The Impact of Various Trade Arrangements on Malaysia's Bilateral Trade Costs
(Kesan Pelbagai Perjanjian Perdagangan terhadap Kos Perdagangan Dua Hala Malaysia)

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ABSTRACT

The benefits of trade agreements on trade activities are notably acknowledged but the impact on bilateral trade costs remains obscure and have to be further examined. First, this study will construct the micro measure of bilateral trade cost, and then the constructed trade costs will be utilized to estimate the impact of trade arrangements on trade costs for Malaysia and her trading partners for the year 2002-2012. The results show that all four types of trade arrangements, namely the Multilateral Trade Arrangement (MTA), Regional Trade Arrangement (RTA), Bilateral Free Trade Arrangement (BFTA) and Bilateral Trade Arrangement (BTA) have lowered trade costs. In addition, the different types of trade arrangements result in a variation of trade costs, where regional trade arrangements are expected to reduce bilateral trade costs the most. However empirical result shows otherwise where BFTA gave the highest reduction in trade costs for Malaysia. As to date, the number of BFTA that has been signed is far behind BTA. It is recommended that Malaysia realign its focus towards BFTA with the hope that Malaysia and her trading partners will experience a greater reduction of trade costs in the coming years.

Keywords: Trade costs; trade arrangement

ABSTRAK

Faedah perjanjian perdagangan terhadap kegiatan perdagangan telah diketahui tetapi kesannya terhadap kos perdagangan dua hala tidak jelas dan perlu dikaji dengan lebih lanjutnya. Pertama, kajian ini akan mengira kos perdagangan dua hala secara mikro, kemudiannya kos perdagangan yang perolehi akan digunakan untuk menganggarkan kesan perjanjian perdagangan terhadap kos perdagangan bagi Malaysia dan rakan dagangnya untuk tahun 2002-2012. Keputusan kajian menunjukkan bahawa keempat-empat jenis perjanjian perdagangan, iaitu Perjanjian Pelbagai Hala (MTA), Perjanjian Perdagangan Serantau (RTA), Perjanjian Perdagangan Bebas Dua Hala (BFTA) dan Perjanjian Perdagangan Dua Hala (BTA) telah menurunkan kos perdagangan. Di samping itu, pelbagai jenis perjanjian perdagangan menghasilkan kos perdagangan yang berbeza, di mana perjanjian perdagangan serantau dijangka mengurangkan kos perdagangan dua hala yang paling banyak. Walau bagaimanapun, hasil kajian menunjukkan sebaliknya di mana perjanjian perdagangan bebas dua hala memberikan pengurangan kos perdagangan yang paling tinggi bagi Malaysia. Sehingga kini, bilangan BFTA yang telah ditandatangani jauh di belakang BTA. Adalah disyorkan bahawa Malaysia harus menukar fokusnya kepada BFTA, dengan harapan Malaysia dan rakan dagangannya akan mengalami pengurangan kos perdagangan yang lebih besar pada masa depan.

Kata kunci: Kos perdagangan; perjanjian perdagangan

INTRODUCTION

According to Anderson and Wincoop (2004), trade costs are large, accounted for approximately 170 per cent of ad valorem tax equivalent of a rich country, and comprised of four costs namely; local distribution costs, transport costs, policy barriers and border related costs.

In the case of Malaysia, trade costs related to policy barriers, which consisted of tariffs are almost negligible, with an exception of non-tariff barriers. At the same time, transport costs have been reduced significantly through an efficient and coordinated logistic distribution of goods. In addition, local distribution costs which consisted of wholesale distribution and retail costs

have been improved through better networking between suppliers and buyers. The improved network has reduced the role of intermediaries in the distribution front, hence a reduced cost to buyers. However, border related costs tend to vary between countries due to differences in its economic and social environment. Different legal and regulatory practices adopted by each country will result in different economic climate. Countries which more friendly to investors, exporters and importers would likely result in lesser border related costs. As such, along with non-tariff barriers, trade costs incurred by border related costs is huge, hence Malaysia's participation in various trade agreements is expected to reduce trade costs.

