The Analysis of Corporate Tax Rates, Interest Rate Spread (IRS), and Economic Growth on Foreign Direct Investment in ASEAN 6 During 1998–2013

Hadi Sasana
Faculty of Economics and Business, Diponegoro University, Semarang 50275, Indonesia

This aim of this study was to analyze the influence of corporate tax, Interest Rate Spread (IRS), and the economic growth of the Foreign Direct Investment (FDI) in ASEAN 6 in 1998–2013. This study applied multiple regression analysis. The result showed that the variables of the corporate tax rate, the Interest Rate Spread (IRS), and the economic growth have a significant effect on the growth of the FDI in ASEAN 6. Partially, the corporate tax rates have a negative and significant impact on the development of the FDI in ASEAN 6. The Interest Rate Spread (IRS) and the economic growth have a positive effect but not significant to the growth of the FDI.

Keywords: Corporation Tax, Interest Rate Spread, Economic Growth, ASEAN 6.

1. INTRODUCTION

One of the effects of globalization is the loss of trade barriers that lead to the increase of the volume of the world trade. According to Das, foreign investors from developed countries invest in the developing countries because: First, capital gains earned in the investors’ countries are inadequate; second, to combine the invested capital with cheap labor in destination countries to reduce production costs; third, in the developing countries, the use of raw materials are close to the source.

Association of South East Asian Nations (ASEAN) is the area of regional economic integration in East Asia. Overall, the economic development of ASEAN is dominated by six major countries, namely Indonesia, Malaysia, Singapore, Thailand, Philippines and Vietnam known as ASEAN 6. The investment inflows to ASEAN mostly go to the ASEAN 6, and Singapore dominated the investment inflows with the amount of US $1,859,670.51 million in 2013. The development of Foreign Direct Investment (FDI) inflow to ASEAN 6 from 1998 to 2013 is shown in Figure 1.

Many factors affect the FDI. Long-term growth rate in a country will improve the economic situation in the country and high growth of GDP rates will have a positive effect for the country because it will attract investors to invest. Research in Pakistan by Clouds (2011) stated that the Gross Domestic Production positively and significantly affects the FDI inflows.

The interest rate is another important factor for investors to invest in a country. Ahmed stated that the interest rate has a positive influence on FDI as investors will invest into countries that pay a higher return on capital. Tax is one of the important variables of the FDI as Azam claimed that the purpose of multinational companies is to generate more benefits by investing. Based on these facts, the aims this study was to analyze the extent of the effect of the variables of corporation tax, interest rate spread, and economic growth on the FDI in ASEAN countries 6.

2. THEORETICAL REVIEW

According to the OECD, FDI (Foreign Direct Investment) belongs to the category of cross-border investment conducted by a resident in a country with the goal of building long-term profitability in a company in another country. Krugman (in Mudara, 2011) explained that FDI is international capital flows of an enterprise of a country to another country by establishing or expanding companies. The factors that affect the entry of FDI into the country are:

(a) Economic growth,
(b) Political risk, and
(c) Macroeconomic variables.

Investment has a broader sense because it includes both direct investment and indirect investment (portfolio investment); while, capital investment associate with direct investments. In Indonesia, investment is regulated by Act No. 25, 2007 from which article 1 of this law stated that foreign capital is an investing activity to do business in the territory of the Republic of Indonesia made by a foreign investor, either using full scale foreign capital or a
joint venture with a domestic investor. According to Madura and Fox (2007), several conditions may affect FDI:
a. Changes in the FDI restrictions. Since 1990, many countries have loosened the entry of FDI into that country to increase the FDI of the country.
b. Privatization. Privatization will increase FDI in a country for privatization provides a freedom for owners to take any decision in their company; so that, foreign investors may increase their investment.
c. The potential growth of economy. A country having a great potential in economic development is preferred by investors because a good economic growth provides benefit to the development of the company following the improvement of the economic development.
d. Tax rate. Low tax rates will increase FDI in a country because low tax means a company may spend a small amount of expenditure to get a big profit.
e. Exchange rate. Whenever an exchange rate is being depreciated (the exchange rate weakened), the FDI will increase as investors can invest at a low price with high yield.

One of the benefits of having FDI is that FDI provides a mean for transferring advanced technologies from developed countries to developing countries. The transferred technologies will help people to increase the quality of goods and services produced in the developing country, which in turn, will increase the country’s economy. As a result, many developing countries are implementing policies to attract foreign investors to invest; such as, fiscal policy in the form of tax holiday and tax reduction.

