Chapter 5

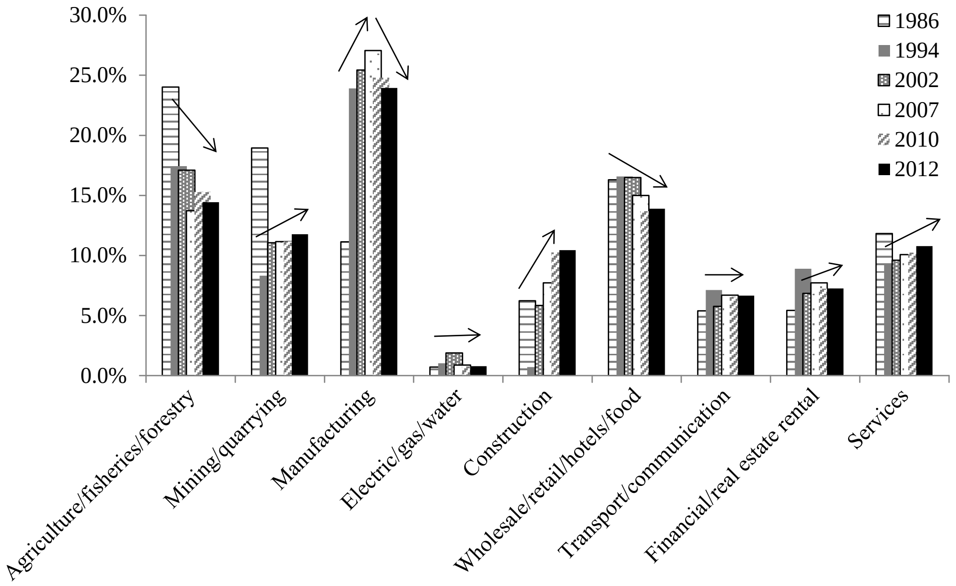
Indonesia: The Surfacing of Structural Problems —The Pressing Issue of Infrastructure Development

Miki Hamada
Senior Research Fellow, Development Studies Center
Institute of Developing Economies

Key Points

- The announcement of a step-down in quantitative easing by the US resulted in capital outflows, and structural problems, such as current account and trade deficits, have surfaced in Indonesia.
- Infrastructure development is the pressing issue, especially distribution infrastructure development, which is crucial to expand trade and resolve trade deficit. .
- Exports depend heavily on natural resources and primary goods. Development of the manufacturing industry is crucial in terms of increasing value-added, but hasty policy turnarounds could negatively influence overseas investments. .
- Institutional weaknesses in terms of governance, including the formation and enforcement of regulations, stand out. Legal opacity is still high, and legal predictability is still low.

Shrinking manufacturing industry in Indonesia
(change in % of GDP by industry)