For Malaysia, the cost of doing trade is an important issue given that Malaysia is a country which relies heavily on trade, where a small change in the trade environment could result in huge impact to the nation's economy. Therefore, Malaysia has begun its initiatives to increase trade competitiveness through gradual reduction of tariffs, and being members of various trade arrangements. Basically, trade arrangements can be classified into four types, namely the Multilateral Trade Arrangement (MTA), Regional Trade Arrangement (RTA), Bilateral Free Trade Arrangement (BFTA) and Bilateral Trade Arrangement (BTA). Each of this trade arrangement has different trade pacts and policies, with some being quite complex, while others are less intensive, therefore one question raised here is which type of trade arrangement is more beneficial or led to greater reduction in trade costs? However the answer is not clear cut. As shown in Figure 1, bilateral trade costs between Malaysia and her trading partners exhibit ambiguous results; with either a modest reduction in trade cost or an enormous reduction, or with no impact at all. For example, Malaysia's involvement as trade partners in World Trade Organization (WTO) has led to a reduction in trade costs (for all member countries) except for Singapore and United States, at the end of the trading period. While being in the Asia Pacific Economic Cooperation (APEC), members experienced a reduction in trade costs, except for Singapore. The ASEAN Free Trade Area (AFTA) which is expected to be the main catalyst of trade cost reduction among ASEAN members has reported a positive impact on cost reduction, with the exception for Singapore. Lastly, the Bilateral Trade Agreement (BTA) has shown a mixed result on how it has impacted trade cost. From Figure 1, it is shown that all the trade arrangements were strung with mixed results, hence a detailed analysis with regard to this matter is required. Motivated by the question of which type of trade arrangement is more beneficial or led to greater reduction in trade costs, this study aims to estimate the impact of various trade arrangements on the bilateral trade costs for Malaysia. This study proposes an estimation procedure using four different proxy of trade arrangements, namely the MTA, RTA, BFTA

and BTA participated by Malaysia to explain changes in trade costs.

Figure A1 in Appendix showed the list of trade arrangements that Malaysia participated from 1957 - 2015. There are four types of trade arrangements, namely MTA, RTA, BFTA and BTA. MTA that Malaysia joined is WTO which is a transition of GATT at 1995. Malaysia in RTA made up of AFTA and APEC which Malaysia joined in 1995 and 1989. Lastly, there are 7 BFTA and 64 that had been signed between Malaysia and various trading partners. All trade arrangements be it either MTA, RTA, BFTA or BTA is aimed at reducing tariffs, however each has its own advantages as well as weakness. For example, the MTA's benefit lies on its bigger geographical coverage of several continents but lack integration and trade facilitation compared to RTA. The BFTA shared similar motivation as RTA, except with a smaller scope of cooperation and special treatment on trading of certain goods. Finally, BTA, the last among the four, its trade arrangements involve the exchange of goods between two nations with removing or lowering of tariffs and other non- tariff barriers. In short, various trade agreements and collaborations between Malaysia and her trading partners were made to ease the export and import procedures of trade which subsequently led to an increase in either the nation's export volume or trading volume between the two nations. Given that the trade volume or value involved is huge, the main concern of most policy makers and exporters of a country is the high trade cost that may incur by such trading activities.

Referring to RTA strong points in terms of trade facilitation and wide scope cooperation, it is expected that a substantial amount of trade costs will be reduced compared to BFTA. On the other hand, the lack of trade facilitation within MTA could lead to little reduction in trade costs, however this weakness can be negated in WTO through the role and members size of WTO, thus, improving the reduction of trade costs. Furthermore, Malaysia's involvement in RTA is undeniably important since it has contributed to high volume of trade with share of 75.54% (Figure 2) or $306.205 billion dollars (Table 1). In average, RTA contributed $ 14.581 billion dollars as opposes to MTA, RTA and BFTA of $2.643, $8.246 and $ 4.070 billion dollars (Table 1). It is expected that trade costs under RTA would be lower compared to BFTA due to the role of RTA which subject its member's countries to deeper integration along special rights in terms of trading certain goods besides economic scale generated by high volume of trade (Figure 2).

