Economic stagnation in emerging market countries: should this justify Keynes’s law?

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Abstract: This study aims to determine the aggregate demand factors that affect economic stagnation in middle-income emerging market countries, and whether Keynes’s law can be a solution to solve the problem with increase demand. Using panel data from official sources such as the World Bank, several factors were tested to determine the effect on economic stagnation, at the 2010–2015 and 2010–2016 periods. By employing panel data modelling (with fixed effect model), the findings suggest that the decrease in household consumption, weak foreign investment, inefficient government spending and decreased export competitiveness have a significant positive effect on economic stagnation, while a low inflation rate has an insignificant effect on household consumption, as well as high lending interest rate have an insignificant effect on the decrease in the inflow of foreign direct investment. Therefore, Keynes’s law must be applied appropriately by increasing aggregate demand to encourage declining economic growth through government interference.

Keywords: stagnation; emerging market; aggregate side; Keynes’s law.


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Purbayu Budi Santosa is a Professor of Economics at the Faculty of Economics and Business at Diponegoro University, Semarang, Indonesia. His research interest is on socio-economic agriculture and philosophy of economics.
1 Introduction

Does the global economic stagnation (ES) continue until late 2016? Because, the world economic growth in 2016 is slowing and lower than previously estimated, that is only at 2.4% from 3.9% forecast. Slowing growth here means slower than projected official institutional/economic growth potential, although its nominal growth rate may be higher than in other countries with no ES. The stagnation of the world economy can lead to a decline in the level of people’s welfare, as it is usually accompanied by an increasing rate of unemployment.

The role of emerging market countries is important in the context of this global ES, as the weakening of economic growth in emerging market countries can disrupt the recovery of world economic growth. One of factors that affect ES in emerging market countries is the 2008 financial crisis that its economic impact still exists in some countries to date. The financial crisis causes private capital flows declined sharply into the destination country, but remittance flows have remained resilient (Ratha et al., 2010), although when the economic crisis occurs in industrial countries, the capital flows from industrialised countries go to secure countries (Prasad et al., 2005). However, in the case of recent years, the flow of funds does not automatically flow to the emerging market countries, because those countries are also experiencing stagnant economic conditions.

Similar to economic growth, the factors that affect ES can be seen in aggregate demand (AD) and aggregate supply (AS). The model of AD and AS are models in macroeconomic theory that explain the relationship between price and output levels, as explained by Keynes. Changes in prices will lead to changes in demand, and prices are strongly influenced by the rate of inflation. Table 1 shows the relationship between one components of AD that affects ES in China. Based on World Bank data, the rate of economic growth in China continued to decline until 2016, on the other hand household expenditure showed a downward trend, especially since 2012–2016. This suggests a possible link between declining household consumption spending and economic growth.

Table 1  Growth and household final consumption expenditure in China

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<tr>
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<tr>
<td>Growth (%)</td>
<td>10.6</td>
<td>9.5</td>
<td>7.9</td>
<td>7.8</td>
<td>7.3</td>
<td>6.9</td>
<td>6.7</td>
</tr>
<tr>
<td>HH/GDP (%)</td>
<td>10.59</td>
<td>11.63</td>
<td>14.677</td>
<td>9.57</td>
<td>7.86</td>
<td>8.21</td>
<td>8.16</td>
</tr>
</tbody>
</table>

Source: World Bank (2017c)

So far, research and discussion on ES after the 2008 financial crisis is more frequent in the developed countries such as the USA and European countries. Larry Summer (2016)
discusses the ES in the USA caused by inflation and low interest rates, some institutions such as the World Bank, Morgan Stanley and the IMF discuss ES focusing on a number of causes (such as reduced investment, declining exports), and some other researchers see ES in single country (Figueira, 2017; Taylor and Tyers, 2017). However, the discussion of ES in this study takes the object in middle-income emerging market countries, and explores it from the demand and monetary side, which are different and complementary findings in the USA or European countries.

