



UNIVERSITI PUTRA MALAYSIA

***IMPACT OF FREE TRADE AGREEMENTS AND ANTI-DUMPING ON
MALAYSIAN TRADE FLOWS***

RASHIDI BIN SAID

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MALAYSIAN TRADE FLOWS**

By

RASHIDI BIN SAID

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

February 2018

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Doctor of Philosophy

IMPACT OF FREE TRADE AGREEMENTS AND ANTI-DUMPING ON MALAYSIAN TRADE FLOWS

By

RASHIDI BIN SAID

February 2018

Chairman : Associate Professor Normaz Wana Ismail, PhD
Faculty : Economics and Management

The issues of the proliferation of free trade agreements (FTAs) and the widespread use of anti-dumping actions in international trading system have attracted much interest among policymakers and scholars to study the impacts of these trade policy instruments to trade. Therefore, the general objective of this research is to examine the impacts of FTA liberalisation and anti-dumping actions on international trade flows, particularly on the extensive and intensive margins of trade between Malaysian and its trading partners. This research utilises the United Nations Commodity Trade (COMTRADE) data from 1994 to 2014. The margins are constructed using Hummels and Klenow (2005) method, with empirical analysis is based on the gravity model framework.

The number of FTAs has increased rapidly since 1990s. As for Malaysia, it has signed twelve FTAs by end-2014. The first specific objective of this research is to evaluate the impacts of Malaysian FTAs on extensive and intensive margins. The research constructs trade margins using the imports data among 48 countries in the Malaysian FTA network. The research finds positive impact of most FTAs on intensive margin when FTAs enter into force with majority of them is regional FTAs. The evidence shows a shift in trade patterns i.e. 4.0 per cent reduction in extensive margin from bilateral FTAs to 41.6 per cent increase in intensive margin from regional FTAs. These results show that much of the increase in trade is evidenced by the trade in existing products.

The reductions in trade barriers from liberalisation policy have resulted in – fairly or unfairly – massive flows of imports, which triggered the increased use of anti-dumping actions around the world. The second specific objective of this research is to investigate the impacts of anti-dumping actions imposed by 14 Malaysian FTA members against their 48 trading partners on extensive and intensive margins. Utilising anti-dumping information from 1994 to 2014 in Bown (2016), the gravity model estimate finds that the anti-dumping actions significantly impacted intensive margin. The anti-dumping actions caused reduction in intensive margin by 2.5 per cent a year following the imposition but only significantly reduced intensive margin by 6.3 per cent in the second year and 7.7 per cent in the third year. For $WTO_{ijt}+$ dummy variable, positive $WTO_{ijt}+$ coefficients indicate that a stricter anti-dumping discipline in FTAs has helped FTA members to increase both trade margins.

Malaysia as one the major trading nations has been exporting a few major products such as iron and steel, chemicals, textiles, and machinery to the FTA partners. The impositions of anti-dumping actions against these products can impact both margins. The third objective of this research examines the impacts of 158 anti-dumping actions filed by eleven Malaysian FTA partners from 1994 to 2014 on extensive and intensive margins in sectors of Malaysian export interests. The gravity model estimates significant and stronger impacts of anti-dumping actions on intensive margin when the sectors of base metal and machinery are covered in Malaysian imports. The results help to explain how an anti-dumping action can have a stronger impact on trade margins when a wider range of products is covered by the actions.

The findings of this research bring some policy implications to policymakers on impacts of FTAs and anti-dumping policies to trade. The positive impact of regional FTAs on intensive margin shows a significant role of these FTAs can play in spurring improvements in trade in existing products. While FTAs promote trade, the excessive use of anti-dumping actions for protection can have some negative impacts. Therefore, it is important for policymakers to be more cautious in utilising the measures, while maintaining their legitimate rights as provided under the WTO rules.

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

**KESAN PERJANJIAN-PERJANJIAN PERDAGANGAN BEBAS DAN
ANTI-LAMBAKAN KE ATAS ALIRAN PERDAGANGAN MALAYSIA**

Oleh

RASHIDI BIN SAID

Februari 2018

Pengerusi : Profesor Madya Normaz Wana Ismail, PhD
Fakulti : Ekonomi dan Pengurusan

Isu percambahan perjanjian perdagangan bebas (FTA) dan penggunaan anti-lambakan secara meluas dalam sistem perdagangan antarabangsa telah menarik banyak minat di kalangan penggubal dasar dan para sarjana untuk mengkaji impak dari instrumen-instrumen ini ke atas perdagangan. Oleh itu, objektif umum penyelidikan ini adalah untuk mengkaji impak liberalisasi FTA dan tindakan anti-lambakan ke atas aliran perdagangan antarabangsa, terutamanya pada margin dagangan yang luas dan intensif antara Malaysia dan rakan perdagangannya. Kajian ini menggunakan data Perdagangan Komoditi Pertubuhan Bangsa-bangsa Bersatu (COMTRADE) dari tahun 1994 hingga 2014. Margin dibina menggunakan kaedah Hummels dan Klenow (2005), dengan analisis empirikal berdasarkan kerangka model graviti.

Bilangan FTA mula meningkat dengan pesat sejak tahun 1990-an. Malaysia telah menandatangani dua belas FTA pada akhir tahun 2014. Objektif pertama kajian ini adalah untuk menilai impak FTA Malaysia pada margin luas dan intensif. Penyelidikan ini membina margin perdagangan menggunakan data import di kalangan 48 negara dalam rangkaian FTA Malaysia. Penyelidikan ini mendapati impak positif kebanyakan FTAs pada margin intensif apabila FTA mula berkuatkuasa dengan kebanyakannya adalah FTA serantau. Bukti menunjukkan terdapat peralihan dalam corak perdagangan iaitu 4.0 peratus pengurangan margin luas daripada FTA dua hala kepada 41.6 peratus peningkatan dalam margin intensif dari FTA serantau. Hasil ini menunjukkan

bahawa banyak peningkatan perdagangan terbukti oleh perdagangan produk sedia ada.

