule” has failed to answer the question of why a country should engage in trade if it has absolute cost advantages in all products, in comparison to its trading partners.
The answer to this question came in 1817 when David Ricardo expounded the theory of comparative cost advantage. Ricardo expounded that international trade is still beneficial to two trading countries even in such a situation that only one country has absolute cost advantages in producing all products. Ricardo ([1817] 1969, 82) demonstrated in his book, *The Principles of Political Economy and Taxation* an example of how comparative cost advantage works. He showed a numerical example of the benefit to both Portugal and England, when they involve in trading two products, wine and cloth under the situation of Portugal having absolute cost advantages in both commodities but enjoying only comparative cost advantage in wine. In essence Ricardo’s example can be depicted as in Table 3.1.

<table>
<thead>
<tr>
<th>Table 3.1</th>
<th>Ricardo’s Production Condition in England and Portugal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Countries</td>
<td>Labour Requirements in Production</td>
</tr>
<tr>
<td></td>
<td>Wine</td>
</tr>
<tr>
<td>Portugal</td>
<td>80 men/year</td>
</tr>
<tr>
<td>England</td>
<td>120 men/year</td>
</tr>
</tbody>
</table>

(Source: Ricardo, [1911] 1969, page 82)

Ricardo expounded that although Portugal has absolute advantages in both wine and cloth, but it enjoys a comparative advantage only in wine production, whereas in cloth production, it suffers a comparative disadvantage. Therefore, it is more advantageous for Portugal to produce only wine while letting England to produce cloth, then exchanging the two goods through trade. Portugal has a comparative advantage in wine production because to produce one

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7 Few classical economists such as Emanuel Leser and R. A. Seligmen argued that the credit for expounding the theory of comparative cost advantage should be assigned to Robert Torrens, since his Essay on the External Corn Trade written in 1815 contained few sentences conveying a similar message as expounded by Ricardo in 1817. However, according to Jacob Viner ([1937] 1975, 442), Ricardo is entitled to the credit because he was the first to give “due emphasis to the doctrine, for first placing it in an appropriate setting, and for obtaining general acceptance of it by economists.” Further, Viner insisted that the theory “was never an integral part of Torrens’ thinking.”
additional unit of wine it needs to divert only $\frac{8}{9}$ men/year from cloth into wine production. This is better since to produce one additional unit of cloth it needs to divert $\frac{9}{8}$ men/year from wine production. Naturally then, England enjoys a comparative advantage in cloth production but suffers a comparative disadvantage in wine production.

Ricardo’s brief exposition of the theory of comparative advantage induced other economists to further augment this theory. James Mill (1821, 87) helped providing a greater clarity of the arguments in relation to the theory of comparative cost advantage:

When a country can either import a commodity or produce it at home, it compares the cost of producing at home with the cost of procuring from abroad; if the later cost is less than the first, it imports. The cost at which a country can import from abroad depends, not upon the cost at which foreign country produces the commodity, but upon what the commodity costs which it sends in exchange, compared with the costs which it must be at to produce the commodity in question, if it did not import it.

In addition James Mill (1821, 89) argued that the benefit enjoyed by a country is due to the products received (import) but not from the products it gives away (export) because a country “gain nothing in parting with its commodities”. He also stressed that the products exported are essentially the cost of acquiring imports.

In arguing for the case of free trade in policy debates (in this era), however, most economists relied not on the abstract theory of comparative advantages, but rather on an efficiency argument associated with absolute cost advantages (Gomes 2003, 42; Irwin 1996, 93). The theory of comparative advantage, however striking, did not become a leading part of the classical cannon until John Stuart Mill gave its prominence in his *Principles of Political Economy* (1848). J. S. Mill’s book contained a concise yet penetrating account of the benefits of trade and the costs of protection. He also lucidly illustrated the static argument of how total world output and individual country consumption increase with international specialization and trade. In
addition, J. S. Mill ([1848] 1920, 581) argued that trade will have an important indirect effect; it helps advancing production techniques and technologies since “the tendency of every extension of the market to improve the processes of production” which benefits the world at large because “whatever causes a greater quantity of anything to be produced in the same place, tends to the general increase of the productive powers of the world”.

3.3 Trade Policies and Practices during the Era of Classical Economics

Trade policies and practices in the early period of classical economics were characterised by the continuation of commercial policies of the previous period, which leaned toward mercantilist thinking. The economic argument in favour of free trade became to be accepted by both policy makers and the general public only toward the end of eighteenth century. In Britain, William Pitt, an enthusiastic student of Adam Smith became Prime Minister in 1784, and he immediately began putting free trade ideas into practice (Armitage-Smith 1898, 9; Hirst 1925, 7; Semmel 1970, 9). In particular, he took efforts to address problems of excessive smuggling activities on goods, which in parts, due to incredibly high import duties. Originally these goods were imposed with high duties to finance the war against the Americans a decade earlier. Accordingly Pitt reduced import duty on tea from 119 percent to 12.5 percent. Although the tariff rate was reduced, the government revenue collection remained about the same as before, partly because the smuggling activities were brought to a halt, and also due to high elasticity of demand for imported tea. Pitt also improved trade relations with neighbouring countries including France, in which a treaty was signed allowing the exchange of various goods at liberal terms. As a result, wines from France could now be brought into England at the same duty as that of wines from Portugal. However, the fledgling liberal bilateral trade regimes of the two countries lasted only twelve years, as it was halted by the French War in 1793.
Wars always pose serious problems for trade, not only that trading activities have to be carried out under extremely high risks, but also because it provides a great opportunity for elements of protection to flourish. During the French War (1793 – 1815), export and import duties as well as other internal taxes in Britain were increased for purposes of collecting additional revenue to finance the war. This original intention, however, succumbed to the pressure of interest groups seeking protection for their products against competition from foreign producers. In Britain Pitt initially believed that the war with France would not be long, and resorted to loans for financing the war. Soon after he found this was inadequate, thus import duties and other taxes were gradually increased. When the war ended in 1815, Britain found its people overburdened with excessive and multiple kinds of taxes, as cogently summarized by Sidney Smith (cited in Hirst 1925, 13):

The schoolboy whips his taxed top; the beardless youth manages his tax horse, with a taxed bridle, on a taxed road; and the Englishman pouring his medicine, which has paid 7 percent, into a spoon which has paid 15 percent, flings himself back upon his chintz bed, which has paid 22 percent, and expires his arms of an apothecary, who has paid a licence of 100 pound for the privilege of putting him to death. His whole property is then immediately taxed from two to ten percent. Beside the probate, large fees are demanded for burying him in the channel.

3.3.1 The British Corn Law Controversies

In Britain, during the period of classical economics, a spectacularly controversial debate among economists as well as the general public occurred over the commercial policy associated with the Corn Law. The law was enacted just after the end of the French War in 1815 with the purposes of ensuring adequate supply of corn and stabilizing the price of agriculture produce (Grampp 1993, 39), therefore, provided protection to British landlords as well as farmers (Daunton 1995, 546; Hirst 1925, 14). Essentially, biased policy toward granting protection to agriculture started well before the Corn Law. In 1773, an act was enacted restricting the
importation of wheat at zero duty; wheat can only be imported if its domestic price was above 48 shillings a quarter. This provision was supplanted with another act in 1791, of which an incentive was introduced in the form of export bounty (subsidy) to encourage the exportation of wheat when the price fell below 44 shillings.

Under the Corn Law the importation of foreign corn was forbidden when the local price of wheat was below 80 shillings per quarter (Gomes 2003, 172; Hirst 1925, 15). Despite elaborative efforts aimed at achieving price stability with the enactment of the Corn Law, the price of wheat increased incredibly. Francis Hirst (1925, 15) noted that within a two-year period the prices of wheat increased by more that 100 percent: “in January, 1816 wheat was 52s, 6d., in January 1817, 103s, 1d., in June, 1817, 111s, 6d., per quarter”.

The Corn Law was particularly controversial from the economic point of view because it attracted some kind of support from Thomas Malthus, another prominent classical economist. Malthus was a supporter of free trade in general, but on grain trade, he was particularly concerned with the security of food supply and the role of agriculture to the state. Malthus (1815, 10) argued that in any case trade in grain must be “… that a free trade in corn in all ordinary cases, not only secure a cheaper, but a more steady, supply of grain”. These requirements would be difficult to achieve under unilateral free trade initiatives with the absence of formal trade agreement with trading partners. For example at a time when there is a general crop failure, grain exporting countries would act to protect their domestic interests and tend to impose export restrictions. Malthus further argued that this situation would limit the ability of Britain to import

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8 It is possible to trace a commercial policy aimed at ensuring the stability of agriculture prices and fair return to farmers and landlords to the period as early as 1670 whereby there existed a provision in the law allowing for the imposition of high import duty of 16s on wheat when its price was less than 53s, 3d. However this policy was uncontroversial until the 1750s because it brought no impact to the general public as up to this time Britain was actually a net exporter of grains, thus the provision of the law was never evoked (Daunton 1995, 546).
sufficient amount of grain, hence exacerbate price fluctuations and jeopardize food supply in the country.

Malthus contended that landlords are important to the economic development and the prosperity of the state. He also argued that the free importation of grain will have far reaching consequences. Abundantly available and competition from foreign grains first reduces domestic production of grains, and subsequently pushes down rents on land due to a lower land-demand for crop cultivation. This in turn reduces the income of landlords, the class of people who supports livelihoods of many others, and consequently lowers aggregate demand in the country. Malthus (1815, 33) believed that competition from foreign grains poses a serious problem because “… here is a reason to fear that it may be accompanied with an actual diminution of home demand”. Malthus acknowledged that the contribution of landlords to the state is not only in terms of producing goods domestically, but more importantly because of the contribution of their capital and opportunities to provide jobs to the public. Malthus also argued that the existence of landlords is closely linked with the prosperity of the state because of the availability of land to ensure the security of food supply. Malthus (1815, 35) noted that “it may truly be said that though they do not so actively contribute to the production of wealth, as either the classes just noticed [labour and capital], there is no class in society whose interests are more nearly and intimately connected with the prosperity of the state”. Additionally he claimed that landlords form the backbone of domestic demand for manufactured goods. If the income of landlords were to be severely affected by free trade in grain, the repercussion to the manufacturers would also be untenable. This is because the consumption of landlords “afford the most steady home demand for the manufactures of the country, the most effective fund for its financial support and the largest disposable force for its army and navy”.
Malthus’s support of the Corn Law drew torrents of opposing responses from other economists. Ricardo contended that the law will increase nominal wages throughout the whole economy, and therefore, will adversely affect manufacturers and drove down profits. Ricardo ([1815] 1951, 25) also argued that the benefits of free trade in grain come from two sources. One benefit is through an increase in profits due to availability of cheap food, which is beneficial “to those derived revenue from the employment of their capital, either as farmers, manufacturers, merchants or capitalists”. Another benefit is due to abundance of food supply to the people, in which “the same revenue becomes efficient in procuring a greater amount of the necessaries and luxuries of life”. Ricardo ([1815] 1951, 237) further stressed the importance of lower food prices caused by free trade in order to induce capital accumulation and elevate economic growth beyond the static efficiency gains:

Beside the impolicy of devoting a greater portion of our labour to the production of food than would otherwise be necessary, thereby diminishing the sum of our enjoyments and the power of saving, by lowering profits, we offer an irresistible temptation to capitalists to quit this country, that they may take their capitals to places where wages are low and profits high. If landlords could be sure of the prices of corn remaining steadily high, which happily they cannot be, they would have interest opposed to every other class in the community … to give a moderate advantage to one class, a most oppressive burthen must be laid on all other classes.

Robert Torrens also opposed the Corn Law and argued for its repeal. Besides expounding similar arguments as Ricardo did on the benefits of free trade in grain for capital accumulation and enhancing economic growth, he argued that Britain will arrive at a stationary state of economic growth if the law were there to remain for a long period of time. He also claimed that return to capital will diminish when a lower quality of land has to be used in quest to increase the amount of crop production. Torrens (1827, 214) accounted that: “Under any given degree of skill and economy in the application of labour, the return upon capital will be determined by the quality of land in cultivation; and as inferior soils are resorted to, the rate of profit will
consistently diminish, until the stationary state is attained, in which no additional capital can be employed”.

James Mill also responded to Malthus’ arguments. Mill expounded that efficiency gains from free trade will naturally be attained because importable goods could only be procured through producing exportable, then exchanging them. When actual trade takes place, the economics behind this is that it occurs as if exported labours were employed at home to produce the importable. The gain from free trade will be unambiguous “because it will procure more corn by going in the shape of commodities to purchase corn abroad, than if it had been employed in raising it at home”. Therefore, a law “to prevent the importation of corn, can have only one effect – to make a greater portion of the labour of the community necessary for the production of its food” (cited in Gomes 2003, 182).

3.3.2 The Coming of Free Trade to Britain

Besides stern criticisms over the Corn Law that came from classical economists, the law also drew massive protests from other groups in Britain, which finally resulted in the repeal of the law in 1846. At least three forces that worked in tandem, which could be associated with the demise of the Corn Law. Firstly, the poor economic conditions faced by ordinary people in the early nineteenth century, in particular due to (temporary) declining state of manufacturing activities and poor harvest of grain, thus created worries about food security. Secondly, the emergence of Anti-Corn Law League, a strong lobbying group, which pressured the authority to repeal the law. And finally, the adoption of free trade ideology among the majority of legislatures and bureaucrats, headed by Robert Peel who became British Prime Minister in 1841.

In the early nineteenth century Britain faced a serious economic deflation. As of 1841, in many manufacturing towns such as Leeds and Nottingham, working hours of mills initially had
been cut short, only for the mills to be completely shut down soon later. The majority of the people faced difficulties to carry on with their normal lives and terribly distressed as the number of unemployment increased. The condition of the working class in 1841 was in horrible state, as accounted by Richard Cobden: “The sufferings throughout the country were fearful … there are thousands of houses in England at this moment where wives, mothers, children are dying of hunger” (cited in Morley 1881, 190). The standard of living which had been on the increase since the early eighteenth century started to decline in the early 1800s, and the declining trend reversed only after 1850s (Daunton 1995, 435). Many quarters, including the general public, partly blamed the protectionist policy embedded in the Corn Law as the main cause.

Another force, the Anti-Corn Law League led by Cobden, was initiated and formed by Manchester textile manufacturers in 1838. The other prominent figures in the league included John Bright, a carpet manufacturer based in Rochdale and James Wilson, a Scottish journalist who founded the Economist magazine. The ultimate aim of the league was to pressure the government of Britain to repeal the Corn Law, arguing that besides denying the availability of cheaper goods to the public, higher British food prices due to agriculture protection implied lower real wages of workers and depressed their standard of living. At the same time British manufacturers were furious since they were unable to export their products to many European countries because these countries demanded reciprocal excess of grains to British market (Gomes 2003, 250; Morley 1881). Apparently British manufacturers began to loose their competitiveness in other markets due to higher cost of domestic labours (Semmel 1970, 133).

Ideological belief among the people who have the power to decide over commercial policies was paramount in helping the adoption of liberal trade regime. It was possible for Britain to change its policy from protectionism to free trade because Robert Peel, the Prime Minister himself subscribed to free trade ideology (Bhagwati and Irwin 1987, 109-130; Hirst 1925, 29-31;
However, even under this circumstance, free trade idea was not easily accepted by politicians, policy makers and the general public in Britain. Since the time of Adam Smith, although free trade doctrine managed to establish itself as the orthodoxy of economics, free trade idea was treated with scorn and criticism by the majority of people. Only after the enactment of the Corn Law in 1815, the discussions, especially in the hall of Parliament, over the nature and validity of economic arguments favouring free trade became pronounced. Semmel (1970, 133) noted that by the 1840s “free traders were present in sizeable numbers in the lower house”. Therefore, free trade idea started to take hold in the thinking of many people and it was successfully translated in many legislations. Notwithstanding this though, the repeal of the Corn Law was never a simple case as Peel faced resistance from his own party, and the repeal went through in Parliament quite dramatically. Peel contemplated resigning as Prime Minister in December 1845 after his recommendation for the repeal had been backed by only three of his Cabinet Members (Semmel 1970, 145). However, he was later persuaded to hold on to power after his colleagues retracted and compromised, and in February 1846 he announced a complete repeal of the Corn Law, which to take effect in 1849 (Gomes 2003, 250; Grampp 1993, 94).

Although the announcement to repeal the Corn Law was made in 1846, essentially the gradual process of trade liberalization on goods other than grains started much earlier, albeit on a piecemeal basis. During 1824 and 1825, most import and export duties were brought down to 20 percent, while over 1000 customs tariff classifications were simplified and repealed. Few years earlier (in 1822), a process of revising Navigation Laws had started until they were completely repealed in 1849. The process of liberalization became more aggressive after the repeal of the

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9 Robert Peel became Prime Minister representing the Conservative Party, which was aligned to agriculture-protectionist group of landlords. Arguably he subscribed to free trade ideology long before becoming Prime Minister, but he, together with other Conservatives, considered agriculture protection was justified as a special case for Britain. However by 1845 he found that justifications for agriculture protection were no longer valid and started arguing for the repeal of the Corn Law. For detailed accounts of the change of Peel’s view over the Corn Law, see Douglas Irwin (1989, 41-59).
Corn Law, and by 1860 all the remaining protectionist tariffs on manufactured goods were abolished. By this time only a few imported consumption goods were still in the list of taxable items of which they “either were not produced at home or were already subject to domestic excise taxes” (Gomes 2003, 252). These were such items as tea, sugar, tobacco, wines and spirits, imposed for purposes of revenue collection. The amount of duties collected on these items was substantial to Britain, contributing about 87 percent of Customs revenue in 1861.

### 3.3.4 The Era of Low Tariffs across Countries, 1860s-1870s

The era of low tariffs (1860s-1870s) across many countries of the world had a strong connection with the successful repeal of the British Corn Law. Economic prosperity attained by Britain in the years after the repeal of the law influenced other countries in Europe to adopt a similar trade policy. Encouraged by the boom years of the 1850s, many British proponents of free trade, especially Cobden\(^\text{10}\) began to envisage the possibility of achieving free trade all over Europe (Armitage-Smith 1898, 145; Bairoch 1993, 23; Marsh 1999, 9), and this idea was shared and promoted by the people at the Britain’s Board of Trade, as well as by diplomatic missions in the capital of Europe (Gomes 2003, 254; Marsh 1999, 21).

In an effort to promote trade in general and free trade in particular, the private sector in collaboration with Britain government held the Great Exhibition of 1851 in Hyde Park, showcasing British supremacy in industrial products and commercial activities. This exhibition impressed foreign visitors over the marvels of British technology and industrial prowess, and also of the self-confidence of British entrepreneurs. All these were claimed to be the result of British

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\(^{10}\) Cobden envisaged a free trade for the whole of Europe even in his speech on the repeal of the Corn Law delivered in the House of Commons on January 15\(^\text{th}\), 1846: “I believe that if you abolished the Corn Law honestly, and adopt free trade in its simplicity, there will not be a tariff in Europe that will not be changed in less than five years to follow your example” (cited in Armitage-Smith 1898, 145).
adoption of the policy of free trade. Hence, to many people the British’s case proved that “free trade brought progress, prosperity and national contentment” (Gomes 2003, 254).

The economic prosperity enjoyed by Britain in the 1850s induced the French to agree for the negotiations of a trade treaty with British in 1859. The architects of this treaty were Cobden, on Britain’s side and Maurice Chevalier on the other.\textsuperscript{11} Chevalier, a free trader and economics professor at the College de France, who headed the negotiations for France, managed to convince the French Emperor, Napoleon III to agree for France to sign a trade agreement with Britain, named the Anglo-French Commercial Treaty in 1860, after taking just one year of negotiations. The swift conclusion of the treaty could be associated with a number of reasons.

First, the experience of British in attaining prosperity and economic wellbeing under a unilateral free trade policy provided them with additional confidence to bring forwards tariff reductions on a few items of interest to France, in particular wine and brandy. Duties on these items were originally classified as “revenue duties”, which had been contributing significantly to the coffer of Treasury (Marsh 1999, 15). The swift of Britain’s action in cutting their tariffs provided stimulus to France in adopting the same attitude over commercial policies.

Second, Napoleon III inclined to believe that lower tariffs would increase the competitiveness of French industries and also would improve the standard of living of the working-class by lowering consumer prices, a thinking that was in consonance with free traders. In addition, the political system of France of that time provided the Emperor with the power to make decisions on matters relating to international commerce without the need to refer to legislatures. To avoid any complications the treaty was negotiated in secrecy, thus it was concluded without the support of parliamentary deputies, business community, and industrialists,

\textsuperscript{11} This treaty was popularly known later as Cobden-Chavalier Treaty, see for example O’Rourke and Williamson (1999, 38) and Peter Gourevitch (1986, 72)
in which the majority of whom were the proponents of protection. French industrialists argued that the treaty would be bad for the country. Comparing the items traded bilaterally with Britain, they argued that France’s industrial exports played a far smaller role than that of Britain, thus there was “no synchronisation of business interests between the two countries” (Gomes 2003, 254). Of course this argument was in sharp contrast with the argument advanced by free traders, who argued that the least controversial aspect of trade between these two countries would be the trade of goods which occurred due to differences in endowments. In this situation, since the imported goods were not in direct competition with locally produced items, everyone will gain from trade. However, to the French that had personal interests, the home market was a paramount importance; their continued prosperity, together with that of thousand of workers, depended on the protection of the local market which was now threatened by the Treaty’s provisions for tariff cuts.

Third, there was an inclination on both sides to ease political tension between the two countries. As far as Britain was concerned, a commercial treaty with France was important to avoid any intention of Napoleon III in advancing its political power across the English Channel; and the victory of France over Austria in northern Italy was a great concern. Therefore many people in Britain “believed that the road to peace could be secured only when the people of each nation learnt to be dependent by supplying each other material needs” (Marsh 1999, 10). Similar intention was also apparent on the part of France, particularly the Emperor himself. Facing difficulties with the new developments in northern Italy, in particular with the defeated Austrians who refused to mollify, and Italian nationalists, who proceeded to unify themselves, Napoleon was in need of peace with other neighbours, especially Britain.

Under the terms of the agreement, which was to be effective for ten years until 1870, France was supposed to abolish all prohibitions imposed on British industrial goods and replaced
them with import duties, initially not exceeding 30 percent ad valorem, and further reduction to 25 percent after four years. Meanwhile, Britain would impose no duties on a large number of French products with the exception of wine and brandy. As for these two items, the duty structure was based on the strength of alcoholic content. The lowest duty was imposed on wine of the lowest strength at 1s. per gallon, followed by medium strength (1s. 9d.), high strength (2s. 5d.) and spirit (2s. 11d.). Tariff concessions granted by Britain was significant since the level of duty on wines had been nearly 6s. per gallon (Marsh 1999, 15).

The most remarkable effect brought about by the Anglo-French Commercial Treaty of 1860 was the chain reaction it produced. Between 1861 and 1868, almost all countries of Western and Central Europe embraced trade agreements interlocking each other, known as the “network of Cobden treaties” (Bairoch 1993, 23; Gomes 2003, 255), all incorporating the Most-Favoured-Nation (MFN) clause. At the same time of the negotiations with France, Britain proposed similar trade treaties with Spain, Portugal and Austria and later negotiated such treaties with Belgium, Italy, and the Zollverein. Meanwhile, France negotiated trade treaties with many European countries including Belgium, Prussia, Italy, Switzerland, Sweden and Norway.

Following the Anglo-French Treaty, France signed similar treaties with Belgium and Prussia in 1862 (ratified by the Zollverein in 1865), Italy in 1863, Switzerland in 1864, Sweden, Norway, the Hanse Towns, Spain and Holland in 1865, Austria in 1866, and Portugal in 1867. Similarly, Britain concluded trade agreements with Belgium in 1862, Italy in 1863, and the Zollverein and Austria in 1865. In later years the Zollverein not only signed commercial treaties with European countries, but also with Mexico and Japan. In 1868 it concluded trade treaties with Austria and Spain and in 1889 with Switzerland, Mexico and Japan (Pollard 1974, 117). Even Russia lowered import tariffs during the twenty years following its economic policy reform which began in the 1860s, in which the most remarkable component was the tariff reduction of
1868. The treaties signed by these countries interlocked each other through the MFN clause that entitled a party to the lowest duties granted by another party to any other signatories of any other treaties. Thus, although every treaty was bilateral in nature, the resulting network was effectively multilateral. More important than their formal shape was the consequence of the treaties; each new treaty continued to lower the tariff barriers that had fragmented the European market previously.

Across the Atlantic, however, the United States engaged in a different sort of commercial policy during the 1860s as compared to European countries. Previously, particularly in the few years after 1845, and following the report of Robert J. Walker, then the Secretary of Treasury, the United States had to some extent involved in the liberalization of its trade policy (Letwin 1961, 40; Taussig 1920, 2). For example, in the Tariff Bill of 1846, some of Walker recommendations in relation to tariff reductions were approved by the Congress. Walker incorporated in his report arguments and justifications for the Congress to liberalize trade, which at that time leaned towards protectionism, as underpinned by Alexander Hamilton’s (1791) “Report on Manufactures”. Walker’s report recommended for the abolishment of protective barriers given to the manufacturing sector arguing that those barriers were erected at the expense of agriculture sector and consumers.

Walker argued that the negative effect of protection granted to manufactured products was that it allowed only a small amount of imports of manufactures, especially from Britain and other European countries. Consequently, those countries were unable to receive much money to be used as an exchange for the importation of agriculture produce from the US. Since the US was naturally well endowed with fertile lands and suitable climate, the country was able to produce huge amount of agriculture products for export. Unfortunately though, the ability of foreign countries to import agriculture products was constrained by the protectionist policy of the US.
Walker acknowledged that: “Foreign nations cannot for a series of years import more that they export; and if we closed our markets against their imports by high duties, they must buy less of our exports or give a lower price, or both” (cited in Letwin 1961, 42).

The Bill of 1846 gradually reduced import tariffs in the US, and by 1861 tariffs on dutiable items were fairly uniform, averaged around 20 percent, with a maximum tariff recorded at 24 percent. However, in 1861 the Congress passed the Morrill Act, the first of a series of laws imposing higher duties on imports. This initiative was taken by the North, who controlled the Congress as a part of efforts to finance the American Civil War (1861-1865) against the South, and later it became the opener of floodgate for protectionist interests to demand for higher tariffs. The speed of tariff being increased was spectacular, because as of 1864, just in three years, the average level of duties was double to 47 percent. It was apparent then “protection was granted to any commodity for which it was requested” (Robertson 1973, 370). Import tariffs continued to be raised in the subsequent years to reach an average of 60 percent in 1897, this time due to the enactment of the Dingley Act.

3.4 Conclusion

The doctrine of free trade managed to establish itself as the orthodoxy of economics during the period of classical economics. It is imperative to note that this period not only witnessed the acceptance of free trade doctrine amongst economists, but also witnessed the adoption of the free trade idea in the setting up of trade policies and practices in many countries of the world. While the acceptance of the free trade doctrine among economists is primarily due to the work of, among others, prominent classical economists such as Adam Smith, David Ricardo and John Stuart Mill, the adoption of free trade into trade policies is arguably due to non economists, including influential individuals such as Robert Peel and Richard Cobden.
CHAPTER FOUR

FREE TRADE IN NEOCLASSICAL ECONOMICS

4.1 Overview

This chapter examines thinking about trade in the period of neoclassical economics which emerged in the 1870s. It begins by analysing the expositions of trade theory both in the early and later periods of neoclassical economics, of which this chapter emphasizes that 1930 was the watershed. This chapter also analyses the debates over the validity of the theory of trade, especially on the criticisms by some economists on the theory of comparative cost analysis, in particular by Bertil Ohlin. Besides this, it also examines the debates over the virtues of free trade in the 1980s and 1990s particularly about the implications brought about by new trade models, in which a few economists incorporate imperfect competition and economies of scales into their analysis. In addition, this chapter also examines trade policies and practices across many countries of the world during neoclassical economics encompassing three main periods: the period between the 1870s and 1910s; the period between the two World Wars; and the period of the post Second World War. Finally, this chapter analyses the factors that influence policy makers of leading trading nations to agree to engage in multilateral cooperation for trade liberalization which resulted in the establishment of the GATT in 1947.

4.2 Neoclassical School of Economics

The neoclassical school of economics emerged in the 1870s (Landreth and Colander 1994, 211). The development of a new set of analytical tools – fundamentally driven by marginal analysis – for analysing economic phenomena marked the transformation of classical economics into neoclassical economics. The extension of the exposition and analysis of trade was primarily due to the works of the early neoclassical economists such as Alfred Marshall, Augustin Cournot,
Francis Edgeworth, Vilfredo Pareto and Arthur Pigou. In some aspects the works of these early neoclassical economists were somewhat different from that of later generations such as Frank Taussig, Gottfried Haberler, Frank Graham, Jacob Viner, Eli Heckscher, Bertil Ohlin, Paul Samuelson, Ronald Jones, Jagdish Bhagwati, and Paul Krugman.

At least two aspects of differences could be identified which divided the early and the later periods of neoclassical economics. First, the separation was signalled by the development of general equilibrium framework mainly in the 1930s, for analysing economic problems in the latter as opposed to partial equilibrium in the former. Gomez (2003, 151) argued that: “The 1930s was the watershed between the old and the new (or modern) neoclassical economics”. Second, the “formalist” approach to economic analysis began to be accepted as the Marshallian economic analysis was inadequate to provide answers to many economic phenomena. In the US for example, Marshallian economics retained its dominance until the 1930s, but since then the formalists’ method of research and analysis became widely adopted, transforming economic theories and expositions into a “highly mathematical structure” (Landreth and Colander 1994, 421).

4.3 Free Trade in the Early Period of Neoclassical Economics

The early contribution of neoclassical economics to the trade theory was attributed to Augustin Cournot, whose approach to economic analysis shaped “the basic structure of twentieth century economics” (Gomes 2003, 92). Cournot’s early contribution was in relation to the analysis of international trade in the form of mathematical expressions demonstrating that the removal of tariffs causes a country worse off than under tariff protection, in particular when he

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12 Some economists describe this period as economics in the age of Marshall, see for example Gomez (2003, 92).

13 The analysis of this Chapter argues the writings of economists prior to the 1930s as contributions to the early neoclassical period. Nonetheless, Pigou’s contribution is distinct from the others because he contributed to both the earlier and later periods of neoclassical economics.
analysed gains from trade measured in terms of money. In his analysis, Cournot ([1838] 1929, 157) showed that there is a “nominal reduction” of real income in the importing country after the removal of tariffs, because the loss to the producers of import-competing products outweighs the gain to consumers. He then concluded that imports reduce real income in the importing country. Cournot’s result, in contrary to the result derived by the use of comparative cost analysis, drew criticisms from other prominent economists including Edgeworth, Viner and Samuelson (Gomes 2003, 94).

The most severe criticism perhaps came from Viner who contended that Cournot’s argument of the benefit of import duties is so obscure and falls short of establishing a case, so “it scarcely deserves attention on its own account” ([1937] 1975, 586). However, Viner acknowledged that Cournot argument could not be ignored because his general authority as an economist was so high; therefore, his finding was used by protectionists as a proof which refutes the doctrine of comparative cost advantage. Referring to Cournot’s argument, Viner contended that the loss to producers is at least offset by a corresponding gain to consumers. On the contrary, Viner ([1937] 1975, 588) argued that there will be a possible additional gain to consumers “because at its reduced price the additional purchases thereof may yield more satisfaction than the commodities they replace”.

Marshall extended the expositions of classical theory of trade by systematically developed and refined analytical methods with the use of geometrical diagrams in addition to descriptive reasoning. He incorporated in his “value of representative bales” of trade between two countries not only the value of labour, as used by the classical economists, but also the value of capital and

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14 Ohlin (1933, 563) noted that Cournot’s works on international trade attracted little attention, except for his early treatments of economic problems in mathematical forms. According to Ohlin this was “due partly to the fact that his conclusions were erroneous” since in his analysis Cournot gave too much weight to the loss of producers of import-competing goods in comparison to gains to consumers.
investment in the analysis of demand and supply of internationally traded goods (Marshall 1924, 157). Marshall’s analysis was still based on the doctrine of comparative cost advantage as the determinant of trade. Although his analysis was based on a barter trade with the non-existence of international borrowing and lending, he argued that demand and supply of international trade is different from demand and supply of domestic trade. Borrowing the terms of “reciprocal demand” introduced by J. S. Mill, Marshall (1924, 160) expounded that trade between two countries occurs because reciprocal demand is effected in such a way that “the demand of each [country] has its origin in the desires of her people to obtain certain goods from abroad; and her supply has its origin in her facilities for producing things which the people of other countries desire. But her demand is, in general, effective in causing trade, only in so far as it is backed by her supply of appropriate goods; and her supply is active, only in so far as she has a demand for foreign goods”.

In analysing reciprocal demand between two countries, Marshall (1924, 161) showed using a numerical “trading schedule” of how two countries, E and G trade on various terms of trade or “rates of interchange”. In the trading schedule, on one side he demonstrated that if G’s products are scare or limited in E’s market, they will be purchased by only few people of very wealthy at very high a price. But if the supply increases greatly, they have to be sold at a lower price in order for less wealthy people with less purchasing power to buy. On the other side, the same will occur for the selling of E’s products in country G. Finally trade reaches an equilibrium point whereby the two countries trade at a particular rate of interchange.
Marshall translated his numerical example into a diagram to show the interaction of this reciprocal demand. Two curves (known also as offer curves), one for each country, took a quadratic form and intersected at the rate of interchange representing trade in equilibrium. The gain from trade or “net benefit” was conceived as the area between the two prices bounded by the offer curves. Marshall’s offer curves diagram representing his trading schedules is depicted in Figure 4.1.

**Figure 4.1**

Alfred Marshall Offer Curves

(Refer to the image in the document)

Note: OE and OG are the offer curves of country E and G, while Ox and Oy (of equal scale) represent the corresponding bale of goods of E and G respectively. In this diagram Marshall demonstrated that following E offer curve, at point P, E is willing to trade OM bales of E goods for only ON goods of G. Similarly, following G offer curve, at point p, G is willing to trade pm bales of G goods for only Om goods of E. Finally, trade between the two countries would be in equilibrium at point A at the specific term of interchange.

In other words Marshall’s case of “net benefit” is simply the sum of the imported “bales” at corresponding unit prices at which a country would have purchased successively up to the point of
equilibrium terms of trade. Viner ([1937] 1975, 571) found fault with Marshall interpretation of this net benefit, which led him to argue that the result is “invalid”. Viner claimed that Marshall’s procedure overestimates the country’s net benefit from trade because Marshall would have assumed the importing country’s offer curve remains the same whether the country pays the equilibrium or the maximum price for the extra marginal units of imports. In essence this simply implies that Marshall would have assumed that the marginal utility of exportables is constant.

Marshall’s reciprocal demands or offer curves in fact are based fundamentally on Edgeworth’s work documented in *Mathematical Psychics* (1881). Edgeworth (1881, 113) used consumer indifferent curves to develop offer curves under the system of barter trade in a manner similar to that later used to explain trade theory. Edgeworth defined an offer curve as “the locus of the point where lines from the origin touch curves of indifference”. Since the locus of coordinates from the origin being the ratio of prices, the offer curve thus summarises the conditions for constrained utility maximization; for at all points on the offer curve, the price ratio equals the ratio of marginal utilities of two individuals, who involve in trade.

Another important contribution of Edgeworth to trade theory was the introduction of contract curves. He defined a contract curve as the locus of points at which one country’s indifference curve is tangent to the other country’s indifference curve. In essence, this locus of points implies that one country cannot increase its welfare without decreasing the welfare of the other, since at one point the total world output of any goods is fixed. By bringing together the two countries offer curves Edgeworth showed that international equilibrium occurs at the intersection of the offer curves.

Pigou provided theoretical arguments over the impact of protective tariffs on revenue and income distribution as published in *Protective and Preferential Import Duties* (1906). He argued
that, theoretically, tariff protection can increase the real income of a factor used intensively in a protected industry. In a hypothetical country which has only two industries, A and B, tariff protection given to industry A will increase the output of industry A and reduce the output of industry B. This will, in turn, increase the proportion of output produced by the factor used more intensively in A. Therefore, he argued that it is possible, even if the imposition of a tariff reduces the real national income (or dividend) as a whole, the absolute return to the favoured factor may be improved by it. Pigou (1906, 59) indicated that: “The increase percent in the share of the dividend obtained by the favoured factor might exceed the shrinkage percent of the dividend itself”. Further, he asserted that free trade will have implication on the international movement of factors of production. A tariff, which raises the share of one factor to the national real income, creates incentives for international movement of disadvantaged factors. In any case the factor most likely to move will be capital, because immigration policy of many countries restricts the movement of labours. Thus, even if the imposition of a tariff is disadvantageous in terms of the share of national income accrued to labour, immigration of labour might not occur. But he suggested a different implication on capital since it is much easier to move from one to another country.

Another important contribution to the analysis of international trade came from an Italian economist, Vilfredo Pareto. Pareto propounded a system of mathematical expositions for analysing trade in equilibrium involving a number of different markets. His treatment, based on the prices of goods brought some modifications to the traditional trade theory, which was traditionally based on the labour theory of value. In a way, Pareto analysis is an extension to the classical Ricardian theory of trade in which other economists use in their analysis. In addition, Pareto also developed optimality criteria for assessing welfare implication of trade. He argued that, with appropriate compensation, free trade causes an improvement in economic welfare. This is achieved so long as the group of people who gains from trade (the gainers) could compensate the losers in such a way
that the welfare position of the losers prevails as before the trade, while at the same time the welfare of the gainers improves. The theoretical underpinning of the Pareto-optimality criterion is a breakthrough in trade theory because it provides a method to ascertain whether free trade in equilibrium achieves (Pareto) optimality or not.

In his analysis of tariffs as the measure of protection, Pareto ([1927] 1971, 374) arrived at a conclusion that as a general rule “every protective tariff is the cause of the destruction of wealth within the country which levies this duty on a good”. On the contrary, the removal of a tariff which induces resources to move from a less efficient import-competing industry to a more efficient export sector will augment wealth, since under free trade a greater bundle of goods can be obtained at lower prices. The gains are even larger if the contracting import-competing sector faces increasing cost of production while the export sector enjoys decreasing costs.

4.4 Free Trade in Neoclassical Economics after the 1930s

4.4.1 Taussig, Haberler, Viner

Until the time of Marshall, economists advanced two forces as the determinants of trade between nations. First, trade occurs because of absolute cost advantage as originally propounded by Smith. At this early stage, the economic argument for free trade was that it is advantageous for a country to import, in exchange for its exports, goods which either could not be produced at home or could only be produced at a cost absolutely greater than if they are imported. Under free trade, every country will gain when all products (abstracting from transportation costs) are produced in countries where their absolute costs are the lowest. Essentially, the case for free trade expounded by Smith did not exceed this point.
Second, trade occurs because of comparative cost advantage as propounded by Ricardo, whose argument started from another state of affairs, apparently less favourable to free trade. The doctrine of comparative advantage maintains that under free trade each country will specialize in the production, thus export goods that it enjoys a comparative advantage in “real costs”. In exchange a country imports goods which could be only produced domestically at a comparative disadvantage. Such a specialization will result in mutual benefits to participating countries. In the exposition of this theory the “real costs” are expressed in terms of the quantities of labour-time embodied in the goods produced.

By the first quarter of twentieth century, the absolute advantage as a determinant of international trade was widely accepted as an explanation for the large part of world trade (Haberler [1933] 1956, 128). Meanwhile the theory of comparative cost advantage when used to explain the cause of trade faced difficulty to be accepted even by some economists. This theory was in general accepted by British, American and Italian economists, but met with resistance in France and Germany (Haberler [1933] 1956, 122), fundamentally because of the reluctance of some economists to accept the labour theory of value. As a result, up to this time the doctrine of comparative cost advantage was on the defensive everywhere (Viner [1937] 1975, 438). Partly because of this reason, there was a renewed interest among economists to expand the analysis and theoretical expositions of trade theory in order to get a complete understanding of the determinants of international trade. On one hand a number of influential economists such as Bertil Ohlin, Gottfried Harbeler and Edward Mason (Viner [1937] 1975, 510), made it a point to challenge the adequateness and validity of the doctrine of comparative cost advantage in explaining international trade. On the other, economists including Frank Taussig and Jacob Viner provided their analyses and arguments justifying the relevance of this doctrine.
Critics against the doctrine of comparative cost advantage mainly pointed to the assumptions underlying Ricardo’s analysis of the example of cloth-and-wine trade between England and Portugal. It is universally agreed that for Ricardo’s conclusion to be valid, the analysis required a number of important assumptions, although Ricardo himself never expressly stated. To economists, it is obvious that among the important assumptions underlying Ricardo’s analysis include the following: (1) labours, as the only factor of production, are mobile within a country while completely immobile between countries, (2) the economy operates under perfect competition, (3) it involves only two countries and two commodities, (4) constant labour cost regardless of the level of output, (4) there is full employment in both countries and (5) internal and external transport costs are zero (Appleyard and Field 1995, 29; Haberler [1933] 1956, 126; Viner [1937] 1975, 444).

Taussig (1927, 3) provided an extended synthesis to the theory of comparative cost advantage by presenting examples of three different concepts which are important in explaining international trade: absolute, equal and comparative differences in costs. He expounded that trade occurs in two of the three situations: the existence of absolute and comparative differences in the costs of production in two trading countries. In this regard he found that trade between tropical and temperate countries occur mainly due to absolute differences in costs. Meanwhile, he argued that goods with equal differences in the costs of production will not be traded; instead both countries will produce them to meet their domestic demand.

He also analysed money wages as well as the prices of goods in relation to international trade. In his analysis he distinguished between international and domestic goods. He contended that the prices of goods, which subject to export (or import) are the same throughout international markets. On the contrary, domestic goods that are not traded internationally at all, will not
necessarily have the same price in one country in comparison to another because the prices of domestic goods in one country are determined by the effectiveness of its labour (Taussig 1927, 35). As such was the case, he maintained that high money wages would not necessarily cause high prices of domestic goods. Also, high money wages will not necessarily correlate with the prosperity of a nation. He claimed that it is a fallacy of the argument which maintains that international trade tends to equalize national money wages since wages are also influenced by the effectiveness of labour in producing domestic goods.

In addition to providing extensions to the theory of trade, Taussig also examined to what extent trade theory reflects realities. He did this to throw some light on the question of whether economic theory can be used as a tool to understand real world phenomena. He used available data in coal, brick, glass, and cotton industries of the United States, Belgium, Germany, Belgium, Sweden and Japan to analyse differences in labour costs. In conclusion he maintained that there are differences in labour costs in the production of those products in various countries. As regard to wages and prices in relation to international and domestic goods, Taussig (1927, 173) found that they are in consonance with the general theory of trade.

Haberler contribution to international trade theory was primarily in terms of providing extended modifications as well as syntheses of the theory of comparative advantage in such a way that in the end the theory can be demonstrated as an approximation of reality. Basing his analysis initially on the “unrealistic” assumptions underlying the theory of comparative advantage, Harbeler presented through models and examples that even after the original assumptions are discarded the results of the analysis remains the same; the existence of trade is superior compared to no trade.
Haberler ([1933] 1956, 131-132) introduced the element of money price into the analysis of trade based originally on the theory of comparative advantage. He demonstrated using a modified example, borrowed from the work of Taussig, how comparative differences in costs can be translated into absolute differences in prices. He showed that goods, which a country exports (or imports), depend directly on absolute differences in money-price. His framework can be considered as an alternative method of analysis since a synthesis using comparative differences in labour-cost faces various difficulties. He argued that his synthesis is important because in actual fact international trade does not involve an exchange of goods against other goods, but through the medium of money.

Haberler ([1933] 1956, 136) also showed that the theory of comparative advantage can also be applied to the case of more than two goods and two countries. Using some mathematical expressions he demonstrated that the conclusion drawn from this situation is similar to that of two goods and two countries. In both cases a country specializes in the production (and export) of goods that it has comparative advantages. Therefore the division of labour between countries increases total output for consumption in both countries.

Haberler ([1933] 1956, 142) analysed the implication of introducing transport cost into his model. In this situation he conceded that the division of labour will not attain benefits as great as under the assumption of goods can be transported at no cost. He acknowledged that the necessity to pay for transportation charges makes the world poorer than if the goods can be transported without cost. However, he maintained that in so far as international trade takes place, although with the existence of transport costs, “it must be advantageous, since it will be undertaken only if the division of labour exceeds the cost of transport”.
In order to approximate reality, Haberler also discarded other assumptions underlying the theory of comparative cost advantage: homogenous labour and the ability of labour to move freely from one branch of production to another.\textsuperscript{15} He reckoned that there existed many different qualities of labour as well as the existence of many other factors of production besides labour. He also made another important observation, that many of these factors are specific. The specificity of factors of production is either due to the fact that they can be used only for one particular purpose, or they will experience great loss if transferred to another use (machinery, for example, can only be used as scrap-iron). The existence of specific factors led to the rise of arguments for tariff protection to avoid losses due to specialization and trade. To this argument Haberler ([1933] 1956, 188) contended that “… the loss, which seems so obvious and impressive, may indeed be real losses from the standpoint of the owners of the idle factors, but they are out weighted by the greater gain to other persons. To community as a whole, the net result is a gain and not a loss”.

In response to criticisms against the assumptions underlying the theory of comparative cost advantage, Viner, in defence of the theory, undertook a detailed study to examine the issue. Viner meticulously recollected and analysed all criticisms that appeared in literature starting from the period of Ricardo up to the time of his study. Viner ([1937] 1975, 444) examined both criticisms against Ricardo’s analysis which did not amount to the rejection of the assumptions as well as of the more fundamental criticisms which questioned their validity. He argued that the doctrine of comparative cost advantage was not only attacked by protectionists for obvious reasons, but also by two groups of economists. The first group of economists rejected the doctrine apparently due to the fact that this doctrine was an “outstanding product” of English classical school. Meanwhile, the

\textsuperscript{15} In another writing, Haberler (1961, 19) contended that economists are confronted with a permanent dilemma in theoretical research. If an economic analysis is based on realistic assumptions, one has to be content with uncertain, ambiguous and only approximate results. In contrast if one looks for unambiguous results, “highly specific” and “not generally applicable assumptions” will have to be made.
other group believed that they have “a superior technique than it affords” to evaluate commercial policy (Viner [1937] 1975, 438), obviously in reference to economists belonging to the Austrian and Lausanne schools.

Viner conceded that one major problem connected with the doctrine of comparative cost is the assumptions that only two commodities and two countries involved. On this point Graham (1923, 54-55) claimed that because of the adherence to these assumptions “the classical theory of international values seems … to open to grave objections, objections which, while they do not subvert its foundations, nevertheless call for a substantial modifications of its conclusions”. Viner responded to Graham’s critic by pointing out that classical economists had already successfully extended the analysis to deal explicitly with this particular issue. He recollected the works of Mountifort Longfield, Nassau Senior, Francis Edgeworth and Gottfried Haberler and showed that even after the assumptions are dropped, the theory of trade in general is still valid.

Viner also acknowledged the assumption of no transport costs involved in carrying out trade was occasionally used as a basis for criticism. In respond to this criticism he admitted that the analysis of trade with the existence of transport costs showed only less gain from trade because the amount of goods traded will be reduced. In addition, Viner ([1937] 1975, 468-469) argued that in this particular case the terms of trade will be different for the two countries; the difference being absorbed in meeting the cost of transportation, thus confirming the result found earlier by Haberler ([1933] 1956, 142).

Reluctant to accept the labour theory of value in determining the real cost as propounded by English classical economists, economists belonging to the Austrian school presented the concept of “opportunity cost” or “alternative cost” as an alternative method in the analysis of trade. In fact Haberler ([1933] 1956, 175) was the first to apply the opportunity cost theory to the
problem of gains or losses from international trade, using it as a substitute for the doctrine of comparative “real cost”. In this regard Viner ([1937] 1975, 469) commented that analysis based on opportunity cost faces difficulties in determining real income about a similar manner to those that faced by the real cost analysis. Further he commented that the new technique of analysis merely avoids the difficulties faced by the real cost analysis through ignoring considerations which the real cost analysis takes into account.

4.4.2 Hecksher, Ohlin, Samuelson

The sternest and sweeping criticisms against the theory of comparative cost probably came from Ohlin. Ohlin’s critics were targeted at both assumptions underlying the theory, as some other economists did, and also at the body of the theory itself. Fundamentally, Ohlin’s critics were directed at the doctrine of labour theory of value. Ohlin (1933, 571-590) contended that this doctrine is defect because it expounds that the relative value of goods – and hence their relative prices – is determined by the amount of labours used to produce them. As such, Ohlin argued that in order to make comparison about the amount of labours used, or the “real costs” of goods produced by different countries, two important assumptions must be made. First, the various categories of labours – unskilled, skilled and technical – must be translated into a common base on the assumption that there exists a fixed relationship between these categories. Hence if the wage of one skilled labour is twice as high as of an unskilled, one working day of the former equals two of the latter. Therefore any types of work can be converted into the common base, the unskilled labour. Second, capital and labour are employed in the same proportion in the production of all commodities. Ohlin argued that these assumptions do not correspond to the facts of reality, and even Ricardo would have aware of it.
As regard to the assumption of the existence of a fixed relationship between the wages of different categories of labours, he argued that this assumption is plagued with a number of problems. In particular, the assumption excludes the possibility of analysing cases related to changes in the relative positions of social classes, such as why the real wages of office workers declined since the previous four decades in Europe, while the wages of manual workers continued to rise considerably. Ohlin contended that changes in relative wages of different groups of workers affect production cost and consequently influence trade between countries.

Ohlin also argued that the assumption of a fixed relationship between capital and the cost of labour in all industries is in stark contrast with reality. He observed that in some industries wage costs were twenty-five times as high as capital expenses, whereas in others, capital expenses were considerably higher than the wage costs. Ohlin acknowledged that some economists claimed the pure labour theory of value, which is based on artificial assumptions, yields only a rough approximation of reality. Further, he acknowledged that these economists argued that it is possible to introduce modifications to the theory of value taking into account the fact that different goods require different proportions of capital and labours, thus the coefficient of relationship between capital and labour changes from one good to another. Ohlin disputed the existence of this possibility and stressed that previous attempts were unsuccessful and doomed to fail right from the beginning. Ohlin (1933, 573) argued that:

If one holds – with Ricardo and Mill – that relative prices are primarily determined by the quantities of labour employed, and if at the same time the quantity of capital employed is considered relevant, one has in fact abandoned the orthodox cost theory which was based on the assumption that all cost elements can be expressed in terms of one [labour].

Ohlin also criticized the assumption of the constant cost of production. He reasoned that this assumption is a defect; therefore, it causes inadequate treatments on the phenomena of both
increasing and decreasing returns. In addition, Ohlin also criticized another assumption, which on one hand assumes free movement of labour within a country, while on the other assumes a complete immobility of the factor of production from one to another country. He argued that due to these assumptions phenomena related to the international movements of factors of production, especially labour and capital cannot be properly addressed.

Ohlin also observed that in analysing specific cases, economists often used the terms of comparative advantage very loosely. The term was used even in reference to all kinds of advantages including cheap capital, cheap labour as well as of various natural advantages; this is a flaw since not in the least those economists thought in terms of “effectiveness of labour”. The loosely use of the terms of comparative advantage, according to Ohlin, necessitated an alternative theory of international trade, expressed in money costs.

Ohlin finally claimed that in essence the whole classical theory of value can be replaced by a simple argument, that prices of goods are determined by their relative costs measured in terms of money instead of real costs. Accordingly, production costs depend on the prices of the factors of production, which, in turn depend on the prices of goods. In other words, the prices of goods and of the factors of production react upon one another, creating an interdependence, which characterises the whole mechanism of price formation.

Having rejected the validity of the classical labour theory of value, Ohlin expounded a different approach to theorizing international trade. Ohlin justified his approach by referring to the fact that the interdependence theory of pricing, developed by Leon Walras, Carl Menger, William Jevon, Alfred Marshall, Irving Fisher, Vilfredo Pareto and Gustav Cassel already replaced the labour theory of value in the analysis of other economic phenomena, therefore, the same should be applied for theorizing international trade.
In expounding a new trade theory, Ohlin gave full consideration to the importance of the element of space in analysing the interdependence system of pricing. He first applied the theory of price interdependence for interregional trade. Since the conditions of trade between regions of a country are similar to that of trade between countries, he then extended the application of the theory of interregional trade to international trade. Moreover, Ohlin (1933, 589) argued that international trade should only be considered as a special case of interregional trade, since countries signify the most important regional boarders as far as the movements of goods and factors of production are concerned. In addition, Ohlin (1933, 34) acknowledged that his theory had had antecedents to the work of Eli Hecksher as appeared in The Influence of Foreign Trade on the Distribution of Income (1919), albeit disagreeing with Hecksher, who contended that his original work was merely a modification and addendum to the classical theory of international trade.16

Ohlin (1933, 14) agreed with the classical viewpoint that interregional as well as international trade occurs because of differences in the relative prices of goods in two difference places. While the doctrine of comparative costs expounds that differences in the prices of goods are due to differences in the real costs expressed in terms of labours used in their production, Ohlin argued that differences in the prices of goods are due to the interdependence system of pricing. In the first place the price of a good is determined by its demand and the possibility of its production. The demand for the good is, in turn, determined by the desire of consumers. Meanwhile, the possibility of producing the good depends on the supply and the condition of productive factors.

16 Hecksher’s original paper published in 1919 was in Swedish language under the title Ekonomisk Tidskrift. Only thirty-year later, in 1949 his paper was translated into English by American Economic Association in Reading in the Theory of International Trade. Since the original idea of Ohlin’s proposition was accrued to Hecksher, this whole theory is popularly known later among economists as Hecksher-Ohlin factor proportion theory.
Therefore, this interdependence relationship mediates the translation of demand for good into demand for the factors of production.