This study aims to prove whether ES in middle-income emerging market countries will continue, whether the components of AD side are more influential, or whether the basic factors that affect price such as loan interest rates and inflation rate have substantial effect on ES, household consumption and foreign direct investment (FDI) inflow? The results of this study will be beneficial for policy makers in determining policies against the ES in many countries.

2 Literature foundation

The onset of the financial crisis in the USA and Europe after the fall of Lehman’s financial and several other financial institutions caused the world economy to decline, including in emerging market countries. The ‘emerging market’ country is a country that has some characteristics of ‘emerging markets’, but does not meet the standards to become a developing market. These include countries that can be a market for developed countries (with low to high middle income) in the future or in the past, including India, China, Russia, Brazil, South Korea, Mexico, Indonesia, Turkey, Saudi Arabia, Iran. The emerging markets are also part of the BRIC group (Brazil, Russia, India, China), which later developed into BRIICS (Brazil, Russia, India, Indonesia, China and South Africa)\(^1\). While ES or economic stagnancy occurs when economic growth is slow (traditionally measured based on GDP growth over a given period). The ‘slower’ is a smaller economic growth rate than the potential economic growth predicted by macroeconomic experts. The condition of economic stagnant occurs, it can also be suspected when economic growth is less than 2–3% per year\(^2\). Prolonged ES is often referred to as secular stagnation, where according to L Summer\(^3\), secular stagnation is a long period where satisfactory growth can only be achieved with unsustainable financial conditions, which concept is taken from the term secular stagnation mentioned by Alvin Hansen in 1938.

There are several theories about ES to see the current state of ES. According Ucak (2015), one of the causes of declining economic growth based on Adam Smith’s classical theory is that global institutions structure and government roles do not operate optimally, apart from division of labour, education, human capital, learning by doing, increasing of returns to scale, technological change and externalities. Ricardo discusses the economic growth associated with the diminishing return of labour for employing labour in infertile soil, resulting in lower profits and stagnant capital accumulation. Malthus said that declining of economic growth is due to a lack of public demand, so there are resources that accumulate and unused. While according Summer (2015), infrastructure and private investment are the best ways to both minimise the risk of secular stagnation and raise demand, Summer also indirectly states that public spending is rather than private spending.

According to Krugman (2014), L. Summer has stated earlier in 2013 that secular stagnation in the USA is caused by a liquidity trap where there is a trend of interest rate
cuts while inflation rates are also low, Krugman also adopted Alvin Hansen’s opinion in 1934 that secular stagnation is also influenced by population growth. Another opinion says that the declining economic growth is influenced by export performance (Adam and Bevan, 2006), where export performance is usually measured by the growth of volumes/export sales (Beleska-Spasova, 2014). The World Bank (Prospects, 2017) was stated that stagnant global trade, weak investment, and high uncertainty for the economy contribute to secular stagnation.

As described above, ES is influenced by both the AD and the AS side. It is interesting for Keynes’s thought that demand (AD) creates its own supply (AS), where this law is contrary to Say’s law that AS will create AD (Keynes, 1937). According Keynes, one reason of Say is that when the producer produces the goods he will immediately sell them, and the proceeds from his sale will soon be bought for other items he needs, because he does not want the value of money to decrease, so the demand for other goods increases. For the record, at that time money only serves as a means of exchange. While post-economic depression of the 1930s, Keynes argued otherwise, that AD creates AS. Demand occurs when there is an individual’s tendency to consume and the demand has an impact on the company’s tendency to invest, assuming that the economy is not full-employment, so that increasing demand will increase supply.

### 2.1 AD side

The national economy can be studied from the approach of development outcomes such as national income. There are three approaches to measuring a national income, namely expenditure approach, value-added approach and income approach (De La Grandville, 2016). The expenditure approach is the most natural approach and arguably the most useful approach from an informative point of view, since we are interested in economic growth calculated from the value of goods and services produced in an economy over a period of time. Economic growth is a change of real gross domestic product (GDP) in a certain period, where GDP is the sum of private consumption, public consumption, investment, exports minus imports. Private consumption refers to the consumption of individual such as household consumption; public consumption is that of the state (at the national or at the local level); investment consists of stock of inventory and fixed investment, where inventories may have accumulated in the producers’ hands; the rest of the world are exports and imports. That component is associated with commodity prices, political instability, weather, interest rates, consumer confidence, real wages that are heavily influenced by inflation, asset prices and so on. Mathematically, this equation is:

\[
Q = C + I + G + (X - M)
\]