This paper will extend the existing literature in four ways. It is the first study which will examine the implications of the different types of trade arrangements on trade costs. All studies thus far had focused on the impact of RTA on trade cost while overlook the roles of MTA, BFTA and BTA. Each of this trade arrangement has different trade pacts and policies, it is interesting to study
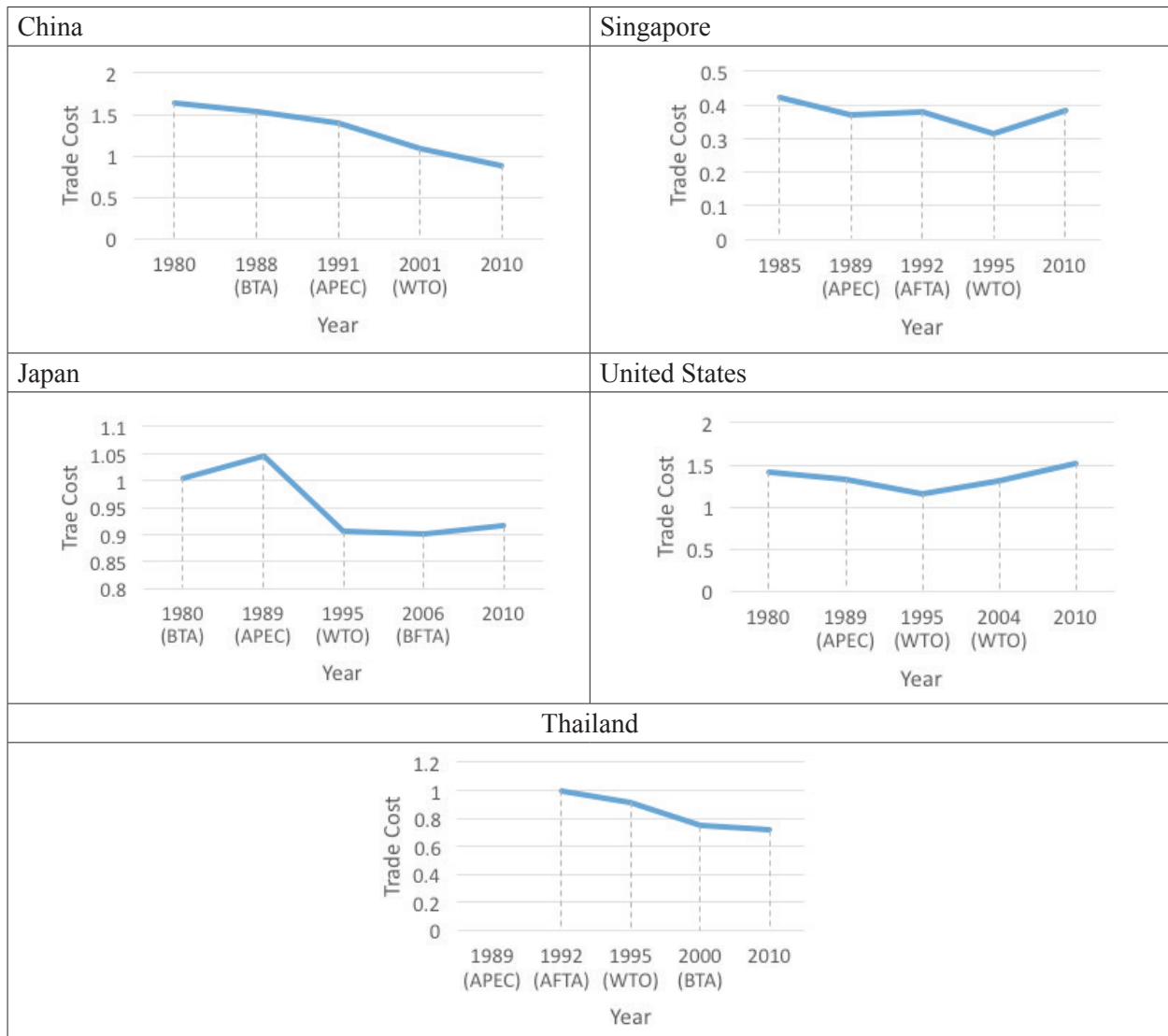
FIGURE 1. Trade Cost Pattern of Malaysia's Top 5 Trading Partners
Note: Computation of Trade Costs are Based on Methodology Introduced by Novy (2013).

which type of trade arrangement able to reduce trade costs the most. Secondly, this study constructed the bilateral costs for Malaysia and 116 trading partners using the measurement proposed by Novy (2013) and Arvis et al. (2012). Most of the previous study used transportation cost, namely Cost, Insurance, and Freight (CIF) and Free on Board (FOB) gap as bilateral cost indicator. Thirdly, the previous study on Malaysia's bilateral trade costs was focused only on Australia, however this paper will extend the scope to include 116 bilateral trade partners. Loke and Tham (2010) examined bilateral trade costs between Malaysia and Australia using freight and insurance costs as bilateral cost indicator. Finally, the result of this study enables us to know which type of trade arrangement able to reduce trade costs the most, therefore Malaysian government can focus on this type of trade arrangement with the hope that trade costs in Malaysia will be reduced and trade volume able to increase.

The rest of the paper is organized as follows. In Section 2 we present the literature review related to trade costs and its determinants. Section 3 discusses the model and data. Empirical results are presented in Section 4. Finally, Section 5 provides the concluding remarks and policy implications.

