THE DIMINUTION OF TARIFF OF INTERNATIONAL TRADE TOWARDS INEQUALITY ON SOUTHEAST ASIA COUNTRIES (2007-2014)

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ABSTRACT

In order to implement blueprint of ASEAN Economic Community (AEC), Southeast Asia countries have been gradually doing the diminution tariff of international trade since 2007. This effort has been implicating the decreasing of each Southeast Asia countries’ GDP. Yet, this decreasing has also been followed by the augmentation of gini coefficients of each Southeast Asia countries during the same time periods. Therefore, hypothesis of this research is there is significant influence between the decreasing tariff of international trade towards the increasing of gini coefficient in the countries of Southeast Asia. Hence, this research had been concerned to seek an answer of how the significance of diminution of tariff of international trade towards the augmentation of Southeast Asia countries’ gini coefficient.

Keywords: tariff, international trade, GDP, gini coefficient, Southeast Asia

1. Introduction

Before the end of this year (2015), Southeast Asia countries would start ASEAN Economic Community (AEC). The program has actually been started on 2007 by gradually decreasing tariff of international trade by South East Asia countries (Blueprint AEC; 2007, P1). By the end of 2015, there would be free trade for each South East Asia countries. Based on its blueprint (2007, P18), AEC has been aimed to improve and strengthen economic capacity of South East Asia countries.

In addition, according to the data of World Bank, ASEAN’s economic capacity has been strengthening since 2007. Based on GDP growth standpoint, in spite of the global financial crisis, GDP growth of this region was -0,64% in 2008. It means that economic capacity of this region was strong enough. Because in 2007, GDP growth of South East Asia was -15%, it means that aggregate of Southeast Asia’s GDP growth was 43.6% at same year. In 2010, its GDP growth was 24%, and then in 2011 the GDP growth was 15% and 16% (databank.worldbank.org). According to those data, it could be concluded that based on GDP growth standpoint, Southeast Asia has economically been straightening.
Compared to the biggest emerging economic like China and India, the economic capacity of Southeast Asia has still been being competitive. For example, in 2010, China’s GDP growth was 10.40%, and India’s was 9.32%, and Southeast Asia’s was still competitive by 24% (databank.worldbank.org). The number of GDP growth of those countries has been continuing to 2014. Based on that fact, it could be concluded that economic capacity of Southeast Asia is big and competitive.

Based on another standpoint, according to GDP viewpoint, even though China’s is always bigger, yet Southeast Asia’s bigger than India’s. For example, in 2007, GDP of Southeast Asia was 1.3 trillion USD, China’s was 3.49 trillion USD, and India’s was 1.2 trillion USD. In 2008, the pattern was the same, Southeast Asia’s GDP was 1.5 trillion USD, China’s was 4.5 trillion USD and India’s was 1.29 trillion USD. In the same year,
GDP of China was bigger than Southeast Asia’s, yet which was bigger than India’s. The pattern has been being the same until 2014 (databank.worldbank.org).

**Graph 3. GDP OF SOUTHEAST ASIA, INDIA, AND CHINA**

2007-2014

Based on its total population, in 2007, Southeast Asia’s total population was 573 million people. In 2008, its total population was 580 million. It means that the total population of Southeast Asia was significantly growing on that year. Furthermore, the pattern was still the same until 2014 (databank.worldbank.org).

According to PPP (purchasing power parity) viewpoint, the number of Southeast Asia’s PPP was 11.463 USD in 2007. Compared to India’s and China’s PPP in the same year, PPP of Southeast Asia was bigger than China’s, which was 3,620 USD and fewer than India’s was 15,540 USD. Until 2014, its pattern was still the same, which means that Southeast Asia’s was bigger than China’s, yet India’s was bigger than Southeast Asia’s (databank.worldbank.org).

**Graph 4. PPP OF SOUTHEAST ASIA, CHINA, AND INDIA**

2007-2012

Information: The number is in USD
Source: www.databank.worldbank.org
Based on the explanation above, it could be concluded that the economic capacity of Southeast Asia has been being strengthening since the decreasing of tariff of international trade by Southeast Asia countries as an implementation of blueprint of ASEAN Economic Community. Yet, as strengthen as Southeast Asia economic capacity, gini coefficient of its countries has also been strengthen at the same period. For example, in 2007, Indonesia’s economic growth was 6.3%. It was decreasing became 6% in 2008. So did its gini coefficient was decreasing at the same year from 3.4 in 2007, and become 3,0 in 2008. Yet while its economic growth was growing become 6,2% in 2009, its gini coefficient was also growing; became 3,8. The pattern had been continuous until 2014. These patterns had also been having in the others countries of Southeast Asia (databank.worldbank.org).