Although granting tax holiday causes controversy as, in the short term, the provision of tax holiday reduces the potential revenue generated from tax sector, it is expected that the granting will be able to stimulate new investment. By having accumulated investment, a multiplier effect as proposed Keynes7 will be created. Theoretically, tax rate reduction has an impact on the economy as shown by Laffer curve that the tax rate increases, the government revenues will increase. However, if the tax rate has already reached the maximum point there will be a reduction in government revenue.

3. RESEARCH METHODS
The data used in this research were secondary data and panel data (data pool) of 6 ASEAN countries; Indonesia, Malaysia, Singapore, Thailand, Philippines and Vietnam, within the period of 16 years starting from 1998 to 2013 and consisting of 24 cross section. The data were obtained from various publications issued by various organizations and agencies such as the World Bank, KPMG International, ASEAN Statistics, and the International Labor Organization (ILO).

Based on the theoretical review and the previous empirical research, the specific model to determine the variables that affect FDI in ASEAN 6 countries during 1998–2013 is as follows:

\[
FDI = f(TRF\_PJK, IRS, GDP)
\]

(1)

\[
FDI = b_0 + b_1TRF\_PJK + b_2IRS + b_3GDP + e
\]

(2)

Where, FDI: Foreign direct investment growth (%); TRF_PJK: corporate tax rate (%); IRS: Interest Rate Spread (%); GDP: Economic growth (%).

4. RESULTS AND DISCUSSION
The result of the analysis using multiple regression equation is shown in Table I.

The analysis shown on Table I using multiple linear regression model produces the following equation:

\[
FDI = 28.989 – 0.917TRF\_PJK + 0.204IRS + 0.200GDP
\]

The result showed that the variable rate of corporation tax, Interest Rate Spread (IRS), and economic growth together has a significant effect on the growth of FDI in ASEAN 6.

Partially, the variable rate of corporation tax has a negative and significant impact on the growth of FDI. The significance of the probability value of the tax variable is 0.000 <0.05; therefore, Ho is rejected, meaning that the tax variable negatively affect the foreign direct investment variables. This result indicates that high tax rates decrease investors’ interest to invest. The lower amount of the corporate tax rate is one of the factors that influence investors to invest. The lower the corporate tax rate set by the government of a country, the more the investors interested in investing in that country. The results support previous studies of Gedik,5 Leitao,9 and Azam3 stating that the tax rate negatively affects foreign direct investment. The higher the tax rate applied in a country, the less the number of the investors invests in that country as high tax rates will reduce the amount of profit/loss of the enterprise. Investors will invest in countries that set low tax rates, so that it would benefit the investor.

Meanwhile, the Interest Rate Spread (IRS) has a positive effect but not significance to the development of FDI in ASEAN 6 due to the fact that the IRS affects the portfolio investment than productive investment such as FDI. The result of this study does not

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t value</th>
<th>Significance</th>
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<tbody>
<tr>
<td>Constant</td>
<td>28.989</td>
<td>9.264</td>
<td>.000</td>
</tr>
<tr>
<td>TRF_PJK</td>
<td>-0.917</td>
<td>-9.103</td>
<td>.000</td>
</tr>
<tr>
<td>IRS</td>
<td>.204</td>
<td>.664</td>
<td>.496</td>
</tr>
<tr>
<td>GDP</td>
<td>.200</td>
<td>1.570</td>
<td>.120</td>
</tr>
<tr>
<td>R</td>
<td>0.710</td>
<td></td>
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<tr>
<td>Adjusted R Square</td>
<td>0.505</td>
<td></td>
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<tr>
<td>F Sig</td>
<td>0.000</td>
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<td>F hitung</td>
<td>31.253</td>
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Note: Dependent variable: FDI
Source: Results analysis.
correspond with the previous studies by Anna,\textsuperscript{1} Eliza\textsuperscript{7} reporting that the interest rate negatively affect the foreign direct investment. The higher the interest rate increases the capital costs of the company.

Moreover, the economic growth has a positive effect but not significant to the development of FDI in ASEAN 6. Countries with high economic growth and stable basically attract investors to invest; however, high economic growth sustained by government spending makes a country less attractive as an investment destination because of the lack of long-term stability as collateral for the rate of return on investment as FDI.

5. CONCLUSION

Based on the empirical test results and discussion, it can be concluded that:

1. The variable corporate tax rate, Interest Rate Spread (IRS), and economic growth together have a significant effect on the growth of FDI in ASEAN 6.
2. The tax negatively yet significantly affects the foreign direct investment in ASEAN 6 countries. The higher the tax rate set in a country, the less the investment inflow of foreign direct investors.
3. The economic growth and the interest rates have a positive relationship to foreign investment but not statistically significant.

References and Notes


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