Taking into account the mechanism of price formation, Ohlin contended that one important condition for trade to occur is that some goods can be produced more cheaply in money costs in one region (of a country) compared to others. The goods are cheaper in that region because in them are embodied relatively great quantities of factors of production, which are also cheaper in comparison to other regions. Therefore those cheaper goods will be exported, while other goods, which can be produced more cheaply in other regions, are imported. Although this line of reasoning seems somewhat similar to the argument underlying absolute cost advantage as the cause of international trade, nevertheless there exists a sharp difference. While the reasoning of absolute cost advantage has not clearly indicated why the costs of production are different in different countries, Ohlin expounded that the cheapness of goods is due to abundant availability of the factors of production. Ohlin (1933, 20) maintained that: “Each region has an advantage in the production of commodities into which enter considerable amounts of factors of abundance and cheap in that region.”

Ohlin (1933, 91) argued that inequality in the prices of factors of production in different countries will translate into different commodity prices, thus causes trade to occur. He also argued that dissimilar endowment of various factors of production in different countries results in different prices. Furthermore, even the existence of similar factors of production in different countries will still result in different prices because of differences in factors’ qualities and attributes. Besides agreeing to the types of factors of production along classical categories – labour, land and capital – he argued that other categories of factors such as natural resources, risk element and the stability of productive conditions must also be taken into account. Ohlin (1933,
76) also contended that even within these broad categories, it might be necessary to divide them further into sub-factors for purposes of analysing their pricing formation. For example, natural resources can be classified into five categories: (1) agriculture and forest growing, (2) fishing and hunting, (3) production of minerals, (4) production of water power and (5) transport activities.

On the immediate effect of trade, Ohlin argued that in addition to equalising prices of goods as expounded by the classical theory, trade will also tend to equalize the prices of factors of production. This is because trade influences the interaction of demand and supply of productive factors. Ohlin provided an example of two regions and two factors to illustrate his case. In this example, one region is abundantly supplied with cheap land but scanty of labour, whereas the opposite is the case for another region. The first region will find it advantageous to export goods requiring much land and import goods produced with much labour. Thus when industries that use greater land expanding the demand for land increases relative to the demand for labours. As a result the price of land increases, while the price of labour declines in comparison to the situation prior to trade. The opposite is true for the second region. Industries requiring much labour will expand and industries using much land will contract, resulting in increased demand for labour and pushing up it price while demand for land decline as does it price. In the end the price of land which used to be cheaper in the first region prior to trade will now become more expensive. Whereas the price of land which was expensive prior to trade in the second region become cheaper; therefore, with trade the prices of factors of production will tend to be partially equalised.

Ohlin’s factor proportion theory of trade quickly gained adherents among economists (Husted and Melvin 1995, 89). Subsequently, many economists undertook further research to provide additional theoretical insights and extensions to this new trade theory. Primarily due to the works of Samuelson, the Heckscher-Ohlin theory become a dominant international trade theory for
much of the post World War 2 period (Jones and Kenen 1984, 14). Samuelson provided two important extensions to the theory. One extension is with regard to factor-price equalization theorem. According to Samuelson (1948, 163-184), free mobility of goods internationally will cause equalization in the prices of factors of production. This exposition extended the original Heckscher-Ohlin theory which had postulated that unlike the free movement of factors themselves, free mobility of goods would only bring partial equalization of prices. Originally, Ohlin (1933, 39) had argued that full equalization is highly impossible because of the existence of transport cost and other impediments. Samuelson contented that Ohlin’s exposition is a false. Furthermore, he argued that Ohlin had failed to formally prove his argument. Samuelson (1948, 169) argued that: “On the contrary, not only is factor-price equalization possible and probable, but in a wide variety of circumstances it is inevitable.” Samuelson formally proved his theorem using production-possibility curves of two hypothetical countries, America and Europe when these two trading partners involve in trade of two products, food and clothing using two factors of production, land and labour. Essentially this proposition suggests that free trade may be a complete and not a partial substitute for free international mobility of labours as well as other factors of production. The factor-price equalization theorem was later supported by Jan Tinbergen (1949, 39-47), James Meade (1950, 129-133), Abba Lerner (1952, 1-16) and Sven Laursen (1952, 540-557).

Commenting on this theorem, Haberler (1961, 17) found that Samuelson’s conclusion is a stark difference with the conclusion of the classical theory of trade. In the Ricardian theory of comparative cost advantage, it is implicit that free trade is perfectly compatible with large and lasting differences in real wages or per capita real income levels of trading countries. In other words, the Ricardian theory of trade expounds that factor prices will not be equalized by free movements of goods, except perhaps in special cases. Few economists, particularly Paul Baran (1957, 53) and Gunnar Myrdal (1957, 149) criticised this theorem, arguing that it is incompatible
with reality since statistical record showed an increasing gap of differences in per capita income between rich and poor as well as between developed and underdeveloped countries. Responding to this criticism Haberler (1961, 18-19) argued that the critics missed an important point because they failed to realise that this theory was developed under very restrictive assumptions and they could not be said to be the representation of actual reality. Since this theory is based on unrealistic assumptions, Haberler maintained that: “… there is no chance whatsoever that factor prices will ever be equalised by free commodity trade.”

A second important contribution of Samuelson to trade theory was his joint effort with Wolfgang Stopler, propounding another theorem, known by later economists as the Stopler-Samuelson theorem. In this theorem, Stopler and Samuelson (1941, 58-73) postulated that international trade will necessarily increase the real wage of the abundant factors of production while lower that of scarce factor expressed in terms of goods. They proved their theorem through the use of production possibility frontiers and Edgeworth’s contract curves. This theorem essentially throws important light to the theoretical uncertainty about the effect of trade on the factors of production which was a subject of debates among economists, in particular between Charles Bastable, Gottfried Haberler and Jacob Viner.

Bastable (1903, 109) argued that free trade may force a food exporting country to cultivate unsuitable soils which will then push rent to increase, therefore, benefiting landlords while labours and capitalists will suffer. Haberler ([1933] 1956, 195), while expressing his doubt that large and mobile factors such as labours can be harmed by free trade, recognised a possibility, especially in

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17 In order to develop his theory Samuelson (1949, 181-197) employed eight assumptions which can be summarised as follows: (1) there are only two countries, (2) there are only two commodities, food and clothing, (3) each commodity is produced using two factors of production, land and labour, (4) the law of diminishing marginal productivity will hold, (5) the commodities differ in their labour and land intensities; food is land-intensive while clothing is labour-intensive, (6) land and labour are assumed to be qualitatively identical inputs in the two countries, (7) all commodities move perfectly free between the two countries, and (8) there will be no complete specialization in both countries.
the short run, that specialised and immobile workers may suffer substantial reduction in the amount of income due to intense foreign competition. Viner ([1937] 1975, 533), on the contrary criticised Harberler’s argument maintaining that there is no priori or empirical ground of such a case. Instead, he contended that: “But even if labour on average had low occupational mobility and were employed relatively heavily in the protected industries, its real income might still rise with the removal of tariff protection … if it was an important consumer of the hitherto protected commodities sufficiently as a result to offset the reduction in money wages in the new situation”.

Since this theorem provides theoretical support on this issue, protectionists, especially in the US, use it extensively to advance the pauper labour argument. Krugman and Obstfeld (2000, 24) noted that protectionists argued that labours in general and unskilled labours in particular will be harmed by free trade, since labours are considered as a scarce factor in the US, and Stopler-Samuelson theorem seems to land theoretical support to this argument. Haberler (1961, 20) criticised the pauper labour argument maintaining that the theorem was developed using a model based on unrealistic and highly restrictive assumptions: only two factors of production are involved and no complete specialization takes place. In fact Stopler and Samuelson (1941, 73) stressed in the conclusion of their study that though this theorem confirms that the scarce factor could be harmed by free trade, it provides no political support for protectionist trade policy. They contended that: “… the harm which free trade inflicts upon scarce factor is necessarily less than the gain to others. Hence it is always possible to bribe the suffering factor by subsidy or other redistributive devices so as to leave all factors better off as a result of trade”.

Another extension to the Heckscher-Ohlin model was provided by T. M. Rybczynski. Rybczynski (1955, 336-341) investigated the effects of an increase in the use of productive factors on production, consumption and the terms of trade. In this analysis he provided theoretical
conclusion that an increase in the quantity of a factor causes more than proportionate increase in the production of a good which uses that factor intensively while the output of another good which uses that factor less intensively will experience absolute decline.

Samuelson’s (1939) formal analysis of Hecksher-Ohlin model, which proves that free mobility of goods results in full equalization of factor prices, was done under “straightjacket” assumptions. More than 30 years later, Samuelson (1971, 365-384) examined an extended model of which he named Ricardo-Viner model. In this model he incorporated three factors of production; two factors are specific, one each for the production of two goods, while the third factor is mobile (labour). The factor is specific in the sense that it cannot move from one industry to another. As for this model Samuelson found that with the existence of international trade factor-prices will only be partially equalised, thus confirming the theoretical possibility of specific cases where the original Ohlin proposition would be true. This finding also provides support to a general understanding that factor-price equalization theorem holds true to the extent that the number of productive factors does not exceed the number of goods. In contrast, if the number of factors exceeds the number of goods, free trade in goods will cause only partial equalization in factor prices.

At about the same time of Samuelson, Ronald Jones (1971, 3-21) made another formal analysis of the specific factor model by constructing a formal structure of a model, and providing theoretical insights concerning its implication to factor returns when there will be variability in factor endowment. Jones concluded that when the prices of goods are held constant, an increase in the endowment of mobile factors lowers the return to these factors, but in contrast, raises the return to specific factors. Similarly, an increase in the endowment of specific factors lowers the return to the specific factors while increasing the return to mobile factors.
4.4.3 Theoretical Research Based on Ricardian Economics

Although a great number of economists in the middle of the twentieth century showed enormous interests in undertaking theoretical research based on Hecksher-Ohlin factor-proportion theory, research based on Ricardian comparative advantage, to a lesser extent, continued to exert its influence in the theory of international trade. Lionel McKenzie (1954, 165-180) made use of Ricardian comparative advantage to examine the problem of specialization of world production under free trade. In this analysis he extended the two-country, two-good model to determine the efficient pattern of specialization involving many countries and many goods. For this analysis McKenzie borrowed a general equilibrium model of world production constructed by Frank Graham. Originally, Graham (1948, 76) used this model to solve the problem of world production involving many countries and many commodities by trial and error. McKenzie extended Graham’s analysis by creating a model of world specialization using matrix equations. He then showed formally that the model based on Ricardian comparative advantage can demonstrate that there are gains from trade involving many countries and many commodities, in which an efficient multilateral specialization can be determined.

Jones (1961, 161-175) later extended McKenzie model of world efficient specialization to examine the relationship between comparative advantage and the theory of tariffs. He constructed the world-efficient-frontier line of production and argued that trade and perfect competition ensures the efficient allocation of world resources, whereby the production of world output will be on the world efficient frontier. When a tariff is introduced, competitive behaviours are still in existence, but it may result in inefficient resource allocation. Furthermore, if the tariff is prohibitive, production takes place in the most inefficient manner. Similarly a system of subsidy also results in world production to be generated below the efficient line. Additionally, a system of
subsidy may depress world output further away from the efficient frontier as compared to the
system of tariffs because inefficient producers are able to export to the efficient region. Jones
(1961, 174) finally concluded that: “Some trade is better than no trade – if the impediments to
trade are in the form of tariffs.”

4.4.4 Normative Theory of International Trade

Another important development that emerged during the post WW2 period was an effort to
define a clear boundary between the positive and normative theories of international trade. As
opposed to the positive theory of trade, which is concerned with the exposition of facts or actual
economic phenomena (Samuel 1994, 24), normative theory is concerned with welfare judgments
of commercial policy (Corden 1984, 65). According to Bhagwati (1964, 4), Ohlin was among the
earliest trade economists who demanded that the distinction between positive and normative
aspects of trade theory be clearly drawn, proposing these two areas be written in separate books or
chapters. Although a demarcation line separating the two is pretty clear nowadays, economists
initially found it difficult to distinguish them. Commenting on Ohlin’s demand, Harberler (1958,
3) contended that this aim is easier postulated than accomplished, and pointed his critic at Ohlin,
he argued that: “… in the midst of ‘objective theory’ he [Ohlin] proves in typical classical manner
that interregional trade and division of labour results in an increased social product without making
it clear that this statement implies a value judgement on his part and is not merely ‘objective
analysis’”.

A fundamental issue concerning the normative theory of trade revolves around the question
of gains from trade. There existed a number of economists who explored this issue, prominent
among them included Paul Samuelson, Robert Baldwin, Murray Kemp and Jagdish Bhagwati.
Samuelson perhaps was the first modern economist who formalised the modelling of gain from
trade. Samuelson (1939, 195-205) developed a model involving small countries –countries which could not influence their terms of trade – and showed that there are gains from trade provided world prices are different from autarky prices. In addition, he also expounded that the gains are not limited to circumstances that the country moves from autarky to free trade; the gains will also exist in the cases of countries moving from autarky to restricted trade. Essentially Samuelson made two contributions to the theory of trade from this model. First, he proved that there are gains from trade in a general model involving many goods and many factors of production. Second, he showed that the potential gains do not depend on the redistribution of income, but rather on improved consumption opportunities brought about by trade.

To supplement his earlier analysis of gains from trade, Samuelson (1962, 820-829) provided a second model involving two commodities with the use of production possibility frontiers. In this second model Samuelson also extended his analysis to cover the case of a large country by the use of the “Baldwin envelop” curve. Baldwin (1948, 748-762) originally constructed an enveloped curve to examine consumption possibilities facing a large country, in which the country is in the position to influence world prices, and thus its terms of trade. Samuelson demonstrated that when the enveloped curve is applied to his model the curve fits outside the autarky frontier at all but one point; the point at which no trade will occur because world prices converge with autarky prices. Hence, Samuelson showed that the existence of an opportunity to trade makes a country potentially better off regardless of whether the country is small or large.

Quite similar to Samuelson, Murray Kemp (1972, 803-819), proved using different mathematical expositions that free trade is potentially superior to no trade, even for large countries. In addition, he also expounded that “compensated” restricted trade is also superior to no trade. He
argued that the manner in which trade is restricted is not important, citing tariffs, quotas and exchange rate as examples of the restrictions. Kemp also examined a question concerning the ranking of trading situations, in particular whether lower tariff rates would be superior to higher rates. To this question, he found that a lower tariff is superior to a higher tariff in similar manner as no tariffs are superior to lower tariffs. Kemp concluded that this proposition holds true because under free trade all necessary conditions to achieve “Paretian optimum” are satisfied. In particular, the marginal rate of transformation between goods in production equals both the marginal rate of transformation between goods in international trade and the marginal rate of substitution in consumption. He argued that the imposition of a tariff will destroy these equalities.

Jagdish Bhagwati investigated the stability and generality of the theorems expounded by Samuelson and Kemp. Based on Samuelson’s proposition that free trade was superior to autarky under competitive price system, Bhagwati (1968, 137-148) examined whether or not this proposition holds for the case of other economic systems. Bhagwati proved that Samuelson’s proposition holds true not only for economies characterized by a competitive price system, but also for planned economies. Bhagwati also examined Kemp’s theorem that restricted trade is superior to no trade, and he found the theorem lacks ammunition for generalization thus he advanced some qualifications. Bhagwati argued that Kemp’s proposition valid only under three classes of policies as provided in Kemp’s examples: tariffs, quotas and exchange restrictions. If the theorem is extended to cases involving taxes on domestic production or subsidies on consumption, it is no longer valid. When a production subsidy (or tax) on exportable (or importable) is granted, it reduces social welfare below that of no trade situation. So in the case of restricted trade, it is impossible to compensate the losers while keeping the gainers at their original welfare level. Bhagwati also advanced qualifications to Kemp’s theorem that low tariffs are superior to high tariffs. He argued that Kemp’s theorem holds true only if exportables are of no inferior in
comparison to importables. Thus, if the inferiority of exportables in societal consumption could not be ruled out, a reduction in the level of tariffs may lead to the deterioration of economic welfare.

4.4.5 Imperfect Competition, Economies of Scale and International Trade

In the 1970s and 1980s there was a renewed interest among some economists to incorporate economies of scale into the theory of international trade, although the effects of increasing returns to scale had been the subject of discussion since the 1920s. Helpman (1984, 326) noted that this matter is recognised as important since it has implications on trade patterns, gains from trade as well as commercial policies. Pioneering works on this were accrued to Frank Graham, Frank Knight, Gottfried Haberler and Bertil Ohlin. Graham (1923, 54-86) argued that economies of scale causes a country to lose from trade and therefore concluded that the imposition of a tariff is beneficial. He constructed a numerical example showing that when a country has two sectors, one subject to increasing, while the other subject to decreasing returns to scales, the country may lose from free trade. On the assumption that there is only one factor of production (labour), free trade will lead a country which has comparative advantage in a decreasing-return sector to specialize in that sector. Therefore, labours are shifted from increasing returns to scale industry to decreasing returns to scale industry. The output per person will fall in both industries, resulting in the reduction of gross domestic product. Finally, this leads to a welfare loss.

Knight (1924, 582-606) accused Graham of failing to distinguish between internal and external economies of scales. He argued that economies of scale external to the firm should bring no implication to trade theory since firms take prices as given. If the economies of scale are internal to the firm, it means that there is no competition, therefore it is entirely a problem associated with monopoly. Graham (1925, 324-330) denied the need to distinguish between
internal and external economies of scales. Haberler ([1933] 1956, 204) and Viner ([1937] 1975, 473) agreed with Knight on this issue. Viner pointed out that Graham would have confused between average and marginal costs in his pricing rules and argued that external economies of scale may depend on world output rather than national output, in which case Graham’s argument will significantly be weakened.

With regard to economies of scale as a determinant of international trade, Haberler ([1933] 1956, v) in the preface of his book outlined the need to formally apply the theory of monopolistic competition and the theory of imperfect competition developed respectively by Edward Chamberlin and Joan Robinson as well as the theory of business cycle into the analysis of international trade. Meanwhile, Ohlin (1933, 55-56) propounded that economies of large-scale production could also cause international trade. However, he argued that the character of this case is entirely exceptional; the choice of location of production is arbitrary and not due to the availability of cheap supply of productive factors. The choice of location of one industry in one region as well as another industry in another region could simply be due to history or chance. An industry, having been located in one place, will overtime gains strength and reach the efficient scale of production. As its operation cannot be profitably undertaken in all regions because of the lack of demand, the industry tends to remain where it was first established. In the event of trade with other countries is opened up, the industry reaps additional benefits due to enlarged market and demand for its products.

The renewed interest in theorizing trade in the present of economies of scale in the 1980s was primarily associated with Paul Krugman, Kelvin Lancaster and Elhanan Helpman. Krugman (1979, 469-479) developed a formal one-sector model to give treatment that trade is caused by economies of scale instead of trade is caused by differences in factor endowments or technology.
The case of increasing returns treated by Krugman was one of internal to firms of which market structure is based on Chamberlinian monopolistic competition. In this study Krugman modified and extended the work of Dixit and Stiglitz (1977, 297-308) for the specification of international trade under monopolistic competition. In his analysis Krugman showed that there are both existence and gains from trade due to increasing returns. He demonstrated that there is an increase in the scale of production and the range of goods available for consumption. He also showed that welfare in both countries will be enhanced due to higher real wages and an increased choice of goods.

From a different angle, Lancaster (1980, 151-175) examined monopolistic competition in association with the theory of intra-industry trade. In his study Lancaster showed that monopolistic competition is the most competitive market structure within the manufacturing sector, especially of high technology industries, because the products of these industries are not homogenous. He concluded that such a structure leads to a high degree of intra-industry trade of differentiated goods produced under internal economies of scale.

Helpman (1981, 305-340) integrated the Heckscher-Ohlin theory of trade with the Chamberlinian approach to product differentiation, economies of scale and monopolistic competition. He used Heckscher-Ohlin theory to examine inter-sectoral trade while Chamberlinian approach was used to analyse intra-industry trade. Helpman’s analysis showed interesting as well as useful results. He proved that even in the presence of monopolistic competition, the pattern of inter-sectoral trade can be predicted from differences in factor endowment. Therefore, a capital rich country becomes net exporter of capital-intensive goods, while a labour-intensive country becomes net exporter of labour-intensive goods. Differentiated products, however, will be exported and imported by both countries. In essence, Helpman’s models showed that if market
structure is monopolistically competitive, economies of scale lead to arbitrary specialization of
goods by different countries. Also, these models established the idea that countries specialize and
trade, not only because of underlying differences, but due to the existence of increasing returns to
scale in certain industries.

4.4.6 The Position of Free Trade Doctrine in the 1980s and 1990s

The findings of research associated with the incorporation of economies of scale into
international trade theory triggered another bout of debates over the virtues of free trade and their
implications on theoretical as well as commercial policies. Writing in 1987 under the title of *Is
Free Trade Passe?* Krugman (1987, 131-144) argued that:

Yet the case for free trade is currently more in doubt than at any time since the 1817
publication of Ricardo’s Principles of Political Economy. … In the last ten years the
traditional constant returns, perfect competition models of international trade have
been supplemented and to some extent supplanted by a new breed of models that
emphasises increasing returns and imperfect competition. These models call into
doubt the extent to which actual trade can be explained by comparative advantage;
they also open the possibility that government intervention in trade via import
restrictions, export subsidies, and so on may under some circumstances be in the
national interest after all. … free trade is not passé but it is an idea that has
irretrievably lost its innocence. Its status has shifted from optimum to reasonable
rule of thumb. There is still a case for free trade as a good policy, and as a useful
target in the practical world of politics, but it can never again be asserted as the
policy that economic theory tells us is always right.

Commenting on this article, Bhagwati (1989, 1-34) found that the argument provided by
Krugman was puzzling. This was so not only because, especially research on the theory of
commercial policy during the 1960s and 1970s, showed plainly that “import restrictions, export
subsidies, and so on, may under some circumstances be in the national interest”, but it was also
puzzling because no one, including economists can assert that free trade is “the policy that
economic theory tells us is always right.” Moreover, Bhagwati argued that the post WW2 theory of
commercial policy went beyond these propositions to alert analysts and policy makers that, even if
a departure from free trade is justifiable, it is necessary to distinguish between policy interventions that are “merely beneficial” and those which are “maximally useful”. He also cautioned economists who want to influence their countries’ trade policies to take into account two key questions in advancing their advices: (1) consistent with theory, what nature of appropriate interventions when departure from free trade is justifiable?, and (2) does a country’s reality fits any of the numerous theoretical possible cases where such an appropriate intervention is desirable?. Bhagwati further argued that the latest models based on imperfect competition are merely additional examples to the previous theoretical circumstances whereby free trade will not be the optimum policy under the existence of market failures; therefore, a government could act to its national advantage by devising appropriate policy interventions.

The new bout of debates about the virtues of free trade among economists calmed down by the end of 1990s. Bhagwati (1998, 4) observed that the academic scenario during this period has witnessed the return of economist “defectors” from free trade doctrine to the fold, and there was an “harmony” of agreement among prominent economists for the case of pursuing free trade policy. A significant reason for the return was due to the acknowledgement by economists of two important propositions: (1) if market failures remain unfixed, then pursuing free trade policy can harm rather that help and (2) if market failures are fixed through suitable policy interventions, then free trade can once again be used to exploit the potential gains from trade. Within the second proposition, economists emphasise that if market failures arise in domestic markets, then the most appropriate policy interventions would be to devise policies targeting at those domestic market failures, while free trade is maintained externally.

Overall, economists provide three persuasive arguments propounding why free trade should be pursued internationally. First, although theoretically a departure from free trade is
justified under the situation of imperfect competition, but there is no evidence of “significant enough” imperfections existed in the world to abandon free trade (Dixit and Grossman 1986, 249). Second, if protectionist intervention is attempted, it will make matters worse because governmental interventions will reflect the interests of powerful lobbying groups instead of social advantage (Krugman and Obstfeld 2000, 221). Third, if one country devises policy interventions resulting in diverting gains from other countries to its advantage, it is most likely that other countries will retaliate, causing everyone loses from the breakdown of free trade (Bhagwati 1998, 7).

4.5 Trade Policies and Practices during Neoclassical Economics

4.5.1 Trade Policies across Countries: the 1870s – 1910s

The emergence of neoclassical economic analysis in the 1870s occurred at a time when trade practices experienced the return of a protectionist trade policy in many regions of the world. This was a reverse of the previous trend, in which a liberal trade policy had been adopted in many countries, especially in Europe following Britain’s adoption of a free trade policy with the repeal of the protectionist Corn Law in 1846. The strengthening trend of a protectionist trade policy continued from the 1870s up to the time of the First World War, which broke out in 1914 (Capie 1994, 10).

In Europe, the sign of shift from the period of a liberal trade policy adopted by many countries following Cobden-Chavalier treaty between Britain and France in 1860, to protectionism started to appear in the late 1870s. As late as 1875, a relatively liberal trade policy was still prevailed in many European countries as depicted in Table 4.1. The first European country to give way to protectionist trade policy was Germany. In 1879, Germany then under Otto Von Bismarck as the Chancellor, who was known as a staunch proponent of protectionism, introduced a
legislation imposing import tariffs on both agriculture and industrial products (Capie 1994, 35; O'Rourke and Williamson 1999, 95). This legislation started with low specific duty on agriculture, equivalent to 6 percent ad valorem on wheat and 8 percent on other cereals. However, import tariffs were raised in 1885 and again in 1887, reaching an equivalent of 35 percent ad valorem on wheat and 47 percent on rye. Tariffs were briefly revised downward during Georg Von Caprivi as the Chancellor in 1890-1894, only to be revised upward again in 1902.

Table 4.1

Average Level of Duties on Manufactured Products in 1875

<table>
<thead>
<tr>
<th>Countries</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria-Hungary</td>
<td>15-20</td>
</tr>
<tr>
<td>Belgium</td>
<td>9-10</td>
</tr>
<tr>
<td>Denmark</td>
<td>15-20</td>
</tr>
<tr>
<td>France</td>
<td>12-15</td>
</tr>
<tr>
<td>Germany</td>
<td>4-8</td>
</tr>
<tr>
<td>Italy</td>
<td>8-10</td>
</tr>
<tr>
<td>Norway</td>
<td>2-4</td>
</tr>
<tr>
<td>Portugal</td>
<td>20-25</td>
</tr>
<tr>
<td>Russia</td>
<td>15-20</td>
</tr>
<tr>
<td>Spain</td>
<td>15-20</td>
</tr>
<tr>
<td>Sweden</td>
<td>3-5</td>
</tr>
<tr>
<td>Switzerland</td>
<td>4-6</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>3-5</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>0</td>
</tr>
<tr>
<td>Continental Europe</td>
<td>9-12</td>
</tr>
<tr>
<td>Europe</td>
<td>6-8</td>
</tr>
</tbody>
</table>

(Source: Bairoch, 1989, page 42)

German turn-around to protection was soon followed by France, which began to increase import duties on agriculture products in 1885. France’s agriculture duties were again increased in 1887, at which time import duty on wheat reached 22 percent (Capie 1994, 35). French protectionism strengthened further with the adoption of Melane Tariff in 1892. Under Melane Tariff, not only import duties on agriculture were increased, but it also reimposed duties on a wide range of raw materials. However, important raw materials to the French import-competing
industries such as cotton, wool and flax were exempted from duties due to political pressure exerted by these industries’ players. Tariffs on both agriculture and industrial products were generally specific, but equivalent to 10-15 percent for agriculture and about 25 percent for industrial goods. In 1894, France again raised import duty on wheat to 7 francs per 100 kilogram; this amounted to an equivalent of 32 percent ad valorem, since domestic price of wheat was 22 francs (O'Rourke and Williamson 1999, 96).

Following Germany and France, many other European countries also returned to protectionism. Protectionism returned to Sweden with first the reimposition of duties on agriculture in 1888, and followed by industrial products in 1892. The return to protectionism occurred after the period of a liberal trade policy adopted by Sweden when it had entered the web of bilateral treaties signed in the wake of Cobden-Chavalier initiative (Heckscher 1954, 237). Similarly, Italy moved toward protectionism starting with the introduction of moderate tariffs in 1878, followed by the imposition of more severe import tariffs in 1887 in which most duties were specific. Duties were increased further in 1895, whereby duty on grain reached 75 lire per ton or about 36 percent ad valorem (Bairoch 1989, 77). In Spain a new tariff structure was devised in 1877, introducing minimum tariffs for products originating from countries with whom it had signed trade treaties while maximum tariffs were imposed on other countries.\(^\text{18}\) Initially, under this new tariff structure the difference between the maximum and minimum tariff was fairly small of about 10 percent. The tariff policy reform of 1892 witnessed an increase in duties and marked the real return to protectionism in Spain. The gap between maximum and minimum tariffs remained small, but the minimum tariff was sharply increased to 80-100 percent for agriculture and 300-400 percent for manufactured goods (Bairoch 1989, 63). Norway which adopted a fairly liberal trade

\(^{18}\) The minimum and maximum tariff structure imposed on an item is also known as “double tariffs”.
policy from the 1860s until 1880s, succumbed to protectionists’ pressure in 1895 with the imposition of import duties on machinery and meat. Norway turn-around happened when Sweden unilaterally abrogated the Sweden-Norway trade treaty which they signed in 1827. In Norway, a more significant move towards protectionism occurred in 1905 when tariffs on agriculture were introduced while duties on animal products were further increased.

Nonetheless, there were few European countries which continued to cling to free trade policy throughout the period of 1870s-1910s. Great Britain managed to maintain free trade despite enormous domestic pressure to adopt a protectionist trade policy similar to its neighbouring countries. One source of demand for protection came from National Fair Trade League, which existed from 1881 until 1891. This lobbying group demanded British government to impose retaliatory tariffs against foreign countries which impose tariffs on British industrial goods. A more challenging demand for protection came from British Colonial Secretary, Joseph Chamberlain who proposed for the establishment of preferential trading area among countries within the British Empire. His proposal, outlined in a speech he delivered in Birmingham in 1903, marked the beginning of intense debates over trade policy. The demand for protection caused enormous policy debates in 1904 and 1905. But the debate subdued when the Liberals, who were generally proponents of free trade won the 1906 election with a landslide majority. The issue, however, remain unresolved as protectionist pressure groups continued to argue for the case of protection right up to the outbreak of WW1 in 1914 (Gomes 2003, 226).

Few smaller countries in Europe also managed to maintained liberal trade policy throughout this period. Denmark continued to adhere to a free trade policy in agriculture, made possible due to the change of country’s economic orientation from a net exporter to a net importer of grains. Nevertheless it imposed tariffs on manufactured goods, in particular manufactured
textiles, which attracted duties between 20 to 30 percent (Bairoch 1989, 81). The Netherlands followed a similar path, maintaining a free trade policy throughout the period. Belgium and Switzerland also managed to cling to free trade, with nearly all agriculture products were free from duties, although they imposed some duties on animal products, and moderate duties on industrial goods (O'Rourke and Williamson 1999, 96).

The returns of protectionism in many countries in Europe during this period can be associated with few reasons, which intertwined upon one another in affecting a change in trade policy. Early distress in Europe was evident in 1873 when economic downturn engulfed many countries. There were some improvements in economic conditions in the years that followed, but they were too far from the earlier strength; prices continued a downward trend while profits were squeezed. For the next two decades (from 1870), enormous tensions were experienced in almost all countries in Europe because of economic downturn. Although there had been several drops in business cycles previously, but the ones happened between 1870 and 1890, was not a “normal” business cycle downturn, leading some people to consider it a period of deflation (Gourevitch 1986, 73). As general prices dropped further, many quarters contended that cheap import of grains was the main cause of the deflation and argued that protection was necessary to insulate the economy from outside pressure.

The liberal trade policy adopted by many European countries after 1860 as they followed the example of the British free trade policy caused an influx of cheap imports of agriculture products from the New World especially from the US. Thus the “grain invasion” into Europe threatened to reduce the income of the people that involved in agriculture sector. To the European countries which considered agriculture products as important, because of their contribution both to domestic economic activities and as a source of export earnings, the grain invasion brought
massive distress. In Germany, agriculture producers and estate owners of Prussia east of Elba (Junkers) found this period of time was particularly hard, not only because their sales of grain in Britain slowed down due to competition from the New World (Gomes 2003, 258), but also because of domestic grain prices continued to drop, therefore, threatening the livelihood of many people. Meanwhile, the producers of textiles, iron and steel also sought protection for their products. As latecomers to these industries in comparison to Britain, they advanced infant industry arguments as justification for their demand for protection (Gourevitch 1986, 88). They needed a tariff wall because this industry entailed high start-up costs; thus early competition from foreign established producers endangered their survival. These two groups constituted a powerful lobby to influence political decision in Germany towards granting protection to both agriculture and industrial goods.

Different domestic circumstances experienced by Britain as compared to other major European countries allowed it to maintain a free trade policy throughout this period. Grain invasion from the New World had less significant impact on domestic politics in Britain. In one aspect grain invasion which caused declining grains prices was good for Britain because it translated into higher real income for the general public. From another aspect grain invasion did not bring enormous distress, since from the early nineteenth century the contribution of agriculture sector to the British economy was on the decline, thus transforming Britain from a net exporter to a net importer of agriculture products. Although grain invasion brought bad impact to agriculture sector, by this time British’s economic structure had transformed significantly to become a well-established industrial economy. As a result, much agriculture land was converted into producing higher value added goods for urban industrial markets. By this time, many British aristocrats already derived their income from a variety of sources and also developed “strong psychological linkages to the industrial order” (Thompson 1963, 55). Another important reason why Britain
managed to maintain the free trade policy was the existence of fairly strong interest groups lobbying against protectionism. These groups included consumers, traders, manufactures of iron, steel and other industrial products who wanted to keep the cost of inputs low for the production of specialty products, therefore they could continue to dominate trade in the world market (Gourevitch 1986, 78).

In Denmark and the Netherlands, different forces were at work that helped these countries to cling to free trade policy. The liberal trade policy of the previous two decades pushed down the prices of agriculture products, resulting in the contraction of domestic production of grains in these countries. Notwithstanding this, however, industrial sector continued to expand, albeit in different dimension. Industries expanded into the production of specialised and high quality foodstuffs such as diary, meat and vegetable. Cheap foreign grain was welcomed as the grain being used as input, especially as feed for the animals that produced milk, meat and other products. In addition, cheap grain prices brought another benefit, especially in terms of cheaper bread for consumers, who then spent their surplus income on high quality goods produced domestically (Tracy 1989. 23).

Trade policies adopted by countries in the North and Latin American continent during this period were similar to that of the majority of European countries. In the US, the deepening of protectionism occurred well before the 1870s. After experiencing two decades of liberal trade environment (1840-1860), the US returned to protectionism with a tariff revision made in 1861. Protectionism strengthened further by the tariff reform of 1866, in which it remained in force until 1883, imposing import duties averaging 45 percent for manufactured goods. Another major revision of trade policy was undertaken in 1890, through the introduction of the McKinley tariffs. This new tariffs not only increased both specific and ad valorem duties, but also enlarged the number of items subject to tariffs. From 1890 to 1913 series of tariff modifications were made,
which alternately reduced and increased import duties, although by only small amounts. There were two important modifications undertaken in this period; the Dingley Act of 1896, which annulled certain small reduction in duties and the Payne-Aldrich tariff of 1909, which introduced the system of double tariffs. The double tariffs system remained in force until 1913, when a slight departure of trade policy occurred. In 1913 a more liberal trade policy was adopted under the Underwood tariff, providing a fairly big increase in the number of goods allowed to be imported at zero duty into the US, and a substantial decrease in the level of import duties. By this time overall import duties fell from 33 to 16 percent, with the decrease of duties on manufactured goods was a slightly higher, dropping from 44 to 25 percent. Nevertheless, at this time the average import duty of the US, comparatively, was still the highest in the world (Bairoch 1989, 144).

In the US, the whole period of 1870s-1910s was characterised by protectionist trade policy, especially on industrial products, although trade policy on agriculture was far more liberal. This happened because the US was always a major producer of agriculture products, thanked to the abundant availability of land in the country. But the case was different for industrial products; the US was a latecomer in comparison to European countries, Britain in particular. Therefore, arguments in favour of industrial protection were all the while strong the United States. The most prominent argument was that protecting infant industries was necessary to avert competition from established foreign competitors. In addition, import duties had been a very important source of revenue to the Federal Government in this period, since only in 1913 the country managed to introduce corporate income tax. The previous attempts to introduce corporate tax were unsuccessful because the initiative was blocked by powerful and politically influential industrialists. This indicates that free trade ideology never had a strong foothold in the US in comparison to the situation in Britain (Gourevitch 1986, 110).
Canada was on the path of a liberal trade soon after Britain adopted free trade policy in 1846, and at that time about 65 percent of Canada exports went to Britain. However, the year 1878 marked a major turning point for Canada when the National Policy was adopted by the Conservative government. It was followed by the new tariff legislation of 1879 which provided protection for both agriculture and industry. By this time import duties on agriculture were between 20-50 percent, and 20-30 percent on manufactured goods. This caused an increase in the intensity of protection; in 1878 the collection of import duties had amounted to 14.4 percent of the value of imports, whereas in 1880 it increased to 26.3 percent (Urquhart and Buckley 1965, 173).

By the second half of the nineteenth century, Argentina’s trade policy was already leaned towards protectionism. A new tariff structure which was adopted in 1854 contained some protectionist elements. This tariff structure was simple, containing only 60 items, but it was fairly progressive. Import duty was low at 5 percent for raw materials and semi manufactured goods, but higher at 15-20 percent for manufactured items. Protectionism strengthened in the 1870s with the revision of duties aimed at promoting industrialization. For the period 1873-1875 bounties were offered to the first few companies that involved in certain targeted industries. The elements of protection were further strengthened by the tariff reform of 1876, imposing 40 percent duty on manufactured goods, 10-20 percent on semi-manufactured, and 20 percent on raw materials. Again the tariff revision of 1891 resulted in a further increase of duties for varieties of goods. Import duty for wholly manufactured goods was 60 percent, slightly lower at 40 percent for semi finished, and low duty at 5-15 percent for semi-manufactured items, while machinery was exempted (Alejandro 1967, 75-98).

In Australia, increased pressure for the introduction of tariffs was evident among the colonies of independent states in the 1860s. In Victoria, the 1867 legislation allowed the
introduction of import duties aimed at protecting domestic industries (Carmody 1952, 51-65). By this time, although the tariff levels were moderate, if one took into account the distance of Australia from other major exporting countries, the distance alone would constitute a natural protection of about 10 to 20 percent (Blainey 1975, 35). Import duties in Victoria were revised upward by the subsequent tariff reforms, the first in 1871, and again in 1877, to provide additional protection for local industries. The Federal tariffs of 1902 marked the deepening of protectionism, with import duties ranged from 5 to 25 percent. In 1906, the Industries Preservation Act was passed, of which the major provision was the introduction of anti-dumping measures. The tariff of 1908 introduced double tariffs in Australia aiming at protecting domestic industries, while retaining preferences for goods coming from Britain. Nonetheless, in 1913 the Australia level of protection was lower in comparison to that of Canada and other countries in continental Europe, if one put aside the remoteness of Australia as a barrier to trade (Bairoch 1989, 147).

Japan’s seclusion from the world economy officially came to an end in 1858 when it signed a formal trade agreement with the US. A similar treaty was then signed with nearly all trading powers in the subsequent years, which forced Japan to impose low import duties, at an average of 5 percent. While the elements of protection started to emerge after the restoration of Meiji in 1868, but effective protection was introduced only in 1899 (Bairoch 1989, 157). Between 1894 and 1897 the treaties that Japan signed earlier were renegotiated with all signatories. This resulted in the signing of new treaties, which came into force in 1899, allowing an increase in import duties and providing for Japan’s complete tariff autonomy in 1911. The first autonomous tariff of 1911 marked a significant increase in protection, whereby, import duties on manufactured goods were varied between 15 and 50 percent. In 1913, import tariffs for the majority of semi-manufactured goods were between 20-30 percent, while that of wholly manufactured items were at 30-40 percent. Import duties on machinery and equipment were lower at around 20-25 percent.
China’s closed imperial economy ended in 1842 following the victory of Britain in the Opium Wars (1839-1842). This forced China to sign the Treaty of Nanking in the same year. One of the important elements of this treaty was to provide fair and consistent tariffs for British goods and to open up four new ports – Amoy, Foochow, Ning Pong, and Shanghai – in addition to Canton and Macau, which were already operating. In the next few years, China signed similar treaties with the US (1844), France (1844), Belgium (1845) Sweden (1847) and Russia (1851). Another treaty, signed in 1858 between China and Britain provisioned for the opening up of more ports for foreign trade and explicitly authorised the import of opium into China. In addition, this new agreement had a provision restricting the imposition of import tariffs of only up to 5 percent ad valorem. This new treaty technically allowed Britain to take control the administration of China’s import tariffs. The low import duty imposed by China made it one of the most liberal trade regimes in this period, although the liberal policy was, in essence, forced upon by Britain, in which at that time was considered a superpower, both in terms of trade and military.

4.5.2 Trade Practices between the two World Wars

The First World War (WW1) which broke out in 1914 marked another sharp break in the history of commercial policies of many countries. The exigencies of the War not only strengthened the protectionist trade policy inherited from the previous period (the 1870s-1910s), but they also exacerbated problems associated with the conduct of international trade. In almost every country, new barriers to trade were erected in response to changes in economic and political conditions brought about by WW1.

Britain, the most significant country which had clung to free trade since 1846, signalled a departure from the past with the imposition of 33.3 percent import duty on a few luxury items such as motor cars and parts, musical instruments, clocks, watches and cinematographic films through
the enactment of McKenna legislation in 1915. The protective flavour of this new import duty was apparent, because unlike the previous luxury duties, it was not matched by domestic taxes to eliminate the protective effects (Kindleberger 1989, 161-196). In addition, the new law allowed Britain to give preferential treatments to countries in the British Empire, which was not possible under the free trade regime previously.

During the WW1, Britain’s trade policy was primarily characterised by efforts to strengthen trade cooperation with other countries within the British Empire. In 1919 two legislations were enacted with provisions favouring trade within the Empire. First, the Finance Act, which extended provisions favouring Empire’s trade, originally introduced under McKenna legislation. This new law reduced import duties on tea, cocoa, coffee, chicory, currents, and certain dried fruits by one-sixth, and on wine by one-third if they came from the Empire. The other legislation, Key Industries Act, designed primarily to strengthen defence industries, equally contained preferences for products within the Empire. Protection was further strengthened in 1921 when the Safeguarding Industries Act was passed, imposing 33.3 percent duty on goods of “strategic importance” to Britain such as scientific instruments, glassware, wireless valves, ignition magnetos and hosiery latch needles. This Act was originally intended to give temporary protection to British industries of only five years, but when the five-years period ended in 1926 the Act was not only extended (for another five years), it also enlarged items liable for duties (Capie 1983, 41).

In the few years after the end of WW1, political ideology played an important role in determining trade policy in Britain. For example, a liberal trade ideology subscribed to by the Labour Government during a brief period between 1924 and 1925 resulted in the repeal of the McKenna legislation and allowed some safeguarding duties to lapse. However, the administration under a protectionist-inclined Conservative Government from 1925-1928 introduced protective
duties on wrapping paper, pottery, button and enamel hollow-ware. Similarly, when Labour Party came back into power in 1929 some safeguarding duties were not renewed and anti-dumping provisions under the Safeguarding Act were repealed. Protectionism strengthened once again during the Coalition Government which came into power in 1931.

Although by the beginning of the 1930s Britain’s moved towards protectionism could be considered complete, yet the elements of protection continued to strengthen (Capie 1983, 63). In 1931 the Abnormal Importation Act was enacted, allowing for the imposition of import duties of up to 100 percent on certain goods, although in practice the highest applied rate was about 50 percent. The list of items subject to duties, however, was not very long covering mainly pottery, sanitary ware, tiles, metal furniture, textiles, camera and electric lamps. A marked increase in protection occurred in February 1932 when the Import Duties Act was introduced imposing 10 percent duty on all other goods not yet attracting any duties. Exceptions were only given to a handful of items, primarily food products and raw material originating from Empire countries. The speed of tariff increases was tremendously fast; in April 1932 the rate was revised upwards, doubling the nominal rate to 20 percent. And by the end of that year iron and steel products including pig iron, girders and sheet were imposed with 33.3 percent duty. Again in 1935, the duty on iron and steel was raised to 50 percent in an effort to ward off competition from other European steel producers. In short, the extent of protection in Britain increased sharply at the beginning of the 1930s. Prior to this, almost 85 percent of British imports were free of duty, but the number was reduced to only 30 percent at the end of 1932.

As if the use of import tariffs was not adequate to provide protection to domestic producers, Britain then started to resort to import quota, fundamentally in the middle of 1930s. The first quota system was introduced for the importation of iron and steel from other European
countries in 1935 as British steel companies found it difficult to compete against cartels of iron and steel from continental Europe. The import quota system was then extended to imports of agriculture products, notably meat, from all countries including those from the British Empire.

A number of forces were at work which forced Britain to make a turn-around to protectionism in the early 1930s after it had clung to free trade for almost a century. A prolonged business cycle downturn and bad economic condition contributed greatly to Britain’s departure from a free trade policy. Initial stress due to bad economic condition was evident during the WW1 (1914-1918). Majority of the people faced difficulties in carrying out their normal lives because many aspects of economic policy setting were geared towards the War. Trade flows and economic activities suffered quickly and severely during the War – consumer goods production was replaced by military production, shipping was requisitioned for the war, and transporting goods around the world encountered enormous hazards (Capie 1983, 69). Economic conditions improved slightly in the early years following the end of WW1, especially in terms of the growth of Gross Domestic Product (GDP), although unemployment and the loss of potential outputs were still high. Throughout the 1920s the general public in Britain experienced enormous distress as the economy fell into a long period of stagnation; a period of very low growth, due to lack of demand, both internal and external for British products, thus the economy was unable to elevate national output to a satisfactory level. Consequentially, the depression pushed up unemployment to reach one million people or 7 percent in the middle of 1920s, and continued to soar to the peak of three million in 1931 (Gomes 2003, 277).

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19 For the twelve years period from 1913-1925, the annual income growth of Britain was at 0.2 percent. This indicated a very low growth since it recorded the growth of annual income of 1.7 percent for the previous 14-years period from 1890-1913 (Kenwood and Lougheed 1999, 177).
At the end of 1920s Britain’s economic malaise became chronic problems. Internally, rigidities in wage and cost structures did not allow the costs of labour, thus final products to fall despite the existence of huge supply of labours in the country. Externally, Britain incurred huge trade deficits, recorded with almost all other countries.\(^{20}\) In addition to the rigidity of the cost structure, British currency was overvalue due primarily to the fact that the sterling was peg to the gold standard; therefore, it was impossible for a natural adjustment in the balance of payment account occur.

Because of these chronic economic problems, it was widely acknowledged that John Maynard Keynes decided in 1930 to break away from free trade ideology that he had subscribed for a long time.\(^{21}\) This happened after a series of conventional remedies and initiatives to increase domestic demand were found to be of “not responding, impractical and inexpedient” due to constraints under which the British economy operated (Gomes 2003, 279). Keynes then contended that imposing import tariffs to generate revenue would be a pragmatic remedy to address the unemployment problem; although he stressed that this measure should only be temporary. Keynes also argued that the economics of free trade would not work under the situation of large scale unemployment. Furthermore, chronic weaknesses in the balance of trade were made worse by the slump in world demand. This condition warranted the imposition of tariffs to switch demand from foreign to home goods, thus resulting in increased employment in domestic industries.

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\(^{20}\) In fact Britain experienced trade deficits for most of the years starting from the middle of nineteenth century. In 1870 the trade deficit was in the amount 58.7 million pound, recorded after goods imported were valued at 302.8 million against the export value of 244.1 million. In 1914 its trade deficit increased to 170.4 million pound, with total import and export stood at 696.6 and 526.2 million respectively (Capie 1983, 13).

\(^{21}\) Keynes previous record as a free trader was unquestionable. In 1923 he wrote that: “We must hold to Free Trade, in its widest interpretation, as inflexible dogma, to which no exception is admitted, wherever the decision wrest with us ... we should hold to Free Trade as a principle of international morals, and not merely as a doctrine of economic advantage”(Keynes CW 1977).
Concerns over “unfair trade practices” allegedly pursued by a number of countries, in particular Germany and the US, and the worry over the influx of foreign goods at the expense of domestic industries contributed to the British switch to protectionism. Since the early 1920s there were growing resentments among producers as well as policy makers over the practice of dumping, accused of being done by foreign companies especially of iron and steel, tyres, and glass bottles aimed at penetrating British market. Consequently at the end of 1920s, allegations of dumping became common.\textsuperscript{22} The National Federation of Iron and Steel Manufacturers, for example, claimed that it was impossible for British steel companies to compete against companies from continental Europe. This federation accused German steel companies of being involved in dumping their products by selling them in Britain at prices below of those sold in Germany, so the federation pressed for appropriate actions to be taken, especially through the introduction of anti-dumping law. Besides the pressure for protection to protect industries from dumping, there were increasing sentiments particularly by those influenced by mercantilist arguments to protect domestic industries against the flood of foreign imports. They were primarily worried over the continued increase of imports and the prolong Britain trade deficits experienced for over a decade.

The continuing existence of pressure groups, existed in different forms at different times, lobbying for protection was another significant force in influencing British trade policy. In fact strong lobbying groups demanded for protection emerged soon after the Britain’s adoption of a free trade policy. The Fiscal Reform League founded in 1870 was the earliest, before the formation of a more famous lobbying group, the National Fair Trade League in 1881. However, these groups were unsuccessful in their demand for protection due to various societal factors existed at that

\textsuperscript{22} At this time, although the allegations of dumping were common, but the evidence of dumping was scanty; only nine applications for the imposition of anti-dumping duty were received by the Board of Trade, and only two were granted, duties on glass bottles and vulcanised tyres (Capie 1983, 49).
time. Britain witnessed a growing number of pressure groups starting from the early twentieth century when domestic economic conditions deteriorated.

In 1903, the Tariff Reform League was formed with two main objectives and immediately became a formidable pressure group under the leadership of Joseph Chamberlain, a former Colonial Secretary. The first objective of the group was to protect the existence of British industries from the onslaught of foreign competitors. This group argued that the conduct of international trade was unfair to British producers because, while goods from foreign countries could enter British market duty free, goods from Britain were imposed with import duties when entering their markets. The other objective of the group was to forge closer economic relations among countries within the British Empire through reciprocal provisions of preferential tariffs. By the 1920s, the Tariff Reform League gained momentum and attracted wide support from various quarters of societies including politicians and businessmen with special interests. At the same time numerous trade and industry associations were complaining with increasing voice about difficulties faced by their members to compete with foreign competitors. Prominent among these associations were National Federation of Iron and Steel (NFIS), Federation of British Manufacturers (FBM) and National Union of Manufactures (NUM).

The Netherlands, another significant country which had managed to maintain liberal trade policy since the sixteenth century turned to protectionism in the early 1930s. Kindleberger (1989, 178) noted that because of increasing domestic resentments over declining wheat prices, the Netherlands decided to regulate farm prices in 1931. This was done with the introduction of the Wheat Act in 1931, setting the domestic price of wheat at 12 florins per kilogram. In 1932, as a response to the depreciation of pound sterling, the country declared fiscal emergency by imposing a general duty of 25 percent on agriculture products under the Dairy Crisis Act and the Hog Crisis
Act. These two acts were then combined into the Agricultural Crisis Act in 1933 with a broadening coverage (Gordon 1941, 307). In addition, the Netherlands also imposed licensing requirements not only on imports, but also in some cases on exports. In 1931 an export quota was established for cases where foreign countries imposed import quotas for its products. The quotas were distributed among exporters based on their historical record of exports. An export licence attracted some fees, in the amount of 70-100 percent of the difference between world price and the market price in the importing country, with the proceeds then distributed back to Dutch producers of particular goods (Gordon 1941, 356).

Major continental European countries such as Germany and France witnessed the strengthening of protectionist elements in trade policy during the inter Wars period. Germany, already protectionist in outlook at the eve of the WW1, underwent a minor change in trade policy during the WW1. After the outbreak of the War, Germany trade policy was geared towards the fight against the blockade imposed by its enemies in an effort to secure its military and essential supplies. During this time it was not only that Germany did not collect any duties for the importation of agriculture and raw materials, but it also imposed a ban on the export of these items. Immediately after WW1 ended, in which Germany was the losing side, its trade policy was devised at the behest of the victorious powers; the countries in the Allied Forces. More specifically, Germany was required by the Treaty of Versailles signed in 1920 to grant the Allied countries unilateral and unconditional most-favoured-nation treatments for five years. When the five years period ended in 1925, especially after the problem of heavy fluctuations in its currency stabilised, Germany decided to return to pre-war protectionist policy with the enactment of “little customs duty law” (Hentschel 1989, 792). Under this law, duties on iron and steel and agriculture were reintroduced, although not to the level requested by the agrarian pressure group east of Elbe (Junkers).
Beginning in the 1930s Germany overall economic policy was devised to deepen industrialization, therefore, its trade policy was used as a supplement to ensure a continuous access to the import of foods and raw materials (Kindleberger 1989, 181). The new economic plan, especially the Four Year Plan devised in 1936, aimed at producing synthetic materials and gasoline from coal, because these items were argued to be important especially during wartime. Up to this time, the sentiment of German general public was primarily of unhappiness over the loss of its African colonies in the Versailles Treaty, particularly Cameroon, since it was an important source of raw materials for energy generation. The strategy of securing foods and raw materials supply was, however, changed towards the end of 1930s, when Adolf Hitler, then the Chancellor, focussed its attention at securing them from countries adjoining Germany. At one meeting held in May 1939, he explained the need for enhancing relations with countries in the east of Germany in order to guarantee an uninterrupted supply of food. He argued that colonial territories would not solve the scarcity of food, which Germany had experienced during WW1, because other countries could block the supply. Also, his directive to the Economic Staff Group in May 1941, just before the attack on the Soviet Union, specifically asserted that this new strategy was designed to secure continuous food supplies from neighbouring countries east of Germany.

