European Report on Development 2015
Financing and other means of implementation in the post-2015 context

Indonesia Country Illustration

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Section 1: In-country Transformation

Indonesia is known as the largest archipelago in the world that has 17,508 islands, 6,000 of which are inhabited. Indonesia is also known for its diversity with 300 distinct native ethnic groups and 742 different languages and dialects. Indonesia is rich of natural resource, such as petroleum, natural gas, coal, gold, and silver. In terms of environmental aspects, Indonesia is home of the world's richest biological diversity of plant and animal life, the highest marine diversity, and the second largest area of rainforest (USAID, 2008). Moreover, in terms of population, Indonesia is the fourth most populous country in the world after China, India, and the United States with estimated population of 242.3 million in 2014.

Indonesia is considered as the third largest democratic country in the world after the United States and India. The progress of democracy implementation in Indonesia is more rapid than other countries (Diamond, 2010). Moreover, Indonesia is also an important regional and global player and its location that seats among key international maritime straits make it as one of the key players of the regional security.

The current condition in Indonesia is the result of a long transformation that has been taking place since 1970s. The most significant milestone for Indonesia's transformation is the Asian Financial Crisis (AFC) in 1997-1998, which had an impact not only on the economy, but also on the area of politics, social and cultural, and environment.

Before the AFC, Indonesia enjoyed the highest economic growth in Southeast Asia with low inflation, modest current account deficit, rapid export growth and growing international currency reserves. Indonesia started as a country with dominant agricultural sector, especially during 1950s and 1960s. At that era, the Government of Indonesia (GoI) strongly promoted food self-sufficiency programs. In the period of 1960s and 1980s, industrialization and urbanization were gradually improved. This can be seen as the sign of shifting from agricultural country to a more industrialized country.

From 1971 to 1981, Indonesia showed sustained economic growth. Real GDP increased at annual average rate of 7.7% (Hill, 2000). This growth was partly contributed by the increase of international oil prices which quadrupled and which brought massive revenue gains for Indonesia in the mid of 1970s. Moreover, Indonesia was as one of the fastest growing economies in the world.

When international oil prices fell in 1986, Indonesia started to look for a new engine of growth. Indonesia transformed itself from an exporting oil country to be a manufacturing goods country. It also tried to reduce trade barriers and enhance global integration. Indonesia was considered as one of the East Asia's major success stories on economic structural transformation (Basri, 2013 and Goeltom, 2007). Together with Thailand and Malaysia, Indonesia was the member of the second tier of Newly Industrialized Economies (NIEs) (DiCaprio and Gallagher, 2006).

However, behind all the above economic success, Indonesia had macroeconomic imbalances and a weak macroeconomic foundation. These two factors, combined with regional shocks and turbulence, contributed to the crisis experienced by Indonesia. The previous achievements as one of the Asian Tigers were almost vanished when Indonesia was hit by AFC. The crisis has weakened the economic and political forces that have previously supported rapid economic growth and have enforced social stability in Indonesia (Malley, 2001). The crisis and its subsequent events have a huge impact on economic, social, political, and environment transformation that affecting and resulting with the current condition of Indonesia.

This paper tries to explore on the Indonesian transformation, from economics, social, and environmental, and the consequences of those transformation on further development of Indonesia, including the options on how to finance these development processes. The paper is constructed in five sections. This section will discuss thoroughly on the Indonesian transformations that has been experienced. Section two will focus on financing options for Indonesia. Section three will discuss on the financing human capital, physical infrastructure, and environment capacity development. Section four will be on complementary factors in mobilizing development finance and how to use finance
more effectively in transformation changes in Indonesia. The last section will be section five as the conclusion section.

**Political and Institutional Transformation**

During the New Order Regime under Soeharto era (1966 – 1998), Indonesia was known as an authoritarian country. The executive power was very powerful and the president held absolute power. Following the fall of the New Order regime, several changes have been made through a series of amendments of the constitution. These amendments have shifted Indonesia from an authoritarian country into a more democratic country.

Regarding the relation between central and local governments, the political and institutional transformation also included the implementation of decentralization in Indonesia. During this process, Indonesia transformed from one of the most centralized country in the world into one of the most decentralized in countries through a process that is known as the “big bang” of decentralization. Decentralization is defined as the transfer of responsibility for planning, management, and resources utilization and allocation of certain public functions from central government to local governments (Rondinelli et al., 1981).

The key objective of the decentralization in Indonesia was to achieve efficient public goods allocation by bringing decision makings close to people. It is also expected that the decentralization will be able to help to spread and balance regional economic growth. The decentralization was executed as consequences of Law No. 22/1999 and Law No. 25/1999 that was implemented in 2001. The decentralization also involves the division of responsibilities between central government and local governments. The central government is responsible for foreign policies, national security, defense, national finance, religion, law, and macroeconomic issues. Meanwhile, the local governments are responsible for local issues, such as local economy, education, heath, and infrastructure provision.

To finance their new responsibilities, local governments have received central government transfers to secure the provision of basic public services. These transfers are mainly in the form of General Allocation Grants (DAU) that are not earmarked and can be freely allocated by the regions, and Special Allocation Grant (DAK) where the fund is earmarked on specific purposes.

The transition phase from a centralized governmental system to a decentralized one in Indonesia is one of the most impressive transition phases, far from chaos and potential of splitting-up countries (Kurlantzick, 2012). However, the decentralization process in Indonesia is not free from negative impacts. One of the negative impacts is in terms of significant increase in number of provinces and districts (pemekaran daerah) 292 district local governments in 1999 to497district local governments in 2013. Nevertheless, the increasing number of new regions is not accompanied by decreasing disparities among those regions. One of the reasons for this is the lack of human resources and infrastructure to deliver public services (Decentralization Support Facility, 2007).

**Economic Transformation**

The Asian Financial Crisis (AFC) started when Thailand was forced to devalue its Bath. In a matter of days, the depreciation of Bath had caused the significant depreciation of Indonesian Rupiah. A high depreciation of Rupiah led to several unpleasant consequences such as increasing domestic debt, high inflation, increasing unemployment, bank rush, increasing poverty, and increasing government debt. Economic growth decreased by 13.7%. The crisis hit several sectors hard (McKinsey, 2012), such as construction (-39.8%), finance (-26.7%), and retail trade, hotel, and restaurant industry (-18.9%). The crisis also resulted in an increasing level of poverty by 24%.

The immediate impact of Asian crisis could be seen on levels of real output and employment (Krishnamurty, 2009). Apart from huge negative economic growth (-13.4% in 1998 (Figure 1.1)), Indonesia has also managed to push its economic growth, entering the recovery process and has been continuously growing steadily. Even during the Global Financial Crisis in 2008-2009, the Indonesian economy is one of only a few economies that still managed to have a positive growth, reaching 6%
during 2008-2009. Although many institutions predicted that Indonesia would be experiencing a slow down, in the first quarter of 2014, Indonesia still managed to grow by 5.21%.

**Figure 1.1**

Indonesian Economic Growth (%), 1961 - 2012

The Indonesian economic transformation can further be analyzed from the shifting of the main sector in the economy. Indonesia was previously known as an agricultural country. Starting from the early 1980s, the industrial sectors started to become the main sector in Indonesia. However, since 2000 this sector has been showing a decreasing trend in its contribution to the economy. The service sector has started to surpass the industrial sector in 2006 (Figure 1.2). This transformation from agricultural, to industrial sector, and finally to service sector happened in relatively short time, especially the shifting from industrial sector to service sector. However, although the contribution of industrial sectors is decreasing, manufacturing as part of the industrial sector is still the main sector in Indonesian economy in 2012, followed by agriculture and trade.

**Figure 1.2**

GDP Indonesia by Sectors

Note: The pie chart shows Indonesian GDP by sector in 2012

Source: Asian Development Bank, *Key Indicators*
On the expenditure side, the Indonesian GDP is dominated by private consumption (Figure 1.3). Although recently showing a decreasing trend, private consumption still contributed more than 50% of the GDP (57% in 2012). The dominance of private consumption as the main component of Indonesian GDP occurred even before Indonesia was hit by the Asian Financial Crisis. This structure of expenditure shows that for Indonesia, the consumers are the engine of growth. Therefore, since it is highly dependent of the people purchasing power, high inflation would reduce the purchasing power and slow down the economic expansion.

**Figure 1.3**  
GDP Indonesia by Expenditure

Indonesia needs to try to search other source of growth and not only depend on private consumption. Another source of growth that has potential as the next engine of growth is investment. Figure 1.4 shows the development of investment in Indonesia from 1995 to 2012. During the crisis, all forms of investments (direct, portfolio, and other type of investments) were experiencing investment outflows. This condition started to change, showing a positive trend after 2004. Currently, the main investment mode in Indonesia is through direct investment. This is a change from previous period where the main investment mode is through portfolio investment. This shift happened since 2010 and continued to go on up to 2012.
The role of international investors are significant, especially in the portfolio investment. The main investors in portfolio investment through Indonesian capital market are foreign investors (Table 1.1). Foreign investors hold 57.46% effects compared to 42.54% that are owned by the domestic investors. Foreign investors mostly hold their effects in the form of equity, mutual fund, and warrant, whereas domestic investors hold their effects in the form of corporate and government bonds, and Islamic bonds. The increasing present of foreign investors in the capital market can be seen as trust from foreign investors. However, the negative aspect of this development is that investments that are conducted through this mode will have a limited impact on economic growth since it is not directly connected to the real sector. Therefore, the impact of this type of investments are not directly linked to decreasing unemployment through job creations. Moreover, financial markets with high foreign investor presence can be prone to capital flight in the presence of shocks since the capital market is an open market.

### Table 1.1

**Composition of Effects’ Owner in Indonesian Capital Market**  
(Received by 7 February 2014)

<table>
<thead>
<tr>
<th>Effects</th>
<th>Value (in billion rupiah)</th>
<th>Percentage of Total Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Foreign</td>
<td>Domestic</td>
</tr>
<tr>
<td>1. Equity</td>
<td>1,532,329.40</td>
<td>893,553.70</td>
</tr>
<tr>
<td>2. Corporate Bond</td>
<td>13,852.10</td>
<td>197,148.90</td>
</tr>
<tr>
<td>3. Government Bond</td>
<td>434.60</td>
<td>21,674.20</td>
</tr>
<tr>
<td>4. Warrant</td>
<td>1,015.00</td>
<td>1,367.70</td>
</tr>
<tr>
<td>5. Right</td>
<td>0.00</td>
<td>1.60</td>
</tr>
<tr>
<td>6. MTN</td>
<td>4,939.10</td>
<td>17,297.90</td>
</tr>
<tr>
<td>7. Mutual Fund</td>
<td>1,320.70</td>
<td>600.60</td>
</tr>
<tr>
<td>8. SBSN</td>
<td>150.20</td>
<td>9,632.90</td>
</tr>
<tr>
<td>9. Sukuk (Islamic Bond)</td>
<td>141.00</td>
<td>7,119.00</td>
</tr>
<tr>
<td>10. EBA</td>
<td>0.00</td>
<td>2,325.70</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,554,182.10</strong></td>
<td><strong>1,150,722.20</strong></td>
</tr>
</tbody>
</table>

In order to improve its investment climate and its competitiveness, Indonesia still needs to carry out...
many improvements. Two indicators on investment conditions and competitiveness are Doing Business (Table 1.2) and World Competitiveness (Table 1.3). The Doing Business report shows that Indonesia is still categorized as having a low performance. Indonesia's rank is even lower in 2014 (rank of 120) compared to 2013 (rank of 116). Furthermore, from the components of Doing Business Rankings, Indonesia is considered to have good investor protection and cross border trade (rank 52 and 54 out of 189 countries). On the other hand, Indonesia still needs major improvement in terms of starting a business, enforcing contracts, paying taxes, and resolving insolvency, where all of these aspects are having lower rank than the Indonesia's overall rank. In terms of competitiveness, Indonesia ranks 38 out of 148 countries, where Indonesia is considered as having a good advantage in terms of market size. Moreover, based on this competitiveness index, Indonesia still needs to improve significantly especially in the area of labor market efficiency, technological readiness, and health and primary education.

<table>
<thead>
<tr>
<th>Topics</th>
<th>2014</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting a Business</td>
<td>175</td>
<td>171</td>
</tr>
<tr>
<td>Dealing with Construction Permits</td>
<td>88</td>
<td>77</td>
</tr>
<tr>
<td>Getting Electricity</td>
<td>121</td>
<td>121</td>
</tr>
<tr>
<td>Registering Property</td>
<td>101</td>
<td>97</td>
</tr>
<tr>
<td>Getting Credit</td>
<td>86</td>
<td>82</td>
</tr>
<tr>
<td>Protecting Investors</td>
<td>52</td>
<td>51</td>
</tr>
<tr>
<td>Paying Taxes</td>
<td>137</td>
<td>132</td>
</tr>
<tr>
<td>Trading Across Borders</td>
<td>54</td>
<td>52</td>
</tr>
<tr>
<td>Enforcing Contracts</td>
<td>147</td>
<td>146</td>
</tr>
<tr>
<td>Resolving Insolvency</td>
<td>144</td>
<td>142</td>
</tr>
<tr>
<td>Rank Overall (out of 189 countries)</td>
<td>120</td>
<td>116</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Aspects</th>
<th>2013-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Requirements</td>
<td></td>
</tr>
<tr>
<td>Institutions</td>
<td>67</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>61</td>
</tr>
<tr>
<td>Macroeconomic Environment</td>
<td>26</td>
</tr>
<tr>
<td>Health and Primary Education</td>
<td>72</td>
</tr>
<tr>
<td>Efficiency Enhancers</td>
<td></td>
</tr>
<tr>
<td>Higher education and training</td>
<td>64</td>
</tr>
<tr>
<td>Goods market efficiency</td>
<td>50</td>
</tr>
<tr>
<td>Labor Market Efficiency</td>
<td>103</td>
</tr>
<tr>
<td>Financial Market Development</td>
<td>60</td>
</tr>
<tr>
<td>Technological Readiness</td>
<td>75</td>
</tr>
<tr>
<td>Market Size</td>
<td>15</td>
</tr>
<tr>
<td>Innovation and Sophistications Factors</td>
<td></td>
</tr>
<tr>
<td>Business Sophistication</td>
<td>37</td>
</tr>
<tr>
<td>Innovation</td>
<td>33</td>
</tr>
</tbody>
</table>

Global Competitiveness Index (out of 148 countries) 38


SOCIAL AND CULTURAL TRANSFORMATION

The last population survey conducted in 2010 estimates that Indonesian population is reaching 237 million. This number of population has increased significantly from the previous survey in 2000 which estimated Indonesia's population at 206 million. Although Indonesia continues to increase in term of total population, the Indonesian population growth is showing decreasing trend, from 1.98% per year for 1980-1990 to 1.49% per year for the period of 1990 to 2010.

It is predicted that Indonesia will have a demographic bonus in 2025-2030. During this period, the number of people within the productive age bracket is higher than the number of elderly people and children (Figure 1.5). Therefore, the dependency index will reach its lowest point and more than 60% of the population is in the working age. This condition will provide a dynamic workforce for Indonesia and according to Indonesia Investment Coordinating Board will be one of the highest in the region.
This situation can lead to opportunities as well as challenges for Indonesia. On one side, Indonesia will have significant resources for the country’s economic development. Moreover, with the majority of the population at productive age, the burden of the state to provide support will be reduced. On the other hand, if these resources are not equipped with sufficient skills and education, the high number of productive age in the population will lead to a drastic increase in unemployment and in the end would be the burden of the state.

Before the Asian Crisis, there were no or relatively only a few policies targeted at the poor. As a result of this, many of the poor are excluded from the development outcomes. When the Asian financial crisis hit in 1997, the poor was directly exposed to this shock resulting in the significant increase of the number of people living below the poverty line. This impact can be shown from Figure 1.6 where in 1997 and 1998, there was a significant increase in the number of poor. This showed that at that time, Indonesia did not have or lack of social protection mechanism. Therefore, when a shocks hits the economy, in this case the Asian Crisis, there are no protection to prevent people to fall below the poverty line.

In 2013, approximately 11.4% people were living below the poverty line in Indonesia. Above this number, there are also people that are categorized as vulnerable groups which means they are living above the poverty line, but very prone to move back to below poverty line whenever a shock occurred. Moreover, from the perspective of regional disparity, it can be seen that provinces in the eastern part of Indonesia such as Papua, Maluku, Bali, and Nusa Tenggara tend to have higher level of poverty rate compared to other provinces (Figure 1.7). Despite the success of Indonesia in reducing national poverty, the disparity among region is still apparent. The provinces in western part of Indonesia tend to be more successful in reducing their poverty rate, while others find it quite difficult to reduce their poverty rate.
In terms of income inequality, the indicators show that the gap between the rich and the poor in Indonesia is getting wider. From 1990 to 2012, Indonesia's Gini coefficient has risen from 0.33 to 0.41, the highest in Indonesian history (Figure 1.8). The increasing trends of the Gini coefficients occur consistently in both urban and rural area as well as across regions in Indonesia. Moreover, the Gini coefficient in rural areas is still and always lower than in urban areas.

Moreover, the inequality are continued to increase across income groups. The increasing gap between the poor and the rich are driven by the differences in growth of per capita income. The poor only experiences annual per capita income growth of 2 percent, while the rich is enjoying an annual per capita income growth of 9 percent.
There are several statistics that can be used to monitor the achievements in improving education qualities, improving health conditions, and alleviating poverty. One of the indicators that is widely used is Human Development Index (HDI). The HDI is a summary of measure for assessing long-term progress in three basic dimensions of human development, those are; a long and healthy life (measured by life expectancy at birth), access to knowledge (measured by expected and mean years of schooling) and a decent standard of living (measured by GNI per capita) (UNDP, 2013). Figure 1.9 shows the development of Indonesia's HDI from 1980 to 2012.

**Figure 1.9**  
Indonesia's Human Development Index

<table>
<thead>
<tr>
<th>Years</th>
<th>Life expectancy at birth</th>
<th>Expected years of schooling</th>
<th>Mean years of schooling</th>
<th>GNI per capita (2005 PPP$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>57.6</td>
<td>8.3</td>
<td>3.1</td>
<td>1,278</td>
</tr>
<tr>
<td>1985</td>
<td>60</td>
<td>9.3</td>
<td>3.5</td>
<td>1,478</td>
</tr>
<tr>
<td>1990</td>
<td>62.1</td>
<td>9.9</td>
<td>3.3</td>
<td>1,911</td>
</tr>
<tr>
<td>1995</td>
<td>64</td>
<td>9.9</td>
<td>4.2</td>
<td>2,630</td>
</tr>
<tr>
<td>2000</td>
<td>65.7</td>
<td>10.3</td>
<td>4.8</td>
<td>2,390</td>
</tr>
<tr>
<td>2005</td>
<td>67.1</td>
<td>11.2</td>
<td>5.3</td>
<td>2,950</td>
</tr>
<tr>
<td>2010</td>
<td>68.9</td>
<td>12.9</td>
<td>5.8</td>
<td>3,775</td>
</tr>
<tr>
<td>2011</td>
<td>69.4</td>
<td>12.9</td>
<td>5.8</td>
<td>3,973</td>
</tr>
<tr>
<td>2012</td>
<td>69.8</td>
<td>12.9</td>
<td>5.8</td>
<td>4,154</td>
</tr>
</tbody>
</table>


Figure 1.9 shows that Indonesia has managed to improve all HDI components. life expectancy is reaching 69.8 with expected years of schooling 12.9 years. The GNI per capita has quadrupled since 1980, reaching 4,154 (using 2005 PPPS in 2012). However, if we compare to other countries achievements, it shows that Indonesia still needs to improve more and faster (Table 1.4). Indonesia has higher rank only if it is compared to Cambodia and Lao PDR.

**Table 1.4**
## HDI Comparison with Asian Countries (2012)

<table>
<thead>
<tr>
<th>No</th>
<th>Countries</th>
<th>HDI (Value)</th>
<th>Rank of HDI</th>
<th>Life expectancy at birth (years)</th>
<th>Mean years of schooling (years)</th>
<th>Expected years of schooling (years)</th>
<th>Gross national income per capita (2005 PPP $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Indonesia</td>
<td>0.629</td>
<td>121</td>
<td>69.8</td>
<td>5.8</td>
<td>12.9</td>
<td>4,154</td>
</tr>
<tr>
<td>2</td>
<td>Japan</td>
<td>0.912</td>
<td>10</td>
<td>83.6</td>
<td>11.6</td>
<td>15.3</td>
<td>32,545</td>
</tr>
<tr>
<td>3</td>
<td>Singapore</td>
<td>0.895</td>
<td>18</td>
<td>81.2</td>
<td>10.1</td>
<td>14.4</td>
<td>52,613</td>
</tr>
<tr>
<td>4</td>
<td>Brunei Darussalam</td>
<td>0.855</td>
<td>30</td>
<td>78.1</td>
<td>8.6</td>
<td>15.0</td>
<td>45,690</td>
</tr>
<tr>
<td>5</td>
<td>Malaysia</td>
<td>0.769</td>
<td>64</td>
<td>74.5</td>
<td>9.5</td>
<td>12.6</td>
<td>13,676</td>
</tr>
<tr>
<td>6</td>
<td>China</td>
<td>0.699</td>
<td>101</td>
<td>73.7</td>
<td>7.5</td>
<td>11.7</td>
<td>7,945</td>
</tr>
<tr>
<td>7</td>
<td>Thailand</td>
<td>0.690</td>
<td>103</td>
<td>74.3</td>
<td>6.6</td>
<td>12.3</td>
<td>7,722</td>
</tr>
<tr>
<td>8</td>
<td>Philippines</td>
<td>0.654</td>
<td>114</td>
<td>69.0</td>
<td>8.9</td>
<td>11.7</td>
<td>3,752</td>
</tr>
<tr>
<td>9</td>
<td>Cambodia</td>
<td>0.543</td>
<td>138</td>
<td>63.6</td>
<td>5.8</td>
<td>10.5</td>
<td>2,095</td>
</tr>
<tr>
<td>10</td>
<td>Lao PDR</td>
<td>0.543</td>
<td>138</td>
<td>67.8</td>
<td>4.6</td>
<td>10.1</td>
<td>2,435</td>
</tr>
</tbody>
</table>

Source: Human Development Report 2013, UNDP
Environmental Transformation

In terms of environmental aspects, Indonesia is faced with several issues that need serious attention and rigorous policy formulation from government and other stakeholders. One of the main issues is regarding energy provision. Although Indonesia is blessed with abundant energy resources, such as oil, natural gas, and coal, its energy sectors are still heavily dependent on non-renewable fossil fuel and natural gas. These non-renewable fuels are finite, gradually depleting, and also contribute to the emissions of greenhouse gas. Moreover, the abundant energy resources that are owned by Indonesia are often not used fully for energy provision in Indonesia. For example, Indonesia is one of the largest LNG producers, but most is exported to Japan. This is one of the examples where Indonesia is facing a trade-off between profit from energy resources export activities and for domestic consumption, what should be used for domestic demand and what should be exported (Figure 1.10) (Ministry of Energy and Mineral Resources, 2012).

Figure 1.10
Natural Resources Dilemma

Indonesia is also the third largest emitter of greenhouse gases in the world (World Bank, 2010). Indonesia's CO2 emissions are showing an upward trend since 1998 (Figure 1.11). However, unlike industrialized countries, Indonesia's greenhouse gases emissions are mostly as the result of forest fires and environmental degradation. In 1990, Indonesia’s forest covered close to 65% of the total land area. By 2011, the forests only covered 52% of the total land area (Figure 1.12). Between 2000 and 2003 the rate of deforestation in Indonesia was about one million hectares per year (Redd, 2012). In 2011 and 2012, the rate doubled to about two million hectares per year. Moreover, many plantations in Indonesia are created in areas of high conservation forest, that led to the loss of forest ecological resources and socioeconomic benefit for local people.

The main method of forest clearing for plantations is the burning the forest area. This method not only significantly contributes to the greenhouse gases emission, but also the smog from the fire causing hazardous pollution for Indonesia, and its neighboring countries, such as Malaysia and Singapore. In the last 16 years, the smog from forest fire in Indonesia has shrouded neighboring countries and increased the pollution standard index up to the hazardous level. Not only impacting the health, the smog could also hurt the economic sectors in Indonesia and neighboring countries.
The issue of climate change is also another important issues related to environment in Indonesia. It is widely believed that global climate change will be felt by all countries. Moreover, poor countries will receive the greatest impact of global climate change despite their contribution to greenhouse gases emission is least compared to rich countries. The greatest impacts of climate change will be experienced by the poorest people in the country, especially those who live in areas vulnerable to flooding, landslides, and drought. The poor lack the assets and flexibility to handle the impacts that climate change have on productivity. With their limited sources, developing countries will not be able to mitigate and adapt to the climate change. It is believed that if climate change is not adequately addressed it will have severe consequences on economic development and the reduction of poverty (ADB, 2009). It needs global policy and commitment to reduce the impact of climate change to overcome the problems of climate change.

Indonesia has been identified as one of the most vulnerable Asian countries in the face of climate change. Indonesia climate change not only has implications for the Indonesia’s environment, it also affects its economy, development, poor population, and health. It is predicted that climate change will cost Indonesia approximately between 2.5% to 7% of GDP by the end of this century (World Bank,
2009). The sectors in the Indonesian economy that will significantly affected by climate change are agricultural and fisheries (ADB, 2009).

Yet with all programs and mainstreaming the principles into the National Plan, Indonesia has not been too successful in harmonizing its short-term goals with the long-term development objectives. It happened particularly when crisis struck (the Asian Financial Crisis 1998 and the Global Financial Crisis 2008) and the urgency to push for economic recovery was high (See Table 1.5 below, in 2000 and 2008 total natural resource rent as percentage of GDP in Indonesia was increased significantly). Another problem for implementation came from decentralization and regional autonomy. Central government must work together with local regions in order to conduct programs at grass-root level.

### Table 1.5
Towards Sustainable Development, Indonesia 1990-2012

<table>
<thead>
<tr>
<th>Year</th>
<th>Electricity prod. fr renewable sources, excl hydroelectric (% of total)</th>
<th>GDP per unit of energy use (PPP $ per kg of oil equivalent)</th>
<th>CO2 emissions (metric tons per capita)</th>
<th>Forest area (% of land area)</th>
<th>Total natural resources rents (% of GDP)</th>
<th>Fossil fuel subsidy (% of GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>3.44</td>
<td>2.73</td>
<td>0.84</td>
<td>65.44</td>
<td>13.52</td>
<td>n/a</td>
</tr>
<tr>
<td>1995</td>
<td>3.74</td>
<td>3.39</td>
<td>1.16</td>
<td>60.16</td>
<td>8.63</td>
<td>n/a</td>
</tr>
<tr>
<td>2000</td>
<td>5.22</td>
<td>3.22</td>
<td>1.26</td>
<td>54.87</td>
<td>14.62</td>
<td>n/a</td>
</tr>
<tr>
<td>2005</td>
<td>5.20</td>
<td>3.93</td>
<td>1.52</td>
<td>54.02</td>
<td>15.37</td>
<td>n/a</td>
</tr>
<tr>
<td>2007</td>
<td>4.96</td>
<td>4.58</td>
<td>1.63</td>
<td>53.26</td>
<td>13.87</td>
<td>2.10</td>
</tr>
<tr>
<td>2008</td>
<td>5.59</td>
<td>4.85</td>
<td>1.76</td>
<td>52.88</td>
<td>15.91</td>
<td>3.00</td>
</tr>
<tr>
<td>2009</td>
<td>6.01</td>
<td>4.78</td>
<td>1.91</td>
<td>52.51</td>
<td>8.38</td>
<td>0.80</td>
</tr>
<tr>
<td>2010</td>
<td>5.60</td>
<td>4.85</td>
<td>1.80</td>
<td>52.13</td>
<td>8.45</td>
<td>1.30</td>
</tr>
<tr>
<td>2011</td>
<td>5.25</td>
<td>5.33</td>
<td>n/a</td>
<td>51.75</td>
<td>8.90</td>
<td>2.20</td>
</tr>
<tr>
<td>2012</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>7.13</td>
<td>1.60</td>
</tr>
</tbody>
</table>


To overcome the above environmental problems, there are several key strategic elements that are important to be addressed (Jupesta, 2011), those are reducing oil subsidies, improving green technologies, supporting a sustainability transition through improving skills and capabilities of workers, improving the international cooperation, and transparent and responsible accounting framework involving social, economic and environment indicators. Moreover, to achieve green economy, there are four energy policies that are planned to be implemented (Sitompul, 2013)

1. Energy conservation, intended to increase energy efficiency on supply and demand side, e.g. industrial, transportation, household, and commercial sector
2. Energy diversification, intended to increase the share of new and renewable energy use in national primary energy mix consisting of new energy (liquefied coal, nuclear, and hydrogen) and renewable energy (geothermal, hydro, solar, wind, and ocean wave)
3. Energy price, in this case the administered oil price where the government tries to reduce the oil subsidy by various policies, where increasing oil price is one of the options.
4. Environmental degradation which currently continued in an alarming rate

The current condition in Indonesia is the result of a long transformation. However, as already discussed above, Indonesia as one of emerging developing countries, still have lots of homework to be solved. One of the most significant issues is how to have and maintain the financing for a stable and sustainable economic development. The next section (Section 2) will discuss the various financing options in Indonesia and their current conditions.
Section 2: Financing Options for Indonesia

The financing options in Indonesia is growing as the financial sector in Indonesia develops. Until the early 1980s, Indonesia’s financial system was heavily controlled by the government. The role of the government was quite broad, from establishing the interest rate to setting strict geographic restriction on private banks’ branching. Moreover, under this mechanism, the saving rate and aggregate investment level were quite low. The government realized this condition would not be conducive to support the economic growth.

During those period, the main goal of Government of Indonesia (GoI) budget policy was to maintain a balanced budget (Anggaran Berimbang). Balanced budget means keeping government revenue and expenditure in balance, including revenue sources from foreign aid and borrowing (Asher and Booth, 1990). When the budget was not in balance, the GoI will counterbalanced it with increasing foreign aid and borrowing in order to maintain a balanced budget. In this case, balanced budget policies tried to avoid financing the deficit through money creation.

Moreover, GoI also played an important role in the financial system. Official Development Assistance (ODA) and private capital (Foreign Direct Investment/FDI, portfolio investment, and Debt) was under GoI supervision. There were no incentive mechanism for the public to put their money in the banking sector and the rate of saving were low.

There is public and private finance. Private finance includes credit from private sector/commercial bank lending, Foreign Direct Investment (FDI), and Portfolio Investment. Meanwhile the main source of public finance is domestic revenue, such as tax, non-tax, and government bond, and foreign revenue.

**Domestic private financing**

The national private financing for Indonesia can be divided into domestic savings and domestic loans. Domestic savings can play a key role in development financing since the domestic saving can provide resources to finance the investment, increase financial (or capital) market development, stimulate economic growth, and maintain the living standards. Countries with higher economic growth usually have high savings ratios (Rodrik, 1998; and Hammouda and Osakwe, 2006). However, the domestic savings in Indonesia are considered as inadequate to meet Indonesia investment needs. Therefore, other sources of financing are needed to close this financing gap.

Another source of financing for development in Indonesia is loan in capital markets. Capital markets have important and strategic roles in providing sources of funds for economic development. Efficient capital markets would lower the cost of mobilizing savings and facilitating investments to the productive sector (Greenwood and Smith, 1996). The international risk sharing through internationally integrated stock markets improves resource allocation and accelerates growth (Obstfeld, 1994). Moreover, capital market development will contribute to economic growth both directly, for example through market liquidity or turnover ratio, and indirectly, such as through market size or capitalization ratio.

The development of Indonesian capital market can be seen in Figure 2.1. The market capitalization has significantly increased since 2004, although it experienced a drop during the Global Crisis in 2008. Indonesian state-owned enterprises (SOEs) also play a major part in the Indonesian capital market. In 2010, listed SOE contributed 29.5% of the total market capitalization on Indonesia Stock Exchange. Among ten biggest market capitalization in Indonesian Stock Exchange, five come from SOEs (MoF, 2011).
Box 1. Banking Deregulation to Mobilize Private Financing

Before 1983, banking sector in Indonesia was relatively small, consisting of Bank of Indonesia as Central Bank and regulator with several state-owned bank. Some private banks did exist, but very limited in terms of permitted activities and capitalization. The financial system was able to utilize the abundant funds from foreign aid and the soaring revenue of the 1970s’ oil boom. The decline of oil price pushed the government to radically alter the previous banking structure. In order to facilitate private financing needed for private sector activities, the government of Indonesia introduce several deregulation reform in promoting banking industry. The financial reform in 1983 and the second reform of 1988 transferred Indonesia’s fund allocation principle, with deregulation and liberalization at the core, from the government to the market. The third reform in 1991 turned the attention to prudential regulation and the government started to pay close attention to soundness in banking practice.

The deregulatory package in 1983 included the abolishment of credit ceiling, the ability for banks to determine their own interest rate, and the removal of 20% tax on interest earned by foreign-currency- denomination deposits. The Bank of Indonesia also introduced several inter-banking credit facilities to help liquidity problems of banks. These were followed by 1988’s policy package which lift up the restriction to establish new private banks (previously set in 1968), as well as reduce the capital requirement of new banks, while at the same time allow private banks to open branches nationwide. Foreign banks were also admitted into Indonesia’s banking system. The result was that the number of banks increased tremendously from 111 in 1998 to 240 in 1994. The third reform in 1991 was intended to tighten the prudential regulations. However, poor implementation of those regulations lead to the weakening control to banking system and increased their vulnerability, which would be the major source of banking crisis in Indonesia during the (AFC).

Figure 2.1
Market Capitalization and Total Value of Stocks Traded in Indonesian Capital Market, 1990 - 2012

Despite positive progress, capital market share still shallow. Deepening them would help maintain
financial stability in the medium term and ease access to finance, especially for small firms. A wider range of instruments has been provided, and banking sector has been encouraged to carry out more transactions in the wholesale markets. However, there are segments on the financial markets, such as venture capital and micro-finance that remain insufficiently developed.

Moreover, the level of participation in the Indonesian capital market is particularly low compared to several advanced and emerging countries in Asia (Table 2.1). The number of investors in the capital market in Singapore and Hongkong is 60% and 17.5% of their total population, respectively. Meanwhile, in the case of Indonesia, the number of investors is only around 0.14% of the total population.

<table>
<thead>
<tr>
<th>Country</th>
<th>Population (Million)</th>
<th>Number of Investors in Capital Market (Million)</th>
<th>Number of Investors in Capital Market (% of Population)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore</td>
<td>5.08</td>
<td>3.05</td>
<td>60.00</td>
</tr>
<tr>
<td>Hongkong</td>
<td>7</td>
<td>1.23</td>
<td>17.50</td>
</tr>
<tr>
<td>Malaysia</td>
<td>28.9</td>
<td>3.61</td>
<td>12.50</td>
</tr>
<tr>
<td>South Korea</td>
<td>49.1</td>
<td>4.17</td>
<td>8.50</td>
</tr>
<tr>
<td>Japan</td>
<td>127.53</td>
<td>10.2</td>
<td>8.00</td>
</tr>
<tr>
<td>Indonesia</td>
<td>238</td>
<td>0.33</td>
<td>0.14</td>
</tr>
</tbody>
</table>

Source: Indonesian Ministry of Finance (2011)

International private finance

Another alternative for development financing is through international private financing options. One of the main sources of this type of financing is through Foreign Direct Investment (FDI). FDI is considered an important source of financing for developing countries, since FDI is more stable and has less risk than other international financing options, such as portfolio investment or foreign debt. In addition, FDI is not easily influenced by the fluctuation of exchange rate.

Various studies have discussed the effects of FDI in an economy. FDI is believed to be a source of economic growth (Balasubramanya et al., 1996 and Borensztein et al., 1998). FDI will promote economic growth through strengthening human capital (Romer, 1990). The role of FDI in the economy occurs through direct and indirect effects (Piyaareekul, 2008). The direct effects of FDI consist of increasing capital formations, employment or job creations, and increasing trade volume (Figure 2.2). Meanwhile, the indirect effects of FDI consist of increasing local productivity, transfer of knowledge, technology, and management skills for the host country. Several studies have been discussing the role of FDI in the Indonesian economy and conclude that FDI have positive effects on Indonesian economic growth (Khaliq and Noy, 2007). It can also be seen that high level of FDI can generate high level of economic growth, and vice versa, a high level of economic growth can generate high level of FDI (Pradhan, 2009).
FDI in Indonesia is intertwined with Indonesian financial deregulation policies. By adopting a fixed foreign exchange rate system in 1970 and followed by further liberalization of the financial sector in 1980s, Indonesia has become an attractive destination for foreign investment. Indonesia changed the system from fixed exchange rate that is pegged to US Dollars to managed floating exchange rate since the Asian Crisis 1997. As the result, Indonesian FDI has increased steadily since the early 1990s. It increased significantly in 1995 to 1997 (Figure 2.3). After the Asian Financial Crisis, Indonesia was experiencing FDI outflows from 1998 to 2001, where the highest outflow occurred in 2000. In 2002, Indonesia managed to have a substantial FDI inflow, and, afterwards in 2003, Indonesia experienced another net FDI outflow. Indonesia started to have net FDI inflow since 2004, and until 2012 the total amount of net inflow FDI continues to increase.
Table 2.2 shows the development of net FDI inflow among Asian countries. In 1982, the Indonesia’s net FDI inflow was lower than that of Singapore, Malaysia, Japan, and China. However, by 2012, the Indonesian net FDI inflow had significantly increased. Only China and Singapore that have higher net FDI inflow than that of Indonesia.

<table>
<thead>
<tr>
<th>Country Name</th>
<th>1982</th>
<th>1990</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>430.00</td>
<td>3,487.00</td>
<td>253,474.94</td>
</tr>
<tr>
<td>Singapore</td>
<td>1,601.85</td>
<td>5,574.74</td>
<td>56,651.07</td>
</tr>
<tr>
<td>Indonesia</td>
<td>225.00</td>
<td>1,093.00</td>
<td>19,618.05</td>
</tr>
<tr>
<td>Thailand</td>
<td>190.87</td>
<td>2,443.55</td>
<td>10,689.32</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1,397.20</td>
<td>2,332.46</td>
<td>9,733.62</td>
</tr>
<tr>
<td>Vietnam</td>
<td>13.05</td>
<td>180.00</td>
<td>8,368.00</td>
</tr>
<tr>
<td>Korea, Rep.</td>
<td>69.00</td>
<td>788.50</td>
<td>4,999.00</td>
</tr>
<tr>
<td>Philippines</td>
<td>16.00</td>
<td>530.00</td>
<td>2,797.00</td>
</tr>
<tr>
<td>Japan</td>
<td>440.00</td>
<td>1,777.36</td>
<td>2,525.41</td>
</tr>
</tbody>
</table>

Source: www.databankworldbank.org

**Domestic public finance**

The Government of Indonesia also plays a significant role in financing for development. The government policies to achieve the national development goals are conducted through implementing policies related to government revenue, government expenditure, and government financing. The government revenue policies are focused on optimizing the revenue from tax and non-tax sectors that include continuing basic taxation policies, intensifying tax potential exploration, and improving supervision and services in customs sector. Table 2.3 shows the State Budget on tax and non-tax revenue both from domestic and grants. The figure shows that the domestic revenue continues to increase in an upward trend. Figure 2.4 also shows that the revenue from Grants on the other hand shows a downward trend since 2012. This is due to the GoI policy to reduce dependency on foreign sources while at the same time strengthening domestic capital market.
The main revenue of government financing comes from domestic tax and natural resources (Table 2.3). The natural resources revenue is the revenue from the usage of natural resource, which one of its form is royalty that is paid to the government from fisheries, forestry, and mining sector. Table 2.3 shows that the domestic tax revenue in 2009 was Rp 619.92 trillion, and continued to increase to Rp1,192.99 trillion in 2013 or 74.2% of the total government revenue. The main tax revenue comes from Income Tax and Value Added Tax. Table 2.3 also shows a significant role of revenue from natural resources, although it is showing a decreasing trend.

During the oil boom in 1980s, Indonesia enjoyed a significant improvement in revenue mainly from oil. When the oil market collapsed in the middle of 1980s, the government started to look for other

---

Table 2.3

<table>
<thead>
<tr>
<th>Item</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
</tr>
<tr>
<td>I. Domestic Revenues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Domestic Tax Revenues</td>
<td>601.25</td>
<td>694.39</td>
<td>819.75</td>
<td>968.29</td>
<td>1,134.29</td>
</tr>
<tr>
<td>b. International trade tax</td>
<td>18.67</td>
<td>28.91</td>
<td>54.12</td>
<td>47.94</td>
<td>58.70</td>
</tr>
<tr>
<td>II. Grants</td>
<td>26.05</td>
<td>30.10</td>
<td>32.18</td>
<td>30.78</td>
<td>33.50</td>
</tr>
<tr>
<td></td>
<td>53.80</td>
<td>59.43</td>
<td>69.36</td>
<td>72.80</td>
<td>77.99</td>
</tr>
<tr>
<td></td>
<td>8.37</td>
<td>10.59</td>
<td>20.10</td>
<td>20.41</td>
<td>23.50</td>
</tr>
</tbody>
</table>

Revenues and Grants

<table>
<thead>
<tr>
<th>Item</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
</tr>
<tr>
<td></td>
<td>848.76</td>
<td>995.27</td>
<td>1,210.60</td>
<td>1,358.21</td>
<td>1,529.67</td>
</tr>
</tbody>
</table>
sources of funds. To overcome the decrease in revenue, government started tax reform with the purpose of generating more revenue from taxes as substitution for oil revenues. The two big steps in the 1985 tax reform were the introduction of value added tax and self assessment system in income tax. This has improved the economy’s performance by increasing the funds available for urgently needed public expenditure items and by easing the burden on tax payers.

Figure 2.5 shows that tax revenue in Indonesia is higher than the non-tax revenue. Moreover, the difference between these revenues is getting wider. Currently, GoI have a wide variety of taxes with varying impacts on income distribution, such as income tax, Value Added Tax (VAT), property tax, acquisition duty of right on land and building (Bea Perolehan Hak atas Tanah dan Bangunan-BPHTB), excise tax (cukai), and other tax. As shown by Figure 2.6, income tax was the main source of Indonesian government revenue compared to the others tax.

**Figure 2.5**
Comparison Tax and Non-Tax Revenue, 1996-2012 (% of GDP)

**Figure 2.6**
Indonesian Tax Revenue, 1991 - 2013 (in trillion rupiah)

Source: Key Indicators, Asian Development Bank
Source: Indonesian Financial Statistics, Bank of Indonesia

**Figure 2.7**
Realization Government Non-Tax Revenue, 1991 - 2013 (in trillion rupiah)

Source: Indonesian Financial Statistics, Bank of Indonesia

*) Based on state budget
Government revenues from non-tax revenue are dominated by revenue from natural resources compared to others, such as profit transfers from Stated Owned Enterprises (SOE's), surplus form Bank Indonesia, revenue from public service institution, and other non tax revenues. Natural resources revenues are revenues from oil, gas, and other natural resources including mining, forestry, fishery, and geothermal. Oil is the main source of revenues collected from natural resources sector with contribution of 72.58% on average during 1991 - 2013 (see Figure 2.8). Despite of dominance of oil revenues on government revenue from natural resources, but the trend shows decreasingly (see Figure 2.9). Oil revenue in 2013 amounted to 61.3% of total revenue from natural resource, decreased significantly from early 1990s when oil revenue contribution to the total revenue from natural resource reaching 93.70%. The second main source of natural resources is from natural gas. This is consistently increasing both in terms of value and contribution to total revenue from natural resources (see Figure 2.8 and 2.9). Gas revenue is significantly increasing from 6.30% in early 1990s to 27.36% of total revenue from natural resource in 2013.

**Figure 2.8**
Comparison Oil, Gas, and Other Natural Resources Revenue, 1991 - 2013
(in trillion rupiah)

**Figure 2.9**
Comparison Oil, Gas, and Other Natural Resources Revenue, 1991 - 2013
(% of total revenue from natural resources)

Source: Indonesian Financial Statistics, Bank of Indonesia
*) Based on state budget

This option to increase revenue from tax is still feasible since Indonesia still has low tax-to-GDP ratio, narrow tax base, and low tax ratio. Although it has increased over the years, the Indonesia tax-to-GDP ratio is less than 12%, which is quite low by international standards (Figure 2.10). To a large extent, this reflects widespread informality and tax evasion. Moreover, in 2013, the Indonesian tax ratio is 12.2%. This ratio has been steadily improving since 2009 (Figure 2.10).
Moreover, Indonesia’s tax rate is still low compared to both regional and OECD countries. The ratio of general government tax revenues to GDP was 12.6% in 2011, slightly lower than in 2008, and one of the lowest in the G20 countries. For comparison, several of the more developed ASEAN countries collected more than 15% of GDP in tax revenues in 2009, and the OECD’s countries average was at 33.8% of GDP (exc. non-tax revenues). The IMF estimate of the maximum tax revenue that Indonesia could achieve by broadening the tax base and enhancing compliance at current rates is 21.5% of GDP (IMF, 2011).

The challenges for increasing the tax ratio in Indonesia come from many aspects: governance, monitoring illicit work, tax evasion, efficiency, tax collection, tax payer identification, and corruption. If these issues are not addressed properly, the government will find it difficult to increase the tax to GDP ratio.

Another alternative to increasing tax rates and increasing tax revenues is through broadening the tax base. The rise of the middle class and the high number of informal sectors in Indonesia offer an opportunity for the government to broaden the tax base. According to the Statistics Indonesia (Badan Pusat Statistik/BPS) 68% of Indonesian was employed in informal sector in 2009. Currently, Indonesia is experiencing a rapid expansion of its middle class, which has helped to transform the country's consumer market. The population of middle-class Indonesian reaches 74 million. It is estimated that by 2020, that number will increase by two-fold, reaching 141 million people. Businesses can expect to capitalize on both the strong purchasing power and the high labor skills of the middle class.

The expenditure side of the State Budget is shown in Figure 2.12. The expenditure in Figure 2.11 is divided between the central government expenditure and local government expenditure. Figure 2.11 shows that the actual expenditure both for central and local governments has increased steadily. Moreover, it can also be seen that after the implementation of decentralization, there is a gap that becomes wider between the expenditure of central government and local governments. It means that the growth of central government expenditure is faster than that of the local governments.
#### Central Government Expenditure, 2011 - 2013

<table>
<thead>
<tr>
<th>Item</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rp (billions)</td>
<td>Rp (billions)</td>
<td>Rp (billions)</td>
</tr>
<tr>
<td>2. Material Expenditure</td>
<td>124,640</td>
<td>162,012</td>
<td>200,735</td>
</tr>
<tr>
<td>3. Capital Expenditure</td>
<td>117,855</td>
<td>176,051</td>
<td>184,364</td>
</tr>
<tr>
<td>4. Interest Payment</td>
<td>93,262</td>
<td>117,785</td>
<td>113,244</td>
</tr>
<tr>
<td>a. Interest of Domestic Debt</td>
<td>66,825</td>
<td>84,749</td>
<td>80,703</td>
</tr>
<tr>
<td>b. Interest of Foreign Debt</td>
<td>26,437</td>
<td>33,036</td>
<td>32,541</td>
</tr>
<tr>
<td>5. Subsidy</td>
<td>295,358</td>
<td>245,076</td>
<td>317,219</td>
</tr>
<tr>
<td>a. Energy</td>
<td>255,609</td>
<td>202,353</td>
<td>274,743</td>
</tr>
<tr>
<td>b. Non Energy</td>
<td>39,749</td>
<td>42,723</td>
<td>42,476</td>
</tr>
<tr>
<td>6. Grant Expenditure</td>
<td>300</td>
<td>1,791</td>
<td>3,621</td>
</tr>
<tr>
<td>7. Social Assistance</td>
<td>71,104</td>
<td>86,028</td>
<td>73,609</td>
</tr>
<tr>
<td>a. Natural Disaster Rescue</td>
<td>3,978</td>
<td>4,000</td>
<td>4,000</td>
</tr>
<tr>
<td>b. Ministry/institution Assistance</td>
<td>67,126</td>
<td>82,028</td>
<td>69,609</td>
</tr>
<tr>
<td>8. Other Expenditure</td>
<td>5,465</td>
<td>68,535</td>
<td>19,983</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>883,722</td>
<td>1,069,534</td>
<td>1,154,381</td>
</tr>
</tbody>
</table>

Source: Ministry of Finance, State Budget (2013)
In Indonesia, government expenditures are dominated by personnel expenditure (civil service expenditure) and subsidies. In 2013, these two components cover 48.41% of total government expenditure. Total personnel expenditure in 2013 is Rp241 trillion, and total subsidies expenditure is Rp317 trillion. This means that the Indonesian budget are mainly used for operational and subsidies, while the allocation for development itself (through capital and goods and services expenditure) is lower compared to the expenditure for personnel and subsidy. (Table 2.4 and Figure 2.12).

**Budget Allocation of Local Government (2013)**

From the figure above, it can be seen that government revenue is generally lower compared to its expenditure. This difference means that the government needs additional financing to close the gap and finance its activities. The type of financing can be divided into two categories based on the origin,
that is domestic financing and foreign financing. The actual financing of the State Budget can be seen in Figure 2.14. The figure shows a decreasing trend of Indonesia’s foreign financing. From 2000, the government has started to repay its foreign debt, which is the source of foreign financing. On the other hand, the domestic financing is experiencing a significant increase which shows that the government prefers to use the domestic market as its financing source.

**Figure 2.14**

Actual Financing (trillion rupiah), 1990 - 2014

Source: Ministry of Finance

Note:
- The figure represents the value in the state budget, not the realization
- Negative numbers indicate that the loan repayment greater than the withdrawal

The use of foreign financing in the form of foreign debt by Indonesians (especially GoI) to finance development started in 1966 due to lack of domestic resources. In the mid of 1960s, Indonesia’s foreign debt reached $2,015 million (Cholifihani, 2008). Along with the implementation of deregulation in financial sector that allows the private sector to borrow from external sources, Indonesia’s debt (both government and private sector) started to increase. Indonesia’s Debt to GDP ratio reached almost 100% in 1998 as the impact of Asia’s crisis. However, the government has been able to lower its debt to GDP ratio, reaching 22.9% in 2012 (Figure 2.15). At the moment, the ratio of Indonesia government debt to GDP is relatively low and experiencing the fastest reductions compared to other countries, including developed countries (Figure 2.16).
The underlying motivations to reduce Indonesia’s foreign debt include:

1. Increasing pressure of debt repayment due to foreign exchange fluctuation;
2. Decreasing ability to pay due the increase of Debt Service Ratio (DSR);
3. Increasing ability to foster foreign debt that will decrease the ability to foster domestic capacity; and
4. Large foreign debt that could affect public expectations through an assessment of the economic outlook.
5. Large foreign debt will bring a negative impact on the business sector and the national economy.

Learning from previous experience in managing external debt and in order to improve the debt structure, the government has tried to alter its debt composition to be more dominated by domestic debt. This policy is in line with empirical studies of Reinhart, Rogoff and Savastano (2003), and Santoso (2004) that stated the ideal foreign debt to GDP ratio to prevent sovereign debt crisis is 15-20%. The switching process from foreign debt to domestic debt can be seen in Figure 2.15.

Financing the deficit using domestic debt is conducted by the additional issuance of Surat Berharga Negara (SBN) and withdrawal of loan programs. At the end of 2013, there was a significant increase in government debt outstanding of 20% from 2012. The increase in outstanding government bonds due to the SBN issuance both in the global and domestic markets, meanwhile the increase of outstanding loans is caused by the depreciation of the rupiah against the foreign currency since more than 99% of outstanding loans denominated in foreign currency.

Therefore, by the end of 2013, there is a change in the composition of government debt, the portion of SBN instruments increased to 70.0% while the share of loan instruments decrease to 30.0% (Table 2.5). This is due to the government's debt financing strategy that prioritised debt financing through the issuance of government securities compared with loan withdrawal.
Table 2.5
The Development of Government Debt

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBN</td>
<td>62%</td>
<td>63%</td>
<td>66%</td>
<td>69%</td>
<td>70%</td>
</tr>
<tr>
<td>Loan</td>
<td>38%</td>
<td>37%</td>
<td>34%</td>
<td>31%</td>
<td>30%</td>
</tr>
<tr>
<td>Total Debt (Rp)</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: DMO Ministry of Finance, 2014

Indonesia Government Securities (Surat Berharga Negara/SBN) consists of Government Bonds (SUN) and Sharia Government Bonds (SBSN). Government Bonds (SUN) are securities in the form of acknowledgement of indebtedness in rupiah and foreign currency secured by the payments of interest and principal amount by the State of the Republic of Indonesia, according to their validity period, as referred to in the applicable laws.

Indonesia has also tried to implement other alternative methods to finance its development. One of the options is through Public Private Partnerships (PPP) and Municipal/Local Government Bond. There are several PPP opportunities in infrastructure in Indonesia are potential to develop in the nearest future, such as (Strategic Asia and UK Foreign Commonwealth Office, 2012):

1. The **drinking water** sector (facility for raw water extraction, transmission network, distribution network, drinking water management installation);
2. The **transportation** sector (port, airport, railway and train station);
3. The **road** sector (toll roads and toll bridges);
4. The **electricity** sector (power plant, transmission and electricity power distribution);
5. The **oil and natural gas** sector (processing, storing, carrying, transmission or distribution);
6. The **waste management sector** (wastewater management installation, carrier and disposal sites);
7. The **irrigation** sector (pipeline for raw water);
8. The **telecommunication** sector (telecommunication network).

Although potential to be develop in the future, some of the PPP schemes are still constrained by the difficulty of land acquisition, regulatory uncertainties, and lack of funding. There are numerous attempts by the government to attract private sector involvement into the schemes. However, the number of projects funded to date is close to nothing (CEDS, 2012). For example, none of 99 projects offered to the private sector in 2005’s Indonesia Infrastructure Summit were executed. This is similar to the case of 200 projects offered during 2008’s Indonesian Regional Investment Forum.

Securing contracts from the private sector to commit securing long term investment is not easy. There are several barriers and challenges in implementing PPP projects in Indonesia, such as:

1. Land acquisition problems;
2. Lack of local government capacity on PPP mechanism and implement procedures;
3. Unclear procedures or mechanism for private sector to enter the PPP market;
4. Contradicting and overlapping regulations among government regulations;
5. Poor governance coordination among government institutions; and
6. In conducive business environment that causes inadequate business environment for GoI to promote PPP.
The PPP mechanism has been implemented by local governments. However, without proper monitoring mechanism and adequate capacity building from local governments, this will bring a more complicated problem in setting infrastructure PPP scheme to work. Low capacity building of local government civil service will hamper the continuation of the PPP coordination. Moreover, it also needs good coordination and robust policies to manage PPP schemes.

The current conditions and the development of financing options in Indonesia has been discussed in this section. However, there are several aspects of developments that need a deeper discussions regarding the financing options for those aspects. Those aspects are, among others, human capital, physical infrastructure, and environment capacity. The detail on financing human capital, physical infrastructures and environment capacity developments in Indonesia, especially regarding their past and current conditions will be discuss thoroughly in the next section (Section 3).
In this Chapter, it would be discussed how Indonesia improve its human capital formation and physical infrastructure over the years as they are the key enablers to stellar performance of the Indonesian economy. In addition to human capital and physical infrastructures, there have been lots of programmes and policies designed to support sustainable development by enhancing environmental carrying capacity. Along with those, there have been lots of resources and financing options dedicated to those plans. It would be interesting to see the impacts of such programs to the achievements of MDGs in 2015 for Indonesia.

**Human Capital Formation**

Sustained economic growth is always associated with high labour productivity growth. Labour has been the main driver of economic growth anywhere, both in terms of quantity and quality. Since the start of the New Order Government in 1967, development of human capital has always been mentioned to be top priority in its long-term development plans.

Since 1984, the Government of Indonesia had implemented 6-year compulsory education. At the 10th anniversary of the program, in 1994, the Government extended the coverage to students aged 12-15 years old. Another milestone in education policy was set in 2002 when the amendment of 1945 Constitution mandated the government to allocate 20% of annual government budget to education spending. Followed by Act no 20/2003, the 20% allocation to education sector has been fully achieved since 2009.

<table>
<thead>
<tr>
<th>Year</th>
<th>School enrollment rate, primary (net)</th>
<th>Persistence to last grade of Primary School (% of cohort)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>97.86</td>
<td>79.71</td>
</tr>
<tr>
<td>1991</td>
<td>96.93</td>
<td>79.80</td>
</tr>
<tr>
<td>1992</td>
<td>96.05</td>
<td>79.91</td>
</tr>
<tr>
<td>1993</td>
<td>94.81</td>
<td>84.55</td>
</tr>
<tr>
<td>1994</td>
<td>95.32</td>
<td>87.00</td>
</tr>
<tr>
<td>1995</td>
<td>95.11</td>
<td>89.23</td>
</tr>
<tr>
<td>1996</td>
<td>93.96</td>
<td>89.32</td>
</tr>
<tr>
<td>1997</td>
<td>93.87</td>
<td>87.05</td>
</tr>
<tr>
<td>2001</td>
<td>93.19</td>
<td>85.89</td>
</tr>
<tr>
<td>2002</td>
<td>92.71</td>
<td>86.37</td>
</tr>
<tr>
<td>2003</td>
<td>92.09</td>
<td>85.10</td>
</tr>
<tr>
<td>2004</td>
<td>91.21</td>
<td>83.45</td>
</tr>
<tr>
<td>2005</td>
<td>90.41</td>
<td>N/A</td>
</tr>
<tr>
<td>2006</td>
<td>93.37</td>
<td>N/A</td>
</tr>
<tr>
<td>2007</td>
<td>95.38</td>
<td>79.98</td>
</tr>
<tr>
<td>2008</td>
<td>94.57</td>
<td>87.87</td>
</tr>
<tr>
<td>2009</td>
<td>94.92</td>
<td>91.80</td>
</tr>
<tr>
<td>2010</td>
<td>94.90</td>
<td>88.00</td>
</tr>
<tr>
<td>2011</td>
<td>93.67</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*Sumber: World Development Indicators (World Bank)*
### Table 3.2

**Literacy Rate Among Youth (Age 15-24)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Literacy rate youth male (age 15-24)</th>
<th>Literacy rate youth female (age 15-24)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>95.07</td>
<td>97.40</td>
</tr>
<tr>
<td>2004</td>
<td>98.54</td>
<td>98.87</td>
</tr>
<tr>
<td>2006</td>
<td>96.27</td>
<td>97.03</td>
</tr>
<tr>
<td>2008</td>
<td>99.38</td>
<td>99.54</td>
</tr>
<tr>
<td>2009</td>
<td>99.40</td>
<td>99.55</td>
</tr>
<tr>
<td>2011</td>
<td>98.75</td>
<td>98.80</td>
</tr>
</tbody>
</table>

Sumber: World Development Indicators (World Bank)

In terms of access to school, net enrollment rate for Primary School has reached 95.55% in 2011, improved from 88.7% in 1992. While improving so much, this indicator only described easy access to school but needs to be complemented with another indicator that reflects school retained rate. Similarly high school retained rate indicates minimum drop-out rate which also means school system has improved its internal efficiency to retain students until primary school graduation. In 1990, the proportion of grade 1 students who graduated from primary school was only 62%, and in 2011 the proportion reached 96.6%\(^1\). On the other hand, literacy rate progressed from 96.6% in 1990 to 98.8% in 2011 with female and male literacy rate reached 98.8% and 98.8% respectively.

The successful achievement in education has been largely supported by provision of education facilities at primary level through BantuanOperasionalSekolah (BOS)/School Operational Assistance funding. This programme began in 2005 and was also designed to subsidize school tuition for students from low-income families. Up to 2011, BOS funding has covered more than 42.1 million students. In addition to BOS funding, the Government disbursed Dana Alokasi Khusus (DAK)/Special Allocation Fund for primary and secondary school since 2003. DAK was used to rehabilitate damaged classrooms and school buildings, and to build other school facilities such as libraries and school labs. The Government also conducted teachers’ trainings and accelerated certification program. In 2011, there was a special allowance budget to support teachers’ welfare (TunjanganProfesi Guru/Teacher Professional Allowance).

### Table 3.3

**Government Spending on Education, 2006-2012**

<table>
<thead>
<tr>
<th>Year</th>
<th>Government spending on education (in IDR billion)</th>
<th>Public spending on education (% of government expenditure)</th>
<th>Public spending on education (% of GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>45,303.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>50,843.4</td>
<td>14.98</td>
<td>3.04</td>
</tr>
<tr>
<td>2008</td>
<td>55,298.0</td>
<td>13.63</td>
<td>2.90</td>
</tr>
<tr>
<td>2009</td>
<td>84,919.5</td>
<td>19.31</td>
<td>3.53</td>
</tr>
<tr>
<td>2010</td>
<td>90,818.3</td>
<td>16.42</td>
<td>2.99</td>
</tr>
<tr>
<td>2011</td>
<td>91,001.3</td>
<td>14.99</td>
<td>2.77</td>
</tr>
<tr>
<td>2012</td>
<td>95,599.6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sumber: Ministry of Finance and World Bank

In terms of health financing, recent data showed that the government budget for healthcare has increased overtime. However, its proportion in total government budget is relatively low compared to other items in the budget such as energy subsidy and education budget (which is mandated by Law to obtain 20% of government budget annually). In 2006, government budget on healthcare was only 5.3% of total budget. Despite all the programmes and spending on human capital formation, Indonesia’s labour productivity is lagging behind that of its neighboring countries.

### Table 3.4

\(^1\)Laporan Pencapaian Tujuan Pembangunan Milenium di Indonesia 2011, Bappenas 2011 p. 31
<table>
<thead>
<tr>
<th>Year</th>
<th>Health Expenditure, Private (% of GDP)</th>
<th>Health Expenditure, Public (% of GDP)</th>
<th>Health Expenditure, Public (% of govt expenditure)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>1.26</td>
<td>0.70</td>
<td>4.75</td>
</tr>
<tr>
<td>1996</td>
<td>1.27</td>
<td>0.73</td>
<td>4.71</td>
</tr>
<tr>
<td>1997</td>
<td>1.26</td>
<td>0.68</td>
<td>3.89</td>
</tr>
<tr>
<td>1998</td>
<td>1.37</td>
<td>0.71</td>
<td>3.93</td>
</tr>
<tr>
<td>1999</td>
<td>1.49</td>
<td>0.79</td>
<td>3.74</td>
</tr>
<tr>
<td>2000</td>
<td>1.25</td>
<td>0.71</td>
<td>4.47</td>
</tr>
<tr>
<td>2001</td>
<td>1.27</td>
<td>0.96</td>
<td>4.65</td>
</tr>
<tr>
<td>2002</td>
<td>1.38</td>
<td>0.85</td>
<td>4.73</td>
</tr>
<tr>
<td>2003</td>
<td>1.52</td>
<td>1.02</td>
<td>5.43</td>
</tr>
<tr>
<td>2004</td>
<td>1.43</td>
<td>0.93</td>
<td>5.02</td>
</tr>
<tr>
<td>2005</td>
<td>1.99</td>
<td>0.80</td>
<td>4.37</td>
</tr>
<tr>
<td>2006</td>
<td>1.99</td>
<td>0.91</td>
<td>4.57</td>
</tr>
<tr>
<td>2007</td>
<td>1.97</td>
<td>1.13</td>
<td>5.87</td>
</tr>
<tr>
<td>2008</td>
<td>1.80</td>
<td>1.01</td>
<td>5.05</td>
</tr>
<tr>
<td>2009</td>
<td>1.81</td>
<td>1.02</td>
<td>6.10</td>
</tr>
<tr>
<td>2010</td>
<td>1.82</td>
<td>1.10</td>
<td>6.80</td>
</tr>
<tr>
<td>2011</td>
<td>1.78</td>
<td>1.09</td>
<td>6.22</td>
</tr>
<tr>
<td>2012</td>
<td>1.83</td>
<td>1.20</td>
<td>6.87</td>
</tr>
</tbody>
</table>

Source: World Development Indicators (World Bank)

There are a number of factors that may explain why Indonesia’s labor productivity is low.

Firstly, the level of education of Indonesia’s workers is low and most workers are unskilled. In the agriculture sector, for instance, around 90% of the workers have attained only basic education. It is one reason why productivity in this sector is very low. Agriculture employs almost 40% of the total employment but produces only around 14% of the country’s GDP. Other sectors such as, construction, mining, manufacturing, trade, hotel and transportation, also have a high share (over 60%) of workers with only basic education.

On one hand, the underdevelopment of the country’s agriculture is, arguably, partly a result of a virtual neglect of the sector’s productivity. There has not been a sufficient attempt directed toward improving productivity through innovation. This is unfortunate since, according a report by McKinsey Global Institute (MGI, 2012), agriculture together with fishery sectors could play a pivotal role in transforming Indonesia’s economy into a modern one. In addition, boosting the sector’s productivity will also serve other purposes. A higher productivity in the sector will help alleviating rural poverty. The sector’s low productivity is a main reason why many of the workers remain poor.

On the other hand, the government has been pursuing a policy to achieve self-sufficiency in a number of agriculture products. Given the low productivity in the sector, the government aims at achieving this goal through trade restrictions in the form of tariff and non-tariff measures on the products in question. Additionally, the government also provides farmers with fertilizer and seed subsidies as well as other measures.

Furthermore, a higher productivity in the agriculture sector will also help slowing down the urbanization process. A rapid urbanization process has helped sustaining a huge informal economic sector in urban areas. In a way, the process has been, and still is, facilitating, if inadvertently, the transferring of poverty from rural to urban areas.

One may argue that one reason for the country’s sizable informal sector in rural and urban areas has something to do with the country’s labor low productivity, as well. For instance, workers who are rendered unqualified to work in the formal sector have no alternative but to work in the informal sector. Another reason is the formal sector has not been growing fast enough to absorb the country’s fast-growing labor force.
Data about the exact size of the country’s informal economy are hard to find. According to OECD (2012), informal employment is around 62.2% of the total employment in 2011. Meanwhile, a survey conducted by the Asian Development Bank and CBS Indonesia (2011) in two provinces, Yogyakarta and Banten, shows that while the informal sector contributes significantly to employment in both provinces, i.e., 89% in Yogyakarta and 76% in Banten, yet its contribution to regional GDP is rather low, i.e., 37% and 27%, respectively, in Yogyakarta and Banten. OECD claims that the large informal sector distorts the country’s labor market, arguing that there have not been enough opportunities for poor workers to move to the non-agriculture formal sectors.

With regard to education, two recent developments are likely to have significant impacts on human development in the country. The first is the introduction of universal education. Under this policy, the government offers Indonesian children free education for up to 9 years. The second one is a provision that is enshrined in the country’s constitution which requires the government to allocate 20% of the national budget to education.

Figure 3.1
Sectoral Labor Force Level of Education

Source: Bappenas (2013)

Properly implemented, these two policies could improve the level and the quality of education. There has not been any comprehensive assessment, at least not to the authors’ knowledge, concerning the likely implications of the policies on the education sector in particular, an on the country’s economy in general. However, according to the MGI study cited above, Indonesia will need around 113 million skilled workers in 2030, more than twice as many as the current level of 55 million. The study also points out that there will be a huge discrepancy between the supply of and demand for college-educated skilled workers in 2030. The shortfall is estimated to be around two million.

A study by the World Bank (2010) corroborates the above claim about the importance of skills to the future of Indonesia’s economy. In particular the World Bank’s study points to the existing skill gap in Indonesia, i.e., the discrepancy between the available (supply of) skills than that demanded by the economy. A survey of firms operating in Indonesia conducted as a part of the study found the following:

- The gap exists in the quantity, relevance and quality of the available skills.
- The gap is more pronounced in larger, export-oriented firms than in smaller, domestic-oriented firms.

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2OECD Economic Surveys: Indonesia, September 2012
In general, the gaps are in English, computer, thinking and behavioral (intrapersonal) skills. Among younger workers, the largest gap is in English but there are also important gaps in creativity, computing and some other technical skills.\(^3\)

It is also important to note that the constitutional requirement to allocate 20% of the government budget to education has a number of downsides. Firstly, it deprives the government a discretionary power, or least limits its flexibility, to allocate the budget according to an emerging priorities. Accordingly, the allocation of the budget may not be as optimal as it should absent the requirement. Secondly, and as corollary of the former, it crowds out, or at least limits the resources available for other government programs, some of them such as healthcare, are also important ingredients for human development. From the Table below, in 2009, there was the increase in education expenditure from 7.98% in 2008 to 13.50% in 2009. However, there was a significant drop in public service expenditure of central government budget from 77.1% to 66.4% during the same period. For healthcare sector, the proportion fell from 2.5% in 2009 (the year when the Government fully implemented the amendment of Constitution that requires the Government to allocate 20% of its annual budget to education sector) to 1.11% in 2011 and 2012.

<table>
<thead>
<tr>
<th>Table 3.5</th>
<th>Indonesia: Sectoral Proportion of Central Government Budget (%)</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Service</td>
<td></td>
<td>64.39</td>
<td>62.65</td>
<td>77.10</td>
<td>66.44</td>
<td>67.62</td>
<td>63.89</td>
<td>63.89</td>
</tr>
<tr>
<td>Defence</td>
<td></td>
<td>5.55</td>
<td>6.08</td>
<td>1.32</td>
<td>2.09</td>
<td>2.45</td>
<td>6.75</td>
<td>6.75</td>
</tr>
<tr>
<td>Domestic Security</td>
<td></td>
<td>5.40</td>
<td>5.61</td>
<td>1.01</td>
<td>1.23</td>
<td>1.98</td>
<td>2.73</td>
<td>2.73</td>
</tr>
<tr>
<td>Economics</td>
<td></td>
<td>8.70</td>
<td>8.37</td>
<td>7.28</td>
<td>9.36</td>
<td>7.48</td>
<td>10.22</td>
<td>10.22</td>
</tr>
<tr>
<td>Environment</td>
<td></td>
<td>0.61</td>
<td>0.98</td>
<td>0.77</td>
<td>1.70</td>
<td>0.94</td>
<td>1.11</td>
<td>1.11</td>
</tr>
<tr>
<td>Housing and Public Facilities</td>
<td></td>
<td>1.24</td>
<td>1.81</td>
<td>1.80</td>
<td>2.33</td>
<td>2.88</td>
<td>2.72</td>
<td>2.72</td>
</tr>
<tr>
<td>Healthcare</td>
<td></td>
<td>2.77</td>
<td>3.17</td>
<td>2.02</td>
<td>2.50</td>
<td>2.69</td>
<td>1.54</td>
<td>1.54</td>
</tr>
<tr>
<td>Tourism and Culture</td>
<td></td>
<td>0.21</td>
<td>0.37</td>
<td>0.19</td>
<td>0.22</td>
<td>0.20</td>
<td>0.26</td>
<td>0.26</td>
</tr>
<tr>
<td>Religion</td>
<td></td>
<td>0.32</td>
<td>0.37</td>
<td>0.11</td>
<td>0.12</td>
<td>0.13</td>
<td>0.20</td>
<td>0.20</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td>10.30</td>
<td>10.08</td>
<td>7.98</td>
<td>13.50</td>
<td>13.02</td>
<td>10.02</td>
<td>10.02</td>
</tr>
<tr>
<td>Social Protection</td>
<td></td>
<td>0.52</td>
<td>0.53</td>
<td>0.43</td>
<td>0.49</td>
<td>0.48</td>
<td>0.55</td>
<td>0.55</td>
</tr>
</tbody>
</table>

Source: Ministry of Finance (2012)

Thirdly, it may also lead to wasteful use of education budget on other purposes that have less to do with education.

Figure 3.2
Productivity by Sector: Comparing Indonesia with East Asian Neighbours, 2010

During the last decade, Indonesia has lagged its regional neighbors in infrastructure development. The only significant improvement of infrastructure in the country occurred in telecommunication sector— enjoying early reform in the sector after the Asian Financial Crisis 1998. In the second administration of President Yudhoyono, the Government has pledged to invest IDR 1.429 trillion (USD 157 billion) in 2010-2014 with approximately 65% of it comes from private sector funds.

In addition to minimum investment of infrastructure, the situation is worsened by the quality of maintenance that also requires finance. The number of roads and railways is limited, electricity supply is inadequate, seaports and airports are congested and therefore, created many stumbling blocks to economic activities. Logistic costs in 2012 reached 26.4% of Indonesia’s GDP, or IDR 1820 trillion, consisting of IDR 546 trillion for storage cost, IDR 1092 trillion for transportation cost and IDR 182 trillion for administration cost.

There were lots of programs to improve investments in infrastructures. In its Rencana Pembangunan Jangka Menengah (RPJM)/National Medium-term Development Plan (2010-2014), the Government acknowledged lack of financing infrastructure projects and invited private sector participation. At about the same time, it established PT PenjaminanInfrastruktur Indonesia/the Indonesia Infrastructure Guarantee Fund (IIGF). This institution gives certain guarantees against infrastructure risks for projects under the Public Private Partnership scheme. In another attempt to further infrastructure development, the Government issued the Masterplan for the Acceleration and Expansion of Indonesia’s Economic Development Plan (MP3EI 2011-2015) in 2011. The MP3EI targeted USD 468 billions infrastructure projects in which 70% of it would be financed by private sector.