Pengurangan perdagangan halangan dari dasar liberalisasi telah mengakibatkan aliran import yang adil atau tidak adil, yang mencetuskan peningkatan penggunaan tindakan anti-lambakan di seluruh dunia. Objektif kedua penyelidikan ini adalah untuk menyiasat kesan tindakan anti-lambakan yang dikenakan oleh 14 anggota FTA Malaysia terhadap 48 rakan perdagangan mereka pada margin luas dan intensif. Dengan menggunakan maklumat anti-lambakan dari tahun 1994 hingga 2014 dari Bown (2016), analisa model graviti mendapati bahawa tindakan anti-lambakan telah memberi kesan yang ketara terhadap margin intensif. Tindakan anti-lambakan itu menyebabkan pengurangan margin intensif sebanyak 2.5 peratus pada tahun pertama tetapi secara jelas hanya berkurang sebanyak 6.3 peratus pada tahun kedua dan 7.7 peratus pada tahun ketiga. Untuk pembolehubah $WTO_{ijt} +$, koefisien WTO_{ijt} positif menunjukkan bahawa disiplin anti-lambakan yang lebih ketat dalam FTA telah membantu ahli FTA untuk meningkatkan margin perdagangan.

Malaysia sebagai salah satu negara perdagangan utama telah mengeksport beberapa produk utama seperti besi dan keluli, bahan kimia, tekstil, dan jentera kepada rakan FTA. Tindakan anti-lambakan terhadap produk ini boleh memberi kesan kedua-dua margin. Objektif ketiga kajian ini meneliti kesan 158 tindakan anti-lambakan yang difailkan oleh sebelas rakan FTA Malaysia dari tahun 1994 hingga 2014 ke atas margin yang luas dan intensif dalam sektor-sektor kepentingan eksport Malaysia. Model graviti menganggarkan kesan yang signifikan dan lebih kuat dari tindakan anti-lambakan pada margin intensif apabila sektor logam asas dan jentera diambil kira dalam import Malaysia. Ini menjelaskan bagaimana tindakan anti-lambakan boleh memberi impak yang lebih kuat terhadap margin perdagangan apabila pelbagai produk diliputi oleh tindakan. Penemuan kajian ini membawa beberapa implikasi dasar kepada penggubal dasar mengenai kesan FTA dan dasar anti-lambakan atas perdagangan. Kesan positif FTA serantau pada margin intensif menunjukkan peranan penting FTA ini boleh dimainkan dalam memacu peningkatan dalam perdagangan produk sedia ada. Walaupun FTA mempromosikan perdagangan, penggunaan berlebihan tindakan anti-lambakan untuk perlindungan boleh mempunyai beberapa kesan negatif. Oleh itu, adalah penting bagi penggubal dasar untuk lebih berhati-hati dalam menggunakan langkah-langkah ini, sambil mengekalkan hak-hak sah mereka seperti yang diperuntukkan di bawah peraturan WTO.

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This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfillment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

Normaz Wana Ismail, PhD

Associate Professor
Faculty of Economics and Management
Universiti Putra Malaysia
(Chairman)

Zulkornain Yusop, PhD

Professor
Faculty of Economics and Management
Universiti Putra Malaysia
(Member)

Law Siong Hook, PhD

Associate Professor
Faculty of Economics and Management
Universiti Putra Malaysia
(Member)

ROBIAH BINTI YUNUS, PhD

Professor and Dean
School of Graduate Studies
Universiti Putra Malaysia

Date:

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Signature: _____ Date: _____

Name and Matric No: Rashidi Bin Said, GS38001

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CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Integration into the world economy has proven beneficial for trade expansion and economic growth of countries. The significant benefits of this expansion are expected from the shift from restrictive trade policies to policies that promotes freer trade through substantial reductions in trade barriers and trade costs—either bilaterally, regionally, or through multilateral commitments. This research examines the role of economic integrations especially free trade agreements (FTAs) in their impacts on world trade flows. However, the acceleration of world trade may also foster unfair trade practices such as dumping that may cause material injury or threatening to cause injury to domestic industries. The increase in these unfair trade practices has spawned a growing interest for an instrument that can redress these practices and remedy the injuries. Therefore, the research also investigates the impacts of this trade remedy instrument labelled as “anti-dumping” action on country-pairs trade flows. To examine the impacts of FTAs and anti-dumping actions, the trade is disaggregated into two margins of adjustment—extensive margin and intensive margin of trade.

There are various ways to define extensive margin and intensive margin. It depends on the levels of data used in the studies such as the firm-level studies by Buono and Lalanne (2012). The authors define extensive margin as a simple count of the number of firms that export; while intensive margin as average exports of each firm. For example, if a change in trade policy i.e. reduction in trade barriers causes an increase in the number of exporting firms from 50 in 2010 to 60 firms in 2015, it is an increase in extensive margin. However, if average exports of firms increased from 100 metric tonnes in 2010 to 200 metric tonnes in 2015, it is an increase in intensive margin. An increase in values (export/import) of existing products is intensive margin. The most recent approach; Baier, Bergstrand, and Feng (2014), Hummels and Klenow (2005), and Kehoe and Ruhl (2013) define extensive margin and intensive margin by calculating the relative importance of trade between two countries vis-à-vis trade with other countries. This approach is discussed in a greater detail in model specifications.

International trade has expanded intensely since the end of Second World War (WWII). The reduction of trade barriers either as a result of unilateral, bilateral or multilateral commitments, is one of the apparent means of promoting international trade liberalisation. The conclusion of Uruguay Round negotiations in 1994 and the establishment of WTO on 1 January 1995 were the two key milestones to further promote trade liberalisation (World Trade Organization [WTO], 2011b). Another key channel of promoting trade liberalisation is FTA, which has been acknowledged its existence in the multilateral framework of GATT¹. Although discussions pertaining to regionalism versus multilateralism are still contentious², the number of FTA establishments is undoubtedly growing. At the time of the establishment of WTO in 1995, there were about 30 FTAs in place (Fugazza & Nicita, 2013). The WTO's FTA statistics show that the number of physical FTA in force has grown to more than 280 establishments by end of 2017.

During the periods of 1950s and 1960s, regional integration was driven by closer cooperation between countries in the similar region, particularly in Europe (WTO, 2011c). The first FTA notified to the WTO was the European Economic Community (EEC) created under the Treaty of Rome in 1957. The EEC, which was entered into force on 1 January 1958, had six founding members: Belgium, France, (West) Germany, Italy, Luxembourg, and the Netherlands. In 1960, the second European bloc, the European Free Trade Association (EFTA) was also formed. This was followed by the spread of regional integration throughout America and Asia. In 1994, Canada, the United States (US), and Mexico formed the North American Free Trade Agreement (NAFTA). In response to continuous proliferation of FTAs, in 1992, an ASEAN Summit in Singapore had agreed to create the ASEAN Free Trade Area (AFTA) to further accelerate trade in the region (Ministry of International Trade and Industry [MITI], 2015). The widespread of regional integrations is based on the notion that they bring reductions in trade barriers – both tariffs and non-tariffs, which reduce fixed and variable costs of trade (Kehoe & Ruhl, 2013). These enable lower price for imported goods, lower price for consumers, greater economies of scale for producers, and increased exports.

