

The Impact of Domestic and External Demand Factors on Malaysia Economic Growth

Umi Insyirah Pakasa¹, Yusman Yacob², Nelson Lajuni³, Dyg Siti Zahrah Abg Abdillah⁴, Lee Wen Chiat⁵

^{1,4}Faculty of Business and Management, Universiti Teknologi MARA Sarawak Branch, Mukah Campus, ²Sustainability Co-operative Business Group (RIG), Faculty of Business and Management, Universiti Teknologi MARA Sarawak Branch, ³Faculty of Business, Economics and Accountancy, University of Malaysia Sabah, ⁵Faculty of Business and Management, Universiti Teknologi MARA Sarawak Branch, Samarahan Campus
Email: umiinsyirah@uitm.edu.my, yusmanyacob@uitm.edu.my, nelsonl@ums.edu.my, dygsitizahrah@uitm.edu.my, wenchiat@uitm.edu.my

Abstract

Economic growth is the most important factor for poverty reduction and development of living standards in developing countries like Malaysia and the rapid economic growth is crucial in advancing the economy towards the Millennium Development Goals (MDGs). However, concerns rose about impending slower growth in Malaysia, and this leads to the question why Malaysia could not maintain a stable increase of economic growth. According to Bank Negara (2012), strengthening domestic demand has become a key driver of growth, underpinning the continued resilience of the economy despite the challenging external environment. On the other hand, as Malaysian economy has undergone transformation into a highly-open economy through greater trade and financial integration since the late 1970s, this study also examine the impact of external demand to the Malaysian economic. Thus, the main objective of this study is to develop an understanding of the impact of the domestic and external demand factors on economic growth in Malaysia using the time series data from 1960 until 2018. The method employed in this study includes Engle Granger Co-integration, Error Correction Model (ECM), and Multiple Linear Regression. This study revealed that household consumption, government spending, gross investment, and export have a positive relationship with economic growth. Meanwhile, import and the economic in Malaysia related negatively. The results of this research support the idea that Malaysia's growth is externally driven, rather than internally driven. This study also confirms that the variables have significant relationship with economic growth. Therefore, this study suggest that Malaysia need to review and update its high-tech export strategies, and rejuvenate its high-tech export industries to meet the rising challenges of exporting high-tech products to the world.

Keywords: Economic Growth, Household Consumption, Government Spending, Gross Investment, Imports and Exports

Introduction

Economic growth is the most major factor in reducing poverty and improving living standards in developing countries. Rapid economic growth is critical to driving progress towards the Millennium Development Goals (MDGs), and not just the first target of doubling the global proportion of living people on less than \$1 a day, as cross-country research and country case studies have shown (DFID, 2019). MDGs progress is threatened by slow economic growth which could affect the level of poverty and prosperity in a country. A rapid economic growth could fasten the progress towards economic growth because when the production in a country increases, it could give job opportunity to people. When there are many job opportunity in a country, the unemployment rate will decrease and it will reduce poverty and help to improve the standard of living. A high standard of living will reduce child mortality in a country and besides that it helps a country to attain universal primary education. Although no generally accepted interpretation has been accepted by now, most theorists think of economic growth as a process that engenders economic and social, quantitative and, in particular, qualitative changes that cause the national economy to cumulatively and sustainably increase its real national product. For the case of Malaysia, its economic performance has been one of the best in Asia, since gaining independence in 1957. According to World Bank (2020), the real gross domestic product (GDP) rose from 1957 to 2005 by an average of 6.5 per cent annually. Performance peaked through the mid-1990s in the early 1980s, as the economy experienced rapid growth that averaged nearly 8 per cent per year. The rapid growth was partly due to the phenomenal success of the export-oriented industrialisation policy. Following the 1997 to 1998 Asian financial crisis, Malaysia's economy has been on an uphill trend, averaging growth of 5.4 per cent since 2010, and is projected to achieve its transformation from a high-income middle-income economy by 2024 (World Bank, 2020).

In Asian economies, GDP growth was focused on continued domestic demand resilience in the midst of declining external demand (Bank Negara Malaysia, 2019). According to Kana and Aruna (2018) if the trade war goes full-blown in 2019, Malaysia may fall into recession over the next two years. One of the primary objectives of all countries around the world is to achieve high growth in order to improve the living standards of people and to achieve a high level of development. To achieve a high economic growth, Malaysia needs to ensure consistent growth over time. However, concerns rose about impending slower growth in Malaysia, and this leads to the question why Malaysia could not maintain a stable increase of economic growth. Major policy and political changes, partly arising from global trade tensions and Malaysia's recent change of government, have become sources of economic instability. Unpredicted supply shortages in the mining and agriculture sectors, as well as commodity exports, negatively affected the economic performance of Malaysia, leading in wider-than expected growth moderation.