LITERATURE REVIEW

An empirical study on trade cost by Anderson and Wincoop (2004) has shown that trade cost can reach to a staggering amount of about 170 per cent equivalent of ad valorem tax of a rich country, and such costs were contributed by various determinants. Since then, a number of empirical studies related to trade costs have emerged. Notably, previous work on trade costs mainly focus on the fundamental determinants which
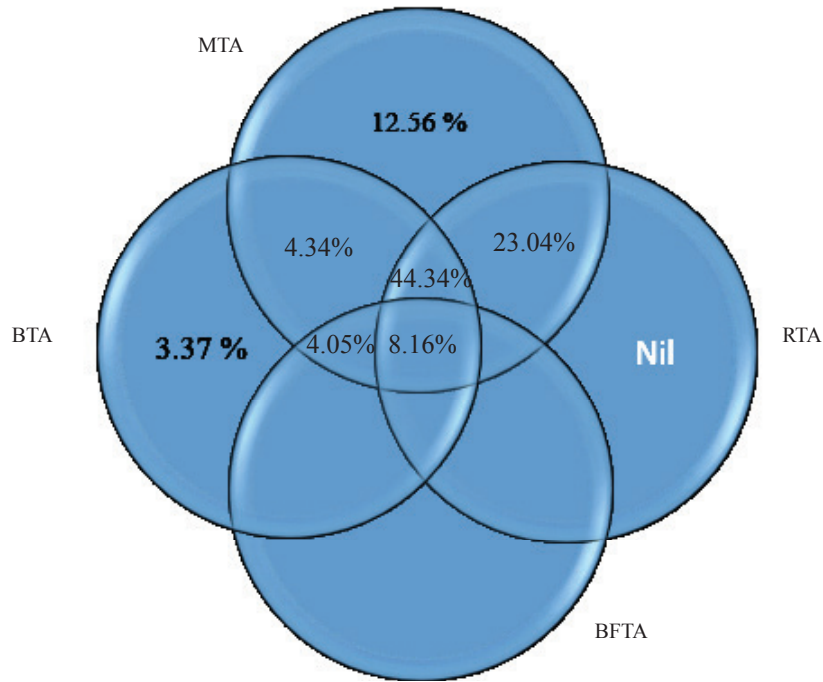
FIGURE 2. Malaysia Share of Decomposition of Trade Volume According to Type of Arrangement 2015
Note: Value are expressed in percentage.
Source: Direction of Trade and Statistics (2016)

TABLE 1. Average Trade Volume based on Agreement Classification 2015

Type of Arrangement	Number of Country Participation	Total trade volume (USD billion)	Average total trade value per nation (USD billion)
MTA	148	391.101	2.643
RTA	21	306.205	14.581
BFTA	6	49.477	8.246
BTA	64	260.467	4.070

Source: Direction of Trade and Statistics (2016)

consisted of geographical factors and historical factors. For geographical factors, most of the study agreed that landlocked countries face higher international transport costs (e.g. Frankel & Rose 2000; Wei 2000), farther distance lead to higher bilateral trade costs (e.g. Melitz 2007; Pomfret & Sourdin 2009), whereas sharing a common border has a negative relation with bilateral trade costs (e.g. De 2011; Novy 2006). In addition, historical factors such as sharing a common language which made exchange of information easily, reduced bilateral trade costs (e.g. Fidrmuc & Fidrmuc 2016; Ismail 2010).

However, geographical factors and historical factors remained unchanged over time, therefore policy makers shall pay attention to other factors such as preferential trade arrangements that strongly influence trade costs. Preferential trade arrangements aimed at reducing tariffs and non-tariff barriers are deemed to reduce trade costs. In a study on the effect of AFTA's formation on trade costs,

the findings of Pomfret and Sourdin (2009) show that preferential trade agreements had led to a great reduction of trade costs. The reduction in costs were due to AFTA's trade facilitation as well as tariff reduction agreed by members in the pact. In addition, either preferential trade agreement or the trade facilitation of AFTA has led to a huge decline of trade costs for third world countries as well.

Novy (2013) also found similar relationship where preferential trade arrangements among countries of common currency union had led to a lower bilateral trade cost. In addition, the empirical results also showed that countries which joined preferential trade arrangements had lower trade costs as opposed to other countries that had imposed tariffs. Similarly, Shepherd (2010) shows that ASEAN and APEC should focus more on tariff facilitation rather than non – tariff segment due to prior superior in reducing trade costs. Meanwhile, Brooks and Ferrarini (2010) who had investigated changes in

trade costs between two big economies namely, China and India, found that a huge trade costs reduction had occurred in both countries. Results from the empirical study showed that the reduction of trade costs in both countries were due to the exponential growth of bilateral trade.

There are barely studies on bilateral trade costs for Malaysia. So far the closest empirical work is by Loke and Tham (2010) which studied on the role of trade costs and its factor, this study focused on the transportation costs and infrastructure on Malaysia's export to US and Australia. Using CIF and FOB ratio, Loke and Tham (2010) found out that Malaysia trade costs have been declining substantially where freight and insurance are among the lowest among ASEAN-5. Meanwhile Ramli et al. (2010) examined the link between the infrastructure and the trade costs in ASEAN-5 using CIF and FOB approach in determine trade costs. Result showed that mobile phones and fixed telephone lines subscribers have significantly reduced the trade costs whereas the internet and telephone proxies have the lowest impact on reducing the trade costs.