Source: Bappenas (2013)

Physical Infrastructure

During the last decade, Indonesia has lagged its regional neighbors in infrastructure development. The only significant improvement of infrastructure in the country occurred in telecommunication sector— enjoying early reform in the sector after the Asian Financial Crisis 1998. In the second administration of President Yudhoyono, the Government has pledged to invest IDR 1.429 trillion (USD 157 billion) in 2010-2014 with approximately 65% of it comes from private sector funds.

In addition to minimum investment of infrastructure, the situation is worsened by the quality of maintenance that also requires finance. The number of roads and railways is limited, electricity supply is inadequate, seaports and airports are congested and therefore, created many stumbling blocks to economic activities. Logistic costs in 2012 reached 26.4% of Indonesia’s GDP, or IDR 1820 trillion, consisting of IDR 546 trillion for storage cost, IDR 1092 trillion for transportation cost and IDR 182 trillion for administration cost.

There were lots of programs to improve investments in infrastructures. In its Rencana Pembangunan Jangka Menengah (RPJM)/National Medium-term Development Plan (2010-2014), the Government acknowledged lack of financing infrastructure projects and invited private sector participation. At about the same time, it established PT PenjaminanInfrastruktur Indonesia/the Indonesia Infrastructure Guarantee Fund (IIGF). This institution gives certain guarantees against infrastructure risks for projects under the Public Private Partnership scheme. In another attempt to further infrastructure development, the Government issued the Masterplan for the Acceleration and Expansion of Indonesia’s Economic Development Plan (MP3EI 2011-2015) in 2011. The MP3EI targeted USD 468 billions infrastructure projects in which 70% of it would be financed by private sector.
Table 3.6
Indicators of Indonesian Infrastructure 1995-2008

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water and Sanitation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improved sanitation facilities (% of population with access)</td>
<td>51</td>
<td>52</td>
<td>52</td>
</tr>
<tr>
<td>Improved water source (% of population with access)</td>
<td>74</td>
<td>77</td>
<td>80</td>
</tr>
<tr>
<td><strong>Energy and Transport</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric power consumption (kWh per capita)</td>
<td>271.6</td>
<td>402.3</td>
<td>566.0</td>
</tr>
<tr>
<td>Electric power transmission and distribution losses (% of output)</td>
<td>11.7</td>
<td>10.9</td>
<td>10.6</td>
</tr>
<tr>
<td>Roads, paved (% of total roads)</td>
<td>52.4</td>
<td>57.1</td>
<td>55.4</td>
</tr>
<tr>
<td><strong>Information and communication technologies</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed broadband subscribers (per 100 people)</td>
<td>0.002</td>
<td>0.176</td>
<td></td>
</tr>
<tr>
<td>International Internet bandwidth (bits per person)</td>
<td>1.2</td>
<td>34.9</td>
<td></td>
</tr>
<tr>
<td>Internet users (per 100 people)</td>
<td>0.03</td>
<td>0.93</td>
<td>7.9</td>
</tr>
<tr>
<td>Personal computers (per 100 people)</td>
<td>0.5</td>
<td>1.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Mobile and fixed-line telephone subscribers (per 100 people)</td>
<td>1.8</td>
<td>5.0</td>
<td>74.9</td>
</tr>
<tr>
<td>Mobile cellular subscriptions (per 100 people)</td>
<td>0.1</td>
<td>1.8</td>
<td>61.6</td>
</tr>
</tbody>
</table>

Source: Pisu (2010) based on World Development Indicators (World Bank)

However, private sector involvement requires good and supporting investment climate, particularly in dealing with law enforcement. One primary concern was difficulties in land acquisition needed for infrastructure projects. Because of land disputes, several infrastructure projects came to halt since 2005. In 2012, the Government issued Law no. 2/2012 on Land Acquisition. The introduction of the Law aimed at speeding up land acquisition process by stipulating procedures and time limit on each procedure. Although the issuance of the Law was early in 2012, its implementing regulations\(^4\) were only ready in 2013.

Infrastructure maintenance is another problem in Indonesia. Damaged roads, crowded ports (seaports and airports), collapsed bridges are common in many parts of Indonesia, both in cities and remote areas. Corruption and incompetence are rampant, causing low quality of infrastructures.

\(^4\)Presidential Regulation no. 71/2012, Head of Land National Agency (BPN) Regulation no 5/2012, Ministry of Interior Regulation no. 72/2012 and Ministry of Finance Regulation no. 12/PMK.02/2013
Infrastructure spending shrank due to Asian Financial Crisis 1998. Although it had increased in the last ten years, it has not reached pre-crisis level. Before 1998, infrastructure investment averaged approximately 8% of the country’s GDP per year but it slowed down to 3% per year due to the crisis. Recently, the number hovers around 4% in 2010-2013. Out of total spending on infrastructure, in 2013, around 46.5% was financed through central government budget (APBN) with the rest was funded by either private sector (13.7%) or local government and state-owned enterprises (39.7%).

Table 3.7
Contributions by Related Parties in Financing Investment for the Physical Infrastructure

<table>
<thead>
<tr>
<th>Year</th>
<th>% of Central Government Budget</th>
<th>% of Local Government Budget</th>
<th>% of State-Owned Enterprises</th>
<th>% of Private Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>37.67</td>
<td>28.37</td>
<td>18.13</td>
<td>15.84</td>
</tr>
<tr>
<td>2011</td>
<td>40.97</td>
<td>25.95</td>
<td>18.13</td>
<td>14.93</td>
</tr>
<tr>
<td>2012</td>
<td>45.40</td>
<td>23.03</td>
<td>17.76</td>
<td>13.81</td>
</tr>
<tr>
<td>2013</td>
<td>46.54</td>
<td>22.04</td>
<td>17.67</td>
<td>13.74</td>
</tr>
</tbody>
</table>

Source: Ministry of National Development Planning/Bappenas

Environmental Carrying Capacity

Even though the Ministry of Environment had been set up since 1980s, environmentally-sound policy in Indonesia only began a decade later. Environmental damage due to heavy industrialization has caused increased pollution, deforestation and loss of natural biodiversity. It creates concerns on how environmental carrying capacity would be able to support development in the long-term period.

Sustainable development principles had been mainstreamed into Rencana Pembangunan Jangka Panjang Nasional (RPJPN)/Long-Term National Development Plan 2005-2025 and Rencana Pembangunan Jangka Menengah (RPJM)/Medium-Term National Development Plan 2004-2009 and 2010-2014. Included in the Plan was Education for Sustainable Development aiming to educate the youth on environment and sustainable growth. It is deemed important to raise awareness among the youth and the public in general to balance out economic growth and environmental protection. Other programs implemented to suit sustainable development principles include forest rehabilitation, sustainable fishing, and climate change mitigation plan.

5Menteri PPN/Bappenas, presentasi “Alternatif Pembiayaan Infrastruktur”, Bappenas, 2013
6The Gold for Green: How the Gold PROPER Award Drives Five Major Companies Achieve Innovation, Value Creation and Environmental Excellence, Kementerian Lingkungan Hidup 2012
7http://www.menlh.go.id/tentang-kami/sejarah-klh/#sthash.TlZQiuF1.dpuf
Section 4: Complementary Factors in Mobilizing Development Financing and Using Finance More Effectively for Transformation Changes in Indonesia

In the first half of the New Order Regime, development financing in Indonesia relied heavily on oil/gas revenue and foreign assistance in the forms of grants and/or debt financing. However, in the mid-1980s when oil prices dropped to USD 9/barrel, the Government of Indonesia took the momentum to do some reforms to reduce its dependency on oil revenue to finance development in the country.


Tax reform in Indonesia started in 1983. It began by introducing a self-assessment approach where taxpayers would calculate, pay and report the amount of money they need to pay as indebted taxes to replace official assessment. Reforms in 1983 also issued Law no 6/1983 on General Guidelines on Tax Administration, UU no.7/1983 on Income Tax, UU no.8/1983 on Value-added Tax and Luxury Good Sales Tax. The GoI also issued Law on Land and Building and Law of duty stamps. With the reform in 1983, the Government sought to improve the tax structure, widen tax basis and enhance tax administration. The next reform of tax system in Indonesia came in 1994. This time, the reform was said to adjust the tax system to respond globalization and its impacts on the domestic economy. The Government issued four new Laws: Law no 9/1994 to amend Law no. 6/1983, Law no.10/1994 to amend Law no. 7/1983 on income tax, Law no.11/1994 to amend Law no.8/1983 on VAT and luxury goods sales tax, and lastly, Law no.12/1994 to amend Law no. 12/1985 on Land and Building Tax. The reform in 1994 was criticized due to restoring tax facilities which had been eliminated previously by the reform in 1983. However, the GoI declared that the reform was needed to support export promotion strategy.

After the crisis in 1998, tax reform was again conducted in 2000 with the establishment of Tax Service Office for Large Taxpayers. The reform in 2000 also replaced tax dispute settlement board with Tax Court, which is an independent judiciary under the Supreme Court—tax dispute settlement board was under Directorate General of Taxation. Another reform in 2005 was due to modernize the tax administration system, resulting in a more integrated and more professional approach in handling tax information and complaints. It also utilizes information technology for e-filling, e-SPT, e-registration etc. This reform phase concluded with the Sunset Policy, enabling taxpayers to abolish administration sanctions due to previous obligations.

The result of tax reform in Indonesia has brought positive progress to Indonesia. In addition to more tax revenues collected, there has been a shift from indirect tax revenue to direct tax revenue since 1996/1997. The shift clearly reflected a more equitable tax system because direct tax was collected directly from taxpayers.

Figure 4.1
Tax Ratio, Amount of Direct and Indirect Taxes, 1970-2004

![Graph showing tax ratio, direct, indirect taxes, and tax ratio over time.](source: Setiyaji and Amir (2005))

Table 4.1
Tax Revenue as proportion in GDP and Government Revenue, 1990-2011

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Revenue (% of GDP)</td>
<td>n/a</td>
<td>14.0</td>
<td>n/a</td>
<td>12.4</td>
<td>13.0</td>
<td>11.3</td>
<td>12.3</td>
</tr>
<tr>
<td>Tax Revenue (% of Gov't Budget)</td>
<td>52.0</td>
<td>66.9</td>
<td>58.5</td>
<td>69.4</td>
<td>67.1</td>
<td>74.9</td>
<td>80.5</td>
</tr>
</tbody>
</table>

Source: IMF

However, the use of revenue has not been returned to taxpayers in the form of development financing. Some of the revenue was used for energy subsidy (part of government consumption in the annual budget APBN). Energy subsidy continues to occupy large space in Indonesia’s state expenditure. By 2013, energy subsidy occupies around 19% of Indonesia expenditure realization, of which 13% went to fuel subsidy. The absolute amount has tripled from around US$10 billion in 2005 to almost US$30 billion in 2013. While in the past, most of the subsidy can be covered from oil export revenue, since 2004 after oil consumption exceeded the production, the subsidy has to be financed from other revenue sources, including tax revenue.

This big portion of state expenditure is intended to keep production cost low and increase Indonesian industrial sector competitiveness, while at the same time help less fortunate population. However, according to World Bank estimation, in 2008 only 54% of the subsidy went to production sector while the rest is used for consumption purposes. Moreover, the study also estimates that around 40% of the subsidy went to 10% richest population. It transferred around US$14 per month to richest households, while only provide US$2 per month to poorer households (World Bank 2011).

International Trade as Engine of Growth (Shift From Import Substitution to Export Promotion Strategy In 1986)— and International Private Finance Mobilization
Foreign aspects have been an integral part of Indonesia’s economic development, including as provider of capital, destinations for sale of natural resources, and market for Indonesian exported products.

At the beginning of the New Order regime in late 1960s, forced by the need for fresh funds to restore the economy from bankruptcy, President Soeharto decided to open up to foreign direct investment (FDIs). As the legal basis investment in Indonesia, Law No. 1 of 1967 on Foreign Investment was issued. Based on Law No. 1 of 1967, foreign investment can go into full operation of all sectors except the sectors that are important to the State and lives of many people such as ports, electricity and telecommunications. To complement the Law, in 1968, the government also issued Law No. 6/1968 which regulates domestic investment.

The policy has brought significant effects on Indonesia’s economic development. At the earlier stage of economic development, FDI fed the needs for capital. In the early 1970s, foreign investment contributed up to 3% of the GDP, taking account of up to 20% of the total gross fixed capital formation (GFCF). Figure 4.2 shows the development of foreign investment in Indonesia. Most of the investment went to primary sectors of extraction, taking advantage of Indonesia’s abundance of natural resources, and to various industries intended to substitute imports and reduce dependence over foreign products.

![Figure 4.2](source.png)

Source: UNCTAD FDI Database

In the period 1970-1985, the economic development of Indonesia was dominated by the oil and gas sector that allowed the government to proceed with more inward-looking, import substitution strategy. Revenue related to oil and gas contributed up to more than 80% of government revenue in mid 1970s. However, following a drastic drop in oil prices at the end of the 1970s, which continued until the early 1980s, the government's budget came under pressure enormous. Mega projects that relied on windfall profits from oil and gas, as well as import substitution industries, could no longer be maintained. This forced the government to launch various deregulation packages, including on international trade regime.

International trade deregulation package was taken in March 1985 by reducing import duties, followed by reform on custom procedures, which allow better procedures for import clearance, more transparent procedure in calculating import duty, and easier payment of custom duties. In addition, the government also freed the use of transport vessels. Foreign investors responded to this economic
reform by investing in the Indonesian economy. FDIs grew steadily during the period of 1985-1997, reaching the peak in 1996 with the value of investment inflow almost 30 times bigger than the value in 1984. Most of the FDIs financed the development of manufacturing, in particular export-oriented, labor-intensive industries, such as textiles and garments, footwear, and furniture, in addition to natural resource intensive such as wood products. This reform supported the development of labor-intensive manufacturing industries that encourage better export performance.

Between 1970 to 1985, for example, the dollar value of Indonesia’s total non-oil exports grew by an average of 15% per annum. But the growth was accelerating during the period of 1985-1996, reaching around 18% per annum, while exports of manufactured goods grew by around 20%, giving manufacturing a share in total exports of more than 50%. This remarkable export performance was interrupted when Asian Financial Crisis (AFC) crisis broke in mid-1997. Total export growth plunged to 6% per annum in 1997, and manufactured goods exports grew by only 12% due to the crisis. After the crisis, exports of non-oil products grew in much slower rate than the previous period. After the crisis, Indonesia failed to restore its pre-crisis export performance which resulted in slower growth rate of exports, despite a global economic improvement in the 2000s.