Domestic demand remained to drive production, mostly supported by expenditure from the private sector. In particular, private consumption growth reported the fastest rate of 8.1 percent since 2012 (Bank Negara Malaysia, 2019). Although labor market stability will continue to support domestic demand, overall growth will be affected by moderating investment and external demand. Numerous empirical studies on export-driven growth for Malaysia have led to mixed and inconclusive findings. That may be due to the exclusion of domestic demand in the studies' bivariate or multivariate models used. Nevertheless, without export support, domestic demand alone could not provide for sustainable growth. Thus, the growth rate is slowly moderating. Despite a slight decline in growth momentum, private

consumption remains fairly resilient and is the most stable portion of domestic demand currently (Rutkovska, 2019).

Therefore, the general objective of this study is to examine the impact of domestic and external demand factors on economic growth. Based on this objective, the sub-objectives are formulated as follow;

- To analyze the long run relationship between domestic and external demand factors with economic growth in Malaysia.
- To examine the short run equilibrium relationship between domestic and external demand factors with economic growth in Malaysia.
- To determine the significant relationship between domestic and external demand factors with economic growth in Malaysia.

Literature Review

Domestic demand is considered as the total of household consumption, government spending and gross investment, and import while external demand is captured by exports of goods and services. Domestic demand to growth is called as domestic-demand-led growth (Sağlam & Egeli, 2018). Yeah (2017) in his study stated that, as compared to export-led growth (ELD), one of the advantage offered by domestic demand led growth (DDLG) which is reduced vulnerability to global demand shock. A DDLG strategy would result in more efficient and sustainable development given the growing uncertainty and unpredictability of foreign markets, and uncertainties about developed economies' ability to absorb all exports from developing countries. Another advantage offered is DDLG developing a more sustainable economy and leveraging capital more fully. Development of goods and services that satisfy global demand appears to be highly concentrated, resulting in unbalanced growth and more pronounced disparity in revenues. Besides that, DDLG offers prospects for greater growth efficiency. The goal of export growth to the extreme of mercantilism by which trade is perceived as a zero-sum game require the compromise of labor and human rights and environmental standards, resulting to a worse result than a DDLG approach that takes these concerns into consideration.

Household Consumption and Economic Growth

Household expenditure is the amount of final consumption expenditure resident households spend on meeting their daily needs, such as food, clothing , housing (rent), energy, transportation, long-lasting goods (notably cars), health, leisure, and various services (OECD, 2020). According to Handriyani et al. (2018), consumption may also be defined as a portion of household income used to fund the purchase of specific services and other needs. The level of consumption also varies depending on the rise and decrease of income, if income decreases then consumption fall. According to analysis of the impact of household consumption on economic growth by Handriyani et al. (2018), by using secondary data in the Province of North Sumatera of 10 years from 2006 to 2016, household consumption has a positive effect on economic growth in the Province of North Sumatera. The study result by Rafiy et al. (2018) shows that consumption has long-run and short-run impacts on economic growth. A study by Sun and Deng (2013) used yearly data from 1980 to 2010 of household consumption and economic growth in Hubei Province. The findings indicate a stable longterm relationship between household consumption and economic growth. The household consumption and economic growth here shows a strong correlation. The household consumption Granger cause the economic growth in the Hubei Province. Thus, the Hubei

government needs to completely harness the ability of household consumption to stimulate rapid economic growth.

Government Spending and Economic Growth

The link between government spending and economic growth has been debated for decades, and has not yet been clearly established (Hasnul, 2015). Government expenditure has been commonly used by government in many countries as fiscal policy but its impact on economic growth is uncertain. There are many economic theories that can be used in the relationship between government expenditure and economic development as frameworks. There has been a revival in economic analysis about the impacts of fiscal policy, as applied by direct government spending and tax rates. Generally, the economic study of fiscal policy consequences focuses on what is called the fiscal multiplier. The neo-classical models of growth indicate that fiscal policies could not bring about changes in long-term production growth. Neo-classical economists suggest that the long-term growth rate is driven by population growth, labor-force growth rate and exogenously determined rate of technological progress. Hasnul (2015) seeks to examine the link between government spending and economic growth for Malaysia by using the OLS methodology to assess the fixed effects of government spending on economic growth over the last 45 years. This analysis incorporates data from the time series for the period from 1970 to 2014. It is observed that there has been a negative correlation between government spending and economic growth in Malaysia over the last 45 years.

Investment and Economic Growth

Recent results conducted by Almsafir and Morzuki (2015) indicate that both public and private investments are highly correlated with GDP while FDI is insignificantly correlated with GDP. This research aims to examine the relationship between the FDI, public investment, private investment and GDP. All independent variables are stated to be positively related to the dependent variable with public investment which has the biggest impact on GDP, suggesting that investment is boosting Malaysia's economic growth. The aim of this paper is to evaluate the relation between domestic investment, foreign direct investment (FDI), and economic growth in Malaysia, using time series data from 1994 to 2013 for a span of 20 years. Manamba and John (2016) are performing a research to evaluate the causal effect of domestic private investment, public investment, foreign direct investment and economic growth in Tanzania during the period 1970 to 2014.

Export and Economic Growth

A number of studies have been carried out to examine the link between exports and economic growth. Different studies have shown that there is a clear association between exports and economic development, but others have shown no correlation. Furuoka (2007) explored the link of exports and economic growth in Malaysia. The study results do not support the strategy of "export-led growth". The result leads to the assumption that there is a 'virtuous loop' or mutually reinforcing relationship between Malaysia's exports and GDP in the long run. He also reported that findings showed unidirectional short-run causality between GDP and exports but not vice versa. This means that the increase in exports from Malaysia appears to be an effect, and not the cause, of increasing production in the country. Furuoka and Munir (2010) chose Singapore as a case study to explore the relationship between the roots of the East Asian Miracle (i.e. the reliance on exports) and economic

growth. The empirical results indicated that given a long-term negative relationship between export dependence and economic growth, Singapore's strong reliance on exports does not appear to have had negative effects on economic growth in the country.

Import and Economic Growth

A study by Kogid et. al (2011) uses two steps of the Engle-Granger bivariate cointegration and causality analysis, Johansen, Toda-Yamamoto and Hsiao's Granger procedures, to investigate the link between economic growth and imports in Malaysia from 1970 to 2007. Results indicate that there is no co-integration between economic growth and import but between economic growth and import there is bilateral causality. Results indicate that there is no co-integration between economic growth and import but between economic growth and import there is bilateral causality.

Methodology

To measure the economic growth in Malaysia, a set of variables of domestic and external demand measuring are used. The set of the explanatory variables includes household consumption, government spending, gross investment, export and import. Meanwhile, economic growth is the dependent variable in this analysis. This study employs three econometric models to achieve the empirical results. The first econometric model analyses the long run and short run relationship between domestic and external demand with economic growth by using the Engle Granger Cointegration and Error Correction Model (ECM). Cointegration means a linear combination of two or more time series may be stationary, while being individually non-stationary. The Augmented Engle-Granger (AEG) test can be used to determine whether two or more time series co-integrate. To illustrate the test, we got the regression below:

$$GDP_t = \beta_1 + \beta_2 CH_t + \beta_3 GS_t + \beta_4 GI_t + \beta_5 EX_t + \beta_6 IM_t + u_t$$

If the variable is individually nonstationary, there is the possibility that the regression is spurious. If the regression is stationary, they are $I(0)$ they are stationary around a deterministic time trend, the trend here being linear. That is, the residuals are $I(0)$ plus a linear trend. A time series may contain both a deterministic and stochastic trend. Now that we have our residuals and have differenced our data, we can attach the residuals to our data set and lag them by one period to estimate our ECM as:

$$\Delta LGDP_t = \alpha_0 + \alpha_1 \Delta LCH_t + \alpha_2 \Delta LGS_t + \alpha_3 \Delta LGI_t + \alpha_4 \Delta LEX_t + \alpha_5 \Delta LIM_t + \alpha_2 u_{t-1} + \varepsilon_t$$

Where ε_t is a white noise error is term and u_{t-1} is the lagged value of the error term.

ECM equation states that $\Delta LGDP$ depends on ΔLCH , ΔLGS , ΔLGI , ΔLEX , ΔLIM and also the equilibrium error term.