Nevertheless, the study on the impact of trade arrangements on trade cost is inadequate. All studies thus far had focused on the impact of RTA on trade cost while overlook the roles of MTA, BFTA and BTA. Each of this trade arrangement has different trade pacts and policies, with some being quite complex, while others are less intensive, therefore it is interesting to study these trade arrangements separately and get know which type of trade arrangement able to reduce trade costs the most.

Besides, most of the studies mentioned above applied transportation cost as representative of trade cost, except Novy (2013). Generally, the measures of aggregate trade cost have been computed as the differences between the Free On Board (FOB) value of traded goods at the point of export and the Cost, Insurance and Freight (CIF) value of the traded goods when they reach the importing country (see Hummels 2007; Sourdin & Pomfret 2012). This method treats transportation cost rather than trade cost. According to Anderson and Wincoop (2004), trade costs have four sources, namely, local distribution costs, transport costs, policy barriers, and border-related costs. And the local distribution costs can be further divided into wholesale distribution and retail costs. In line with Anderson and Wincoop (2004), a micro measure of bilateral trade cost has been proposed by Novy (2013). This technique for estimating bilateral trade costs was comprehensive and accounted for multilateral resistance effects.

Based on the above discussions, it can be concluded that there were limited studies on the impact of trade arrangements on Malaysia. Therefore, this study aims to fill the literature gap by examining the impact of various types of trade arrangements on trade costs between Malaysia and her trading partners. There was a study done by Loke and Tham (2010) on Malaysia's bilateral trade costs with Australia and another study done by Ramli et al. (2010) on trade costs in ASEAN-5. However the method used treats transportation cost rather than trade cost. In this study, the method proposed by Novy (2006, 2013) and Arvis et al. (2012) in measuring trade costs will used to analyze the effect of trade arrangement on trade costs.

EMPIRICAL METHODOLOGY AND DATA

For the purpose of this study, the trade costs of 116 countries of Malaysia's trading partners have been estimated for the period of 2002 to 2012 annually[1]. Trade cost was computed using the approach by Novy (2006). According to Novy (2006), trade cost computations are defined as follows:

$$tc_{j,k} = \left(\frac{1 - (EX_{j,k} \, EX_{k,j})}{(GDP_j - EX_j)(GDP_k - EX_k)s^2} \right)^{\frac{1}{(2\rho-2)}} \quad (1)$$

Where $tc_{j,k}$ represents bilateral trade cost between country j and k; $EX_{j,k}$ represents goods export of country j to k; $EX_{k,j}$ represents goods export of country k to j; EX_j represents goods export of country j; EX_k represents goods export of country k; GDP_j represents gross domestic product of country j; GDP_k represents export of country k; s represents share of tradable goods and ρ is elasticity of substitution between domestic goods and foreign goods .

The multicounty general equilibrium model developed by Anderson and Wincoop (2003) was among the earliest work carried out in estimating the magnitude of trade costs based on a bottom down approach where estimations were based upon assumptions of what would be the likely components for trade costs. However, Head and Ries (2001) and a more recent study by Novy (2013) used estimation technique of top-down perspective where it's based on patterns of trade and production without having to go through individual policies. The recent Novy (2013) technique in estimating bilateral trade cost has the advantage of controlling multilateral resistance with addition ability to relax assumption made by Anderson and Wincoop (2004) and almost all gravity literature that all goods are tradable.

However, as mentioned by Novy (2013), the computation of trade cost by applying gross domestic product (Equation 1) is deemed not suitable as proxy of income for a country. Hence, Novy (2013) suggested the use of gross domestic shipment to represent income, and Wei (1996) approach in obtaining gross output had been adapted in this study. Due to data constraints, gross domestic shipment is represented by gross output, which is available at United Nations National Accounts Database based on ISIC Rev 3.4. The value is converted to US Dollars using the nominal exchange

rate provided by the International Financial Statistics. Where the data on gross output is unavailable, this study will follow Arvis et al. (2012) methodology by using value added obtained from the United Nations National Accounts Database, and a rescaling factor is created based on the multiplier factor between value added and gross output for those countries where both data sets are available. The value of rescaling factor is later classified into five categories based on the World Development Indicator (WDI) of low income, lower middle income, upper middle income, high income of member and non-member of the Organization for Development Cooperation and Development (OECD). The value of rescaling factor then is used to fill the missing value of gross output. Hence Equation (1) can be rewritten as

$$tc_{j,k} = = \left(\frac{(x_{jj}x_{kk})}{(EX_{jk}EX_{kj})} \right)^{\frac{1}{(2(\rho-1))}} - 1 \qquad (2)$$

Where $tc_{j,k}$ represents bilateral cost between country j and k; x_{jj} and x_{kk} represent intra-national trade of j and k. EX_{jk} represents export of country j to k; EX_{kj} represents export of country k to j and ρ is elasticity of substitution. In case of countries that experienced high re-export, gross output using Arvis et al (2012) eliminated re-export value from Gross Domestic Product that used in Novy (2006) computation.