### 2.1.1 Household expenditure

Pointing to Malthus’s theory and equation (1), ES is caused by a lack of public demand, in other words there is a decline in household consumption expenditure, or a declining public consumption. Decrease in demand for goods and services by households or a decrease in household consumption expenditure causes goods produced by producers to be unsold and piled up, so that producers no longer produce. Because producers do not produce anymore, the amount of goods and services produced in the economy declines, consequently GDP also decreases. Household expenditure and household demand should
be increased so that economic growth will increase. Demand creates its own supply not only in the money commodity but also in the commodity of goods. So if the demand for goods by households increases, then economic growth will increase as well. This condition occurred in the USA as stated by Broda and Parker (2014), where when low-income households received economic stimulus payments in 2008, at the beginning of payment, the average household’s spending increased, but then declined in subsequent quarters, so that US economic growth became stagnant. The same thing happened in the decline in the AD of the Brazilian economy which caused a slowdown in economic growth in 2011–2014 (Serrano and Summa, 2015).

2.1.2 Efficiency of government spending

The size and type of government expenditure can affect economic growth. In war countries (Egypt, Israel and Syria), there is a negative causality relationship between total government spending on economic growth in the long run, but if government spending is separated in military spending and spending on civil society, then there is a negative causality relationship between military expenditure and economic growth, and there is a positive causal relationship between spending on civil society on economic growth in Israel and Suriah (Abu-Bader and Abu-Qarn, 2003). Eltejaei (2015) suggest that financing government expenditures by non-oil revenue has positive effects on economic growth in Iran as an oil-producer country. But Bose et al. (2007) found that the effect of the share of government capital expenditure in GDP on economic growth is not significant in 30 developing countries over the 1970s and 1980s, and only education spending has a positive effect on economic growth.

Based on Smith’s idea of ineffectiveness of the operation of political/state institutions, fiscal policy is one of the political tools affecting economic growth, including the expansionary fiscal policy. Government spending is one of the tools in the expansionary fiscal policy, which consists of subsidies, transfer payments to improve people’s welfare, government projects, salary of government.

In relation to government spending, most of the government expenditure is a mandatory budget, of which the type and magnitude are determined by law. This mandatory budget often burdens the government budget when the revenue-side conditions are much smaller than the expenditure side. Therefore, the government of a State often implements tight fiscal policy, by cutting or reducing pre-planned budget expenditures. Thus, tight fiscal policy is a budgetary spending policy of the government spending that is trimmed or subtracted from previous planning by reason of balancing with its acceptance. Budget cuts or cuts from the original plan could reduce revenues, particularly in developing and poor country, still require government budget stimulus to improve economic performance. Tight fiscal policy can be seen from the % of budget reductions compared to the previous budget. The downward domestic revenue has resulted in the government taking other sources of financing such as debt sourced both domestically and abroad.

According to Coelli et al. (2005), the optimal budget can be seen from allocation efficiency and technical efficiency. Technical efficiency is measured from the pure relationship between input and output within the framework of production possibilities whose purpose is ‘best practice’, whereas allocation efficiency measures efficiency more to ‘economic sense’ by including cost (budget) and benefits to achieve particular outputs. Government spending is often expressed by % of GDP. This measure has the effect of
some interpretations, for example, the greater the government’s expenditure on GDP, the higher the government’s debt, especially in the current state of the crisis, and it may mean that the government has tightened its expenditures because of the small amount of tax revenues. According to the online article Investopedia, in times of debt crisis, one measure used by investors to track global government expenditure controls is government spending expressed as a percentage of GDP. If the ratio of government spending on GDP is increase, then investor’s confidence in that country decrease. This means that if the ratio of government spending to GDP is increase as economic growth declines, then the government’s fiscal allocations is inefficient.