Therefore, the research is being focused to seek an answer of question of how significant of the decreasing of tariff of international trade towards inequality in Southeast Asia countries. Hence, to measure that significance, it is to be needed a regression analysis as an analysis tool. In addition, previous research and theoretical framework are also needed within this research to be a foundation of regression model, and theory for an analytical framework.

2. Discussion

Within this research, the research of “The Impact of Trade Openness on Growth, Poverty, and Inequality on Vietnam” by CAO Xuan Dung (2004) became a foundation to build a model of regression. On his research, Xuan Dung (2004, P8-12) has built model of regression as such.

**Graph 5. Regression Model**

Information:
Openness: Tariff of International Trade
Growth: GDP Growth
Poverty: Poverty
Inequality: Gini Coefficient

There are three schemes of regression analysis on that research. First, the scheme of regression analysis, it was measuring the significance of tariff of international trade towards GDP Growth. Second, the scheme of regression analysis, it measure the significance of tariff of international trade towards poverty. And third, the scheme of regression analysis, it measure the significance of tariff of international trade towards gini coefficient (Dung 2004, P12-15). Hence, within this research, the third scheme is used, and the model of scheme of regression analysis it so measure the significance of tariff of international trade towards gini coefficient.
In addition, this research is aimed to measure the significance of the influence of the decreasing of tariff of international trade towards the inequality of Southeast Asia countries. Hence, model that would be used in order to measure significance of the influence both of tariff of international trade and inequality is below.

**OPENNESS == INEQUALITY**

Information
Openness = Tariff of International Trade
Inequality = Gini Coefficient

The Marxist Theory of Economic and Political Integration would be used to interpret and analyze the result of regression analysis of each Southeast Asia countries. The perspective of the theory is every free trade or economic integration would create the inequality of capital within the people of each countries. It caused by the competition of capitalist which resulting the exploitation by bigger capitalist toward fewer capitalist (Mandel; 1970, P88). At the beginning, the decreasing of tariff of international trade was influencing the increasing of economic growth of each Southeast Asia countries, yet the increasing of economic growth was influencing the decreasing of gini coefficient of each of Southeast Asia countries. To measure the coherency of the theory, we could see the result of regression analysis of each Southeast Asia countries beneath.

**Indonesia**

Based on the result of regression analysis of Indonesia, the significance of tariff of international trade towards gini coefficient is significant. The number of significance is 0,004, which means that the correlation between independent variable towards dependent variable is significant. In addition, it could be seen on the table beneath:

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>14.466</td>
<td>1</td>
<td>14.466</td>
<td>18.107</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>4.794</td>
<td>6</td>
<td>.799</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>19.260</td>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Y3

b. Dependent Variable: X3

The result of regression analysis above is coherence with the pattern of both of Indonesia’s economic growth and gini coefficient data. For example, in 2009, Indonesia’s economic growth was 4,6% and its gini coefficient was 3,8% in the same year. In the next year, that was 2010, the economic growth of Indonesia was 6,2% and its gini coefficient was 3,9% (databank.worldbank.org). Hence, it means that if there is the increasing of
economic growth, it would be followed by the increasing of gini coefficient, and if there is the decreasing of economic growth, it would be followed by the deceasing of gini coefficient.

**Laos**

Regression analysis result of Laos is the number of regression 0.024. It means that tariff of international trade is significantly increasing gini coefficient in Laos. As like as Indonesia, the correlation of both variable is significant. Yet, the significance of it is not as significant as Indonesia. It could be seen beneath:

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>32.930</td>
<td>1</td>
<td>32.930</td>
<td>9.002</td>
<td>.024*</td>
</tr>
<tr>
<td>Residual</td>
<td>21.950</td>
<td>6</td>
<td>3.658</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>54.880</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Y6
b. Dependent Variable: X6

The pattern of economics growth and gini coefficient of Laos is coherence with the regression analysis above. For example, Laos’ economic growth was 4.5% in 2008, and its gini coefficient was 3.2. In the next year, that was in 2009, its economic growth was 4.8%, and its gini coefficient was 3.4. It was meaning that both of the indicators were have the same pattern. The pattern was interesting in 2013 and 2014, its economic growth was 4.2% in 2013, and its gini coefficient was 4.2. Yet, in 2014, its economic growth was 3.5%, and its gini coefficient was 2.3. It was meaning that, if there was the decreasing of economic growth, it would be followed by the decreasing of gini coefficient (databank.worldbank.org).