The WW1 strengthened protectionist agitation in France. By 1918 the minimum tariff rate was raised from 5 to 20 percent, while maximum rate was also increased from 10 to 40 percent. France was argued to be the first country to introduce import quota to provide additional protection to domestic producers of both agriculture and industries (Kindleberger 1989, 162). Protectionism enhanced further between 1919 and 1931 when laws were enacted to extend the list of agriculture products, of which the French government could change the rate of import duty during emergencies. Originally this provision was provided by an old law of 1897, the so-called loi de cadenas, in which the original list contained only 46 items.
The WW1 caused a fresh request for higher duties in the US; this time it came from a new group of “infant industries”, which had started to produce certain products, such as chemicals and dyes, originally pioneered by industrialists in Germany (Robertson 1973, 663). The US authority responded to this request with the passing of the Emergency Tariff Act of 1921, and in 1922 a permanent legislation, the Fordney-Mc Cumber tariff, was enacted allowing for the increase of average duty to about 33 percent. Throughout the 1920s, people aligned to the Republican argued that high tariffs contributed significantly to the attainment of prosperity in the US, especially since the country recorded high trade surpluses with other countries, forgetting that the high level of exports was only a result of the readiness of Americans to lend abroad in quest for higher rate of returns for their investments. When the country started to experience economic downturn in 1929, these people thought that serious depression could be avoided by again increasing the level of tariffs. In 1930, after a year of debate, the Congress passed the Hawley-Smoot tariff, which raised average duty to over 60 percent and imposed tariffs on more than 12,000 items (Husted and Melvin 1995, 166). Although 34 foreign countries collectively lodged a protest note over the bill and a huge number of American leading economists urged President Herbert Hoover to veto the bill, the President was unremoved and signed the bill into a law.23

Many competent observers argued that the Hawley-Smoot tariff was the main cause for the deepening of the 1930s Depression. The passing of this legislation resulted in massive retaliations by other countries; some immediately increased their tariffs while others responded with the imposition of import quotas. Also, this legislation signalled an important massage to the world; the US would act to fulfil its selfish nationalism whenever the country considered it justified. Furthermore, in the campaign of 1932, Republicans, who was the incumbent government, claimed

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23 According to the New York Times of 5th May 1930, 1028 economists in the United States singed the protest note, prominent among them were Irvin Fisher, Frank Graham, Paul Douglas, Frank Taussig, Ernest Patterson, Henry Seager and Clair Wilcox.
that protection had brought prosperity in the past, therefore, promised even higher duties and proposed to broaden the list of dutiable goods. The Democrats, sharing the thinking with Republicans this time, joined them for tariff-making efforts in the Congress, only to notice that their acts contributed greatly to the massive deterioration of world trade. In the next two years, many people started to realize that the collapse of world trade hurt everyone and a plan for trade liberalization needed to be initiated.\textsuperscript{24}

New thinking in the US favouring trade liberalization resulted in the enactment of the Reciprocal Trade Agreement Act in 1934, which was passed by a large majority in both the House of Representative and Senate. The Act permitted the President a negotiating period of three years to come to an agreement with any countries willing to engage in reciprocal tariff concessions. Although the Act specified that the Congressional approval of the reciprocal agreement was not required, but the president’s tariff reducing power was limited to 50 percent of the prevailing rates. This legislation was renewed thrice (in 1937, 1940 and 1943) by Congress without major amendments, and for the period of 1934-1945 reciprocal trade agreements were negotiated with 29 countries. As the signing of the reciprocal trade agreements proved to be beneficial, it was renewed again in 1945, and this time the tariff making power of the President was broadened. Under the new provisions, the President could reduce tariffs up to 50 percent of the rates prevailing at January 1, 1945. Also, duties which had already been lowered to 50 percent from the 1934 levels could be further reduced to another 50 percent.

Between 1934 and 1947, after series of tariff reductions provided in the reciprocal trade agreements, the average tariff duty of the US was reduced to about 25 percent. But reciprocal trade agreements have limitations, primarily due to the fact that they could only be used for the

\textsuperscript{24} During the Great Depression between 1929 and 1933 world trade contracted nearly 70 percent. The value of world trade declined from US$2,998 million in 1929 to US$992 million in 1933 (Kindleberger 1973, 132).
negotiations to reduce import tariffs. These agreements were unable to address the issue of quantitative restriction on imports such as quotas because no country felt that it could give up its quota system unless all other countries did the same, and a bilateral trade agreement with the US did not fall into a framework which provided such a guaranty.

4.5.3 Post WW2 Trade Policies and Multilateral Cooperation for Trade Liberalization

Three important developments which occurred during the inter Wars period signalled the need for multilateral cooperation for the setting up of a new international economic order in efforts to ensure continuous prosperity for the world.\textsuperscript{25} And much of efforts to realise this desire was taken under the stewardship and influence of the US, which emerged from WW2 as a major economic and military superpower. The first of the three developments was the collapse of world trade, due primarily to increased protectionism in every trading nation. During this time the general public had to endure high cost of living because goods could only be purchased at higher prices, as supposedly cheaper goods from abroad were impaired by various measures introduced to protect domestic producers.

Second, it became evidently clear that a unilateral free trade policy adopted by some countries in Europe starting from the middle of nineteenth century, as exemplified by Britain and the Netherlands, was not sustainable in the long run, since this policy completely broke down during the hard times of the inter Wars period. Apparently it was very difficult for those countries to continue maintaining a unilateral free trade since other countries resorted to “beggar my neighbour” trade policy (Kjeldsen-Kragh 2001, 122); a policy devised to augment economic wellbeing of one country at the expense of others. Third, the instability of arrangements for international payments, caused by excessive exchange controls undertaken by many countries,

\textsuperscript{25} By the end of WW2, the economy of most countries was in ruin with the exception of only the US, which at that time accounted for more than 50 percent of world industrial output (Woolcock 2003, 107).
created enormous risk and uncertainty for trading nations. This problem was further exacerbated by the collapse of gold standard, forcing many countries to resort to a competitive devaluation of their currencies in the quest for increasing exports.

As WW2 drew to an end, major trading countries at both sides of the Atlantic came to an agreement for the setting up of an international economic order to deal with two broad issues: international monetary arrangements and international trade relations (Gomes 2003, 298). Preliminary discussions over these issues were held following the signing of Mutual Aid Agreement between the US and Britain in 1941. This agreement, although primarily concerned with lend-lease issues, also contained provisions committing both countries to cooperate in international economic affairs after the war (Kenwood and Lougheed 1999, 237). As regard to addressing the issue of international monetary arrangements, after many discussions and meetings, specific rules were finalised by delegates representing 44 countries at an international conference held at Bretton Woods, New Hampshire, in July 1944. This led to the creation of International Monetary Fund (IMF) and International Bank for Reconstruction and Development (commonly known as the World Bank).

Originally the IMF was established to achieve three main objectives, reflecting lessons learnt during the interwar years. The first objective was to ensure a stable multilateral system of payments based on the worldwide convertibility of currencies; therefore, the system of exchange controls could be eliminated. Another objective was to maintain the stability of exchange rate, thus the competitive devaluation of currencies would be avoided. The final objective for the establishment of the IMF was to grant member countries with flexibilities over the control of domestic monetary and fiscal measures allowing them to pursue policies targeting at full
employment, while at the same time retaining the worldwide stability of exchange rates.  

Meanwhile, the original objective of the World Bank was to provide financing for the post WW2 reconstruction of the affected countries. The roles of the bank were later widened to include providing aid to developing countries as well as to assist member countries evaluating their economic potential and designing development programmes.

Parallel to efforts undertaken on international monetary arrangements, the intention of wartime planning was also to establish a set of rules for the conduct of international trade. Initial discussions to address this issue started in early 1943 when the US and British governments initiated a proposal for the creation of a commercial union. The main elements of this proposal which came from both sides were twofold; a sweeping cut in tariffs, of which all tariffs to be reduced by a targeted percentage and to end export subsidies provided to agriculture sector, which were prevalent in the US. While negotiations on monetary issues continued smoothly and led to the signing of the Bretton Woods Agreement in 1944, the talks on trade, however, faced various hiccups started right from the beginning. This was mainly due to differences between the US and Britain, the two important trading countries. The US wanted thorough sector-by-sector and country-by-country tariff reductions and these approaches be applied based on non-discriminatory or Most-Favoured-Nation (MFN) principle extended to all other countries. The US also demanded Britain to end its imperial-preference trade policy, the demand of which the British resisted.

Discussions on international trade relations continued in 1945 when the US came up with another proposal aimed at ensuring the expansion of world trade and employment. Many elements

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26 While the IMF is still functioning today, but the original objectives underlying its establishment were abandoned when the Fund legalised the floating of currencies under Jamaica Agreement in January 1976. According to Robert Leeson (2003, 7-15), the collapse of Bretton Woods system was due predominantly to the defeat of the ideology that favoured fixed exchange rate (as subscribed to by the IMF) by the “floaters” (under the influence of Milton Friedman). In addition, such other factors as the oil price shocks of the 1970s and the win of market forces or “invisible hand” in determining the price of foreign exchange over the “fixers” were also at work.
in this new proposal were in essence formed the first draft of a Charter for the establishment of International Trade Organization (ITO). The proposal also contained measures to tackle a wide range of issues including tariff reductions, the elimination of preferences, the non-discrimination of domestic taxes and regulation, and common principles for custom valuation. At the end of 1945 the US and British officials found a compromise; British could initially continue with its imperial tariff preferences, but they would have to be reduced progressively through product-by-product negotiations. In the following year, the US organised an international conference on trade and development where it formally proposed for the establishment of ITO (Woolcock 2003, 110). It invited 15 other countries to participate in the conference held in London in 1946. Countries which participated in the conference included Britain and its colonies and dominions – Australia, Canada, New Zealand, South Africa and India. Other countries which took part in the conference were France, the Netherlands, Belgium, Luxemburg, Russia, Cuba, Brazil and China.

Subsequent important negotiations were undertaken from May to September 1947 in Geneva. In these negotiations, in which 23 countries took part, the focus was on the negotiations for tariff reductions based on “request” and “offer” between the countries of major exporters of goods’ concerned. The agreed level of tariff cuts would then be extended to all other participants based on MFN principle. At the end of the negotiations tariff concessions for 45,000 tariff lines, covering two-thirds of world trade were concluded and tariff reductions of about 35 percent were achieved. The negotiations in Geneva also reached an agreement on some core principles over the conduct of international trade such as non-discrimination, national treatment, and common rules governing anti-dumping and custom valuation. All important elements agreed to during the negotiations were incorporated into the General Agreement on Tariffs and Trade (GATT), which was signed at the end of the meeting. Since the ratification of any international agreements was always difficult in the US, President Harry Truman signed an Executive Order legalising the
implementation of the GATT Agreement using the trade negotiating authority granted by Congress under the Reciprocal Trade Agreement Act before the expiry of the authorised power in 1948.

During the negotiations in Geneva the draft Charter for the establishment of ITO was also discussed. Britain and few other countries, due to their chronic balance of payment problems, requested specific provisions allowing member countries to impose trade barriers in efforts to address these problems. In this meeting, it was generally agreed that such provisions could be permitted, but the US insisted that the IMF should have a veto over this issue; therefore, in essence allowing the Americans to use their influence and huge voting rights in the IMF to ensure the original intentions of these provisions are always observed.

In 1948, negotiations for the establishment of ITO were held in Havana, Cuba following the positive impetus gained at the Geneva discussions. At the end of the Havana meeting an agreement was reached among the negotiators representing 53 countries including the main players, the US and Britain, over the need to officially establish ITO as a world governing body overseeing international trade affairs, thus the Havana Charter was signed.

The establishment of the ITO, however, did not materialise, mainly due to the failure of the US Congress to ratify the Havana Charter. Few forces were at work making the ratification of the Charter impossible in the US Congress. Contrasting political climates were existed in the US during the period of ITO negotiations as compared to the period of the negotiations for the establishments of the IMF and the World Bank. During the negotiations of the IMF and the World Bank, the US Congress was controlled by Democrats, who were relatively in favour of liberal trade regime. However, in the election of 1948, Republicans gained control of the Congress, and since they had been critical of the ITO, arguing that many of the ITO provisions amounted to the
surrendering of the control of American domestic policies to a supranational body (Gomes 2003, 298), the ratification of the Charter would surely face problems.

With the Congress already leaning towards opposing the ITO establishment, a group representing international business, previously one of main lobbies in favour of liberal trade, shifted position and came out against the ratification of the Havana Charter (Woolcock 2003, 112). This group believed that two provisions, one allowing member countries unrestricted implementation of domestic policies targeting at full employment, and the other which permitted expropriation, although it could only be done in exceptional cases, provided too much scope for state interventions, therefore, these provisions were argued to work against the interest of the US businesses (Diebold 1952, 18). As the GATT already ratified, there was in fact an alternative avenue for the US businesses to fall back on to resolve issues in relation to the conduct of international trade. During the Congressional hearings on the Havana Charter, major US companies which had campaigned for a new trade regime kept a distance from the debate. Since protectionist interests, particularly the US agricultural lobbying group, opposed ITO all along, the possibility of the ratification of the Havana Charter in the US quickly became out of question.

In Europe, by the early 1947 the East-West ideological conflicts of the Cold War became a pressing issue. This problem attracted considerable attentions in the US, and it was widely acknowledged that the US government must act promptly to help European countries recovering from their economic weaknesses, so as to avoid potential social unrest, which could lead to gains for the communist ideology. Such was the situation that, in June 1947 General Marshall proposed a plan for the US to assist European countries by extending aid, which later known as the Marshall Plan. The Truman Administration put significant efforts into pushing the Marshall Aid legislation through the Congress and felt that the ITO issue was a lower priority. Without support from
businesses and the administration, there was simply no prospect that the US Congress would ratify the Havana Charter.

Since the establishment of ITO was never materialised, the GATT Agreement was the only concrete result of the many rounds of negotiations on matters associated with international trade. Originally, the GATT was meant only as an interim agreement involving governments (and custom authorities) for the conduct of international trade and this agreement would need to be incorporated into ITO. Even though GATT possessed many of the specific provisions intended for the ITO, having been conceived as a temporary trade agreement, it lacked institutional structures (Hoekman and Kostecki 1995, 13). In the initial years of its operation, GATT did not exist as an independent body, although it organised formal Sessions of Contracting Parties once or twice a year. Its organization structure emerged only gradually. While major decisions were made at the Sessions of the Contracting Parties, it rapidly became obvious that a permanent body was needed especially to coordinate and implement decisions arrived at each Session. Subsequently, an Inter-Sessional Committee was formed in 1951 to organised voting by air mail or telegraphic ballot over certain issues such as matters relating to import restrictions justified for balance of payment problems. This committee was replaced in 1960 by the Council of Representatives which assumed broader powers and responsibilities including day-to-day management of the GATT Secretariat.

At the early 1990s a complete structure of the GATT as an organization emerged. This allowed Contracting Parties to further enhance rules for international trading system, including a strengthening capacity for the surveillance of Contracting Parties’ trade policies and assisting conflict resolution through consultations, negotiations, mediations, and dispute settlement.

27 Since signatories of the GATT comprised also the custom authorities of certain territories such as Hong Kong, the members of the GATT are called Contracting Parties instead of Member Countries.
Trade liberalization initiatives under the GATT were undertaken through a mechanism called Multilateral Trade Negotiations (MTNs). During the life of the GATT, and before the creation of World Trade Organization (WTO) in 1995 as its replacement, eight rounds of MTN were held. The eight rounds of MTN negotiations were the Geneva round (1947), the Annecy round (1949), the Torquay round (1951), another Geneva round (1956), the Dillon round (1960-1), the Kennedy round (1964-67), the Tokyo round (1973-79) and the Uruguay round (1986-94). In the Uruguay round negotiations, Contracting Parties decided to establish WTO as the world governing body, entrusting the new body with a bigger role in managing world trading system.

The early rounds of MTNs dealt primarily with tariff negotiations. In addition to negotiations on tariff issues, attention began to shift towards non-tariff restrictions and starting from the Kennedy round the problem of trade in agriculture products was discussed. The Tokyo round took Contracting Parties a step forward by addressing policies which were not previously subject to GATT disciplines, particularly product standards and government procurement. This trend continued in the Uruguay round, in which negotiations were also conducted on trade in services, intellectual property, and rules of origin, all of matters which the GATT had very little rules (Hoekman and Kostecki 1995, 17).

As far as negotiations on tariffs were concerned, a significant achievement of tariff reductions were recorded in the Geneva round, which resulted in the signing of the GATT, with an average tariff cut of 35 percent. The next four rounds of MTNs achieved only moderate tariff cuts, predominantly because the negotiations for tariff reductions were based on item-by-item and request and offer basis. But the negotiations at the last three rounds – Kennedy, Tokyo and Uruguay – resulted in another significant tariff cuts; 35 percent, 34 percent and 40 percent
respectively, since during these negotiations, a formula-based approach to tariff cuts was introduced and agreed upon by the Contracting Parties.

Since the conclusion of WW2, the existence of the GATT (and from 1995, WTO) has helped strengthening rules for the conduct of international trade, particularly when more and more trading nations decided to become members.\textsuperscript{28} Unfortunately, however, the purist economics of free trade idea, which dominated the argument for the Repeal of the Corn Law in Britain in the middle of nineteenth century, was never regained its dominance during trade negotiations in the twentieth and twenty-first centuries.

Nowadays the economists’ case for free trade has not had much weight among the people who really matters when it comes to international trade relations. According to Paul Krugman (1997, 113-120), trade negotiations conducted in the many rounds of MTN are essentially “a game scored according to Mercantilist rules”. In contrast to economists’ case for free trade, which is simply a unilateral case, whereby it is of its own benefits that a country pursues unilateral free trade regardless of what others might do; the current rule in trade negotiations is that an increase in exports – no matters how expensive to produce them in terms of other opportunities forgone, is a victory. Likewise, an increase in imports – no matter how many resources they release for other uses, is a defeat.

In fact the 23 countries which signed the GATT Agreement in 1947 did not indicate that achieving free trade for the world was one of the underlying objectives of the Agreement. Instead the desire then was only to achieve substantial reduction of tariffs and non tariff barriers (GATT 1994, 486) reflecting the thinking that all countries should now move towards adopting a “freer” trade policy regime in comparison to the policy adopted between the two World Wars. Similarly,\textsuperscript{28} As of August 2006, WTO memberships comprised 149 countries and custom authorities, in which on 11 December 2005 Saudi Arabia was the latest country being accepted as contracting a party.
when 124 countries agreed at the conclusion of the Uruguay round negotiations to establish WTO, achieving free trade for the world was again not a goal. At this time, the prime goal for the establishment of the WTO and thus trade negotiations to be conducted under its auspices was merely to have “more open world trading environment” (GATT 1994, iv).

4.6 Conclusion

There have been significant changes to thinking about trade during the period of neoclassical economics. Besides a new approach being used in expounding the theory of trade, which is essentially based on formal analysis, this period also observes significant changes to trade policies adopted by individual countries. Unilateral free trade policies, adopted by many countries following Britain’s footstep in the middle of nineteenth century, came to an end at the breakout of the First World War in 1914. Thereafter, protectionist trade policies in virtually all countries continued to strengthen their grip, especially during the period between the two World Wars. Free trade failed to emerge as a dominant thinking in trade policy formulation for the post WW2 period. Instead, this period witnessed the emergence of the “freer” trade idea, whereby policymakers of one country agreed to embrace a liberal trade policy provided other countries do so. Although proponents of freer trade agree that liberal trade policies in all trading countries are good and achievable, they never envisage that setting free trade for the whole world is possible and achievable.
CHAPTER FIVE

HISTORICAL EVOLUTION OF REGIONALISM AND REGIONAL TRADING ARRANGEMENTS

5.1 Overview

This chapter examines the historical evolution of regionalism and regional trading arrangements that have occurred all over the world. Besides examining regionalism of the twentieth century, which has been pursued aggressively by many countries after the conclusion of WW2, this chapter also examines regionalism of the eighteenth and nineteenth centuries which occurred in parallel with the formation of nation-states. Specifically, this chapter examines regionalism that has occurred in various parts of the world including Europe, North and South America, Africa and Asia.

5.2 Concepts and Definitions

Four concepts are widely used in reference to special and policy-induced arrangements of trade affairs, which have been initiated in many parts of the world. These are Regional Preferential Trading Arrangements (RPTA), Regional Free Trade Areas (RFTA), Customs Unions (CU) and Bilateral Free Trade Areas (BFTA). While the first three are generally advanced along regional lines, the fourth is pursued bilaterally by only two countries. RPTA is an arrangement involving few member countries in which goods that come from members are subject to lower trade barriers than goods coming from non members. RFTA is an arrangement in which member countries agree to allow free flow of trade between them without imposing any trade barriers while retaining

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29 For simplicity as well as generality, few authors such as Jagdish Bhagwati (1996) and Arvind Panagariya (1999) categorize these four terms as Preferential Trade Arrangement (PTA). Others, including John McMillan (1993), Frieder Roessler (1993), Alan Winters(1999) and Dilip K. Das (2004) group them as Regional Integration Arrangement (RIA). However, since the focus of this study is on Regional Trading Arrangements (RTAs), this latter term is used in many situations throughout, although at times it refers to the same thing.
independent authority over trade policy with other countries. CU is essentially an arrangement which incorporates two important elements: a free trade area among member countries, and the application of common external tariffs with non members. The common external tariffs can differ across goods but not across union partners. Meanwhile, BFTA is an arrangement involving only two partner countries in which traded goods are free from any trade barriers.

One of the main reasons countries engage in certain types of trading arrangements along regional lines is because they want to reap benefits created by the economics of regionalism. However, regionalism is a loose and elusive concept; scholars have yet to agree on a standardized and widely accepted definition. The problem of defining regionalism perhaps first appeared more than a half century ago, when Jacob Viner (1950, 123) commented that “economists have claimed to find use in the concept of ‘economic region’, but it cannot be said that they have succeeded in finding a definition of which it would be of much aid … in deciding whether two or more territories were in the same economic region”. Thus far, neither economists nor political scientists have had much success in settling this issue (Mansfield and Milner 1999, 589-628).

Dispute over the definition of regionalism arises because of disagreements on the importance of the geographical proximity of constituent countries on one hand, and the importance of the relationship between economic activities as well as communal similarities on the other. Generally, a region is defined as a group of countries located in the same geographically specified area. Exactly which areas constitute a region, however, remain controversial. For example, while some writers consider Asia-Pacific as a combination of two regions, Asia and America, others consider it a single region. Moreover, a region implies more than just close physical proximity among the constituent states. The US and Russia, for instance, are rarely considered inhabitants of the same region, even though Russia’s eastern coast is very close to Alaska. Besides proximity,
many scholars insist that members of a common region should also share cultural, economic, linguistic, or political ties (Nye 1971, 45; Thompson 1973, 89-117).

A number of authors define regions largely in terms of these non geographic criteria and place relatively little emphasis on the physical location. For example, France and the French speaking countries of Northwest Africa are sometimes referred to as a regional grouping because of their linguistic similarities. Also, social constructivists argue that countries sharing a communal identity imply a region, regardless of their location (Kupchan 1997, 212). In this regard Peter Katzenstein (1997, 8) argued that regional “geographic designations are not ‘real’, ‘natural’, or ‘essential’. They are socially constructed and politically contested and thus open to change”. Therefore, there are researchers who loosely consider arrangements such as the US-Israel Free Trade Area and the Lome Convention as regional arrangements in their studies.

This study, however, aims at analysing formal regional economic groupings which are created along geographical proximity. The study focuses on regional arrangements established by contractual-obligation agreements with specific intentions to enhance extensive economic relations among participating countries. This approach is imperative in order to distinguish formal and informal economic groupings. In addition, this approach is also in line with a definition provided by Sheila Page (2000, 7), who defines regionalism as a group of countries that have “created a legal framework of cooperation covering extensive economic relationship, with the intention that it will be of indefinite duration, and with the possibility foreseen that the region will economically evolve in future”. To this end, loose and non-binding regional groupings such as Asia Pacific Economic Cooperation (APEC) as well as arrangements pursued at bilateral level will be given attention only in special circumstances.
5.3 The Genesis and Proliferation of Regional Trading Arrangements

Economic regionalism has a long historical record, although it has existed in slightly different forms at different times. During the eighteenth and nineteenth centuries, it occurred in parallel with the move towards the formation of nation-states, which was pervasively pursued in many parts of the world. This effort brought along the establishment of a kind of “customs-union”, in which uniform tariffs were set for imports from other politically independent states. Again in modern history, especially after WW2, regionalism has been pursued with increasing intensity all over the world.

5.3.1 Regionalism in Europe

The earliest regionalism in Europe probably occurred between England and Scotland, which was established through the Act of Union in 1703, although the idea for the formation of an economic and political union between them was first floated in 1547 (Das 2004, 9). In France, the conclusion of the French Revolution in 1789 brought all its provinces into a kind of customs union. In Germany, the German Custom Union or the Zollverein was formed in 1834 among 18 small states and territories. It grew bigger with the unification of the whole of Germany in 1871, which brought all tariffs into uniformity externally. The confederation of Switzerland in 1848 as well as the unification of Italian states in 1860 resulted in a similar form of customs unions. Also, a customs union was established with the creation of Romania through the unification of Wallachia and Moldova in 1881 (Schiff 2000, 9).

Economic regionalism established in Europe during this period had significant impact, especially from the perspective of economics, to the countries concerned. But the most significant of all was arguably Germany. Partly due to this, Germany emerged from thirty-nine disconnected and backward independent states and territories at the end of eighteenth century (Barraclough
1972, 414), into one of the most powerful and advanced countries in Europe towards the end of nineteenth century. The production of coal in Germany in 1871, one of the indicators used to measure economic “greatness” during this time, surpassed the combined production of France and Belgium. By 1913 the production of coal in Germany was almost as much as in Britain, then the world’s largest producer. This was a dramatic reversal; as late as the early nineteenth century, German’s states and territories were economically backward in comparison to other European countries, with each German territory retaining independent tariffs not only with other countries but also among themselves. Prussia, the largest and most influential German state, alone had sixty different tariffs and 2800 classes of taxable goods in 1815. As a result, German producers faced enormous difficulty to compete especially with their English and French rivals (Leeson 2005, 403-406).

The move toward the establishment of uniform external tariffs started in Prussia with the Tariff Law of 1818, aimed at creating uniform internal tariffs and to extend them to other small and medium-sized states in North Germany that formed enclaves between the disconnected Prussian territories. Thereafter, the unification of tariffs was soon pursued in other areas of Germany. By 1828 three customs unions were established: the Prussian-Hessian Customs Union; the South German Customs Union, which united Bavaria and Wurttemberg; and the Central German Customs Union, although originally this was largely formed to balance Prussian dominance (Bramsted 1972, 118). In 1829, Prussia and South Germany were united and opened the way for a much wider German Customs Union. In 1834 the Zollverein was officially established covering an area of 8,253 square miles and a population of 25 million, comparable in size with other leading European powers.
The Zollverein was not the only successful story of customs unions which helped countries emerge stronger economically. Another important successful story about the creation of customs unions out of non-viable small territories in Europe was the unification of Italy. Previously, the existence of many Italian city states – with their own currencies, banks and customs – had hampered trade even between themselves. Before 1848, freight for the 125 mile journey from Bologna to Lucca had to stop at seven customs stations. Similarly, freight between Florence and Milan had to stop at eight stations in 150 miles. The unification of Italy in 1860, primarily due to the influence of the Prime Minister of Sardinian state, Camillo Benso Cavour, abolished these obstructions and laid the foundation for swift economic progress, and in the early twentieth century Italy emerged as one of the great industrial nations in Europe (Pollard 1974, 118).

During the nineteenth century, there was no lack of initiatives to establish customs unions among politically independent countries. Unofficial attempts were made for such a union involving France and Germany in 1888 while the Hungarians attempted a central European union during 1885-86. But the most persistent attempt, in particular from the 1880s to 1914, was to link Germany with its neighbours in a variously named “Central European Economic Association” (Pollard 1974, 120). This initiative was not only to include Germany’s close neighbours of Austria-Hungary, Belgium, Holland, Switzerland and Denmark, but at times it went even as far as Italy, Romania, and Sweden. None of this seriously took shape, except in the distorted form of expansionist Germany during the Great War (which was rename the First World War) of 1914-1918. To the Germans, economically this War was aimed at incorporating the Balkans, Turkey and Ukraine into a German-dominated economic empire. Since this distorted economic grouping did not last long when the Germans lost the War to the Allied Forces, only two minor customs unions between politically independent countries were successfully established. These were the customs union involving Norway and Sweden in 1874 and the customs union of Austria-Hungary, which
was formed by the establishment of the Austro-Hungarian Empire in 1867. The latter customs union remained effective until the collapse of the Empire in 1918.

The proliferation of customs unions and other regional trading initiatives in Europe was disrupted by the outbreak of the WW1 in 1914. But such initiatives re-emerged soon after the war ended. Nevertheless, trade arrangements initiated during the period between WW1 and WW2 tended to be highly preferential. Some were created to consolidate the empires of major powers, including the customs union of France, which was formed in 1928 with countries under its empire, as well as the Commonwealth system of preferences established in 1932 by Great Britain (Pollard 1974, 145).

In contrast to the eighteenth and nineteenth century experiences, however, many regionalism initiatives during the inter Wars period occurred among sovereign countries. Shortly after the WW1 ended, Hungary, Romania, the Balkan States and Bulgaria negotiated tariff preferences especially on the trade of agricultural products between them as well as with other European countries. In 1934, the Rome Agreement was signed for the establishment of a regional PTA involving Italy, Austria and Hungary. Similarly, throughout the 1930s, Belgium, Denmark, Finland, Luxemburg, the Netherlands, Norway and Sweden concluded a series of economic agreements (Kenwood and Lougheed 1971, 211-219; Pollard 1974, 49).

In the modern history of the post-WW2, the regionalism of economies through the signing of regional trading agreements arguably occurred in two waves. The first wave of regionalism began in the 1950s and lasted until the 1970s, while the second started in the mid-1980s (Bhagwati 1993, 22-51). The first wave emerged in Europe with the signing of the Treaty of Rome in 1957 involving Belgium, France, the Federal Republic of West Germany, Italy, Luxembour and the Netherlands to establish the European Economic Community (EEC). Other European countries
comprising Austria, Denmark, Norway, Portugal, Sweden, Switzerland and United Kingdom organized a convention in Stockholm in 1959 and agreed to form the European Free Trade Area (EFTA).

Throughout history, the EEC has probably been the most successful example of economic regionalism among politically independent countries that was formed along regional lines, especially in terms of its ability to integrate member economies. By 1967, the EEC successfully established a Commission, a Parliament and a Court. The roles of these institutions of integration have since been strengthened and expanded. Progress towards integrating its members, nevertheless has never been a smooth path all the time. The integration of the EEC member economies was oscillated between confidence and enthusiasm at one period, and doubt and retrenchment at the other. The former seemed to coincide with economic booms and the latter with recessions.

The economic difficulties experienced in the early 1980s caused the EEC falling into a moribund state. While severe anti-inflationary policies adopted worldwide at the beginning of the decade helped the US and Japan to stop their economy from deteriorating, the EEC countries were firmly stuck in the mire. The matter was made worse since the growth of intra-EEC trade was uneven among its members, making some members feel uneasy. The rapid integration of economic activities that had characterized the early stages of its establishment lost steam in the mid-1980s. This sign of weakness forced the EEC members to draw up new programs to ensure integration processes remained on track. In 1986 members of the EEC came up with their Single Market Program (SMP) with the aim of creating a single market for goods, services, capital and labour. This program was later known as EC-92, a reflection of the target date for the completion of the plan by the end of 1992. Subsequently a new agreement, the Treaty on European Union was
agreed in December 1991, laying the foundation for the signing of the Maastricht Treaty in February 1992, with the prime aim being the establishment of the Economic and Monetary Union (EMU). This new agreement marked a further integration of the EEC member countries. With the Maastricht Treaty coming into force in November 1993, the EEC was renamed the European Union (EU).

Throughout the twentieth century, the EU expanded its membership four times – in 1973, 1981, 1986 and 1995. This enlarged the membership of the grouping from the original six to 15 after the 1995 expansion. The beginning of the twenty-first century saw the EU enlarge its membership still further. In April 2003 the Treaty of Accession was signed in Athens, Greece between the 15 existing member-countries and 10 would be new members. These 10 new members included the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia. Except for Cyprus and Malta, these new members were all central and east European countries, formerly belonging to the Eastern Bloc under the stewardship of Russia during the Cold War until the collapse of the Soviet Union in 1990. Officially, these 10 new members were accepted into the EU in May 2004.

Still four more candidates for future membership, Bulgaria, Romania, Turkey and Croatia are at various stages of negotiations for accession into the EU. Bulgaria and Romania have been involved in negotiations with the EU over their accession since 2002. It is expected that both countries would officially become new members of the EU by January 2007. The accession negotiations for Turkey commenced in the early 2005, paving the way for Turkey to become a member of the EU in 2008. Meanwhile, Turkey has to continue undertaking economic and political reforms, in particular concerning elements to uphold the principles of liberty, democracy,

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30 The new members of the EU according to dates of expansions are as follow: United Kingdom, Denmark and Ireland joined in 1973; Greece joined in 1981; Spain and Portugal joined in 1986; and Austria, Finland and Sweden joined in 1995.
respect for human rights and fundamental freedoms, and the rule of law, in which all these elements need to be brought into compatibility with the EU standards. Also, in June 2004, the European Council decided to accept Croatia as the latest candidate for the EU membership. With this, Croatia would be eligible to get help, including financial assistance in preparing its pre-accession programs required by the EU.

5.3.2 Regionalism in North and South America

Economic integration through the formation of nation-states was not only pervasive in Western Europe but also occurred in other parts of the world, especially in North America. The American colonies maintained independent external tariffs until the constitution adopted in 1789 imposed uniform external tariffs with other countries and barred individual states from setting up independent import duties (Bairoch 1989, 147).

Regionalism in the American continents during the first wave (of the twentieth century) followed closely the events happening in Europe. In Latin America, frequent public debate on the need to create regional blocs was heard throughout the 1950s, at the time when European countries negotiated the establishment of the EEC. Finally after a decade of deliberation and negotiations, the Latin America Free Trade Area (LAFTA) was launched in 1960 involving Mexico, Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay and Venezuela. In the same year four Central American countries, El Salvador, Guatemala, Honduras and Nicaragua established the Central American Common Market (CACM), while Costa Rica joined the grouping in 1962. In 1969, four members of the LAFTA – Bolivia, Colombia, Ecuador and Peru – decided to form a customs union under the name of the Andean Pact with Venezuela becoming the fifth member in 1973.
In contrast to the first wave of regionalism which started in Europe, the second (and current) wave of regionalism, which emerged in the mid-1980s, started in the American continents following a change in the attitude of the US in relation to international trade affairs. Beginning from this period the US made a conversion from pursuing a multilateral-only trade policy it adopted since the formation of the GATT into an increasing involvement in all facets of trade relations with other countries – multilateral, regional and bilateral. This was indeed a major change since during the first wave of regionalism two specific proposals were advanced for the formation of free trade areas on a regional basis involving the US. These two proposals were the establishment of the North Atlantic Free Trade Area and the Pacific Free Trade Area. But none of these materialized because the US opposed the proposals. The change then came in 1985, when the US signed a free trade agreement with Israel, and followed by the signing of a similar agreement with Canada in 1988.

The shift in Americans attitude took place primarily because of growing perception in the Congress that the GATT is inadequate and the “regional card should be played” as a form of threat to those reluctant to liberalize fast enough through the GATT process to suit America’s desires and interests (Bhagwati 1991, 70). Since trade liberalization processes at the GATT have been slower than the American impatience, the regional cards have been played again and again, reinforcing the American shift in external economic policy.31

The proliferation of regionalism in the Americas during the second wave continued with a stronger momentum during the 1990s. During the period 1990-1992 a new sub regional customs union, the Common Market of the South (MERCOSUR), was negotiated and agreed upon in South

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31 The US frustration over the slow GATT process for trade liberalization ran high at the GATT Ministerial Meeting in November 1982 when it failed to secure an agreement from European and developing countries for the launching of a new round of MTN (Bhagwati 1996, 46; Panagariya 1999, 7).
America between Argentina, Brazil, Paraguay and Uruguay. In 1994, the US-Canada FTA was extended to include Mexico with the establishment of the North America Free Trade Area (NAFTA). Meanwhile, in other parts of Latin America, the old and inactive preferential trading arrangements began to be revived and in the early 1990s the Andean Pact and the CACM were rejuvenated.

During the Summit of the Americas (December 1994), a proposal was made to establish the Free Trade Area of the Americas (FTAA). The FTAA is obviously the most ambitious regional free trade area ever proposed to date, and if this is materialised, it would become the largest FTA in the world with a combined GDP of US$13 trillion representing a total population of 800 million (Das 2004, 193). Negotiating parties include all countries in the two American continents with Cuba being the only exception.32 Thirty-four participating countries have been involved in negotiations for a formal agreement aimed at progressively eliminating all barriers to trade and investment.33 The originally target date for completing the negotiations was January 2005. However, efforts undertaken to formally establish the FTAA came to a complete halt at the following Summit of the Americas (November 2005) because their leaders could not even agree whether or not to continue the negotiations on the proposed economic grouping.

5.3.3 Regionalism in Africa

The first wave of regionalism after WW2 was argued to end with events that occurred in the African continent. Due to the influence of the earlier regionalism initiatives pursued in Europe

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32 The exclusion of Cuba from the FTAA is due to differences in political and economic ideology subscribed by Cuba as compared to other participating countries. This is understandable because it would be impossible to reconcile Cuba’s communism and centrally planned economy with democracy and market economy subscribed by the others, upon which the specific provisions of the FTAA Agreement being currently negotiated are based upon.

33 Thirty-four participating countries of the FTAA are Antigua and Barbuda, Argentina, Bahamas, Belize, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico,Montserrat, Nicaragua, Panama, Paraguay, Peru, St. Lucia, St. Kitts and Nevis, St. Vincent and Grenadines, Suriname, Trinidad and Tobago, Uruguay, The US and Venezuela.
and Latin America, respectively in the late 1950s and 1960s, African countries aggressively pursued their economic groupings starting in the 1970s. The first of the economic groupings established in Africa was the Communauté Économique de l’Afrique Occidentale (CEAO) when the Abidjan Treaty was signed in 1973 by Burkina Faso, Côte d’Ivoire, Mali, Mauritania, Niger and Senegal, while Benin joined the grouping in 1984. In 1975 a much bigger grouping, the Economic Community of Western Africa States (ECOWAS) was formed with the participation of fifteen countries. These fifteen countries comprised the seven members of the CEAO plus Guinea, Liberia and Sierra Leon, Cape Verde, Gambia, Ghana, Guinea Bissau, Nigeria and Togo. In addition, a small economic grouping was also formed in 1976 involving Burundi, Rwanda and Zaire (Foroutan 1998, 305-336). In the same year the Union Douanière et Économique de l’Afrique Centrale (UDEAC) was founded by former French colonies of Cameroon, Central African Republic, Chad, Congo and Gabon. Equatorial Guinea, a former Spanish colony joined the union in 1985. The economic groupings in Africa were probably the least successful of all; by the middle of the 1980s the groupings became feeble and unable to move forward as they faced various problems.

The second wave of regionalism gave a new lease of life to many economic groupings in Africa; this time new PTAs were formed based on old foundations. The Union Économique et Monétaire Ouest Africaine (UEMOA) was established out of the CEAO, and the Common Market of Eastern and Southern Africa (COMESA) was resurrected. The PTA for Eastern and Southern African states was expanded and the UDEAC was revamped with the aim to replace complex and distorted external and internal tariffs with a simplified and transparent system, similar to the one adopted by CEAO members.
5.3.4 Regionalism in other Parts of the World

In the eighteenth and nineteenth centuries, regionalism in other parts of the world was scanty, perhaps because during these two periods many third world countries were under the empires of colonial powers of Europe. Efforts to create uniform external tariffs among colonies and dominions only occurred when these powers started to decolonize their colonies. In Australia for example, a form of customs union, setting uniform external tariffs was established when the Commonwealth of Australia was created by its six states in January 1901. In Asia, no effort was made to form any kind of economic groupings until long after the conclusion of WW2 (Das 2004, 10).

The first economic grouping in Asia was formed during the late period of the first wave of regionalism. It occurred in 1975 with the signing of the Bangkok Agreement (BA) by six countries – Bangladesh, India, Laos, the Philippines, South Korea, Sri Lanka, and Thailand – with the aim of liberalizing trade among members based on preferential tariff arrangements. This grouping is probably one of the least known, and because member countries failed to come up with a specific name for the grouping, it is only known as BA, the acronym of the agreement. Notwithstanding the ambitious target drawn during the formation of the grouping, which aimed to include all Asian countries as its members, the grouping has been plagued with problems right from the beginning in which two of its original members, Thailand and the Philippines, failed to ratify the agreement. Additionally, the scope of trade liberalization is trivially limited, even the removal of non tariff barriers is excluded from the agreement. In the end, albeit in existence for almost 30 years, it has achieved very little (Kelegama 2001, 105-222).

Only few significant economic groupings were initiated during the benign period between the first and second waves of regionalism. In the Middle East, the Gulf Cooperation Council
(GCC) was founded in 1981 with the participation of six countries – Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates. This economic grouping was formed with the aim of eliminating tariffs between members by 1982, and to be followed by the liberalization of trade in services in the following year (Soloaga and Winters 2001, 1-29).

Another important regionalism occurred during this time was the establishment of the Australia New Zealand Closer Economic Relations (CER) in 1983. Although this was essentially an enhanced version of the earlier free trade agreement signed in 1965, the implementation of the CER agreement resulted in an unprecedented deepening of economic integration. Thus, the CER is considered as another example of successful economic integration between politically independent countries besides the EU. Since the CER agreement involves only two partner countries, integration processes follow a relatively smooth path in comparison to that of the EU. The path is smooth because both countries have many comparable features, including the systems of government, laws, customs regulations as well as sharing a common language. Prior to the formation of the CER, in particular before the 1970s, both Australia and New Zealand had the highest average level of protection for their import-competing products among OECD countries (Das 2004, 143).

The CER agreement widened and deepened substantially the scope of trade liberalization and other economic integration programs. The CER sets specific target dates for phasing out trade barriers and other trade-distortion measures: 1987 for performance-based export incentives, 1988 for tariffs, and 1995 for tariff quotas and other import restrictions. Also, anti-dumping practices between the two countries were to be ceased by 1990. All those targets were achieved within the stipulated time frames reflecting a smooth implementation of the agreement. It is imperative to note that the successful implementation of the CER agreement has been based on two distinct
features. First, the agreement is implemented without the need for the creation of a supervisory
body or secretariat. And second, the actual implementation of trade liberalization programs is not
only restricted to the two partner countries, but in most cases it is also extended unilaterally to
others. According to Peter Lloyd (1997, 267-280), the CER can be considered as one of the “most
clean and most outwardly open” regional integration arrangements notified to the GATT, second
only to the EU, particularly in bringing down trade barriers.

During the second wave of regionalism only one important economic grouping that was
established in Asia. In 1992, countries of the Association of South East Asian Nations (ASEAN)
agreed to establish the ASEAN Free Trade Area (AFTA). This proposal was initiated by Thailand
in January 1991, and all ASEAN member countries accepted the proposal during the fourth
meeting of ASEAN leaders (the ASEAN Summit) held in Singapore a year later (January 2002).
The original goal of the AFTA was to progressively reduce tariffs on goods traded among
members to between zero and 5 percent within 15 years starting from January 1993. Under the
AFTA, trade liberalization activities are implemented through a mechanism called Common
Effective Preferential Tariff (CEPT).

The CEPT divides goods into two categories: (1) fast-track goods for which tariffs would
be reduced to 0 to 5 percent within 7 or 10-years period, depending on whether the prevailing tariff
was below or above 20 percent, and (2) normal-track goods for which tariffs would be reduced
more slowly within a 15-years period. Subsequently, during the 1993 and 1994 ASEAN Summit
meetings, tariff liberalization programs were accelerated. Member countries agreed that the
liberalization of tariffs on goods in the fast-track would be completed by 2000 and goods in the
normal-track by 2003 instead of 2008. These trade liberalization schedules would be applied
equally to the original six ASEAN members – Brunei, Indonesia, Malaysia, the Philippines,
Thailand and Singapore. Four newer member countries of ASEAN, Cambodia, Laos, Myanmar and Vietnam are allowed longer time frames for their tariff liberalization programs.

Originally ASEAN was established in 1967 as a political grouping to address security and ideological issues in the region, particularly in trying to balance the influence of communism which gained credence in the 1960s and the early 1970s especially in neighbouring Indo-China countries. Economic cooperation began to be incorporated into ASEAN starting in 1977 when the ASEAN Preferential Trading Arrangement (ASEAN PTA) was drawn up. This PTA granted a 10 to 15 percent margin of preferences on 71 commodities and industrial products traded among member countries. However, this new scheme was weak and insignificant because important sectors were exempted. Additionally, the scheme was ineffective due to multiple problems: negotiations were conducted on a product-by-product basis; domestic content requirements were high; and tariff preferences were limited. Although during the 1985-1987 Summit Meetings ASEAN leaders had agreed to expand the list of sectors covered by the PTA as well as to increase the margin of preferences, it still did not achieve much. At the end of the 1980s, the fraction of goods eligible for regional preferences was only about 3 percent of the total number of traded goods. When the AFTA was established in 1992, the PTA arrangements were absorbed into the AFTA.

5.3.5 Regionalism after WW2: A Comparison between the First and the Second Waves

The two waves of regionalism which occurred after the conclusion of WW2 arose in sharply different context and rationality. The first wave of regionalism arose and initiated against the backdrop of the Cold War and the rash of decolonization, all of which coloured their economic and political effects. Many least-developed and developing economies signed preferential trading arrangements to reduce their economic and political dependence on former colonial powers.
Meanwhile, the second (and current) wave of regionalism arose in a different context than the earlier episode. Although it began in the mid-1980s, the current wave gained a stronger momentum in the wake of the Cold War’s conclusion, which marked a significant change in the pendulum of interstate power and security relations.

The first wave of regionalism was weak, short-lived and achieved very little except for the EEC. One of the important reasons which contributed to this failure was the fact that the US, the most influential country as regard to world economic affairs, was only committed to multilateralism and largely opposed regionalism. The US had a historical bias toward MFN-only trade liberalization and considered regionalism as a force which worked against multilateral liberalization. The US took a polemical stance and relentlessly championed the cause of trade liberalization through the GATT.

Another reason for the first wave’s failure was attributable to one of underlying objectives behind the formation of regional economic groupings, especially among developing countries. This was essentially in relation to the belief subscribed by many developing countries that regionalism would help them in economic development and industrialization. Since the period of the 1960s until the early 1970s was economically characterized by the adoption of an import-substitution strategy in many developing countries, they found regionalism was an appealing concept to help achieving these aims. Policy makers argued that start-up companies could first learn to export within a less competitive regional market and use it as a stepping stone to face stronger competition in the global markets. However, import-substitution as a strategy for economic development and industrialization was largely a failure; cases of infant industries created under the wall of protection, but later managed to become stronger internationally were very rare.
In contrast, the second wave of regionalism has been characterized by the increasing regularity of its use to promote and consolidate economic and political reforms in prospective members, a rarity during the prior wave. Additionally, the second wave of regionalism has also been accompanied by a high level of economic interdependence as well as the adoption of “export-and-foreign-investment-led policies” rather than the promotion of import substitution policies (Lawrence 1996, 6).

5.4 Conclusion

Regionalism may be argued to occur in two main periods of time. First, it occurred during the eighteenth and nineteenth centuries in parallel with the formation of nation-states in many parts of the world, in which uniform external tariffs were set for imports from other independent countries. Regionalism has also been aggressively pursued by many countries after the conclusion of WW2. During the latter period, regionalism has been established primarily through the signing of regional trading arrangements between politically independent countries, leading to the formation of either one of the following regionally based economic arrangements: Preferential Trading Arrangements, Free Trade Areas or Customs Unions. Regionalism in the twentieth century has occurred in two waves. The first wave began in the 1950s with the formation of the EEC and lasted until the 1970s. Meanwhile, the second wave emerged in the middle of 1980s marked by the signing of the US-Israel Free Trade Agreement.
CHAPTER SIX

REGIONALISM VERSUS MULTILATERALISM

6.1 Overview

This chapter examines the issue of regionalism versus multilateralism. It is imperative to examine this issue because there exists an opposing view on whether or not regionalism is compatible with multilateralism. In this context, the specific question of interest is whether regionalism is “building blocs” or “stumbling blocs” to multilateralism. In addition, this chapter also examines the GATT position on regional trading arrangements (RTAs), in which the analysis is not only on those RTAs that were in existence prior to the formation of the GATT, but also for RTAs to be established in future. Subsequently, this chapter examines the economics and politics of the GATT Article XXIV, which deals specifically with the issue relating to the formation of customs unions and free trade areas. Finally, this chapter analyses theoretical research on regionalism versus multilateralism. This part begins with the examination of Viner’s (1950) exposition of “trade creation” and “trade diversion”. It then examines various theoretical models that try to shed light on this issue, which can be grouped into the following categories: symmetric models; asymmetric models; negotiated-tariff models; and political economy models.

6.2 Concepts and Definitions

The issue concerning regionalism versus multilateralism has been the subject of debate since the 1940s, primarily during the negotiations for the formation of the GATT and the establishment of ITO. According to Alan Winters (1999, 8) “multilateralism is a characteristic of the world economy or world economic system”.34 However, multilateralism “must ultimately

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34 This Chapter only attempts to define multilateralism as the definition of regionalism is already presented in Chapter 5.
reside in the behaviour of individual countries” to the extent that individual countries behave multilaterally. So for any one country, multilateralism is a positive function of: “(1) the degree to which discrimination is absent” – the degree to which all trading partners receive identical treatments; and “(2) the extent to which the country’s trading regime approximates free trade”. Winters further noted that on the face of it criterion (1) alone would be a sufficient definition of multilateralism, but in the context of regionalism versus multilateralism, whereby any preferential trading arrangements involving a few member countries will worsen multilateralism, criterion (2) will “add back the missing dimension”.

6.3 The GATT Position on Regional Trading Arrangements

Under the GATT (and from 1995 WTO) the position of regional trading agreements (RTAs) is spelled out specifically in three Articles: Articles I, XXIV and XXXIII. The position of RTAs under the GATT is mainly governed by the provisions of Articles I and XXIV. It is a well known fact that the idea for the establishment of a multilateral trade order had its origin from the dispute between the US and the UK over trade policy during the inter Wars period, in which the US strenuously complained about the UK imperial preferences. This dispute continued to pronounce significantly during the negotiations for the formation of the GATT. During these negotiations, the main tussle was still between the US, which was determined to have multilateralism approach to international trade liberalization and the UK, which was reluctant to give away totally its imperial-preference trade policy (Bhagwati 1991, 63). Also, at the time when these negotiations started many other countries such as Belgium, France, Luxemburg and the

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35 The establishment of the WTO in January 1995 was one of the outcomes of the Marrakesh Agreement (also referred to as WTO Agreement) of which the Contracting Parties signed on 15 April 1994. The WTO Agreement includes the original text of the GATT as well a set of additional agreements covering other areas than trade in goods. Since the primary discussion of this Chapter focuses on specific articles of the GATT, in many circumstances a direct reference to the GATT is made rather than the WTO.
Netherlands had signed certain forms of RTAs, and it was against their interest to abandon these arrangements.

The agreed GATT and the ITO Havana Charter (nevertheless, the establishment of ITO did not materialize because many participating countries which signed the Havana Charter fail to ratify it) contain provisions reflecting a compromise between these two contrasting views. Article I, Paragraph 1 of the GATT contains provisions adopting an unconditional MFN principle. Paragraph 2 of the same Article, however, grants exemption to certain types of RTAs which had been in force prior to the signing of the GATT. This latter provision specifically gives exemption to preferences granted by Great Britain and France to their imperial countries; preferences under the customs union of Belgium, Luxemburg and the Netherlands; preferential trade arrangements between Chile and its neighbouring countries; and preferential arrangements between Lebanon and Syria and their neighbouring countries. During the GATT negotiations not only treatments to be accorded to the existing RTAs were debated, but also treatments for RTAs to be established in future. At the end of the negotiations, it was agreed that both the existing and future RTAs are exempted from the MFN principle: paragraph 2 of Article I for RTAs formed prior to the GATT and Article XXIV for RTAs to be established in future.

At the GATT negotiations, customs unions were proposed to be exempted from the unconditional MFN principle right from the beginning, but free trade areas and other forms of RTAs were not included until the last moment (Snape 1993, 281). Even the US was relatively soft on the issue of customs unions so long as their formation encompasses a complete-100 percent

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36 Conditional and unconditional MFN principles perhaps could best be explained by illustrating an example provided by John Jackson (1989, 137): “Under conditional MFN, when country A grants a privilege to country C while owing MFN to country B, then country A must grant the equivalent privilege to B – but only after B has given A some reciprocal privilege to pay for it”. As regard to unconditional MFN, following through this example, country A “must grant the equivalent privilege to country B, without receiving anything in return from B.”
tariffs reduction. According to Wilcox (1949, 70) although the US opposed trade preferences but it tolerated customs unions; the US proposal for the ITO Charter had provisions exempting prevailing customs unions from the MFN principle. As for the free trade area, it was only at the Havana Meeting that Article XXIV of the GATT was incorporated at the insistence of Lebanon and Syria.37

The language in which the exception of customs unions from MFN principle is expressed as well as the exception given to free trade areas indicated that the original thinking and the basis for the exemptions from unconditional MFN were significantly bent by the time the GATT was agreed. As a result, the formation of a complete customs union was no longer the only criterion for exemptions since other forms of RTAs were also tolerated under Article XXIV. Essentially, Article XXIV would not exist but for MFN being unconditional in Article I; conditional MFN would not have led to the demand for such exemptions, as preferences would have been allowed (Snape 1993, 281). Although these provisions are viewed as loopholes by proponents of multilateralism, according to Dilip K. Das (2004, 97) without them many countries “would not have joined the GATT.”