2.1.3 The weakness of investment

Investment has the function of increasing economic growth, as in theories of economic growth are often studied. While the weak investment is meant here is the condition of investment in a country whose growth is declining. The reasons for the weak growth of investment in a country by the World Bank (World Bank Group, 2017) are, among others, the prospect of low economic growth, commodity trade shocks for exporters, the reduction and evaporation of capital flows, policy uncertainties in the main sectors of the economy, and the rapid accumulation of personal debt. Otherwise, strong investment causes real GDP growth to increase, political stability, improved terms of trade, reduced government debt.

Investment can be sourced from domestic and overseas. The influence of foreign FDI according to some researchers is still ambiguous. According to Alfaro and Johnson (2012), there is no relationship between FDI and economic growth in the primary sector, but in the manufacturing sector there is still a correlation in OECD countries. Jahfer and Inoue (2014) find that FDI is less important for economic growth in Sri Lanka than financial development. Al Mamun and Sohag (2015) found that the effect of FDI on economic growth is less effective than the domestic capital formation in LDCs in the long run.

In the short term, uncertainty in investment growth will lead to the uncertainty of global financial markets, political uncertainty at home and abroad, whereas in the long run it will lead to slow capital accumulation, weak productivity growth, slow income growth. The weakening of FDI is marked by the steady decline in the number of FDIs entering a country, as investors do not / put off investing. As stated by Levine (1997) that financial development will be affected and affect long-term economic growth.

2.1.4 The export competitiveness

In some studies, there is a relationship between a country’s exports and its economic growth. For example, in the long run period, there is a relationship between exports and economic growth in Sub-Saharan African countries in the period 1985–2014 (Ee, 2016). But the relationship between export and growth rate is not same for all developing countries. According Yüksel and Zengin (2016), there is not any relationship among exports and economic growth in Brazil and Mexico, but on the other hand, he suggest that increase in export causes higher growth rate in Argentina.

Perhaps more needed is export competitiveness. Export competitiveness is the ability of a country in its export activity, as measured by among others the export competitiveness index issued by certain rating agencies. The rating agency ranked the
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index of the competitiveness of a country’s exports by considering several dimensions. One of the rating agencies is The International Trade Center (ITC), which issued The ITC (TPI).

Another measure to see the competitiveness of their exports is to look at export growth itself. The growth of a country’s exports to the growth of world exports can illustrate the competitiveness of exports of the State concerned, which may also reflect whether they are competitive or not, whether the State needs to expand the market or not, whether they are in the developing sector or not, whether trade, industry, and other domestic policies trigger or weaken exports. The World Bank measures the competitiveness of a country’s exports with measuring export competitiveness (MEC).

2.1.5 Factors affecting AD

AD is influenced by several factors, such inflation rate and lending interest rate (LIR). If the LIR rises, assuming the amount of money supply is fixed, then the demand for money for investment, working capital, and consumption will decrease, and vice versa. Another factor is the real wage that is affected by inflation. If inflation rises, real wages will decline, and demand for output also falls. Consumer confidence is another factor that also affects AD, where if consumer confidence rises, demand for output also rises. Other factors such as exchange rate and asset prices also influence AD. According to X, financial development is more important for economic growth in Sri Lanka than direct foreign investment.

Economically, inflation is a general increase in prices and fall in the purchasing value of money. The Inflation can be distinguished from the level and rate of inflation, difference matters as regards the size and the timing of the cost of inflation (Andrés and Hernando, 1999). If inflation is low, there are actually many advantages, such as improving the competitiveness of domestic products for export, encouraging investment because it is easier for entrepreneurs to predict costs, prices and wages, increase real wages and so on, so that inflation greatly affects economic conditions. However, low inflation caused by demand pressures will lead to deflationary pressures, which makes it difficult to encourage stagnant growth. Some Central Banks are targeting an interest rate of 2% per annum, but Ball (2014) says the rate has not been able to boost growth due to a downturn in the economy, and that a 4% inflation rate will provide many benefits and not harm the economy. According to Sarel (1996) before, there is evidence of significant structural breakthroughs in a function linking inflation to economic growth, where the breakthrough is expected to occur when the inflation rate is more than 8%, because below that level, inflation has no effect on growth, whether it is small or has a positive effect. Some countries are successful in their economies with policies targeting inflation, such as Chile in 1990 by setting an inflation target of more than 20% (Mishkin, 2000).