¹ The GATT allows exception from the MFN principle in Article XXIV related to the formation of customs union or FTA but must subject to several requirements. In this study, the "GATT" refers to both "GATT 1947" and "GATT 1994" if both shared the same textual provisions. Otherwise, either specific will be mentioned.

² See Baldwin and Freund (2011), Heydon (2003), Krugman (1993), Schultz (1996), and WTO (2011b) for detailed discussions on regionalism versus multilateralism.

As the international trade grows and the economic integration becoming more complex, the international trade relation expands beyond the similar region. The proliferation of FTAs not only brings changes in regional composition but also a major shift in the scope of the agreements (WTO, 2011). Since 1990s, there has been a drastic increase in the number of FTAs. From 19 FTAs in force from the period 1958-1989, the number expanded to 43 FTAs by end of 1990s. There are few essential points we can observe from

Figure 1.1. There was a rapid increase in FTAs after mid-1980s, about 144 per cent increase from the period of 1985-1989 to 1990-1994. The enormous importance of bilateral integration vis-à-vis regional integration only emerged from the period 2005-2009 in which a total of 117 bilateral FTAs were in force compared to 90 regional FTAs. By the end of 2017, a total of 289 FTAs were already in force with 153 bilateral and 113 regional FTAs.

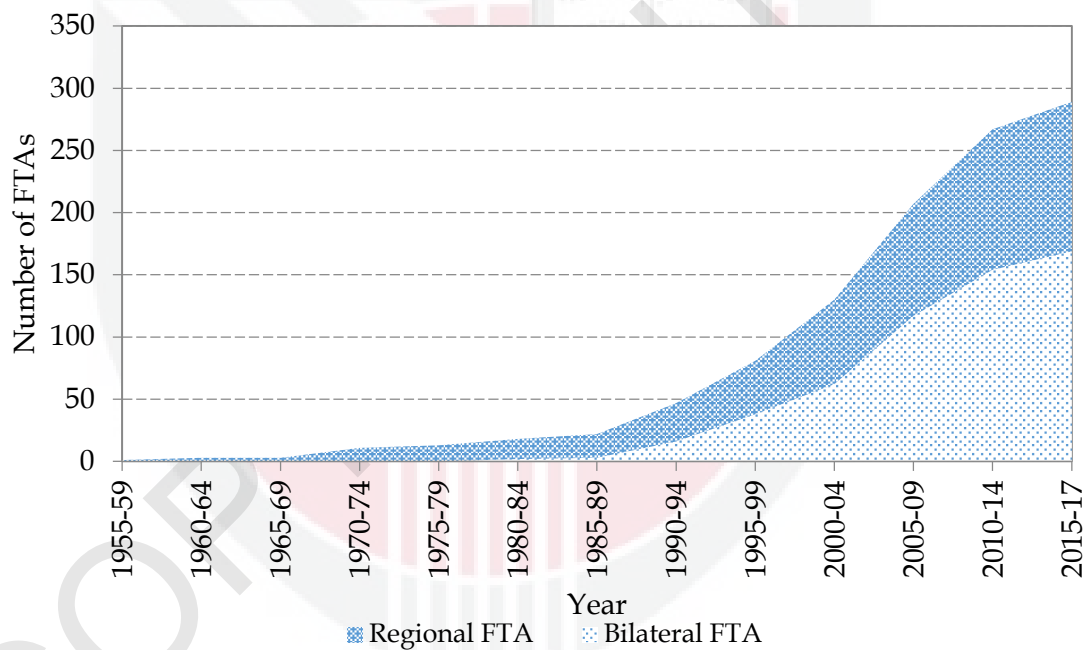


Figure 1.1 : Cumulative number of FTA by types, 1955-2017

(Source : WTO's Regional Trade Agreements Information System and MITI's website)

The reason for this proliferation has been discussed in the literature. The stalled of Doha Round trade talks to more than a decade since it was launched in 2001, have diverted the negotiation resources away to bilateral and regional FTAs as the results of these economic integrations are considered quicker and tangible (Baldwin & Freund, 2011; Kim, Rahman, & Ara, 2014; Urata & Okabe, 2010). The proliferation of FTAs is also contributed by other political and economic factors such as possible economic growth and welfare gains to participating members (Itakura, 2014; Abe, 2011; Scollay & Gilber, 2010; Balassa, 1961).

Specifically to the region, Malaysia as one of the world's major trading countries, recognises international trade is one of the key contributors to Malaysia's economic growth and development. Malaysia's trade policy objectives are to improve market access for its goods and services, enhance competitiveness of its exports, broaden its trading partners, and explore new market opportunities (WTO, 2010). While Malaysia continues to affirm priority to WTO multilateral trading system, Malaysia is also devoting its resources to regionalism through bilateral and regional FTAs. These FTAs are not to substitute the multilateral liberalisation process but rather to complement multilateral approach (MITI, 2014).

By end of 2014, Malaysia has already signed seven bilateral FTAs and six regional FTAs. Malaysia is currently negotiating Malaysia-EU, ASEAN-EU, and has signed the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)³. This research calls these FTAs collectively as "FTA network". The involvements of Malaysia in these FTAs are mostly aimed at providing means to achieve faster and higher level of liberalisation that will create greater market access in FTA trading partner's markets (MITI, 2014). It took about ten years for Malaysia to have its second regional FTA through ASEAN-China FTA in 2002. Malaysia's first bilateral FTA was only materialised in 2005 through Malaysia-Japan FTA (refer Table A.1 for list of Malaysian FTAs).