Another GATT provision which has a direct bearing on RTAs is Article XXXIII. This Article rules out that other GATT provisions may be invoked for the treatment of preferential trading arrangements involving customs territories of contracting parties, in which they can be a sovereign state or “a separate customs territory possessing full autonomy in the conduct of its external commercial relations and of the other matters provided for in this Agreement”. According to Frieder Roessler (1993, 312) this means that a complete customs union such as the EEC, which

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37 According to Frank Haight (1972, 391-404), the original GATT proposal envisaged that a free trade area should be only between countries of the same region, but this restriction was removed by relevant subcommittees formed during the GATT negotiations.
possessed customs autonomy, could itself theoretically accede to the GATT/WTO, in which case its existence no longer require justification under Article XXIV.

6.4 The MFN Provision in Commercial Treaties and its Controversies

The use of a MFN provision or clause has a long history and its phrase was first appeared in the seventeenth century (Jackson 1989, 133). The use of the MFN provision, either conditional or unconditional seemed to be driven primarily by the importance of trading activities in the eyes of European countries as they competed against each other to develop networks of trading relationships among themselves and with other countries outside Europe. In the later centuries, it was a norm to include a MFN clause in a variety of trade arrangements, especially in various friendship, commerce and navigation treaties.

The incorporation of a MFN provision in a commercial agreement assures each party that, if other parties of the agreement enter into any other treaties with third parties which provide more favourable treatments in relation to trade with those third parties, these more favourable treatments will be automatically extended to all the parties of the first agreement. This essentially means that no other countries will be treated more favourably (Snape 1993, 274).

Nevertheless, the existence of a MFN clause in commercial treaties has always been subject to controversies. In the nineteenth century, controversies over the MFN clause occurred occasionally because some countries which had signed a treaty that included in it a MFN provision tried to derogate their MFN commitment. This especially happened in cases when these countries signed a new agreement with third parties and did not want to extend newly negotiated favorable treatments in the new agreement to the signatories of a previous treaty. In Europe, numerous examples of this kind of controversies existed during this period.
Frankfurt, one of the many German territories, in 1832 signed a commercial treaty with the UK providing for MFN treatment. As surrounding states joined the Prussian Zollverein, Frankfurt found itself increasingly isolated economically and became willing to accede to the Prussian Zollverein. In 1835, therefore, Frankfurt asked the UK for leave to abandon its promise of MFN treatment, but it was not explicitly granted by the UK. All parties concerned seemed to have taken it that in the absence of express consent from the UK Frankfurt was bound by the treaty of 1832 not to enter the Zollverein (Viner 1950, 7).

A controversy also occurred in 1867 when the Prussian Zollverein adopted a new constitution and took into its membership some additional German states. Napoleon III of France insisted, on the strength of the MFN clause in the Franco-Prussian commercial treaty of 1865, an extension to France a similar favourable treatment granted by Prussia to new Zollverein members; free entry of France’s goods to Prussia. The France claim was, however, energetically denied by Prussia.

Another controversy occurred in 1857, in connection with the “customs union treaty” between Austria and Modena. Originally, Austria had in 1852 signed with Modena a “complete” customs union treaty. But in 1857 Austria negotiated a revised arrangement provisioning for less complete tariff unification than the 1852 treaty. Meanwhile in 1851, Austria had also signed a commercial treaty with Sardinia which provided for a reciprocal MFN treatment. Under this treaty a separate article, however, exempted both countries from MFN obligations of the concessions made to the third countries if any of them form a complete customs union.

Cavour, on behalf of Sardinia, made a claim to benefit from the 1857 Austrian-Modenan treaty on the ground that the new tariff arrangements between Austria and Modena did not constitute a complete customs union and therefore was not eligible to claim exemptions from the
MFN obligations provided under the Austro-Sardinian treaty of 1851. Cavour maintained that a customs union involved a fusion of the tariff interests of two or more states. If certain conditions were not met, the resulting agreement was only a commercial treaty and not a complete customs union. He argued that four conditions must be met to constitute a complete customs union: uniformity of export and transit tariffs; free exchange of products of the unified countries; uniformity of external import tariffs and suppression of an internal tariff line; and, pooling of customs revenue and a specific formula for the allocation of customs revenue between the participating states must be established in advance. He claimed that the Austrian-Modenan arrangement failed to meet these conditions mainly because it allowed Modena to add “internal” duties to the external ones. In addition, this new agreement had three other defective points: it created separate and distinct Austrian and Modenian tariffs; it installed a tariff wall between Austria and Modena; and it failed to provide a specific method of customs revenue allocation. He therefore demanded the extension to Sardinia of all concessions granted by Austria to Modena.

De Buol, replying on the part of Austria, argued that the arrangement with Modena adequately met the conditions of a complete customs union. Foreign goods crossing the territories of either Austria or Modena to reach the other member required only one and the same customs declaration. They were subject to the same customs regulations and pay only once the rates fixed by a tariff common to both countries. As for the internal duties, which were different in the two countries, he maintained that internal arrangements between the parties had no bearing on the international character of the arrangement. Also, the special internal duties had no international bearing, nor did the method for reimbursement of the tariff revenues. He also pointed out that international law did not establish any definition of a complete customs union and history furnished too few precedents to fall back on. Therefore, to determine whether an arrangement was a complete customs union or not, it was necessary to observe the actual operation of the agreement.
and whether the two countries form, in their relations with the outside world, a single customs territory. While refusing to concede the validity of the legal arguments raised by Cavour, De Buol however stated that Austria, moved by other considerations, had asked Modena to accede to the nullification of the treaty.

Since the formation of the GATT, controversies in relation to the principle of MFN emerged in a different context than the nineteenth century experiences. Throughout the post-WW2 period there have been controversies over the usefulness of conditional in comparison to unconditional MFN principles in ensuring gradual but continuous liberalization of trade among the GATT members. As opposed to unconditional MFN, which is based on non-discriminatory principle of trade policy and to be applied equally to all members, conditional MFN in essence allows GATT members to preferentially discriminate one against another.

There are basically two opposing views over the usefulness of the principle of preferential discrimination brought about by conditional MFN in the context of multilateral liberalization. Both are set in the context of domestic protectionist pressure on governments. On one hand it is argued that preferential discrimination permits countries to liberalize further (and faster) than otherwise by engaging in reciprocal reductions of barriers in agreements with like minded countries. The opposing view in contrast maintains that discrimination permits governments to raise, selectively, barriers against “troublesome” exporting countries – and thus to bow to domestic protectionist pressures – in a manner in which they could not if the barriers had to be raised against all exporters, friends as well as foes (Snape 1993, 238).

A leading advocate of the latter view was Jan Tumlir. Tumlir (1985) argued strongly that non-discrimination, unconditional MFN provides a firm constraint on protection. He maintained that the existence of an avenue to discriminate especially among sources of imports works to
weaken a government’s ability to resist protectionist pressures. He pointed out that some forms of protection which emerged in the 1970s as well as in the 1980s, even as tariffs had been falling since the GATT came into force – for example, country-specific import quotas and voluntary export restraints – could not be imposed in a system that was really non-discriminatory. Strong implementation of unconditional MFN would have prevented them.

In contrast, it is often argued against Tumlir’s position that unconditional MFN does not guarantee the development of a liberal, multilateral trading system. The liberal system in Europe started to be eroded from the early 1870s, despite unconditional MFN. French protectionists were able to claim that the Cobden-Chavalier Treaty, with its unconditional MFN provisions, was initially imposed undemocratically (by Napoleon III). Moreover if governments wish to circumvent the constraint of unconditional MFN they can do so by multiplying tariff classifications, by not renewing bilateral treaties as they expires, or by providing notice of withdrawal under the terms of the treaties (Pomfret 1988, 18).

Another position opposed to that of Tumlir is presented by those who argue that unconditional MFN is a drag on trade liberalization because it could encourage free-riding and foot-dragging. The possibility of free-riding would discourage negotiation and curb the selection of products to be covered. Foot-dragging which comes from those who already benefit from unconditional MFN provisions as well as from those who want to secure benefits without paying a price would cause some countries to refuse to negotiate at all, but conditionality could have brought them to the negotiating table. Conditional MFN and preferential discrimination brought by it then could facilitate more rapid liberalization.

Commenting on this last point, Richard Snape (1993, 279) argued that the arguments favouring conditional MFN because it could avoid the problem of free-riding and foot-dragging
frequently tend to focus on approximation and ignore the whole. He asserted that “it is difficult to envisage a world of criss-crossing, bilaterally negotiated, conditional MFN agreements, each designed to discourage free riding and foot-dragging and each therefore with limited coverage, leading to a stable and harmonious trading system, or even one with the degree of harmony and stability produced by that which we have.”

6.5 The Economics and Politics of GATT’s Article XXIV

Article XXIV of the GATT permits the formation of customs unions and free trade areas provided that “the duties and other restrictive regulations of commerce are eliminated on substantially all trade between the constituent territories in products originating in such territories”. Some economists have questioned the requirement of the GATT that an agreement establishing an RTA to cover substantially all trade, suggesting instead that the relevant criterion should be whether or not the preferences provisioned in an RTA creates trade. Others have argued that the current spread of RTAs undermines the principle of MFN. The GATT/WTO has also been criticized for not effectively enforcing its requirements for RTAs, in particular because it frequently failed to reach decisions in interpreting the provisions of various regional agreements notified to the GATT/WTO (Roessler 1993, 311).

Following Viner’s (1950) theory of customs unions, economists have analysed preferential trading arrangements by comparing the relative efficiency of an RTA in comparison to multilateral trade liberalization, and their standard conclusion being that an RTA may increase or decrease world welfare depending on whether it creates or diverts trade. From that perspective the substantially-all-trade criterion make little sense, because it seems to oblige contracting parties to include in their RTAs preferences that divert trade from more efficient producers in the third countries to less efficient producers in the preference-receiving countries, thereby reducing world
welfare. Kenneth Dam (1970, 289) argued that “certainly it is strange to state, as Article XXIV effectively does, that discrimination is forbidden unless it is 100 percent effective”. Rather than requiring that the discrimination in favour of regional partners be complete, so he and others argue, the GATT should insist that RTAs do not divert trade or at least do not divert more trade than they create.

Commenting on such a proposal political scientists argued that the proposal does not take into account that most RTAs have their origin mainly in political considerations. Over and above the aim to create closer economic ties, partners to these agreements generally wish to create greater political cohesion between them. The examples of these are abundant; the Treaty of Rome which created the EEC is the most obvious. According to its preamble the purpose of the treaty is to establish “the foundation of an ever-closer union among the European people” and “to strengthen the safeguards of peace and liberty”. Similarly, one of the purposes of the ASEAN PTA was to “contribute to political and economic stability in the region”. The Australia-New Zealand CER emphasizes in its preamble that the close historic, political, economic and geographic relations between Australia and New Zealand would be further strengthened by the expansion of trade between them. From this perspective, Roessler (1993, 312-313) argued that to propose that regional agreements be examined in the GATT solely in the light of economic efficiency considerations is thus to ignore the fact that most RTAs are not concluded solely for those reasons. He further argued that the main function of the GATT rules governing such agreements is to permit contracting parties to pursue regional trade liberalization for non-economic purposes.

In addition to analysing the economics of customs unions and free trade areas in terms of the resource allocation implications of specific arrangements, some economists examine the economics of the GATT trade liberalization process. On this issue they argue that the main
economic consequences of GATT trade liberalization are to be found in the economics of the multilateral liberalization process as a whole rather than in the resource allocation effects of any particular RTAs. But of course if each agreement has beneficial resource allocation effects as well as contributing to a beneficial process, so much the better.

The economics of the influence of the GATT’s Article XXIV on multilateral trade liberalization is perhaps best seen through the framework of analysis of the formation of a club (Johnson 1976, 30; Snape 1993, 283-284). According to Snape, clubs are formed between those who wish to share the benefits of impure or excludable public goods, recognizing that a voluntary cooperative arrangement in the same area of interest will be superior to unilateral action. View in this way the GATT “club” comprises members who recognize that by making commitments to each other they constrain the actions of others against them and also constrain their own actions, and create a system that itself yields benefits – a public good.

In clubs, a number of questions arise and need to be answered collectively by members in order for the club to remain in existence. These include questions in relation to how broad the coverage of the rules should be, whether there should be special provisions for certain classes of members, whether higher fees can purchase higher benefits, whether the membership is open or closed, whether new members will be admitted on the same conditions as the old, how much the basic rules should be bent in order to retain members (particularly important ones), how to enforce the rules, and whether there might be a networks of clubs with similar but differentiated purposes with partially overlapping membership. All these questions also arise with respect to the GATT “club”.

As regard to the formation of the GATT “club”, one of the basic principles in which its establishment is based upon is the equality of treatments among all members. This principle is
argued to be important in order to achieve the GATT’s objectives as outlined in the preamble of the agreement: raising members’ income; ensuring full employment; developing full use of resources; and increasing the production and exchange of goods. The vehicles for achieving all these are the liberalization of trade and elimination of discrimination.

Since the GATT membership is defined in terms of customs territories rather than countries, so complete customs unions could not be considered “exception” from the equality of treatment. The main relevant exceptions to the basic non-discrimination rule of the GATT then are for the treatments given to other types of RTAs: incomplete customs unions, free trade areas, as well as interim arrangements leading to customs unions and free trade areas. In order to analyse the economics of the GATT “club”, two additional pertinent questions need also to be answered. Are the exceptions given to those RTAs necessary to create memberships large or important enough to generate the public goods associated with the establishment of the GATT? Do they damage the real purposes of the GATT and reduce the production of the public good significantly?

According to Snape (1993, 284-285), the answer to the first question is probably yes. As it was mentioned previously, the GATT is not just an economic agreement. It is essentially “international legal document whose primary purpose is to promote or protect certain political goals of nation-states” (Baldwin, 1980, 138). Snape further argued that if there had been an effective enforcement mechanism in the GATT so that Article XXIV had been applied strictly, the six original members of the EEC almost certainly would have left the GATT. Thus the exception and slack enforcement of this Article have helped protecting the GATT “club”.

The second question – whether exceptions damage the real purpose of the GATT and reduce the production of the public good significantly – actually addresses the issue of how important non-discrimination really is for the achievement of GATT trade liberalization. Snape
(1993, 285) argued that what Article XXIV manages to do is to constrain the granting of preferences to “purport” free trade areas or customs unions. By and large Article XXIV does appear to have a restraining influence. In many instances participating countries appear generally to adhere to the provisions restricting the increase in trade barriers upon the formation of preferential arrangements, although the methods by which average trade barriers are to be calculated for conformity with GATT’s Article XXIV provision “have been much in dispute”.

Would Tumlir’s argument maintaining that discrimination is the enemy of progressive liberalization still apply when the raising of barriers against third parties is proscribed and that proscription is generally adhered to? Obviously it seems difficult to sustain his argument when it is interpreted narrowly, though Tumlir does make a telling point that discriminatory non-tariff barriers have flourished even as non-discriminatory tariffs have been reduced. But his argument gains more substance when it is considered in the context of the development of a systemic system. The main worry is that the less demanding are the constraints on preferences the more preferential arrangements will develop. Each agreement on its own may satisfy Vinerian trade creating criteria for improved resource allocation. But preferential discrimination could result in many other downside effects: it can lead to resistance by governments to further liberalization as existing preferences are defended; it tends to make further negotiations with other parties more difficult; it tends to promulgate new rules of origin and dispute settlement procedures; and it is likely to lessen the system’s resistance to further implicit discrimination against some countries – a development that can easily lead to explicit discrimination. To this point Krugman (1991c, 56) argued sharply that: “the great political advantage [to European and North Americans] of regional pacts is that they can exclude Japan.”
View from this perspective, the economics of Article XXIV really concern with the public good produced by the GATT “club” and the damage that discrimination can do to its production. The rules provided by Article XXIV essentially aimed at limiting discrimination by imposing a high political cost on it. Strictly interpreted, the GATT would only allow an RTA if its signatories are really serious about favouring each other (free trade among partners for most products) while at the same time external barriers cannot be raised. The high political cost attached to establishing such preferential arrangements could act as a deterrent to their formations. Increasingly, however, loose interpretation of Article XXIV has lowered this cost for all countries, while the Enabling Clause has reduced the cost for developing countries even further. The plethora of pseudo-free trade agreements that are now being implemented or proposed, and the threat in which they provide to a liberal and efficient multilateral system, suggest that currently the cost may be too low.

6.6 Theoretical Research on Regionalism versus Multilateralism

Theoretical research on regionalism versus multilateralism grows rapidly as economists grapple with the question of whether RTAs are good or bad for the multilateral system. Borrowing Bhagwati’s (1991, 77) phrase, are RTAs “building blocs” or “stumbling blocs” towards multilateralism? This question becomes more pressing as the worry about the ability of the WTO

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38 The Enabling Clause was incorporated into the GATT as a result of the Tokyo Round of MTN negotiations (1973-1979). Under this clause developing countries are allowed a much easier path to establish preferential trade arrangements among them without the need to conform to the provisions of Article XXIV. This clause also legalizes the Generalized System of Preferences (GSP) in which developed countries offer non reciprocal trade preferences to developing countries.
to maintain the GATT’s unsteady yet distinct momentum towards multilateral trade liberalization heightened, and also as the world faces the proliferation of RTAs everywhere.\textsuperscript{39}

At present, regionalism versus multilateralism changes the focus of research from the immediate consequences of regionalism on the economic welfare of the integrating countries to the question of whether it sets up forces which encourage or discourage evolution towards global freer trade. Findings from theoretical research point to either direction, and according to Winters (1999, 7), the conclusion is “we don’t know yet”. This is so because one can build models that suggest either conclusion, and the models constructed are highly abstract that they could only be viewed as “parables rather than sources of testable predictions.”

\textit{6.6.1 Early Theoretical Research on Regionalism}

Theoretical research on regionalism may be argued to begin with Viner (1950, 45) seminal contribution in theorizing the possibilities of “trade-creating” and “trade-diverting” due to the formation of customs unions, although his work did not directly address the debate over regionalism versus multilateralism in the present context. Viner’s classic work was mainly concerned with analysing the welfare effect of customs unions to members as well as to the rest of the world. Under his framework trade-creating is associated with a welfare gain, and trade-diverting with a welfare loss. Viner expounded that the net welfare effect depends on the magnitude of trade creation and trade diversion, and all these in turn depend on specific features of a customs union – its economic size, the level of external tariffs imposed on non members, the degree of complementarities of member countries and the level of difference in the unit cost of

\footnote{\textsuperscript{39} A full survey of theoretical research on regionalism as well as multilateralism is beyond the scope of this study. Instead, this chapter only examines the most relevant research that directly addresses the issue of regionalism versus multilateralism.}
protected industries. This is so because any customs unions could result in both trade-creating and trade-diverting at the same time.

Notwithstanding this, however, Meade (1955, chapter 2) argued that the relative magnitudes of trade creation and trade diversion alone would not be sufficient to determine the welfare effect of a customs union for two reasons. First, the benefits of preferential liberalization depend not only on the extent of trade creation, but also the magnitude by which the cost is reduced on each unit of newly created trade. Similarly, losses are determined not just by the amount of trade diversion but also by the magnitude of the increase in cost due to trade diversion. Second, and as formalized subsequently by Frenz Gehrels (1956, 61-64) and Richard Lipsey (1957, 40-46) using a one-factor, general-equilibrium model, which indicates that once the unrealistic assumption of zero elasticity of demand in the importing country is dropped, even a wholly trade-diverting union may lead to a net increase in welfare. Bhagwati (1971, 580-587) made a further point that even with zero demand elasticity, a trade-diverting union can lead to an improvement in welfare provided the supply elasticity of the good in question is positive but finite. He then concluded that in order to eliminate the possibility of a trade-diverting union leading to welfare gains, one must assume the elasticity of demand for imports in the importing country to be zero and the elasticity of supply in the exporting countries to be infinity.

6.6.2 Symmetric Models

In the present context and debate, theoretical research on regionalism versus multilateralism, according to Winters (1999, 11), “took off” with a 1991 seminal article by Krugman, Is Bilateralism Bad? To make the analysis of the problem of regionalism tractable, Krugman (1991a, 9-23) employed a simple model in which there exists $N$ identical countries and $B$ identical blocs in the world. Each country produces one differentiated good and he assumed that
there is no transport cost to bring the good from one to another place. If \( B = N \) each country is a bloc, but when \( B \) falls as regional integration occurs, each country within the bloc gives one another free market access as well as imposes a common external tariffs on non-members. The external tariff rate is chosen so as to maximize the bloc’s welfare, taking the policies of other trading blocs as given – a traditional “Nash” optimum tariff game.

Krugman showed that as the number of blocs in the world decreases, each bloc’s share in the other blocs’ consumption rises, so the rate of optimum external tariff increases because the bloc commands more market power. Integration not only creates trade diversion but also in his model it is exacerbated by increasing external tariffs. In essence he showed that the world welfare is lower with a few trading blocs than the cases of only one or many blocs, and for specific parameter values, the world welfare is worst when the number of blocs is three.\(^{40}\)

Krugman’s work stimulated a storm of criticism and extension. The most pressing theoretical criticism was that his production structure contained no element of comparative advantage, and that this led him to over emphasis trade diversion. Srinivasan (1993, 84-89) offer one counter example when he considered a two-good-one-factor Ricardian model as an analogy to the two-province-one-factor model with continuum of goods. He demonstrated in this model that even with complete trade diversion, each province enjoys the same level of welfare as in global free trade, and concluded that once the symmetric assumption of trading blocs is dropped the Krugman’s result is no longer valid.

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\(^{40}\) This finding raised the eyebrows of many economists and policy makers because at about the time of Krugman’s writing the world seemed to be moving towards the formation of three major trading blocs: Europe, North America and Asia. Specifically at this time the EC started an aggressive program for its enlargement; in North America the US was proposing for the establishment of NAFTA; and, in Asia the expectation was for Japan to lead the East Asia Economic Grouping, the formation of which was proposed by Malaysia (nevertheless, the original concept of this grouping never takes off due to lukewarm response from Japan and outright opposition from the US).
Alan Deardorff and Robert Stern (1994, 18) provided another counter example in which the finding is inconsistent with Krugman. They used different assumptions: trade in homogenous products occurs between countries which own the same technology but have different factor endowments as in Hecksher-Ohlin model. Deardorff and Stern imagined two types of countries, with a pair of countries of each type. When two blocs are formed, each combining a country of each type, all the benefits of a move to free trade are achieved at the two-bloc level. In a more general setting, with equal-probability drawing to form trading blocs, Deardorff and Stern showed that the world welfare increases monotonically as the number of blocs diminishes (with each bloc becoming larger). This finding is in contrast with Krugman’s U-shaped welfare contour depicting the relationship between the number of blocs and world welfare, in which the world welfare is minimized when the number of trading blocs is three.

Eric Bond and Constantinos Syropoulos (1996a, 411-437) introduced an elegant model to examine the relationship between the size of trading blocs and their market power under the existence of comparative advantage. They demonstrated that the effect of an increase in the size of trading blocs over Nash optimum tariffs is highly sensitive to the assumptions made regarding the pattern of endowment. When the share of importables in the bloc endowment is zero (as in Krugman) equilibrium tariffs must increase with an increase in absolute bloc size. In contrast, if the share of importables in the endowment is positive, this result only holds if the elasticity of substitution is sufficiently low. Otherwise, the equilibrium tariffs must decrease with increasing bloc size. They also showed that the world welfare is at minimum when the world has four or more blocs if the elasticity of substitution is low and the share of importables in the endowment bundle is small. If the share of importables in the endowment bundle is sufficiently high, world welfare will be minimized when there are only two trading blocs.
A significant extension to the Krugman’s original model is the incorporation of the role of transport costs. Krugman (1991b, 5-25) was the first to do this, although the issue was later thoroughly taken up by Jeffrey Frankel, Ernesto Stein and Shang-jin Wei in a series of papers. Krugman subdivided the world into continents and observed that if inter-continental trading cost was prohibitively high – thus precluding inter-continental trade – a series of regional blocs, each covering one continent, would produce a first-best outcome equivalent to global free trade. This finding is in contrast with Krugman’s earlier work; that now trading blocs are good. Krugman inferred that even without the formation of regional free trade areas or preferential trading arrangements of any sort, countries trade more with their neighbours than with countries from which they are far apart, in part because of transport costs. Krugman’s conclusion is that, to the extent that trade follows the “natural” lines dictated by proximity, the formation of regional trading blocs is good. Such natural blocs are contrasted with “unnatural blocs”, in which free trade agreements are formed between individual countries on different continents, which are less likely to be welfare-improving.

Frankel, Stein and Wei (1995, 61-95; 1996, chapter 4) and Frankel (1997) undertook research analysing the cases in between the two Krugman’s assumptions by allowing transport costs to be finite but non-zero. They found that, as inter-continental transportation and business costs increase relative to intra-continental ones, regionalism becomes a better policy in welfare terms. For a set of parameters – three continents each with two countries, import tariffs of 30 percent; and zero intra-continental trading cost – they found that if inter-continental cost was above 15 percent of the gross value of export, intra-continental regionalism is welfare-improving. However this result is not very robust. Volker Nitsch (1996b, 26) showed that if intra-continental cost is fixed at just 5 percent in the above case, it produces a different result: regional blocs are welfare-decreasing for all the chosen values of inter-continental costs. Inter-continental
regionalism is always harmful to the world welfare for the models employed by Frankel, Stein and Wei. This result was also challenged by Nitsch (1996a, 355-363) who provided examples of relatively low inter-continental transport costs in which cases “unnatural” integration could be better than “natural” integration.

Frankel, Stein and Wei (1995, 61-95; 1996, chapter 4) also considered PTAs which merely reduce rather than abolish tariffs between partners. In this study the model showed improvement in welfare, essentially because (the formation of) PTAs ensure that the optimal import-sourcing condition is not too badly violated. In this sense Frankel, Stein and Wei argued that a bloc formation is a stepping stone towards multilateral free trade. This argument was disputed by Winters (1999, 14) who claimed that since they did not provide specific mechanism through which the benign path could be followed or even encouraged, their argument does not seem to be a particularly powerful characterization. Winters further argued that merely referring to the partial welfare benefits resulted from a PTA is not sufficient, for one could “equally refer to the (greater) benefits of jumping straight to free trade”.

6.6.3 **Asymmetric Models**

Bond and Syropoulos (1996a, 411-437) examined a situation in which one bloc expands asymmetrically from other blocs of the world, although, this bloc expansion occurs by drawing members symmetrically from each of the other blocs. They showed that the optimal tariff of the expanding bloc becomes arbitrarily large and its internal prices approach the free trade level as the number of countries included in the bloc increases. This happen because the terms of trade benefits (due to increased demand) for the bloc’s comparative advantage goods outweigh the trade diversionary effects, and this result holds even if the enlarged bloc does not increase its tariffs on other countries. They also showed that the expanding bloc can assure itself a welfare level that is
above a free trade by excluding some countries. The welfare level of the expanding bloc would
decrease, however, when the size of its membership reach the point where it includes all countries.

Frankel (1997) also shed some light on this issue. He demonstrated that in a world with
four continents in which all countries initially practice MFN trade policies, a sequential Nash tariff
game leads to regionalism and lower welfare for all. By playing this game, one continent can
improve its welfare by creating a FTA, if the other three maintains their MFN tariffs. The other
three would lose because their terms of trade decline, even if the first continent does not increase
its tariffs. From here a second continent would benefit itself by integrating with neighbouring
countries, assuming unchanged policies elsewhere, and then this game would be played by the
third and the fourth continents. In the end all countries in the four continents are worse off than
under MFN policy.

Junichi Goto and Koichi Hamada (1994, 18; 1997, chapter 4) obtained a similar result to
that of Frankel’s (1997). They found a situation in which one regional trading bloc begat another.
They also showed that once countries A and B combines to form a bloc it pays them to pre-empt C
and D from combining in the same manner by bringing one of the latter into their own bloc. This
game imposes high cost on the left-out country, but the left-out country could do nothing to join
the bloc, thus creating free trade for the world, unless the other three agree.

Hakan Nordstrom (1995, chapter 3) analysed this issue in a more general framework. He
introduced a model quite similar to that of Frankel (1997) – involving differentiated products and
finite transport costs. He started by considering just one bloc in the form of a customs union. The
creation and expansion of the customs union harm excluded countries even at constant external
tariffs; but in mitigation, the excluded countries can always raise their welfare above the level of
free trade by joining the bloc and exploiting further the remaining outsiders. As suggested by Goto
and Hamada as well as Bond and Syropoulos, however, this process would not lead to a global coalition, in which all countries joining the customs union, because existing members will eventually lose from further expansion as the number of outsiders available to be exploited declines. Nordstrom suggested that after about a half of all countries are inside the customs union, further expansion will be vetoed from the inside.

Nordstrom also observed that if the customs union chooses an optimum rather than a constant tariff, it will increase its external tariff as it grows, hitting outsiders harder than in the previous case. In the abscent of retaliation, the optimum size of the union is about 60 percent of the world economies. But, of course, the excluded countries might retaliate against such an aggression. If these countries alter their MFN tariffs they will punish the union as well as each other. However, if they maintain existing tariffs on each other and coordinate their punishment tariffs against the union, they can exercise significant market power. Such a retaliation could reduce the union welfare below what it could achieve at a constant external tariff and no retaliation, provided the members of the union is smaller than 75 percent of all countries. A union of more than 75 percent of all countries would win the tariff war even in the face of coordinated opposition.

Nordstrom also explored inter-bloc issues by introducing a model in which the world is divided into two continents, A and B, and allowing only one bloc to be formed along a “natural” line, similar to the approach taken by Frankel, Stein and Wei (1995). Nordstrom found that a customs union on continent A hurts all excluded countries, and benefits much more heavily countries in A, because they are a union of natural trading partners, than of countries in B since the latter are not. The incentives are, therefore, for both sets of countries to seek integration. However, as in the previous case, the union in A may close its doors, although nothing can stop another customs union to be formed in B. If there is a prospect, then after the formation of the blocs on
both continents, an inter-bloc negotiation will take place, each bloc seems likely to include all the
countries on their continents in efforts to maximize their power for the second round of
negotiations. Provided the continents are not very different in size, the subsequent negotiation of
inter-bloc free trade would be mutually advantageous.

6.6.4 Negotiated-Tariff Models

An early effort to incorporate trade agreements into the analysis of regionalism was
undertaken by Bond and Syropoulos (1996b, 118-141). Using the same basic model as Bond and
Syropoulous (1996a), they examined trigger strategies in which initially there exists an inter-bloc
free trade agreement supported by the threat of trade wars if any party violate the agreement. They
then examined the critical rate of discount perceived to be needed to make the blocs indifferent
between defecting and continuing to cooperate – the critical discount rate is important because it
balances current benefits of defection against future costs of trade wars. If the current discount rate
is above this perceived-critical value, blocs defect from free trade. Similarly, if integration
(moving from smaller to larger blocs) reduces the critical discount rate, it will make cooperation
less likely to be maintained.

Bond and Syropoulos argued that for the larger blocs, two countervailing forces are at
work: on the one hand the incentive to deviate is greater the larger are the blocs, but on the other,
the welfare loss from the resulting trade wars is also high. However, they found that the former
effect always dominates, making it more difficult to maintain free trade in blocs-ridden world.
They also found that for any given discount rate the minimum supportable cooperative tariff rises
as bloc size increases, indicating that integration increases the pressures for protectionism.

Based on similar principles, Kyle Bagwell and Robert Staiger analysed multilateral tariff
cooperation during the formation of customs unions and free trade areas in two separate papers. In
the first paper, they (1997b, 291-319) argued that the trade diverting effect of free trade agreements leads to higher multilateral tariffs during the transition period over which such agreements are negotiated and implemented. During the period of transition, trade volume between member and non-member countries is still large as internal tariffs between member countries have not yet been eliminated. Yet members and non-members recognize that they will trade less with one another in the future, once the FTA agreement is fully implemented. Thus, during the transition period the incentive to deviate unilaterally from MFN tariffs among members is large because the actual discount rate is higher than the discounted future value of maintaining cooperative relationship. In order to ensure some measure of cooperation between member and non-member countries, it is then necessary to raise the transition-period tariffs between the two sets of countries, reducing the volume of their trade and the associated incentive to defect.

In the second paper Bagwell and Staiger (1997a, 91-123) considered tariff cooperation during the formation of customs unions. They argued that while the formation of both customs unions and free trade areas bring about a similar trade diversion effect, the former has another distinct by product: the market power effect. In their model they demonstrated that the emergence of customs unions will be associated with temporarily reduced multilateral trade tensions between member and non-members, and resulted in a temporary “honeymoon” for liberal multilateral trade policies. During this “honeymoon” period, non-members are less apt to take a confrontational stance over trade disputes with member countries of the emerging customs union as the risk of a possible trade war is high. Subsequently their results suggest, however, that the harmony between customs unions and multilateral liberalization is temporary; eventually, as the market power effect of the emerging customs union being felt, a less favourable balance between current and expected future conditions emerges, therefore liberal multilateral trade policies cannot be sustained.
Bond, Syropoulos and Winters (1996) used the Bond and Syropoulos (1996b) framework to examine explicitly the relationship of deepening EU integration in relation to trade with other trading partners. They considered a model involving N countries, split initially into one large country (the US) and two smaller ones (France and Germany). While the latter have already combined into the EU bloc with common external tariffs, there also exists a self-sustaining trade agreement between the EU and the US. They then allowed France and Germany to integrate more deeply by reducing trade frictions between them and asked whether tariff cuts within the union affect the incentive-compatibility agreement with the outside country (the US). They found that the “Kemp-Wan” tariff reduction – the reduction in the union’s external tariffs that just leave the outside country indifferent to the union’s internal tariff reduction – becomes a useful benchmark. For the outside country, the reduction in the union’s internal tariffs reduces the attractiveness of the original trade agreement because its trade within the union is now reduced. The Kemp-Wan reduction in the union’s external tariff, however, restores incentive-compatibility for the outside country because the tariff reduction brings its welfare back to the initial level. For the union, however, a Kemp-Wan adjustment generates two conflicting forces.

First, the customs union becomes more attractive to the union members because the expanded volume of intra-union trade raises the welfare of member countries. This suggests that the union could “live with” a lower tariff imposed on the outside country. On the other hand, deviating from the trade agreement with the outside country also becomes more attractive because the payoff rises. This indicates that from the perspective of the union members, the external tariffs need to rise in order to ensure the union maintains the agreement with outside country because a higher external tariff makes sticking to the agreement more attractive. They found that the first effect almost always dominates the second, therefore, a fall in the union’s external tariffs help maintaining incentive-compatibility of the original agreement. Essentially, the two conflicting
forces exerting on the union offset each other if the share of the union expenditure on the union goods is not influenced by the level of external tariffs. In such a case, and since the Kemp-Wan tariff reduction is incentive-compatibility for both the union and the outside country, internal liberalization plus a Kemp-Wan reduction will maintain the sustainability of the agreement.

6.6.5 Political Economy Models

In contrast to the models discussed previously which assume that the decisions to form a trade bloc as well as the choice of external tariffs are exogenous, political economy models assume that those decisions are endogenously determined (Panagariya 2000, 312). And according to Winters (1999, 23) many of political economy models are essentially derived from the initial works of Gene Grossman and Elhanan Helpman. Grossman and Helpman (1995, 667-690) examined the conditions under which a free trade agreement might emerge as an equilibrium outcome of negotiations between politically like-minded governments. They imagined those governments to make decisions in response to political pressures from industry’s interests and at the same time pay some attention to the plight of average voters. In analysing the rivalry between competing interests in a single country, they used an analytical framework which was originally developed in Grossman and Helpman (1994, 833-850). This framework emphasizes the interaction between lobby groups representing industry special interests and (an incumbent) government. In the model, lobby groups offer policy-contingent campaign contributions to politicians, who make decisions that serve their own political objectives. In this setting, the country’s policy stance reflects the relative political power of its organized special interests and also the extent of the government’s concern for the plight of average voters.

They argued that if a FTA must completely liberalize trade among member countries, a particular government might endorse such an agreement under two types of situations. The first
arises when the FTA will generate substantial welfare gains for the average voters while the affected interest groups fail to coordinate their efforts to defeat the accord. The second arises when the agreement will create profit gains for actual or potential exporters in excess of the losses to be suffered by import-competing industries plus the political cost of any welfare loss that might be inflicted on the average voters.

They found that an agreement to form a FTA is most likely to occur when there is a balance in the potential trade between member countries and when the FTA affords enhanced protection (due to trade diversion) rather than reduced protection (due to trade creation) to most sectors. With enhanced protection, an exporting industry captures the benefits of the high domestic prices in the partner-importing country. With reduced protection, an import-competing industry sees its domestic prices fall as a result of the duty-free imports from partners. Whereas reduced protection may involve some trade creation, enhanced protection gives rise only to trade diversion. Thus, the conditions that improve the viability of a potential FTA also raise the likelihood that the agreement will reduce aggregate social welfare.

Grossman and Helpman (1994, 833-850) also showed that the allowance for the exclusion of certain sectors from a FTA agreement can make a previously infeasible FTA feasible. More recently, Rupa Duttagupta (2000) incorporated trade of intermediate inputs into the Grossman-Helpman model and addressed the role of the rules of origin in a general equilibrium model. She assumed that one partner-country exports an input to a partner country and imports from that country a final good using the input. She showed that the introduction of the rules of origin in this setting can make acceptable a FTA that is otherwise rejected, though, under some circumstances, the reverse may also happen. The former possibility arises because the country that exports the input and votes against the FTA in the absence of the rules of origin switches its vote in the
presence of such rules. As regards to the welfare of the bloc, the rules of origin can create distortion effects in which the FTA becomes welfare inferior relative to the status quo.

Pravin Krishna (1998, 227-251) employed a one-sector, partial-equilibrium, imperfect competition model to analyse a decision to form a FTA. She used a Cournot oligopoly model in which firms belonging to three countries compete in one another’s market. She assumed that the number of firms and market size are asymmetric across countries. Also, producers are given a decisive role in determining policy outcomes via an assumption that governments based their policy decisions on the home firms’ profits. Initially each country imposes non discriminatory tariffs on imports from each other and the tariffs are the same across all countries. Two countries, A and B, must decide whether or not to form a FTA which, given equal initial tariffs, is equivalent to a customs union. She found that for the FTA to be accepted by both governments, profits of home firms must rise in each potential member. She also found that the greater the degree of trade diversion, the more likely that the FTA will be accepted.

A number of researchers explored the question of how a decision to join a PTA by a country impacts its choice on preferred external tariffs. In raising this question, Bhagwati (1993, 22-51) expressed a concern that such a decision may result in a rise in the extra-bloc trade barriers either via an increase in tariffs or more vigorous implementation of anti-dumping measures against outside countries. This may turn even an initially trade-creating bloc into a trade-diverting bloc. He argued that within a traditional three-country framework, increased imports from a PTA partner that threaten the survival of another member country’s firms will lead the latter to seek higher tariffs on imports from non-member countries.

Following up this issue, Panagariya and Ronald Findlay (1996, 265-287) used a model in which industry-specific lobbies play a decisive role in the determination of tariffs. Specifically,
they considered three-goods, Meade-Lipsey model in which a country imports two goods and exports the remaining one. Each good is produced using one specific-factor and labour. One of its imports comes from a partner and the other from an outside country. They found that tariffs in each sector are determined by the amount of labours employed by that sector.

Olivier Cadot, Jaime De Melo and Marcelo Olarreaga (1999, 635-657) also used the Meade-Lipsey, three-goods model in which tariffs are determined endogenously via the Grossman-Helpman (1995) political-economy process. They found that in FTA arrangements that exclude the rules of origin, whereby goods destined to a high-tariff member market can be imported through a low-tariff member, competition for tariff revenue may lead to competitive reductions in external tariffs until they are removed completely. In a CU setting, by contrast, lobbies may cooperate on a union-wide basis and win in their quest for increased protection against outside countries.

6.7 Conclusion

The issue of whether regionalism is good or bad for the multilateral trading system was extensively debated during the negotiations for the formation of the GATT. During these negotiations, the main tussle was between the US, which argued that the world should only embrace multilateralism and the UK, which at that time already had arrangements giving preferential treatments to its imperial countries. At the end of the negotiations a compromise was achieved, not only recognizing the prevailing preferential arrangements but also allowing for the formation of future preferential trading arrangements, albeit subject to a number of conditions.

Findings from theoretical research addressing the issue of regionalism versus multilateralism, especially on the question of whether regionalism is good or bad for multilateralism, are still inconclusive. This is so because researchers can build models supporting
either conclusion. According to Winters (1999, 7), these models are highly abstract that they can only be considered as “parables rather than the sources of testable predictions”.

CHAPTER SEVEN

EMPIRICAL RESEARCH ON THE ECONOMIC EFFECTS OF REGIONALISM

7.1 Overview

This chapter examines empirical research on the economic effects of regionalism. It begins by analysing the origin of the theory on regionalism, which is essentially due to Jacob Viner (1950) seminal contribution in expounding the possibilities of trade creation and trade diversion brought about through the formation of customs unions. For clarity and simplicity, this chapter divides empirical studies on regionalism into four categories: counterfactual studies based on partial equilibrium analysis; counterfactual studies based general equilibrium analysis; studies based on gravity models; and ex-post studies of regionalism. Besides analysing the results of previous empirical studies, this chapter also examines the methodological underpinnings of these four categories of studies, emphasizing the strengths and shortcomings of each of them.

7.2 The Origin of the Theory on Regionalism

Many empirical studies have been conducted over the years to examine the economic effects of regional trading arrangements (RTAs). These studies started soon after Viner’s (1950) seminal contribution in theorizing the implications of trade creation and trade diversion due to the formation of customs unions. According to Bela Balassa (1967, 1) the earliest empirical analyses examining the economic effects of customs unions were undertaken by P. J. Verdoorn (1954), L. H. Janssen (1961) and L. B. Krause (1963).41 Originally under Viner’s framework, trade creation

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41 A full survey of empirical research on the economic effects of regionalism is beyond the scope of this chapter. Instead, this chapter analyses only the findings of prominent empirical studies as well as examines their methodological underpinnings.
is associated with the expansion of trade between partner countries in accordance with comparative advantage. He (1950, 43) expounded the case of trade creation as follows:

There will be commodities, however, which one of the members of the customs union will now newly import from the other but which it formerly did not import at all because the price of the protected domestic product was lower than the price at any foreign source plus the duty. This shift in the locus of production as between the two countries is a shift from a high-cost to a lower cost point …

Whereas he argued that trade diversion is associated with the expansion of trade between member countries as a result of preferential treatments given to imports that come from customs union members:

There will be other commodities which one of the members of the customs union will now newly import from the other whereas before the customs union it imported them from a third country, because that was the cheapest possible source of supply even after the payment of duty. The shift in the locus of production is now as between a low-cost third country and the other, high-cost, member country.

Although the interest of research on regionalism is argued to be triggered by these two Viner’s expositions, actual empirical studies have not limited only to the analyses of trade creation and trade diversion as they have gone far beyond validating these propositions. Many studies have been undertaken to examine other economic effects of regionalism such as the effects of regionalism on prices and competition among firms, trade, growth, resource allocation as well as gains of member vis-à-vis non member countries. Even in assessing trade creation and trade diversion, the original Viner concept of “the shift in the locus of production” is not directly examined due to various difficulties. Instead, economists in their empirical examination measure the shift in the “pattern”, “direction” and “volume” of trade flows between members and non members, and these variables are taken as indicators of trade creation and trade diversion.
From a broad perspective, empirical studies on the economic effects of a RTA can be grouped into two main categories: *ex ante* or *ex post*, depending on the character of a study whether one attempts to evaluate possible repercussions in advance or after a particular RTA was established. For clarity and simplicity, however, this study divides empirical studies of RTAs into four categories, taking methodological approaches as the defining factor, since generally the use of different methodologies produces different results. Furthermore, these studies employed different key assumptions, model structures, representations of economies and approaches to data analysis, which in part influence their results.\(^{42}\)

The first and second groups of studies (of the four categories) are both model-based counterfactual analyses. The first group is counterfactual studies based on partial equilibrium analysis while the second group based on general equilibrium framework. Both groups of studies involve either perfectly or imperfectly competitive markets and also incorporate various possible scale economies and market structures into the analyses through a number of ways. The third group is the studies of RTAs which use gravity model, originally developed by Jan Tinbergen (1962) with the purpose of analysing determinants of bilateral trade flows between trading partners. Finally, and following Augusto de la Torre and Margaret Kelly (1992), the fourth group is called *ex post* studies of RTAs.

\(^{42}\) Categorizing empirical studies on the economic effects of regionalism into these four groups is entirely the view of the author. Nonetheless, many other writers have come up with different types of categorization; see for example T.N. Srinivasan, John Whalley and Ian Wooton (1993).
7.3 Partial Equilibrium Counterfactual Analyses

7.3.1 Methodological Underpinnings

Partial equilibrium counterfactual analysis (PECA) was the earliest technique employed by researchers to evaluate the economic effects of RTAs. In general, studies of this group involve simulation exercises based on specific models, undertaken before the official formation or extension of a particular RTA and they are designed based on characteristics of prominent trade theories (Srinivasan, Whalley, and Wooton 1993, 52-79). Parameter values for production, preferences and trade barriers are introduced into the models in an effort to perform *ex ante* counterfactual analyses assessing potential effects of a trading bloc. The application of this technique of analysis is not only limited to the examination of RTAs, since it can also be used to perform simulation exercises of policy experiments of other trading arrangements such as bilateral free trade agreements.

The use of partial equilibrium analysis is, however, subject to limitations. According to Micheal Gasiorek, Alasdair Smith and Anthony Venables (1992, 35) a partial equilibrium approach to study the economic effects of an economic integration is incomplete for two reasons. First, partial equilibrium analysis assumes that resources used by an industry under investigation are available at prices equal to social opportunity cost. If one imperfectly competitive industry’s expansion is only possible at the expense of another’s contraction (due to overall resource constraint), then this assumption is no longer valid, therefore the result of a study may overestimate the welfare gains associated with any policy experiments. Second, partial equilibrium studies assume that inputs supply curves are horizontal, so that resources are available to an industry at constant prices. If inputs supply curves to each industry are in fact upward sloping, partial equilibrium studies again overestimate the effects of the policy experiments.
7.3.2 Empirical Research Based on PECA

Verdoorn (1954) study was an early example of partial equilibrium counterfactual analysis examining the effects of an intra-OECD trade arrangement on members as well as on the rest of the world (ROW). In this study he used a static partial equilibrium analysis under a perfectly competitive market structure. Key assumptions he employed were that \(-0.5\) consumption elasticity of substitution between imports and domestic production and \(-2\) between different countries’ exports. Under his framework, import tariffs on manufactures are eliminated among 10 OECD countries. A common external tariff is then imposed on non members after the formation of the grouping. Under the situation of unchanged exchange rates, his simulation showed that total world export increased by US$400 million (2.6 percent of 1952 total world export), meanwhile intra-bloc export increased much larger at US$1 billion (19 percent of 1952 intra-bloc exports). He also showed substantial trade diversion; of the US$1 billion increase in intra-OECD export, US$600 million (6 percent of 1952 total world export) is diverted (into the group) from the rest of the world.

Another partial equilibrium study was performed by Harry Johnson (1958), assessing the potential benefits associated with the UK’s entry into the EEC. He calculated potential welfare gains to the UK due to lower tariffs facing UK exporters as well as lower prices received by its importers. Like Verdoorn, this study also examined the impact on manufactured products, whereby tariffs between the UK and EEC are eliminated. A common external tariff is also imposed on outside countries after the bloc formation. Johnson found that trade gains accrued to the UK were between £62-£192 million for exports and £31 million for imports. At the minimum, welfare gain to the UK was roughly 1 percent of its Gross National Products (GNP), which would occur in 1970.
Employing data used previously by Verdoorn (1954), Tibor Scitovsky (1958) undertook a partial equilibrium study examining gains from the formation of the EEC under the situation of changing exchange rates. In his model, different marginal costs between countries in a particular industry are taken to be due to a difference in import tariffs in an importing country. The gain from integration is thus in terms of resource gains due to the equalization of marginal costs. Using Verdoorn data, he assumed that when trade imbalances occur because of the formation of the EEC, exchange rates will appreciate to bring the trade back into a balance as before its formation. Scitovsky found that the EEC gained US$74 million, the same amount that the ROW loss. This is a gain from increased specialization and represented only 0.05 percent of European GNP. In addition, the EEC countries also gained US$465 million from a favourable terms-of-trade improvement.

Smith and Venables (1988) used a static partial equilibrium model to simulate various possible scenarios of the effects of the EC-1992 single market program. These include the range of products available to consumers, the level of prices, and welfare gains. In order to capture these effects they employed a model of trade under imperfect competition, originally developed by Krugman (1979). This means that firms operate under increasing return to scale (IRS) and produce differentiated goods, while market in equilibrium involves intra-industry trade. This study considered ten industry sectors, each of which has firms that use IRS technology. The rest of the economy is, however, modelled as perfectly competitive industries with constant return to scale technology in each industry. Trading countries (and regions) included in the study were France, Germany, Italy, the UK, the rest of the EC and ROW.

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43 As a result of further integration of EEC members, originally formed in 1957, the name of this economic grouping was changed twice; first to European Community (EC) in 1988 and later to European Union (EU) in 1993.
Following a method employed by past studies, they chose sector-by-sector trade barrier reductions in the order of 2.5 percent of the base value of intra-EC trade. They analysed segmented and integrated markets when barriers are removed under Cournot and Bertrand markets, in which the number of firms is either fixed (Cournot) or varied (Bertrand). Under Cournot market, the equilibrium of demand and supply is determined only by changes in outputs as prices are held constant. In contrast, under Bertrand outputs are held constant but prices are allowed to change. They found that under Cournot market, the welfare effects caused by the removal of barriers for segmented markets range from – 0.01 percent of consumption for cement, lime and plaster to 1.3 percent for office machinery. The effects were higher for integrated markets, ranging from 0.2 percent for cement, lime and plaster to 5.6 percent for artificial and synthetic fibres. Under Bertrand market, welfare effects for segmented markets were insignificantly low, whereas for integrated markets the results were higher in the range of 0.04 to 1.2 percent for the 10 industry sectors.

### 7.4 General Equilibrium Counterfactual Analyses (GECA)

#### 7.4.1 Methodological Underpinnings

Starting from the middle of the 1980s, economists, based on the general equilibrium theory of international trade, have incorporated general equilibrium conditions into the analysis of RTAs by introducing a variety of Computable General Equilibrium (CGE) models. In addition to evaluating *ex ante*, these models, to a certain degree, can also evaluate *ex post* effects of any trading arrangements. This technique of analysis has also a wider scope of applications in comparison to partial equilibrium, since it can examine any economic variables such as output, employment, consumption, trade, price and welfare.
Over the years CGE models have extensively evolved and may be grouped into three main generational structures (Lloyd and MacLaren 2004, 445-468). The first generation CGE models incorporate perfect competition and constant returns to scale. However, this group of models differs from the general equilibrium models of trade theory in one important aspect, although they are based on the same assumptions. While the general equilibrium trade-theory models assume perfect competition and homogenous goods, CGE models assume that goods, including intermediate inputs, are differentiated by their origin, therefore, for any goods, imports from different sources are imperfect substitutes.44

With goods differentiated by sources, the existence of two-way bilateral trade flows (of intra-industry goods) is possible because the goods are imperfect substitution. This departs markedly from that of general equilibrium trade-theory models, in which their assumptions impose a condition that trade flows can only be one way. And because two-way intra-industry trade constitutes an important component in international trade data, it is necessary that models used to evaluate RTAs can take account of this reality.

The second generation CGE models incorporate imperfect competition and economies of scale. Imperfect competition is often introduced through monopolistic competition using Dixit and Stiglitz (1977) utility function, while economies of scale is incorporated by assuming that total cost function contains a fixed and a constant marginal costs. Meanwhile the latest, third generation CGE models attempt to capture inter-temporal effects of investment and productivity growth.

In general, a CGE model constructed to examine a particular RTA contains multilevel specification structures, thus requiring a huge amount of information, which could only be analyzed through the use of a specialized computer software program (e.g. G-Cubed Model). A

44 This condition is often referred to as the Armington assumption as it was first expounded by P. S. Armington in his (1969) article, *A Theory of Demand for Products Distinguished by Place of Production*. 
typical CGE model used to evaluate a RTA generally requires the following components: (1) a
database of bilateral trade flows of commodities between countries; (2) a database containing
transportation costs and information on protection (e.g. tariffs or tariff equivalents); (3) an input-
output table for each country, which link sectors within industries and across countries; and (4) a
set of behavioral equations based on a specific economic theory containing specific assumptions
about the behaviors of individual firms and consumers (Lloyd and MacLaren 2004, 450-451).

In addition, a CGE model also requires a set of accounting identities. These identities track
various flows of income and expenditure in an economy. These include: (1) the flow of household
expenditures to private consumption, to governments, to imports and to savings; (2) the flow of
income to households from wages and rents; (3) the flow of income to government from taxes on
domestic transactions and on traded goods (and inputs); (4) the flow of income to firms from
selling goods and services to consumers, governments, domestic firms as well as exports; and (5)
the flow of expenditure made by firms to households as the providers of primary factors, domestic
firms as the suppliers of intermediate inputs and to the importation of goods.

As regard to the behavioral equations of firms, they are normally based on the following
economic underpinnings. Each firm is assumed to choose its profit-maximizing level of outputs for
purposes of determining the least-combination of domestic factors of production and intermediate
inputs from both domestic and import sources (to produce a good). From this optimization
problem, a demand function for the factors of production and intermediate inputs can be derived,
as also the supply function of the good. It is usual to represent these functions through constant
elasticity. The demand side of the economy is represented by households maximizing utility across
private consumption, government expenditure and savings. From these assumptions, demand
equations can be derived for domestically produced and imported (final) goods.
The policy simulation results generated by a CGE model are derived from calibrating the elasticities in the model to the data in the base period (i.e. quantities, prices and trade policy settings) and from imposing a policy shock – for example, a change in tariff rates. The differences in the values of the variables (between simulated and based period) can then be taken as the effects due to the policy shock.