In line with the objective of this study, the constructed trade costs will be utilized to examine the impact of various trade arrangements on trade costs. The general model was adopted from gravity model. It is expected all types of trade agreements may result in a negative relation with trade costs. Our intention is to identify which type of trade agreement has the most impact on trade costs. The regression for estimation is as follow:

$\ln tc_{jkt} = \beta_1 \ln distance_{jkt} + \beta_2 \ln area_{jkt}$
$\qquad + \beta_3 landlocked_{jkt} + \beta_4 Common \, Border_{jkt}$
$\qquad + \beta_5 \ln exchange \, rate\_jkt$
$\qquad + \beta_6 Common \, Languange_{jkt}$
$\qquad + \beta_7 Type \, of \, Trade \, Arrangement_{jkt}$
$\qquad + Error \, Term_{jkt} \qquad (3)$

Where tc_{jk} represents bilateral trade cost between country j and k; distance is bilateral distances between two country's capital; area is geometric area in km[2] between two countries; landlocked is a dummy variable that takes values 1 if the country is entirely closed by land and 0 if otherwise; common border is a dummy variable that takes value 1 if both share common border and 0 if otherwise; exchange rate is geometric average of the official USD exchange rate of a country in country j and k (LCU per USD); common language is a dummy variable that takes value 1 if both share one official language and 0 if otherwise. The type of trade

arrangement will be replaced by four different types of trade arrangements namely MTA, RTA, BFTA and BTA one at a time which will generate Model 1, Model 2, Model 3, and Model 4. MTA acts as a dummy variable that takes value 1 if the trading partner is a member of WTO and 0 if otherwise; RTA is a dummy variable that takes value 1 if the trading partner is a member of AFTA or APEC and 0 if otherwise; BFTA is a dummy variable that takes value 1 if the trading partner possess a bilateral FTA with Malaysia and 0 if otherwise; BTA is a dummy variable that takes value 1 if the trading partner possess a bilateral trade agreement with Malaysia and 0 if otherwise. β_1, β_3 and β_5 is expected to be positive related to trade costs while β_2, β_4, β_6 and β_7 is expected to be negative is expected to be negative related. As the trade costs measure nets out multilateral resistance components, the regressions do not have to include additional fixed effects to control multilateral resistance. All variables except dummy variables are in log form and each model is estimated by using robust OLS panel regression.

RESULT AND DISCUSSION

The panel regression results for the determinants of trade costs are presented in Table 2. Models 1, 2, 3, 4 consisted of four different types of trade arrangements namely MTA, RTA, BFTA and BTA. The explanatory power of the trade costs proxies is fairly reasonable with minimum R^2 value stood at 0.44 for all four different models. All regressors in four different models have the expected sign and they are significant except for the variables of common language (Model 2) and BTA (Model 4). Determinants of trade costs such as distance, exchange rate and landlocked are variables which tend to increase trade costs while land area, common border, common language (official) and the type of trade arrangements are all associated with lowering trade costs.

As seen from the results in Table 2, it is clear that all types of trade arrangements led to lowering of trade costs but with a different magnitude. In comparing all these four models, Model 3 which constitutes BFTA displayed the biggest impact in lowering trade costs followed by RTA and MTA. The BFTA recorded a reduction of trade costs by 2.13 per cent by every ten per cent improvement. It was followed closely by RTA with a reduction of 1.92 per cent and lastly MTA with 1.75 per cent. Referring to BTA in Model 4, it showed a negative relationship with trade costs of about 0.09 per cent for every ten per cent improvement. It is surprising that BFTA surpassed RTA in reducing trade costs, and this implies that the size of the trading zone or regional trade arrangement does not match a bilateral arrangement in terms of cost reduction. This could be due to the latter having more access to special privileges in terms of quotas, supporting institutions and favorable preferences.

TABLE 2. Regression of Trade Costs

	Model 1	Model 2	Model 3	Model 4
Distance	0.237***	0.175***	0.220***	0.222***
	(0.012)	(0.012)	(0.011)	(0.012)
Area	−0.042***	−0.029***	−0.039***	−0.039***
	(0.003)	(0.003)	(0.003)	(0.003)
Landlocked	0.231***	0.224***	0.248***	0.251***
	(0.023)	(0.024)	(0.024)	(0.024)
Common Border	−0.107***	−0.116***	−0.169***	−0.158***
	(0.031)	(0.031)	(0.030)	(0.030)
Exchange Rate	0.023***	0.026***	0.026***	0.025***
	(0.003)	(0.003)	(0.003)	(0.003)
Common Language	−0.040***	−0.013	−0.043***	−0.047***
	(0.012)	(0.012)	(0.013)	(0.013)
MTA	−0.175***			
	(0.023)			
RTA		−0.192***		
		(0.020)		
BFTA			−0.213***	
			(0.039)	
BTA				−0.009
				(0.015)
Number of Observation	1276	1276	1276	1276
R^2	0.472	0.478	0.450	0.444

Notes: The dependent variable is the logarithmic trade costs.

