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THE IMPACT OF EXPORT DIVERSIFICATION ON THE ECONOMIC GROWTH IN MALAYSIA

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ABSTRACT

This study aims to analyse the impact of export diversification on the economic growth in Malaysia in both the short and long run. Computed data of degree of specialisation and diversification (DSD) in Malaysia from 1987 to 2017 were utilised. Furthermore, this study takes into consideration other determinants such as foreign direct investment and human capital to examine their impacts on the economic growth in Malaysia. The findings indicate that Malaysia is experiencing diversification in its export basket. Furthermore, all the independent variables were found to be positive and significant in relation to economic growth in the long run. However, there was no short-run relationship found throughout the studies amongst the dependent and independent variables. The research findings suggested that Malaysia should diversify further in terms of export commodities and cultivate a larger partnership socially and economically with the rest of the world.

***JEL classification**: F10, F14.*
***Keywords**: Degree of specialization and diversification (DSD), economic growth, FDI, human capital, Malaysia.*

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1. INTRODUCTION

The concept of export diversification originated in development economics which entailed that export diversification provides a platform for developing nations to boost their economic growth. In fact, many developing countries in the world are highly dependent on commodities or a limited export basket which exposes them to export instability risk (Agosin, 2007). To illustrate, commodities are usually linked with high price volatility due to inelastic global demand and led countries to face negative terms of trade effects. Conversely, conventional trade theory neglects the notion of export diversification in accelerating economic growth. According to the Ricardian model, countries must specialise in productions with lower relative costs in comparison with world relative prices (Deardorff, 2007). In other words, only goods that are proven to be a comparative advantage to the country will be produced which are equivalent to no diversification in production. The Heckscher-Ohlin Model also puts weight on the relationship between factor endowment and export patterns of nations. However, in

reality, export patterns cannot be fully determined by factor endowment, hence in the modern international market, a country has to overcome its factor limitation to maintain its competitive advantage in the long run.

Theoretically, several channels through export diversification exist to bring a positive impact on output growth. One of them is horizontal diversification which refers to a variety of goods that can be seen introduced in independent industries. It raises the number of export sectors to spread the risk across different industries thus lowering their dependency on commodities. The other type is vertical integration which infers that in the same industry, diverse products can be seen. This includes value-added activities that are found in manufacturing sectors. According to the Prebisch-Singer thesis, commodity-dependent countries can practise vertical export diversification into manufacturing sectors to reduce the declining trend in terms of trade (Athukorola, 2000).

According to Saviotti and Frenken (2008), knowledge spillovers are vital when nurturing the manufacturing sector as it not only promotes innovation but also protects countries from sudden shocks. Similarly, according to Al-Marhubi (2000), the diversification process is usually linked with modifying and constantly improving production methods and this will be an advantage to all industries through knowledge spillovers. According to Imbs and Wacziarg (2003), a hump-shaped relationship was found between export diversification and economic development. This depicts those countries will diversify their production in the early stage to obtain specialisation at higher income levels. Many developing countries including Malaysia are still diversifying their exports for the development of the country.

In view of the above, this study is to evaluate the impact of export diversification on the economic growth in Malaysia. This research also attempts to acquire a better understanding of the behaviour of the diversification process through the measurement of the degree of specialisation and diversification (DSD) from 1987-2017. This study distinctively utilises the formula introduced by Balassa (1989) to calculate the DSD of Malaysia through revealed comparative advantage (RCA), which is different from most of the past studies. To my best knowledge, study on this particular subject especially in Malaysia is lacking and the application of the DSD theory is limited in today's research. The remaining of this paper is organised as follows: Section 2 describes the literature review; Section 3 displays the theoretical framework. Section 4 and 5 will include the description of data and most importantly discuss the empirical findings. The last section concludes the study with policy implications.