### 7.4.2 Caveats on Using CGE Models

Schiff and Winters (2003) argued that although CGE models are one of the most popular techniques employed to evaluate the economic effects of RTAs, they have a number limitations that need to be recognized when interpreting their results. First, the results obtained from simulated policy shocks are just simulations and not unconditional predictions. Second, although CGE models measure any chosen variables quantitatively, they are not empirically estimated; therefore, according to Lloyd and MacLaren (2004, 453) the results obtained from CGE models are essentially “theory with numbers”. Third, simulation results may be sensitive to the assumed values of elasticities and to the way in which changes in a particular trade policy are incorporated. Fourth, although it is easy to simulate changes in tariff rates, it is often difficult to measure tariff equivalents of non tariff barriers. It is not only that measuring barriers to trade in services difficult, but in many situations none of this information is available. Moreover, the rules of origin, which are the necessary component of RTAs, are neither incorporated in the design of the policy simulations, nor are the costs of the rules of origin included in the welfare calculations. Hence, not all aspects of trade liberalization in goods and services brought about by the formation of an RTA can be simulated and, therefore, the results can only be treated as a guide.

The fifth caveat concerns the Armington assumption. This assumption is necessary in order to capture intra-industry trade, therefore it is useful, because it reduces the number of parameters
to be estimated. However, its usage comes at a cost. This assumption takes it that the elasticity of substitution is constant for a particular good (or intermediate input) and it is the same across all sources of imports. Moreover, the use of the Armington assumption together with constant elasticity of substitution (CES) introduces a bias result of CGE models. The bias occurs because no matter how high the price of an import from a non member country rises, the quantity imported, while approaching zero, never reaches it. This problem does not exist in a partial equilibrium model because an import from non member country will become zero if its tariff-inclusive price exceeds the member country’s price. CGE models, therefore, produce a bias result against finding trade diversion and understate a possible welfare loss to non member countries. The second consequence over the use of the Armington assumption together with CES functions is that the terms of trade effects resulting from the change of a trade policy can be implausibly large. Therefore, a welfare loss due to deteriorating terms of trade (when tariffs are lowered) is bias upwards. Taking these two partially offsetting effects together, it is uncertain what would be the sign of the net effect to members as well as to non member countries.

The sixth caveat is that in *ex ante* evaluation, it is assumed that there is a total removal of preferential tariffs. In practice, some politically sensitive sectors may be excluded from an agreement altogether, hence causing a bias in the evaluation. However, even if this bias is avoided through correctly specifying the detail of the agreement with respect to trade liberalization in goods, there remain the omission of items involving beyond-the-boarder deregulation, such as intellectual property right and domestic content in mass media, which means that the results of CGE models provide only a partial picture of the effects of a RTA.
7.4.3 Empirical Investigation Based on GECA

A study by Marcus Miller and John Spencer (1977, 71-93) was one of the earliest attempts to incorporate numerical, general equilibrium analysis (a generation one CGE model) of a RTA. They examined the effects of UK entry into the EEC which involves not only lowering trade barriers with the EEC-6 but also the elimination of preferences given by the UK to Commonwealth countries (primarily Australia and New Zealand) as well as its resulting effects on the rest of the world. They used Armington assumption with two goods per country, constant return to scale and perfect competition. They examined two scenarios for the UK joining the EEC, both involving the elimination of mutual tariffs and an adoption by the UK of the EEC common external tariffs. The first scenario requires the UK to transfer 90 percent of its tariff revenue to the EEC, while the second does not. They found that the UK obtained a small terms-of-trade gain on its entry. The price of the UK agriculture rose by 22 percent as compared to manufactures. Under the no-transfer scenario, the UK increased both exports and imports of manufactured goods with the EEC in the amount of 50 percent (in both scenarios). In addition, the UK increased its agricultural imports from the EEC by 72 percent and decreased its imports from the Commonwealth countries by 0.8 percent.

R. G. Harris and David Cox (1984, 45-47) used a second generation CGE model to examine the effects of the US–Canada FTA. They incorporated a non competitive market structure and economies of scale in their study and examined various possible scenarios of trade liberalization arrangements: (1) Unilateral free trade (UFT) where Canada set all its tariffs to zero; (2) Multilateral free trade (MFT) where Canada and the rest of the world set their tariffs to zero; (3) Bilateral free trade (BFT) with the US where tariffs of both countries are set to zero; and (4) Sectoral free trade (SFT) between Canada and the US in selective industries: textiles, steel,
agriculture machinery, urban transport equipment and chemical. They chose nine industries characterized by constant return to scale (CRS) while 20 others characterized by increasing return to scale (IRS) and used the Armington assumption. The IRS firms face fixed and variable costs per unit of output. While Canada is allowed to affect its export prices, it takes import prices as given. They found that Canada enjoyed welfare gains of 4.0, 9.0, 9.0 and 1.5 percent of its Gross Domestic Products (GDP), respectively for scenarios 1, 2, 3 and 4.\(^45\) In addition, Canadian trade volumes with the world respectively increased by 55, 90, 88 and 15 percent. As regard to trade with the US, Canadian trade volume increased by 99 percent and 14 percent under BFT and SFT. Finally, real wages in Canada rose by 10, 25, 28 and 6 percent under UFT, MFT, BFT and SFT.

Bob Hamilton and John Whalley (1985, 446-455) used a multi-countries global general equilibrium model, somewhat similar to Miller and Spencer but with larger dimensionality, to analyse a variety of potential RTAs. They examined the following potential FTAs: US–EEC, US–Japan, US–Canada, US–Other Developed Countries, US–NICs, and US–LDCs. In addition, they also considered (hypothetical) regional free trade areas involving EEC–Japan, Northern FTA (involving the US, EEC, Japan, Canada and other developed countries) and Southern FTA (involving NIC and LDC countries). They employed Armington assumption in addition to the assumptions of constant returns to scale and perfect competition (i.e. a generation one CGE model). They found that in all cases that involve the US (in FTAs), the country always gained. Almost all the left-out countries lost, with the greatest welfare loss experienced by LDC and NIC countries. As for the three regional FTAs, they obtained results showing that EEC–Japan FTA produced small welfare effects; the EEC countries and Japan recorded only small gains (0.8 billion and 1.0 billion in 1977 price respectively), while the left-out countries also recorded small losses.

\(^{45}\) Harris and Cox (1984) and latter economists used GDP as a variable in the place of GNP which was popular previously. Apparently, this is due to difficulties in finding information about net factor payments accrued to a country which need to be added to the GDP figure in order to derive GNP.
The result for Northern FTA showed greater welfare effects with huge gained for members and substantial losses for non members. The results for Southern FTA were less clear cut; even among members, only LDC countries gained while NIC countries lost and non members recorded small loss.

Harrison, Rutherford and Wooton (1989, 288-294) used a somewhat similar model as of Hamilton and Whalley (1985) to examine the effects that might occur if member countries left the EC. The model incorporated six tradable goods and eleven countries. They employed a static general equilibrium model, used the Armington assumption and firms are characterized by constant returns to scale and perfect competition (i.e. a generation one CGE model). They assumed that trade barriers (tariffs and non tariffs) are equivalent to 40 percent between non members and 20 percent between members. The examined two possible scenarios: (1) eight cases of various countries leaving the EC (with Common Agriculture Policy (CAP) remaining in place); and (2) eight cases of each country leaving the EC (with CAP being eliminated). They found that in both scenarios, all the EC countries recorded welfare reductions on leaving the EC. The US (a non EC member), however, recorded a small welfare gain in all cases. The highest loss was for Ireland (8 percent of GDP) and the smallest losses were for France and Italy (both at 0.9 percent of GDP).

Gasiorek, Smith and Venables (1992, 35-61) employed a generation two CGE model to estimate gains from lowering non-tariff barriers and the integration of the EC. They examined eight countries (and regions), of which seven are France, Germany, Italy, the UK, other EC North (Benelux and Denmark), Greek and Ireland, and Iberia (Spain and Portugal), and the eighth country represents the rest of the world (ROW). They identified 14 IRS and 1 CRS sectors. The factors of production comprise of labour (with four types of skills), capital and intermediate goods. There is a single representative consumer and firms are symmetric in each country and industry.
They examined four situations: segmented and integrated markets, each in the short and long run. Market behaviour follows Cornout conditions. The number of firms is fixed in the short run but vary in the long run. They found that under segmented market welfare gains were small for all countries, but increase slightly from short to long run. Greek/ Ireland recorded the highest welfare gains, an increase of 1.1 percent of GDP in the short run, but increased further in the long run to 1.4 percent. Welfare gains for members were higher in the integrated market for both short and long run as compared to segmented markets.

Jan Haaland and Victor Norman (1992, 67-88) used a generation two CGE model to investigate the effects of the EC integration on the EC and EFTA countries, as well as on Japan and the US. They used a model similar to Gasiorek, Smith and Venables (1992). They considered 11 IRS and 1 CRS tradable goods and 1 CRS non tradable good for each regions or countries. The factors of production are skilled and unskilled labours, capital and intermediate goods. They assumed that only one representative agent in each region. The EC and EFTA each consists of 6 separate, but identical, countries and submarkets. Firms are assumed to be symmetric in each industry within a region. They performed four experiments: (1) trade costs in segmented EC markets were reduced by 2.5 percent of the initial value of the EC trade, with initial trade costs assumed to be 10 percent within the EC and EFTA and 20 percent between Europe, Japan and the US; (2) trade costs were reduced and the EC markets were integrated; (3) trade costs in Europe (including EFTA) were reduced, as in the first scenario; and (4) Same as scenario 2, except that now it encompassed all Western Europe. They found that for scenario (1), the EC gained a 1 percent increase in welfare, while EFTA, the US and Japan recorded declining welfares of 0.3, 0.02 and 0.02 percent respectively. For scenario (2), EC experienced welfare gains of 1.9 percent but welfare fell in EFTA, US and Japan by 0.4, 0.4 and 0.6 percent respectively. For scenario (3)
and (4), EFTA experienced positive welfare gains while the EC gains in welfare were smaller than in scenario (1) and (2).

Robert Scollay and John Gilbert (2001) used a CGE model (version 4 of the Global Trade Analysis Project (GTAP) database) to run a comprehensive set of trade liberalization experiments for the Asia-Pacific region. These experiments included cases of various liberalization arrangements: bilateral, plurilateral, hub-and-spokes and global (multilateral). For each experiment they calculated changes in welfare (as percentage of based-period GDP) for individual APEC countries, the EU and for all non member countries of these possible RTAs as an aggregate.

In the case of (potential) Japan–South Korea–China plurilateral RTA, all three countries gained: 0.25 percent, 0.8 percent and 2.09 percent respectively. However, most APEC countries in South East Asia countries lost (for example Singapore lost - 0.87 percent) due to this plurilateral arrangement. The members of this plurilateral RTA gained 0.5 percent in aggregate, whereas the aggregate of non member countries’ loss was – 0.03 percent. They considered ASEAN + 3 (China, Japan and South Korea) as a hub-and-spokes arrangement. For this specific case, all +3 countries gained individually (Japan by 0.34 percent, South Korea by 1.18 percent and China by 1.96 percent), and collectively they gained 0.64 percent, whereas the aggregate of non members loss was - 0.06 percent.

Using the Michigan model of world trade (a generation two CGE model) with version 4 of the GTAP database, Brown, Deardorff and Stern (2003, 803-828) also simulated the ASEAN + 3 RTA. In this study they used (a future) 2005 as the base year, the year in which all post-Uruguay Round liberalization is supposed to be completed. They found that if all members were to eliminate all tariffs on agriculture and manufacturing products and remove barriers to trade in services, then there would be the following welfare gains: Japan would gain 2.62 percent of its
base period GDP, Singapore 10.66 percent, South Korea 4.21 percent and China 1.95 percent. The magnitudes of these gains and the rankings of these countries by the size of the gains are quite different from those obtained by Scollay and Gilbert (2001) because both studies used different underlying economic theories for the design of simulation experiments.

This study also found that if APEC countries were to liberalize on an MFN basis, most (but not all) member countries would gain with the group experiencing aggregate welfare gains of 0.56 percent, while non member countries would also gain (0.05 percent). However, if APEC were to liberalize on a preferential basis, again, most members would gain, with APEC countries as a group gaining a slightly higher (0.58 percent), whereas the aggregate welfare loss of non APEC countries would also be higher (-0.12 percent).

The findings of this study showed a couple of interesting features. First, global multilateral trade liberalization generates the greatest gains to the whole world (0.56 percent). Second, if the members of APEC liberalize based on an “open regionalism” MFN basis, then the gains to the world economy are greater (0.34 percent) than if the liberalization is on preferential basis (0.27 percent).46 Since the gains to APEC members are slightly higher for preferential than MFN liberalization (0.58 percent as against 0.56 percent), therefore, there would be a possible tension between “open regionalism” and a preferential trading arrangement because the latter leads to greater gains for members, and this occurs at the expense of non member countries.

46 The terms “open regionalism” used here follows the definition of Shang-Jin Wei and Jeffrey Frankel (1995). They relate this terms to a situation in which members of a RTA collectively lower their external barriers on goods from non members in addition to the reduction of barriers among member countries, although the degree of liberalization against non members need not be as high as that between members.
7.5 Regionalism Studies Based on Gravity Models

7.5.1 Methodological and Theoretical Underpinnings

The use of gravity models in empirical analysis of bilateral trade flows was first employed by Tinbergen (1962) and then by Pentti Poyhonen (1963). In its most basic form, a gravity model of bilateral trade expounds that trade between country $i$ and country $j$ is proportional to the product of GDP$_i$ and GDP$_j$ and inversely related to the distance between them. As shown by Hans Linnemann (1966), other explanatory variables such as “psychic costs” could justifiably be added to the model. In recent years economists have developed a full gravity equation by adding other explanatory variables including the size of the partner countries (proxied by GDP per capita or land area) as well as dummy variables representing qualitative factors which are claimed to have a direct influence on the flow of trade such as geographical proximity and cultural similarity.

To analyse the effects of regionalism, researchers typically add dummy variables for participation in regional arrangements. A positive coefficient on the dummy variable indicates that two countries, both of which participate in the same preferential arrangement, trade more with one another than predicted by incomes, population, and distance. This positive sign is interpreted as suggesting that the arrangement is trade-creating for its members. A negative coefficient on a second dummy variable, in which only one member of the pair-countries participates in a particular preferential arrangement, is taken as evidence of trade diversion vis-à-vis ROW.

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47 Gravity models were applied much earlier in other areas of economics than international trade. According to Walter Isard ([1960] 1990, 5), gravity models were used to examine empirical evidence in regional economics as far back as 1946.

48 The use of the term gravity model is a reflection of Isaac Newton’s gravity theory of physic which says that the attraction between two heavenly bodies is proportional to the product of their masses and inversely related to the distance between them.
Regression results of studies that use gravity models have a strong explanatory power with $R^2$ values ranging from 65 to 95 percent depending upon the sample (Bergstrand 1998, 23-28). However for a long period of time, gravity models received a poor recognition from reputable economists. The poor reputation attached to gravity models was due to the lack of theoretical trade-theory-foundation of which gravity models are based upon, especially from the perspective of factor proportion, Heckscher-Ohlin framework (Deardorff 1998, 7-22). The earliest theoretical support for the use of gravity models in the analysis of trade flows was provided by Edward Leamer and Robert Stern (1970). The authors argued that bilateral trade is indeterminate in the absent of transport costs – for example there is nothing to determine whether Japan imports apparel from China or from Morocco. They then derived a gravity model from the probability distribution of traded good transactions. Another early theoretical foundation was provided by James Anderson (1979). Under his framework, Anderson employed two preferences, Cobb-Douglas and constant-elasticity of substitution (CES), to examine the economic properties of a resulting model. In both situations he made used of Armington assumption in which products are differentiated by the country of origin.

Jeffrey Bergstrand explored the theoretical determination of bilateral trade in a series of papers. In one paper, Bergstrand (1985, 474-481) used CES preferences to derive a reduced-form equation of bilateral trade involving price indexes. Using GDP deflators to approximate these price indexes, he derived an equation for the purpose of testing his assumption that trade occurs because of product differentiation. His CES preferences were also nested, with a different elasticity of substitutions between (various) imports as well as between imports and domestic goods. His empirical estimates supported the assumption that goods are not perfect substitutes and that

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49 According to Jeffrey Bergstrand (1998, 23), gravity models experienced low respectability among leading trade economists for more than thirty years since it was first employed in empirical analysis of international trade. This has only changed when Alan Deardorff (1998) managed to derive gravity equations based on Heckscher-Ohlin framework, in which he formally showed a link between this respectable trade theory and gravity models.
imports are closer substitutes for each other than for domestic goods. He called his equation a
generalized gravity model because it also includes price terms.

In other papers, Bergstrand (1989; 1990) used Dixit and Stiglitz (1977) monopolistic
competition, and therefore products are differentiated between firms rather than between countries.
He employed a two-sector economy in which each monopolistically competitive sector has
different factor proportion, thus his model is a hybrid of a perfectly competitive Heckscher-Ohlin
and a one-sector monopolistically competitive model of Krugman (1979). Bergstrand used this
framework to derive a gravity model as well as used it to empirically examine bilateral intra-
industry trade. Bergstrand’s work therefore served to bring together the earlier Armington-based
approaches to derive a gravity equation with a second framework in which a gravity equation was
derived from a simple monopolistic competition model.

Another best known theoretical rationale for the idea that bilateral trade depends on
product of GDP of trading partners emerged from the work of Helpman (1987, 62-81) and
Helpman and Krugman (1985, section 1.5). Under this approach, consumers are assumed to seek a
variety of products for their consumption. They also assumed that firms are monopolistically
competitive and products are differentiated by firms as well as by the countries of origin.
Helpman (1987) used the correlation between a gravity equation and a monopolistic competition
model as a basis to empirically test his (monopolistic competition) model. That is, he interpreted
the close fit of the gravity equation with bilateral trade data as supportive evidence for the
superiority of the monopolistic competition model in explaining international trade flows.
Obviously, up to this time Helpman (1987, 63) did not see any possibility of integrating a gravity
model with the Heckscher-Ohlin factor proportions theory, as he remarked that “the factor
proportion theory contributes very little to our understanding of the determination of the volume of trade in the world economy, or the volume of trade within groups of countries”.

Deardorff (1998) provided another theoretical support for the use of gravity model in the empirical analysis of international trade flows. Deardorff showed that Heckscher-Ohlin framework can be used to derive a gravity equation as easily as from the theory of imperfect competition. Contrary to Helpman, his main purpose was to show that the empirical success of gravity models does not necessarily support the imperfect-competition model relative to the Heckscher-Ohlin theory. He started by positing an international price vector, in which the production of goods takes place in the absent of transport costs. Demands from each country (at the same international price vector) are then randomly matched by supplies. Since there is no transport cost, home country’s buyers of a good may nonetheless satisfy their demands from a foreign source while the country’s exports are the residual of domestic production and domestic demand. Deardorff then introduced transport costs, which ensure that the equalization of factor prices would not occur, and in a world with more commodities than countries, he argued that it is likely that most goods will be supplied by only one country. In that circumstance a gravity model for bilateral trade flows would be justified even in a Heckscher-Ohlin framework. Thus gravity models appear to be consistent with virtually any trade models in which specialization occurs.

The use of gravity models in examining the economic effects of a RTA is, however, subject to few limitations. First, as Kimberly Clausing (2001, 680) argued, the dummy variable used to examine the effects of a RTA is unable to indicate the amount of trade creation relative to trade diversion. This is because even if the coefficient of the dummy variable representing intra-bloc trade is positive and statistically significant, it does not specifically tell whether the expansion of trade among members is a result of trade creation or trade diversion.
Second, studies employing gravity equations generally use trade flows data at a very aggregate level. So these studies are therefore unable to examine the variations of trade liberalization across goods or industries. Additionally, it is also unable to separate the effect of trade liberalization from other influences that are acting on trade flows. On this, Frankel (1997, 93) conceded in his study (employing a gravity equation) to analyse the effects of a RTA on trade by noting that “some effects of regional trading agreements are lost in tests like ours on highly aggregated data”.

Third, the gravity equation estimates of the effects of a RTA are also sensitive to the sample of countries included in a study. Haveman and David Hummels (1998, 47-72) showed that changing the sample of countries resulted in a different prediction of trade between countries in the absence of a particular RTA and also can significantly alter the coefficient of the dummy variable. They (1998, 52) argued that the gravity equation estimates of the effects of the EC on trade “vary dramatically” according to countries in the sample. Richard Pomfret (1997, 254) also commented about a number of different studies (using gravity models) that produce contradictory conclusions over the same regional agreement. Citing a number of “implausible results”, Pomfret concluded that “there are clearly shortcomings” in this approach.

7.5.2 Empirical Research Based on Gravity Models

The use of gravity models in the analysis of regional trading areas, according to Soloaga and Winters (2001, 3) was first employed by Norman Aitken (1973, 881-892) who examined the effects of the formation of the EEC and EFTA on European trade. In addition to normal gravity variables which have a direct influence trade flows between countries such as national income, the size of population and geographical distance, he also incorporated two dummy variables representing the membership of the EEC and EFTA into the gravity equation. Following Balassa’s
(1967, 5) definition, he examined gross trade creation (GTC) which refers to the total increase in trade among members of the EEC and EFTA. For the purpose of examining trade diversion (TD) he estimated the amount of trade between countries if there was no preferential trade arrangement. To do this he first examined to ascertain an appropriate base year in which it is free from integration effects. This based year is then used to make projections about what would be the amount of trade in the event of no preferential arrangement. TD was then calculated by abstracting the projected amount of trade (from the actual trade) of the respective years of the study. In addition, they also estimated “external trade” creation which refers to integration-caused increases in trade between members and outside countries.

The results of the study showed that both the EEC and EFTA experienced a cumulative growth in GTC over their respective RTA periods with GTC of the EEC being substantially greater than the GTC of EFTA. The estimates for 1967 (the last year of the sample data) indicated that the size of the GTC for the EEC and EFTA were approximately US$9.2 billion and US$1.2 billion respectively. The EEC was found to have a net GTC effect on EFTA through 1964, but this was replaced by a growing net TD effect from 1965 through 1967. The regression results of the study suggested that 1958 being the last year for which it could safely be assumed that European trade was unaffected by the formation of the EEC, and therefore it could be used as the base year for making the extrapolation of trade.

A similar study was undertaken by Aitken and Robert Obutelewich (1976, 425-433) to examine the effects of the trade agreement between the EEC and the Association of African Countries (AAC), concluded during the Yaounde Convention (1963). In this study, they incorporated four dummy variables to capture the effects of preferential trading arrangements. These variables are British preference for the exports of African Commonwealth countries, the
preference of the EEC countries other than France for the exports of the AAC, French preference for Tunisian-Moroccan exports, and French preference for the exports of the AAC (former French colonies). They found that this trade arrangement had a statistically significant effect on both the EEC and AAC exports, with the size of the effect, in both cases, increasing progressively throughout the period of study (1959-1971). Also, the effect of British preference was the strongest, estimated at US$683.1 million in 1971, while the combined preference of all the EEC countries was more than 80 percent of the total AAC’s exports to the EEC.

Frankel, individually as well as with other researchers, undertook a series of empirical studies on the effects of trading blocs on trade in various parts of the world, and the results of these studies were comprehensively compiled in *Regional Trading Blocs in the World Economic System* (1997, chapter 5). In addition to formal RTAs – such as the EU, EFTA, NAFTA, MERCUSOR and ASEAN – Frankel also analysed informal trade blocs grouped as Western Europe, Free Trade Area of the America (FTAA) and APEC in these studies. For some formal RTAs, the beginning period of the study started many years before their actual formation as his studies encompassed a period of 1965-1992. Frankel argued that this was done in order to examine the effects of informal blocs in those (pre-formation) years as well as to have comparability of results among the trading blocs being investigated.

### 7.5.2.1 European Union, European Free Trade Area and Western Europe

Frankel’s study of the fifteen member countries of the EU revealed that trade among members was insignificant for the early periods but turns into significant thereafter. The coefficient values of a dummy variable – which represents the case when the pair of countries being members of the EU – were insignificant for various years of 1965-1980. Only in 1985 the coefficient became significant with the parameter value of 0.2 and the coefficient value increased
to 0.3 in 1990. This suggests that in 1990 (after holding constant the influence of GNP, proximity, and the other gravity variables), two members of the EU-15 trade 35 percent more with each other than two otherwise similar countries \( e^{0.3} = 1.35 \). Frankel argued that the somewhat weak EU effect could either be due to the fact that the EU only has officially in existence from 1993 onward as well as because some of the 15 countries were not in the precursor EEC.

In many studies that he involves – see for example Frankel, Stein and Wei (1995), and Frankel and Wei (1993) – Frankel seldom found that trade among EFTA members to be statistically significant. The only exception was, however, found in Frankel and Wei (1997) which showed positive and significant coefficient of 0.2. This occurred when data of 1970, 1980, 1990 and 1992 was pooled together. The coefficient of the dummy variable for Western Europe as a whole was not significant prior to 1990. But in that year (1990) the coefficient turned significant with the parameter value being 0.4, indicating that two Western European countries trade 49 percent more than two otherwise-similar countries. This suggests that even without a formal arrangement, Western Europe is still naturally a potential trading bloc.

7.5.2.2 NAFTA, MERCOSUR, the Andean Pact and the Free Trade Area of the America

Frankel and Wei’s (1997, table 1) study showed that the coefficient values of NAFTA bloc were almost never significant, not even in 1992, when NAFTA was officially negotiated. They argued that the lack of significance could be due in part to the small number of observations (that could be included in their study) since NAFTA has only three member countries. An exceptional result was obtained, however, when data was pooled over the 1970-1992 period. Of this they found that the estimated coefficient of NAFTA bloc being significant with the parameter value of 0.36, implying a 43 percent effect on intra-NAFTA trade \( e^{0.36} = 1.43 \).
Frankel and Wei (1997) found a clear upward trend of intra-bloc effects for MERCOSUR with the coefficient values of the dummy variable not significant during 1965-1975, but thereafter the variable became significant (the coefficient value was 1.9 in 1990). This implies that in 1990 the MERCOSUR member countries – Argentina, Brazil, Paraguay and Uruguay – trade among themselves almost seven times as much as otherwise-similar countries. This demonstrated an example of how a gravity model can give a very different answer in comparison to the calculation of intra-regional trade share. The Intra-regional trade share of the MERCOSUR countries has been low and slow-growing. But when one takes into account the fact that MERCUSOR member countries constitute only a small fraction of gross world product and trade then its intra-regional trade share looks far more impressive.

Frankel (1997) showed the most dramatic turnaround for the member countries of the Andean Pact. Despite the fact that the Andean Pact was only established in the 1960s, the dummy coefficient for 1965 was negative and highly significant (–1.3), meaning that in 1965 these countries traded with each other only one-quarter as much as they should have been \[e^{-1.3} = 0.27\]. The coefficient became small and insignificant in 1970 through 1990, but in 1992, after the reinvigoration of the Andean Pact, it suddenly became positive and highly significant with the parameter value of 1.0. This implies that in 1992 the Andean Pact countries traded 2.7 times as much as otherwise-similar countries. In this study Frankel also found an upward trend for the parameter values of the dummy coefficient representing intra-FTAA bloc trade. The coefficient was negative and significant (-0.3) in 1965, which reflects a general lack of openness on the part of Latin American countries during the heyday of import substitution. But the coefficient turned positive (although not significant) for period 1975-1980. By 1990 the coefficient became positive.

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50 The share of intraregional trade of MERCOSUR as computed by Frankel (1997, table 2.1) was small at 6 percent in 1962 and only increased to 19 percent in 1994. As a comparison, the intraregional trade share of the EU-15 and NAFTA were 56 percent and 36 percent respectively in 1962 and each increased to 64 percent and 43 percent in 1994.
and highly significant with the parameter value being 0.8, indicating a boost to intra-regional trade by a factor of 2.2.

7.5.2.3 ASEAN and Asia Pacific Economic Cooperation

Frankel’s (1997, table 4.2) study showed that ASEAN recorded a significant intra-regional trade bias in every year from 1965 to 1992. The coefficient value for 1992 was 1.8, which also happen to be close to the mean, median, and mode of the yearly estimates. This means that two ASEAN countries trade six times more than two otherwise-similar countries. Frankel argued that an apparent intra-ASEAN bias could be due to the extreme openness of Singapore.\footnote{Singapore is a well known city-state which assumes the role of imports and exports hub for the whole ASEAN region. This is indicated by its exports and imports ratios to GDP which stand at above 100 percent.} To analyse this, Frankel and Wei (1995) tried adding a Singapore dummy to the regression, examining bilateral trade involving the city-state. The Singapore dummy did indeed have a positive and very significant coefficient (1.51). The coefficient on ASEAN dummy was then reduced to 1.4 but remained quantitatively large and statistically significant. This suggests that Singapore’s extreme openness does not explain all of the apparent inward trade bias of ASEAN countries.

Frankel’s (1997) study found a rather surprising result for APEC as a regional grouping. Although APEC was only established as informal grouping in 1992, the magnitudes of the APEC dummy coefficients were highly significant for 1965 through 1992. There was a slight upward trend in the parameter values of the APEC dummy coefficient, reaching 1.2 in 1992. This indicates that two APEC countries trade 3.3 times as much as two otherwise-similar countries.

In a close connection with the finding of Frankel, which indicates significant concentration of intra-regional trade (of certain economic groupings) even without a formal trading arrangement, Barry Eichengreen and Irwin (1998, 33-57) examined the role of history in influencing regional
trade flows. They argued that the reason why intra-regional trade flows are higher than predicted by gravity models even before the formation of a RTA is primarily because of history. They argued that “history should matter” due to a triple of reasons. First, once exporters have developed distribution networks in another country, they are likely to continue utilizing them unless profit decreases significantly. Second, fixed costs facing those exporters could be “sunk costs”, therefore only variable costs need to be covered by exporters for export transactions. Finally, over a period of time exporters may be just acquaintance with the market.

Eichengreen and Irwin used historical trade data – involving 34 countries for 1928 and 1938; and 38 countries for 1949, 1954 and 1964 – to examine the important of history to trade flows. They analysed the deviations of trade patterns with the use of a gravity model. They found that trade patterns in one period are explained, at least in part, by deviations in the preceding periods. The results showed that gravity variables included in the model were significant and surprising stable for the various years under investigation. When they added a lagged-trade as an additional variable, then the magnitudes of the coefficients of income and distance were reduced. They also found that trade in 1949 (after the end of the WW2) was significantly influenced by trade patterns in 1928 and 1938, with trade in 1938 being twice of 1928. By 1964, however, the impact of pre war trade patterns disappeared.

The results of this study imply few implications. First, GATT members traded more with one another than predicted in 1949 after the conclusion of the first round of multilateral trade negotiations, although this effect disappeared by the 1950s. Second, countries belonging to (former) British Empire traded more with Britain and less with ROW in 1949 than predicted. In contrast, however, by the 1950s these countries traded more with ROW but less with Britain than
predicted by the gravity model. In a way, Eichengreen and Irwin demonstrated that history does indeed matter in influencing trade flows, particularly along regional lines.

Anne Krueger (1999) employed a gravity model in her study of trade creation and trade diversion of NAFTA. Besides analysing the effects of regionalism on trade for NAFTA members, she also estimated the effects of regionalism on members of other trading blocs: the EU, MERCOSUR, ASEAN, Andean Pact and CER. In addition, she also examined the effects of NAFTA on outside exporters. For this study Krueger used trade data involving 61 countries for the period of 1987-1997. As for NAFTA, she found that the dummy coefficient for the pair of countries, both are members, was positive (0.11) but insignificant. This means that trade among members is only 12 percent \( e^{0.11} = 1.12 \) higher than predicted by the gravity equation. If an importer was in NAFTA while the exporter was in ROW, imports into NAFTA are on average 46 percent less than predicted.

Consistent with other studies, she found the effect of the EU on members’ trade is small (7 percent) and insignificant. However, she found a different finding from Frankel (1997) for MERCOSUR, whereby trade between members is less than predicted with the coefficient value being \(-0.19\). Similar to Frankel, she found that ASEAN dummy variable was the most significant of all coefficients and it was surprisingly large (1.0), indicating that members’ trade 2.7 times more than otherwise-similar countries. She also found members of CER (Australia and New Zealand) traded with each other 65 percent more than predicted by the gravity equation. Interestingly though, imports from non members into CER also positive, 12 percent higher than predicted.

Soloaga and Winters (2001) incorporated three dummy variables to capture the “full” effects of RTAs on trade. The first variable is to capture the extent to which trade is higher than expected if both pair of countries are members of a trading bloc. The second variable is to measure
the extent to which members’ imports are higher than expected from all countries. Finally, the third variable is to measure the extent to which members’ exports are higher than expected to all countries. As for the result of this study, they largely found different results as compared to the previous studies of Frankel (1997) and Krueger (1999).

Soloaga and Winters found that in all cases involving Latin American countries – CACM, LAIA, ANDEAN, MERCOSUR – the coefficient of the dummy variable representing intra-bloc trade was positive and statistically significant for the whole period of 1980-1996. That is, in every dimension tested, Latin American countries traded disproportionately large with each other. As for NAFTA, the intra-bloc trade effect was positive but not significant. The coefficients capturing intra-bloc trade effects for the EU, EFTA and ASEAN were all negative. Thus they concluded that after controlling for normal gravity variables and general trade behaviour, only members of Latin American trading-blocs trade significantly more with themselves than expected.

7.6 Ex Post Studies of Regionalism

7.6.1 Methodological Underpinnings

This group of studies generally concerns with investigating the effects of regionalism on members as well as on the rest of the world by analysing trade data after a trading bloc was formed. These studies use various kinds of econometric methods and other data analysis to identify the economic effects of a particular trading arrangement. By employing extended definitions of the original Viner’s concept of trade creation and trade diversion, researchers are able to indicate whether a regional trading arrangement creates or diverts trade. However, according to Srinivasan, Whalley and Wooton (1993, 66) this type of studies has limited applications since no welfare analysis can be made because underlying theoretical structures are not specified, especially in
terms of microeconomic underpinnings. In addition, these studies are plagued with a number of econometric problems such as specification bias, parameter value instability and simultaneity bias.

### 7.6.2 Ex Post Empirical Research

Balassa’s (1967) study examining trade creation and trade diversion due to the formation of the EEC common market was probably the earliest research that falls into this category. He employed a partial equilibrium study focusing on the income elasticities of import demand before and after the formation of the EEC. In this study Balassa assumed that income elasticity of import demand to be constant in the absent of integration. Therefore a rise in the income elasticity of demand for intra-area imports indicates gross trade creation (GTC), while an increase in the income elasticity of demand for imports from all sources of supply indicates the actual trade creation.\(^{52}\) In turn, a fall in the income elasticity of demand for extra-area import provides evidence of trade diverting effects of the customs union.

Balassa’s study encompassed two periods: the pre-formation of the EEC (1953-1959) and the post-formation (1959-1965). Trade data was broken down into seven major commodity groups: non tropical food, beverages and tobacco, raw materials, fuels, chemicals, machinery, transport equipment, and other manufactured goods. The results of the study showed an increase in income elasticity of demand for imports of all commodities, suggesting that the EEC creates trade. But the results vary considerably between commodity groups, indicating trade creation for fuels, machinery, and transport equipment while trade diversion is evident for food, raw material,

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\(^{52}\) Gross trade creation is a term created by Balassa referring to an increase in intra-area trade, irrespective of whether this is due to substitution of the source of supply of goods for domestic or foreign. This is an extension of the original Vinerian concepts which relates trade creation as a newly created trade due to a shift of production from higher cost domestic to partner countries, while trade diversion entails a shift from lower cost foreign to higher cost partner country producers.
chemicals and transport equipment. He also suggested that the gain to the EEC is in terms of an increase in the real GNP growth rate of 0.1 percent per year.

Edwin Truman (1975) employed a partial equilibrium econometric study of trade shares for the EEC-6 before and after the formation of this customs union. He calculated hypothetical import shares after its formation and compared these with the actual import shares. Two methods were used: the first attempted to adjust for country-specific cyclical effects, whereas the second did not. The pre-formation period was from 1953 to 1960. The year of comparison between the hypothetical and actual import shares was 1968 whereby eleven manufacturing industries were examined. The study revealed the following results for non member countries under the first method: 43 percent of the industries recorded an increase in trade shares while 37 percent showed a decrease. He also found that 20 percent of the industries experienced a falling trade shares for both member and non member countries. Additionally, the first method showed a US$11 billion increase in trade, of which US$2 billion came from extra-regional trade. The second method showed a US$1 billion increase in total trade, but this came at the expense of extra-regional trade.

Kym Anderson and Hege Norheim (1993) calculated numerous indexes to analyse the regionalization of international trade. Specifically these indexes were: (1) An intra-regional trade share of its total trade, (2) Regional trade share of world trade, (3) Intensity of intra-regional trade index, (4) Intensity of extra-regional trade index, (5) Share of GDP traded; (6) Index of propensity to trade intra-regionally; and (7) Index of propensity to trade extra-regionally. Utilizing data provided by Bairoch (1974) they calculated these indexes for European region from 1830 through 1990 with a ten-years interval. Due to data limitation, the study of the other regions covered only the period starting of 1928-1990, although with the same interval.
The results of this study showed that intra-regional trade share (of total trade) increased steadily for all regions: Western Europe (from 51 percent in 1928 to 72 percent in 1990), North America (from 25 percent to 31 percent) and developing Asia (from 47 percent to 56 percent). The intra-regional trade share was somewhat stable for Asia as a whole, while African region recorded declining trade share. Merely looking at this index, one might be tempted to conclude that the regionalism in Europe and North America cause the concentration of intra-regional trade. However Anderson and Norheim argued that this conclusion is totally misleading because the share of intra-regional trade is a very inadequate indicator of intra-regional trade bias. This is simply because trade share is affected by the number of countries in a region, in which the larger the number of countries in a region, the larger is the region’s intra-regional trade share. In fact if one considers the whole world constitutes one region, then intra-regional trade share of its total trade will be 100 percent.

According to Anderson and Norheim a better way of addressing the issue of intra-regional trade concentration is by examining four pertinent indexes (out of seven) at once. These indexes are intensity of intra-regional trade, intensity of extra-regional trade, propensity to trade intra-regionally, and propensity to trade extra-regionally. Since the results of the study showed that the index of propensity to trade extra-regionally is generally stable throughout the period (in comparison to other indexes) – for example 0.3 in 1928, 0.31 in 1958, 0.28 in 1979 and 0.23 in 1990 for Western Europe, while somewhat fluctuates but increasing, 0.09, 0.07, 0.15 and 0.14 for these respective years for North America – it indicates that regionalism has not badly affected trade with non member countries.

Krueger (1999) undertook an ex post study to examine NAFTA effects on trade of members vis-à-vis non members. Taking Mexico as a major beneficiary of NAFTA, she analysed
Mexico exports into the US as well as to ROW before and after the formation of NAFTA. She analysed the “shift and share” of trade to assess the extent to which increases in intra-NAFTA trade occur at the expense of the shares of trade of countries outside NAFTA. She started by examining the shifts in the shares imports from Mexico into the US market. This analysis attempted to provide a rough assessment of the extent to which an increase in Mexican export share (into the US) occurred at expense of outside countries.

Using the average of 1987-1988 trade as a base, the share of Mexican exports into the US and the ROW total imports (from Mexico) was calculated. The calculated shares then applied to the US and ROW imports for 1990, 1993, 1997, and 1998 to estimate what Mexico’s exports would have been if her share of the two markets was not unaltered. The difference between this estimate and the actual Mexican exports to each market was then taken as the “shift” in Mexican exports in the two markets.

The results of this study showed few interesting patterns. For the late 1980s and early 1990s, Mexican exports appeared to have been gaining share (although relatively slowly) in the US market but losing share in ROW. After the early 1990s, and especially after 1994, however, Mexico gained share both in the US and in ROW markets. The gain in shares was most pronounced in manufactured products classified as materials, machinery and transport equipment, and miscellaneous manufactures. In each of these categories, the increased Mexican export share in trade with ROW was almost as large as the proportionate increase in share of trade with the US. Thus the fact that Mexico’s increased export share in ROW’s trade suggested that Mexican products were generally a more attractive source for ROW imports, especially after the 1994-1995 devaluation.
Clausing (2001) examined the Canada-US FTA (CUSFTA) to ascertain the evidence of trade creation and trade diversion. She employed an econometric study on Canada and the US tariff liberalization vis-à-vis the ROW. Clausing specified three models and then regressed these models on the data of US imports from 1989 through 1994. As for the first model, she argued that as tariffs are reduced between Canada and the US, prices would change to bring to a new equilibrium in import demand and export supply. Thus the change in imports is determined by the change in the level of tariffs and various shocks in macroeconomic variables such as exchange rates, cyclical factors and so on. These shocks are captured in her model by incorporating a dummy variable.

To derive the second model, she added Canada pre-CUSFTA export share into the first model arguing that this variable will have a direct influence on the US imports. For example, if Canada is already the most competitive source of imports into the US market prior to CUSTA, tariff reductions on Canadian goods will likely lead to trade creation. The third model was specified specifically to examine trade diversion. In order to examine this effect a series of regressions were performed between a dependent variable, which is the percentage change in the US imports of a particular commodity from ROW against the US change in tariffs imposed on Canada goods. If trade diversion is present, one would expect the percentage change in imports from ROW to be negatively related to the extent of tariff liberalization with Canada.

The results of this study showed that the US tariff liberalization on Canadian goods caused trade creation between the two countries since a one percentage point reduction in tariffs was associated with a 10 percent increase in imports from Canada. Contrary to her hypothesis for the second specification, however, the Canadian pre-CUSFTA export share did not show positive relationship with Canadian exports into the US. The result showed that a one percent increase in
the Canadian pre-CUSFTA export share was associated with a 0.69 percent reduction in the US imports from Canada. As regard to the question of trade diversion, the coefficient explaining the relationship between reductions in tariffs on Canadian goods with the US imports from ROW was statistically insignificant from zero. Therefore the result of this study suggests no evidence of trade diversion created by CUSFTA.

7.7 Conclusion

All four categories of empirical studies examining the economic effects of regionalism are equally popular among researchers, albeit each of them has its strengths and shortcomings from the methodological as well as theoretical points of view. The findings of many of these empirical studies differed, especially with regard to the welfare effects that a particular regional trading arrangement (RTA) has on member vis-à-vis non member countries. This is true even if these studies fall into the same methodological category. Studies based gravity models for example, show that the findings of Soloaga and Winters (2001) about the effects of various RTAs on members vis-à-vis non members are different from that of Frankel (1997) and Krueger (1999). These inconclusive findings, therefore, justify further research to examine economic effects brought about by regionalism.
CHAPTER EIGHT
THE POLITICAL ECONOMY AND ECONOMIC BENEFITS OF THE ASEAN FREE TRADE AREA

8.1 Overview

This chapter examines the factors that influenced the thinking of ASEAN leaders in agreeing to the establishment of AFTA in 1992. It is imperative to analyse and identify factors which caused a change in the minds of ASEAN leaders, since competent observers claimed that even in a few years before the formation of AFTA, discussions about the possibility of establishing a free trade area in the region were discouraged and avoided. Besides analysing this issue, this chapter also examines the economics of AFTA establishment, in particular, investigating whether or not AFTA benefits its member countries.

8.2 The Precursor of AFTA

For a long while the Association of South East Asian Nations (ASEAN) remained primarily a political and diplomatic organization to address issues related to securities, and to much lesser extent economics, that affect member countries as well as the Southeast Asian region. Since the early days of its formation (August 1967), ASEAN countries have been confronted with security issues facing the region particularly the threat of communism. Despite many problems that ASEAN has faced, scholars have noted that ASEAN could be considered as one of the most successful organizations of its kind in developing countries. ASEAN success has been linked to its ability to stabilize a region that might otherwise have experienced a great turmoil. At the centre of this argument is the role of ASEAN in moderating intra-regional conflicts and significantly reducing the likelihood of wars (Acharya 2001, 5). This is very significant since at the time of its
establishment ASEAN was divided by a host of conceivable political differences (Funston 1999, 205-219). Tension over security issues, however, began to decrease significantly from the beginning of the 1990s especially after the end of the Cold War and the breakdown of Soviet Union.

Although another important goal of ASEAN establishment as stated in the Bangkok Declaration – which gave birth to ASEAN – and also as appeared in many of succeeding ASEAN pronouncements, has been to strengthen economic cooperation in the areas of trade and industrial development, little efforts were taken to achieve this aim. In fact in the first 10 years of its establishment the Association’s Economic Ministers failed to meet on a regular basis and ASEAN continued to be rotated around the annual meetings of its Foreign Ministers (Akrasanee and Stifel 1992, 27).

A significant change however occurred in January 1992 when ASEAN member countries signed an agreement to form ASEAN Free Trade Area (AFTA) with the aim to have it fully implemented within 15 years starting from January 1993. Subsequently, in September 1994 ASEAN member countries agreed to speed up the process of AFTA implementation by bringing

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53 The turbulent political scenarios in the region around the time of ASEAN establishment could be depicted by the following cases. Indonesia’s armed confrontation to “crush Malaysia” was only wound up in 1965 as power transferred from Sukarno to Suharto. In the same year Singapore left the Federation of Malaysia to become an independent state. The Philippines laid claim to the Malaysia’s state of Sabah when the latter became independent from Great Britain through Malaysia in 1963 – and in fact the Philippines has never officially retracted this claim. Claims on small territories, including islands, occurred times and again between some of the founding members of ASEAN, and these claims continue to this day.

54 From the late 1960s to the mid-1980s ASEAN countries signed four separate agreements on a piecemeal basis to implement economic cooperation projects: ASEAN Preferential Trading Arrangement (APTA), ASEAN Industrial Project (AIP), ASEAN Industrial Complementation (AIC) and ASEAN Industrial Joint Venture (AIJV). All these initiatives however achieved little success economically due to the lack of interest among members at various stages of implementation.

55 The six original signatories of AFTA were Brunei, Indonesia, Malaysia, the Philippines, Thailand and Singapore. The four newer members of ASEAN became signatories to AFTA at the time when they joined ASEAN: Vietnam (1995), Laos (1997), Myanmar (1997) and Cambodia (1999). As regard to the detailed account of mechanisms and schedules of AFTA implementation, see for example Suthiphand Chirathivat (1996) and AFTA Reader series: Volume I (1993), Volume II and III (1995), Volume IV (1996) and Volume V (1998) published by ASEAN Secretariat.
forward the target date for its full implementation to 10 years, from 2008 to 2003.\textsuperscript{56} This reflected a major change in the thinking of ASEAN leaders because even in few years before the formation of AFTA discussion about the possibility of the establishment of a free trade area was still discouraged and avoided (Imada and Naya 1992, xi). From the perspective of economics, a number of economic benefits are to be gained by members of ASEAN as they gradually liberalize their trade in the course of fulfilling their commitments for the implementation of AFTA. This proposition however, holds only in the context of the “second-best policy option” that ASEAN member countries have chosen to follow.\textsuperscript{57} In retrospect ASEAN member countries would stand to enjoy greater economic benefits had they choose trade policies along the “first-best option” by adopting unilateral and non discriminatory trade liberalization (Bhagwati 1993, 23).\textsuperscript{58}

8.3 The Political Economy of AFTA Establishment

The fact that ASEAN member countries adopted the second-best policy instead of the first-best option for their trade liberalization warrants investigation. At least three factors could be advanced to explain circumstances that influence the decision of ASEAN countries in choosing the second-best policy for their path to trade liberalization through the formation of a discriminatory-

\textsuperscript{56} Again during the Sixth ASEAN Summit (December 1998) held in Hanoi, Vietnam, leaders of ASEAN decided to further bring forward the completion date of AFTA implementation by one year from January 2003 to January 2002. This was taken as a response to Asian financial crisis which swept through many Asian countries in 1997 and 1998.

\textsuperscript{57} The proposition that there are economic benefits to be gained by member countries that participate in a regional free trade area (FTA) holds only in the context of analysis within the theory of the second best. When the analysis is broadened to take into account the effects of a regional FTA on members as well to the world at large, the benefits then become ambiguous. In this regard abundance of literature is in existence debating about whether a regional FTA is good or bad for the world economy. Examples of such literature, both theoretical and empirical analyses include Jagdish Bhagwati (1993), Takatoshi Ito and Anne Krueger (1997), Arvind Panagariya (1999), Alan Winters (1999) who argued against regional FTAs. For views in favour of regional FTAs, see Robert Z. Lawrence (1991), Lawrence Summers (1991) and Asian Development Bank (2002, part 3).

\textsuperscript{58} The theory of the first-best option for international trade policy was enshrined in Adam Smith ([1776] 1937) and David Ricardo ([1817] 1969), and rigorously proved later by Paul Samuelson (1939), Murray Kemp (1972), Jean-Michel Grandmont and Daniel McFadden (1972).
and-reciprocal free trade area.\textsuperscript{59} All these three factors are particularly relevant in explaining the policy option adopted by Indonesia, Malaysia, the Philippines and Thailand (ASEAN 4) as Brunei and Singapore had been pursuing unilateral trade liberalization even before the creation of AFTA.

Arguably the most important factor which influenced the option chosen by ASEAN members was that it reflected a compromise between rival economic ideologies which underpinned policy formulation in the ASEAN 4 countries. Secondly, ASEAN countries were increasingly affected by the second wave of regionalism, which proliferated in other parts of the world especially in Europe, North and South America as well as in Africa, around the time of AFTA establishment. And thirdly, by the end of the 1980s it became clear to ASEAN countries that establishing a regional free trade area (FTA) would be a good strategy to induce and sustain foreign direct investment (FDI) to member countries by offering investors a much bigger market than individual members could provide. Each of the factors, will, in turn be considered in greater details. However, before discussing these factors in details it is imperative to track down the origin of economic ideological rivalry that emerged in developing countries in general as it inherently has significant influence over economic thinking in this part of the world.

\textbf{8.3.1 The Origin of Economic Ideological Rivalry in Developing Countries}

In the modern history of the twentieth century, the rivalry of economic ideologies had its origin from the debate which occurred in the 1940s through 1960s between development economists vis-à-vis neoclassical economists, arguing to influence economic policy formulation. Although neoclassical economic ideas have become the orthodoxy of economics since the 1870s, this orthodoxy was seriously challenged by the ideas of development economics during a period

\textsuperscript{59}AFTA is a discriminatory free trade area because it discriminates member countries against non members, particularly with regard to the imposition of import tariffs. Also, AFTA is a reciprocal free trade area because exporters from one member country could only enjoy tariff concession provided for a good by another member if only the import tariff for the good in question in both countries does not higher than a threshold of 20 percent.
between the 1940s and 1960s, particularly in least developed countries (LDCs) and developing countries (DCs). Nevertheless, the prominence of development economic ideas lasted only about three decades as its influence started to decline significantly by the beginning of the 1960s. By this time “economic planning” which attracted maximum enthusiasm in the 1940s and 1950s in LDCs and DCs failed miserably, and the 1960s witnessed a resurgence of neoclassical economic ideas in economic policy settings all over the world (Little 1982, chapter 9).

An initial idea associated with development economics was arguably emerged from Paul Rosenstein-Rodan’s (1943) study of the economic problems of underdeveloped countries (Krugman 1994, 39-58). The influence of Rosenstein-Rodan study, together with other prominent development economists such as Arthur Lewis, Gunnar Myrdal, Albert Hirschman, Raul Prebisch, Hans W. Singer, Thomas Balogh and Ragnar Nurkse, caused many developing countries to adopt an inward-looking economic policy during the 1950s and 1960s (Lal 1983, 17).

As regard to international trade, three contentious theoretical issues were heatedly debated between development and neoclassical economists in their quest to influence economic policy formulation. The first of these issues was the income elasticity of demand for goods from developing countries. Development economists argued that income elasticity of demand for tropical goods in developed countries is low and it could not be expected to grow sufficiently high to enable LDCs and DCs to raise their national income (through exporting). A leading source of this argument was documented in Nurkse’s (1961) book, in which he maintained that the role of

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60 Although neoclassical economics emerged as orthodoxy of economic thinking in the 1870s, it did not necessarily dominate economic policy settings in many countries. Even in the US for example, Institutionalists played a significant role in economic policy formulation at the turn of the twentieth century until the 1930s (Landreth and Colander 1989, 392).

61 The debate between development and neoclassical economists encompassed a wide range of areas including international trade, industrialization strategy, economic planning, exchange rate, the flow of capital and labor and the balance of payment management. For the purpose of this study, however, discussion is restricted to debates about international trade issues.
international trade in nineteenth century as the engine of growth for the new countries of white settlement – the USA, Canada, Argentina and Australia – is no longer applicable to LDCs and DCs. Unlike some other development economists, Nurkse did not object the idea that these countries should seize any trading opportunities available, but he was pessimistic about their future availability.

Nurkse argued that in contrast to grains, which according to him is the basis of the white-settler’s countries prosperity, the demand for tropical products in developed countries has not risen in line with growth in their incomes because the income elasticity of demand for these goods is low. In addition, there is also a serious danger that synthetic substitutes would be developed for many tropical products. He was also pessimistic about the possibility of LDCs and DCs to be able to export manufactured goods, partly due to these countries’ lack of technological capability to produce them, and also because of the protectionism he thought such exports would provoke in developed countries. He therefore advocated what he called a “balanced growth” which is in effect the policy of import substitution to meet home demand for imports.

Nurkse argument was challenged by Irving Kravis (1970), who provided empirical evidence that the economic growth of those white settler countries is mainly caused by internal rather than external factors. He argued that international trade provides only an extension of opportunities in converting domestic resources into goods and services required for investment or consumption in other countries. The enlargement of market made it possible for a good to be produced efficiently on large scale production characterized by decreasing costs. Furthermore he argued that exposure to international competition is the best anti-monopoly policy to prevent the establishment of high cost industries. Finally, Kravis (1970, 869) maintained that finding from his research showed that international trade could not indicate a differential diagnosis to explain the
varying growth records of countries in the nineteenth century. The US, the country which recorded the greatest economic success of the nineteenth century owed the pattern and speed of its development and prosperity mainly to internal factors, while its external trade expanded just as rapidly as some less successful countries; comparable only to the growth of trade of India and Ceylon, which did not at all experience fast growth.