Then, to determine the significant relationship between real GDP and its variables; household consumption, government spending, gross investment, export and import, this study applying the multiple linear regression in order to evaluate the independent effects of each explaining variable on the dependent variable. The model of the economic growth has been derived from the domestic and external demand led theory. Domestic demand is household consumption plus government spending plus gross investment plus import. Meanwhile, the external demand is export. Based on the theory above, the rapid increases in household consumption, government, gross investment, exports and imports, will increased the economic growth. Thus, this model consist of six variables which is Gross Domestic Product (GDP) as the dependant variable, and the explanatory variables includes the

household consumption (CH), government spending (GS), gross investment (GI), export (EX) and import (IM).

$$GDP = f(CH, GS, GI, EX, IM)$$

The econometric model is specified as follows:

$$GDP_t = \beta_1 + \beta_2 CH_t + \beta_3 GS_t + \beta_4 GI_t + \beta_5 EX_t + \beta_6 IM_t + u_t$$

Where GDP is a real GDP;

CH is a real volume of Consumption of households;

GS is a real volume of Government spending;

GI is a real volume of Gross Investment;

EX is a real volume of export; IM

is a real volume of import;

β_0 is the constant term, 't' is the time trend, and 'ε' is the random error term

Findings and Discussion

Based on ADF results, LGDP, LCH, LGS, LGI, LEX and LIM are individually stationary at 1st difference, that is, they are I(1). Then, Error Correction Model (ECM) can be derived. Unit root test on the residuals are performed

Table 4.1

Engle-Granger Cointegration summary

Engle-Granger Cointegration summary		Statistical τ value	Critical τ value (At 5%)	Critical τ value (At 10%)	Prob.*	Remarks
At level	Without drift	-3.563599	-1.946654	-1.613122	0.0006	I(0)
	With drift	-3.521209	-2.913549	-2.595033	0.0108	I(0)
	With drift and trend	-3.471240	-3.490662	-3.173943	0.0523	I(0)

*significant at 10% significant level

The residuals of the estimated model should be found to be stationary. If the residuals are stationary means that the considered variables are cointegrated or they have a long-run relationship or long-run equilibrium relationship between them. The Engle and Granger test is done by first running the co-integrating regression. Table 4.1 above shows the result for Engle Granger cointegration at level. As shown in table 4.1, p-value for random walk without drift, with drift, with drift and trend are at level is 0.0006, 0.0108, and 0.0523 respectively. Therefore, the residual from the regression are stationary at 10 percent significance level. This can be supported by comparing the critical τ value with statistical τ value. Based on the table, the Engle granger asymptotic 5 percent and 10 percent for random walk without drift at level are about -1.95 and -1.61 respectively.

Therefore, the residual from the regression are stationary at 10 percent. As for random walk with drift, the Engle granger asymptotic 5 percent and 10 percent are about 2.91 and -2.60, respectively. Thus, the residual from the regression are stationary at 10 percent. Lastly, for random walk with drift and trend, the Engle granger asymptotic 5 percent and 10 percent are about -3.49 and -3.17, respectively. Therefore, the residual from the regression are also stationary at 10 percent. In short, it can be concluded that the residuals at level are stationary. Therefore, the residual from the regression are stationary at 10 percent significance level.

Since the residuals are stationary in level, they are $I(0)$. Therefore, all series are cointegrated and have a long run relationship.

Based on Table 4.1, all the series LGDP, LCH, LGS, LGI, LEX and LIM are cointegrated. Thus, there is a long-term relationship or equilibrium, relationship between the series. Granger representation theorem states that the relationship between the variables can be expressed as ECM if the variables are cointegrated. The following model was used:

$$\Delta LGDP_t = \alpha_0 + \alpha_1 \Delta LCH_t + \alpha_2 \Delta LGS_t + \alpha_3 \Delta LGI_t + \alpha_4 \Delta LEX_t + \alpha_5 \Delta LIM_t + \alpha_6 u_{t-1} + \varepsilon_t$$

Table 4.2

Error Correction Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.004787	0.001918	2.495830	0.0158
D(LOG_CH)	0.245355	0.059778	4.104410	0.0001
D(LOG_GS)	0.148296	0.033267	4.457741	0.0000
D(LOG_GI)	0.157535	0.021562	7.306007	0.0000
D(LOG_EX)	0.409400	0.043055	9.508815	0.0000
D(LOG_IM)	-0.199745	0.037906	-5.269464	0.0000
ECM(-1)	-0.448717	0.092725	-4.839226	0.0000

