Singapore, Indonesia and Malaysia perspectives of potential trading relationship: An empirical investigation of their export diversification.

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Abstract

Trading relationship, multilateral trade, bilateral trade and trade relations have helped countries realize their potential and invest more on industries and innovation, but slow pace of decisions of working on challenges realized in the course of trading relationship slow down trade benefits, growth of market and economic development, more advanced economies works hard to export wide range of products to a great number of trading partners where they have realized Market potentials and they are taking advantage to make sure they benefit from their trading system. Singapore, Malaysia and Indonesia are trying their best to trade with the rest of the world through a strong establishment of policy on investment that they have implemented for years, this has given them opportunity to access markets easily and increase space for expansion of market share, now they are well positioned for future growth and expansion in the relevant markets continue to be successful though some are facing contraction with their trading partners but still more efforts are carried to make sure there are no more existence of contraction. An investigation on their degree they are taking advantage of potential trading relationships based on their export diversification talk a lots about their potential trading market destination to the world and their countries growth but the question is, what's the perspectives of potential trading relationship, result of export diversification and growth orientation of Markets for their top ten trading partners for the period of 2010 to 2014. The investigation look at total trade for sub-heading all 6 digits HS Codes being the level of aggregation using UN comtrade 2002 nomenclature 1998/92 product classification; on the other side an investigation on potential growth for Indonesia, Malaysia and Singapore exports is carried by comparing the compound annual growth rate of their primary exports to their partners growth.

Introduction and economy overview

Trading relationship has remarkably introduced an economy widely and it has characterized investment and market expansion in the Asian countries with more forces and demand required to trade with the rest of the World, this has helped them alots to make sure they are among the top growing economies both by realizing their potentials, building a good trading relationship, implementing industrialization strategy/policy and design of good environment for trade and investment. Singapore, Malaysia and Indonesia went through recession in early years with negative economic growth, but later in recent years they were about to face same recession but they designed strategies to tackle challenges that forced them to face recession; for example in 1998 Singapore had -2.22 as GDP per capita, 2001: -0.95, 2009: -0.06; in 1998 Malaysia had -7.35, 2001: 0.51, 2009: -1.51, its only Indonesia that did not undergo a negative GDP per capita for the same period and later for the period of 2014-2016 they all showed a significant growth of 5.0 in average. There are much reason for Indonesia, Malaysia and Singapore to expand business especially where they are opportune to do so it's well understood that the diversification by these countries is achieved by entering into additional markets (expansion) and the plan they had included market research, legal review and product adaptation analysis now todate Singapore, Malaysia and Indonesia are accounting growth rate through enforcement of policy which has now resulted in a growth rate above other growth that implies an increase in Market share in their top trading partners and they keep on being positioned for future growth with potential for further expansion in more than twenty relevant markets. The total trade of all products traded for the period of 2010-2014 and products diversification for them are closely tied to economic development they are showing much effort to export a wide range of goods to a greater number of partners it means they have advanced and indicators on diversifications of markets and products has provided the degree to which they are taking advantage of their trading relationship for the same period considering the destination markets, they have created value reach of exports that offer count of number of product that survive and were terminated between 2010-2014 this has helped their growth and diversification of their products and whenever they realize there is a higher index which indicates that they have exported a great percentage, they understand that they have exported to a greater percentage in specific markets, they balance the supply on the basis of demand for specific products and in other markets where they realize a low value of products. Singapore, Malaysia and Indonesia have established measurements and strategies that help them understand their diversification in the world market which is an important step toward export and this investigation help their economy grow.

Singapore has developed so fast and successfully initiated free-market economy. It enjoys a remarkably open and corruption-free environment, with stable prices, and a per capita GDP higher than that of most developed countries. The economy depends heavily on exports, particularly of consumer electronics, information technology products, medical and optical devices, pharmaceuticals, and on its vibrant transportation, business, and financial services sectors.

The economy contracted 0.6% in 2009 as a result of the global financial crisis, but has continued to grow since 2010. Growth in 2014-16 was slower than during the previous decade, at fewer than 3% annually, largely a result of soft demand for exports amid a sluggish global economy and weak growth in Singapore's manufacturing sector.