The highly relevance of these FTA network countries to this research among others, derives from their major shares in Malaysia's trade on values of exports and imports. Table 1.1 presents the Malaysia's top-ten export destinations and import sources from the period of 2011-2013. The top-ten

³ TPP was signed on 4 February 2016 but never entered into force as a result of the withdrawal of the US. A new agreement without the US on board, CPTPP incorporates most of the Trans-Pacific Partnership (TPP) provisions. CPTPP was signed by 11 members on 8 March 2018 in Santiago, Chile.

export destinations and import sources were obviously the main Malaysia's trade partners within the Malaysian FTA network. In 2011, these countries comprised approximately 70 per cent of a total USD227.0 billion in value of exports and USD187.6 billion in value of imports respectively. The contributions of these countries in Malaysia's value of exports increased about half a billion dollars in 2012 to USD227.5, while imports was at USD196.2. The shares of these countries in world trade rose in 2013 at 27.8 per cent and 33.1 per cent for exports and imports respectively. The People's Republic of China (China) which became the second Malaysia's FTA partner and first for ASEAN through ASEAN-China FTA in 2002, remained the Malaysia's largest source of imports from 2011-2013 and second largest Malaysia's export destination after Singapore. The share of China in Malaysia's value of imports increased from 13.17 per cent in 2011 to 15.15 per cent in 2012. The share continued to climb to 16.4 per cent in 2013. Major ASEAN countries particularly Indonesia, Singapore, Thailand, and Vietnam collectively constituted 26.71 per cent of Malaysia's value of imports in 2011 and 25.5 per cent in 2013. Major ASEAN countries and China combined made up 33.87 per cent, 42.05 per cent and 41.9 per cent of Malaysia's value of imports in 2011, 2012, and 2013 respectively. Germany remained at 8th position in 2011-2013.

Table 1.1 : Malaysian top-ten value of merchandise trade (share in per cent), 2011-2013

Country	2011		2012		2013	
	Export	Import	Export	Import	Export	Import
China	13.1	13.2	12.6	15.1	13.5	16.4
Singapore	12.7	12.8	13.6	13.2	13.9	12.4
Japan	11.5	11.4	11.9	10.3	11.0	8.7
USA	8.3	9.7	8.7	8.1	8.1	7.8
Thailand	5.1	6.0	5.4	5.9	5.5	6.0
Republic of Korea	4.5	2.4	4.3	2.2	4.3	1.6
Indonesia	4.1	1.8	4.2	1.9	3.6	2.5
Germany	3.7	4.0	3.6	4.1	3.6	4.7
Viet Nam	3.6	2.2	4.1	2.4	4.1	2.5
Australia	3.0	6.1	3.9	5.1	4.6	4.3
Others	30.3	30.5	27.7	31.6	27.8	33.1
Total (USD billion)	227.0	187.6	227.5	196.2	228.3	205.8

(Source : UN COMTRADE database, 2015)

Built upon AFTA in 1992, the ASEAN Trade in Goods Agreement (ATIGA) signed in 2009 sets a commitment for ASEAN-6 (Malaysia, Brunei, Indonesia, Philippines, Singapore, and Thailand) to eliminate tariffs on 99.4 per cent of their tariff lines by 1 January 2010 (MITI, 2015). These reductions and

eliminations of tariffs have prompted rapid flows of trade in goods among ASEAN member countries. This is not uncommon for any FTA liberalisation commitments. One striking challenge from tariff eliminations and dismantling non-tariff barriers (NTBs) is a fierce import competition from low-cost producing countries. As the trade costs reduced and competition increased, the upsurge of unfair pricing practices from FTA member countries has brought serious concerns not only to import-competing industries but also to the host governments.

It can also be observed that as trade liberalisation policy geared towards dismantling tariffs and NTBs, the attention has progressively been given to maintaining trade remedy measures as alternative trade policy options. One of the measures that are increasingly becoming a preferred tool for countries to address unprecedented outcomes of trade liberalisation and dumping is the anti-dumping actions. However, there have emerged two perspectives from the increase use of anti-dumping action. Some quarters view anti-dumping action is necessary to protect domestic producers from dumping in order to eliminate injurious effects of dumped imports. The aim is to ensure all market players are competing on a level playing field (Mathieu & Weinblum, 2013). The protection against unfair trade practices has become the spirit of WTO anti-dumping provisions since its inception about more than half a century ago.

Another view such as Bekker (2006) emphasises that while anti-dumping action is an “internationally acceptable” tool to counter injurious dumping, in some cases, it has been applied to protect the interests of domestic industries (p. 501). Regardless of its desired policy aim and how it is interchangeably termed, a great majority of literature favourably view dumping as a bad trade policy instrument within the spirit of trade liberalisation (Mathieu & Weinblum, 2013). Prusa (2005) puts a strong analogy that anti-dumping is “more harmful than the disease it was originally intended to treat” (p. 683). Some others view anti-dumping to serve as a “safety valve” or as an adjustment mechanism to facilitate trade liberalisation (WTO, 2009, p. 19). The scepticism towards anti-dumping has been criticised by Marion (2014) by stating that issues of dumping and anti-dumping has “aroused emotions” instead of a proper analysis on the question (p. 149).

What is dumping and why anti-dumping policy is needed? Dumping has long been practiced in the world trading system even before the twentieth century, although the practice may be used indiscriminately under different terminologies and forms such as customs undervaluation, price undercutting, and many more (Viner, 1922b). Gregory (1921) refers dumping to cover four

types of commercial practices: (1) selling at prices below foreign market prices, (2) selling at prices in which foreign competitors unable to compete, (3) selling at prices abroad which lower than home prices, and (4) selling at prices unprofitable to sellers. While the original definition considers dumping as price discrimination between the two markets, the alternative definition has been extended to also refer dumping to selling of goods in foreign market below the cost of production. This definition is closely related to the fourth commercial practice cited by Gregory (1921).

The WTO Agreement on the Implementation of Article VI on General Agreement on Tariffs and Trade 1994 or Anti-dumping Agreement (hereinafter the “ADA”) defines dumping as a pricing practice in which the price of a good is higher in the domestic market than the price for exports. ADA allows countries to investigate and impose temporary measure in the form of an additional duty – called anti-dumping duty, if this pricing practice causes material injury to the domestic industries. WTO definition solely implicates that dumping practice does not necessary mean there exists sales below cost to predate competitors and dumping practices can also represent a wide variety of pricing behaviour.