The second issue of debate was the terms of trade effect of developing countries’ exports. As expounded by Prebisch (1950) and Singer (1950), development economists argued that both theory and historical fact demonstrate an inexorable tendency, over a long period of time, of the declining term of trade of primary commodities of developing countries. This occurs due to the existence of unlimited supply of labours in developing countries, available for employment in plantation or other sectors of export potential at constant real wage.

The declining terms of trade argument provided those that opposed neoclassical ideas with further basis for turning their backs on the orthodox case for freedom of international trade and payments. Since, as it was asserted, the prevailing trade system led to a pattern of specialization in which the gains from productivity increases in LDCs and DCs primary production are transferred to advanced countries, whereas productivity gains in the latter’s manufacturing activities accrued only to their own inhabitants, the LDCs and DCs must shun trade with developed countries. Again the policy of import substitution is the panacea offered. The most extreme form associated with the declining terms of trade argument was the assertion of Myrdal (1957) and Balogh (1963), and contrary to the neoclassical view in which a liberal international trade and payments regime yield mutual benefits to all trading nations, they argued that trade relations are really a zero sum game, enabling the rich advanced countries to prosper at the expense of the poor, backward ones. Myrdal
(1957, 46) suggested that the liberal international system would inevitably make the rich richer and the poor poorer.

Neoclassical economists responded to this theoretical argument by claiming that economic history in the 1940s through 1970s did not born out as predicted by development economists. Lal’s (1983, table 2) examination of the performance of developed versus developing countries as well as performance comparison of different developing countries (because developing countries were far from being a homogenous group) showed that all of them differ considerably in living standards for the period of his studies. This study indicated that Latin America, the richest region of developing world in 1950 grew more slowly, in terms of per capita income, than the second poorest region in the sample (East Asia, excluding Communist China). Interestingly though, East Asia region also grew faster that the world’s richest region (developed countries) in 1950.

The third issue was the argument about foreign exchange bottleneck experienced by developing countries. Development economists claimed that the export earnings of LDCs and DCs could not be increased even in the long run. This export pessimism was soon formalized into a so called “two-gap” model by Ronald McKinnon (1964). This argument essentially came about on the assumption that goods for export could only be produced using imported capital inputs and intermediate products in a fixed set of proportion. Output for export could not, therefore, be increased above the level determined by the quantity of imports with which a fixed export proceeds could finance. Even if a country is willing to save and invest a larger proportion of its income to finance growth, it will not be able to transform the saving into higher income and output because of an inexorable limit set by ‘fixed’ export earnings. Since an incremental saving could not be transformed into foreign exchange to finance the import requirement of additional investment, the country then now stuck in a foreign exchange bottleneck.
Furthermore, development economists argued that this chronic balance of payments constraint experienced by LDCs and DCs could not be cured by the orthodox prescription of raising the price of foreign exchange through devaluation of domestic currency – to both increase the supply of and reduce the demand for foreign exchange – because these effects are ruled out by assumptions. Their assumptions are either that exports would be constrained by world demand, or in the case of export volume does increase, it could only be sold at reduced prices, thus render impossibility for foreign exchange earnings to increase. Therefore, while raising the price of foreign exchange would not increase its supply, technologically fixed import requirements for the production of output (for export) means that, for any quantity of output, raising the price of foreign exchange would not reduce the demand for it. The only available options for LDCs and DCs are that governments to manage their fixed foreign exchange earnings for use in “essential” industries and seek to augment them through foreign loans and grants, preferably at low interest rates. During the 1940s through 1960s many developing countries were very much influenced by development economic ideas, therefore they were pessimistic about their trade prospects. These countries therefore tried to solve the problem of foreign exchange bottleneck through direct control of imports regardless of the real costs to the economy (Lal 1983, 25).

Neoclassical economists responded to this issue by arguing that trade policies adopted by LDCs and DCs made the availability of foreign exchange even scarcer. Import control which they had set up to manage the presumed fixed quantity of foreign exchange induced a bias against export sectors and thus retarded the growth of industries with export potential, causing a relative decline of profitability of export industries. As import control also rendered protection to domestic producers, it caused an increase in domestic prices of importable goods; therefore, consumers switched some of their expenditure to the now relatively cheaper exportable products. The relative decline of profitability of exporting industries resulted in further reduction in the volume of
exports, thus export earnings. This continued until imports were limited to a bare minimum. The foreign exchange shortage, which could be cured by a normal means of devaluation then became chronic and rolled on its self fulfilling prophecy.

8.3.2 Economic Ideological Rivalry in ASEAN Countries

The economic ideological rivalry in ASEAN countries especially during the build up years to the creation of AFTA emerged in a slightly different form. At this time the apparent rival economic ideologies were between those subscribed by neo-mercantilist-nationalists and proponents of neoclassical economics. Neo-mercantilist-nationalists generally emphasize the importance of state building through interventionist policies to build a strong economy in order to enhance and sustain the state’s position in the global economy (Jones 1986, 145-166). In a world which they view as highly competitive with conflicting interests, economic activities particularly industrialization needs to be pursued through economic policies which help to protect domestic industries from foreign imports, while at the same time provide assistance to emerging export industries (Giplin 1987, 31-34).

In contrast, proponents of neoclassical economics view the market, not the state, as the most effective and productive way of organizing economic relations. They sought to open up their economies to market forces through deregulation and liberalization, and to encourage free flow of trade and capital, to exploit the perceived mutual gains from participating in an expanding global economy (Giplin 1987, 26-31). Recognizing that in certain circumstances the market could not function as good as it should be due to the existence of price distortions and other impediments in the market, then it is the role of a state to intervene to alleviate those distortions and impediments to pave the way for the smooth functioning of the market. Around the time of AFTA establishment
these two approaches dominated the debate over economic policy in Indonesia, Malaysia, the Philippines and Thailand (Stubbs 2000, 299).

In analysing the factors that influence the decision of ASEAN countries to choose the second-best policy option, it is imperative to note that in many ASEAN countries the decision making process of the states is highly centralized. As a consequence, any decisions on economic and trade policies are made by a very small group of people, which includes the prime minister or president, responsible ministers, senior government officials of key ministries, technocrats and selected economic advisers. While each country has elected members of parliament, of which majority of their votes are required to pass any policies into laws, since all governments of these countries are very strong with overwhelming majority in their parliaments, usually all those elected members representing the party which forms the government simply endorse the wish of the government. The business community is fairly small, and while the number of business representations that could lobby their governments is increasing, but only those that have a close link with senior politicians and officials manage to represent their business interests effectively in any policy formulation (Stubbs 2000, 299).

62 The use of these terms and the roles they assume in economic policy setting warrant explanation especially of senior officials, technocrats and economic advisers as the role of president, prime minister and responsible ministers are obvious to most people. The prime role of senior officials is to advise their respective ministers, as Michael Pusey (1991, 67) put it “… to what he/she [minister] should or should not do in this or that situation” and also to manage and implement programs adopted by the governments (Pusey is a sociologist who studied circumstances that influenced the change of economic thinking from the left to the right among Australian policy makers in the mid 1980s). Technocrats are heads of specialized government departments or agencies having highly skilled scientific knowledge whose work mainly involve the application of value-free judgement to a particular problem (Pusey 1991, 70). Meanwhile, economic advisers refer to a group of people co opted by the government to give advice on matters of economic importance, although many of them are neither professional nor academic economists, but leaders of successful businesses with little economic knowledge (Krugman 1996, 40-48). According to Krugman, these great business leaders often provide misguided economic policy advice to their governments due to the lack of economic understanding.

63 This has been the case for Malaysia, Singapore and Thailand. It was the case for Indonesia up to Suharto era before Indonesia’s political structure was changed due to public revolt in 1999 when the country experienced its worst economic crisis. As for the Philippines, it was true especially during the era of Ferdinand Marcos before its political landscape was changed in 1986 because of “people powers” who overthrew the Marcos government after the public claimed the occurrence of massive cheating during the 1986 presidential election.
8.3.2.1 Indonesia

In Indonesia, neo-mercantilist-nationalist ideology began to gain prominence among decision making elites since the 1950s, soon after the country gained its independence in 1947. Collectivist spirit as enshrined in the country’s Constitution played a central role in augmenting the role of this group over economic policy settings. Connected with collectivist sentiments was the notion that it was necessary for the state to assume a dominant role in the economy to protect the nation’s hard-won independence and to guard against the recurrence of foreign domination in economic activities (MacIntyre 1992, 140). Although already achieving a prominent status, the intertwined values of economic nationalism and state intervention came to permeate all aspect of economic policies during the period of Sukarno’s “guided democracy”, beginning from the late 1950s until his fall in 1966 (Glassburner 1971).

The influence of neo-mercantilist-nationalists was even stronger in the 1970s, largely because of successive oil price booms. As the net exporter of petroleum, the oil price booms of the 1970s strengthened nationalists’ influence on economic policy as the state revenue from oil exports was channelled to fan economic activities aimed at furthering industrialization. Among the notable cases were the activities of the giant state oil company, Pertamina and its counterpart, Krakatau Steel. Pertamina was of particular importance due to the fact that it was also the sole agent for the collection of oil taxes. As oil revenues continued to grow, so did the state’s capacity though Pertamina and Krakatau Steel to involve directly in economic activities (MacIntyre 1992, 142; Robison 1986, 182).

Only occasionally proponents of neo-classical economics managed to exert some influence over economic policy formulation in Indonesia, and this occurred especially during the times when the country faced severe economic crises. The first example of such crises was the balance of
payment problems of the 1970s which stemmed from over expansion of Pertamina. This over expansion was not only through the use of oil revenues, but also by heavy dependence on borrowings from international credit markets, many of which short-term loans. Another example was the economic crisis of the mid 1980s, occurred due to declining oil price, from US$30 to US$10 per barrel from 1983 to 1986. Given that 60 to 70 percent of the Indonesian government revenues were generated from the oil sector, the collapse of oil price dramatically affected its economy. Upon the adoption of neoclassical economic ideas, stabilization and structural adjustment programs were introduced as reflected in the policy of a balanced budget, implemented through such austerity measures as budget cuts and the postponement of major industrial projects. On the revenue side, efforts were taken to augment non oil revenues through a major tax reform. Various deregulation measures were also undertaken with the aim of improving national efficiency through greater reliance on market forces (Aziz 1994, 387-391).

The rivalry of ideologies between neo-mercantilist-nationalists and neoclassical proponents in Indonesia heightened towards the end of 1980s as they struggled to influence the thinking of President Suharto who held a final say over economic policies. The neo-mercantilist-nationalists group, whom Iwan Aziz (1994, 398-415) referred to as the “engineers” and led by B.J. Habibie, then the minister of science and technology, was always in favour of protectionist approach to trade policy. On the contrary the neoclassical proponents, led by Widjojo Nitisastro – former economic and planning minister and at that time a senior government adviser – and included in this group high-level technocrats and American university graduates of Indonesian-based economists, pressed for further economic reform and trade liberalization. As a result of that tussle, a deal was clinched for embracing less sweeping trade liberalization through AFTA. If the proponents of neoclassical economics had their way, Indonesia would have adopted unilateral and non
discriminatory tariff cuts. On the contrary, if neo-mercantilist-nationalists had their way, the country would not have agreed to the establishment of AFTA.

It is worth noting that a discriminatory-and-reciprocal trade liberalization under AFTA could still, to a lesser extent, pacify the emotion of neo-mercantilist-nationalists. At least it could be argued from their point of view that AFTA would provide a training ground for domestic industries to learn to compete with firms from other member countries. In addition, the 15-years (later reduced to 10-years) implementation period could be used by domestic companies for their necessary adjustments to face greater competition under AFTA. Also, a form of trade off could easily be envisaged; while some local industries could suffer a contraction of domestic sales due to greater competition, but competitive exporting firms could enjoy a much bigger export market in other member countries.

8.3.2.2 Malaysia

In Malaysia, neo-mercantilist-nationalists ideology started to become prominent since the country gained its independence from Great Britain in 1957. Under British rule, especially before 1955, Malaya was essentially under an imposed free trade regime (Lim 1992, 94). The country exported rubber and tin mainly to United Kingdom (UK), and other western industrialized countries, in return for imports of manufactured goods also primarily from UK. During the colonial era, free trade was a logical policy choice for the British because it worked to their benefits, and the few customs and excise taxes in existence were imposed primarily for revenue collection and for controlling the consumption of such products as alcohol and opium, which were considered harmful to the society. In the 1960s Malaysian government took bold measures to encourage the setting up of import substitution industries by offering various tax incentives, in addition to providing protection against competing imports in the forms of high tariffs and quota
Besides aiming at broadening the country’s economic base through industrial development activities, this effort reflected the thinking that it is better and desirable for the public to consume domestically-produced than imported goods under the disguise of nationalist spirit and loyalty to the country.

Neo-mercantilist-nationalist ideas continued to intensify in the early 1980s when the state enhanced its involvement in economic activities particularly by the launching of the heavy industrialization policy. Under this initiative the state undertook four big projects; the setting up of iron and steel, cement, national car and ammonia-urea plants. To make sure the viability of these projects, the country not only made available the fund for these investments – the bulk of which came from foreign borrowings – but also provided credit facilities, subsidies and tariff protection (Jomo and Edwards 1993, 29; Teik 2001, 191). Explicitly the immediate objectives of these projects were to further broaden the country’s industrial base, upgrade domestic technological capability and create extensive linkages in the economy. Implicitly, however, this initiative reflected the idea that the increased affluence of the general public, due to rising disposable income as the country experienced uninterrupted economic growth since the time of independence, should be directed towards enhancing the state economic prowess by plugging import leakages with domestic goods.

During the 1980s the rivalry of ideologies between neo-mercantilist-nationalists and proponents of neoclassical economics was less evident in Malaysia especially during the era of Dr. Mahathir Mohamad, himself a nationalist, as the Prime Minister. While the existence of a few people in the policy setting circle that inclined towards the ideology of neoclassical economics could not be denied, they were reluctant to express their idea strongly. This was primarily because the idea of neo-mercantilist-nationalists was so dominant among the policy making elites.
Additionally, this minority group did not want to be seen as having different ideas and “visions” from the powerful and influential Prime Minister.

The grip of neo-mercantilist-nationalist ideology over Malaysian trade policy loosened somewhat when Malaysia faced its first recession, that is, when the country recorded its first negative economic growth of 1 percent in 1985; the first time during the post colonial era. Particularly hard hit was the heavy industrialization projects. Faced with a possible failure of the projects, Malaysian Prime Minister was pressed by neoclassical economic proponents to open up the economy and sought out more foreign direct investment (FDI) to bring the economy back onto the growth path (Bowie 1994). It was clear that Dr. Mahathir and his policy setting elites were increasingly convinced about the virtues of the opening up of Malaysian economy to a wider global economy, at least during hard times (Bowie and Unger 1997, 82-94). Since Malaysian economy immediately got back onto a growth path by achieving 1.2 percent GDP growth in 1986, and continued even stronger to achieve 7.2 percent in 1989, mainly due to the influx of FDI, the proposal for the formation of a reciprocal regional FTA was much easier to get accepted by the policy setting elites.

8.3.2.3 The Philippines

In the Philippines, neo-mercantilist-nationalists began to dominate economic policy formulation in the 1950s. The enactment of Import Control Act of 1950 marked the beginning of measures to control imports into the country, although a part of this effort was aimed to curtail the pervasiveness of Chinese community in retail, distribution and other economic activities. This was followed by the imposition of import tariffs on varieties of goods. The Philippine government then gradually made greater efforts to promote import substitution industries by providing loans to well connected oligarchies (Bowie and Unger 1997, 104). In an effort to further control imports and
address the balance of payments problem the government also imposed exchange controls. As a result, the Philippine manufacturers increasingly received additional protection for their businesses.

In the early 1960s the Philippine government strengthened measures to encourage import substitution industrialization (ISI), although this was argued as not an integral part of its development strategy. President Ferdinand Marcos continued with this initiative when he assumed power in 1966. During his twenty-years in power, the country witnessed enormous expansion of state’s activities in agriculture and financial sectors. The state role in the finance sector expanded dramatically in the 1980s when the government took over loan defaults to the Development Bank of the Philippines and the Philippine National Bank. In the agriculture sector, the state monopolized the distribution of sugar through the setting up of the Philippines Sugar Commission. In cooperation with Coconut Producers Federation, the government establish United Coconut Oil Mills which took over the control of most of country’s coconut processing mills (Yoshihara 1988, 110).

After a brief period of outward orientation in 1972 the economy reversed back to inward looking in the middle of 1970s. Import tariffs were revised upwards to accord protection to local producers. The government also continued to provide funds for investment in sectors related ISI industries. As a result, the number of state owned enterprises expanded from 70 in 1972 to about 300 in the 1980s. In addition, President Marcos deliberately introduced measures to further protect domestic producers, created monopolies and provided tax exemptions especially to well connected businesses. In late 1979, the Philippine government announced an additional plan for the setting up of eleven large industrial projects including cooper and aluminium smelters, fertilizer and petrochemical plants, a pulp and paper mill, the manufacture of diesel engines and an integrated
steel project, as part of efforts to strengthen industrial deepening. The bulk of the funds for these investments were raised internationally in the form of borrowing.

Only on several occasions proponents of neoclassical economics managed to influence the decisions of the Philippine government over economic policies. In the early 1960s, under President Diosdado Macapagal, the country faced a major balance of payments problem. In an effort to solve external imbalance the Philippine government embraced new policies aimed at promoting export, loosening foreign exchange control, devaluing the peso, restructuring import tariffs, and providing incentives for foreign investment (Stauffer 1985, 247-248). Similarly under the martial law declared in 1972 by President Marcos, proponents of neoclassical economic ideas were given a dominant role in policymaking which resulted in policies geared towards improving revenue collection, rationalizing the bureaucracy, upgrading infrastructure, attracting foreign capital and weakening rural oligarchs (Bowie and Unger 1997, 98).

Beginning in the 1980s many of the firms, both public and private, which were established to undertake ISI projects started to face insolvency problems primarily due to mismanagement. This caused severe fiscal burden to the government since these firms were unable to pay back government-guaranteed loans. Many of public owned companies were subsidiaries of the National Development Company, established under the auspices of the Ministry of Trade and Industry. The mismanagement of these public companies was stemmed by the fact that these public owned companies were not subject to regularized central government supervision, and the holding companies could relatively easy to establish new subsidiaries and incur new debts (Haggard 1990, 215-255).

The advice of neoclassical economic proponents was sought again in the middle of 1980s when the economic problem became acute. Pushed from within by this group, such as those at the
National Economic and Development Authority (NEDA) and also forced externally because of dependency on the IMF and the World Bank for loans, the Philippine government agreed to liberalize the economy in efforts to get the country out of its insolvency problem. Under the 1984 agreement with the IMF, Marcos government promised to remove quota and licenses for the importation of 1,200 types of goods. Building on to this, the NEDA released in May 1986 its Yellow Book, a relatively coherent economic policy, promising a market orientation and calling for institutional reforms, export orientation, ending monopolies, tax reform, trade liberalization and privatization of public enterprises. The market based economic reforms continued when President Corazon Aquino assumed power in 1986. In the same year, President Aquino decided to remove import controls on two-third of the items, while leaving out intermediate goods thereby hurting producer of finished goods. In 1988 the government removed the remaining import license requirements and shifted import quota into tariffs, ranging between 10 to 50 percent (Timberman 1991, 338-339), thus setting the foundation for the Philippines’ deeper economic integration into ASEAN.

8.3.2.4 Thailand

In Thailand the nationalist spirit has been less prevalent as compared to other Southeast Asian countries. This is mainly linked to the fact that Thailand has never been colonized by any other powers. For a long time since the signing of 1855 Bowring Treaty, its trade policy followed the terms set by western countries which involved some degree of “free trade” (Hewison 2001, 78). In the 1940s and 1950s, Thailand then under the monarchy system of government, experimented with state involvement in economic activities through various kinds of investments only to notice that these investments were plagued with insolvency problems a few years later.
The coups of 1957-1958 which brought General Sarit Thanarat to power ushered in an era of political, social, and economic change. The new government devised policies aimed at promoting private rather than state investment. The new approach was taken upon realizing that a number of shaky state enterprises could not be saved. This was coincided with a range of reports by international organizations, recommending increased support for the private sector as well as encouraging import-substituting industrialization to broaden Thailand’s economic base. These reports argued that the state should restrict itself to provisioning funds only for investment in infrastructure development (World Bank 1959).

When Thailand shifted toward an import-substituting industrialization strategy in the late 1950s, authorities provided funds to both Thais and foreign companies, and gave assurances against nationalization or the establishment of competing public enterprises. The government also offered a variety of tax and other investment inducements, largely through a newly created Board of Investment, including protection against imports. By 1964, the effective rates of protection in Thailand were fairly high, ranging from 22 to 65 percent for a variety of consumer goods (Muscat 1994, 106). In addition, tariff escalation was designed to encourage the establishment of finished consumer good industries. Tariffs were raised further in 1970, initially for purposes of increasing revenue for the state, but subsequently resulted in furthering protection to local firms.

At the end of the 1950s, the World Bank (1959, 94-106) urged Thailand to adopt ISI strategy to deepen its industrial base with generous promotional incentives. Sarit and his advisers accepted this recommendation and moved quickly to expand investments in manufacturing activities by offering various incentives to the private sector. The first National Development Plan (1961-1966) reinforced this policy, and at the same time the government sought the assistance of the World Bank and the US government to implement this Plan. Immediately, the Thais
government revised the Promotion of Investment Act (1960) to incorporate provisions supporting private businesses and to channel state revenues only to investments in projects related to infrastructure development.

For local business people, this approach meant more room for their involvement in economic activities that were free from state competition. For budding industrialists, the new policy meant increasing protection which acted as added incentives for them to involve in manufacturing activities aimed at local market. Meanwhile foreign investments producing goods for domestic market also increased steadily since their businesses were shed behind protective barriers. The government argued that it emphasis on promoting foreign investment was important to overcome the shortages of capital, technology and entrepreneurial skills (Hewison 1985, 280-281).

Calls for the promotion of manufacturing goods for export were occasionally made in the late 1960s by neoclassical economic proponents as well as by technocrats. However at this time there was no great pressure for a change in policy since economic growth continued and profits were maintained. In fact, due to pressure from domestic capitalist groups, protection for import-substituting manufacturing actually increased between the 1970s and the early 1980s (Phongpaichit and Baker 1995, 144-145). It was not until the mid 1980s that export oriented industrialization (EOI) policy was established. This was even achieved after Thailand experiencing severe economic downturn in the mid 1980s.

Signs of economic downturn were evidenced by the early 1980s. Agriculture exports were stagnant, the area under crop cultivation stopped growing, and it was widely believed that the expansion of the agriculture sector had come to an end. The decline in agricultural exports had substantial impact on domestic demands. Domestic traders and manufacturers of import-
substituting industries producing goods for domestic market concluded that the market was saturated and began looking for other opportunities especially exports. This heightened the pressure for a change in policy emphasizing the promotion of industries with export orientation, and it came both from within the government and from influential business community. The proponents of neoclassical economics and technocrats – led by Sino Unakul, who was the Secretary General of the National Economic and Social Development Board (NESDB) – who had been arguing for such a reorientation for over a decade at last found a receptive audience (Phongpaichit 1992, 18-21).

The downturn had substantially bad impact on Thailand’s economy. Although Thailand continued to record economic growth in 1984 and 1985, the growth was the lowest for years. Bankruptcies mushroomed, investment dropped precipitously, unemployment increased, and even the biggest and strongest companies reported flat profits or recorded loses. The downturn also indicated significant problem for the state. The policy setting elites were split on the appropriate response to the downturn (Phongpaichit and Baker 1996, 65-66). It was recognition however, that agriculture sector would not be able to save the economy. Consultations and meetings among senior government officials, technocrats, powerful sectors such as banking and textiles as well as advisers form the World Bank finally achieved a compromise. This resulted in a major devaluation of bath and a move to embrace EOI strategy. The devaluation opened new opportunities as Thailand’s cheap labour meant that its manufactures would be more competitive in the world market.

The dominance of neo-mercantilist-nationalists re emerged in July 1988 when Chatichai Choonhavan became the first elected Prime Minister since 1976. Chatichai’s alliance of businessmen-politicians forced technocrats at NESDB, as well as many of proponents of
neoclassical economic approach, who had reached influential positions previously, onto the sidelines. This group had to wait until the coup of February 1991 to regain their hold on the government’s economic and trade policies. Against this backdrop, the new Prime Minister of Thailand, Anand Panyarachun proposed for the establishment of AFTA during the ASEAN Leaders Summit in January 1992 and this proposal was unanimously accepted by other leaders of ASEAN.

8.3.3 The Influence of the Second Wave of Regionalism

The second wave of interest for the formation of regional free trade areas which started in the mid 1980s (Bhagwati 1993, 22-51) had significant influence over the establishment of AFTA. In contrast to the first wave of regionalism which was triggered by events happening in Europe – with the formation of the EEC through the signing of the Treaty of Rome in 1957 and the formation of EFTA in 1959 – the second wave of regionalism was sparked by the change of attitude of the US on the issue of regionalism in the mid 1980s. Departing from its previous attitude which had favoured multilateral-only-trade policy, the US started to involve in regionalism seriously by first signing a free trade area with Israel in 1985 and Canada in 1988. And in June 1991 the US (after securing fast-track negotiating authority from the Congress in May), Canada and Mexico began formal negotiations for the establishment of NAFTA. After taking a relatively long period of time, the negotiations were finally concluded, and the NAFTA agreement was signed by all countries in 1994 (Whalley 1993, 352-382).

Meanwhile in Europe, the EEC original member countries comprising Belgium, France, Germany, Italy, Luxemburg and the Netherlands plus newer members of United Kingdom, Denmark, Ireland, Greek, Portugal and Spain embraced greater economic integration by drawing up their single market program (SMP) in 1986. The SMP was one of the most significant
initiatives for the EEC integration since it provisioned for the free movements of goods, capital, services and labours between member countries. In South America, the period of 1990-1992 witnessed the establishment of a number of regional FTAs; prominent among these was the Common Market of the South (MERCOSUR). In Africa, the second wave of regionalism gave a new lease of life to the various regional economic arrangements that had been established during the first wave but ineffective. For example UEMOA was formed out of CEAO and COMESA was resurrected.

The proliferation of regionalism, especially the formation of NAFTA and the deepening of EEC integration, brought significant impact to the thinking of policy making elites in ASEAN countries. These two regional trading arrangements were thought to bring enormous downside impact on ASEAN countries, both individually and as a group. While ASEAN countries have been engaged in outward orientation of economic policy to reap benefits from a world-wide open international economic environment, which started in the mid 1980s, these countries felt that they would be vulnerable to a segmentation of global market place (Plummer and Imada-Iboshi 1996, 121).

The formation of NAFTA and further deepening of the EEC integration posed not only the possibility of shrinking market share for ASEAN products, but also an increase in protection in these markets. Towards the end of 1980s, North America and Europe represented two important markets for ASEAN countries both in terms of export destinations as well as the source of imports. In 1988 these two regions absorbed 35 percent of ASEAN exports and provided 39 percent of its imports (Akrasanee and Stifel 1992, 37). The preference nature of NAFTA and EEC arrangements meant that imports from ASEAN into these two regions could faced stiffer competition or even displaced by imports from members. Influenced by these events ASEAN countries viewed that the
time has come to strengthen their own economic integration by establishing a regional free trade area.

8.3.4 Inducing and Sustaining Foreign Direct Investment

By the early 1990s it became clear to many ASEAN countries that FDI contributed enormously to their countries’ economic prosperity, particularly in generating employment opportunity and contributing to GDP growth. In 1990 FDI inflows into ASEAN countries was US$11.66 billion, an increase of almost 100 percent within a span of only two years (Athukorala and Menon 1996, table 6.1). This FDI influx primarily occurred after ASEAN countries embarked on specific programs to attract FDI inflows particularly by provisioning numerous incentives, developing physical infrastructure and maintaining political stability.

Economically FDI can be divided into two major categories: market-seeking and efficiency-seeking investments (Athukorala and Menon 1996, 85). Market-seeking investment is an investment in which the prime aim is to produce goods for the host-country and also other markets in a region. Efficiency-seeking investment, in contrast, is an investment driven by the desire to acquire competitive advantage over competitors in the host country. Market-seeking investment itself can take two major forms: First, tariff-jumping investment which is influenced purely by tariff preferences and second, investment induced by the enlargement of a market because of a regional FTA. Therefore, the attractiveness of a region for tariff-jumping investment depends on the magnitude of the margin of preference, which is the difference between tariffs applicable to members as compared to non members.

In addition to the influence of the margin of preference, specific characteristics of a regional FTA can have a significant impact on the decision of investors of tariff-jumping investments, especially if its formation could create a (real or perceived) threat of increased
protection for trade with countries outside the grouping. The main worry for outside investors is that the creation of a regional FTA may foster a more protectionist approach towards extra regional trade. In this regard, it has been argued that the increase of FDI from East Asian investors, particularly Japanese, in the EEC in the late 1980s was due to the concern that EEC single market program would increase protection against outsiders (Balasubramanyam and Greenaway 1993, 86).

Although prior to AFTA establishment the bulk of FDI that had come into the ASEAN region was market-efficiency and export oriented investments, the formation of AFTA provides a great potential for AFTA members to attract FDI that falls under the category of market-seeking investment influenced by the enlargement of the regional market. Since each ASEAN member has a distinct comparative advantage in a particular stage of manufacturing activities (Heinrich and Konan 2001, 156), foreign investors could reap enormous benefits by locating different types of investments in different countries. Less developed ASEAN members would be suitable as a location for producing low value added goods such as product assembly, while relatively more advanced countries possessing highly-skilled labours (such as Singapore and Malaysia) would be suitable for higher value added activities, such as high technology and capital intensive manufacturing industries.

At the time of its establishment, AFTA represented a single enlarged market with over 335 million people and a combined income of US$305 billion (Athukorala and Menon 1996, 88). This undoubtedly would be attractive to foreign investors who have been looking to gains from economies of scale by producing goods for the ASEAN market as well as for export to other regions. According to Narongchai Akrasanee and David Stifel (1992, 36) ASEAN officials involved in the negotiations leading up to the Leader Summit in Singapore (January 1992)
admitted that the opportunity and capability to attract FDI were the most compelling arguments for the establishment of AFTA.

8.4 The Economic Benefits of AFTA

Trade liberalization undertaken by ASEAN member countries in efforts to fulfil their commitments under AFTA brings certain economic benefits to the participating countries. These benefits are unambiguous especially if one looks from the perspective of the theory of the second best. The theory of the second best, expounded by Richard Lipsey and Kevin Lancaster (1956) says that although the first best Paretian optimum could not be achieved because of certain necessary conditions are not attainable, welfare gains to an economy are still possible under the second best situation.\(^{64}\) In this regard at least three economic benefits can be envisaged for members of a regional FTA, and these benefits are possible because trade liberalization would bring a variety of long term dynamic effects (Frankel 2000, 1-12; Lawrence 1991, 23-35). First, member countries will enjoy economic gains because many industries are able to operate on a large scale basis thus enjoying economies of scale. Second, both consumers and producers will gain since they are able to access to consumption goods and intermediate inputs within the region at lower costs. And finally, member countries are able to increase their economic efficiency due to greater competition for many sectors of their economy.

8.4.1 Economics of Large Scale Production

The formation of AFTA brings economic gains as each firm in ASEAN will have better opportunity to operate on a large scale basis to serve enlarged market comprising all member

\(^{64}\) The Paretian optimum national welfare could not be achieved under economic equilibria characterised by an imperfect market. As regard to international trade, Bhagwati ([1971] 1983, 73-94) demonstrated that trade policies can improve national welfare if the policies are devised in the presence of market distortions and if they act to correct the detrimental effects caused by the distortions. He also showed that in almost all circumstances a trade policy is a second best rather than a first best policy choice.
countries. In fact AFTA constitutes a big combined market as the total population of the ten member countries in 2004 was more than 500 million. With large scale production, companies will be able to enjoy both internal and external economies of scale. Internal economies-of-scale comes in the form of decreasing unit cost of production as output increases. The decrease in unit cost of production could occur from various sources when economic integration among ASEAN countries accelerates, particularly through better specialization of labours as well as lower costs of inputs since companies could buy their inputs in bulk to serve their bigger production capacity. In addition, external economies-of-scale is also at works. When more companies in an industry operate on large scale production they bring positive external effects, first to the industry and second to the whole economy. These positive external effects mainly come from decreasing costs of communication, transportation and other delivery mechanisms as companies interact with each other in undertaking their business activities.

8.4.2 Gains to Consumers and Producers

Lowering and eliminating tariffs and non tariff barriers under AFTA bring economic benefits to both consumers and producers in ASEAN countries. As the liberalization of trade occurs, consumers will not only be able to access bigger varieties of alternative products, but also those products will be available at lower prices. This is novel because it translates into an increase in real income for consumers since they can acquire more goods with the same amount of money. Similarly, producers in ASEAN will also gain from trade liberalization as they now able to get access to inputs for their production at lower costs. The lower cost of inputs will, in turn, have positive dynamic effects especially in the long run for two reasons. First, the lower cost of inputs will lead to lower production costs, which then result in lower prices of final goods to consumers...
(provided there exist many companies in an industry). Second, final goods of one company sometime are used as intermediate inputs in the production of goods by other companies regardless of whether they are in the same of different industries. This chain of effects finally translates into greater economic gains for the entire economy.

8.4.3 Increase Efficiency through Greater Competition

The liberalization of trade policy among ASEAN member countries means that domestic companies will be exposed to greater competition from rival companies of other members as tariffs and no tariff barriers are lowered and finally eliminated. The need to compete will prevent companies from setting their prices excessively above their cost of production. The greater the competition, the closer is the price for a product to equal its marginal cost of which producers could charge consumers, a level at which the economy is at its most efficient. Competition will also drive a country towards achieving allocative-efficiency. A country is said to reach this point of efficiency when companies produce a combination of goods that maximizes the overall level of satisfaction (or welfare) of the population. In addition, increased competition will also cause an increase in economic efficiency as companies have to be more competitive and innovative to remain in business. Companies will have to be competitive especially in pricing their products as well as innovative in producing goods that appeal to a wide range of consumers. In the long run all these will finally result in an increase in real income for the entire economy.

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65 However, there is a problem for these dynamic forces to operate efficiently in ASEAN countries. This is due to the fact that policies aimed at preventing monopoly as well as anti-competitive behaviours of firms are either not well established or poorly enforced.

66 AFTA agreement only requires member countries to lower import tariffs into the range of 0 to 5 percent. However, individually ASEAN member countries agreed to eliminate tariffs on most goods traded between them (Severino 2001, 218-301).
8.5 Conclusion

At least three factors and circumstances could be identified to be in existence around the time of AFTA establishment which had great influence over the thinking of ASEAN leaders in agreeing to the formation of AFTA in 1992. First, the unanimous decision of ASEAN leaders to establish AFTA reflects a compromise of economic and ideological rivalry between neo-nationalist-mercantilists and neoclassical economics. Second, ASEAN leaders were increasingly influenced by the proliferation of regional FTAs which at that time engulfed three major continents: Europe, North and South America and Africa. Third, the establishment of AFTA was taken in an effort to continue attracting FDI into the ASEAN region.

From the perspective of economics, there are specific economic benefits to be gained by member countries of AFTA as they engage in trade liberalization in efforts to fulfill commitments agreed to under the AFTA agreement. This is because trade liberalization will bring long term dynamic effects, thus improving economic welfare of the participating countries. In this regard at least three economic benefits can be identified, although these gains are only unambiguous in the context of the theory of the second best. First, member countries will gain because many industries are now able to operate on a large scale basis, therefore, enjoying economies of scale. Second, both consumers and producers will gain because they are able to gain access to goods and intermediate inputs within the region at lower costs. Finally, member countries are able to increase their economic efficiency due to greater competition in their economies.
CHAPTER NINE

METHODOLOGY FOR ASSESSING THE EFFECTS OF REGIONAL FREE TRADE AREAS ON TRADE

9.1 Overview

This chapter explains the methodology to be employed in the third part of this study, that is, the examination of the effects of regional FTAs on trade. This chapter begins by providing justification over the use of gravity models in the study, and also explains the approaches adopted in specifying the appropriate gravity models. Next, this chapter examines the sources of data and explains the coverage of this study, which runs over a period of 24 years, from 1980 until 2003. Finally, this chapter clarifies the techniques, procedures and steps taken to assess the effects of regional FTAs on trade, as well as to examine if the establishment of AFTA led to creating or diverting trade.

9.2 Justification for Further Examination of the Effects of Regional FTAs on Trade

The broad objective of the third part of this study is to examine the economic effects brought about by the formation of regional FTAs on trade of member vis-à-vis non member countries. As highlighted in Chapter 7, there have been studies employing various methods of analysis to assess the economic effects of regional FTAs with the methods used by these studies are as diverse as the studies’ findings. For example, studies which employed a variety of gravity models as the method of analysis showed contrasting findings.67 As regard to studies involving ASEAN regionalism, some researchers found this economic grouping positively and significantly boosted its intra-bloc trade, while others indicated an opposite outcome.

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67 The use of different specification of gravity models in empirical investigation of various economic issues associated with regionalism is a common practice among researchers. The main reason behind this is due to the fact that objectives and research questions are different from one to another study.
A well known study on ASEAN regionalism (as well as other economic groupings) using a gravity model was Frankel’s (1997), which examined the effect of ASEAN regionalism on trade using data covering the period of 1965-1992. In this study he found that ASEAN regionalism has a positive and significant effect on intra-bloc trade for all the years under examination. A similar conclusion was advanced by Kruger (1999), when she examined ASEAN regionalism using more recent data (1987-1997). However, a study by Soloaga and Winters (2001) employing a different specification of a gravity model, showed an opposite result. Testing yearly data for the period 1980-1996 they showed that ASEAN regionalism has a significantly negative effect on intra-bloc trade, especially after 1987. These inconclusive findings justify further examination of the issue, with the use of a different approach and methodology. In addition, this study also assesses the effect of AFTA based on more recent data, from 1980 through 2003.

This research takes a different approach to past studies in an effort to examine the economic effects brought about by the formation of regional FTAs in general and AFTA in particular. In essence, this study analyses relevant data in 3 different parts. At the first part, a different specification of gravity model is used to examine the effects of a number of regional FTAs on trade of member vis-à-vis non members. The second part involves the examination of trade patterns of six original members of AFTA. And finally, the third part assesses “trade creation” and “trade diversion” due to the formation of AFTA.

9.3 Examining the Effects of Regional Free Trade Areas on Trade

The first part of this study uses a specific gravity model to examine the effects of a number of regional FTAs (AFTA, CER, EU, MERCUSOR and NAFTA) on trade. A gravity model is chosen over other methods of analysis examined in Chapter 7 because of three main reasons. First, the robustness of gravity models in explaining determinants of trade flows between countries in
past studies have been well documented (Bergstrand 1998, 23-28). Second, although gravity models suffer poor reputation among trade economists early on due to the lack of theoretical underpinnings, this problem is considered “settled” by many people after Deardorff’s (1998, 7-22) paper which proved formally that a gravity equation can be derived from Hecksher-Ohlin factor proportion framework, a prominent theory of international trade. Additionally the recent works of Anderson and Wincoop (2003, 170-192) and Andrew K. Rose (2004, 98-114) provided a further theoretical foundation for the use of gravity model in analysing international trade. Third, since this study is an \textit{ex post} study examining the effects of regional FTAs on trade after their formation, it has been argued that gravity models are one of the best methods to undertake this type of study.

The original gravity model, introduced into international trade by Tinbergen (1962) was a model explaining determinants of bilateral trade flows between trading partners. Tinbergen used bilateral trade value as an endogenous variable while only two explanatory variables were identified. These explanatory variables were the gross domestic products (GDP) of the two countries and the distance between them. Subsequent researchers identified and used additional explanatory variables which were argued to have an influence on bilateral trade flows. These included the wealth of people in the two countries (proxied by per capita income) and cultural similarity (proxied by the use of common language in business dealings), which contributed to lowering the cost of doing business. To test the effect of any particular free trade areas on trade, a dummy variable was included into the gravity equation.

Frankel’s numerous studies, determining the effect of regionalism on trade, used the value of total trade flow as an endogenous variable (see for example Frankel (1997)). As for explanatory variables, he used the product of GDP for the first, and the product of per capita GDP of the two trading partners for the second explanatory variable. Krueger (1999) used a different specification
of the gravity model in her study. She used the value of export of one country to its trading partners as an endogenous variable. Unlike Frankel (1997), she used GDP and per capita GDP of individual countries as explanatory variables. Soloaga and Winters (2001) used yet another different specification. In their study, the value of import was used as an endogenous variable, while individual countries’ GDP and per capita GDP were used as explanatory variables. In all three studies, distance and language were used as other explanatory variables. Meanwhile, Soloaga and Winters added population and total land area as additional explanatory variables in their study.

9.3.1 Model Specification

This study uses a different approach in specifying a gravity model to be employed. Fundamentally, the model is derived from the basic functional form of Tinbergen (1962) and Frankel (1997). Econometric studies are then employed to assist the author in selecting the most appropriate specification of gravity model which is supported by the data. The basic functional form of the model can be depicted as follows:

\[ T_{ij} = f(GDP_{ij}, PGDP_{ij}, Distance_{ij}) \]  \hspace{1cm} (9.1)

Whereby:

\[ T_{ij} \] is the value of total trade of country \( i \) and country \( j \)

\[ GDP_{ij} \] is gross domestic products of country \( i \) and country \( j \)

\[ PGDP_{ij} \] is per capita GDP of country \( i \) and country \( j \)

\[ Distance_{ij} \] is the physical distance between country \( i \) and country \( j \)
What this basic gravity model says is that bilateral trade flow between two countries is primarily determined by a combination of the two countries’ income (GDPs), the wealthiness of their combined population (per capita GDPs) and the physical distance between them.

Econometric analyses are performed in an effort to come up with the most appropriate functional form as well as to help the author choosing the types of interaction terms for the explanatory variables. This is an important process since the interaction terms of explanatory variables (GDP$_{ij}$ and PGDP$_{ij}$) can either be multiplicative or additive. This study uses specific econometric methods to ascertain the most appropriate interaction term which is supported by the data in explaining bilateral trade flows.  

Schematically, the two basic competing models are either

$$ T_{ij} = \alpha + \beta_1 (GDP_i \times GDP_j) + \beta_2 (PGDP_i \times PGDP_j) + \beta_3 (Distance_{ij}) + \mu_{ij}, $$

of which explanatory variables take the multiplicative form of interaction, or

$$ T_{ij} = \alpha + \beta_1 (GDP_i + GDP_j) + \beta_2 (PGDP_i + PGDP_j) + \beta_3 (Distance_{ij}) + \mu_{ij}, $$

of where they take the additive form.

Econometric analyses also help resolving the problem of uncertainty over the best functional form to be used, as they provide test statistics to guide a researcher in selecting either a linear or a log linear model. It is to be noted that the functional form of gravity models mostly used in past studies was log linear, while the use of gravity models of a linear form was rare. In addition, econometric analyses are also performed to detect and address problems and requirements associated with the use ordinary least square (OLS) technique of regression. These

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68 There are many alternative econometric methods developed by econometricians that can be used to determine the best model based on data at one’s disposal. For purposes of testing competing models, this part of study used econometric methods proposed by Sargan (1976), MacKinnon, White and Davidson (1983), Bera and McAleer (1989), Vuong (1989) and Pesaran and Pesaran (1995).

69 Econometrically, as will be detailed out in Chapter 10, and in conformity with its popularity for empirical investigation, the former model (culminating multiplicative interaction form) turns out to be the better model of the two.

70 Again test statistics (will be discussed in Chapter 10) show that log linear is a better alternative than linear form.
include problems associated with multicollinearity, autocorrelation and heteroscedasticity as well as the requirement that residuals (or error terms) of the regression must be normally distributed.

To examine the effects of regional free trade area on trade, then dummy variables are added into the gravity equation. The use of dummy variables aims to answer two of the research questions highlighted in Chapter 1. The first question is whether the formation of regional FTAs in general boosts trade among participating members as compared to trade of countries that do not become members of any regional free trade areas. The second question is whether the formation of AFTA results in boosting trade among members in comparison to trade with non member countries. To answer these questions, two separate regressions are performed and two different set of dummy variables are used. To answer the first question a regression analysis of the following gravity model is performed:

\[
\log T_{ij} = \alpha + \beta_1 \log (GDP_i \times GDP_j) + \beta_2 \log (PGDP_i \times PGDP_j) + \beta_3 \log (Distance_{ij}) + \rho_1 (AFTA) + \rho_2 (CER) + \rho_3 (EU) + \rho_4 (NAFTA) + \rho_5 (MERCUSOR) + \mu_{ij} \tag{9.2}
\]

Whereby (in addition to variables already defined):

AFTA is a dummy variable representing AFTA bloc and takes the value of 1 if both trading partners are members of AFTA and 0 if otherwise.

CER is a dummy variable representing CER bloc and takes the value of 1 if both trading partners are members of CER and 0 if otherwise.

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*Only five dummy variables, AFTA, CER, EU, NAFTA and MERCUSOR, are included into the model representing five respective regional FTAs because countries belonging to other formal regional FTAs do not report their trade statistics with other members consistently that allows the author to analyze. This means that except for member countries of these five regional FTAs, no other pairs of countries in the sample that belong to other formal regional FTAs.*
EU is a dummy variable representing EU bloc and takes the value of 1 if both trading partners are members of EU and 0 if otherwise.

NAFTA is a dummy variable representing NAFTA bloc and takes the value of 1 if both trading partners are members of NAFTA and 0 if otherwise.

MERCUSOR is a dummy variable representing MERCUSOR bloc and takes the value of 1 if both trading partners are members of MERCUSOR and 0 if otherwise.

To answer the second question concerning whether or not the formation of AFTA boosts trade between members vis-à-vis non members, another regression analysis is performed as follows:

\[ \log T_{ij} = \alpha + \beta_1 \log (GDP_i \times GDP_j) + \beta_2 \log (PGDP_i \times PGDP_j) + \beta_3 \log (Distance_{ij}) + \varphi (AFTA) + \mu_{ij} \]  

(9.3)

Whereby (in addition to variables already defined):

AFTA is a dummy variable representing AFTA bloc and takes the value of 1 if both trading partners are members of AFTA and 0 if otherwise.

Regressing 9.2 and 9.3 will give different results and interpretations. The magnitude of the coefficients of dummy variables produced by econometric model 9.2 will indicate the different of trade of members of a regional free trade area (say AFTA) in comparison to trade of countries that do not become members to any regional free trade areas that exist around the globe (as captured by the value of the intercept term). In contrast, the magnitude of the coefficient of AFTA in 9.3 will

Terminologically this type of econometric model (as also with model 9.2) which incorporates both quantitative explanatory variables (GDP and PGDP) and qualitative variable (AFTA dummy) is called analysis of covariance (ANCOVA) model. This is useful since ANCOVA models provide a method of statistically controlling the effects of quantitative explanatory variables, called covariates or control variables on exogenous variable when dummy variables are added into the model (Gujarati 2003, 304).
imply the difference of trade of AFTA members in comparison to countries that do not become members of AFTA.

9.3.2 Data

Data used in this part of study covers a period of 24 years (1980-2003). The 24-years coverage encompasses pre-AFTA formation period (1980-1991) as well as post-AFTA period (1992-2003). This part of study involves regression analyses of cross sectional data of pairs of sample countries, performed for every alternate year, thus producing a total of 13 regression results. Regressing total trade (exogenous variable) on explanatory variables for every two years of pairs of countries should give a good indication of how the coefficients of all variables in the model change over time both for pre-AFTA and post-AFTA formation periods.

In order to increase the statistical reliability of the regression results and to minimise econometric problems associated with multicollinearity, autocorrelation and heteroscedasticity, as well as the requirement that error terms are normally distributed, this study analyses trade data of all countries that report their trade statistics regularly (for the period of 1992-2003) to the United Nations which compiles this data into its Commodity Trade Statistics Database (UNCOMTRADE). Of all the countries available in this database, a total of 45 pairs of countries meet the requirements to be included in the sample countries.73 This should constitute a good representation of international trade flows, as trade among these countries covers approximately 50 percent of world trade. The use of the 45 pairs of countries produces a total of 990 (45 × 44/2) data

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73 The selection of countries to be included into the analysis began with the list of countries used previously by Frankel (1997), of which 63 countries were identified. However because some of these countries did not report their trade statistics regularly, they were deleted from the list. In the end only 45 of them meet the sampling requirements and are included in the analysis.
points for the analysis of each alternate year.\textsuperscript{74} Data on GDP and per capita GDP is drawn from another United Nations database, called National Accounts Main Aggregates Database, while data on distances between capital cities of sample countries are drawn from Great Circle Distances between Cities Database.\textsuperscript{75}

9.3.3 \textit{Expected Signs of Explanatory Variables}

As pointed out by previous researchers and already discussed in Chapter 7, as well as in line with the expectation of economic theory, two explanatory variables used in this part of the study, national income (GDP\textsubscript{i}) and the wealthiness of population (PGDP\textsubscript{i}) are expected to have positive influence on bilateral trade flows. The economic logic behind this is straightforward: the higher is the income and the wealthier is the people in two countries that trade with each other, the higher is the value of trade between them. In contrast, it is expected that physical distance between the two trading countries will have negative influence on their bilateral trade flows as this poses a kind of barrier, particularly in terms of higher transportation cost.

9.4 \textit{Examining Trade Patterns of AFTA Countries}

The second part of this research involves the examination of trade patterns of the original six member countries of AFTA – Brunei, Indonesia, Malaysia, the Philippines, Singapore and Thailand. Although the membership of AFTA has increased to 10 countries, only original member countries are chosen to be included in this study because of two reasons. First, since this study is an \textit{ex-post} study examining the effects of AFTA before and after its establishment, the availability

\textsuperscript{74} A list containing all 45 countries that meet the sampling requirements is provided as Appendix 1.

\textsuperscript{75} These three databases are accessed online by the author between July 2005 and February 2006 at the following addresses:
1) Trade statistics (UNCOMTRADE) at www.unstats.un.org/unsd/comtrade
2) GDPs and per capita GDPs at www.unstats.un.org/unsd/snama/dnlist.asp
3) Distances between cities at www.wcrf.ars.usda.gov/cec/java/lat.long.htm
of data for the two periods, pre and post AFTA formation, is extremely important. Of the currently 10 AFTA members, only the original six countries have adequate data for analysis. The pre-formation period covering 12 years is from 1980 to 1991, while the post-formation period also covering 12 years, is from 1992 until 2003. Second, the dates that the other four countries became members of AFTA were different, making comparison of the pre and post AFTA period impossible, if all 10 AFTA member countries were to be included into the analysis. Therefore, the inclusion of all 10 AFTA members would not only make the comparison impossible, but the analysis would also be plagued with the problem of data inconsistency.\textsuperscript{76} The analysis of the six original AFTA members should give a good indication how trade patterns of each of these countries change over the two time periods. In addition, the ratios of trade of those six countries with member vis-à-vis non members are calculated over the two time periods to examine how trade ratios have changed overtime.

9.5 Assessing Trade Creation and Trade Diversion of AFTA

A specific method is employed to assess trade creation and trade diversion of AFTA. This is done by calculating and comparing actual against counterfactual trades of both intra and extra AFTA bloc after the formation of AFTA. Intra-AFTA trade value is established by summing up each other bilateral trade of all six original AFTA members. In contrast, extra-AFTA trade is calculated by summing up each of these countries’ trade with the rest of the world. Mathematically, the calculation of intra and extra AFTA trades can be depicted as follows:

\[ X_a = \sum T_{ij} \]
\[ X_b = \sum T_{ik} \]

\textsuperscript{76} As already pointed out in Chapter 8, the other four members of AFTA joined the grouping at different dates: Vietnam (1995), Laos (1997), Myanmar (1997) and Cambodia (1999).
Whereby:

\[ X_a = \text{intra AFTA trade} \]
\[ X_b = \text{extra AFTA trade} \]
\[ T_{ij} = \text{Total trade between one AFTA member with another member} \]
\[ T_{ik} = \text{Total trade between one AFTA member with non member} \]
\[ X_b = \sum T_{iw} - \sum T_{ij} \]

Whereby:

\[ T_{iw} = \text{Total trade between one AFTA member country with the whole world} \]

Trade creation is observed if trade between AFTA member countries increases, while at the same time trade with non members (the rest of the world) also increases. In contrast, trade diversion is evident if intra bloc trade increases while extra bloc trade decreases.\textsuperscript{77}

It is important to recognize that an increase in either intra or extra bloc trades of AFTA countries after the establishment of AFTA could be due to other factors than the “policy shock” of AFTA formation – such as due to an increase in the level of investment as well as due to sustained economic growth. In order to capture only the effect of “AFTA shock” on trade, then counterfactual trades of member countries in the absence of AFTA need to be established.

\textsuperscript{77} It should be made clear that the defining concept of trade creation and trade diversion used in this study are slightly different from their original meaning. The original concept of trade creation expounded by Viner (1950) referred to a shift in the location of production from a high cost member country to a low cost member country, while trade diversion referred to a shift in the locus of production from low cost non member to high cost member country. The adjustment in the defining concepts of trade creation and trade diversion is necessary, because, as repeatedly noted by other researchers, trying to examine empirically trade creation and trade diversion under Viner’s original concepts is impossible because of problems faced in establishing whether an increase (or decrease) in trade is due to a shift in the location of production of traded goods.
Estimating counterfactual trade is important because it indicates what would be the value of intra and extra bloc trade if AFTA did not come into existence (in 1992). One way of assessing whether AFTA causes trade creation or trade diversion is by comparing the value of trade of AFTA member countries in existence of AFTA with the value of trade if AFTA was never established (counterfactual trade). For purposes of estimating counterfactual trades, this part of study proceeds in two stages.