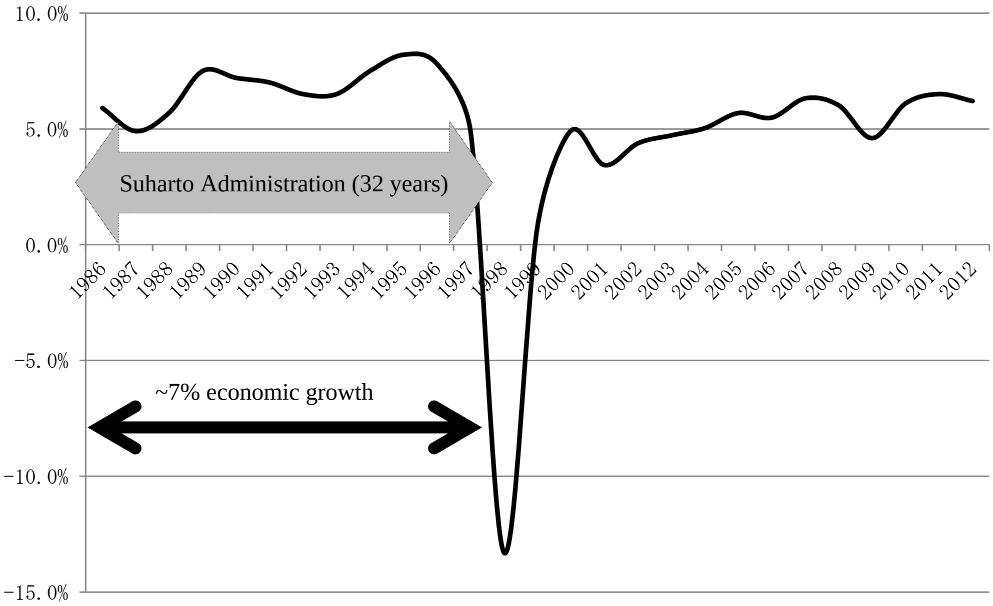


Source: Created by author based on Indonesian Central Statistics Agency

1. Introduction—Increasing attention after the global financial crisis

After the global financial crisis in 2008, the global economy stagnated, and the neighboring countries of Thailand, Malaysia, and Singapore recorded negative growth. Amidst these declining economies, Indonesia showed steady economic growth of 4.6% (Figure 1) and has since garnered attention. As a result of the plunge in the rupiah due to the Asian currency crisis in 1997 and the collapse of the Suharto administration the following year, Indonesia fell into chaos politically, socially, and economically. As a result, foreign businesses, which had tapped into markets in Indonesia during the 1990s, were forced to withdraw or contract their presence. Afterwards, due to the political chaos and continual terrorism, Indonesia posed too great a risk for investors; investments from abroad did not return, not for about a decade. Thus, the strength of the Indonesian economy in 2009 brought Indonesia to international investors' attention.

Figure 1: GDP growth rate



Source: Indonesian Central Statistics Agency

Furthermore, 2009 was the year President Yudhoyono won the election for a second time. The achievements of the Yudhoyono Administration's first term, which began in 2004, had earned a good reputation, and in this year the world recognized that a period of political stability had arrived. The Indonesian economy thereafter had a tailwind from a variety of factors and experienced four years of smooth sailing. The successive upgrades to Indonesia's sovereign ratings supported the upswing in the Indonesian economy, and further propelled it forward. The upgrades continued from the beginning of 2010, reaching investment grade at the end of 2011.

2. The path towards a middle-income country

2.1 The awareness of a middle-income country

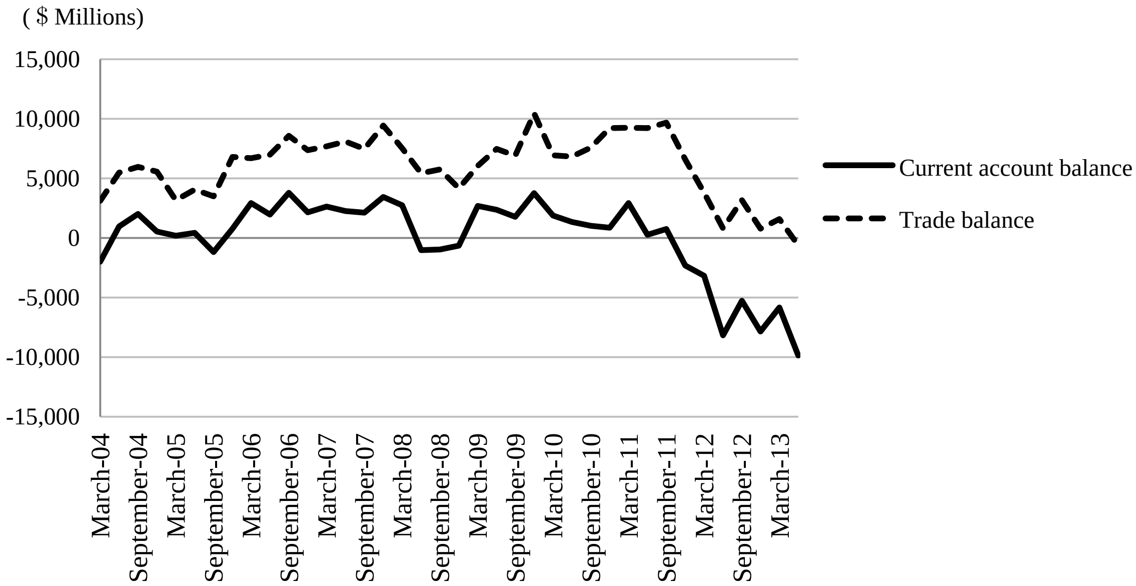
The GDP per capita of Indonesia exceeded $3,000 in 2010. The local media also reported largely on this fact, and it can be said that this was a period in which the awareness within Indonesia of itself as a middle-income country began to develop. Indonesia became a lower-middle-income country in 1995, and its per capita GNI in 2012 was $3420; it is therefore poised to become an upper-middle-income country soon.[1]