Despite the fact that scholars – for example Prusa and Skeath (2004) and Teh, Prusa, and Budetta (2009) – recognise that ADA is a legal instrument for addressing unfair trade practices, the profound effects to trade, however, tend to invite much criticism. Dumping and anti-dumping are not as simple as how they are defined without a set of rules. There must be a causal relationship between dumped imports and injury to domestic industry. The possible anti-dumping impositions within the scope of ADA are subject to additional proofs such as dumping margin threshold, dumped import threshold, and injury determination procedures⁴. Dumping cases must not merely be allegations and must be supported with data and evidence. These conditions which up to a certain extend *de facto* constrain the scope of abuse (Weidemann, 1990). This research adopts WTO definition of dumping with a view for consistency of data analysis, and consistent with the information provided in previous empirical literature.

⁴ Article 3.5 ADA requires the examination of the effects of dumped imports to domestic industry to include all relevant economic factors: sales, profits, output, market share, productivity, return on investments, capacity utilisation, cash flow, inventory, employment, wages, growth and ability to raise capital, or investments. This list however, is not exhaustive.

Several striking features in anti-dumping adoptions can be identified from Table 1.2. First, it can be observed that countries which were the first to institute anti-dumping laws before GATT 1947 were mainly developed countries. These countries also were also the most active users of anti-dumping laws before 1990s—Canada, Australia, the US, New Zealand, and the EU. Second, although certain developing countries such as Malaysia and Republic of Korea (Korea) had adopted anti-dumping law as early as 1950s and 1960s, the use on anti-dumping actions was only in evidence in 1980s. The reasons for this have not been documented but it is believed that this was due to institutional constraints in the respective countries. Malaysia enacted its first anti-dumping law in 1959 before being replaced by Countervailing and Anti-dumping Duties Act in 1993 (Act 504) and its subsidiary legislation i.e. Countervailing and Anti-dumping Regulations in 1994. These Act and regulations allow Malaysia to investigate dumping allegations and impose definitive anti-dumping duties if the finding resulted in positive determinations of dumping and injury. The Act 504 also requires termination of the case if the case has no evidence of dumping or dumping does not cause material injury to domestic industry.

Table 1.2 : Anti-dumping law adoptions by countries in Malaysian FTA network

Country	Year	Country	Year	Country	Year
Canada	1904	Ireland	1968	Hungary	1994
Australia	1906	Italy	1968	Malta	1994
United States	1916	Luxembourg	1968	Philippines	1994
Japan	1920	Netherlands	1968	Thailand	1994
France	1921	Austria	1971	Indonesia	1995
New Zealand	1921	Spain	1982	China	1997
UK	1921	Pakistan	1983	Czech Republic	1997
Germany	1951	India	1985	Poland	1997
Greece	1954	Singapore	1985	Slovakia	1997
Sweden	1954	Chile	1986	Lithuania	1998
Cyprus	1956	Mexico	1986	Croatia	1999
Finland	1958	Peru	1991	Latvia	2000
Malaysia	1959	Romania	1992	Estonia	2002
Korea, Rep.	1963	Bulgaria	1993	Vietnam	2004
Portugal	1966	Slovenia	1993		
Belgium	1968	EU	1994		

(Source : Zanardi 2004 and WTO 2004)

While WTO authorises anti-dumping duties to be imposed to offset dumping, majority of scholars arguably refers anti-dumping actions as restrictive, abusive, and the impositions may reverse trade liberalisation gains (Drope, 2007; Moore & Zanardi, 2011). The anti-dumping action has always been a preferred choice for most countries in the world and the use has been proliferating over the years – for both economic and political reasons. This fact is supported by two key evidences: First, we can observe that anti-dumping has always become the “must have” provision in most bilateral or regional FTAs, similar to other liberalisation commitments such as tariffs reductions, trade facilitation, and transparency.

How FTAs embodied anti-dumping rules in their provision? Prusa (2011) and Teh et al. (2009) map anti-dumping provisions contained in 74 selected FTAs. Prusa (2011) identifies 63 per cent of the selected FTAs contained specific rules on anti-dumping actions. Specifically for Malaysia, 13 FTAs that are currently in force contained specific anti-dumping provisions. All regional FTAs preserve the current rights and obligations provided under the WTO ADA. This can be due to the complexity of regional agreement negotiations. When more negotiating parties participate, there will be more difficult for negotiations to reach compromise. Hence, preserving status-quo is an easy way out. On the other hand, Malaysia-New Zealand, Malaysia-India, Malaysia-Australia, and Malaysia-Turkey carry WTO-plus anti-dumping obligations.

The second evidence is related to the proliferation of anti-dumping investigations triggered by the dumping complaints made by domestic industries. During 1980s, five countries accounted close to 100 per cent of world's anti-dumping cases. These traditional users were mainly developed countries – Australia, Canada, the EEC (newly known as the EU), New Zealand, and the US. Based on the WTO statistics, the highest number of anti-dumping cases was recorded by Australia with 410 cases initiated from 1980-1989. This was followed by EEC with a total of 263 cases. Canada which was the first country adopted its anti-dumping law in 1904 initiated 229 anti-dumping cases. The WTO statistics further show that the US who adopted its anti-dumping law in 1916 initiated 376 anti-dumping investigations and New Zealand stayed with 10 anti-dumping cases. In 1990s, we observe that developing countries had actively begun to adopt and apply anti-dumping laws as parts of their trade policies. By end of 2014, a total of 4,757 anti-dumping investigations were reported to WTO.

Table A.2 highlights the anti-dumping investigations by countries in the Malaysia's FTA network from the period of 1995 to 2014⁵. These countries investigated 3,425 dumping cases or 72 per cent of the world's total 4,757 investigated cases during the period of 1995-2014. The most active anti-dumping user was India. The number of anti-dumping initiations recorded by India for the first five years was 132. The number doubled to 268 from 2000-2004 and India continued to rank first until the next ten years. By end of 2014, India's anti-dumping investigations reached 740 cases. This was followed by the US with a total of 527 investigations initiated while the EU as a group has investigated 468 dumping cases.

Malaysia as the second most active user in ASEAN after Indonesia initiated 70 dumping investigations. Until the end of 2014, Malaysia was the world's 18th most active user of anti-dumping law. ASEAN collectively investigated 276 dumping cases from the period of 1995-2014 with more than 90 per cent was contributed by Indonesia, Malaysia, and Thailand.

Table A.2 highlights the number of anti-dumping initiations by countries in the Malaysian FTA network from 1995 to 2014. We can observe that India was the most active user of anti-dumping action with a total of 740 cases. This was followed by the US (527 cases), EU (468 cases) and Australia (289 cases). All the countries in Malaysian FTA network constituted about 72 per cent of the world's anti-dumping initiations.

How anti-dumping contributed to the escalating trade tensions between countries? Table 1.3 reveals the total number of complaints that were brought to the WTO Dispute Settlement Body (DSB) from 1995 to 2014. It can be seen that the trade remedies – anti-dumping, countervailing, and safeguards have become the main trade policy concerns of WTO members with 171 or 35 of overall dispute cases. Out of this, more than half were related to anti-dumping cases.

⁵ A more comprehensive and complete data on anti-dumping (initiation and measure imposed) was only available starting 1995 as the notification requirement becomes compulsory for all WTO members.

Table 1.3 : WTO dispute settlement cases by subject areas, 1995-2014

Subject area	1995-2014
Trade remedies	171 (35.0)
Non-agriculture goods	130 (26.6)
Agriculture goods	129 (26.4)
Intellectual property rights	30 (6.1)
Services	13 (2.7)
Others	15 (3.1)

Note : The number in parentheses is in per cent.

(Source : The figures for 1995-2012 were from VanGrasstek 2013, while 2013-2014 from WTO dispute settlement gateway)

Fundamentally, anti-dumping actions have frequently subject to criticism. Some scholars argue that anti-dumping has deliberately been used for protection. Vandenbussche and Zanardi (2010), for example, view that while most empirical literature conceded anti-dumping instrument is supposedly to address unfair trade and to remedy the injury of domestic industries, there were instances that the instrument was used as a strategic trade policy tool to foster domestic industry interests.

There are several empirical studies that support the criticisms by analysing the impacts of anti-dumping duties on trade. Chandra and Long (2013) for example, observe some negative impacts of the US anti-dumping measure on Chinese firms productivity. Moreover, Dumont and Cuyvers (2005) also find regional-level trade diversion impacts from EU's anti-dumping measure against ASEAN countries. The most recent study of Wu, Chang, and Chen (2014) examine the welfare impacts of anti-dumping actions based on duopolistic competition model. They find anti-dumping duties erode national welfare. Apart from these views, it is obviously unfair, at least according to the anti-dumping rules agreed by all WTO members, to sell goods cheaper in foreign market than in the domestic market if the action predates incumbent competitors. This unfair pricing practice is a "symptom" of market imperfections that causes "market distortion" (Penrose, 1990, p. 182) and it remains as one of the most striking problems in international trade.

1.2 Problem Statements

The first issue is related to the FTA formation and its impacts on the extensive and intensive margins of trade. The FTAs are formed because of the expected benefits towards freer flows of trade and economic growth. However, there are criticisms that some of FTAs will not operate on a level playing field between parties of uneven levels of development – especially to those smaller trading partners. Further issue arises when some segments of the industry groups joining in the chorus of criticism that there will be import competition from larger trading partners. Albeit some FTAs are surrounded by controversy and debate, the number of FTA establishments is continued to grow in various forms and shapes.

At the end of 2015, Malaysia has signed 13 FTAs with 19 FTA partners. Malaysia maintained the centrality of ASEAN—through AFTA (1992), ASEAN-China (2002), and ASEAN-Korea (2005) in its scope of economic integration for over a decade. But as the trade expanding and FTAs around the region proliferating rapidly, these economic realities have altered the way Malaysia adapts and accelerates its economic progress through FTAs. Malaysia's first non-ASEAN FTA was only materialised through Malaysia-Japan FTA in 2005, which is 13 years after AFTA, the first Malaysian FTA entered into force.

When Malaysia formed its first non-ASEAN with Japan in 2005, other ASEAN countries—Singapore and Thailand—have already actively engaged in FTA negotiations and have signed over a dozen FTAs with partners throughout the world. By end 2005, Singapore had signed eight non-ASEAN FTAs including with major countries such as New Zealand (2000), Japan (2002), Australia (2003), the US (2003), and an FTA with Islamic country of Jordan⁶. Similarly, by end of 2005, Thailand which devoted its resources to FTAs as early as 1991 had concluded six non-ASEAN FTAs including with Bahrain⁷. Thailand's trade liberalisation has brought a more pronounced revamp in the structure of import tariffs that further promote Thailand's trade (Busser, 2007).

⁶ Singapore's non-ASEAN FTAs by end 2005: New Zealand (2000), EFTA (2002), Japan (2002), Australia (2003), the USA (2003), Jordan (2004), India (2005), and Korea (2005).

⁷ Thailand's non-ASEAN FTAs by end 2005: Laos (1991), Bahrain (2002), China (2003), India (2004), Australia (2004), and New Zealand (2005).

Related to this issue is whether the formation of FTAs is solely based on their trade benefits or whether the costs that occur unexpectedly when one country is left out of these “FTA clubs”. The question is how the resources that Malaysia has invested on regional and bilateral FTAs affecting trade of Malaysia and its member countries, by looking at the two margins of adjustment—the creation of new trade opportunities (extensive margin) and the expansion of existing products trade (intensive margin). The strength of decomposing trade into extensive margin and intensive margin relies on its ability to deliver a new theoretical explanation to the model that goes beyond the traditional trade creation and trade diversion can explain (Besedeš & Prusa, 2011). In addition, understanding of relative importance of both margins in international trade is crucial in designing appropriate trade policies (Lucio, Mínguez-fuentes, Minondo, & Requena-silvente, 2011).

The second issue is related to the impacts of anti-dumping actions on extensive margin and intensive margin when anti-dumping actions are imposed by FTA member countries to redress dumping. FTA liberalisation is attained through reductions or eliminations of trade barriers in both tariffs and NTBs. This has become the central pillar of FTA commitments. Notwithstanding liberalisation commitments, most FTAs allow partner countries to undertake anti-dumping actions to address unfair pricing practices consistent with the definition of dumping pursuant to Article VI of GATT 1994 and the ADA. The statistics are quite appealing that show some developing countries including Malaysia are increasingly becoming the main target of dumping practices. To redress dumping practices, developing countries alone have initiated about 66 per cent of the total world’s anti-dumping investigations by end of 2014. Out of this, 59 per cent were contributed by developing countries in the Malaysia’s FTA network while the remaining was largely contributed by developing countries from Latin American continent.

Regardless of *de facto* motive of an anti-dumping action in GATT, most studies referred it as a cost-based element in trade between countries. An anti-dumping action is one form of an additional layer of import duty levied upon imports against foreign producers. This additional tariff may lead to price increase of imported goods thus this theoretically will reduce flows of trade on another end. The controversy around this notion is that the anti-dumping actions may reverse FTA liberalisation benefits.

The third issue is related specifically to the impacts of anti-dumping actions imposed by FTA trading partners against Malaysia on extensive margin and intensive margin of trade; in the event there is evidence that Malaysian firms are practicing dumping in specific sectors of export interests. The fast growing exports of Asian countries comes at a cost. Asian countries have become the most frequently alleged countries practicing dumping. Asian countries have been subject to anti-dumping investigations from only 76 cases in 1995 to 2,973 cases at the end of 2014, a 3812 per cent increase. The subset of these, 620 cases were against ASEAN countries.

Malaysia as one of the world's largest trading nations – ranked 25th in exports and 24th in imports in 2013 – was alleged to have practiced dumping in certain specific sectors. WTO data show that Malaysia was the 10th leading target of anti-dumping investigations with 125 cases recorded from the period of 1995-2014. The bulk of the dumping cases were highly concentrated to sectors of base metals (mainly iron and steel); chemicals; textiles, and machinery. The impositions of anti-dumping duties on these sectors implicate the increase in costs, thus the way Malaysian exporters compete in the foreign markets, which can be explained by adjustments in extensive and intensive margins. Therefore, this research seeks to investigate the impacts of anti-dumping actions by Malaysian FTA partners on these specific sectors, which are the sectors of export interests to Malaysia.

1.3 Objectives of the Study

The general objective is to examine the impacts of FTA liberalisation and the impacts of the impositions of anti-dumping duties on margins of trade based on the gravity model. The specific objectives are as follows:

- (1) To evaluate the impacts of FTA liberalisation on trade flows at the intensive margin and extensive margin of trade among Malaysian FTA member countries;
- (2) To investigate the impacts of the impositions of anti-dumping actions on the trade flows at the extensive margin and intensive margin to Malaysian FTA member countries; and
- (3) To examine the impacts of the imposition of anti-dumping actions by Malaysian FTA trading partners to extensive margin and intensive margin of trade in highly targeted sectors of base metals; chemicals (including plastics); textiles, and machinery products.

1.4 Significance of the Study

There have been numerous studies that examine the impacts of FTA and anti-dumping actions on trade flows. The prevalence of FTAs in recent years has resulted in heightening interest among scholars to empirically study the impacts of FTAs on international trading system and welfare. The recent empirical literature has devoted great attention to trade liberalisation policies and their impacts on trade flows by decomposing the bilateral trade into two margins of adjustment: changes in the new categories of products (extensive margin) and changes in the existing traded products (intensive margin).

Despite the emerging popularity of these margins in international trade policy studies, there still limited attention is given to empirical studies related to the impacts FTA liberalisation on extensive and intensive margins of trade. There are limited studies in that respect with several known studies include Baier et al. (2014), Debaere and Mostashari (2010), Foster (2012), Foster et al. (2011), Kehoe et al. (2015), Kehoe and Ruhl (2013) and Nguyen (2014). These FTA studies find extensive margin is more important than the intensive margin in explaining trade impacts. These studies however, have not comprehensively dealt with the impacts of recently formed FTAs in Malaysia's FTA network. To the best of researcher's knowledge, this is the first comprehensive study that examines the impacts of all Malaysian bilateral and regional FTAs to extensive and intensive margins of trade. This study helps to create a better understand of how the imports are adjusting – through both margins – when various FTAs are formed.

On anti-dumping, we could observe that the use of anti-dumping actions is on the rise among developing countries and other non-traditional users beginning 1990s. There have emerged two strands of empirical research in this regards: (1) studies related to determinants of anti-dumping actions; and (2) studies on the impacts of anti-dumping actions on trade. The first strand of research studies the causal relationship between the use of anti-dumping and trade liberalisation instruments. Several examples of such research include Sudsawasd (2012) who shows that there is a negative relationship between the levels of tariffs and anti-dumping actions – the reduction in tariffs leads to increase in anti-dumping initiations and vice versa. Another important study by Debapriya and Panda (2006) find trade liberalisation contributes to the increase in the number of anti-dumping actions in both developed and developing countries. Furthermore, Liu (2005) who studied on the bilateral trade relation between the EU and China finds that a drastic increase in anti-dumping initiations by the EU was closely linked to an increase in imports from China.

Recognising the widespread use of anti-dumping actions, the bulk of literature in this area has emerged to follow the second strand of research. This becomes the main focus of this research. In principle, with a few exceptions⁸, most FTAs bear specific provisions on anti-dumping that allow FTA parties to investigate and impose anti-dumping actions against one another to remedy material injury facing by the domestic industries.

Although the aim of anti-dumping action is to eliminate injurious dumping practice, its use however has always been subject to scrutiny. For governments, anti-dumping measure is viewed to create fairer trade as permitted under Article VI of GATT and ADA. In contrast, for many economists, an anti-dumping action is another form of protection and the action is said will always favour the interests of certain segments of domestic industries. Most of their studies show negative impacts of anti-dumping actions on trade flows and welfare, whether the impacts are aggregated or disaggregated through trade diversion or trade destruction (the prominent studies include Bown & Crowley, 2007; Durling & Prusa, 2006; Egger & Nelson, 2011; Vandebussche & Zanardi, 2010; Zanardi, 2006). Different from the existing path of most empirical studies, this research focuses on the trade impacts on extensive margin and intensive margin of trade.

Another key observation that can be made from existing body of research is that the research on anti-dumping continues to focus on traditional anti-dumping users i.e. the US and EU including their major trading partners such as China and India. Blonigen and Prusa (2003) have highlighted this more than a decade ago but still not much has been explored in this area of research. Specifically, “[Finally] although the economic issues stemming from AD law are common to all GATT/WTO members, almost all research has focused on AD use in the US and EU” (p. 253). This observation has been supported by Choi and Kim's (2014) research.

⁸ AFTA and ASEAN-China for example, have not included any FTA-specific rules to address dumping, while EU and Australia New Zealand Closer Economic Relations Trade Agreement (ANZCERTA) disallowed anti-dumping to be taken against each other.