The government is attempting to restructure Singapore's economy by weaning its dependence on foreign labor, addressing weak productivity growth, and increasing Singaporean wages. Singapore has attracted major investments in advanced manufacturing, pharmaceuticals, and medical technology production and will continue with efforts to strengthen its position as Southeast Asia's leading financial and technology hub. Singapore is a member of the Regional Comprehensive Economic Partnership negotiations with the nine other ASEAN members plus Australia, China, India, Japan, South Korea, and New Zealand. In 2015, Singapore formed, with the other ASEAN members; the ASEAN Economic Community this position has placed it to a better position on trading relation.

Indonesia is the largest economy in Southeast Asia, it has seen a slowdown in growth since 2012, due to the end of the commodities export boom but this has not discouraged the government from increasing the demand for industrialization and has not slowed it realize it potential for trading with the rest of the world. During the global financial crisis, Indonesia outperformed its regional neighbors and joined China and India as the only G20 members posting growth. Indonesia's annual budget deficit is capped at 3% of GDP, and the Government of Indonesia lowered its debt-to-GDP ratio from a peak of 100% shortly after the Asian financial crisis in 1999 to less than 27 percent today. While Fitch and Moody's Investors upgraded Indonesia's credit rating to investment grade in December 2011, Standard & Poor’s has yet to raise Indonesia’s rating to this status amid several constraints to foreign direct investment in the country, such as a high level of protectionism.

Indonesia still struggles with, inadequate infrastructure, corruption, a complex regulatory environment, and unequal resource distribution among its regions.

Malaysia has transformed itself since the 1970s from a producer of raw materials into a multi-sector economy. Under the current Prime Minister, Malaysia is attempting to achieve high-income status by 2020 and to move further up the value-added production chain by attracting investments in high technology, knowledge-based industries and services. Economic Transformation Program under the current Prime Minister is a series of projects and policy measures intended to accelerate the country's economic growth. Malaysia is vulnerable to a fall in world commodity prices or a general slowdown in global economic activity. The administration continues with his efforts to boost domestic demand and reduce the economy's dependence on exports. Domestic demand continues to anchor economic growth, supported mainly by private consumption, which accounts for 53% of GDP. Nevertheless, exports - particularly of electronics, oil and gas, and palm oil - remain a significant driver of the economy.

In 2015, the gross exports of goods and services is equivalent to 73% of GDP, oil and gas sector supplied 22% of government revenue in 2015, this is down significant from prior years amid decline in commodity prices and diversification of government revenues.

It’s noted that Malaysia signed the 12-nation Trans-Pacific Partnership (TPP) free trade agreement in February 2016, although the future of the TPP remains unclear following the US withdrawal from the agreement. Along with nine other ASEAN members, Malaysia established the ASEAN Economic Community in 2015, which aims to advance regional economic integration.

Singapore GDP real growth rate seem to have dropped from 3.6 percent in 2014 to 2 percent in 2016 while it had 1.9 percent in 2015, this can be the effect of market environment, tariff and other barriers to trade while trading with their partners including weakness in sector contribution to industrial performance where the GDP composition by sector shows that agriculture contributed 0 percent, Industry 26.6 percent and services 73.4 percent which the highest. Among the industries Singapore has processed food and beverages, rubber processing and rubber, electronics, oil drilling equipment, chemical, petroleum refining, ship repair, offshore platform construction, entrepot trade and life sciences all these with an industrial growth rate of 1 percent in 2016 the country being 145th comparison to the world; Singapore exports pharmaceuticals and chemicals, machinery, equipments including telecommunication and electronics, petroleum products, foodstuffs and beverages. In 2015 Singapore exported products worth US$ 377.1 billion[1] and in 2016 it exported products worth US$ 353.3 billion[2] that classify it being 13th in export compared to the world, a slight decrease of 23.8 billion which can be described as fact on barrier to trade, competitiveness, decrease in industrial production and political disputes.

Malaysia GDP growth rate in 2014 dropped by 1.8 percent in 2014 there are several factors because in 2015 it decreased by 1 percent too though political instability is one of the factor but still the production and consumer demand decreased too; in 2016 sectors contribution to GDP shows that services is the highest with 54 percent followed by Industry with 37.8 percent then Agriculture with 8.2 the decrease seem most to be caused by service sector and industry they accommodate professionals and most demand by the population outside in regards to that they are the most sectors that should not be neglected, anything to affected both sector can cause decrease in growth. Industries in Malaysia includes petroleum and natural gas production, Peninsular Malaysia - rubber and oil palm processing and manufacturing, Sarawak - agriculture processing, petroleum and natural gas, light manufacturing , medical technology, petroleum and natural gas production, electronics and semiconductors, timber processing; Sabah - logging,; pharmaceuticals, logging all these have much and more contribution to GDP so government of Malaysia is constraints to support these industries for growth of their economy; despite the

[1] 2015 est.

[2] 2016 est

operation of industries it's reported that industrial production growth rate in 2016 was of 4.2 percent which is significant but wonder where the decrease in GDP rely on. In 2016 Malaysia exported goods worth USD167.3 billion and imported goods worth USD 139.5 bill same period which is a decrease of USD 27.8 billion and in 2016 it exported goods worth USD 175.7 billion and imported goods worth 147.7 billion in the same period which clearly state that there was an increase of USD 28 Billion in that period the commodity it exported includes wood and wood products, semiconductors and electronic equipment, palm oil, rubber, textiles, palm oil, chemicals, solar panels, petroleum and liquefied natural gas and on the other side it imported, machinery, vehicles, iron and steel products, petroleum products, plastics, chemicals, electronics.

Indonesia GDP remained constant for the period of 2014 to 2016 with 5 percent growth rate but in 2015 that it decreased by 0.1 percent, all these caused by sectors contribution, once sectors contribution increases then the overall GDP growth rate increases, services contributed 46 percent followed by Industry with 40.3 percent and Agriculture 13.7 percent. There are so much to count on Growth, industrial performance and Market analysis; factors remain almost the same catalyzing these markets that contribute to their export diversification. Industries remain to be performing well but markets seem to derogate on terms of trade with their partners, among the industries Indonesia has plywood, handicrafts, petroleum and natural gas, textiles, chemical fertilizers, jewelry, automotive, electrical appliances, apparel, footwear, mining, cement, medical instruments and appliances, rubber, rubber, chemicals processed food and tourism; export commodities includes, palm oil, petroleum and liquefied natural gas, wood and wood products, palm oil, textiles, solar panels, semiconductors and electronic equipment, while import commodities are vehicles, iron and steel products, electronics, petroleum products, machinery, plastics, chemicals all these are exported and imported because Markets determine what to trade based on the consumers demand and markets demand for export so the Indonesia governments has to provide strength on the demand of industries and support them to increase export and decrease import.

Singapore, Indonesia, Malaysia top ten partners on import and export of goods in percentage 2015 estimates.

The import and export of goods in percentage is the calculation of size of produced goods in percentage traded to the destination market/ partner market by this countries learn and work hard to find the complementarily and opportunity to cover from one sector to another to respond on competitors strength and consumers demand of import/export without technological limitations. These countries like any other countries have trade analyst and economists who analyses trade and barriers within specific period of time for sustainability of their trade growth and development to advise their governments accordingly challenges are reported to them and strategies are designed by them but finances to implement their decisions and recommendations is what discourage progress of their work. Singapore, Malaysia and Indonesia continue to work hard on sectors transformation in order to respond to consumers demand and change trade negative balance of trade into positive, though by the below table some are still holding negative balance rate of accessing partners markets but more efforts are carried and still an observation is carried out and realized the following on the balance of import and export for 2015 estimates.

1.0 Singapore, Indonesia, Malaysia rate of trading import and export by partners and balance 2015 estimates.

Country	Partner	Export	Import	Trading rate Balance
SINGAPORE	China	13.7	14.2	-0.5
	Malaysia	10.8	11.2	-0.4
	Japan	4.4	6.3	-1.9
	Indonesia	8.2	4.8	5.4
	US	6.9	11.2	-4.3
	South Korea	4.1	6.1	-2
	Malaysia	10.8	11.2	-0.4
	Hong Kong	11.5	-	
INDONESIA	Japan	12	9.3	2.7

	US	10.8	5.3	5.5
	China	10	20.6	-10.6
	Singapore	8.4	12.6	-4.2
	India	7.8	-	
	South Korea	5.1	5.9	-0.8
	Malaysia	5.1	6	0.9
	Thailand	-	5.7	
MALAYSIA	Singapore	13.9	12	1.9
	China	13	18.8	-5.8
	Japan	9.5	7.8	1.7
	US	9.4	8.1	1.3
	Thailand	5.7	6.1	-0.4
	Hong Kong	4.7	-	
	India	4.1	-	
	South Korea	-	4.5	
	Indonesia	-	4.5	

Source: World fact book

Singapore face challenges doing business with her top ten partners, some have forces of changing technology with immediate effect to respond to quite a number of demand in various markets and some have strong economy where Singapore cannot compete in their markets, but still economists and trade experts are working hard to change the negative into positive; for the year 2015 Singapore holds a positive rate of balance while accessing Indonesia market which translate that Singapore was strong enough to trade in Indonesia market with an export of 8.2 percent of all against 4.8 and being able to respond to the market demand.

We understand that the rate of market access in percentage has resulted into positive rate of balance this is the interest of exporting goods into Indonesia market, Japan, USA and India which are bigger economies, they cannot compete in accessing Indonesia market rather we tend to say that Japanese and Americans have not shown so much demand on Indonesian goods but services is what they are in demand for the type and services required into their markets, on the side of services describe that Indonesians are cheap in labor while American goods are expensive that Indonesians cannot afford based on their level of life so the fact that China, Singapore and south Korea export much into Indonesia market with a negative rate of balance this translate that much of their goods are exported into Indonesia market and consumer demand respond positively with almost double export compared to the importation.

Malaysia has worked hard to demolish negative rate of market access among its top ten trading partners, it has not been an easy task to see China with difference of -5.8 percent and Thailand with -0.4, as stated, strong economies and great producers might have find no product to trade with Malaysia but might need the service of their people as part of offers on cheap labor. There is no rate of accessing Malaysia market on import by Hong-Kong and India they are silent and there is no export rate declared by south Korea and Indonesia into Malaysia market this tell us that there was no export/ import for year 2015 or it has not yet been calculated and understood as the ratio and as the final figure to publish.

2.0 Investigation and method of simulating export diversification and growth orientation of markets for Singapore, Malaysia and Indonesia.

Export diversification and Growth orientation of Markets evaluate and investigate potential growth for Indonesia, Malaysia and Singapore exports by comparing the compound annual growth rate (CAGR) of their total traded products which includes primary exports to their top ten trading partner’s growth rate. The mathematical calculation is:

$$CAGR_{ijk} = 100 * \left[\left(\frac{x_{ijkt_2}}{x_{ijkt_1}} \right)^{\frac{1}{t_2 - t_1}} - 1 \right]$$

x is represented as the value of export of products **k** (total products traded for the period starting 2010 to 2014) from origin country **i** (Singapore, Malaysia and Indonesia) to destination **j**

(partners as top ten) and the Total exports is given by **X.** The start year **2010** is given by **t1** and the end year **2014** is given by **t2.**

Changes in market share of total product of *sub-heading all 6 digits HS codes for top 10 trading partners is* one of the indicators of changes in competitiveness in the market influenced by business environment, subsidies or tariffs than changes in comparative advantage (Krugman and Hatsopoulus, 1987).

Singapore, Malaysia and Indonesia export diversification 2014.

Singapore Export diversification and growth orientation of top ten partners Markets 2010-2014.

Reporter Name	Partner Name	Share End Year	World Growth	Country Growth
Singapore	China	12.5683	5.3105	7.2164
Singapore	Hong Kong, China	11.0083	7.3577	1.8243
Singapore	Indonesia	9.3639	5.8533	3.0268
Singapore	India	2.7154	3.6886	-3.5072
Singapore	Japan	4.0867	3.6821	0.4056
Singapore	Korea, Rep.	4.0749	4.7338	3.0565
Singapore	Malaysia	11.9575	4.993	3.1453
Singapore	Other Asia, nes	3.9387	1.6715	4.4794
Singapore	Thailand	3.6721	4.6669	3.449
Singapore	United States	5.9172	4.4365	1.1046

Source: Wits

Growth potential of Singapore export is compared through compound growth rate from 2010-2014 to their top ten trading partners this shows that Singapore has an increase in market share while trading with other Asian countries being it leading trading partners on primary export with 4.4794 as high growth market which means Singapore is well positioned for future growth, therefore they need further expansion in the other markets such as in China, Hong Kong, Indonesia, India, Japan, Korea Rep, Malaysia, Thailand and US; existence of barriers inhibit growth in this market. So far Singapore shows that it has a contraction with India as it has -3.5072 on it growth.

Indonesia Export diversification and growth orientation of top ten partners Markets 2010-2014

Reporter Name	Partner Name	Share End Year	World Growth	Country Growth
Indonesia	Australia	2.819	3.885	3.1754
Indonesia	China	10.0013	5.3105	2.3276
Indonesia	India	6.9582	3.6886	4.3184
Indonesia	Japan	13.1377	3.6821	-2.1498
Indonesia	Korea, Rep.	6.0252	4.7338	-3.347
Indonesia	Malaysia	5.5281	4.993	0.7766
Indonesia	Other Asia, nes	3.6499	1.6715	5.8402
Indonesia	Singapore	9.5164	5.0326	4.0695
Indonesia	Thailand	3.2861	4.6669	4.8428
Indonesia	United States	9.4072	4.4365	2.9755

Source: Wits

Indonesia primary export compared to its top ten trading partners shows that it has an increase in Market share with India with 4.3184 it has an increase market share with other Asia, nes with 5.8402 and it also has an increase in market share with Thailand with 4.8428 this tells that it is well positioned for future growth in other Asian and Thailand Market. There are more need for Indonesia to expand in their top ten partners that exclude other Asian and Thailand, negotiation need to be conducted on barriers that inhibit their growth in those markets or Indonesia need to put more efforts to increase trade for expansion in their partners market. Contraction is noted in the Japanese market with -2.1498 and Korea, Rep. with -3.347.

Malaysia Export diversification and growth orientation of top ten partners Markets 2010-2014.

ReporterName	Partner Name	Share End Year	World Growth	Country Growth
Malaysia	Australia	4.3036	3.885	6.1766

Malaysia	China	12.054	5.3105	2.4079
Malaysia	Hong Kong, China	4.8323	7.3577	2.26
Malaysia	India	4.1634	3.6886	8.3884
Malaysia	Japan	10.7959	3.6821	4.1656
Malaysia	Korea, Rep.	3.6609	4.7338	2.6447
Malaysia	Netherlands	3.0593	3.2276	2.6462
Malaysia	Singapore	14.2066	5.0326	4.609
Malaysia	Thailand	5.2567	4.6669	2.9771
Malaysia	United States	8.4151	4.4365	0.7489

Source: Wits

The chart shows how Malaysia primary product is traded to its top ten partners it shows that there has been growth in market share with Australia with 6.1766 against 3.885, it has an increase in market share with India with 8.3884 and Japan with 4.1656 this tells that Malaysia is well positioned for future growth in those markets where it has an increase in market share. But there are much more need for Malaysia to expand in it partners market because it seem there are existence of barriers that inhibit growth in their top ten partners markets so far Malaysia has not shown contraction in all its top ten trading partners which tells that there are potential for growth in those markets.

Conclusion

It's has been a must for Singapore, Indonesia and Malaysia to improve their economy which they consider as one of the best way to improve their people's life condition, all efforts carried to maintain trading relationship, improving investment policy and implementing strategy that are linked to business and trade development; they have initiated free market economy which has so much benefit in accessing their markets and understand what's needed in their market by consumers and therefore design products based on demand and needs in the market. Crisis has not relented their effort toward finding their potential and export diversification rather make sure their economy grow more rapidly but governments is not only limited to that but also they restructure their economy and this is one of the reason that there are so much increase in their investments as of now they are efficient and operation cost in manufacturing sector has decreased.

The perspective and potential for trading with top ten partners is a one step forward the top ten partners are big economies, Singapore Malaysia and Indonesia shows their strength in trading with these economies and vow to improve their trade relationships with them though there are challenges doing business with them but this has helped them work hard to change their technology, top ten partners have shown interest in receiving service trade from Singapore, Malaysia and Indonesia and this is one of the sector that has increased their diversification, one of the reason that they have not been able to shoot the importation of goods from their top ten partners it's because of price and quality in the competing market only little is exported but much of Indonesia with average quality based on standard is being exported to their partners too, top ten partners have established industries for cheap labor and low cost of production and therefore exported the same goods to their respective countries and label as per rule of origin and this explain how much top ten partners have imported goods from their reporter.

Investigation and observation of their export diversification shows that Singapore has increased in market share its well positioned for future growth but need to expand into other markets such as China, Malaysia, Hong Kong and others where they have found product of interest for them.

Indonesia has increased in market share with its partners its well positioned for future growth but there is a slight contraction in the Japanese market and Korea rep.

Malaysia has not remained behind to make effort in her trading relationship its well positioned for future growth but need to expand but the problem of contraction does not determine that it has not been able to improve trade relationship but it shows how much its challenged and need to take action on specific products exported to their partners, otherwise there are potentials for growth in those markets.

Reference:

World Bank, Online Trade Outcomes Indicators -, the World Bank, Version 1.0, September 2013 P. 21-39.

World fact book, https://www.cia.gov/library/publications/the-world-factbook/ 27-30 Sept. 2017