LIR is the bank rate that usually meets the short- and medium-term financing needs of the private sector. This rate is normally differentiated according to creditworthiness of borrowers and objectives of financing. The terms and conditions attached to these rates differ by country, however, limiting their comparability. The banking and financial system can boost economic growth. Banks can participate in increasing growth through the channelling of funds collected. A strong financial system can increase economic activity and welfare, but instability can disrupt financial activity and impose widespread economic costs. Based on the theory of money demand, that low interest rates will increase demand for money both for consumption and investment and so on, thus
encouraging economic growth. But much is happening in this world, where according to Summers (2014) low interest cases in the USA have not been able to raise economic growth until 2017.

3 Methodology

The type of data used in this study is quantitative data in the form of numbers in the actual sense, especially the ratio data. Panel data were used in this study, which included data from emerging market countries with low and high middle income per capita in the period 2010–2016. Data are collected from various official sources, including the World Bank, the World Trade Organization (WTO), the ITC and other relevant sources.

The equation of panel data regression model in this research is used to analyse the influence of AD to ES to see changes in factors affecting ES in emerging market countries, and to analyse factors that being influence by inflation rate (INFL) and LIR in two time periods (the periods 2010–2015 and 2010–2016). Several tests were performed to achieve the BLUE model. Model specification test used Chow-test, Hausman-test and Lagrange multiplier-test to choose the best model, whether choose common effects model, fixed effects model or random effect model. In addition, the detection of the symptoms of classical assumptions is also done, and the last hypothesis test to determine whether the independent variables affect the dependent variable.

The object sample are 15’s emerging market countries with lower (LM) and upper (UM) middle income on the period of research 2010 to 2016, include Argentina (UM), Brazil (UM), China (UM), Egypt (LM), Indonesia (LM), South Korea (UM), Malaysia (UM), Mexico (UM), Philippines (LM), Russian (UM), South Africa (UM), Thailand (LM), Turkey (UM), Vietnam (LM). Some emerging market countries are not included in this study sample, because they have a high per capita income levels (e.g., Saudi Arabia, Singapore, etc.) and other causes.

Hypothesis (1) proposed in this research is whether the factors of AD side have an effect on ES in emerging market countries. The AD side consists of household expenditure (HH), FDI, government expenditure (GOV) and export competitiveness (MEC). Hypothesis (2) is whether the inflation rate and the LIR have effect on ES, house expenditure and FDI.

Based on the hypothesis, the equations to be tested in the periods 2010–2015 and the periods 2010–2016 is:

\[ ES_{it} = \alpha + \beta_1 HH_{it} + \beta_2 FDI_{it} + \beta_3 Gov_{it} + \beta_4 MEC_{it} + \epsilon_{it} \]  

\[ ES_{it} \] The economic stagnation in countries \( i \) years \( t \) (% economic growth)

\[ HH_{it} \] The household expenditure in countries \( i \) years \( t \) (% expenditure growth)

\[ FDI_{it} \] The foreign direct investment in countries \( i \) years \( t \) (log FDI in US$ billion)

\[ Gov_{it} \] The efficiency of Gov. spending in countries \( i \) years \( t \) (% Gov. spending to GDP)

\[ MEC_{it} \] The measuring export competitiveness in countries \( i \) years \( t \) (index).
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\[ ES_{it} = \alpha_{it} - \beta_1 INFL_{it} - \beta_2 LIR_{it} + e_{it} \]  
(3)

\[ HH_{it} = \alpha_{it} - \beta_1 INFL_{it} - \beta_2 LIR_{it} + e_{it} \]  
(4)

\[ FDI_{it} = \alpha_{it} - \beta_1 INFL_{it} - \beta_2 LIR_{it} + e_{it} \]  
(5)

\( INFL_{it} \) The inflation rate in countries \( i \) years \( t \) (% annual growth)

\( LIR_{it} \) The lending interest rate in countries \( i \) years \( t \) (% real interest rate).