Generalisation of these empirical findings to countries and regions beyond the context of traditional users is quite misleading because institutional structure and experiences are relatively different. There are very few empirical studies embarked on the impacts of anti-dumping actions to the region—especially East Asia and Southeast Asia and yet the comprehensive empirical studies on Malaysia and its network of FTAs are fairly unexplored. This possibly due to the technicality and complexity of the applicable anti-dumping rules (Prusa, 2005).

This research can also provide an additional understanding about anti-dumping instrument. Anti-dumping instrument is highly technical, complex, and unique in its own way. Anti-dumping policy is traditionally derived from competition law but it differs in practice, especially related to investigation procedures and the nature of measures being applied. Despite that the investigations and subsequent impositions of anti-dumping duties come from the government, the request is normally made by the injured domestic industry. Therefore, this research can add value to offers some empirical knowledge to enhance understanding for the government of implications of anti-dumping duties on trade margins.

This research also contributes to the methodological aspect of the research. The contribution includes the use of Hummels & Klenow's (2005) methodology in analysing the impacts of FTAs and anti-dumping actions on extensive and intensive margins, which are fairly unexplored in the context of Malaysian FTAs network. Other contribution relates to the use of import data for the reasons of accuracy and consistency for intensive and extensive margins to capture the impacts of anti-dumping actions.

1.5 Scope of the Study

Figure 1.2 presents the scope of the study. The trade liberalisation can be accelerated through the role of institutions such as WTO, IMF, and FTAs. For this research, the focus is to examine the role of economic integration especially the FTAs and their impacts on margins of trade. The scope for this is the proliferation of Malaysian FTAs.

The acceleration of world trade through FTA liberalisation has brought serious concerns about unfair trade practices. While trade barriers have been cut in many areas, the use of different forms of barriers such as anti-dumping actions however is observed to increase rapidly. Hence, this research is also to cover the impacts of anti-dumping actions on FTA member countries.

Several studies on determinants of anti-dumping actions such Moore and Zanardi (2011), and Vandebussche and Zanardi (2008) show that there is a relationship between substantial trade liberalisation and rapid increase in anti-dumping cases. Against this backdrop, this research also aims to examine the impacts of anti-dumping actions by FTA partners against Malaysia on several highly concentrated sectors namely base metals; chemicals, textiles, and machinery. To examine the impacts of FTAs and anti-dumping actions, the gravity model is used. In doing this, the disaggregated import data of Malaysian bilateral and regional FTA members are used to construct extensive margin and intensive margin.

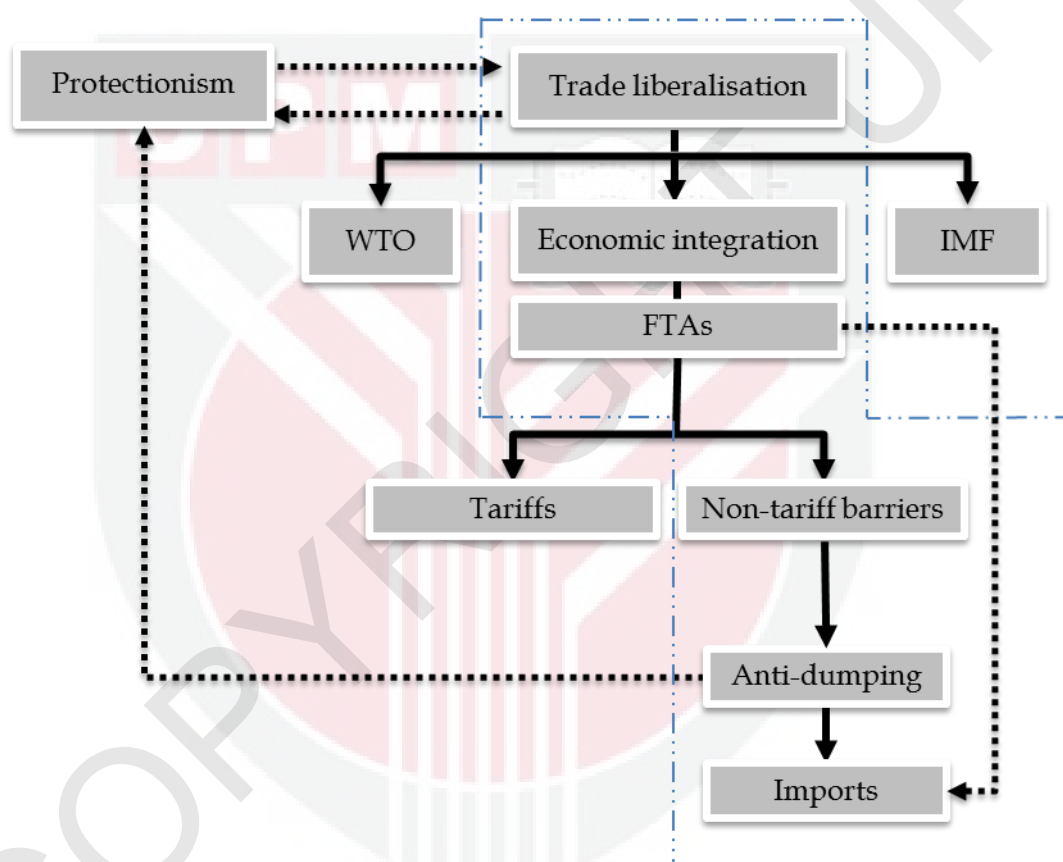


Figure 1.2 : Scope of the study

Note: ---> depicts direction of trade policies. -.-.- is the scope of the study

1.6 Organisation of the Study

Chapter 1 presents the background of international trade liberalisation and anti-dumping practices that characterise the main objective of this research – how both FTAs and anti-dumping actions affecting trade margins. Chapter 2 begins with the discussions on WTO and multilateral trading system then followed by the trade liberalisation of FTAs. Subsequently, Chapter 2 discusses anti-dumping actions and anti-dumping policy of Malaysia.

Chapter 3 reviews the theoretical and empirical literature related to FTAs, and anti-dumping actions including all the underlying issues related to their impacts on trade. These include how dumping is derived from international price discrimination that leads to anti-dumping actions, thus impacts trade flows.

Chapter 4 discussed the theoretical model of this research. Discussion covers gravity model, extensive and intensive margins of trade, empirical specifications, and estimation procedures. Chapter 5 provides an empirical analysis and findings of research. Finally, Chapters 6 devotes to summary and conclusion.

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