**Myanmar**

The significance is also happened in Myanmar, the number of it is 0.006. It is mean that independent variable is significantly influencing dependent variable. Hence, the diminution of tariff of international trade is influencing the increasing gini coefficient significantly. As Laos and Indonesia, Myanmar is also having the significance correlation. The result of regression analysis is beneath.
ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>5.593</td>
<td>1</td>
<td>5.593</td>
<td>17.424</td>
<td>.006*</td>
</tr>
<tr>
<td>Residual</td>
<td>1.926</td>
<td>6</td>
<td>.321</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7.519</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Y8
b. Dependent Variable: X8

Myanmar has the same pattern like the others. For example, in 2011, its economic growth was 3,3%, and its gini coefficient was 3,55. In the next year, that was 2012, its economic growth was 4%, and its gini coefficient was 3,56%. It was meaning that both of those indicators have the same pattern (databank.worldbank.org).

**Thailand**

The significance of the decreasing of tariff of international trade towards the increasing gini coefficient is 0,008. The number is significant, which mean that there is significant influence of tariff of international trade towards the increasing gini coefficient. It could be seen on the table below:

ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>9.887</td>
<td>1</td>
<td>9.887</td>
<td>294.369</td>
<td>.008*</td>
</tr>
<tr>
<td>Residual</td>
<td>.202</td>
<td>6</td>
<td>.034</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>10.089</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Y7
b. Dependent Variable: X7

Thailand’s economic growth was 7,5% in 2010, and its gini coefficient was 3,8 in the same year. Switch to 2011, its economic growth was 8,0%, and in the same year, its gini coefficient was 4,0 (databank.worldbank.org). It could be seen that both of indicators have the same pattern. If economic growth was increasing, then gini coefficient was increasing too. It is meaning that Thailand has also the same pattern like the others.

**Philippines**

The significance of the decreasing of tariff of international trade towards the increasing gini coefficient is 0,008. The number is significant, which mean that there is significant influence of tariff of international trade towards the increasing gini coefficient. It could be seen on the table below:
For The Philippines, in 2008, its economic growth was 4.2%, and its gini coefficient was 3. Yet in the next year, that was 2009, its economic growth was 1.1% and its gini coefficient was 2.5. It was meaning that there was the same pattern of both of indicators on that period. In addition, in others periods, The Philippines economic growth was 3.7% in 2011, and in the same time, its gini coefficient was 4.0. In 2012, its economic growth was 6.7%, and gini coefficient of which was 4.2% (databank.worldbank.org). Hence, it is meaning that the pattern of both of economic growth and gini coefficient of The Philippines is coherence with the regression analysis above.

**Malaysia**

The significance of the decreasing of tariff of international trade towards the increasing gini coefficient is 0.043. The number is significant, which mean that there is significant influence of tariff of international trade towards the increasing gini coefficient. It could be seen on the table below:

**ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>7.172</td>
<td>1</td>
<td>7.172</td>
<td>4.318</td>
<td>.043</td>
</tr>
<tr>
<td>Residual</td>
<td>9.968</td>
<td>6</td>
<td>1.661</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>17.140</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Y1
b. Dependent Variable: X1

In 2008, Malaysia’s economic growth was 4.8%, and its gini coefficient was 3.6. Yet, in the next year, that was 2009, its economic growth was -1.5%, and its gini coefficient was 3.62% (databank.worldbank.org). It is interesting, because if there is the increasing of economic growth, there is also the decreasing of gini coefficient, and if there is the decreasing of economic growth, there is also the decreasing of gini coefficient. Hence, the pattern of it is coherence with the result of the regression analysis.

**Vietnam**

Regression analysis result of Vietnam is the number of regression 0.008. It means that tariff of international trade is significantly increasing gini coefficient in Vietnam. As like as Indonesia, the correlation of both variable is significant. Yet, the significance of it is not as significant as Indonesia. It could be seen below:
Vietnam economic growth was 5.4% in 2009, and its gini coefficient was 3.58 in the same year. In the next year, in 2010, its economic growth was 6.4%, and gini coefficient of the country was 6.4. Vietnam has the same pattern as the other countries, which have explained before that as the result of decreasing of tariff of international trade, the increasing of Vietnam’s economic growth has been followed by the increasing of gini coefficient. As Vietnam, Brunei Darussalam is also having the same pattern. For example, in 2010, its economic growth was 2.6% and its gini coefficient was 3.77. Switch to 2011, its economic growth was 3.4% and its gini coefficient was 3.79 (databank.worldbank.org).