Trade costs, distance, area and exchange rate variables are in log form.

Landlocked, common boarder, common language, MTA, RTA, BFTA and BTA are dummy variables. Standard error is given in parentheses, *** and ** indicate significance at 1% and 5%.

In all the above models, distance remain an important determinant of overall bilateral trade costs between Malaysia and her trading partners, hence the death of distance hypothesis has been overly exaggerated (Disdier & Head 2008). All four models as shown in Table 1 indicate that geographical distance affect trade costs by a minimum increase of 1.7 per cent for every ten per cent increase in distance. The results are quite consistent with the findings of Novy (2013) and Arvis et al (2012). The effects of other variables such as land area and common border are much smaller in magnitude but bear significant effect on trade costs. The small coefficient of variable land area on trade costs suggested an improvement in infrastructure connecting the inland with the outer regions (Novy 2006). Meanwhile, common border currently exhibits as an important factor affecting trade costs, suggesting that border related cost still has an impact on trade costs. However, countries without access to sea front suffered more with a minimum 2.7 per cent increase in trade costs. This result suggests the importance of a port which serves as transit for most international goods' movement even with the advancement of other transportation systems.

The next important determinant is the official language. As seen in Table 2, the effect of official languages has almost similar magnitude influencing trade costs where a 0.4 per cent reduction of trade costs is due to every ten per cent increase in usage of common official language. This suggests that common language (official) is still relevant in helping to lower trade costs through facilitation in bilateral transactions, with the exception of Model 2 where a common language is not significant. This is because within the RTA region, common language has been fully optimized hence its does not have further effect on trade costs. Finally, the results showed the impact of exchange rate on trade costs is minimal, ranging between 0.23 to 0.26 per cent due to depreciation of local currency. This implies that Malaysia has managed to reduce the dependency on United States for exports, hence reducing the reliance of USD in trade, which was brought about through trade diversification soon after the 1997 financial crisis.

CONCLUSION AND POLICY IMPLICATIONS

This study aims to estimate the impact of trade arrangements on trade costs for Malaysia and her 116 trading partners. In this paper, four different models consisting of MTA, RTA, BFTA, and BTA were analyzed

and it was found that all trade agreements reduce trade costs. However, it is surprising that BFTA had led to a much greater cost reduction compared to RTA. Besides, BTA showed a dismal and insignificant reduction on Malaysia's trade costs which implies that Malaysia should focus more on the other three types of trade agreements. The policy implications for this study is straightforward. Based on the results of this study, it is recommended that Malaysian government shall give greater attention to BFTA. As to date, the number of BFTA that has been signed is far behind the number of BTA, the government shall realign its focus towards BFTA with the hope that Malaysia and her trading partners will experience a greater reduction of trade costs in the coming years. Since a few BFTA is in the discussion stage and will be implemented soon, greater attention should be placed for these BFTA talks. Besides, the policy makers shall identify the potential trading partners for BFTA and take initiative to have more BFTA talks with these trading partners.

NOTES

[1]   The countries adopted in the analysis were listed in Appendix Table A1.