Even though the series seem are equilibrium, but, there may be disequilibrium in the short run. Thus, the error term can be treated as the “equilibrium error” and this term are used to tie the short term behaviour of the variables to the long-run value. The error correction coefficient α_6 is expected to be negative. Based on table 4.2 above, the value of α_6 is -0.448717. Statistically, the ECM term is significant, since the p-value is 0.0000 which is less 0.01 (significant at 1 percent). Thus, it shows that ECM term is significant. As shown in table 4.2, the result suggesting that GDP adjusts to CH, GS, GI, EX and IM with a lag; only about 44.8 percent of discrepancy between long-term and short-term GDP is corrected within a year. From the regression, it shows that the short-run household consumption is about 24.5 percent, while the short-run government spending, gross investment, export, and import are about 14.8 percent, 15.8 percent, 40.9 percent, and 20 percent respectively. Table 4.3

Multiple Linear Regression result

	Coefficient	Std. error	t-Statistic	Prob.
C	1.259885	0.068811	18.30924	0.0000
CH	0.297291	0.027345	10.15312	0.0000
GS	0.235394	0.023184	10.15312	0.0000
GI	0.233292	0.011795	19.77862	0.0000
EX	0.542426	0.023654	22.93133	0.0000
IM	-0.377020	0.029967	-12.58132	0.0000
R-squared	0.999794	Mean dependent var		11.42106
Adjusted R-squared	0.999775	S.D. dependent var		0.466577
S.E. of regression	0.007003	Durbin-Watson stat		0.808770
Sum squared resid	0.002599	Prob(F-statistic)		0.000000
F-statistic	51482.84			

$$\ln \widehat{GDP}_t = 1.2599 + 0.2973 \ln CH_1 + 0.2354 \ln GS_2 + 0.2333 \ln GI_3 \\ + 0.5424 \ln EX_4 - 0.3770 \ln IM_5$$

As these results show, the elasticity of GDP with respect to CH is 0.2973, suggesting that if household consumption goes up by 1 percent, on average, the GDP goes up by 0.2973 percent. The relationship between household consumption and economic growth is significant at 99% confidence level. This result is supported by Handriyani et al (2018) as their study found that household consumption has a positive and significant effect to economic growth. The study was conducted for data from 2006 to 2016 in province of North Sumatra. Secondly, the elasticity of GDP with respect to GS is 0.2354, suggesting that if government spending increases by 1 percent, on average, the GDP increase by 0.2354 percent. It is significant at 99% confidence level. The increase in government spending will lead to an increase in aggregate demand (AD). Thus, in short term, it can cause a higher growth. This is in contrast with the finding by (Hasnul, 2015). In his study, for the last 45 years, there is a negative correlation between government expenditure and economic growth in Malaysia. However, the result appears to be in line with a study by Jiranyakul and Brahmasrene (2007) who conducted a study in Thailand from year 1993 until 2004. It is found that government spending confirms a strong positive impact on economic growth.

Thirdly, the elasticity of GDP with respect to GS is 0.2354, suggesting that if gross investment goes up by 1 percent, on average, the GDP goes up by 0.2354 percent. As one of the component of aggregate demand, investment influences the rate of economic growth. Thus, an increase in investment should be a boost to economic growth. This result is similar to a study carried out by Chidoko and Sachirarwe (2015) from 1980 to 2013 in Zimbabwe that has been discovered that investments positively affect economic growth. Fourthly, the elasticity of GDP with respect to EX is 0.5424, suggesting that if export increases by 1 percent, on average, the GDP increase by 0.5424 percent. The finding on the positive relationship between export and economic growth is similar to a study Fatemah and Qayyum (2018) in Pakistan. The study proves that export is an important and significant determinant of economic growth in Pakistan. As for import, the elasticity of GDP with respect to IM is -0.3770, suggesting that if import decreases by 1 percent, on average, the GDP increase by 0.3770 percent. This is consistent with Uddin and Khanam (2017) on their study in Bangladesh using

time series data from 1981 to 1992. From the analysis, it is found that import is negatively related with GDP growth.

Conclusion

The results of this research support the idea that Malaysia's growth is externally driven, rather than internally driven. It has several policy implications. Malaysia's future growth is largely dependent on the continued success of the electrical machinery that has been attracted to it in recent years. Thus, external competitiveness is a key issue for the Malaysia economy. Malaysia's slow success in growth over the past 9 years has prevented it from competing effectively against other fast-moving emerging economies, such as Vietnam (Vun, 2019). Therefore, Malaysia needs to keep up with the worldwide rise in demand for high-technology to produce the high value added products. In the future, Malaysia need to review and update its high-tech export strategies, and rejuvenate its high-tech export industries to meet the rising challenges of exporting high-tech products to the world. In order to move toward a high-tech, employers in Malaysia need to reduce dependency on low-skilled foreign workers. To be a high income country, Malaysia needs to push the economy to rely more on high-tech. Malaysia also need to reduce its dependency on import goods especially for the foods products. Malaysia importing too much products that are available locally especially for the grown foods such potatoes, chillies, rice and so forth. This issue is important to prevent the food security crisis in the future. Therefore, government needs to encourage local suppliers to promote local products. More research on this topic needs to be undertaken before the association between domestic and external demand factors with economic growth is more clearly understood. In future investigations, it might be possible to add or use a different variable in which it could explain the economic growth. Further research should be done to investigate the impact of technological innovation to economic growth in Malaysia. In a globalizing economic world, this is an important issue for future research because the reasons for the disparities in economic growth and income inequality between countries are explained by the technological differences.

References

- Almsafir, M. K., & Morzuki, Z. M. (2015). The relationship between investment and economic growth in Malaysia. *Journal of Empirical Economics*, 4(2), 116-126
- Bank Negara Malaysia. (2012). *Bank Negara Annual report of 2012*. Bank Negara Malaysia.
- Bank Negara Malaysia. (2019). *Bank Negara Annual report of 2018*. Bank Negara Malaysia
- Chidako, C., & Sachirarwe, I. (2015). An analysis of the impact of investment on economic growth in Zimbabwe. *Review of Knowledge Economy*, 2(2), 93–98. <https://doi.org/10.18488/journal.67/2015.2.2/67.2.93.98>
- Fatemah, A., & Qayyum, A. (2018). Modeling the impact of exports on the economic growth of Pakistan. *Turkish Economic Review*, 5(1), 56-64.
- Furuoka, F. (2007). Do exports act as “engine” of growth? Evidence from Malaysia. *Economics Bulletin*, 6(38), 1-14
- Furuoka, F., & Munir, Q. (2010). Does export dependency hurt economic development? Empirical evidence from Singapore. *Economics Bulletin*, 30(1), 204-218.
- Hasnul, A. G. (2015). The effects of government expenditure on economic growth: the case of Malaysia. *Munich Personal RePEc Archive*, (71254), 1–16.
- Jirayankul, K., and Brahmasrene, T. (2007). The relationship between government expenditures and economic growth in Thailand. *Munich Personal RePEc Archive*.

- Kana, G., & Aruna, P. (2018, Aug 07). Experts: US-China trade war may have negative impact on Malaysia. *TheStar*.
<https://www.thestar.com.my/news/nation/2018/08/07/experts-uschina-trade-war-may-have-negative-impact-on-malaysia/>
- Kogid, M., Mulok, D., Kok, S. C., Lily, J. (2011). Does import affect economic growth in Malaysia. *The Empirical Economics Letters*, 10(3), 297-307.
- Rutkovska, A. (2019). *Domestic demand remains the only pillar supporting GDP growth*. Macroeconomics.
- Saglam, Y., & Egeli, H. A. (2018). A comparison of domestic demand and export-led growth strategies for European Transition Economies. *Foreign Trade Review*, 53(3), 156–173.
<https://doi.org/10.1177/0015732517734755>
- Yeah, K. L. (2017). Domestic demand-driven growth: Analytical perspectives and statistics needed. *Advances in Economics and Business*, 5(3), 109-128.
<https://doi.org/10.13189/aeb.2017.050301>
- Handriyani, R., Sahyar, S. S., & Arwansyah, M. (2018). Analysis the effect of household consumption expenditure, investment and labor to economic growth: A case in province of North Sumatra. *Studia Universitas Economics Series*, 28(4), 45-54.
<https://doi.org/10.2478/sues-2018-0019>
- Rafiy, M., Adam, P., Bachmid, G., & Saenong, Z. (2018). An analysis of the effect of consumption spending and investment on Indonesia's economic growth. *Iranian Economic Review*, 22(3), 753–766. <https://doi.org/10.22059/ier.2018.66642>
- Sun, X., Deng, L. (2013). An empirical analysis on the influence of household consumption on economic growth in Hubei province. *The 19th International Conference on Industrial Engineering and Engineering Management*, 45-51. https://doi.org/10.1007/978-3642-38427-1_6
- Uddin, H., & Khanam, M. J. (2017). Import, export and economic growth: The case of lower income country. *IOSR Journal of Business and Management*, 19(1), 37-42.
<https://doi.org/10.9790/487X-1901053742>
- World Bank. (2020). *Malaysia: Leveraging knowledge for development*. The World Bank In Malaysia.