4 Result and discussion

Based on data collected from various sources, the average of annual economic growth from 15 emerging market countries during 2010–2016 is as follows:

Figure 1 Growth of 15 emerging market countries (see online version for colours)

![Graph showing economic growth](image)

Source: World Bank (2017a)

Figure 1 shows that the average of annual economic growth in the 15 emerging market countries studied has a downward and low tendency, from an average of 7% per year to 3%. In other words, the ES in these countries continues until 2016. In order to see how the future of economic growth, it is important to analyse the movement of the factors that influence it, whether it has a tendency to support or weaken economic growth. On an average annual basis, the movement of factors suspected to affect the low economic growth in these countries can be seen in Figure 2 and Figure 3. However, these factors need to be examined whether they have significant effect.

Figure 2 shows that there is a serious downward trend in household consumption (HH) and export competitiveness (MEC), while the decrease in FDI starts from 2013, and the ratio of government expenditure to GDP continues to increase in emerging market countries developing. The decline in household consumption has resulted in lower economic growth, especially in countries whose growth is heavily dependent on household consumption such as Indonesia. An increase in ratio of Government spending to GDP can mean that fiscal policy is inefficient because economic growth is declining. Meanwhile, the declining export competitiveness index reflects a decline in export capability that dampened economic growth. The decline in exports is not only influenced by the supply side but also from the demand side of the destination countries which recently affected by the economic downturn, while not sharply reducing FDI inflows should not have much effect on economic growth.
Figure 2  The trend of AD factors (see online version for colours)


Figure 3 shows the average annual inflation rate ranging from 5.5% to 7%, reflecting a fairly low and varied not-extreme, possibly due to a decrease in consumer demand. The inflation rate is declining in 2015, but slightly increased in 2016. While LIRs are quite high and tend to slightly increase with an average of above 10%, unfavourable for the recovery of economic growth, because it will complicate the return of capital so that domestic investment may fall.

Figure 3  The trend of annual AS factors (see online version for colours)

Source:  World Bank (2017b)

Based on the above data, we performed some tests on panel data with several stages to obtain the BLUE equation. The stages are the selection of the best equation model, the detection of classical symptom assumptions, and hypothesis testing. To select the best model in panel data regression, there are several tests consisting of Chow test, Hausman...
test and Lagrange Multiplier test. Based on the three tests, the best regression model for equation (2) is the Fixed Effect Model (FEM) for two periods. To determine whether there is any classical symptom assumption, heteroscedasticity, autocorrelation and multicollinearity detection has been done, with no classical symptom assumption on its four models.

### Table 2  The influence factors to ES

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Constanta</td>
<td>12.15158***</td>
<td>12.80613***</td>
</tr>
<tr>
<td>( t_{\text{stat}} )</td>
<td>(2.9621)</td>
<td>(3.7044)</td>
</tr>
<tr>
<td>HH expenditure</td>
<td>0.422259***</td>
<td>0.480193***</td>
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<td>( t_{\text{stat}} )</td>
<td>(6.2798)</td>
<td>(8.7277)</td>
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<td>FDI inflow</td>
<td>1.989490**</td>
<td>0.438074*</td>
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<tr>
<td>( t_{\text{stat}} )</td>
<td>(2.5262)</td>
<td>(1.8818)</td>
</tr>
<tr>
<td>Gov. exp. to GDP</td>
<td>–0.884693***</td>
<td>–0.862940***</td>
</tr>
<tr>
<td>( t_{\text{stat}} )</td>
<td>(–2.8669)</td>
<td>(–3.4451)</td>
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<tr>
<td>Export competitiveness</td>
<td>0.047855***</td>
<td>0.036473***</td>
</tr>
<tr>
<td>( t_{\text{stat}} )</td>
<td>(3.3476)</td>
<td>(3.0693)</td>
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<tr>
<td>( F_{\text{stat}} )</td>
<td>(23.2437)</td>
<td>(30.8959)</td>
</tr>
<tr>
<td>( R^2 )</td>
<td>0.854920</td>
<td>0.866069</td>
</tr>
</tbody>
</table>