**Brunei Darussalam**

Regression analysis result of Brunei Darussalam is the number of regression 0.043. It is mean that tariff of international trade is significantly increasing gini Coefficient in Brunei Darussalam. As like as Indonesia, the correlation of both variable is significant. It could be seen below:

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>7.172</td>
<td>1</td>
<td>7.172</td>
<td>4.318</td>
<td>.043</td>
</tr>
<tr>
<td>Residual</td>
<td>9.968</td>
<td>6</td>
<td>1.661</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>17.140</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Y1  
b. Dependent Variable: X1

Brunei was also having the same pattern like the others countries. For example, in 2010, its economic growth was 2.6%, and its gini coefficient was 3.77. Then, in 2011, its economic growth was 3.4%, and its gini coefficient was 3.79. It was also meaning that there is the same pattern in Brunei (databank.worldbank.org). Hence, it is coherence with the result of regression analysis.

**Cambodia**

Regression analysis result of Cambodia is the number of regression 0.0026. It is mean that tariff of international trade is significantly increasing gini coefficient in Cambodia. As like as Indonesia, the correlation of both variable is significant. Yet, the significance of it is also not as significant as Indonesia. It could be seen below:
ANOVA<sup>b</sup>

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>70.778</td>
<td>1</td>
<td>70.778</td>
<td>8.699</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>48.817</td>
<td>6</td>
<td>8.136</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>119.595</td>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Y2
b. Dependent Variable: X2

For Cambodia, the pattern of economic growth and gini coefficient is coherence with the result of regression analysis. For example, its economic growth was 6.0% in 2010, and its gini coefficient was 3.0. And in the next year, in 2011, its economic growth was 7.1% and its gini coefficient was 3.8. The same pattern has also occurred in Myanmar, in 2009, its economic growth was 7.5%, and its gini coefficient was 3.51. In 2010, its economic growth was 8.0%, and its gini coefficient was 3.53 (databank.worldbank.org).

**Singapore**

Regression analysis result of Singapore is the number of regression 0.008. It is mean that tariff of international trade is significantly increasing gini coefficient in Singapore. The correlation of both variables is significant. It could be seen below:

ANOVA<sup>b</sup>

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>9.887</td>
<td>1</td>
<td>9.887</td>
<td>294.369</td>
</tr>
<tr>
<td></td>
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<td>.202</td>
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<td>.034</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>10.089</td>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Y7
b. Dependent Variable: X7

Like the others Southeast Asia countries, the pattern of both of Singapore’s economic growth and gini coefficient has the coherency with the result of regression analysis on the table above. For example, in 2007, Singapore’s economic growth was 9.1% and its gini coefficient was 3.2. Yet in 2008, its economic growth was dropped, it was 1.8%, and its gini coefficient was also significantly decreasing was becoming 2.2. In addition, the pattern was interesting in 2010. On that year, its economic growth was significantly growing was 15.2%, and its gini coefficient was also significantly growing was 3.7 (databank.worldbank.org)

Based on the tables above, the result of regression analysis is significant for all countries. All of them are significant. It means that there is significant influence of the decreasing of tariff of international trade towards gini coefficient of those countries. Using Marxist theory of economic and political integration viewpoint, the increasing of gini coefficient means that the inequality of people within those countries is increasing too. It is coherence to the concept of that theory that free trade or economic integration would create the exploitation of “little capitalist” by “bigger capitalist”, because there is capital
competition among them (Mandel; 1970, P88). Hence, the inequality within those countries is increasing.

Each of explanations above is showing that the decreasing of tariff of international trade is implicating the increasing the economic growth and it is implicating the increasing of gini coefficient. Based on the regression analysis above, the decreasing tariff of international trade is significantly influencing the increasing of gini coefficient in Southeast Asia countries. Hence, it could be concluded that the increasing of economic growth as the result the decreasing of tariff of international trade has been significantly implicating the inequality within the people in Southeast Asia countries.

3. Conclusion

Based on the regression analysis that has done, and the result is significant of all of those countries. Hence, the decreasing tariff of international trade, which implicating the increasing of economic growth, and it significantly influencing the increasing of gini coefficient of those Southeast Asia countries. In conclusion, based on this research, the decreasing of tariff of international trade is significantly influencing the increasing of gini coefficient within each of Southeast Asia countries.

References: