A Review of Indonesia's Economic Competitiveness

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Abstract

This paper explains why Indonesia’s competitiveness is falling, compared with other countries, while the economic growth seemed quite robust in recent years. After the commodity boom and quantitative easing policy was over, Indonesia is struggling to compete in the world market resulting a low rate of participation in the global production network. In addition, unclear industrial policy, downstreaming strategy and value added obsession are some of the misguided approaches to rejuvenate Indonesia’s industry. A substantial reform is essential to change the old paradigms in trade and industry such as populist, protectionist and inward-looking policy. Instead, an open trade regime, facilitating investment policy and a more flexible labor market are much-needed strategies to increase Indonesia’s competitiveness in the future.

Keywords: competitiveness, industrial policy, Indonesia
1. Introduction

At a glance, Indonesia seems does not have any problems with its competitiveness. In fact, Indonesia is quite success in attaining a robust economic growth with a slight fluctuation which reached 5.3% on average since the Asian Financial Crisis (AFC). Indonesia also outperformed G20 countries’ average economic growth for the past years. This condition happens due to several causes such as prudent macroeconomic management including the success of Indonesian government in lowering government debt-to-GDP ratio since the AFC. Currently, Indonesia's government debt-to-GDP ratio is one of the lowest in the region. With a deliberate economic management, Indonesia has succeeded in passing through the Global Financial Crisis (GFC) with a minimum negative impact to the economy.

We will argue in this paper that the recent Indonesia's economic performance is not sustainable nor resilient to respond the external environment challenges ahead. First, global economy is forecasted to remain sluggish for the next several periods. Second, the recent economic growth was supported by the commodity boom and the capital inflow from developed countries as a result of the US quantitative easing (QE) policy that seeks for higher returns. As the commodity boom ended, the QE will also come to an end. Lastly, most importantly, some of the international competitiveness indicators, that will be analyzed later, show that Indonesia was underperformed compared with other countries in the region. Next chapter will discuss these factors in more detail manner.

2. The Weakening of Indonesia's Economic Competitiveness

There are several reasons behind the weakening of Indonesia's economic competitiveness. Firstly, Indonesia has experienced an increase in terms of trade during commodity boom for the past decades. As the consequence, Indonesia's real effective exchange rate (REER) has been appreciated, due to a rise in nominal exchange rate and/or a rise in domestic inflation relative to its trading partners. As mentioned before, there has been a rise in capital inflow from developed countries that seek for higher returns. A rise in capital inflow to Indonesia encourages Indonesia's real exchange rate to appreciate. During AFC, Indonesia experienced a deep currency depreciation, but Indonesia's high rate of inflation relative to its trading partners had lowered its competitiveness due to depreciation of rupiah in 1998.
The failure in implementing regulatory reform after AFC also impeding Indonesia’s competitiveness. Looking back to the history, Indonesia had done a significant reform in the mid-1980s when Indonesia experienced an economic crisis due to the fall in oil price. This significant reform had resulted in a healthier economy. Indonesia’s economy became more diversified, the reliance on oil and gas sector had decreased, and private sector participation had risen. But, the deregulation fatigue that happened in the early 1990 resulted an economic (and political) crisis in 1998. Then, a massive economic and political reform happened again. Most of the reform had been able to turn back the economic growth performance in a positive way. But at the same time, the more assertive DPR, the rainbow cabinet, the weaker presidential institution, the lower legal certainty and the more active civil society had resulted in a policy that tend to be populist and nationalist.

Thirdly, Indonesia hasn't been able to develop its sophisticated technology in production relative to other countries such as Brazil, Russia, India, China, South Africa (BRICS), but at the same time, Indonesia is also getting new competitors from countries with lower cheaper labor costs such as Vietnam and Bangladesh.

To validate our arguments, the third part of this paper will compare Indonesia’s competitiveness with other ASEAN countries.

3. Indonesia's Competitiveness Indicators Relative to ASEAN Countries

This section explains various competitiveness indicators of Indonesia relative to ASEAN countries which are 1) real effective exchange rate 2) constant market share 3) total factor productivity 4) unit labor cost and 5) infrastructure.

Real Effective Exchange Rate (REER)

REER is one of the competitiveness indicators that measure real exchange rate by comparing Indonesia’s price level with other countries. Graph 1 describes REER trends for Indonesia, Malaysia, Philippines, and Thailand in 2000-2015. Downward shifting of the REER shows real exchange rate appreciation because of nominal exchange rate appreciation and/or a high level of inflation. Hence, downward shifting of the REER means that there is a potential for weaker competitiveness.
Indonesia's REER is consistent with Dutch Disease literature, which explains that commodity boom results in exchange rate appreciation and lowers the competitiveness of tradable sectors outside the commodities that experienced boom.

Based on the graph, we can conclude several salient features regarding Indonesia's competitiveness compare to its neighboring countries. First, throughout 2000-2013, Indonesia had lost its competitiveness in comparison with its neighboring ASEAN countries. Second, depreciation period is more correlated with the occurrence of capital outflow, which happened due to political instability in Indonesia (early 2000s) or global shock (2009 and 2013), and the remaining periods shown that Indonesia's real exchange rate tend to appreciate (lose its competitiveness). Third, Indonesia's REER has higher volatility compare to its neighboring countries. This volatility of REER adds up the weakening Indonesia's competitiveness, especially for long-term investments.

**Graph 1. REER Comparison between Indonesia, Malaysia, Thailand, and Philippines**

Source: BIS

**Constant Market Share (CMS) Analysis**

CMS analysis is one of quantitative techniques in international economics. It is a decomposition technique that decomposes export performance of a country in a certain period into structural effect, or mainly known as commodity composition effect. Aside
from that, adaption effect is also known as market distribution effect and competitiveness effect. In other words, export growth can be caused by export growth in general, combination of commodity in relevant exports, and condition where main export market grows faster or slower than global economic growth. Residual competitiveness effect that describes a rise or fall in the market share is assumed to have impact on relative price of a country's export production. Commodity composition effect will be positive if the demand for commodity increases significantly. One example is the case of palm oil in Indonesia in the last decades. Meanwhile, price distribution effect will be positive if export on one country relies on the country with high growth. China and India are the examples for the case of Indonesia.

Before entering the explanation concerning CMS analysis, graph 2 below describes the percentage change of Indonesia's export market share in the world trade, compared to other ASEAN countries.

**Graph 2. Percentage Change of Indonesia's Export Market Share in Comparison to Other ASEAN Countries**

![Graph 2](image)

Source: Author's Calculation

Indonesia's export market share in the world market increased significantly from 2008 to 2011 before the trend was declining until 2014. A rise in export market share not necessarily shows an increase in Indonesia's competitiveness in the world market. As discussed before, this period coincided with an increase in demand and price for export commodity in Indonesia. A fall in demand after 2011 was followed by a decrease in Indonesia's market share. An increase in market share throughout 2008-2011 and
decrease in market share after 2011 shows a product composition product in CMS analysis. Table below shows the competitiveness effect for Indonesia, Malaysia, Philippines, and Thailand.

Table 1. Comparison of Competitiveness Effect in ASEAN Countries

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<tr>
<td>Indonesia</td>
<td>-0.004</td>
<td>0.009</td>
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<td>0.029</td>
<td>-0.011</td>
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<td>0.012</td>
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Source: ITC

Based on Table 1, Indonesia often appears with negative competitiveness effect in comparison to Thailand and Philippines. Except in 2007-2011, Indonesia shows a positive competitiveness effect. Throughout 2006-2013, a fall in Indonesia's export competitiveness has lowered its market share by 0.014%. On the contrary, competitiveness effect has given a significant positive contribution in Philippines and Thailand's export growth. Thus, Indonesia's export growth is tend to be encouraged by demand rather than the skill of producing export commodity that is competitive in terms of price or quality. This structural weakness leads Indonesia (as well as Malaysia, who has abundant natural resources) to be more volatile with the international demand turmoil.

Total Factor Productivity

Research concerning total factor productivity (TFP) in Indonesia had been done a lot by the researchers. But, most of them are outdated. Hence, we use international TFP estimation released by Conference Board that provides latest estimation until 2014. Here, Conference Board only shows the data regarding TFP growth, while Penn World Table 8.1 provides TFP level relative to the US. Using TFP level data in 1990 from Penn
World Table, as well as US and ASEAN TFP growth data, now we can calculate TFP level of ASEAN countries relative to US TFP until 2014.

**Graph 3. Comparison of TFP Level between ASEAN Countries and United States**

![Graph 3](image)

Source: Author's Calculation

By referring to graph 2, we can take several conclusions. Firstly, the growth of TFP follows the GDP growth or the pro cyclical. This pro cyclical phenomenon is obviously seen during the AFC 1998 and during smaller degree in 2008 crisis. This empirical regularity is consistent with the Verdoorn Law in TFP and economic growth literatures. Secondly, except for crisis, Indonesia and ASEAN countries were mostly experiencing positive TFP growth. Thirdly, on the average, TFP growth in Indonesia was slowdown and lower after the AFC. Lastly, Indonesia had attained the highest TFP level before crisis, but it experienced deepest plunge in comparison to its neighboring countries. In addition, the neighboring countries were also recovered faster than Indonesia, while Indonesia was still suffering from crisis until 2004. Equally important, Indonesia’s TFP was increasing after 2014. Due to a deep plunge and the slowdown of Indonesia’s economic recovery, Indonesia's TFP level was placed below Malaysia and Philippines in 2014.
Unit Labor Cost

After the AFC, employment policy in Indonesia tended to support labor union compared to the period before AFC. The change in this policy gave impact on production costs, especially for labor-intensive sectors. This section will review this change that is reflected on Unit Labor Costs (ULC). Figure 3 below shows labor productivity, average wage, and ULC for manufacture sector in Indonesia.

Graph 4. Unit Labor Cost in Indonesia, 2000-2014

Source: Author's Calculation

Data on the graph shows that throughout 2000-2014, average wage grows faster compared to labor productivity. As the result, ULC increased by 3.5 times higher. The average wage growth was highest in the early 2000 as it was adjusted to high inflation during 1998 crisis. Then, average wage rose from 2012 to 2014, while labor productivity didn't change significantly.

In comparison to ASEAN countries, it was actually not only Indonesia who experienced a significant growth. Thailand and Malaysia was also experiencing high rate of inflation. For this reason, Indonesia's ULC was relatively competitive until 2012. For instance, a sharp increase of Thailand's ULC in 2011 was happening due to a decline in
its productivity that happened because of major flooding in 2011, instead of a rise in the average wage (a surge in minimum wage started in 2012).

Infrastructure

Infrastructure performance in Indonesia had been intensively explored and well prioritized in the era of President Susilo Bambang Yudhoyono, and it was even more prioritized in the era of president Jokowi. In the era of SBY, there was an establishment of infrastructure development master plan that is covered in Masterplan Percepatan dan Perluasan Pembangunan Ekonomi Indonesia (MP3EI). Aside from that, Logistic Blueprint was also released in logistic sector. Infrastructure budget in 2015, during the era of Jokowi, was almost Rp300 trillions. Even so, the transportation cost between islands in this archipelagic country is still quite high, specifically for road and port infrastructure. This high cost of logistic pushes up the overall price structure, especially in the areas away from Java. For example, Sandee et al. (2014) provided comparison data showing that Indonesia's logistic cost was significantly higher than the neighboring countries that were more efficient.

Road infrastructure is the most important issue in the distribution of goods that should've received special attention from the government. There are several schemes have been done by the central and local government, but the quantity and quality of road have not been able to balance the vehicle growth, which reflected from the high level of congestion. Indonesia Infrastructure Initiatives (IndII) analysis shows that for the last 20 years, Indonesian government only managed to increase about 200 km toll road and the central government road about 1-2% each year. Whereas in 2030, it requires about 500 km toll road and the growth of central government road have to be 5% each year.

Meanwhile, port infrastructure that takes a central role in this archipelagic country still confront with several difficulties, especially on dwell time and infrastructure quality. Sandee et al. (2014) shows that the biggest port in Indonesia, Tanjung Priok, it was recorded that throughput had increased throughout 2007-2013, but there was no additional facilities take into account. Then again, in order to boost Indonesia's port competitiveness, problems such as limited investment and the release of supporting documents for exports and imports that haven't been optimum, have to be abolished.

This logistic problem in Indonesia occurs due to low number of infrastructure investment and other various regulation barriers. Even the ratio of infrastructure to
GDP in Indonesia after the AFC was about a half of the ratio during president Soeharto era. The regulations that not very much encourage investment in logistic sector worsen its performance. On the contrary, deregulation in the air transportation sector has encouraged competitiveness and growth of the sector. Meanwhile, water transportation sector is becoming more restrictive. Indonesia's shipping law in 2008 has restricted the cabotage principal, where domestic ships were prioritized to ship in Indonesian waters. Since Indonesian government has to raise its commitment to develop infrastructure, whether the government will be able to remove the crucial barriers in logistic sector (such as weak coordination between central and local government, as well as policy environment in logistic sector that is uncertain) becomes the important question.

For the past years, Indonesian government has implemented Public-Private Partnership (PPP) scheme in order to solve infrastructure financial problem. Government has engaged private sector in financing infrastructure to inject additional financial inflow and to increase the quality of infrastructure in Indonesia. However, several challenges still occur during the process. For instance, market structure in financing infrastructure was still unsatisfying. Currently, government is still giving BUMN privilege for taking charge in developing big infrastructure projects. Then again, private sectors consider this restriction as contradictory to government commitment in PPP scheme, where it seems that infrastructure projects that being offered to private sectors are placed on the "second rank". In addition, problems regarding infrastructure plan were also put the uncertainty on the private sectors. The government was advised to prevent the occurrence of projects that didn't correspond to the long-term development plans.

4. Misguided Approach in Industrialization Obsession to Value Added and Downstreaming Strategy

Recently, the issue concerning the importance of increasing Indonesia's value added has been spread in the country. Actually, this is not a brand-new issue because 20 years ago, during development dialogue in Centre of Information and Development Studies (CIDES), Habibie had advised that Indonesia had to implement a development strategy based on value added with industry- and technology-oriented. In addition, this increasing value added strategy has been included in Undang-Undang Nomor 4 Tahun 2009 tentang Pertambangan Mineral dan Batubara (UU Minerba). Through this law, Indonesian government will be able to control the export of raw materials by processing them until they gain the optimum domestic value added through downstreaming of the industry.
As a matter of fact, Ricardo Haussmann shows that downstreaming issue is not only misguided, but also critical because it limits the diversification on the raw materials to which it belongs. Whereas, the ownership of raw materials will have value added only if the cost for distributing raw materials between countries is expensive. In addition, this value added has been diminished by the revolution of transportation, even for mining goods.

Furthermore, Haussmann states that,

"both theory and practice provide reasons to question the presumption that downstream processing is an appropriate development path. The skills and other inputs required to process raw materials and market finished products could be very different from those required to mine or grow them. The key input for producing aluminum, for example, is cheap energy, not local Bauxite deposits, and that is why South Africa could develop aluminum exports, even though it had no Bauxite and why Jamaica produces Bauxite but does not process it."

Indonesia who experiences energy deficit obviously does not have comparative advantage in producing downstream product of mining goods.

**Reasons for Labor Absorption**

By definition, value added is the difference between the overall income of the firm and its expenses for unfinished goods and services as well as raw materials bought from outside the firm. Mostly, this value added is divided into two components: wages given to the labors and returns given to the investors.

If the workers have more skill in processing raw materials and if bigger capital used in production process, the value added produced by the firm/industry will also bigger. For example, based on BPS Input-Output table in 2005, value added per worker in chemistry industry is 276 times bigger than value added per worker in agriculture rice and it is 10 times bigger than value added per worker in textile, clothing, and tannery industry. From the capital needs per worker side, chemistry industry is 30 times more capital-intensive than agriculture sector, and it is 8 times more capital-intensive than textile, clothing, and tannery industry.

In a nutshell, industry or sector that has high value added is the sector that is relatively physical capital-intensive and/or human capital-intensive.
Strategy Choices in Increasing Value Added

Without new investment, increasing value added of a certain industry is similar to reallocation of resources from low to high value added sector. In other words, there will be a reallocation of resources from low skilled labor-intensive sector to more capital-intensive and/or high skilled labor-intensive sector.

However, you can argue the statement above by pointing at the first sentence before this paragraph, which is "without new investment". What if an increase in value added happens through new investment rather than reallocation of resources? But the question will be the same: why the new investment is held in processing industry that is capital-intensive rather than in the sector with more labor absorption?

Then, you can raise a question, if we are glued only on the labor absorption aspect, isn't it Indonesia will be trapped on the underdevelopment and continuously produce goods with decent technology and low value added? The answer is no.

Imagine if Indonesia is able to deliberately and rapidly raise its investment. In a not-so-long period of time, labors in Indonesia will be completely absorbed, so that labors will be scarce in the labor market. In this case, wages will be rise. As the result, producing labor-intensive goods will be no longer profitable and in turn, the firms will adjust themselves by shifting to capital- or high skilled labor-intensive.

In other words, if investment in Indonesia grows faster, Indonesia will naturally shift to higher value added industry. Meanwhile, it’s different with downstreaming strategy, where downstreaming strategy increases value added gradually, without picking winner, and still maintains the economy with full employment.

Things to remember, Indonesia had once succeeded in implementing strategy stated above. A rapid growth of labor-intensive sector that happened in 1986 until before crisis 1998 had absorbed millions of labors. Manning (2000) shows that before crisis in 1998, Indonesia had entered labor scarcity era. If only crisis didn’t happen, the natural increase of value added will happen by itself in that labor scarcity era.

The abundant of labors continued to happen in Indonesia due to the occurrence of crisis. However, it doesn't mean that Indonesia should leave the labor absorption strategy and move to strategy with value added creation industry as the target. On the contrary, Indonesia has to work two times harder in effort to create job opportunities. Unfortunately, rigid labor policy and high minimum wage laws have completed the
advice for increasing value added policy above. In this case, capital-intensive with high value added that grew after crisis had low absorption of labor.

**Protectionism and Import Substitution Policy**

From independence until crisis era, Indonesia had been ambivalent to the globalization. The pendulum shifts from protectionism to liberalization and otherwise, throughout republic history, from closed economy in the early 1960s to the open regime in the end of 1960s, back to regime with full of government intervention during oil boom era in 1970s to the deregulation era in the mid-1980s. AFC in the end of 1990s pushed Indonesia to implement liberalization even though it wasn't massive. Meanwhile, policy in Indonesia in the last decades has been tending towards protectionism.¹

One of the arguments that is mostly used in order to support protectionism is the import substitution policy which was popular in 1970s era. The logic behind import substitution policy is based on the infant industry argument as follows. Industrial products in Indonesia are not competitive by price as well as quality, in comparison to foreign products. Due to its competitiveness, there will be no production of those products. Since Indonesia does not produce those products, so that there’s no chance for Indonesia to learn on how to produce that product (economics of learning by doing) and to enjoy the economies of scale to lower the cost as well as quality of the product.

However, this argument has a weakness. One simple example as follows could provide picture concerning its weakness. For instance, assume that the price of import product A is Rp 1000/unit and the price of domestic price is Rp 1500/unit. In order for domestic product to compete with import product, Indonesian government needs to impose tariff on import product by Rp 500. If the price of domestic product can be lowered by Rp 50/year, then domestic product will be able to compete with import product in 10 years ahead.

Nonetheless, simple calculation above assumed that price of import product is stagnant. But, if there's an improvement on production of import product through various research and efficiency efforts, something different will happen. Consider that due to research and efficiency efforts, price of import product can be decreased by Rp 50/year, then new protection have to be implemented gradually and that industry will

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¹ See literature of Yose Rizal Damuri for further details concerning the development of Indonesian policy
continuously become infant industries that unable to compete. One thing to remember, this protection cost is entirely paid by the consumers.

A continuous protection scheme above is very likely to happen in the country with high corruption and high number of rent-seekers. Firms will compare the cost to lower its price to become more competitive (e.g. research and development cost) vs. the cost of lobbying to decision makers, in order to make them willing to give the firms protection deliberately. In the country with high corruption and high number of rent-seekers, it is most likely for the firms to choose the second strategy, which is rent-seekers strategy, instead of lowering their price of product. As the result, those industries will continuously become infant industries that are not competitive and the consumers will constantly being harmed.

The argument stated above is similar to logic thinking as follows. If a certain industry sure that the loss will only be temporary before it finally receives profit as the result from competing with import products, so that cost can be included in their business plan. The cost occur before the industry able to compete with import products can be covered by loan, then it can be paid off by the profit they received after the products become competitive to import products. By this argument, it's should be questioned why should consumers entirely paid the protection cost, while firms, if they're discipline in doing productivity and efficiency efforts, are able to compete in the long-term without protection?

**Global Production Network (GPN)**

GPN refers to trade and production that is vertically integrated and involving various countries, which become bigger part of global intra-industry trade, especially among East Asian countries. Through GPN, there are fewer countries that produce goods from the upstream to the downstream. Each country produces a certain component based on its comparative advantage to be combined into finished products in the country that takes role as the production hub. Among ASEAN countries, intra-industry trade related to GPN consists of more than 50% of the total trade (Athukorala, 2010). Mostly, GPN happens in the automotive and electronic industry, although basically, GPN can be implemented in many industries. Unfortunately, Indonesia is still left behind in this GPN. For instance, in 2010-2011, Indonesia was only involved in GPN by 0,5%; it was far behind Malaysia (2,6%), Philippines (1,2%), and Thailand (1,6%).
The previous import substitution and downstreaming policy are no longer compatible with the concept of GPN, and this should be left soon. Aside from the changing paradigm, there are three important things that determine participation of a country in GPN, such as trade regime, the openness of the investment, and the availability of efficient supporting service sector as well as competitive labors from low-skill to managerial level. Since labor competitiveness have been discussed before, so next discussion will focus on the trade regime and investment climate as well as logistic sector in support of GPN.

Trade regime policy in Indonesia still requires an improvement, especially a change in government approach from regulator into facilitator. The government role as regulator is more prominent after the law that is restrictive in nature was introduced. For example is *UU Perdagangan* or Trade Regulation, which mandates 9 Government Regulations, 14 President Regulations, as well as 20 Minister Regulations. The role of facilitating government seems to be insufficient, especially in the case of export that leads to high cost and risk, so that the situation is less profitable for producers. Then again, a change in paradigm is required to solve this problem. For example is Free Trade Agreement (FTA). This free trade agreement is still considered as negative perspective by most of the Indonesians. This condition is unquestionably contradictory to other countries that utilize FTA as the asset to participate in the GPN. Furthermore, FTA is not only the expansion of market access, but also the chance to increase product sophistication and labor quality in Indonesia, which are able to support Indonesia in GPN.

Investment climate in Indonesia that hasn't been good to support GPN is reflected from the low number of foreign investment, which is 28% of GDP, compared to neighboring countries that have achieved 40% of their GDP. At least, there are three main problems regarding investment in Indonesia. Firstly, there's a high cost of doing business in Indonesia that complicates the investors, which happen due to complex procedures and regulations. Barriers in land acquisition and the lack of investment incentives are also imped Indonesia to be uninteresting compare to its neighboring countries. Secondly, the over-lapped of institutional design is also highlighted because it may lead to some uncertainties in policy making and the formulation of regulation between ministries, central or local government. Thirdly, the established regulations aren't in a good quality, which is reflected on the abolishment of regulations that happen because these regulations collide with other previous regulations. This condition will obviously
increase the investment risk due to uncertainty. Lastly, there's a misguided understanding about *Daftar Negarif Investasi* (DNI) that is regarded as the protection list to keep national business sector away from the foreign investment. Whereas, most of business sectors, which are covered in DNI, are restricted from the lobbies of entrepreneurs who aren't willing to compete with foreign firms but they're willing to maintain the market with unhealthy competition. Aside from that, DNI hasn't take role as single reference in foreign investment in Indonesia.

The other cause of the lack of Indonesia's participation in GPN is due to the inefficient service sector in Indonesia. Transportation cost that reaches 27% of the total cost leads Indonesia to lose its competitiveness. This high cost is also worsened by the unreliable service and the lack of market competitiveness. There is several other service sectors with exclusive rights are dominated by BUMN. In addition, foreign investment is not maximized whereas technological transfer is still demanded by domestic firms.

5. Conclusion and Policy Recommendation

A change in industrial and trade policy paradigm is one of the keys in boosting Indonesian's competitiveness because for the past few years, policies in Indonesia tend to be protectionist and inward-looking. One of them is downstreaming strategy that is no longer relevant in international trade. Aside from that, Indonesia also has to be able to utilize partnership opportunities in the free trade area, such as Trans-Pacific Partnership (TPP). Policy makers in Indonesia shouldn't only be thinking about cost-benefit of joining in a certain trade agreement. But, they also have to think about the cost-benefit if they reject the partnership. In this case, the government has to be more proactive in facilitating trade instead of establishing restrictive regulations. This change in paradigm has to be wholly implemented in order to prevent inconsistency and preceded government regulations that often happened.

To solve infrastructure problem in Indonesia, it is recommended that Indonesian government have to improve its investment financial structure, project procedures, as well as infrastructure asset management system. The share between BUMN and private sector has to be rational and balanced, which can be achieved by encouraging BUMN to compete properly, so that government hopes to overcome infrastructure deficit through PPP scheme can be implemented. The formation of Project Development Facility (PDF) to increase the government readiness in the process of negotiating project is also needed. In addition, it is required for government to carry out a significant breakthrough in solving land acquisition issue.
To improve investment climate, Indonesian government has to increase its policy consistency as well as implementation design in order to give certainty to the investors. Furthermore, Indonesian government has to implement reward and punishment as well as key performance indicator system as the criterion for central and local government performance in support of business climate improvement. Concerned with DNI, the government has to assign DNI as a single reference for foreign investment regulation in Indonesia. Through this single reference, foreign investors will receive the certainty and they can avoid the ambiguity as well as inconsistency from the overlapped regulations. The formulation of DNI also has to be more comprehensive, transparent, and analytical-based such as Regulatory Impact Assessment (RIA). This analysis is prospected to be cross-institution by involving stakeholders and also free from certain group interests.

Related to GPN, as explained before, there are three things that have to be owned by a country to be involved in GPN, such as labors, efficient service sector, and open investment and trade regime. This rigid labor policy has caused Indonesia to lose its competitiveness in case of labor market. With this in mind, improving service sector and implementing trade and investment liberalization policy can improve Indonesia's competitiveness. For instance, Vietnam is an example of country that has succeeded in raising its participation in GPN and also active in international trade agreement.
References

Athukorala, P (2010). “Production Networks and Trade Patterns in East Asia: Regionalization or Globalization?” ADB Working Paper Series on Regional Economic Integration