Notes: ***Significant at the 0.01 level; *Significant at the 0.10 level; **Significant at the 0.05 level

Source: Authors’ calculations using data from official sources

Table 2 is a summary of the hypothesis test, either partial test or simultaneous test. This table shows that four factors on the AD side have an effect on ES in emerging market countries at two periods of analysis, either partially and simultaneously. All of factors have significant at level 0.01, except FDI with a significance level of 0.05 in the period 2010–2015 and at level 0.10 in the period 2010-2016. In addition, the variation in ES variables is strongly influenced by changes in the factors affecting them, designated from \( R^2 \). This is mean that stagnancy of economic growth in middle-income emerging market countries will continue, if there is no improvement in declining household consumption, decreasing in export competitiveness, decreasing in incoming FDI, and continued inefficiency in government spending. In general, the results are near similar to indication of World Bank that stagnant global trade, weak investment, and high uncertainty about the policies taken have made it difficult for the world economy (Global Economic Prospects, 2017).

Meanwhile, Table 3 shows the influence of AS factors affecting stagnation growth, household consumption and FDI inflows. It shows that the slowdown of economic growth (or ES), the decreasing of household consumption (HH) and the weakness of FDI inflow influenced by the inflation rate (INFL) and the lending rate (LIR) simultaneously. In general, there are negative relation between two independent variables and three dependent variables. HH is the most sensitive factor influenced by INFL and LIR shown by the largest \( R^2 \), while FDI is the smallest sensitive factor.
<table>
<thead>
<tr>
<th>Period</th>
<th>The best model</th>
<th>Constant</th>
<th>INFL</th>
<th>LIR</th>
<th>F-stat</th>
<th>R²</th>
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<td>t-stat.</td>
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<td>(6.3103)***</td>
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<td></td>
<td>2010–2016</td>
<td>REM</td>
<td>6.76158***</td>
<td>-0.10836*</td>
<td>-0.14923***</td>
<td>(12.0598)***</td>
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<td>(9.0562)</td>
<td>(-1.9232)</td>
<td>(-2.6860)</td>
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<tr>
<td>HH t-stat.</td>
<td>2010–2015</td>
<td>FEM</td>
<td>8.80165***</td>
<td>-0.10601</td>
<td>-0.29028***</td>
<td>(4.3682)***</td>
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<td></td>
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<td>(6.9786)</td>
<td>(-1.0285)</td>
<td>(-2.0285)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2010–2016</td>
<td>FEM</td>
<td>0.36725***</td>
<td>-0.05820</td>
<td>-0.38451***</td>
<td>(6.8489)***</td>
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<td>(9.6427)</td>
<td>(-0.6792)</td>
<td>(-3.4781)</td>
<td></td>
</tr>
<tr>
<td>FDI t-stat</td>
<td>2010–2015</td>
<td>REM</td>
<td>1.25629***</td>
<td>-0.017423**</td>
<td>0.00386</td>
<td>(3.5831)**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(7.9444)</td>
<td>(-2.3556)</td>
<td>(0.4112)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2010–2016</td>
<td>REM</td>
<td>2.76844***</td>
<td>-0.03874**</td>
<td>0.01662</td>
<td>(28.7272)***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(7.6630)</td>
<td>(-2.13935)</td>
<td>(0.77833)</td>
<td></td>
</tr>
</tbody>
</table>

Notes: ***Significant at level 0.01; **Significant at level 0.05; *Significant at level 0.10

Source: Authors’ calculations using data from official sources
Economic stagnation in emerging market countries

Partially, inflation has a significant negative effect on economic growth and FDI, this means that if inflation gets higher then economic growth and FDI will decline. Inflation also has a negative influence on household consumption but not significant, this is because when the inflation rate in the countries studied tends to rise, remain or fall, the level of household consumption tends to fall. In some of the countries studied it is not the same as the rate of inflation, but below the double-digit average, only Argentina whose inflation reaches more than 40% and Egypt reaching 13% in 2016. The same thing happened at domestic lending rates (LIR), which had no influence to stagnation in economic growth on the 2010-2015 periods and on FDI inflows in the two periods of analysis.