2.2 Facing fluctuations

The steady economic growth was driven by vigorous domestic consumption and high international commodity prices. Furthermore, increasing investment in Indonesia was supported by stable macroeconomics, or in other words, a stable rupiah exchange rate, a current account balance and trade balance surplus, and a steadily increasing foreign exchange reserve. The inflation rate was within the target range of the central bank, and the interest rate was maintained at a low level for a long time. Meanwhile, in the labor market, wages continued to rise, and, coupled with low lending rates, domestic consumption was increased, which resulted in an increase in imports. Following the latter half of 2011, the trade surplus continued to shrink, and the current account balance also deteriorated. Figure 2 shows the trade and current account balance on a quarterly basis. The current account surplus in 2011 was $1.69 billion, or one third of the value of the previous year, and became a large deficit of $2.44 billion in 2012. The deficit has continued to expand in 2013.

[1] According to the World Bank's income classification, low-income countries' GNI per capita (2012) is less than $1,035; lower-middle-income countries range from $1036-$4085; upper-middle-income countries range from $4,086-$12,615; and high-income countries exceed $12,616.

Figure 2: A deteriorating current account balance and trade balance (on a quarterly basis)



Source: Bank Indonesia, Indonesian Financial Statistics

The current account deficit put pressure on aggressive international investors to review their Indonesian strategy. Since the US suggested a step-down in quantitative easing in May 2013, international funds began to flow out of emerging countries, and the Indonesian economy also fluctuated. The prices for natural resources, which constitute a majority of Indonesian exports, were affected by the slowing Chinese economy, and began to decline in the international markets. While exports dropped continuously, the depreciation of the rupiah and the increase in imports due to vigorous demand overlapped, and the trade balance also continued to deteriorate. The stock market had been continuously recorded high, and further capital inflow was expected as of May 20, 2013, when it reached a record high of 5,214.976, but it dropped due to the US announcement of a step-down in the quantitative easing program. Since foreign investors dominate–they are responsible for approximately 30% of transactions–the stock markets stagnated due to the sell-off by foreign investors. Expectations of capital inflow turned into concerns about capital outflow.

3. Avoiding the middle-income trap

In response to signs of fluctuation, concerns about a “middle-income trap” have arisen in Indonesia as well. President Yudhoyono, who had submitted a 2014 fiscal budget to the legislature, gave warning against the middle-income trap and emphasized the expanding infrastructure expenditures in order to avoid it. Abundant natural resources and a large population have been the natural endowments of Indonesia, and the sharp rise in international commodity prices was a strong tailwind. However, resource prices are unstable, and price fluctuation has a negative effect on the economy, which has been experienced since the oil boom of the 1970s. The large population does not always have a positive effect, and without the support of economic growth, it causes the opposite effect, including unemployment and a poverty problem.

The biggest problem in the Indonesian economy is its undeveloped infrastructure. In October 2012, Anoop Singh, Director of the Asia and Pacific Department at the IMF, also noted Indonesia's danger of falling into the middle-income trap if the infrastructure is not improved.[2] Moreover, unceasing corruption is a major obstacle to growth, and problems with industrial structure have been made clear through the current account deficit are profound issue.

3.1 Infrastructure development

In "Doing Business in Indonesia: 2012 Country Commercial Guide for U.S. Companies," which was produced for US companies by the US Commerce Department Commercial Service, the Indonesian infrastructure and service network were noted to not have caught up with the economy, and the undeveloped infrastructure was an obstacle to business.

The importance of infrastructure development has been consistently noted. During the decade following the Asian currency crisis, there was a negative spiral in which insufficient investment impeded infrastructure development, and deteriorating facilities resulting from the investment shortfall became an obstacle to foreign direct investment. The biggest problem of all was how to obtain funds. In January 2005, directly after the presidential inauguration, the "Indonesia Infrastructure Summit 2005" was held on a large scale as an initiative of President Yudhoyono, who called for the world to invest in the Indonesian infrastructure sector. Declaring that during the five years between 2005 and 2009, infrastructure investment totaling $145 billion would be necessary to achieve an annual economic growth rate of 6.6%, he explained that the majority of this would derive from overseas private funding. However, of the 91 projects presented by the government, only six had concretely actualized after one year,[3] and the development of laws in all kinds of fields pertaining to infrastructure development became an urgent task for introducing private capital.

---

[2] Jakarta Post article, "RI risks falling into middle-income trap," October 13, 2012.
[3] Sato(2011)

3.2 A resource-dependent economy

Indonesia is the world's second-largest exporter of coal, and in terms of reserves, ranks fourth for nickel, sixth for copper, and seventh for bauxite (and fourth in production volume). Natural gas reserves stand at 165 tcf (trillion cubic feet), of which the annual production is 3 tcf. Also ranking second in the world in tin production, Indonesia has abundant natural resources that are an important factor supporting the growth of its economy.

Indonesian natural resource exports expanded rapidly in the latter half of the 2000s thanks to rising international commodity prices and expanding demand from China. Natural resources and primary goods exports accounted for 34.8% of total exports in 2005 but reached 47.6% in 2012; nearly half of all exports came to rely on natural resources. Crude oil and natural gas, which for many years had been the primary export items of Indonesia, declined, respectively, from 8.3% to 6.7%, and from 11.8% to 9.4%, while coal rose rapidly from 4.8% to 13.9%.

Many studies have suggested that if resource-rich countries rely too much on resource exports, there is a negative effect on economic performance, and in recent years, the relationship between economic growth and the quality of institutions in resource-rich countries has been debated.[4] In Indonesia as well, instead of selling resources piecemeal, economic direction has aimed at high added value in resource exports. In 2009, the Law on Mineral and Coal Mining was enacted, forbidding the export of unprocessed mineral resources starting in 2014. The objective was to expand exports and promote the fostering of downstream industries by requiring high added value for mineral resources domestically.

This policy is important in promoting a higher-level industrial structure, but the sudden change in direction for the mining business, which require time before profits are recovered, has a strong nationalistic coloration, and so could be avoided by foreign companies. Also, prohibiting exports at a stage when the structure of domestic industry is still not in order could invite a loss in revenue, and hasty policy turnarounds could negatively influence overseas investments.

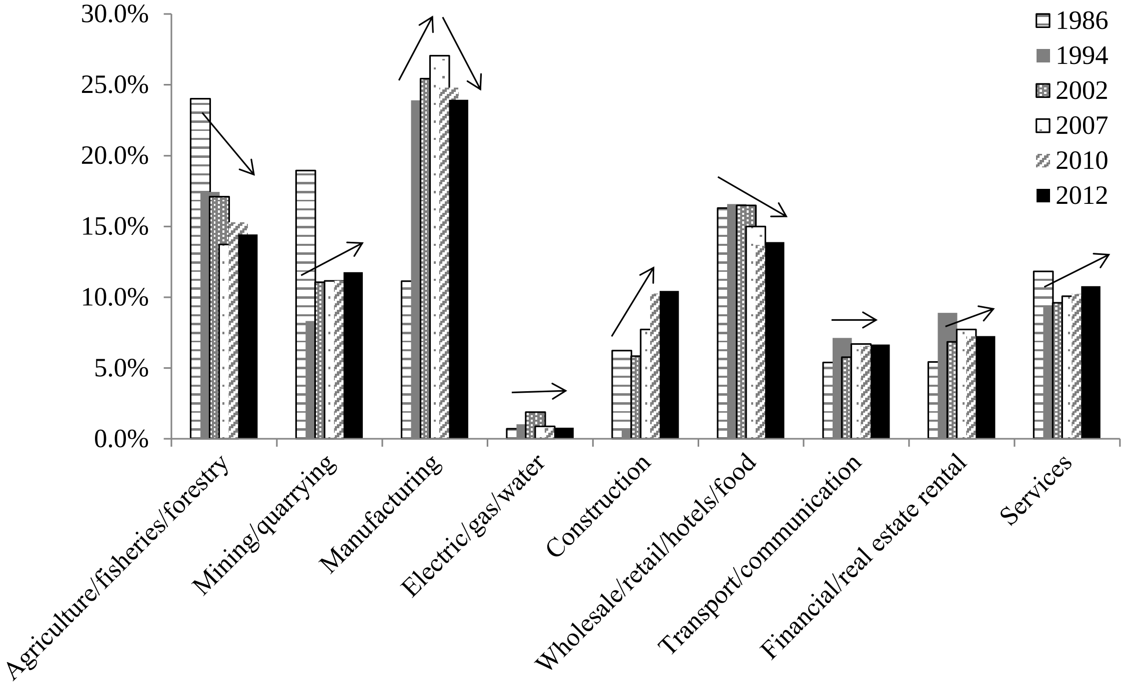
3.3 The task of improving the industrial structure