Between 1998 to 2008, Indonesia’s exports only grew by around 10% per annum, while manufacturing recorded slower growth than average of 9%. Indonesia’s exports began to recover only in 2003, thanks to high commodity prices in international markets. The period after the AFC reflected a slowdown in the manufacturing sectors. The export growth of labor-intensive manufactured goods declined significantly, from 24% in 1990-96 to only 4% a year in the period of 1998-2010. The share of manufacture in exports also declined to 45% in 2012, whereas in 1990s the share reached 60%. During the first decade of 2000s, Indonesia’s commodities exports rose by tremendous rate of around 20%, driven mainly by rising international commodity prices. The Global Economic Crisis in 2008, put a halt on Indonesia’s export growth, especially on commodities. Weaker global demand of commodities reduce Indonesia’s export performance significantly: during the last two years, Indonesia’s non-oil exports declined by around 6% due to the fall of world commodity prices, including crude palm oil (CPO), which account for 15% of Indonesia’s non-oil exports.

The Asian Financial Crisis in 1997-1998, which reduced the value of the rupiah nominal exchange rate into a-fifth of pre-crisis value, has changed Indonesia’s economic structure significantly as previously discussed in Section 1. It also reduced Indonesia’s attractiveness to foreign investors: during the period of 1998-2001, Indonesia recorded negative inflow of FDIs indicating massive reallocation and withdrawal of investments. Only after 2002, foreign investments started to pick up again, although with slower rate of growth and fluctuated a lot. In order to improve investment climate, the government of Indonesia launch several policy and institutional initiatives.

Major improvement was taken when the government finally presented new Law on Investment in 2007 to replace the then two 30 years old laws on foreign and domestic investment. This Law No. 25 of 2007 removes the dichotomy of investment rules and treatments applied to foreign investment and domestic investment. In addition, the Law also improves treatment and protection to investors, including the possibility of collateral disputes through international arbitration, guarantees against nationalization, transparency in terms of capital for foreign investors and granting land use rights for longer investors with the extension of the use of land given upfront. Some institutional improvement was also conducted including simplifying investment procedures and cut short the time required for licensing, followed by assurance to complete the licensing process within certain amount of time. The reform has resulted to a significant improvement in Indonesia’s FDI performance. Even during the global crisis in 2009, Indonesia still received a lot of foreign investment, which continue to grow until now.

One can also observe the change in composition of FDI to Indonesia. In the pre-AFC, manufacturing and processing industries were the main destinations of foreign investments, counting on average of 70% in the period of 1990-1996. In the period of 2002-2010, investment in manufacturing and processing industries only contribute in average of around 38%. During the same period, foreign investment in mining and quarrying increase significantly, counting in average of more than 20% of total FDI. Investment in mining reached the peak just right before the global crisis in 2008, surpassing investment in manufacture. FDIs also mostly come to several services sector, such as financial and
telecommunication, which are badly needed to support the economy. The share of FDI in manufacture, on the other hand was declining until 2009, where there have been a revival of manufacturing sector along with significant increase of FDIs.

The combination of global commodity boom and massive flow of investment, both foreign and domestic, in extraction sectors including mining and plantation has increased the importance of commodities production. During the period of 2004-2012, the non-oil mining sector grew on average by 6.5% per annum, higher than 5.8% average growth of the economy. At the same time the manufacturing sector has grown lower than the economic growth.

In short, trade and FDI has influenced structural transformation of Indonesian economy quite significantly. Liberalization of capital flow, followed by export oriented policy regime in the past has moved the economy into manufacturing-dominated economy until the AFC took place in 1997-1998. The decline of industrial sector in Indonesia has also been influenced by growing global demand of commodities at the first decade of the 2000s. As a relatively open market economy, international economic aspect has contributed greatly to development and transformation.

**Banking and Capital Market Reform 1988 (domestic private finance mobilization)**

Starting in 1983, the Government of Indonesia introduced a series of banking reform programme. Internal liberalization of banking system began with abolishing all kinds of government intervention into the banking sector such as credit ceiling, interest rate ceiling, selective credit to certain economic sectors and portfolio requirement. Further in 1988, the Government opened access to domestic banking system by lowering minimum capital start-up for banks and allowing foreign banks to open branches.

At the same time, the Government also introduced several regulations to rejuvenate capital market development. Since 1977-1988, the Indonesian capital market did not develop well as it competed with banking sector—private sector preferred placing their money in banks because there was no tax applied to deposit interests while there was 15% tax applied to dividend from capital market.

Domestic credit provided by financial sector (including banking, and other financial institutions non-banking) has increased from 46.7% in 1990 to about 60% in 2000. However, due to the Asian Financial Crisis in 1997-98, the Government reconsidered alternative development financing approach—the Government finally shifted from external debt to domestic debt financing⁹. The Government issued bonds for the first time in 2003 to finance budget deficits. Domestic credit by financial sectors lingered around 40% of GDP for the past five years as equity and bond markets slowly strived with government bonds as the engine of growth. Equity and capital market capitalization reached 46% and 13% of GDP respectively.

<table>
<thead>
<tr>
<th>Table 4.2</th>
<th>Domestic Credit by Financial Sector, Market Capitalization in Stock and Bond Market, and Other Indicators, 1990-2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic credit provided by financial sector (% of GDP)</td>
<td>46.7</td>
</tr>
<tr>
<td>Market capitalization of listed companies (% of GDP)</td>
<td>7.1</td>
</tr>
<tr>
<td>Bond Market capitalization (% of GDP)</td>
<td>n/a</td>
</tr>
<tr>
<td>Annual new capital raised (% of GDP)</td>
<td>2.67</td>
</tr>
</tbody>
</table>

### Asian Financial Crisis 1998 (Using Domestic public Finance Effectively)

Prior to 1998, there was no specific social assistance policy. The strategy was to have a broad-based economic growth, coupled with rural development. When the crisis struck in 1998, the number of poverty incidents in Indonesia expanded swiftly. Surely, the lack of social safety net and protection exposed the poor adversely to economic shock. As mentioned, no specific social protection means that poverty reduction efforts took the form of more general price subsidies. Lots of subsidies for consumption of energy, electricity, food (including rice, corn, sugar and flour) must be given up cut due to worsening fiscal deficits in 1998 (all food subsidies were abolished in 1998\(^{10}\)). Rural development program such as BIMAS, KUK (credit facility for SMEs) etc. underwent massive reduction.

In the middle of the crisis in 1998, the Government launched JaringPengamanSosial (JPS)/Social safety net program. The program was a response measure to control negative impacts of the prolonged crisis. Nevertheless, the program was different from before because it started to be specifically-targeted. Some programs included under JPS umbrella was rice for the poor (sale of subsidized rice to poor people), cash for work, block grant for schools and health centers’ operational/running costs, scholarships for primary and secondary students from low-income families, nutritional assistance for babies and children. These programs would be the seeds for more permanent programs starting in 2005 since these programs are funded by government budget every year.

Besides more permanent and target-specific, social assistance policy in Indonesia has changed due to more involvement of regional government. These programs must now be coordinated with local government. Social assistance programs that have continued to obtain budget support are energy and electricity subsidy and the sale of subsidized rice to the poor. Then, in 2005, energy prices soared in international market and created major concerns within domestic and foreign investors in Indonesia due to large amount of subsidy in 2005 government budget. The fiscal deficits worsened and the Government was forced to increase domestic fuel prices by 144%. At the same time, the Government launched compensation programs for the poor in lieu of reduced energy subsidy. The Fuel subsidy compensation programs were Unconditional Cash Transfer, Education and Basic healthcare assistance, rural infrastructure development and community-based development/Program Pemberdayaan Masyarakat Nasional (PNPM)/National Program for Community Empowerment). In 2007, the Government introduced two types of conditional cash transfers: Program Keluarga Harapan (PKH)/Hope Families Program and PNPM Generasi Sehat dan Cerdas (block grant for communities, conditional on certain education and healthcare indicators in the communities).

### Section 5: Conclusion and Looking Ahead

The Indonesian economy has experience significant transformation since the country began its economic development programme in 1967. During the early stage of the development, most of the activities were concentrated in primary sectors, in particular agriculture-related activities. After more than 40 years of development, the economy is dominated by industrial and manufacturing activities, in addition to services sector. Financial aspect of this development process has also been transformed significantly in accordance to the economic situation. While the first decade of economic development pretty much relied upon government financing, mostly came from natural resources.

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\(^{10}\) Following IMF Letter of Intent, January 15, 1998, the GoI issued Presidential Decision (Keppres) no. 19/1998) limiting BULOG (National Food Logistic Agency)’s function to control rice prices. Prior to 1998, BULOG was the state agency responsible to control basic food prices (rice, sugar, soybeans, and corn).
revenue, the economy developed further counting on the participation of private activities and financing.

While Indonesia’s financial development has served the transformation process quite adequately, there are still several related issues to handle properly. The first issue is related to optimization of public revenue and increase effectiveness of public spending. Currently part of the public revenue comes from corporate taxes, while at the same time most of government budget has been allocated to routine spending, leaving limited fiscal space for development. Indonesia is in need to diversify the sources of public revenue and reduce the fiscal burden. Second is to increase the role of financial institutions for the transformation process. Currently, most of the financing comes from the banking sector, while the cost of financing is still relatively high, making it difficult to get access to finance, especially for the poor and small-scale economic activities. Third is to strengthen mechanism and institutional requirement for private participation in public goods provision, especially in infrastructure, to complement government spending.

Optimizing Public Revenue

As mentioned in Section 2, while government expenditure is increasing in absolute term, the role in the economy has been declining quite sharply from around 50% in the early 1980s to only 18% currently. However, the budget still serves various important functions, from the provision of public goods to macroeconomic stabilization. One of the problems in Indonesia’s government budget is relatively low revenue. The Law on Government Budget states that the government should maintain budget deficits of less than 3% of the GDP. Although the government has successfully maintained the deficits below the threshold, the combination of low revenue and low deficits has limited the government’s ability to boost economic performance and to provide necessary public goods such as infrastructure and social protection.

As mentioned in Section 2, the biggest portion of government revenue comes from tax collection, which contributes to around 75% of total central government revenue. However, the tax ratio remains relatively low, at 12.2% of GDP, compare to other countries in the region, which can reach 17% in Thailand or 16% in Malaysia. Although tax revenue is increasing quite substantially in the recent time, the tax ratio has remained almost the same. This indicates that various actions are needed to increase the tax revenue that in the end provide greater capacity for the Indonesian government to carry out its functions.

One way to increase tax revenue is by revising tax schedules and increases in tax rate. The Indonesian government has modified the tax structure several times, partly to become more in line with economic conditions, e.g. adjusting tax-free income, and partly to raise tax revenue. While this may raise tax revenue in the short time, it brings consequences of distorting the economy and providing disincentives to economic activities. Moreover, without having better collection system and monitoring, increasing tax rate might increase motivation for tax fraud, both from tax payers and tax collectors.

An alternative to increase tax revenue is by broadening the tax bases. One feature of Indonesia’s tax composition is a strong reliance on corporate and consumption taxes, which contribute around 45% and 40% respectively. Tax on personal income only accounts for around 10% of the total tax revenue. This is quite difference from the tax revenue structure of many developed countries, which rely more on personal income tax. One possible explanation for this is that much of the revenue comes from taxes on natural resources wealth. For example, almost 20% of corporate tax revenue comes from taxes of oil and gas sector. However, personal income tax revenue are indeed still very low even compare to other countries in South East Asia: personal income tax revenue in Indonesia is only 1.4% of GDP, compare to around 4% on average in other middle income ASEAN countries. This indicates there is a big potential to increase tax revenues by intensifying personal income tax alone.

In order to increase tax bases, especially for personal income tax, Indonesia needs to improve its tax administration. The main challenge is to increase compliance of tax payers, while at the same time increase the number of registered payers. According to Directorate General of Taxes (Ministry of Finance) data, out of the current 23 million personal registered tax payers, only around 8 million actually submitted annual income tax return form—a little more than 35%. There is no data available
for what proportion that files the required documents properly and provides sufficient information. The compliance can be increased through simplifying the procedure and increasing monitoring and enforcement system.

Simplification is necessary because the largest portion of registered tax payers filling their annual tax return are employees with single sources of income. Their tax is withheld by employers every month at salary payment day. Tax administration could be simplified by lifting the requirement to file an annual tax return for employees with a single source of income and relying solely on the withholding system to assess their tax liabilities. This would reduce both the compliance burden for such employees and the workload of the tax administration to allow them improving tax monitoring for non-employee tax payers.

The informal business sector and the self-employed are among those that should be targeted to increase the tax bases since most of them still pay little or no taxes. Realizing the big potential of this group, the government has done various attempts to improve tax collection. A tax census completed in 2012 was intended to provide better information on the magnitude of the problem and to come up with proper strategy. One of the strategies is to target relatively small informal business activities with the sales of less than Rp 4.8 billion (around US$400 thousand). The tax schedule for this group is designed to be very simple: it is calculated based on sales, rather than income, with only a single applied rate of 1%, making it less complicated for the business. This is expected to increase tax compliance of the non-formal sector. However, many of those informal business are not voluntary. They are forced to start non-formal activities because the opportunities to work in the formal sector are limited. Tackling the problem of inflexible labour mobility as well as improving investment climate is among those needed to improve the situation of informal sector, which eventually would increase tax bases and revenue.

Another source of government revenue that need more attention is revenue from the profits state owned enterprises (SOEs). Currently SOEs only provides 2.2% of government revenue; a decline from more than 3% in the late 2000s. That is mostly because the profits from SOEs, which only comes from a handful of them, have remained stagnant. Many of state owned companies are in a loss position, even depending on subsidies and support from the budget. While some of the companies are needed to deliver social services, the government of Indonesia need to be more selective in which types of SOEs to maintain. Deregulation of several sectors that are currently in the monopoly of SOE such as electricity, ports and airports management, as well as basic telecommunication need to be carried out, followed by sufficient privatization initiative. That would not only improve the sector performance, but also increase tax revenue from privatized companies.

### Optimizing Government Expenditure

The biggest problem with government of Indonesia’s expenditure is that most of the money available is already allocated even before the budget is arranged. The constitution, for example, requires that at least 20% of the budget should be allocated for education purposes. Several other laws also demand the government to spend a certain percentage of the budget for specific purposes. As discussed in Section 2, the biggest spending of central government takes place in energy subsidy, which absorbs around 24% of budget in 2013, and keep increasing. This is followed by personnel expenditure, as well as material expenditure, which in total constitutes of 38% of the total spending.

Improvements need to be done at various fronts. However, the most crucial aspect is to reduce the burden of energy subsidy in the budget. As a result of growing economic development, energy consumption has been increasing tremendously at an average rate of 8.5% per annum. Together with increasing trend of world oil price and depreciation of the rupiah, energy subsidy has been burdening the budget. The government needs to revise an ongoing budget on the ground that energy consumption and oil price increases faster than the budget assumption. Reducing energy subsidy would allow more spending on other areas, including infrastructure and social assistance.

Two elements are worth considering. First, subsidy reduction should be done sequentially at a regular basis. Cutting back subsidy would increase the domestic selling price of fuel and consumer prices of electric power. Increasing the price at a regular basis would make the price increase affect the economy and the poor less substantially. This would also reduce the psychological effect of price
increase that normally foster inflation. Price increases as little as 10% annually should be enough to reduce the subsidy substantially within a five year period. Similar scheme should also be done in the case of electric power. It is important, however, that the policy has a definitive target to be achieved at specific period.

Second, the initiative to reduce energy subsidies need to be complemented by other reforms. The government should explain where the money previously disbursed as energy subsidy would be allocated. One of the important complementary programmes is to provide social assistance to mitigate adverse effect of a fuel price hike. Another possible complementary program is to improve energy mix of Indonesia by supporting the use of alternative energy.

Another potential issue that can create challenges in public finance if not being handled properly is the new social security system that has begun since 2014. This is part of the initiatives from the government to support the poor as amended by Law No. 40/2004 on Social Security System. The Law stipulates that the government would arrange social protection for all citizens, including pensions and savings for the elderly, national health insurance, work injury insurance and death benefits for survivors of deceased workers. In January 2014, the government launched the Universal Health Coverage (UHC) as a part of the system. The aim is to have every Indonesian covered by health insurance by 2019 under a new scheme called JaminanKesehatanNasional (JKN, National Health Insurance).

There are several foreseeable problems with the UHC system. First is inadequate supply of health infrastructure and personnel. The ratio of health workers to population in Indonesia currently meets the WHO standard – 25 health worker per 10,000 people, but mostly concentrated in urban and populated areas. There are 1,700 state and private hospitals are participating in the JKN, with over 9,000 state-funded community clinics, serving as the backbone of primary care. The government plans to build 150 new public hospitals in 2014, and says all hospitals will be required to serve UHC patients by 2019. Indonesia also still needs to increase number of health workers, including increasing number of doctors to meet its goal to have a ratio of 40 doctor per 100,000. This will require larger expenditure for development of health infrastructure as well as training and recruitment of health workers.

Second is the problem of financing the UHC. Expected cost of the UHC is not widely known, although World Bank puts figures between 6.66 percent of total public expenditures (1.17 percent of GDP) to 11.58 percent (or 2.03 percent of GDP) just to provide enough financing for health services expenditure, not for infrastructure development. However, in 2014 the government only allocated around 1% of total public expenditure to support the program. It is complemented by a premium paid monthly by citizens ranging from 25,500 rupiah ($2) per month to 59,000 rupiah ($5). There will be inevitable problems with regard to this relatively low premium: health workers will not be paid adequately and health services would function poorly. The government has realized this problem and plans to increase its expenditure, while at the same time increase contributions from participating citizens. This problem needs to be handled carefully as it would be likely to create additional fiscal burden and jeopardize the objective of the UHC.

Third is to coordinate the current existing public health insurance and programs at national and local level. After the decentralization of public authorities was introduced in 2001, health is one the functions decentralized and become the domain of local governments. Many local governments have introduced local health coverage schemes using the funds available under allocated accounts from the central government. Successful coordination between the JKN and other programs may increase the effectiveness of the program and reduce fiscal burden of the central government.

**Development of Financial Institutions**

There are three major areas of improvement to develop Indonesia’s financial sector and to contribute more effectively to the economic development and transformation. First is diversification of financial sources for economic activities. Indonesian economic activities rely intensively on financing from the banking sector. Around 79% of Indonesian financial assets are controlled by the banking sector. The current situation reveals the need to further develop non-banking financial institutions (NBFIs),
including capital market, pension funds, insurance and consumer financing, to mobilize domestic financial resources necessary for economic development.

Strong non-banking financial institutions provide greater options for businesses, households and the public sector to meet their financial needs accordingly. While the banking sector is quite suitable for financing short-term financing needs, longer-term financing and investment on the other hand might be best approached by other instruments such as raising funds through capital market. Many NBFIs provide more specific financing options and instruments that may allow for better risk management for certain individuals and business activities. In addition, these financial institutions create greater competition to banking sector that may eventually increase its competitiveness in channeling resources.

Second is to increase banking sector competitiveness. The Indonesia banking industry experienced structural change in the 1990s where the number of banks increased significantly reaching up to 200 at one point in time. After a restructuring and consolidation process following the Asian Financial Crisis, there are around 120 commercial banks operating in the country. Despite a large number of banks, the industry is dominated by only several players. The top-four banks, three of them are state-owned, control around 42% of the banking assets, which is around 35% of total financial assets in Indonesia. Those four banks principally determined market behaviour and the development of financial institutions in the country, leading to lower competition in the industry.

One main problem related to banking performance is relatively high net interest margin (NIM), the difference between lending rate and deposit rate. Average NIM in Indonesian banking sector is in the range of 3% for foreign banks to 6% for state-owned banks. The figure is higher than NIM of banking in Singapore (2.2%), Vietnam (3%) or Malaysia (2.7%). This brings adverse effect to the intermediary function of banking in mobilizing financial resources, while at the same time reduce the sector’s competitiveness and efficiency. This partly comes from low competition and oligopolistic environment in the banking sector. More consolidation and merger, especially among small and medium banks, would likely to improve the distribution of market share and reduce market concentration. That would eventually reduce the cost of financing and support development process.
Third is improving access to finance. While Indonesian banking and financial sector have been developed significantly in the last three decades, access to financial institutions is still problematical. Only 20% of adult population has a lending account at a bank, while less than half of households maintain any kind of financial accounts. In addition, access to risk management such as insurance and pension funds is still very low. Moreover, the financial sector is highly concentrated geographically where some areas, e.g. Java and Bali is rather overbanked compare to the economic needs, while other areas tends to require more banking facilities. Greater access to financial resources is necessary to develop the economy and reduce inequality.

The Government of Indonesia launched a program to increase financial access, especially to the poor. One of the strategies is to increase financial institutions’ involvement in micro financing initiatives by giving incentives for commercial and public institutions to extend their operations and reduce transaction costs. This is also complemented by programs to increase financial literacy and enhance quality of bankable assets of the micro and small business sector. The challenge lies on regulatory framework and high transaction costs at the supply side, as well as lack of financial endowment and absence of appropriate individual’s financial history at the demand side.

A new independent financial authority known as OJK has just started fully this year taking over several regulatory and supervisory authorities previously held separately by Bank Indonesia for banking sector and the Capital Market and Financial Institution Supervisory Body (Bapepam-LK) for NBFI. This new institution is expected to bring more coherence approach toward the development of financial industry in the country that would lead to increasing competitiveness of banking and non-banking institution as well as improving access to finance.

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**Box 3. Non-Banking Financial Institutions and Long Term Financing**

Non-banking financial institutions (NBFI) in Indonesia consist of various financial institutions with specific means to obtain financing or particular purposes in serving financial needs of customers and business sectors. Among others are capital and bonds markets, insurance, pension funds as well as multifinance industries, e.g. leasing and factoring services. Some Indonesia’s NBFI are expected to be able to mobilize long term domestic financial objectives. As discussed in previous section, the capital and bond markets, although growing significantly, are still relatively small. With the current market capitalization of around 50% of GDP, the capital and bonds markets, however, have served quite well to the need of long term financing and borrowing. The development of mutual fund industry since early 2000s has enabled individual and small investors to take part and brings together domestic resources for further capital market development. With assets of around 7% of GDP, insurance industry would offer a pool of assets that have not yet been tapped optimally for long-term investment needs. A significant portion of the assets is still invested in short term bank deposits instead of capital market to reduce companies’ risks over the claim. This is especially more prevalent among smaller insurance companies with lower capitalization. Strengthening insurance companies by allowing them to consolidate, while at the same time improving regulatory framework for insurance companies’ investment in equity and bond markets would allow greater participation for long term financing in Indonesia.

Another potential comes from pension funds. Total assets of Indonesia’s pension funds is still very small of only around 1.8% of GDP, but it has potential to grow significantly as the government is planning to launch obligatory pension scheme for the whole population. One potential use of the funds is for infrastructure development which has to be put in a long investment horizon. However, there is a need for greater protection for infrastructure financing before it would become a main destination for pension funds’ investments. In short, Indonesia NBFI can serve as an alternative toward long term financing, either through the development of equity and bond markets, or through infrastructure development financing. Regulatory frameworks that are not only supportive to the development of the industries, but also to provide greater certainty over their investment would release the potential.
Public-Private Partnership in Infrastructure Development

One particular issue related to the role of financing in Indonesia’s economic development can be observed in the case of infrastructure development. As discussed in Section 3, Indonesia has been having problem to catch up with ever increasing needs of physical infrastructure, partly due to low government spending on infrastructure development. In order to address the financing issue, the Government of Indonesia has attempted to increase private sector participation and stimulate private investment through Public-Private Partnerships (PPP) by establishing necessary regulatory framework, including amending and modifying laws and regulations related to private investment in Indonesia.

In the 2011’s Master plan for Acceleration and Expansion of Indonesia Economic Development, Indonesia’s government expected to raise 42% of its US$ 240 billion infrastructure financing need from private sector participation. But the realization of infrastructure projects through this scheme is yet to bear fruit. Up to now, only one project has started under the PPP, which is Central Java Power Plant, a 2000 megawatt coal-fired power plant in the District of Batang, Central Java. Infrastructure projects in Indonesia are still constrained by the difficulty of land acquisition, regulatory uncertainties and lack of funding. More specifically, these investment projects are not popular with private investors because they usually involve expensive and risky investments with a long return horizon.

In order to make the PPP scheme successful, the government needs to provide more commitment to assure private investors that those projects would be financially sustainable and expose to little risks, especially from future political risks of regime change, i.e. expropriation and nationalization. The government also needs to pay more attention in dealing with problems of land acquisition and local government authority in infrastructure development. These problems can be more easily solved if there is an independent functioning PPP institution at the national level that is in charge to coordinate projects offered in the program, and maintain closed relations with similar units at sub-national level. At the same time, the government should also implement the new Law on Land Acquisition (UU No. 2/2012) fully by unleashing all necessary implementing regulations.

By Way of Conclusion: What we can learn from Indonesian case

The case of Indonesia’s economic development is a rich source of lesson on how different financing strategies affect the outcome of economic transformation. Indonesia is a country rich in natural resources with a large population and abundant pool of labor force. During its earlier period of economic transformation, Indonesia relied on revenue from exploitation of natural resources, particularly oil and gas production. The government played a very important role in determining the direction of economic development by channeling the revenue to finance state-led big projects with heavy import-substitution characteristics. Heavy government involvement in the development process had restrained the transformation to take place fully, although it laid some foundations necessary for further process, such as infrastructure, education and health.

The end of 1970s oil crisis, followed by the fall of world oil price, ended Indonesia’s big government strategies towards development. Economic deregulation and reforms took place several times during the period of 1980s, encouraging greater private participation and transform the economy from primary-base to more modern economic sectors. During this period, the economy was dominated by the development of labor-intensive manufacturing industry, taking advantage of large number and relatively cheap labor force and export oriented strategy, while the Government focused on financing public goods, including social infrastructure such as education and health. Boosted with greater private participation and economic openness, Indonesian economy managed to perform quite well, not only achieving remarkable growth of 7% during the period of 1980s and 1990s, but also improved the livelihoods of its population.

The Asian Financial Crisis has changed the country’s economic structure as well as its social and political situation. Two forces drove the economy away from labor-intensive manufacturing previously dominated the economy, namely global boom of commodities, such as palm oil and mineral products, and substantial increase of labor cost. Most FDIs to Indonesia in the first decade of 21st century went to extractive industries, services that cater domestic consumption and capital intensive manufacturing. This is also the period where the Government found that fuel subsidy
became a hindrance to its budget as world oil price soared up to very high level, while at the same
time revenue from oil has been declining sharply. Lack of fiscal space of the budget has reduced the
Government’s capacity to finance many other important public goods, including infrastructure
development and social security system.

Four lessons can be learned from Indonesia’s experience. First is that it is important to share
development financing between government and private sector. While it is tempting for government
to finance productive sectors through public spending, especially for resource-rich countries such as
Indonesia, the experience shows that such strategy might crowd-out private sector ability to finance
their business operation, increasing costs of production and reduce competitiveness. At the same time,
governments also tend to choose productive sectors that may not be suitable with the country’s
comparative advantages and characteristics. Governments should focus on the development of public
goods, including physical and social infrastructure such as education and public health.of the
development and financing productive sectors should become the domain of private sector, with the
assistance of government policy and regulations

Second is the importance of the development of financial institutions to support private sector
activities. Indonesia managed to introduce banking and other financial institutions in the early 1980s
when private sector started to contribute more significantly in the economy. However, the country
failed to create strong and resilient financial institutions due to some practices against prudential
principles, e.g. excessive lending to the same business groups, financing domestic projects with
foreign-currencies-denomination loans, and low capital adequacy requirements. That had led to
massive financial sector collapse during the Asian Financial Crisis. Currently Indonesia is still
struggling to have a policy framework that puts a right balance between prudential action and
financial expansion.

Third is the importance to diversify away from natural resource dependency, both in government’s
revenue and economic activities. The decline of oil price in early 1980s prompted Indonesian
government to take necessary measures to increase other sources of revenue and encourage other
economic activities. This requires long term and consistent reforms and transformation. In the first
decade of 21st century Indonesia was again trapped to commodities boom that failed to stimulate other
sectors growth, except for non-tradable consumption-related sectors, such as property and low
productivity services. Indonesian government also still has difficulties in increasing and diversify its
revenue as now it depends on large tax payers, especially from corporate taxes.

Fourth is the importance of economic openness. As Indonesia moved toward greater participation of
business sector, the country also shifted to more open and outward oriented policy. It provides
financial means for economic activities in terms of FDIs, it opens the possibility of having bigger
market for Indonesia’s products, it supplies intermediate inputs for domestic production, and chance
to learn and progress through technological transfer and competition. The need to be more integrated
toward global economy has currently been deteriorating with the introduction of various inward
looking policies. This has resulted to low participation of Indonesian industry in the global value
chain and international production network compare to other countries in the region.

Those factors have been contributing to a great deal to the development and transformation of
Indonesian economy. Indonesia is still lack behind in various other important factors and fails to
address them properly in the past. These include bureaucratic reform, development of economic
institution and implementation of rule of law. These holdback transformation process and increase
uncertainty to the economy, which eventually reduce the economic capacity to supply necessary
opportunities and job creation and affect the government’s ability to provide necessary public goods
for the better livelihood of the whole population.
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