Theoretically, ES in emerging market countries will continue if the INFL increase. It can be seen in Table 3, that INFL has a significant negative effect on economic growth in two periods, with different levels of significance. The lack of INFL influence on ES (growth) in the period 2010-2015 is likely due to the unstable inflation rate during the year of analysis, and the inflation rate that varies in developing market countries. Based on data, except Thailand, Philippines, Malaysia, Rep. Korea and China, which have low interest rates of less than 4%, other countries have rather high inflation rates, even Argentina’s inflation rate reaches 41% and Egypt is more than 10%. Beyond all that, it is necessary to consider the opinion of Sarel (1996) and Ball (2014) that rising inflation rates can increase ES in developing market countries. In other words, inflation targeting by the Central Bank needs to be relaxed to encourage economic growth.

In theory, the stagnation of economic growth in emerging market countries will continue if the lending rate (LIR) increases, because with the increase in LIR, business/producers will delay loans to banks, consequently production decreases. This can be seen in the negative relationship between LIR and Growth in 2010–2015 periods, but not significant because not all lending rates in emerging market countries are high. Some countries have below double-digit of LIR including China, South Korea, Malaysia, Mexico, Philippines, South Africa and Thailand, while the average LIR of Brazil reaches 39%, Argentina 19%, and Egypt, India, Indonesia, Russia, Turkey and Vietnam have LIR between 10%–12%. The insignificant effect of the LIR on the improvement of ES in the emerging market countries for the period 2010–2015 is similar to the case in the USA, where LIR are currently at the lowest level but have not been able to encourage low economic growth. But the case in emerging market countries is in contrast with the USA, because the LIR on emerging market are quite high, which makes it difficult to improve economic growth which requires large capital. The significant influence of LIR on economic growth in the period 2010–2016 shows that there is a tendency to increasing LIR, so that ES in emerging market countries potentially continue to decline. LIR also has no significant effect on FDI, but has a positive relationship, meaning that interest rates still have a positive relationship to investment.

Generally, factors from the AD side proved to affect the stagnation in economic growth significantly, while from the supply side, the increase in LIRs caused stagnation in economic growth in the period 2010–2016, whereas in the period 2010-2015 the LIRs has no effect on the same variable.

Evidence of a downward trend in economic growth along with the influence of factors from the demand and supply side, actually there are still opportunities for these countries to increase their economic growth. Economic growth can be driven through increased AD, for example increasing household consumption. If household consumption rises, it will encourage producers to increase production. The role of the government and
the central bank is needed as the regulator of the economy by lowering interest rates on loans that are conducive to the economy while keeping inflation stable. The government’s involvement in the AD side proves that Keynes’s law should be applied.

5 Conclusions and recommendations

Based on the period data 2010–2016, ES in the middle-income emerging market countries will continue, especially if there is no improvement on the factors that influence it, especially from AD side. Keynes’ law which says that AD create its supply can be applied in that middle-income emerging market countries, or in other words household consumption expenditure needs to be increased to encourage increased production, FDI inflow each country should be increased to strengthen production forces, government spending needs to be improved but must be efficient so that the percentage of government spending on GDP becomes smaller, and enhance export competitiveness to increase domestic production.

Meanwhile, factors that affect AD, i.e., LIRs, it not has effect significantly to growth in period 2010–2015 and on the FDI inflows in two analysis periods. It means that the economy is sluggish, because high or low inflation does not drive household consumption and the flow of FDI. Because high or low inflation does not drive household consumption and the FDI inflow. Households have no purchasing power, while foreign investors are waiting for the right time to invest their funds. Under these two conditions, it is necessary to adopt Keynes’s law, that the government’s role must be greater to restore ES.

References


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World Bank (2017a) [online] https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG.


Notes

1 Survey from Global Intelligence Alliance (GIA) *Business Perspectives on Emerging Markets 2012–2017*.