2. LITERATURE REVIEW ON THE DETERMINANTS OF THIS STUDY

Based on the past literature, there were many past studies that examine the relationship between foreign direct investment (FDI) and GDP. There is a belief that FDI leads to an increase in productivity in host countries which in return promotes economic development. According to the World Bank (2001), countries with greater absorptive capacities will be able to fully leverage the inflow of foreign capital. This was supported by Hermes and Lensink (2003) and Alfaro et al. (2004) which emphasises that the robustness of the financial markets in a developed nation will spur economic growth by absorbing the spillover effect of FDI. The degree of FDI growth within a nation is highly dependent on the absorptive capacity of the host country. Zhang (2001) uses the Johansen cointegration test and found that 5 out of 11 countries show a long run positive relationship whereas the remaining countries only show a short run FDI-GDP relationship.

Besides, using panel data that comprises 139 countries over the period of 30 years, Neto and Veiga (2013) empirically examine the role of FDI in fostering growth via the

dissipation of technologies and innovation**.** It was found that these two have a positive effect on the degree of productivity and GDP growth. The findings are coherent with an open economy model whereby foreign direct investment influences growth through widespread technologies and innovation. Li & Liu (2005) examine the endogeneity between FDI and economic growth by using a simultaneous - equation system that consists of a large cross-country sample. The analysis suggested that FDI does not directly encourage economic growth but also indirectly with the help of several other interaction terms. Azman-Saini et al. (2010) tend to find out the link between economic freedom, FDI and economic growth in 85 countries. Based on a generalised method-of-moment system estimator, there is no direct impact of FDI on growth however it relies on the economic freedom in the host country. This implies that countries that encourage freedom in economic activities will reap more benefits from the existence of multinational corporations (MNCs).

The relationship between human capital and the degree of economic growth were proven through several empirical and theoretical researchers. Tsai et al. (2010) examine the impact of several types of human capital on growth. OLS and System- Generalised Method of Moments (GMM) models were used and 5 different types of human capital from different fields of studies were tested. The findings revealed that tertiary education is crucial in promoting growth in both developed and developing countries. It also postulated that high-tech human capital is positively significant to economic growth. This implies that nations should promote people to venture into high-tech fields of study. The author further stated that to identify a high-quality labour force, we can look at the percentage of participation in science, engineering and computer science at the tertiary level. Similarly, Zhang and Zhuang (2010) also used the same model which is GMM to test the relationship of both variables in China. The authors utilised panel data for China districts from 1997 to 2006 and divided human capital into two levels of education and proposed a new variable which is human capital structure to find out which level of education attainment benefits growth the most. The findings suggested that the importance of tertiary education towards promoting economic growth is more than the lower education levels.

On the other hand, there were limited studies done specifically for Malaysia and other countries. Arip et al. (2010) examine the long-run relationship between export diversification and economic growth in Malaysia over the period of 1980-2007. The authors employed cointegration time series techniques to examine the long-term interactions amongst the variables. Their findings revealed that DSD is negatively related to Gross Domestic Product (GDP) in the long run which implied that economic growth is significantly influenced by export diversification. The results are consistent with the hypothesis that was introduced in endogenous growth theory which is dynamic spillover effects and increasing returns to scale.

However, Hamed, Hadi and Hossien (2014) finds out the relationship between GDP, capital, total labour employed and DSD through a generalised method of moments (GMM) on 23 developing nations from 2000 to 2009. The findings suggested that it is difficult to identify how diversification is able to affect the growth of other countries as some may benefit from diversifying and some may not. Nevertheless, amongst the 23 countries, it was found that there is a positive diversification-led growth whereby the decrease in the volume of primary commodities in their export portfolio will reduce the instability of export earnings. This will result in a rise in growth in developing nations in the long run.

3. METHODOLOGY

3.1 Theoretical framework

Export-led growth (ELG) hypothesis exhibits the causal relationship of exports and economic growth whereby it glorifies export activities and export production of nations. As mentioned in past literature, growth is driven by trade and significant increase in the efficiency of redistribution of resources has resulted in an upward trend in the aggregate output of the nation. Furthermore, the formation of foreign exchange capital will facilitate economic growth as it will hike the imports of goods. Thus, this implies that export policies act as a vital tool in stimulating economic growth. According to Thirlwall (1994), export growth reflects the health and progress of a nation's economy. Rapid export growth will see a surge in demand, savings by individuals and business capitals.

3.2 Empirical model

This research employs annual time-series data to conduct its analysis. Time-series techniques of co-integration and Granger causality tests are adopted to investigate the long-run relationship and correlation between the dependent variable and the independent variables. In this study, the dependent variable is real gross domestic product (GDP). Real GDP is derived by using nominal GDP divided by GDP deflator. The independent variables are taken on board based on the theories and past literature. DSD is the most important independent variable in this study. According to Naude and Rossouw (2011), there is a causal relationship between both export diversification and growth. The author further revealed that a U-shaped relationship is found between specialisation and per capita growth. The formula to calculate DSD was introduced by Balassa (1989) as shown below:

$$\sigma = \sqrt{\frac{1}{N}\sum_{i=1}^{N}(RCA_i - \underline{RCA})^2} \quad (1)$$

Where:
N depicts the number of commodities currently exported by the country,

RCA_i is the revealed comparative advantage for a specific commodity,

$\underline{RCA}$ is the mean value of RCA from the N number of samples.

This calculation uses the standard deviation of revealed comparative advantage (RCA) to measure the export diversification index. According to the World Bank (2019), diversification in export is vital for developing countries as they relied highly on raw materials to generate incomes. Primary commodities are tied with unstable prices which subject countries to terms of trade (ToT) shocks. Diversification into new export products or higher value-added production is seen as a progressive development. Based on the equation, the lower value of standard deviation sees a higher degree of export diversification whereas a higher value in the standard deviation illustrates a greater degree of specialisation. This implies that if the index drops consistently over time, a higher degree of diversification is experienced by the country. As such, the coefficient of DSD is expected to be negative based on the economic growth theory.

From eq. 1, the measurement revealed comparative advantage (RCA) is shown in Eq. 2.

$$RCA^j{}_i = \frac{(\frac{X_i{}^j}{X_t{}^j})}{(\frac{X_i{}^w}{X_t{}^w})} \quad (2)$$

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Meanwhile, the specifications of variable used are listed below:

RCA = notation of revealed comparative advantage,

X_i^j = value of country *j*'s export in commodity *i*,

X_t^j = total export of country *j*,

X_i^w = total world export of commodity *i*

X_t^w = total export of the world

UNCTAD (2019) states that RCA can be explained through Ricardian trade theory which postulates that patterns of trade across countries are determined by the differences in the productivity of nations. However, it can be tough to detect the relative differences in productivity hence policymakers can resort to RCA to calculate these differences through trade data. Despite that, this metric does not take account of a national policy such as implementations of tariff, non-tariff, quotas, subsidies and others which may influence the competitiveness of a country.

Apart from DSD, the other independent variable is foreign direct investment (FDI). Saint-Paul (1992) and Obstfeld (1994) argued that the movement of funds and capital in the economy can influence productivity by encouraging the diversification of international risk. This in return develops the domestic market as more are inspired to innovate and this will induce a rapid growth. Following that, foreign savings was found to benefit developing countries as they can grow faster to compete with developed countries or rich economies. Hence, FDI stands as a vital platform for technology transfer, fostering aggressive competition in host countries to induce local firms to operate efficiently and prompt more sectors to take up diversifications in terms of product and sectoral activities (Barro, 2001).

Human capital is also one of the other determinants of economic growth. Human capital is denoted by the total school enrolment in tertiary level in Malaysia (World Bank, 2019). Several theoretical research has stressed on the formation of human capital through the attainment of educational level in a nation. According to Barro (2001), nations that have achieved a high level of education and a certain level of GDP per capita will experience rapid growth. It was also found that the growth of human capital will foster the growth in investments of tangible goods. Based on the aforementioned facts, the empirical model of this study is shown as below:

$$RGDP_t = \beta_0 + \beta_1 DSD_t + \beta_2 FDI_t + \beta_3 HUM_t + \varepsilon_t \ \ldots\ldots \quad (3)$$

Where:

$RGDP_t$ = Real Gross Domestic Product (annual %)

FDI_t = Foreign Direct Investment inflow (current USD)

HUM_t = Human capital (tertiary school enrolment, % gross)

ε_t = Random error term

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β_0, β_1, β_2, β_3 = Coefficient

t = Time period from 1987 to 2017

The model is transformed into a log-linear model due to differences in data characteristics. This will ensure that the data will be normally distributed and reduce the value of standard deviation. Therefore, RGDP, DSD, FDI and HUM will be converted into log form. Hence, the study will now employ the new equation (4):

$$LRGDP_t = \beta_0 + \beta_1 LDSD_t + \beta_2 LFDI_t + \beta_3 LHUM_t + \varepsilon_t \ldots\ldots \quad (4)$$

3.3 Econometric analysis

Unit Root Tests which are Augmented Dickey-Fuller (ADF) and Phillips-Perron test (PP) are employed to identify the stationarity of a series. The Cointegration Test is to examine the long run correlations among the time series data selected. The selected Cointegration Test carried out was the Johansen Juselius (JJ) test. Once proven the time series is cointegrated and has a long run relationship, the JJ test will be able to progress to Vector Error Correction Model (VECM). VECM is able to take into consideration any cointegrating relationships among the variables. The one characteristic of VECM is that it includes the lagged error correction term which is cointegration term into their model. To illustrate, the VEC model is expressed below:

$$[\Delta RGDP\ \Delta DSD\ \Delta HC\ \Delta FDI\ ] = [\alpha_0\ \alpha_1\ \alpha_2\ \alpha_3\ ] + \sum_{i=1}^{k} \Gamma[\ \Delta RGDP\ \Delta DSD\ \Delta HC\ \Delta FDI\ ]_{t-k} + \Pi[RGDP\ DSD\ HC\ FDI\ ] + [\ v_0\ v_1\ v_2\ v_3] \quad (5)$$

Error correction term lies on the right-hand side of the variable. In the long run, the term will exhibit a zero value. Conversely, if it is in a short run equilibrium, ECT will show a nonzero value and the variable will gradually adjust to equilibrium.

Following the above tests, the Granger Causality Test will be carried out to obviate the possibility of omitted common factors. This model will be focusing on testing the causal relationship between the selected variables. Granger causality is based on two assumptions which are that the future cannot influence the past however the past shaped the present and future and a cause contains information about an effect not available.

3.4 Sources of data

The data of the dependent variables which is the real GDP of Malaysia is obtained from the World Bank Indicator (The World Bank Group, 2019). On the other hand, the independent variable which is degree of specialisation and diversification (DSD) is calculated based on the formula introduced by Balassa (1998). Furthermore, foreign direct investment and human capital are derived from the World Bank Indicator (The World Bank Group, 2019). The data collected are annual time series data from the year 1987 to 2017.

4. RESULTS AND DISCUSSION

This section exhibits the degree of specialisation and diversification (DSD) indices computed in Malaysia from the year 1987 to 2017 in the accuracy of 4 digits decimal point in Table 1.

Table 1: The overall indices of DSD in Malaysia from 1987 to 2017.

Year	RCA	DSD
1987	3.8770	8.6282
1988	3.8771	12.6045
1989	4.1781	11.4063
1990	3.5874	14.2174
1991	2.2321	8.7348
1992	1.8064	2.4167
1993	1.1535	2.5831
1994	0.6626	0.5800
1995	0.5242	0.2826
1996	0.4020	0.2062
1997	0.2852	0.1148
1998	0.2642	0.0612
1999	0.2441	0.0658
2000	0.1632	0.0540
2001	0.1475	0.0243
2002	0.1253	0.0283
2003	0.1399	0.0210
2004	0.1971	0.0271
2005	0.1798	0.0448
2006	0.2247	0.0328
2007	0.2441	0.0548
2008	0.2247	0.5734
2009	0.1972	0.0474
2010	0.2642	0.0387
2011	0.2247	0.0726
2012	0.1714	0.0428
2013	0.1714	0.0304
2014	0.1632	0.0342
2015	0.2061	0.0303
2016	0.1972	0.0475
2017	0.2061	0.0386

Source: Authors' own calculations

Based on Table 1, the observation suggests that there is a minor fluctuation in the range of 0.1% to 0.5% in certain years that changes the diversifying rate of the nation. To magnify, the diversification activity in Malaysia's export basket kicked off in the year 1991 whereby the indices dropped around 6% in comparison to the previous year. Furthermore, within 3 years, Malaysia has managed to achieve a significantly low index of 0.5800 which depicts that the country is experiencing a vigorous rate of diversification instead of specialisation. As mentioned previously, the lower value of DSD suggests that there is a higher degree of export diversification whereas a higher value in the standard deviation illustrates a greater degree of specialisation. In addition, if the indices are found to drop consistently over time, a higher degree of diversification is experienced by the country. Thus, the table above concludes that Malaysia is indeed experiencing a low to medium degree diversification rate in its export basket as there is a continuous decrease of indices within the 30 years of studies. According to Arip et al. (2010), a country will be labelled as highly diversified in its export basket when it has negative indices over time. Thus, Malaysia is labelled as a low to medium diversified country as the indices computed are low in figure however still carries positive value.

4.1 Unit root tests results

Table 2 and Table 3 display the results from Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) unit root test respectively.

Table 2: Augmented Dickey – Fuller (ADF).

Variables	Level		1st Difference	
	Intercept	Trend & intercept	Intercept	Trend & intercept
LRGDP	-0.8082 (7)	-2.6292 (0)	-3.5605 (1)**	-4.0629 (1)**
LDSD	-1.8672(0)	-2.0781(0)	-5.6752 (0)***	-5.5653 (0)***
LHC	-0.5420 (0)	-2.0331 (0)	-6.6331 (0)***	-6.5306 (0)***
LFDI	-2.0366 (2)	-2.990 (2)	-5.0801 (1)***	-5.0092 (1)***

Table 3: Phillips-Perron (PP).

Variables	Level		1st Difference	
	Intercept	Trend & intercept	Intercept	Trend & intercept
LRGDP	-2.5953 (1)	-2.6788 (2)	-4.5372 (2)***	-5.0024 (1)***
LDSD	-1.8672 (3)	-2.1792 (2)	-5.6702 (2)***	-5.5627 (2)***
LHC	-0.4406 (2)	-0.8163 (1)	-5.3674 (0)***	-5.5767 (0)***
LFDI	-2.904 (26)	-3.1740 (2)	-6.2041 (3)***	-6.1607(3)***

Notes: Figures in (...) are the lag lengths. Asterisks (**) and (***) denotes significance at 5% and 1% levels respectively.

The results generated in Table 2 and Table 3 suggested that all data in the series are not stationary at level; however after transforming to first order differencing, the series data is now stationary and integrated into an order of I(1). As a result, cointegration tests can be implemented for the next step to verify the long run relationship of the series.

4.2 Cointegration tests

This section exhibits the degree of specialisation and diversification (DSD) indices computed Johansen Juselius (JJ) Test is adopted to find out the cointegrating relationship between the variables. There will be two tests to identify the cointegrating relationship in this study which are Trace and Maximum Eigenvalue tests. Table 4 shows the results obtained from the Johansen Juselius (JJ) Cointegration Test.

Table 4: Johansen Juselius (JJ) Cointegration Test.

Trace Test: LRGDP, LDSD, LFDI, LHC (k=2, r=1)

H_0	H_1	λ_{-trace}	95% CV
r=0	r ≥1	64.0931**	47.8561
r ≤ 1	r ≥2	28.2617	29.7971
r ≤ 2	r ≥3	9.6355	15.4947
r ≤ 3	r ≥4	0.2074	3.8415

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Maximum Eigenvalue Test: LRGDP, LDSD, LFDI, LHC (k=2, r=1)

H_0	H_1	λ_{-max}	95% CV
r=0	r ≥1	35.8313**	27.5843
r ≤ 1	r ≥2	18.6262	21.1316
r ≤ 2	r ≥3	9.4282	14.2646
r ≤ 3	r ≥4	0.2074	3.8415

Notes: Asterisk (**) denotes significance at 5% significance level, k is the number of lag and r is the number of cointegration Vectors.

Both Trace test and Maximum Eigenvalue test suggest that there is only one cointegration vector significant at 5% significance level. This implies that a long run cointegrating relationship between the variables exists in the model. Following that, the test can move forward to the Vector Error Correction Model (VECM).

4.3 Vector Error Correction Model results

Table 5: Vector Error Correction Model results.

Parameter Estimated	Constant	LRGDP	LDSD	LFDI	LHC	ECT
Elasticities	-22.917	1.000	-0.2087	0.1616	1.2674	- 0.0773
[t-statistics]	-	-	[- 4.057]***	[- 4.110]***	[-7.221]***	[-1.8942]*

Notes: Asterisks (*) and (***) denote significance at 10% and 1% levels, respectively.

Based on the results above, all of the independent variables are significant. Of which, the degree of specialisation and diversification is negatively related to the level of economic growth in Malaysia. According to Mohammad Affendy Arip et al. (2010) the smaller value of DSD signifies that the country is experiencing higher degree of export diversification whereas, the higher value signifies that country has a higher tendency to specialise than diversifying its export basket. Following that, a constant decrease in the value of DSD will show that the country has a higher diversification in export. The table above shows that DSD has a coefficient of -0.2087, hence, this proves that Malaysia is experiencing a high degree of diversification in our export basket.

Besides, two variables which are foreign direct investment and human capital are positive and significant at 1% significance level. This concludes that both of them have positive relations with the level of economic growth in Malaysia. Furthermore, amongst these three variables, human capital is seen to have the most significant relation to economic growth as it has the highest coefficient.

The Error Correction Term value for this model is -0.0773 which reveals that the long-run equilibrium will be adjusted by 7.73% in a year. In other words, the process for all

variables to achieve equilibrium from the deviation will require about 13 years. The ECT has a t-statistic value of -1.8942 and is significant at 10% significance level.

4.4 Granger causality test

Table 6: Granger causality test results.

Dependent Variables	x2-statistic (p-value)				ECTs	
	ΔLRGDP	ΔLDSD	ΔLFDI	ΔLHC	Coefficients	t-statistics
ΔLRGDP	-	5.1273 (0.1627)	1.8543 (0.6032)	15.2153 (0.0016)***	-0.0773	-1.8942*
ΔLDSD	2.9916 (0.3929)	-	12.5790 (0.0056)	4.3673 (0.2244)	1.9296	[4.005]
ΔLFDI	4.6139 (0.2024)	0.5902 (0.8987)	-	1.7659 (0.6224)	0.1453	[0.0584]
ΔLHC	4.1758 (0.2431)	1.1928 (0.7547)	2.6549 (0.4479)	-	0.0148	[0.1185]

Notes: Asterisk (***), (**) and (*) denote significance at 1%, 5% and 10% levels, respectively are the first different operator.

According to Table 6, although the ECT coefficient of -0.0773 is negative and statistically significant at 10% significance level, there is no causality between DSD and economic growth in Malaysia in the short run as the coefficient is insignificant.

5. CONCLUSION AND POLICY IMPLICATIONS

This study was conducted to determine the impact of diversification in Malaysia's export basket on the level of economic growth of Malaysia. The study was carried out by applying 31 years of data from the year 1987 to 2017 using cointegration and Granger Causality test to conclude the long-run relationship as well as the causality between the variables in the short-run results. The estimated results suggest that export diversification

imposes a positive impact on economic growth. In addition, other independent variables such as foreign direct investments and human capital also impose a positive and significant impact on the economic growth of Malaysia.

From the results obtained, the variable degree of specialisation and diversification has successfully indicated Malaysia as a low to medium degree export diversified nation. This is because it was associated with a relatively smaller and negative value for its coefficient and was found to be statistically significant. Meanwhile, human capital has the most significant impact out of the three variables on the economic growth in Malaysia as it is statistically significant in the short and long-run. In other words, Malaysia should invest more in education, especially at the tertiary level in order to produce more human capital in the labour market. Other than that, foreign direct investment also acts as a catalyst in the level of economic growth. Government is able to attract quality FDI into the nation by lowering the barriers in the country such as tax rates to boost competitiveness among the domestic firms and enable them to enter the market smoothly.

Our findings suggest that Malaysia should diversify further in terms of export commodities and cultivate a larger partnership socially and economically with the rest of the world. Other than that, Malaysia should be actively developing closer economic cooperation with other countries. Instead of engaging in trade with a few major trading partners, Malaysia should search for more partners in order to diversify their risk of putting all their trades in a limited number of countries. As an export-oriented economy, having more trading partners is more beneficial as this will not only increase the export volume of our nation but also diversify the risk of facing trade wars or other conflicts that may raise uncertainty amongst trading partners.

REFERENCES

Agosin, M. P. (2007). Export Diversification and Growth in Emerging Economies, *Working Paper No.233*. Universidad de Chile: Departmento de Economia.

Alfaro, L., Chanda, A., Kalemli-Ozcan, S. and Sayek, S. (2004). FDI and economic growth: the role of local financial markets. *Journal of international economics*, 64(1), pp.89-112.

Al-Marhubi, F. (2000). Export diversification and growth: an empirical investigation. *Applied economics letters*, 7(9), pp.559-562.

Athukorala, P (2017). Manufacturing exports from Sri Lanka: Opportunities, Achievements and policy options, *Working Paper No. 2017/*03, Australian National University.

Azman-Saini, Ahmad Zubaidi Baharumshah & Law, S.H. (2010). Foreign direct investment, economic freedom and economic growth: International evidence. *Economic Modelling*, vol. 27, no. 5, pp. 1079-1089.

Barro, R.J. (2001). Human capital and economic growth. *The American Economic Review*, vol. 91, no. 2, pp. 12-17.

Deardorff, A.V. (2007). The Ricardian Model, Working Papers 564, *Research Seminar in Internat*. Economics, the University of Michigan, School of Public Policy.

Hamed, K., Hadi, D. & Hossein, K. (2014). Export diversification and economic growth in some selected developing countries. *African Journal of Business Management*, vol. 8, no. 17, pp. 700-704.

Hermes, N., & Lensink, R. (2003). Foreign direct investment, financial development and economic growth. *The Journal of Development Studies*, vol. 40, no. 1, pp. 142–163.

Imbs, J. and Wacziarg, R. (2003). Stages of diversification. *American Economic Review*, 93(1), pp.63-86.

LBIBf 20(1), pp. 12-24.

Li, X., & Liu, X. (2005). Foreign Direct Investment and economic growth: An increasingly endogenous relationship, *World Development*, vol.33, no. 3, pp. 393-407.

Mohammad Affendy Arip, Lau, S.Y. & Bakri Abdul Karim (2010). Export Diversification and Economic Growth in Malaysia, University Library of Munich, *MPRA Paper No. 20588*

Neto, D.G. and Veiga, F.J. (2013). Financial globalization, convergence and growth: The role of foreign direct investment. *Journal of International Money and Finance*, 37, pp.161-186.

Saviotti, P.P. and Frenken, K. (2008). Export variety and the economic performance of countries. *Journal of Evolutionary Economics*, 18(2), pp.201-218.

Tang, C.F., Lai, Y.W. & Ozturk, I. (2014). How stable is the export-led growth hypothesis? Evidence from Asia's Four Little Dragons. *Economic Modelling*, vol. 44, pp. 229-235.

Thirlwall, A. P. (2003). Growth and development, with special reference to developing economies. Hound mills: Palgrave Macmillan.

Tsai C.L., Hung M.C. & Harriott K. (2010). Human Capital Composition and Economic Growth. *Social Indicators Research*, vol.99, no. 1, pp 41-59.

UNCTAD 2017, Revealed Comparative Advantage. UNCTAD, Geneva

World Bank 2010, *Trade Indicators*. World Bank, Washington.

World Bank, *World Development Report 1987*. World Bank, Washington.

Zhang, CG & Zhuang, LH. (2011). The composition of human capital and economic growth: Evidence from China using dynamic panel data analysis. *China Economic Review*, vol. 22, no. 1, pp. 165-171.

Zhang, K.H. (2001). Does foreign direct investment promote economic growth? Evidence from East Asia and Latin America. *Contemporary economic policy*, 19(2), pp.175-185.