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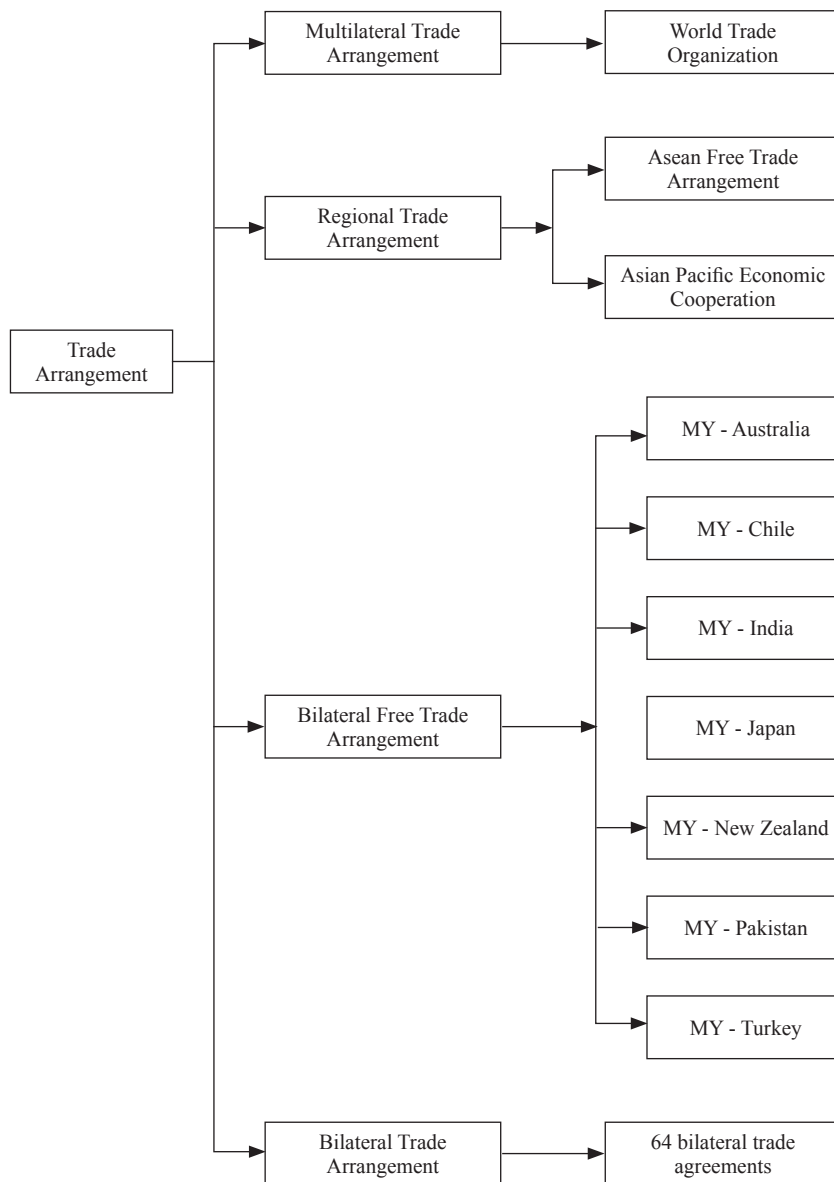
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APPENDIX

FIGURE A1. Malaysia Participation in Trade Arrangement 1957 -2015
Source: Malaysia International Trade and Industry Report (MITI) Report (2015).

TABLE A1 List of Countries Adopted in the Analysis

1.	Afghanistan	30.	Cote d'Ivoire	59.	Japan	88.	Philippines
2.	Algeria	31.	Croatia	60.	Jordan	89.	Poland
3.	Angola	32.	Cyprus	61.	Kenya	90.	Portugal
4.	Argentina	33.	Czech Republic	62.	Korea, Republic of	91.	Qatar
5.	Armenia	34.	Denmark	63.	Kuwait	92.	Romania
6.	Australia	35.	Djibouti	64.	Lao Pdr	93.	Russian
7.	Austria	36.	Dominican Republic	65.	Latvia	94.	Rwanda
8.	Azerbaijan	37.	Egypt	66.	Lebanon	95.	Saudi Arabia
9.	Bahamas	38.	Estonia	67.	Lithuania	96.	Sierra Leone
10.	Bahrain	39.	Ethiopia	68.	Luxembourg	97.	Singapore
11.	Bangladesh	40.	Fiji	69.	Madagascar	98.	Solomon Islands
12.	Barbados	41.	Finland	70.	Malawi	99.	South Africa
13.	Belarus	42.	France	71.	Maldives	100.	Spain
14.	Belgium	43.	Gabon	72.	Mali	101.	Sri Lanka
15.	Belize	44.	Gambia	73.	Malta	102.	Sweden
16.	Bolivia	45.	Germany	74.	Mauritius	103.	Switzerland
17.	Brazil	46.	Greece	75.	Mexico	104.	Thailand
18.	Brunei Darussalam	47.	Grenada	76.	Morocco	105.	Togo
19.	Bulgaria	48.	Guatemala	77.	Mozambique	106.	Tonga
20.	Cambodia	49.	Guyana	78.	Myanmar	107.	Trinidad and Tobago
21.	Cameroon	50.	Honduras	79.	Nepal	108.	Tunisia
22.	Canada	51.	Hungary	80.	Netherlands	109.	Turkey
23.	Chad	52.	Iceland	81.	New Zealand	110.	Uganda
24.	Chile	53.	India	82.	Norway	111.	Ukraine
25.	Hong Kong	54.	Indonesia	83.	Oman	112.	United Arab Emirates
26.	Macau	55.	Iran	84.	Pakistan	113.	United Kingdom
27.	China	56.	Iraq	85.	Papua New Guinea	114.	United States
28.	Colombia	57.	Ireland	86.	Paraguay	115.	Uruguay
29.	Costa Rica	58.	Italy	87.	Peru	116.	Vietnam