At the first stage, overall trends of both intra and extra AFTA trades are examined to establish a forecasting-model that appropriately represents the type of trade-trend for data covering 22 years, from 1970 to 1991, a period before AFTA was established. To come up with the most appropriate trend-model, a forecasting technique called “trend analysis” (Carver and Nash 2005, 229) is employed, in which this forecasting technique will show statistical results comparing all competing models fitting the (best) data at hand. Once the best model is found, then it is used to estimate intra and extra AFTA counterfactual trades (i.e. after its formation). In order to come up with the best model, six possible trend-models are examined: linear, quadratic, growth, logarithm, S and exponential.78 The functional forms of these six models are as in Table 9.1

At the second stage, intra and extra AFTA counterfactual trades (for the post-AFTA formation period of 1992-2003), derived based on the chosen model of forecasting, are used to ascertain whether AFTA creates or diverts trade. This is done by deducting the estimated counterfactual trades of intra and extra AFTA bloc (of period 1992-2003) from their respective actual trades. A positive difference between the actual and counterfactual trades of “intra” AFTA bloc indicates a “gross” trade creation. The term gross trade creation is used to indicate an increase

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78 As will be further explained in Chapter 10, of all six forecasting models examined, quadratic model comes out to be the best model for forecasting both intra and extra trades of AFTA countries.
in intra bloc trade which is attributable to AFTA effect.\footnote{The term gross trade creation was originally introduced by Bela Balassa (1967), in which he defines it as the total increase in trade among members of a trading community brought about by an economic integration, regardless of whether the increase in trade replaces domestic production (trade creation) or whether it replaces non member exports (trade diversion).} This also means that there is an increase in trade among member countries after the establishment of AFTA. Meanwhile, a positive difference between the actual and counterfactual trades of “extra” AFTA bloc shows a “net” trade creation. This indicates that trade between members of AFTA and the rest of the world countries for the same period of time also increase despite the existence of preferential and discriminatory AFTA agreement.

### Table 9.1

<table>
<thead>
<tr>
<th>Trend Models</th>
<th>Functional Forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linear</td>
<td>$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2$</td>
</tr>
<tr>
<td>Quadratic</td>
<td>$Y = \beta_0 + \beta_1 X_1^2 + \beta_2 X_2^2$</td>
</tr>
<tr>
<td>Growth</td>
<td>$Y = e^{(\beta_0 + \beta_1 X)}$</td>
</tr>
<tr>
<td>Logarithm</td>
<td>$Y = \beta_0 + \beta_1 \ln (X)$</td>
</tr>
<tr>
<td>S</td>
<td>$Y = e^{(\beta_0 + (\beta_1 / X))}$</td>
</tr>
<tr>
<td>Exponential</td>
<td>$Y = (\beta_0) e^{(\beta_1 X)}$</td>
</tr>
</tbody>
</table>

(Source: Carver and Nash (2005, 223))

To assess whether AFTA “actually” creates or diverts trade, then the test of difference (t-test) is applied to statistically ascertain whether or not the difference between actual and counterfactual trades is significant. In order to establish whether AFTA creates or diverts trade, the following decision rules are applied:
1) “Actual” trade creation is observed if the existence of “gross” trade creation is significant while at the same time the existence of “net” trade creation is also significant – in other words both are significantly different from zero – for the post-AFTA period of 1992-2003.

2) “Actual” trade diversion is observed if the existence of “gross” trade creation is significant while “net” trade creation is inexistence, or if its existence is not significantly different from zero for the post-AFTA (1992-2003) period.

9.6 Conclusion

Specifically, two gravity models are used in this part of this study, one to assess the effects of regional FTAs on trade and the other to examine the effects of AFTA on trade of member vis-à-vis non member countries. This study chooses gravity models as the method of analysis for three reasons. First, the robustness of gravity models in explaining determinants of trade flows between countries in past studies has been proven and well documented. Second, although gravity models have suffered from a poor reputation amongst trade economists due to a lack of theoretical underpinnings, this problem is considered “settled” by many people after Deardorf’s (1998, 7-22) paper, which proved formally that a gravity equation can be derived from the Hecksher-Ohlin factor proportion framework. Third, it is a well known fact that the use of gravity models is one of the best methods to undertake this type of ex post study. In addition, this study employs a specific forecasting technique to examine whether AFTA creates or diverts trade.
CHAPTER TEN

ANALYSIS AND FINDINGS

10.1 Overview

This chapter provides the analysis and findings of the third part of this study. It begins by explaining the procedures adopted to come up with an econometric model for the purpose of examining research questions identified in this part of the study. Subsequently, it discusses other important econometric issues associated with the selection of an econometric model. These include the discussion of the statistical tests employed to analyse auxiliary assumptions and other requirements in order to use the ordinary least square (OLS) technique of estimation. In addition, this chapter also discusses the adequateness of the model selected for empirical assessment. Finally, this chapter proceeds to discuss the results and findings obtained in this part of the study, particularly in efforts to answer the following research questions: (1) Does the formation of regional FTAs boost member countries’ trade in comparison to trade of countries that do not belong to any regional FTAs? (2) To what extent the trade patterns of the original six member countries of AFTA change after its establishment? (3) Does the formation of AFTA result in boosting trade among members at the expense of non members? And (4) Does AFTA create or divert trade?

10.2 The Effects of Regional Free Trade Areas on Trade

10.2.1 Model Selection Procedures

As already highlighted in Chapter 9, relevant data gathered for the purpose of this study’s empirical investigation are the value of bilateral trade of the 45 sample countries, their income (GDP), per capita income (PGDP) and physical distance between two trading partners. Following
standard economic theory as well as evidence from past studies, establishing a relationship between these variables is straightforward:

\[ T_{ij} = f(GDP_{ij}, PGDP_{ij}, Distance_{ij}) \]  \hspace{1cm} (10.1)

Whereby:

- \( T_{ij} \) is the value of total trade of country \( i \) and country \( j \)
- \( GDP_{ij} \) is gross domestic products of country \( i \) and country \( j \)
- \( PGDP_{ij} \) is per capita GDP of country \( i \) and country \( j \)
- \( Distance_{ij} \) is the physical distance between country \( i \) and country \( j \)

The measurement of endogenous variable \( T_{ij} \) and explanatory variable \( Distance_{ij} \) is uncomplicated and follows the same measurement used by Frankel and Wei (1997). Endogenous variable \( T_{ij} \) represents the value of total trade (exports plus imports) of a pair of trading countries, while \( Distance_{ij} \) is the physical distance (in kilometres) of the capital cities of the two countries. However, the measurement of explanatory variables \( GDP_{ij} \) and \( PGDP_{ij} \) is a bit problematic because the combination of their income can take either multiplicative or additive interaction terms, each of which has different implications on the extent of bilateral trade to be reflected in the regression results. To determine which interaction terms is the most appropriate, econometric analysis and testing are performed. Test statistics employed for this purpose are N-Test proposed by Cox (1961), NT-Test and W-Test both by Godfrey and Pesaran (1983), J-Test by Davidson and MacKinnon (1981) and JA-Test by Fisher and McAleer (1981). In addition, Akaike Information Criterion (AIC) and Schwarz Bayesian Criterion (SBC) are also used. As for the results of the 13 regression analyses performed every alternate year from 1980 through 2003, multiplicative form of
interaction appears to outperform additive form (an example of the test results i.e. of year 2003 is presented as Appendix 2).\textsuperscript{80}

It remains an issue, however, whether linear or log linear model (as a functional form) is superior over the other for purposes of performing regression analysis. To investigate this issue another Non-Nested Test comparing linear against log linear model is employed. The Non-Nested tests used are S-Test proposed by Pesaran and Pesaran (1995), PE-Test by MacKinnon, White and Davidson (1983), BM-Test by Bera and McAleer (1989), and DL-Test by Davidson and MacKinnon (1981). In addition, Sargan’s (1976) Likelihood Criterion and Vuong’s (1989) Likelihood Criterion are also used. For all regression analyses performed over the period 1980-2003, the log linear model appears to be superior over the linear model (Appendix 3).\textsuperscript{81} Therefore, the chosen model is:

$$\log (T_{ij}) = \alpha + \beta_1 \log (GDP_i x GDP_j) + \beta_2 \log (PGDP_i x PGDP_j) + \beta_3 \log (DIST12_{ij}) + \mu_{ij} \quad (10.2)$$

\subsection*{10.2.1.1 Diagnostic Tests of Auxiliary Assumptions}

In order to use results produced by the regression analysis using ordinary least square (OLS) technique, certain auxiliary conditions need to be satisfied. These conditions include the requirements that (1) there is no multicollinearity problem between some or all explanatory variables included in the regression model, (2) there is no heteroscedasticity which means that error terms must be of equal variance, (3) there is no autocorrelation between error terms, (4) error terms follow normal distribution and (5) the functional form is correctly specified. To ascertain to


\textsuperscript{81} Another minor test comparing multiplicative against additive terms of interaction of explanatory variables income and per capita income in linear versus log linear function is also performed. The result of this test confirms earlier test in Section 10.1.1 in which, econometrically, the multiplicative form of interaction is superior over the additive form.
what extent these problems are in existence in the data used in this study, specific diagnostic tests are performed. An example of diagnostic test results of the original econometric model (of year 2003) is presented in Table 10.1.82

Table 10.1

Ordinary Least Squares Estimation – Total Trade as Endogenous Variable

<table>
<thead>
<tr>
<th>Dependent variable is LTTRADE03</th>
</tr>
</thead>
<tbody>
<tr>
<td>990 observations used for estimation from 1 to 990</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regressor</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>T-Ratio[Prob]</th>
</tr>
</thead>
<tbody>
<tr>
<td>INPT</td>
<td>-26.3260</td>
<td>1.4574</td>
<td>-18.0638[.000]</td>
</tr>
<tr>
<td>LGDP03</td>
<td>1.0448</td>
<td>.026944</td>
<td>38.7763[.000]</td>
</tr>
<tr>
<td>LPGDP03</td>
<td>-.018209</td>
<td>.028170</td>
<td>-.64640[.518]</td>
</tr>
<tr>
<td>LDIST12</td>
<td>-.92164</td>
<td>.057469</td>
<td>-16.0373[.000]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R-Squared</th>
<th>.69709</th>
<th>R-Bar-Squared</th>
<th>.69617</th>
</tr>
</thead>
<tbody>
<tr>
<td>S.E. of Regression</td>
<td>1.5887</td>
<td>F-stat. F( 3, 986)</td>
<td>756.3585[.000]</td>
</tr>
<tr>
<td>Mean of Dependent Variable</td>
<td>20.0193</td>
<td>S.D. of Dependent Variable</td>
<td>2.8821</td>
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<tr>
<td>Residual Sum of Squares</td>
<td>2488.5</td>
<td>Equation Log-likelihood</td>
<td>-1861.0</td>
</tr>
<tr>
<td>Akaike Info. Criterion</td>
<td>-1865.0</td>
<td>Schwarz Bayesian Criterion</td>
<td>-1874.8</td>
</tr>
<tr>
<td>DW-statistic</td>
<td>1.7908</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Diagnostic Tests

<table>
<thead>
<tr>
<th>Test Statistics</th>
<th>LM Version</th>
<th>F Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>A:Serial Correlation</td>
<td>CHSQ(1)= 10.8139[.001]*F(1, 985)= 10.8781[.001]</td>
<td></td>
</tr>
<tr>
<td>B:Functional Form</td>
<td>CHSQ(1)= 91.1998[.000]*F(1, 985)= 99.9464[.000]</td>
<td></td>
</tr>
<tr>
<td>C:Normality</td>
<td>CHSQ(2)= 77143.6[.000] Not applicable</td>
<td></td>
</tr>
<tr>
<td>D:Heteroscedasticity</td>
<td>CHSQ(1)= 13.6649[.000]*F(1, 988)= 13.8282[.000]</td>
<td></td>
</tr>
</tbody>
</table>

A: Lagrange multiplier test of residual serial correlation
B: Ramsey’s RESET test using the square of the fitted values
C: Based on a test of skewness and kurtosis of residuals
D: Based on the regression of squared residuals on squared fitted values

(Source: Output of microfit computer program)

82 Table 10.1 represents an example of regression results (of year 2003) obtained through OLS method. The 12 other regression results performed on alternate years from 1980 through 2003 exhibit about the same statistical results.
10.2.1.2 Model Adequacy

Based on economic theory as well as prior empirical works, researchers develop econometric models with the belief that they can capture the essence of the phenomena under investigation. However, a researcher is never sure in advance that an econometric model specified for empirical examination will be able to satisfactorily approximate the real-world phenomenon as predicted by relevant economic theory. Only when results are obtained then a post-mortem analysis begins, assessing whether the results make sense or not, keeping in mind the criteria of a good model provided by econometric methods. It is at this stage that the researcher comes to know if the chosen model is adequate or otherwise. In determining model adequacy, a look at some broad features of the results, such as the $R^2$ (or $R^2$) values, the estimated t-ratios, the sign of the coefficients in relation to their expectation, and the diagnostic statistics is essential. If these diagnostics are reasonably good, it can be proclaimed that the chosen model is a fair representation of reality. By the same token, if the results do not look encouraging because many auxiliary assumptions are not met, very few coefficients are statistically significant, very few coefficients have the expected signs then the researcher should begin to worry about model adequacy and look for remedies.

As shown in Table 10.1 the regression results (of year 2003) of the original econometric model show that the value of $R^2$ is reasonably high (0.61644), the expected signs of explanatory variables are present and the value of t-scores of the estimated coefficients are reasonably high, resulting in all explanatory variables highly significant except for one (i.e. LPGDP03).\(^83\)

\(^{83}\) A number of econometricians argue that $R^2$ (or $R^2$) is not a good measure to determine whether the selected model is good or bad. This is due to the fact that at times regressing unrelated variables could also result in high $R^2$ as in the case of spurious regression. As far as this study is concerned, it is the view of the author that it presents no harm to report the value of $R^2$ so long as judgements or conclusion are not made based solely on their values. A paper by David F. Hendry (1980, 387-406) presents a good discussion about a misleading nature that high $R^2$ could have in implying a relationship between exogenous and explanatory variables.
Unfortunately though, data available for the use in this regression analysis are plagued with problems associated with heteroscedasticity and functional form. This is indicated by the diagnostic tests which reject null hypotheses concerning heteroscedasticity and functional form, two of the most important criteria which need to be satisfied in order to use the OLS technique of estimation. Essentially, the existence of the problems of heteroscedasticity and incorrect functional form inflate the values of t-scores and $R^2$ resulting in the statistical results invalid, therefore conclusion could not be drawn whether the coefficients of variables under investigation are significant or not.

In order to address these problems an adjusted econometric model is constructed by transforming the original data. This is done by constructing a new variable, trade intensity, as a proxy to total trade and use it as the new endogenous variable. Trade intensity basically measures the proportion of trade to income (GDP) of the sample countries, indicating the openness of a country to international trade. Schematically the adjusted econometric model is as follows:

$$\text{Log (TRIN}_{ij} = \alpha + \beta_1 \log (\text{GDP}_i \times \text{GDP}_j) + \beta_2 \log (\text{PGDP}_i \times \text{PGDP}_j) + \beta_3 \log (\text{DIST}_{12ij})$$

\[+ \mu_{ij} \]  \hspace{1cm} (10.3)

Regressing endogenous variable trade intensity (TRIN) on explanatory variables GDP, per capita GDP and Distance between two trading partners (in log form) produces regression results as appear in Table 10.2 (also for year 2003).
Table 10.2

Ordinary Least Squares Estimation – Trade Intensity as Endogenous Variable

<table>
<thead>
<tr>
<th>Regressor</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>T-Ratio [Prob]</th>
</tr>
</thead>
<tbody>
<tr>
<td>INPT</td>
<td>-26.3260</td>
<td>1.4574</td>
<td>-18.0638 [.000]</td>
</tr>
<tr>
<td>LGDP03</td>
<td>.044797</td>
<td>.026944</td>
<td>1.6626 [.097]</td>
</tr>
<tr>
<td>LPGDP03</td>
<td>-.018209</td>
<td>.028170</td>
<td>-.64640 [.518]</td>
</tr>
<tr>
<td>LDIST12</td>
<td>-.92164</td>
<td>.057469</td>
<td>-16.0373 [.000]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Dependent variable is LTRIN03</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>990 observations used for estimation from 1 to 990</td>
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<th><strong>Regressor</strong></th>
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</table>

<table>
<thead>
<tr>
<th><strong>R-Squared</strong></th>
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<tbody>
<tr>
<td><strong>R-Bar-Squared</strong></td>
<td><strong>.22203</strong></td>
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<td><strong>S.E. of Regression</strong></td>
<td><strong>1.5887</strong></td>
</tr>
<tr>
<td><strong>F-stat.</strong></td>
<td><strong>F(  3, 986)  95.0839 [.000]</strong></td>
</tr>
<tr>
<td><strong>Mean of Dependent Variable</strong></td>
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<td><strong>S.D. of Dependent Variable</strong></td>
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<td><strong>Residual Sum of Squares</strong></td>
<td><strong>2488.5</strong></td>
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<tr>
<td><strong>Equation Log-likelihood</strong></td>
<td><strong>-1861.0</strong></td>
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<td><strong>Akaike Info. Criterion</strong></td>
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**Diagnostic Tests**

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<tr>
<td>A:Serial Correlation</td>
<td>*CHSQ(  1)=  10.8139 [.001]*F(  1, 985)=  10.8781 [.001]</td>
<td></td>
</tr>
<tr>
<td>B:Functional Form</td>
<td>*CHSQ(  1)=  .81957 [.365]*F(  1, 985)=  .81611 [.367]</td>
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<td>C:Normality</td>
<td>*CHSQ(  2)=  77143.6 [.000]*Not applicable</td>
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<tr>
<td>D:Heteroscedasticity</td>
<td>*CHSQ(  1)=  1.1272 [.288]*F(  1, 988)=  1.1262 [.289]</td>
<td></td>
</tr>
</tbody>
</table>

The regression results produced by the adjusted model are much better than that of the original model in terms of meeting the requirements of the OLS. The statistical results of new model do not show the existence of heteroscedasticity and incorrect functional form as diagnostic tests of these auxiliary assumptions suggest do not reject their null hypotheses. Also the regression results indicate that the data do not have multicollinearity problem. Multicollinearity is a problem if the coefficients of explanatory variables are significant when jointly tested, but neither one of the coefficients is significant when tested individually (Pesaran and Pesaran 1997,
188). As for the 13 regression results obtained from the OLS estimation, it is statistically evident that multicollinearity is not a problem. As can be seen from Table 10.2, F-statistics used to test joint hypothesis \((\beta_0 = \beta_1 = \beta_2 = \beta_3 = 0)\) suggests the rejection of null hypothesis that all coefficients are zero. Similarly, the test of difference of individual explanatory variables when tested separately \((\beta_0 = 0, \beta_1 = 0, \beta_2 = 0, \text{ and } \beta_3 = 0)\) also suggests the rejection of the null with the exception of only \(\beta_2 = 0\). This implies that multicollinearity is not a problem.84

In contrast diagnostic tests suggest the rejection of null hypothesis that the data has no serial correlation. However, since the regression analysis in this part of the study is performed on cross sectional data, the statistical results are not in significant way influenced by this problem. Serial correlation becomes a problem for regression analysis involving time series data. Similarly, diagnostic tests reveal that the normality requirement is not satisfactorily met since the normality test statistics suggests the rejection of the null hypothesis. However, because the sample size of this study is very large with 990 observations, the normality requirement of the error terms can be relaxed. This is due to the fact that the normal distribution of error terms is only critical for small sample size but it is not so for regression analysis involving large sample size as a departure from normality will not affect any statistical tests (Pesaran and Pesaran 1997, 72).

10.2.2 Determinants of Trade Intensity

It is useful to highlight the performance of the adjusted gravity model specified in this part of the study. Generally the regression results obtained through OLS method show that the model is reasonably good since it is able to shed some light over determinants of trade intensity. The regression results (for year 2003) presented in Table 10.2 show that the \(\overline{R^2}\) value is 0.22203

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84 As for regression model appearing in Table 10.1, \(\beta_0, \beta_1, \beta_2\) and \(\beta_3\) are respectively the estimated coefficients of INPT (intercept), LGDP00, LPGDP00 and LDIST12.
which means that the three explanatory variables included in the model (income, per capita income and distance) are able, collectively, to represent about 22 percent of the variation in trade intensity.\(^85\) The sign of all coefficients of explanatory variables included in the model is as expected by the theory as already explained in Chapter 9 except for per capita income (LPGDP03). This means that trade intensity is positively influenced by income but it is negatively influenced by distance between two trading countries. The result also show that the coefficients of LGDP (0.044797) is significant at 9.7% level while LDIST12 (-0.92164) is very significant (at confidence level of almost 100 percent). Since the regression model is in log linear form, the result implies that if income (GDP) increases by 1%, then trade intensity increases by 0.044% provided that the effects of the other explanatory variables on trade intensity remain constant. The coefficient of per capita income (-0.018209) is not significant (since it is not significantly different from zero). This also means that explanatory variable per capita income (PGDP) has no significant influence over trade intensity, especially for year 2003. The other 12 regression analyses generally show similar results except for per capital income whereby in the initial years of the study its coefficients are positive and significant.

**10.2.3 The Effects of Regional FTAs on Trade of Members versus Non Members**

One of the objectives of this study is to examine the effect of formal regional FTAs on trade of member vis-a-vis non member countries. In particular, the specific question of interest is whether the formation of regional FTAs results in boosting trade among members in comparison to trade with non members. To examine this effect dummy variables are added into the model specified previously as equation 10.3 resulting in a new regression model:

\(^85\) The \(\overline{R}^2\) score is taken as the measure of “goodness-of-fit” for this model since it is superior to \(R^2\) for a model consisting more than one explanatory variables. In this case \(\overline{R}^2\) is a better measurement because it takes into account the number of the degree of freedom associated with the number of explanatory variables included into the model.
Log (TRIN\textsubscript{ij}) = \alpha + \beta_1 \log (GDP_i \times GDP_j) + \beta_2 \log (PGDP_i \times PGDP_j) + \beta_3 \log (DIST12\textsubscript{ij}) + \varphi_1 AFTA + \varphi_2 CER + \varphi_3 EU + \varphi_4 NAFTA + \varphi_5 MERCUSOR + \mu_{ij} \tag{10.4}

It is important to note that of the total 990 pairs of countries that meet the sampling requirements, 111 pairs represent the cases in which two countries that trade with each other belonging to at least one of the five regional FTAs included as dummy variables (AFTA, CER, EU, NAFTA and MERCUSOR). The rest of the pairs (879) are either both countries are not members to either one of the five regional FTAs or only one of the pairs is a member. Adding five dummy variables, each representing a formal regional FTA allows regression analysis to make comparison of the effect that a particular regional FTA has on members in comparison to a pair of countries in which both are not members to any regional FTAs.\textsuperscript{86} The effect can be examined by analysing the coefficients of the dummy variables of the regression analysis. The summary of the 13 regression results analysing the effect of formal regional FTAs on trade for period 1980-2003 are presented in Table 10.3.\textsuperscript{87}

Table 10.3 shows that throughout the study period income (LGDP) appears to have a significant influence on bilateral trade. Explanatory variable physical distance (LDIS12) between two trading countries also has a significant (but negative) influence on bilateral trade throughout the study period with its coefficients fairly close to one. The explanatory variable per capita income (LPGDP), however, shows a different characteristic. This variable has significant and positive influence on bilateral trade in the early period of study until 2000, after which the variable becomes marginally small and insignificant. This implies that the wealthiness of the people in two trading countries has no longer influence the variability in trade in recent years.

\textsuperscript{86} As discussed in Chapter 5, there are many other formal regional FTAs such as LAFTA, CACM, CEAO and ECOWAS that are in existence currently. However, dummy variables are not assigned to these other regional FTAs because none of the pairs of trading countries included in this study belong to these other groupings.

\textsuperscript{87} Full statistical results (of year 2003) of the econometric model 10.4 are provided in Appendix 4.
This is probably due to the fact that trade barriers have come down significantly as a result of successful conclusion of many multilateral trade negotiations conducted under the ambit of the WTO as discussed in Chapter 4.

Table 10.3
The Effect of Regional Free Trade Areas on Trade

<table>
<thead>
<tr>
<th>Year</th>
<th>Estimated Coefficients and Probability Values of Controlled Variables</th>
<th>Estimated Coefficients and Probability Values of Dummy Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>INPT</td>
<td>LGDP</td>
</tr>
<tr>
<td>1980</td>
<td>-35.52</td>
<td>0.172</td>
</tr>
<tr>
<td></td>
<td>(.00)</td>
<td>(.00)</td>
</tr>
<tr>
<td>1982</td>
<td>-36.71</td>
<td>0.215</td>
</tr>
<tr>
<td></td>
<td>(.00)</td>
<td>(.00)</td>
</tr>
<tr>
<td>1984</td>
<td>-33.79</td>
<td>0.136</td>
</tr>
<tr>
<td></td>
<td>(.00)</td>
<td>(.00)</td>
</tr>
<tr>
<td>1986</td>
<td>-35.38</td>
<td>0.133</td>
</tr>
<tr>
<td></td>
<td>(.00)</td>
<td>(.00)</td>
</tr>
<tr>
<td>1988</td>
<td>-33.63</td>
<td>0.129</td>
</tr>
<tr>
<td></td>
<td>(.00)</td>
<td>(.00)</td>
</tr>
<tr>
<td>1990</td>
<td>-31.57</td>
<td>0.052</td>
</tr>
<tr>
<td></td>
<td>(.00)</td>
<td>(.00)</td>
</tr>
<tr>
<td>1992</td>
<td>-32.94</td>
<td>0.128</td>
</tr>
<tr>
<td></td>
<td>(.00)</td>
<td>(.00)</td>
</tr>
<tr>
<td>1994</td>
<td>-30.46</td>
<td>0.069</td>
</tr>
<tr>
<td></td>
<td>(.00)</td>
<td>(.00)</td>
</tr>
<tr>
<td>1996</td>
<td>-30.48</td>
<td>0.062</td>
</tr>
<tr>
<td></td>
<td>(.00)</td>
<td>(.00)</td>
</tr>
<tr>
<td>1998</td>
<td>-28.69</td>
<td>0.046</td>
</tr>
<tr>
<td></td>
<td>(.13)</td>
<td>(.00)</td>
</tr>
<tr>
<td>2000</td>
<td>-31.28</td>
<td>0.101</td>
</tr>
<tr>
<td></td>
<td>(.00)</td>
<td>(.00)</td>
</tr>
<tr>
<td>2002</td>
<td>-27.82</td>
<td>0.042</td>
</tr>
<tr>
<td></td>
<td>(.09)</td>
<td>(.00)</td>
</tr>
<tr>
<td>2003</td>
<td>-28.69</td>
<td>0.066</td>
</tr>
<tr>
<td></td>
<td>(.01)</td>
<td>(.96)</td>
</tr>
</tbody>
</table>

Note: Figures in parenthesis are the probability values indicating the significant level of each explanatory variable.

(Source: A compilation of outputs of microfit computer program, 1980-2003)

The coefficients of the dummy variables representing AFTA, CER and MERCUSOR indicate that in recent years, two members of these regional FTAs trade with each other well.
above the trade of a pair of countries in which both are not members of any regional FTAs.¹⁸ In 2003 for example, two members of AFTA trade 14 times \(e^{2.649} = 14.13\) more with each other than a pair of countries that both of them do not belong to any regional FTAs and this statistical result is very significant (at almost 100% level of confidence). In the same year, two members of CER and MERCUSOR trade with each other 12 times \(e^{2.459} = 11.69\) and 8 times \(e^{2.068} = 7.91\) more in comparison with a pair of countries which are not members of any regional FTA with the statistical results significant at 11% and 18% respectively. Unlike AFTA which shows significant evidence of intra-bloc trade intensifying effect since the beginning of the study period (1980), this effect is only evident since 1998 (significant at 17% level) for CER and 2002 for MERCUSOR (significant at 16% level).

The coefficients of EU and NAFTA dummy variables show similar characteristics. Both EU and NAFTA do not show an intra-bloc trade intensifying effect for any period of the study. Interestingly, the signs of EU and NAFTA dummy variables are negative from 1980 until 1992 with the signs changing to positive in 1994. Also, the dummy coefficients of these two regional groupings are not significant for all the years of study. This implies that a pair of EU and NAFTA members trade with each other about a similar magnitude in comparison to a pair of countries that do not belong to any regional FTAs. In other words, this result suggests that EU and NAFTA do not have an intra-bloc trade intensifying effect before as well as after the formation of their economic groupings.

¹⁸ It should be made clear that the regression results (i.e. of year 2003) of Table 10.3 are different from the result shown in Table 10.2. This is because the regression results shown in Table 10.3 are of the econometric model incorporating dummy variables AFTA, CER, EU, MERCUSOR and NATFA.
10.3 The Effects of AFTA on Trade

10.3.1 Examining the Trade Patterns of AFTA Countries

The other objective of this study is to examine how the trade of AFTA countries with members as opposed to non members has been carried out for the period of study. To shed some light to this question, this study analyses trade patterns of all six original members of AFTA to examine how trade has changed, especially between periods before and after the formation of this economic grouping. The analysis of this part of study focuses primarily on the growth of trade, the ratio of intra against extra AFTA trades as well as graphic presentation of trade patterns of Brunei, Indonesia, Malaysia, the Philippines, Singapore and Thailand, the six original member countries of AFTA.

10.3.1.1 Brunei

**Figure 10.1**

Brunei’s Trade With Partner Countries

(Source: Table 10.4)
Brunei’s external trade fluctuated extremely for the period of study. As can be seen from Figure 10.1 and Table 10.4, the country’s trade with the whole world in 1980 was in the amount of slightly over US$5 billion, but it dropped to a low US$2.4 billion in 1988 before gradually increased again to reach US$5.3 billion in 2003. Although Brunei’s trade with AFTA 6 countries before the formation of AFTA never exceeded US$1 billion, the country’s trade immediately surpassed the US$1 million mark in the year that AFTA was established (1992) and its trade remained above that level thereafter.

Table 10.4
Brunei’s Trade with Partner Countries in Million US Dollars

<table>
<thead>
<tr>
<th>Years</th>
<th>World Value</th>
<th>Value</th>
<th>Growth (%)</th>
<th>% of World</th>
<th>Value</th>
<th>Growth (%)</th>
<th>% of World</th>
<th>Ratio(^\ast)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>5,084</td>
<td>723</td>
<td>14.2</td>
<td>4,360</td>
<td>85.8</td>
<td>0.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1981</td>
<td>4,662</td>
<td>755</td>
<td>16.2</td>
<td>3,907</td>
<td>83.8</td>
<td>0.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td>4,540</td>
<td>621</td>
<td>13.7</td>
<td>3,918</td>
<td>86.3</td>
<td>0.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983</td>
<td>4,111</td>
<td>672</td>
<td>16.3</td>
<td>3,438</td>
<td>83.6</td>
<td>0.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1984</td>
<td>3,818</td>
<td>717</td>
<td>18.8</td>
<td>3,100</td>
<td>81.2</td>
<td>0.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td>3,582</td>
<td>821</td>
<td>22.9</td>
<td>2,761</td>
<td>77.1</td>
<td>0.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td>2,449</td>
<td>537</td>
<td>21.9</td>
<td>1,912</td>
<td>78.1</td>
<td>0.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1987</td>
<td>2,539</td>
<td>676</td>
<td>26.6</td>
<td>1,863</td>
<td>73.4</td>
<td>0.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1988</td>
<td>2,445</td>
<td>599</td>
<td>26.0</td>
<td>2,026</td>
<td>74.0</td>
<td>0.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1989</td>
<td>2,739</td>
<td>712</td>
<td>27.4</td>
<td>2,331</td>
<td>72.5</td>
<td>0.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>3,214</td>
<td>882</td>
<td>24.9</td>
<td>2,922</td>
<td>75.1</td>
<td>0.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td>3,890</td>
<td>967</td>
<td>24.9</td>
<td>2,922</td>
<td>75.1</td>
<td>0.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1992</td>
<td>3,776</td>
<td>1,060</td>
<td>28.1</td>
<td>2,715</td>
<td>71.9</td>
<td>0.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1993</td>
<td>3,914</td>
<td>985</td>
<td>25.2</td>
<td>2,929</td>
<td>74.8</td>
<td>0.34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td>3,983</td>
<td>1,393</td>
<td>35.0</td>
<td>2,590</td>
<td>65.0</td>
<td>0.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>4,376</td>
<td>2,425</td>
<td>55.4</td>
<td>1,950</td>
<td>44.6</td>
<td>1.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>4,690</td>
<td>2,622</td>
<td>55.9</td>
<td>2,067</td>
<td>44.1</td>
<td>1.27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>4,767</td>
<td>1,510</td>
<td>31.7</td>
<td>3,256</td>
<td>68.3</td>
<td>0.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>3,872</td>
<td>1,093</td>
<td>28.2</td>
<td>2,779</td>
<td>71.8</td>
<td>0.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td>3,956</td>
<td>1,124</td>
<td>28.4</td>
<td>2,831</td>
<td>71.6</td>
<td>0.40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>4,222</td>
<td>1,583</td>
<td>28.2</td>
<td>2,638</td>
<td>62.5</td>
<td>0.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>4,608</td>
<td>1,342</td>
<td>29.1</td>
<td>3,265</td>
<td>70.9</td>
<td>0.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>5,064</td>
<td>1,391</td>
<td>27.5</td>
<td>3,672</td>
<td>72.5</td>
<td>0.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>5,387</td>
<td>1,422</td>
<td>26.4</td>
<td>3,964</td>
<td>73.6</td>
<td>0.36</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Ratio\(^\ast\) = Trade Value AFTA 6/Non AFTA 6
(Source: UNCOMTRADE Database)
AFTA appeared to produce a negative impact on Brunei’s trade with the rest of the world soon after its establishment. As indicated by Figure 10.1 the country’s trade with the rest of the world dropped below that of AFTA 6 in 1995 and 1996, and the trade with the rest of the world only increased again after 1996. Nevertheless, Brunei’s trade with the rest of the world increased tremendously from the early 2000s, while its trade with AFTA 6 countries seems to be stagnant.

10.3.1.2 Indonesia

As shown in Figure 10.2 and Table 10.5, Indonesia’s external trade increased steadily with a clear upwards trend starting from 1986. This upwards trend was, however, interrupted by Asian financial crisis of 1997-1998 causing a huge drop in Indonesia’s external trade. In 1980 its total external trade was only US$32.7 billion, but the trade increased threefold to US$107.2 billion in 2004. As can be observed from Figure 10.2, AFTA appeared to have positive impact on Indonesia’s trade with AFTA 6 countries as its trade with these countries increased tremendously after this economic grouping was established.
Table 10.5
Indonesia’s Trade with Partner Countries in Million US Dollars

<table>
<thead>
<tr>
<th>Years</th>
<th>World Value</th>
<th>AFTA 6</th>
<th>Non AFTA 6</th>
<th>AFTA 6</th>
<th>Non AFTA 6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value</td>
<td>Growth (%)</td>
<td>% of world</td>
<td>Value</td>
<td>Growth (%)</td>
</tr>
<tr>
<td>1980</td>
<td>32,732</td>
<td>4,110</td>
<td>12.6</td>
<td>28,633</td>
<td>87.5</td>
</tr>
<tr>
<td>1981</td>
<td>25,942</td>
<td>3,387</td>
<td>6.7</td>
<td>22,363</td>
<td>87.5</td>
</tr>
<tr>
<td>1982</td>
<td>29,823</td>
<td>6,797</td>
<td>54.9</td>
<td>32,026</td>
<td>82.5</td>
</tr>
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<td>1983</td>
<td>37,491</td>
<td>7,393</td>
<td>8.8</td>
<td>30,097</td>
<td>80.3</td>
</tr>
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<td>1984</td>
<td>35,752</td>
<td>4,436</td>
<td>-40.0</td>
<td>31,315</td>
<td>87.6</td>
</tr>
<tr>
<td>1985</td>
<td>28,842</td>
<td>2,955</td>
<td>-33.4</td>
<td>25,887</td>
<td>89.8</td>
</tr>
<tr>
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<td>25,505</td>
<td>2,618</td>
<td>-11.4</td>
<td>22,866</td>
<td>89.7</td>
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<td>29,231</td>
<td>2,676</td>
<td>2.2</td>
<td>26,554</td>
<td>90.8</td>
</tr>
<tr>
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<td>3,071</td>
<td>14.8</td>
<td>29,078</td>
<td>90.4</td>
</tr>
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<td>1989</td>
<td>38,131</td>
<td>3,970</td>
<td>29.3</td>
<td>34,161</td>
<td>89.6</td>
</tr>
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<td>4,279</td>
<td>7.8</td>
<td>43,110</td>
<td>91.0</td>
</tr>
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<td>54,865</td>
<td>5,535</td>
<td>29.4</td>
<td>49,330</td>
<td>89.9</td>
</tr>
<tr>
<td>1992</td>
<td>61,094</td>
<td>6,833</td>
<td>23.5</td>
<td>54,261</td>
<td>88.8</td>
</tr>
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<td>64,696</td>
<td>7,227</td>
<td>5.8</td>
<td>57,741</td>
<td>89.2</td>
</tr>
<tr>
<td>1994</td>
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<td>8,648</td>
<td>19.7</td>
<td>63,388</td>
<td>88.0</td>
</tr>
<tr>
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<td>10,035</td>
<td>16.0</td>
<td>75,959</td>
<td>88.3</td>
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<td>92,651</td>
<td>12,076</td>
<td>20.3</td>
<td>80,575</td>
<td>87.0</td>
</tr>
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<td>1997</td>
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<td>13,623</td>
<td>20.3</td>
<td>81,275</td>
<td>85.6</td>
</tr>
<tr>
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<td>12,555</td>
<td>-7.8</td>
<td>63,153</td>
<td>83.4</td>
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<tr>
<td>1999</td>
<td>72,317</td>
<td>11,694</td>
<td>-6.9</td>
<td>60,622</td>
<td>83.8</td>
</tr>
<tr>
<td>2000</td>
<td>95,252</td>
<td>16,274</td>
<td>39.2</td>
<td>78,978</td>
<td>82.9</td>
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<td>-13.5</td>
<td>72,768</td>
<td>83.8</td>
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<td>2002</td>
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<td>82.1</td>
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<td>75,978</td>
<td>81.4</td>
</tr>
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<td>21,976</td>
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<td>85,212</td>
<td>79.5</td>
</tr>
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</table>

Note: Ratio* = Trade Value AFTA 6/Non AFTA 6
(Source: UNCOMTRADE Database)

In terms of proportion, Indonesia’s trade with AFTA 6 countries as a percentage of its trade with the world was 12.6 % in 1980. The ratio fluctuated slightly in the next few years before it became stable soon after AFTA formation. The ratio then increased at a faster rate thereafter and stood at 26.7 % in 2004. Although the ratio of Indonesia’s trade with the rest of the world recorded a decreasing trend in comparison to its trade with AFTA 6 countries, its trade with both groups of countries in nominal terms continued to increase enormously throughout the study period as shown in Table 10.5.
**10.3.1.3 Malaysia**

Malaysia recorded an impressive external trade growth for the period of study. Its external trade stood at only US$23.7 billion in 1980 and continued to increase every year. Over the 24-years study period, Malaysia external trade grew about 10 times to reach US$229.1 billion in 2004. Prior to the formation of AFTA in 1992 Malaysia’s trade with AFTA 6 countries was low and erratic, although in nominal terms Malaysia’s trade with AFTA 6 countries increased steadily, especially after the formation of AFTA. As indicated by Figure 10.3, AFTA appeared to have positive impact not only to Malaysia’s trade with AFTA members but also to its trade with the rest of the world.

**Figure 10.3**

Malaysia's Trade With Partner Countries

![Graph showing Malaysia's trade with partner countries](image)

(Source: Table 10.6)

In terms of trade proportion, Malaysia’s trade with AFTA 6 countries in 1980 was 19.7% of its trade with the whole world. The AFTA 6 countries’ share of Malaysia’s external trade did not experience big changes for the study period with the share only hovered between 19% and
25%, with the highest share was recorded in the year that AFTA was established. The share dropped slightly thereafter and in 2004 the ratio stood at 23.8%. Despite this, Malaysia’s trade with the rest of the world continued to increase tremendously in nominal terms. In 1980 the trade stood at US$18.9 billion but it increased almost 10 times to US$174.5 billion in 2004.

Table 10.6
Malaysia’s Trade with Partner Countries in Million US Dollars

<table>
<thead>
<tr>
<th>Years</th>
<th>World Value</th>
<th>Growth (%)</th>
<th>% of World</th>
<th>Value</th>
<th>Growth (%)</th>
<th>% of World</th>
<th>Ratio*</th>
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<tbody>
<tr>
<td>1980</td>
<td>23,673</td>
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<td>18,998</td>
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<td>77.6</td>
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<td>1981</td>
<td>23,241</td>
<td>5,204</td>
<td>11.3</td>
<td>22.4</td>
<td>18,037</td>
<td>75.0</td>
<td>0.29</td>
</tr>
<tr>
<td>1982</td>
<td>24,386</td>
<td>6,102</td>
<td>17.3</td>
<td>25.0</td>
<td>18,283</td>
<td>76.3</td>
<td>0.33</td>
</tr>
<tr>
<td>1983</td>
<td>27,328</td>
<td>6,484</td>
<td>23.7</td>
<td>20,843</td>
<td>14.0</td>
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<td>7,089</td>
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<td>23,346</td>
<td>12.0</td>
<td>76.0</td>
<td>0.32</td>
</tr>
<tr>
<td>1985</td>
<td>28,147</td>
<td>6,865</td>
<td>24.4</td>
<td>21,281</td>
<td>-8.8</td>
<td>75.6</td>
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</tr>
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<td>5,340</td>
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<td>19,220</td>
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<td>78.3</td>
<td>0.28</td>
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<tr>
<td>1987</td>
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<td>23,582</td>
<td>22.7</td>
<td>77.3</td>
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<td>1988</td>
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<td>78.2</td>
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<tr>
<td>1989</td>
<td>46,635</td>
<td>10,412</td>
<td>22.3</td>
<td>36,233</td>
<td>24.0</td>
<td>77.7</td>
<td>0.29</td>
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<tr>
<td>1990</td>
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<tr>
<td>1991</td>
<td>69,548</td>
<td>17,032</td>
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<td>52,515</td>
<td>20.8</td>
<td>75.5</td>
<td>0.32</td>
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<tr>
<td>1992</td>
<td>79,844</td>
<td>19,952</td>
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<td>59,892</td>
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<td>0.33</td>
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<tr>
<td>1993</td>
<td>91,519</td>
<td>21,777</td>
<td>23.8</td>
<td>69,742</td>
<td>16.4</td>
<td>76.2</td>
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<td>1994</td>
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<td>77.0</td>
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<td>1995</td>
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<td>27.8</td>
<td>77.9</td>
<td>0.28</td>
</tr>
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<td>36,580</td>
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<td>117,761</td>
<td>1.5</td>
<td>76.3</td>
<td>0.31</td>
</tr>
<tr>
<td>1997</td>
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<td>36,784</td>
<td>23.7</td>
<td>118,722</td>
<td>0.8</td>
<td>76.3</td>
<td>0.31</td>
</tr>
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<td>30,045</td>
<td>23.0</td>
<td>100,422</td>
<td>-15.4</td>
<td>77.0</td>
<td>0.30</td>
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<td>0.30</td>
</tr>
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<td>134,248</td>
<td>17.6</td>
<td>75.2</td>
<td>0.33</td>
</tr>
<tr>
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<td>37,584</td>
<td>23.5</td>
<td>122,526</td>
<td>-8.7</td>
<td>76.5</td>
<td>0.31</td>
</tr>
<tr>
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<td>171,888</td>
<td>41,161</td>
<td>23.9</td>
<td>130,727</td>
<td>6.7</td>
<td>76.1</td>
<td>0.31</td>
</tr>
<tr>
<td>2003</td>
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<td>44,451</td>
<td>23.9</td>
<td>141,735</td>
<td>8.4</td>
<td>76.1</td>
<td>0.31</td>
</tr>
<tr>
<td>2004</td>
<td>229,148</td>
<td>54,590</td>
<td>23.8</td>
<td>174,557</td>
<td>23.2</td>
<td>76.2</td>
<td>0.31</td>
</tr>
</tbody>
</table>

Note: Ratio* = Trade Value AFTA 6/Non AFTA 6
(Source: UNCOMTRADE Database)

10.3.1.4 The Philippines

The Philippines external trade grew rapidly over the study period, with pronounced increases after the middle of the 1990s as indicated by Figure 10.4 and Table 10.7. In 1980 its
external trade was only US$14.1 billion; it then increased 6 times to US$83.5 billion in 2003. As regard to the Philippines’s trade with AFTA 6 countries, in 1980 the trade was only US$938 million. In the following few years the trade fluctuated slightly, while an upward trend only emerged clearly after the formation of AFTA. In nominal terms, the Philippines’ trade with AFTA 6 countries increased impressively soon after AFTA was established. In 1992 the country’s trade with AFTA 6 countries stood at US$1.9 billion, but the trade increased sixfold to US$13.9 billion in 2004. As indicated by Figure 10.4, AFTA appeared to bring positive impact on the Philippines’s trade with AFTA members as well as to its trade with non members.

**Figure 10.4**

Philippine's Trade With Partner Countries

(Source: Table 10.7)
Table 10.7
The Philippines’ Trade with Partner Countries in Million US Dollars

| Years | World |   |   |   | World |   |   |   |   |
|-------|-------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|       |       | AFTA 6 Value    | AFTA 6 Growth % | AFTA 6 % of World | Non AFTA 6 Value | Non AFTA 6 Growth % | Non AFTA 6 % of World | Ratio*         |
| 1980  | 14,082| 938             | 6.7             | 93.3             | 13,143           | -0.3              | 92.3             | 0.07            |
| 1981  | 14,199| 1,094           | 16.6            | 7.7              | 13,105           | -25.2             | 91.5             | 0.08            |
| 1982  | 10,717| 908             | -17.0           | 8.5              | 9,809            | -20.9             | 91.4             | 0.09            |
| 1983  | 12,977| 1,114           | 22.7            | 8.6              | 11,863           | 20.9              | 91.4             | 0.09            |
| 1984  | 11,814| 1,321           | 18.6            | 11.2             | 10,493           | -11.5             | 88.8             | 0.13            |
| 1985  | 10,073| 1,313           | -0.6            | 13.0             | 8,759            | -16.5             | 87.0             | 0.15            |
| 1986  | 10,234| 887             | -32.4           | 8.7              | 9,346            | 6.7               | 91.3             | 0.09            |
| 1987  | 12,519| 1,198           | 35.1            | 9.6              | 11,320           | 21.1              | 90.4             | 0.11            |
| 1988  | 15,803| 1,285           | 7.3             | 8.1              | 14,517           | 28.2              | 91.9             | 0.09            |
| 1989  | 18,990| 1,651           | 28.5            | 8.7              | 17,338           | 19.4              | 91.3             | 0.10            |
| 1990  | 21,226| 1,845           | 11.8            | 8.7              | 19,381           | 11.8              | 91.3             | 0.10            |
| 1991  | 21,683| 1,779           | -3.6            | 8.2              | 19,903           | 2.7               | 91.8             | 0.09            |
| 1992  | 25,254| 1,942           | 9.2             | 7.7              | 23,312           | 17.1              | 92.3             | 0.08            |
| 1993  | 29,984| 2,753           | 41.8            | 9.2              | 27,231           | 16.8              | 90.8             | 0.10            |
| 1994  | 36,220| 3,969           | 44.2            | 11.0             | 32,251           | 18.4              | 89.0             | 0.12            |
| 1995  | 45,736| 5,512           | 38.9            | 12.1             | 40,224           | 24.7              | 87.9             | 0.14            |
| 1996  | 54,990| 6,866           | 24.6            | 12.5             | 48,124           | 19.6              | 87.5             | 0.14            |
| 1997  | 63,530| 8,255           | 20.2            | 13.0             | 55,275           | 14.9              | 87.0             | 0.15            |
| 1998  | 60,791| 8,009           | -3.0            | 13.2             | 52,781           | -4.5              | 86.8             | 0.15            |
| 1999  | 67,403| 9,422           | 17.6            | 14.0             | 57,981           | 9.9               | 86.0             | 0.16            |
| 2000  | 71,701| 11,148          | 18.3            | 15.5             | 60,552           | 4.4               | 84.5             | 0.18            |
| 2001  | 63,421| 9,562           | -14.2           | 15.1             | 53,859           | -11.1             | 84.9             | 0.18            |
| 2002  | 70,496| 10,821          | 13.2            | 15.3             | 59,675           | 10.8              | 84.7             | 0.18            |
| 2003  | 75,570| 12,854          | 18.8            | 17.0             | 62,715           | 5.1               | 83.0             | 0.20            |
| 2004  | 83,548| 13,984          | 8.8             | 16.7             | 69,563           | 10.9              | 83.3             | 0.20            |

Note: Ratio* = Trade Value AFTA 6/Non AFTA 6
(Source: UNCOMTRADE Database)

In terms of the trade ratio, the Philippines’ trade with AFTA 6 countries in 1980 was 6.7% of its trade with the whole world. The ratio showed an erratic pattern for the next few years until AFTA was established. After the formation of AFTA, the proportion of the country’s trade with AFTA 6 countries increased steadily; up from 7.7% in 1992 to 16.7% in 2003. Meanwhile, the Philippines’s trade with the rest of the world also increased impressively in nominal terms.
despite the rest of the world’s share of the country’s external trade showed a slightly decreasing trend – from 93.3% in 1980 to 83.3% in 2004. In the year when AFTA was established the Philippines’ trade with non AFTA members was US$23.3 billion, it then increased to US$69.6 billion in 2004.

10.3.1.5 Singapore

Figure 10.5

Singapore's Trade With Partner Countries

(Source: Table 10.8)

Singapore’s external trade increased enormously throughout the study period. The nominal value of trade recorded in 1980 was US$43.4 billion, and the value increased nearly 10 times to US$339.5 billion in 2004 as indicated by both Figure 10.5 and Table 10.8. Singapore emerged as the biggest trading nation among AFTA members both in terms of its trade with members as well as its trade with the rest of the world. In nominal terms, Singapore’s trade with AFTA 6 countries stood at US$ 11.8 billion in 1980. The trade then increased to US$ 32 billion in 1992, the year that AFTA was established. The country’s trade with AFTA 6 countries continued to increase at a fast rate thereafter and reached a record US$85.4 billion in 2004.
Notwithstanding this, however, its trade with the rest of the world also increased tremendously throughout the study period. From the value of only US$31.5 recorded in 1980, trade increased to US$103.4 billion in 1992, and reached US$254 billion in 2004.

As shown in Table 10.8, Singapore’s trade with AFTA 6 countries as the ratio of its trade with the entire world experienced only small changes for the period of study. In 1980, 1992 and 2004 its trade ratios stood at 27.2%, 23.7% and 25.2% respectively. Consequently, Singapore’s trade ratio with the rest of the world remained above 70 % for most of the 24 years study period.

**Table 10.8**

Singapore’s Trade with Partner Countries in Million US Dollars

<table>
<thead>
<tr>
<th>Years</th>
<th>World</th>
<th>AFTA 6</th>
<th>Non AFTA 6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value</td>
<td>Growth (%) of World</td>
<td>Value</td>
</tr>
<tr>
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<td>2004</td>
<td>339,513</td>
<td>85,459</td>
<td>18.7</td>
</tr>
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</table>

Note: Ratio * = Trade Value AFTA 6/Non AFTA 6
(Source: UNCOMTRADE Database)
10.3.1.6 Thailand

Figure 10.6

Thailand's Trade With Partner Countries

As shown in Figure 10.6 as well as Table 10.9, Thailand’s external trade was less impressive as compared to other AFTA countries at the beginning of the study period. Thailand’s external trade was only US$16.0 billion in 1980 and was almost stagnant for few years before it started to increase in 1986. Thereafter, Thailand’s external trade grew impressively to reach US$158.0 billion in 2003. As regard to Thailand’s trade with AFTA 6 countries, the country’s trade was US$2.2 billion in 1980. The trade increased only marginally over the years to reach US$8.0 billion in 1991. After AFTA was established in 1992 Thailand’s trade with AFTA 6 countries increased at a faster rate to reach US$ 24.9 billion in 2004. Meanwhile, Thailand’s trade with the rest of the world also increased as fast as its trade with AFTA 6 countries for post AFTA period. In nominal terms, the country’s trade with the rest of the world was only US$13.8 billion in 1980, it increased almost 5 times to US$ 63.6 billion in 1992 and reached US$130.1 billion in 2004.

(Source: Table 10.9)
The ratio of Thailand’s trade with AFTA 6 countries as a proportion of its trade with the world did not change significantly. In 1980, 1992 and 2003 the ratios stood at 13.6%, 12.8% and 16.1% respectively. Consequently, the ratio of Thailand’s trade with the rest of the world also did not experience big changes and remained above 80% throughout the study period.

**Table 10.9**

Thailand’s Trade with Partner Countries in Million US Dollars

<table>
<thead>
<tr>
<th>Years</th>
<th>World Value</th>
<th>AFTA 6 Growth (%)</th>
<th>% of World</th>
<th>Non AFTA 6 Value</th>
<th>Growth (%)</th>
<th>% of World</th>
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<td>84.9</td>
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<td>17,959</td>
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<td>15,405</td>
<td>12.9</td>
<td>85.8</td>
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</tr>
<tr>
<td>1987</td>
<td>24,614</td>
<td>3,566</td>
<td>14.5</td>
<td>21,047</td>
<td>36.6</td>
<td>85.5</td>
<td>0.17</td>
</tr>
<tr>
<td>1988</td>
<td>39,792</td>
<td>4,333</td>
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<td>35,458</td>
<td>68.5</td>
<td>89.1</td>
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</tr>
<tr>
<td>1989</td>
<td>45,677</td>
<td>5,505</td>
<td>27.0</td>
<td>40,171</td>
<td>13.3</td>
<td>87.9</td>
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<tr>
<td>1990</td>
<td>56,196</td>
<td>6,697</td>
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<td>49,498</td>
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<td>88.1</td>
<td>0.14</td>
</tr>
<tr>
<td>1991</td>
<td>65,823</td>
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<td>57,790</td>
<td>16.8</td>
<td>87.8</td>
<td>0.14</td>
</tr>
<tr>
<td>1992</td>
<td>72,924</td>
<td>9,304</td>
<td>12.8</td>
<td>63,620</td>
<td>10.1</td>
<td>87.2</td>
<td>0.15</td>
</tr>
<tr>
<td>1993</td>
<td>83,102</td>
<td>11,447</td>
<td>13.8</td>
<td>71,655</td>
<td>12.6</td>
<td>86.2</td>
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</tr>
<tr>
<td>1994</td>
<td>99,672</td>
<td>15,047</td>
<td>15.1</td>
<td>84,624</td>
<td>18.1</td>
<td>84.9</td>
<td>0.18</td>
</tr>
<tr>
<td>1995</td>
<td>126,685</td>
<td>19,668</td>
<td>15.5</td>
<td>107,017</td>
<td>26.5</td>
<td>84.5</td>
<td>0.18</td>
</tr>
<tr>
<td>1996</td>
<td>127,471</td>
<td>19,707</td>
<td>15.5</td>
<td>107,763</td>
<td>0.7</td>
<td>84.5</td>
<td>0.18</td>
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<tr>
<td>1997</td>
<td>119,843</td>
<td>18,441</td>
<td>15.4</td>
<td>101,401</td>
<td>-5.9</td>
<td>84.6</td>
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</tr>
<tr>
<td>1998</td>
<td>95,225</td>
<td>14,381</td>
<td>15.1</td>
<td>80,843</td>
<td>-20.3</td>
<td>84.9</td>
<td>0.18</td>
</tr>
<tr>
<td>1999</td>
<td>108,189</td>
<td>16,651</td>
<td>15.4</td>
<td>91,537</td>
<td>13.2</td>
<td>84.6</td>
<td>0.18</td>
</tr>
<tr>
<td>2000</td>
<td>129,598</td>
<td>20,863</td>
<td>16.1</td>
<td>108,734</td>
<td>18.8</td>
<td>83.9</td>
<td>0.19</td>
</tr>
<tr>
<td>2001</td>
<td>126,302</td>
<td>19,208</td>
<td>15.2</td>
<td>107,093</td>
<td>-1.5</td>
<td>84.8</td>
<td>0.18</td>
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<tr>
<td>2002</td>
<td>136,099</td>
<td>23,245</td>
<td>17.1</td>
<td>112,854</td>
<td>5.4</td>
<td>82.9</td>
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<td>2003</td>
<td>154,999</td>
<td>24,880</td>
<td>16.1</td>
<td>130,118</td>
<td>15.3</td>
<td>83.9</td>
<td>0.19</td>
</tr>
</tbody>
</table>

Note: Ratio* = Trade Value AFTA 6/Trade Value Non AFTA 6
(Source: UNCOMTRADE Database)

**10.3.2 The Effect of AFTA on Trade of Member vis-à-vis Non Members**

The other question of interest of this study is to examine the effect of AFTA on trade of member in comparison to non-member countries. This question is different from that already...
examine in Section 10.2.3. While the former examined the effect of regional FTAs on trade of members against other countries which do not become members to any regional FTAs, this part of research examines the effect of AFTA on trade of member vis-à-vis non AFTA members.

In order to shed some light to this question, an adjustment needs to be made to the regression model previously specified as equation 10.4. The adjustment produces a new model:

\[
\log (\text{TRIN}_{ij}) = \alpha + \beta_1 \log (\text{GDP}_i \times \text{GDP}_j) + \beta_2 \log (\text{PGDP}_i \times \text{PGDP}_j) + \beta_3 \log (\text{DIST12}_{ij}) \\
+ \varphi \ D_{AFTA} + \mu_{ij}. 
\] (10.5)

This new econometric model allows the examination of the effect of AFTA on trade of members in comparison to non-members. While controlled variables remain the same in this new model, but only AFTA dummy variable (taking the value of 1 if both countries are AFTA members and 0 otherwise) is included. Under the new model the coefficient of AFTA dummy variable tells us how big is the difference of trade between AFTA member countries in comparison to their trade with non-members.

Regression analyses of the new model performed over the same 990 pairs of countries on alternate years basis for the period 1980-2003 produce 13 regression results, the summary of which are presented in Table 10.10.89 Table 10.10 shows, as expected, that the value of coefficients of covariates or controlled variables INPT, LGDP, LPGDP, and LDIST12 are about the same as those of the covariates of regression results produced by regression model of Section 10.2.3. As shown in Table 10.10, the 13 coefficients of AFTA dummy variable are positive, above 2 and highly significant throughout the study period. This indicates that trade between two AFTA member countries is higher than their trade with non members. In 2003 for example, two

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89 Full statistical results of econometric model 10.4 are presented in Appendix 5.
AFTA member countries trade with each other about 14 times \((e^{2.611} = 13.61)\) higher than they trade with non-member countries.

### Table 10.10
The Effect of AFTA on Trade of Members vis-à-vis Non Members

<table>
<thead>
<tr>
<th>Year</th>
<th>INPT</th>
<th>LGDP</th>
<th>LPGDP</th>
<th>LDIST12</th>
<th>Estimated Coefficients and Probability Values of Controlled Variables</th>
<th>Estimated Coefficients and P-Values of AFTA Dummy variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>-35.67</td>
<td>0.166</td>
<td>0.187</td>
<td>-0.902</td>
<td>0.000</td>
<td>3.029</td>
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<td></td>
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<td>(00)</td>
<td>(00)</td>
<td>(00)</td>
<td>(00)</td>
<td>(00)</td>
</tr>
<tr>
<td>1982</td>
<td>-37.11</td>
<td>0.208</td>
<td>0.199</td>
<td>-0.988</td>
<td>0.000</td>
<td>2.680</td>
</tr>
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<td>(00)</td>
<td>(00)</td>
</tr>
<tr>
<td>1984</td>
<td>-33.76</td>
<td>0.132</td>
<td>0.211</td>
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<td>0.000</td>
<td>2.538</td>
</tr>
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<td>(00)</td>
<td>(00)</td>
</tr>
<tr>
<td>1986</td>
<td>-35.46</td>
<td>0.131</td>
<td>0.217</td>
<td>-0.788</td>
<td>0.000</td>
<td>3.228</td>
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<td>(00)</td>
<td>(00)</td>
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<tr>
<td>1988</td>
<td>-33.86</td>
<td>0.126</td>
<td>0.139</td>
<td>-0.824</td>
<td>0.000</td>
<td>3.125</td>
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<td>(00)</td>
<td>(00)</td>
</tr>
<tr>
<td>1990</td>
<td>-31.68</td>
<td>0.080</td>
<td>0.125</td>
<td>-0.797</td>
<td>0.000</td>
<td>3.009</td>
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<td>(00)</td>
<td>(00)</td>
<td>(00)</td>
</tr>
<tr>
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<td>0.076</td>
<td>-0.832</td>
<td>0.000</td>
<td>2.876</td>
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<td>(02)</td>
<td>(00)</td>
<td>(00)</td>
<td>(00)</td>
</tr>
<tr>
<td>1994</td>
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<td>2.557</td>
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<td>(02)</td>
<td>(00)</td>
<td>(00)</td>
<td>(00)</td>
</tr>
<tr>
<td>1996</td>
<td>-30.35</td>
<td>0.064</td>
<td>0.083</td>
<td>-0.798</td>
<td>0.000</td>
<td>2.409</td>
</tr>
<tr>
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<td>(00)</td>
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<td>(00)</td>
<td>(00)</td>
</tr>
<tr>
<td>1998</td>
<td>-28.50</td>
<td>0.046</td>
<td>0.055</td>
<td>-0.834</td>
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<td>2.855</td>
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<tr>
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<td>(00)</td>
<td>(11)</td>
<td>(08)</td>
<td>(00)</td>
<td>(00)</td>
<td>(00)</td>
</tr>
<tr>
<td>2000</td>
<td>-30.75</td>
<td>0.102</td>
<td>0.032</td>
<td>-0.851</td>
<td>0.000</td>
<td>2.749</td>
</tr>
<tr>
<td></td>
<td>(00)</td>
<td>(00)</td>
<td>(36)</td>
<td>(00)</td>
<td>(00)</td>
<td>(00)</td>
</tr>
<tr>
<td>2002</td>
<td>-27.65</td>
<td>0.042</td>
<td>0.040</td>
<td>-0.861</td>
<td>0.000</td>
<td>2.578</td>
</tr>
<tr>
<td></td>
<td>(00)</td>
<td>(00)</td>
<td>(12)</td>
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<td>(00)</td>
<td>(00)</td>
</tr>
<tr>
<td>2003</td>
<td>-28.54</td>
<td>0.066</td>
<td>-0.003</td>
<td>-0.837</td>
<td>0.000</td>
<td>2.611</td>
</tr>
<tr>
<td></td>
<td>(00)</td>
<td>(00)</td>
<td>(98)</td>
<td>(00)</td>
<td>(00)</td>
<td>(00)</td>
</tr>
</tbody>
</table>

(Source: A compilation of outputs of microfit computer program, 1980-2003)

The overall results of the regression analysis provided in Table 10.10 show two interesting features. First, an intra-bloc trade intensifying effect emerged in the AFTA bloc even before AFTA was officially established in 1992. This is implied by the value of the coefficients of AFTA dummy variable which have been positive and significant since the beginning of the study period. For example, in 1980 the coefficient was 3.029 which means that two AFTA members trade with each other 21 times \((e^{3.029} = 20.7)\) than their trade with other countries, and
interestingly the coefficients remain above 3 until 1990 with the exceptions of the years 1982 and 1984. Secondly, the intra-bloc trade intensifying effect of AFTA is in fact higher at the early years of the study period. This intra-bloc trade intensifying effect slightly and gradually becomes less pronounced for period after AFTA agreement was signed and especially so in late 1990s onwards. This result suggests two implications. First, it lends support to the notion that a trading bloc can itself be a “natural trading bloc” as expounded by Krugman (1991b, 5-25) and AFTA probably falls into this category.90 Second, although the AFTA agreement has specific provisions giving favourable treatment to members over non-members, in practice AFTA appears to have characteristics of an “open trading bloc” whereby although tariff concessions are given to members initially, these concessions are soon willingly extended to non members by individual countries.91

10.3.3 Trade Creation and Trade Diversion of AFTA

As already discussed in details in Chapter 7, trade creation and trade diversion are two concepts introduced by Viner (1950). Under Viner’s framework, trade creation is associated with welfare gains to member countries (of customs unions) due to the expansion of trade among them. The welfare gains come from a shift in the locus of production from a high cost member to a lower cost member country. Meanwhile, trade diversion is associated with welfare loss not only to non members but to member countries as well. Trade diversion occurs due to a shift in the location of production from a low cost third country to a higher cost member country. According

90 As already discussed in Chapter 6, a natural trading bloc refers to a situation whereby the existence of high concentration of trades among members is due to proximity between them while high transportation costs hinder trade with non members. According to Krugman (1991b), as long as countries establish a trading bloc along natural lines then its establishment would not have harmful effect on non-members.

91 The exposition of the concept of “open regionalism” is primarily due to Shang-Jin Wei and Jeffrey Frankel (1995). They relate this concept to a situation in which members of a trading bloc collectively lower their external barriers on goods from non-members in addition to the reduction of barriers among themselves, although the degree of liberalization towards non-members need not be as high as that between members.
to Viner the welfare loss is the result of preferential treatments given to imports that come from another member of a customs union.

For this part of study, adjustments are introduced to the defining concepts of trade creation and trade diversion. This is unavoidable because of difficulties faced in gathering data to establish whether a good is shifted from one location of production to another location due to the formation of AFTA. For the purpose of assessing trade creation and trade diversion of AFTA, trade creation is said to be evident if intra AFTA trade increases ("gross" trade creation) while at the same time extra AFTA trade also increases ("net" trade creation). In contrast, trade diversion is observed if intra AFTA trade increases but extra AFTA trade decreases.

This part of study proceeds in two stages. At the first stage intra and extra AFTA counterfactual trades are estimated by the use of a forecasting technique. The estimated intra AFTA counterfactual trade (i.e. trade among members of AFTA 6 countries) as well as extra AFTA counterfactual trade (i.e. trade of AFTA 6 countries with the rest of the world) are then compared with their respective actual trades for the post AFTA period of 1992-2003. At the second stage, a test of difference (t-test) is performed to statistically examine whether AFTA creates or diverts trade. As already detailed out in Chapter 9, the decision rules adopted for establishing trade creation and trade diversion of AFTA are as follows:

1) “Actual” trade creation is observed if the existence of “gross” trade creation is significant while at the same time the existence of “net” trade creation is also significant.92

2) “Actual” trade diversion is observed if the existence of “gross” trade creation is significant while “net” trade creation is inexistence, or if its existence is not significantly different from zero.

---

92 Definitions and explanation about “gross” and “net” trade creation were already discussed in details in Chapter 9.
10.3.3.1 **Intra and Extra AFTA Actual Trades**

Intra AFTA actual trade for the post AFTA period is calculated by summing up all six original AFTA members (Brunei, Indonesia, Malaysia, the Philippines, Singapore and Thailand) bilateral trades with each other (for the period 1992-2002). Similarly, extra AFTA actual trade is established by summing up bilateral trade of the six AFTA members with the rest of the world for the same period. The value of intra and extra AFTA actual trades are provided in Table 10.11.

**Table 10.11**

<table>
<thead>
<tr>
<th>Year</th>
<th>Intra AFTA</th>
<th>Growth (%)</th>
<th>Extra AFTA</th>
<th>Growth (%)</th>
<th>Ratio*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>71,145</td>
<td></td>
<td>307,191</td>
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<td>0.23</td>
</tr>
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<td>1993</td>
<td>84,099</td>
<td>18.2</td>
<td>348,277</td>
<td>13.4</td>
<td>0.24</td>
</tr>
<tr>
<td>1994</td>
<td>111,837</td>
<td>33.0</td>
<td>417,498</td>
<td>19.9</td>
<td>0.27</td>
</tr>
<tr>
<td>1995</td>
<td>136,313</td>
<td>21.9</td>
<td>517,616</td>
<td>24.0</td>
<td>0.26</td>
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<td>1996</td>
<td>147,110</td>
<td>7.9</td>
<td>542,628</td>
<td>4.8</td>
<td>0.27</td>
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<tr>
<td>1997</td>
<td>147,757</td>
<td>0.4</td>
<td>546,870</td>
<td>0.8</td>
<td>0.27</td>
</tr>
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<td>1998</td>
<td>121,099</td>
<td>-18.0</td>
<td>454,879</td>
<td>-16.8</td>
<td>0.27</td>
</tr>
<tr>
<td>1999</td>
<td>133,266</td>
<td>10.0</td>
<td>491,993</td>
<td>8.2</td>
<td>0.27</td>
</tr>
<tr>
<td>2000</td>
<td>171,097</td>
<td>28.4</td>
<td>579,764</td>
<td>17.8</td>
<td>0.30</td>
</tr>
<tr>
<td>2001</td>
<td>147,905</td>
<td>-13.6</td>
<td>530,101</td>
<td>-8.6</td>
<td>0.28</td>
</tr>
<tr>
<td>2002</td>
<td>162,041</td>
<td>9.6</td>
<td>550,320</td>
<td>3.8</td>
<td>0.29</td>
</tr>
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<td>2003</td>
<td>172,963</td>
<td>6.7</td>
<td>613,475</td>
<td>11.5</td>
<td>0.28</td>
</tr>
<tr>
<td>Total</td>
<td>1,606,632</td>
<td></td>
<td>5,900,612</td>
<td></td>
<td>0.27</td>
</tr>
</tbody>
</table>

Note: Ratio* = Intra AFTA/Extra AFTA Actual Trades

(Source: Author’s own calculation based on UNCOMTRADE Database)

As shown in Table 10.11, both intra and extra AFTA actual trades increased enormously after AFTA was established except for the years 1998 and 2001. Intra AFTA actual trade increased more than double from US$71.2 billion in 1992 to US$173 billion in 2003. Likewise, extra AFTA actual trade also increased by about the same proportion from US$307 billion to US$613 billion for the same period.
10.3.3.2 Intra and Extra AFTA Counterfactual Trades

The estimation of intra and extra AFTA counterfactual trades begins by identifying the most appropriate trend-model to capture the correct representation of the trend of trade of AFTA 6 countries. The model selection process begins by examining six trend-models to ascertain which model fits the data most appropriately for pre-AFTA period covering 22 years (1970 – 1991). Once a trend-model is identified, this model is used to forecast the likely trade under a hypothetical assumption that AFTA was never been established (in 1992). For this purpose the extrapolated amount of trade is termed as counterfactual trades. The six trend-models examined are linear, quadratic, growth, logarithm, S and exponential. Statistical results of the six trend-models fitting intra and extra AFTA trade data are respectively provided in Table 10.12a and Table 110.12b.

Table 10.12a
Statistical Results of Trend Models Fitting Intra AFTA Trade Data

<table>
<thead>
<tr>
<th>Goodness-of-fit Tests</th>
<th>Linear</th>
<th>Quadratic</th>
<th>Growth</th>
<th>logarthym</th>
<th>S</th>
<th>Exponential</th>
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</thead>
<tbody>
<tr>
<td>Multiple R</td>
<td>0.9305</td>
<td>0.9729</td>
<td>0.9722</td>
<td>0.7587</td>
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<td>0.9722</td>
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<td>R Square</td>
<td>0.8659</td>
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<td>0.9451</td>
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<tr>
<td>Adjusted R Square</td>
<td>0.8617</td>
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</table>

(Source: Outputs of SPSS computer program)

Table 10.12b
Statistical Results of Trend Models Fitting Extra AFTA Trade Data

<table>
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<th>Goodness-of-fit Tests</th>
<th>Linear</th>
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<th>Growth</th>
<th>logarthym</th>
<th>S</th>
<th>Exponential</th>
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</thead>
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<td>Multiple R</td>
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<td>0.8975</td>
<td>0.9487</td>
<td>0.9356</td>
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<td>0.9336</td>
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</table>

(Source: Outputs of SPSS computer program)
Table 10.12a and Table 10.12b suggest that the quadratic model appears to be the best among the six trend-models at capturing the most appropriate trend of both intra and extra AFTA trade data. As can be seen from these two Tables, all measures of goodness-of-fit – Multiple R, R Squared and Adjusted R Squared – show that quadratic model produces the highest statistical scores among all six trend-models. Therefore, the quadratic model is selected as the forecasting tool to extrapolate counterfactual trade under the assumption that AFTA was never been established. Based on intra and extra AFTA actual trade data of 22 years prior to the formation of AFTA (1970-1991), an extrapolation is then performed with the use of the chosen quadratic trend model as the forecasting tool. The results of intra and extra AFTA trade forecasts (counterfactual trades) in comparison to actual trades for each year from 1992 through 2003 are provided in Table 10.13.

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual Trade</th>
<th>Counterfactual Trade</th>
<th>Gross Trade</th>
<th>Net Trade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intra AFTA</td>
<td>Extra AFTA</td>
<td>Intra AFTA</td>
<td>Extra AFTA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Creation</td>
<td>Creation</td>
</tr>
<tr>
<td>1992</td>
<td>71,145</td>
<td>307,191</td>
<td>56,782</td>
<td>260,500</td>
</tr>
<tr>
<td>1993</td>
<td>84,099</td>
<td>348,277</td>
<td>60,810</td>
<td>281,060</td>
</tr>
<tr>
<td>1994</td>
<td>111,837</td>
<td>417,498</td>
<td>64,969</td>
<td>302,440</td>
</tr>
<tr>
<td>1995</td>
<td>136,313</td>
<td>517,616</td>
<td>69,262</td>
<td>324,640</td>
</tr>
<tr>
<td>1996</td>
<td>147,110</td>
<td>542,628</td>
<td>73,687</td>
<td>347,700</td>
</tr>
<tr>
<td>1997</td>
<td>147,757</td>
<td>546,870</td>
<td>78,244</td>
<td>371,560</td>
</tr>
<tr>
<td>1998</td>
<td>121,099</td>
<td>454,879</td>
<td>82,935</td>
<td>396,260</td>
</tr>
<tr>
<td>1999</td>
<td>133,266</td>
<td>491,993</td>
<td>87,757</td>
<td>421,780</td>
</tr>
<tr>
<td>2000</td>
<td>171,097</td>
<td>579,764</td>
<td>92,712</td>
<td>448,120</td>
</tr>
<tr>
<td>2001</td>
<td>147,905</td>
<td>530,101</td>
<td>97,800</td>
<td>475,300</td>
</tr>
<tr>
<td>2002</td>
<td>162,041</td>
<td>550,320</td>
<td>103,020</td>
<td>503,300</td>
</tr>
<tr>
<td>2003</td>
<td>172,963</td>
<td>613,475</td>
<td>108,370</td>
<td>532,120</td>
</tr>
</tbody>
</table>

Total 1,606,632 5,900,612 976,348 4,664,800 630,284 1,235,812

Note: Gross Trade Creation = Intra AFTA Actual Trade – Intra AFTA Counterfactual Trade
Net Trade Creation = Extra AFTA Actual Trade – Extra AFTA counterfactual Trade
(Source: Author’s own calculation UNCOMTRADE Database)

93 Another analysis is also performed by constructing graphs for all six trend-models fitting both intra and extra AFTA trade data. Consistent with the statistical results provided in Table 10.12a and Table 10.12b, these graphs, presented as Appendix 4 show that quadratic model is the most appropriate model for purposes of forecasting.
As can be seen from Table 10.13, intra and extra AFTA actual trades are higher than their respective counterfactual trades each year for post AFTA period. This literally means that both “gross” and “net” trade creation are in existence for period after the formation of AFTA.

10.3.3.3 Statistical Tests of Trade Creation and Trade Diversion

To statistically ascertain whether AFTA creates or diverts trade, intra and extra AFTA actual as well as counterfactual trades derived in Section 10.3.3.2 are used to perform the test of difference. The test of difference is an appropriate test to examine if the difference between actual and counterfactual trades is statistically significant. In other words, the test of difference is employed to examine whether or not the existence of “gross” and “net” trade creation is significant. The statistical results of the test of difference are presented in Table 10.14.

Table 10.14
Test Statistics of Gross and Net Trade Creation

<table>
<thead>
<tr>
<th>Paired Samples Test</th>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pair 1</td>
<td>Intra AFTA bloc trade, actual - Intra AFTA bloc trade, counterfactual</td>
<td>5.3E+10</td>
<td>1.999E+10</td>
<td>5.8E+09</td>
<td>4.0E+10 - 6.5E+10</td>
<td>9.100</td>
<td>11</td>
<td>.000</td>
</tr>
<tr>
<td>Pair 2</td>
<td>Extra AFTA bloc trade, actual - Extra AFTA bloc trade, counterfactual</td>
<td>1.0E+11</td>
<td>5.733E+10</td>
<td>1.7E+10</td>
<td>6.7E+10 - 1.4E+11</td>
<td>6.222</td>
<td>11</td>
<td>.000</td>
</tr>
</tbody>
</table>

(Source: Output of SPSS computer program)

Table 10.14 shows that 2 pairs of differences are tested. Pair 1 is the test to ascertain if the existence of “gross” trade creation is significant, while Pair 2 is to establish the same conclusion for “net” trade creation. Following the decision rules adopted for establishing trade creation and
trade diversion of AFTA as already highlighted in Section 10.3.3, this study shows that AFTA essentially creates trade.

10.4 Conclusion

One of the important results obtained in this part of study suggests that of the five regional FTAs examined – AFTA, CER, EU, MERCUSOR and NAFTA – trade among member countries of three of them, AFTA, CER and MERCUSOR, is well above the trade of countries that do not belong to any regional FTAs. Meanwhile, trade among member countries of EU and NAFTA is of a similar magnitude to that of countries that do not participate in any regional FTAs. Another important result suggests that, for the period of this study, AFTA member countries do not only record a continuing increase in trade amongst themselves, but also with the rest of the world. Consistent with this, results obtained from the forecasting technique used in this part of the study also imply that AFTA actually creates rather than diverts trade. This means that the formation of AFTA does not only increase trade among members, but it also boosts trade with non members.
CHAPTER ELEVEN

SUMMARY AND CONCLUSIONS

11.1 General Synthesis

This thesis has argued that throughout the history of trade, there have been significant changes to thinking about international trade particularly among politicians, policy makers and to a lesser extent, economists. During the early trading years of the first century, in which trading activities were already extensively carried out among cities around the Mediterranean Sea, the social position of traders was low as trade was viewed as having harmful effects on human morality. The negative view on trade changed significantly during the era of mercantilism, during which time trade was viewed as an important tool for improving national prosperity and economic wealth. Mercantilists were, however, extremely in favour of exports, but strenuously against imports, arguing that exports are good, while imports are bad for a country.

The mercantilist view of trade was supplanted by the idea of free trade during the era of classical economics, which emerged in the 1770s with the argument that both exports and imports are good; therefore, they should be welcomed because both contribute equally to improve economic wellbeing. The ideological belief favouring free trade during this time was straightforward as the majority of economists argued for the adoption of a free trade policy for all countries around the globe.

Trade policies become more complex during the era of neoclassical economics which emerged in the 1870s. Although economists in general still agree about the virtues of free trade, they also realize that in some circumstances the virtues of free trade, at least in theory, could break down – such as trade under increasing returns to scale and the possibility of gains by manipulating the terms of trade – therefore, under these circumstances, free trade would not be
an optimum policy choice. Partly due to the inability of the free trade theory to show gains from free trade in all circumstances, the idea of free trade faces difficulty to be accepted by policy makers and the general public in many countries of the world. This led to the emergence of the “freer trade” idea in the middle of twentieth century, particularly after the end of the Second World War. In contrast to free trade, freer trade idea emphasizes the cooperation of all trading nations to collectively liberalize their trade regimes. One important tenet underlining this thinking is that trade liberalization is good, although it has never been envisaged as a vehicle to achieve free trade for the whole world. Two means are generally advanced by proponents of freer trade in their quest for trade liberalization. These are multilateralism, pursued under the auspices of the GATT/WTO, and regionalism, established through the signing of regional free trade agreements. Apparently at present, the idea of freer trade is the dominant thinking among policy makers, politicians and the general public.

11.2 Summary and Findings of the First Part of the Study

Mercantilism is a term used to explain economic thinking and practice, which was dominant for about two and a half centuries between the 1500s and 1750s. Fundamentally, mercantilists believed that international trade is important because it can be used as a vehicle to achieve multiple interrelated objectives: (1) accumulating treasure (or bullion), (2) enriching national wealth, (3) achieving a favourable balance of trade, (4) maximizing employment opportunities, (5) protecting home industries and (6) strengthening state power (Coats 1992, 46). In order to achieve these objectives, the conduct of international trade must hinge on one important principle; exports must be promoted while imports must be restrained (Backhouse 2002, 58; Roll 1992, 62).
Trade between countries during the era of mercantilism was carried out under enormous restrictions in consonance with the prevailing thinking of that time (Hunt 2002, 21). The mercantilist economics which was centred on competitive struggles between nations, propounded that economic relations with other countries are “zero-sum-game”, whereby one country’s gains could only be achieved at the expense of another (Appleyard and Field 1995, 19). This thinking, thus, exerted great influence on the trade policies of many countries (Backhouse 2002, 58).

The free trade idea emerged during the era of classical economics is primarily due to Adam Smith. In the *Wealth of Nations (1776)*, Smith expounded free trade theory while he examined and criticized mercantilist economics. He argued that free trade would improve the economic wellbeing of any nations. From the 1770s until the early nineteenth century, the discussion over the benefits of free trade among economists was hinged on the notion that the price of certain goods would be cheaper through importing because the absolute cost of production is lower in other countries. The absolute cost advantage as a determinant of trade is, however, unable to show the benefits of free trade for a situation in which one country has absolute lower costs in producing all goods that it trades with another. The answer to this question came in 1817 when David Ricardo expounded the theory of comparative cost advantage. Ricardo expounded that international trade is still beneficial to both exporting and importing countries even if only one country has absolute cost advantages in all goods.

Trade practices in the early part of classical economics were characterized by the continuation of the commercial policies of the previous period, which leaned towards mercantilist thinking. However, by the end of eighteenth century the economic arguments in favour of free trade began to be accepted by both policy makers as well as the general public. Nevertheless, during the period of classical economics a spectacularly controversial debate occurred in Britain
over the protectionist Corn Laws, enacted in 1815 with the aim of ensuring adequate supply of corn and stabilizing the price of agriculture produce (Grampp 1993, 39).

The Corn Laws drew massive protests from many groups in Britain, which finally resulted in the repeal of the law in 1846. At least three forces that worked in tandem, leading to the demise of the Corn Laws. Firstly, the poor economic conditions faced by ordinary people in the early nineteenth century, in particular due to the cyclical declining state of manufacturing and poor harvest of grain, thus created concerns about food security (Morley 1881, 190). Secondly, the emergence of the Anti-Corn Law League, a strong lobbying group led by Richard Cobden that pressed the British government to repeal the law. Finally the adoption of free trade ideology by the majority of legislatures and bureaucrats, headed by Robert Peel who became British Prime Minister in 1841.

During the early period of neoclassical economics, Alfred Marshall extended the exposition of trade theory by systematically developing and refining analytical methods with the use of geometrical diagrams in addition to descriptive reasoning. In particular, Marshall (1924, 157) incorporated into the “value of representative bales” of trade between two countries not only the value of labour, as used by classical economics, but also the value of capital and investment in the analysis of demand and supply of internationally traded goods.

In the early twentieth century significant economic debates occurred, questioning the validity of the theory of comparative cost advantage, which is primarily based on the labour theory of value. The sweeping and sternest criticisms of this theory probably came from Bertil Ohlin who did not only question the validity of theory but rejected it altogether. Having rejected the labour theory of value, Ohlin (1933) expounded a different approach to theorizing
international trade. In developing a new trade theory, Ohlin gave consideration to the importance of the element of regions in analysing the interdependence system of pricing.

Taking into account the mechanism of price formation, Ohlin contended that one important condition for trade to occur is that some goods can be produced more cheaply in money costs in one country as compared to others. The goods are cheaper in a particular country because in them are embodied relatively great quantities of factors of production which are cheaper in comparison to other countries. Therefore, those cheaper goods will be exported, while other goods, which can be produced more cheaply in other countries, are imported. Although this line of reasoning seems somewhat similar to the argument underlining absolute cost advantage as the cause of international trade, nevertheless, there exists a sharp difference. While the reason behind the absolute cost advantage has not clearly indicated why costs of production are different in different countries, Ohlin expounded the idea that the cheapness of goods is due to the abundant availability of factors of production.

In the 1970s and 1980s there was a renewed interest among some trade economists to incorporate economies of scale into the theory of trade, although the effects of increasing returns on trade had been the subject of discussion since the 1920s. Helpman (1984, 326) noted that increasing returns to scale had been recognized as important since they have implications for the explanation of trade patterns, gains from trade as well as for commercial policies.

The findings of theoretical research associated with the incorporation of economies of scale into international trade theory triggered another bout of debate about the virtues of free trade. Krugman (1987, 131-144) argued that new trade models based on increasing returns raised doubt on the extent to which actual trade can be explained by comparative advantage; therefore, government interventions in trade through import tariffs and export subsidies may be beneficial.
Notwithstanding this, however, Jagdish Bhagati (1989,1-34) noted that he was puzzled by Krugman’s argument, and insisted that the new trade models emphasizing increasing returns are merely additional examples to the previous theoretical circumstances whereby free trade would not be an optimum policy under the existence of market failures, thus a government could act to its national advantage by devising appropriate policy interventions.

The new bout of debates about the virtue of free trade among economists calmed down by the end of the 1990s. Bhagwati (1998, 4) observed that the academic scenario during this period witnessed the return of economist “defectors” from free trade doctrine to the fold, and there was an “harmony” of agreement among prominent economists for the case of pursuing free trade policy. A significant reason for the return was due to the recognition among economists of two important propositions: (1) if market failures remain unfixed, then pursuing free trade policy can harm rather than help and (2) if market failures are fixed through suitable policy interventions, then free trade can be used to exploit the potential gains from trade. Within the second proposition, economists emphasize that if market failures arise in domestic markets, then the most appropriate policy interventions would be to devise policies to correct those domestic market failures, while free trade is maintained externally.

11.3 Summary and Findings of the Second Part of the Study

Regionalism of economies has a long historical record, although they have existed in slightly different forms at different times. During the eighteenth and nineteenth centuries they occurred in parallel with the move towards the formation of nation-states, which was pervasively pursued in many parts of the world. This effort brought along the establishment of a kind of “customs-union”, in which uniformed tariffs were set for imports from other politically independent states. The earliest form of regionalism is argued to occur between England and
Scotland in which a customs union was established through the Act of Union in 1703. This was followed by the formation of customs union in France after the conclusion of the French Revolution in 1789. In Germany, the German Customs Union or the Zollverein was formed in 1834 involving 18 small states and territories. The confederation of Switzerland in 1848 as well as the unification of Italian states in 1860 resulted in a similar form of customs union.

In the modern history, particularly after the end of WW2, the regionalism of economies through the signing of regional trading agreements arguably occurs in two waves. The first wave began in 1950s and lasted until the 1970s, while the second wave started in the mid-1980s. The first wave emerged in Europe with the signing of the Treaty of Rome in 1957 involving Belgium, France, West Germany, Italy, Luxembourg and the Netherlands to establish the EEC. In contrast to the first wave which started in Europe, the second (and current) wave of regionalism, which emerged in the mid-1980s, started in the American continents with the signing of free trade agreement between the US and Israel in 1985 as well as another free trade agreement involving the US and Canada in 1988. This was soon followed by the signing of MERCUSOR in 1992 and NAFTA in 1994.

In Africa, the second wave of regionalism gave a new lease of life to many economic groupings which was originally established during the first wave but having all sorts of implementation problems. As a result the UEMOA was established out of the CEAO and the COMESA was resurrected. Another important regionalism that occurred during the second wave was the establishment of Australia-New Zealand Close Economic Relations (CER) in 1983. In Asia, only one important economic grouping that was established during the second wave, the ASEAN Free Trade Area (AFTA).
AFTA was officially established in January 1992 with the aim of enhancing trade among member of ASEAN countries. From the perspective of economics, a number of economic benefits are to be gained by members of ASEAN as they gradually liberalize their trade in the course of fulfilling their commitments for the implementation of AFTA. This proposition, however, holds only in the context of the “second-best policy option” that ASEAN member countries have chosen to follow. In theory, ASEAN member countries would stand to enjoy greater economic benefits had they chosen trade policies along the “first-best option”, that is, adopting unilateral and non discriminatory trade liberalization (Bhagwati 1993, 23).

11.4 Summary and Findings of the Third Part of the Study

Empirical studies on the effects of regionalism on trade have produced inconclusive findings, thus justifying this part of study, undertaken to re examine these issues with the use of a different approach and technique of analysis. One of the objectives of this study is to examine the effects of formal regional FTAs on trade of member vis-à-vis non member countries. In particular, the specific question of interest is whether the formation of regional FTAs results in boosting trade among members in comparison to trade with non-members. To investigate this question a specific gravity model is employed. The gravity model used in this study is essentially a regression model of bilateral trade between countries. For this model, total trade (imports plus exports) is specified as the endogenous variable, while income, income per capita and distance between two trading partners are used as explanatory variables. In addition, dummy variables are included in the model for the purpose of capturing the effects of regional FTAs on trade. Due to the limitation of data availability only five dummy variables are included into the model in

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As discussed in Chapter 10, the original econometric model incorporating total trade as the endogenous variable is plagued with the problems of heteroscedasticity and functional form. To correct these problems an adjusted econometric model is constructed by transforming the data. The adjusted model specifies trade intensity as the endogenous variable while explanatory variables remain the same.
which each dummy variable represents a particular regional free trade area. These dummy variables (take the value of 1 if both trading partners are members and 0 otherwise) are AFTA, CER, EU, NAFTA and MERCUSOR.

The coefficients of the dummy variables representing AFTA, CER and MERCUSOR indicate that in recent years, two members of these regional FTAs trade with each other well above the trade of a pair of countries in which both are not members of any regional FTAs. In 2003 for example, two members of AFTA trade 14 times \(e^{2.649} = 14.13\) more with each other than a pair of countries that both of them do not belong to any regional FTAs and this statistical result is very significant (at almost 100% level of confidence). In the same year, two members of CER and MERCUSOR trade with each other 12 times \(e^{2.459} = 11.69\) and 8 times \(e^{2.068} = 7.91\) more in comparison with a pair of countries which are not members of any regional FTA with the statistical results significant at 11% and 18% respectively. Unlike AFTA which shows significant evidence of intra-bloc trade intensifying effect since the beginning of the study period (1980), this effect is only evident since 1998 (significant at 17% level) for CER and 2002 for MERCUSOR (significant at 16% level).

The coefficients of EU and NAFTA dummy variables show similar characteristics. Both EU and NAFTA do not show an intra-bloc trade intensifying effect for any period of the study. Interestingly, the signs of EU and NAFTA dummy variables are negative from 1980 until 1992 with the signs changing to positive in 1994. Also, the dummy coefficients of these two regional groupings are not significant for all the years of study. This implies that a pair of EU and NAFTA members trade with each other about a similar magnitude in comparison to a pair of countries that do not belong to any regional FTAs. In other words, this result suggests that EU and NAFTA do not have an intra-bloc trade intensifying effect before as well as after the formation of their economic groupings.
The other question of interest in this study is the examination of the effect of AFTA on trade of member in comparison to non member countries. The regression results obtained to answer this question show that the coefficients of the AFTA dummy variable are positive, above the value of 2 and highly significant throughout the study period. This suggests that trade of two AFTA member countries is higher than their trade with non members. In 2003 for example, two AFTA member countries trade with each other about 14 times ($e^{2.611} = 13.61$) higher than they trade with non members. The results also show that an intra-bloc trade intensifying effect emerged in AFTA-bloc even before AFTA was officially established in 1992. In fact, the intra-bloc trade intensifying effect of AFTA is higher at the early years of the study period. This intra-bloc trade intensifying effect gradually becomes less pronounced after the AFTA agreement was signed and especially so in the late 1990s.

These regression results, therefore, suggest two implications. First, they lend support to the notion that a trading bloc can itself be a “natural trading bloc” as expounded by Krugman (1991b, 5-25) and AFTA probably falls into this category. Second, although the AFTA agreement has specific provisions giving favourable treatment to members over non-members, in practice AFTA appears to have characteristics of an “open trading bloc” (Wei and Frankel 1995), whereby, although tariff concessions are given to members initially, these concessions are soon willingly extended to non-members by individual countries.

The other important objective of this study is to examine the question of whether AFTA creates or diverts trade. In order to answer this question this part of the study proceeded in two stages. At the first stage intra and extra AFTA counterfactual trades are estimated by the use of a forecasting technique. The estimated intra AFTA counterfactual trade (i.e. trade among members of AFTA countries) as well as extra AFTA counterfactual trade (i.e. trade of AFTA countries with the rest of the world) are then compared with their respective actual trades for the post
AFTA formation period of 1992-2003. At the second stage, a test of difference (t-test) is performed to statistically examine whether AFTA creates or diverts trade. The results obtained in this part of study suggest that AFTA essentially creates rather than diverts trade.

11.5 Policy Implications

It is interesting to note that throughout history, free trade did not only exist merely as a theoretical exposition but it was adopted into trade policies of a number of countries particularly in Europe. These countries, notably Britain, the Netherlands, Belgium and Switzerland managed to cling to unilateral free trade policies for quite a long period of time between the 1850s and 1890s (O'Rourke and Williamson 1999). These unilateral free trade policies, however, came to an end with the outbreak of the First World War in 1914.

For the post WW2 period, free trade has failed to emerge as a dominant force in the setting of trade policies in almost all countries. Instead, the twentieth and twenty-first centuries has witnessed the emergence of the freer trade idea, whereby, policy makers in many countries are reluctant to embrace unilateral free trade but are willing to pursue liberalized trade policies provided other countries do so. This is exemplified by the outcomes of negotiations conducted under the auspices of the GATT and WTO. To a certain extent this freer trade thinking is probably justified especially in the practical world of politics. Furthermore, the theory of trade itself has few caveats in suggesting the adoption of outright free trade policies for all countries because under some circumstances a country can gain more by departing from a free trade policy, although the gain could be obtained at the expense of others.

Problems faced by countries adopting the free trade policy during the period between the 1870s and 1890s highlighted an important lesson for the world. It appeared that during this period, countries adopting unilateral free trade especially Germany and France suffered from
“grain invasion” from the New World and the United States (Gomes 2003, 258). Since countries outside Europe, generally, were less open and erected more barriers to imports, these two countries found that their agriculture producers lost market share (both in domestic and foreign countries). This problem, coupled with a prolonged business cycle downturn they experienced in this period, caused them to make a break from a unilateral free trade policy by raising tariffs as well erecting other barriers. This experience suggests that a world with harmonized but liberal trade policy regimes, involving cooperation of all countries, is more sustainable in comparison to a world where only a few countries adopt unilateral free trade policies.

The empirical results of this study indicate that, for several reasons, AFTA is a step in the right direction in its quest for trade liberalization. First, the results suggest that AFTA has the characteristics of a natural trading bloc, so its establishment probably does not harm non-member countries. Second, AFTA shows that it is an open trading bloc, whereby, although tariff reductions had initially been given to members, but these concessions were soon be extended to other countries as well. Finally, the results of the study suggest that AFTA essentially creates rather than diverts trade. This means that AFTA’s establishment not only increases trade between member countries but it also boosts trade with the rest of the world.

11.6 Limitations and Further Research

Due to the unavailability of data, the empirical component of this study takes into account only the six original members of AFTA. It might be possible that the results of this study would be different if all 10 AFTA member countries were included in the empirical investigation. Future research may be able to incorporate all AFTA member countries in studying the effects of AFTA on trade, particularly when trade data from countries such as Cambodia, Laos and Myanmar are more readily available.
To examine trade creation and trade diversion of AFTA, this study employed a forecasting technique based on a trend analysis to extrapolate counterfactual trades of AFTA countries under the assumption that AFTA did not come into existence (in 1992). Under this assumption, trade value of AFTA countries (for the post-AFTA period) is assumed to follow the previous 22-years (1970-1991) trend. This is admittedly quite a strong assumption because in the real world things change frequently. Therefore, it would be possible that the results found in this part of the study do not hold if different assumptions and techniques to calculate the counterfactual trade of AFTA were employed. Nevertheless, since the empirical investigation of this study only tries to approximate the theory with reality, the results obtained have shed additional light on the question of whether AFTA creates or diverts trade.
APPENDICES

Appendix 1: List of Sample Countries

Europe
1) Austria
2) Belgium
3) Denmark
4) Finland
5) France
6) Germany
7) Hungary
8) Ireland
9) Italy
10) Netherlands
11) Norway
12) Poland
13) Portugal
14) Spain
15) Sweden
16) Switzerland
17) United Kingdom

Oceania
18) Australia
19) New Zealand

North America
20) Canada
21) Mexico
22) United States

South America
23) Argentina
24) Brazil
25) Chile
26) Columbia
27) Ecuador
28) Peru

Asia
29) Bangladesh
30) Brunei
31) China
32) India
33) Indonesia
34) Japan
35) Malaysia
36) Pakistan
37) Philippines
38) Singapore
39) South Korea
40) Thailand

Other Countries
41) Israel
42) Kenya
43) Kuwait
44) Saudi Arabia
45) Turkey
**Appendix 2: Alternative Tests of Non-Nested Regression Models**

**Dependent variable is TTRADE03 990 observations used from 1 to 990**

Regressors for model M1:
- INPT
- GDP03
- PGDP03
- DIST12

Regressors for model M2:
- INPT
- GDP03A
- PGDP03A
- DIST12

<table>
<thead>
<tr>
<th>Test Statistic</th>
<th>M1 against M2</th>
<th>M2 against M1</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-Test</td>
<td>-7.1486[.000]</td>
<td>-25.5766[.000]</td>
</tr>
<tr>
<td>NT-Test</td>
<td>-7.0616[.000]</td>
<td>-25.2962[.000]</td>
</tr>
<tr>
<td>W-Test</td>
<td>-6.6719[.000]</td>
<td>-21.4210[.000]</td>
</tr>
<tr>
<td>J-Test</td>
<td><em>NONE</em></td>
<td><em>NONE</em></td>
</tr>
<tr>
<td>JA-Test</td>
<td>5.7503[.000]</td>
<td>15.1088[.000]</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Encompassing</th>
<th>F( 2, 984)</th>
<th>F( 2, 984)</th>
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</thead>
<tbody>
<tr>
<td>Model M1:</td>
<td>17.5707[.000]</td>
<td>117.2177[.000]</td>
</tr>
<tr>
<td>Model M2:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model M1+M2:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Akaike's Information Criterion of M1 versus M2 = 88.4105 favours M1
Schwarz's Bayesian Criterion of M1 versus M2 = 88.4105 favours M1

(Source: Output of microfit computer program)

**Note**: In Appendix 2, explanatory variables GDP03 and PGDP03 used in model M1, respectively represent the combination of income and per capita income of two trading countries in multiplicative interaction terms while those of GDP03A and PGDP03A represent additive interaction terms (model M2). The test results (N-Test, NT-Test, W-Test, J-Test and JA-Test) show that neither model M1 nor model M2 outperforms the other as null hypothesis of both tests, M1 against M2 and M2 against M1 reject each other (the results of the tests are indeterminate because the difference of influence of the two models over bilateral trade is very marginal). Notwithstanding this, however, both Akaike Information Criterion and Schwarz Bayesian Criterion indicate that model M1 which represents multiplicative interaction terms is favourable over model M2.
Appendix 3: Non-Nested Tests by Simulation

******************************************************************************
Dependent variable in model M1 is TTRADE03
Dependent variable in model M2 is LOG(TTRADE03)
990 observations used from 1 to 990. Number of replications 100
******************************************************************************

<table>
<thead>
<tr>
<th>Estimates of parameters of M1</th>
<th>Estimates of parameters of M2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under M1</td>
<td>Under M2</td>
</tr>
<tr>
<td>INPT</td>
<td>-26.3260</td>
</tr>
<tr>
<td>GDP03</td>
<td>-26.3260</td>
</tr>
<tr>
<td>PGDP03</td>
<td>-26.3260</td>
</tr>
<tr>
<td>DIST12</td>
<td>-26.3260</td>
</tr>
<tr>
<td>Standard Error</td>
<td>1.0448</td>
</tr>
<tr>
<td>Adjusted Log-L</td>
<td>1.0448</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

******************************************************************************
Non-Nested Test Statistics and Choice Criteria
******************************************************************************

<table>
<thead>
<tr>
<th>Test Statistic</th>
<th>M1 against M2</th>
<th>M2 against M1</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-Test 100 replications</td>
<td><em>NONE</em></td>
<td>-35.6579[.000]</td>
</tr>
<tr>
<td>PE-Test</td>
<td><em>NONE</em></td>
<td>2.5931[.010]</td>
</tr>
<tr>
<td>BM-Test</td>
<td><em>NONE</em></td>
<td>1.6329[.102]</td>
</tr>
<tr>
<td>DL-Test</td>
<td><em>NONE</em></td>
<td>6.7655[.000]</td>
</tr>
<tr>
<td>Sargan's Likelihood Criterion for M1 versus M2= -2976.0  favours M2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vuong's Likelihood Criterion for M1 versus M2= -396.1056[.000] favours M2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

******************************************************************************
S-Test is the SC_c test proposed by Pesaran and Pesaran (1995) and is
the simple version of the simulated Cox test statistic.
PE-Test is the PE test due to MacKinnon, White and Davidson.
BM-Test is due to Bera and McAleer.
DL-Test is the double-length regression test statistic due to Davidson
and MacKinnon.
******************************************************************************
(Source: Output of microfit computer program)

Note: Appendix 3 shows, linear function is used for model M1 while log linear function is used
for model M2. Test statistics of M2 against M1 show that all four tests (S-Test, PE-Test,
BM-Test and DL-Test) are significant, suggesting the log linear model (M2) is favourable
over the linear model. These test results are also supported by Sargan’s Likelihood
Criterion as well as Vuong’s Likelihood Criterion. This suggests that log linear model is
the better model to be used in the regression analysis.
Appendix 4: Ordinary Least Squares Estimation of Model 10.3

Dependent variable is LTRIN03
990 observations used for estimation from 1 to 990

<table>
<thead>
<tr>
<th>Regressor</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>T-Ratio [Prob]</th>
</tr>
</thead>
<tbody>
<tr>
<td>INPT</td>
<td>-28.6936</td>
<td>1.4952</td>
<td>-19.1907 [.000]</td>
</tr>
<tr>
<td>LGDP03</td>
<td>.065894</td>
<td>.026837</td>
<td>2.4553 [.014]</td>
</tr>
<tr>
<td>LPGDP03</td>
<td>-.0011846</td>
<td>.028126</td>
<td>-.042118 [.966]</td>
</tr>
<tr>
<td>LDIST12</td>
<td>-.81773</td>
<td>.069894</td>
<td>-11.6995 [.000]</td>
</tr>
<tr>
<td>AFTA</td>
<td>2.6486</td>
<td>.42771</td>
<td>6.1925 [.000]</td>
</tr>
<tr>
<td>CER</td>
<td>2.4598</td>
<td>1.5631</td>
<td>1.5736 [.116]</td>
</tr>
<tr>
<td>EU</td>
<td>.074373</td>
<td>.21781</td>
<td>.34147 [.733]</td>
</tr>
<tr>
<td>NAFTA</td>
<td>.11813</td>
<td>.91142</td>
<td>.12961 [.897]</td>
</tr>
<tr>
<td>MERCUSOR</td>
<td>2.0683</td>
<td>1.5636</td>
<td>1.3228 [.186]</td>
</tr>
</tbody>
</table>

R-Squared: .25657, R-Bar-Squared: .25051
S.E. of Regression: 1.5593, F-stat: F( 8, 981) = 42.3204 [.000]
Mean of Dependent Variable: -32.3259, S.D. of Dependent Variable: 1.8011
Residual Sum of Squares: 2385.2, Equation Log-likelihood: -1840.0
Akaike Info. Criterion: -1849.0, Schwarz Bayesian Criterion: -1871.1

Diagnostic Tests

* Test Statistics * LM Version * F Version

A: Serial Correlation * CHSQ(1) = 11.6477 [.001] * F(1, 980) = 11.6673 [.001]
B: Functional Form * CHSQ(1) = 1.6918 [.193] * F(1, 980) = 1.6776 [.196]
C: Normality * CHSQ(2) = 87379.6 [.000] * Not applicable
D: Heteroscedasticity * CHSQ(1) = 2.2511 [.134] * F(1, 988) = 2.2516 [.134]

A: Lagrange multiplier test of residual serial correlation
B: Ramsey's RESET test using the square of the fitted values
C: Based on a test of skewness and kurtosis of residuals
D: Based on the regression of squared residuals on squared fitted values
**Appendix 5: Ordinary Least Squares Estimation of Model 10.4**

---

**Dependent variable is LTRIN03**
990 observations used for estimation from 1 to 990

<table>
<thead>
<tr>
<th>Regressor</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>T-Ratio [Prob]</th>
</tr>
</thead>
<tbody>
<tr>
<td>INPT</td>
<td>-28.5397</td>
<td>1.4748</td>
<td>-19.3510 [.000]</td>
</tr>
<tr>
<td>LGDP03</td>
<td>0.066145</td>
<td>0.026675</td>
<td>2.4797 [.013]</td>
</tr>
<tr>
<td>LPGA03</td>
<td>-0.3833E-3</td>
<td>0.027804</td>
<td>-0.013786 [.989]</td>
</tr>
<tr>
<td>LDIST12</td>
<td>-0.83718</td>
<td>0.058047</td>
<td>-14.4224 [.000]</td>
</tr>
<tr>
<td>AFTA</td>
<td>2.6109</td>
<td>0.42254</td>
<td>6.1790 [.000]</td>
</tr>
</tbody>
</table>

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**R-Squared** 0.25333
**R-Bar-Squared** 0.25030
**S.E. of Regression** 1.5595
**F-stat.** F(4, 985) 83.5471 [.000]
**Mean of Dependent Variable** -32.3259
**S.D. of Dependent Variable** 1.8011
**Residual Sum of Squares** 2395.6
**Equation Log-likelihood** -1842.2
**Akaike Info. Criterion** -1847.2
**Schwarz Bayesian Criterion** -1859.4
**DW-statistic** 1.7868

---

**Diagnostic Tests**

<table>
<thead>
<tr>
<th>Test Statistics</th>
<th>LM Version</th>
<th>F Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: Serial Correlation</td>
<td>CHSQ(1) = 11.2476 [.001]</td>
<td>F(1, 984) = 11.3079 [.001]</td>
</tr>
<tr>
<td>B: Functional Form</td>
<td>CHSQ(1) = 1.6332 [.201]</td>
<td>F(1, 984) = 1.6260 [.203]</td>
</tr>
<tr>
<td>C: Normality</td>
<td>CHSQ(2) = 86033.5 [.000]</td>
<td>Not applicable</td>
</tr>
<tr>
<td>D: Heteroscedasticity</td>
<td>CHSQ(1) = 2.1277 [.145]</td>
<td>F(1, 988) = 2.1280 [.145]</td>
</tr>
</tbody>
</table>

---

A: Lagrange multiplier test of residual serial correlation  
B: Ramsey's RESET test using the square of the fitted values  
C: Based on a test of skewness and kurtosis of residuals  
D: Based on the regression of squared residuals on squared fitted values
Appendix 6: Graphs Fitting Alternative Trend-Models

Graph A1 – Linear, Quadratic and Growth Models of Extra AFTA Trade

(extra AFTA bloc trade)

(Source: Output of SPSS computer program)
Graph A2 – Logarithmic, S and Exponential Models of Extra AFTA Trade

(extra AFTA bloc trade)

(Source: Output of SPSS computer program)
Graph A3 – Linear Quadratic and Growth Models of Intra AFTA Trade

(Source: Output of SPSS computer program)
Graph A4 – Logarithmic, S and Exponential Models of Intra AFTA Trade

intra AFTA bloc trade

(Source: Output of SPSS computer program)
BIBLIOGRAPHY


Lawrence, Robert Z. 1991. Emerging Regional Arrangements: Building Blocks or Stumbling Blocks? In Finance and the International Economy 5; The AMEX Bank review Prize