In Indonesia, where reliance on resource exports heightened, de-industrialization began proceeding before industrialization was complete. Since 1994, when the GDP per capita of Indonesia exceeded $1,000, the manufacturing exports[5] exceeded 50% in 1994 but steadily declined thereafter to 35.3% in 2010, when the GDP per capita exceeded $3,000. At 32.6%,

4 Mehlum(2006)
5 Based on the first digit of the HS code (Harmonized Commodity Description and Coding System) export item classification.

it currently represents less than one third of the whole. It declined after peaking in 2007, as indicated in Figure 3.

Figure 3: Fractions of GDP by industry over time

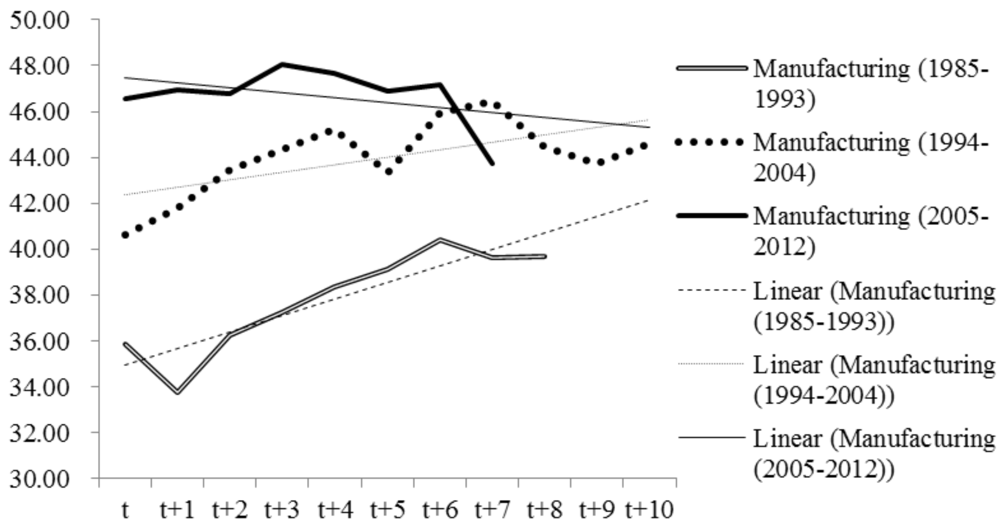


Source: Produced by author based on the Indonesian Central Statistics Agency

In order to become an upper-middle-income country or an advanced country, it is necessary not only to master existing technologies, but also to be innovative in one's own right.[6] Industrial development is indispensable as a forum for fostering such technological strength, but comparing the value-added by the industrial sector during 1985-1993, when the per capita GDP was at the $1,000 level, to the period of 1994-2004, when it was at the $2,000 level, it can be seen that the increase has been slackening (Figure 4).

6 Aiyar et al. (2013).

Figure 4: Value-added of industrial sector (as % of GDP)



Source: Created by author based on World Bank data.

During the Suharto Administration in the 1960s, Indonesian industrialization was pushed forward by an import-substituting industrialization policy under a full-set principle.[7] Following the oil boom in the 1980s, export-oriented industrialization was promoted, and then efforts were made for the structural reform of an oil-dependent economy into a post-oil-dependent economy.[8] The Suharto Administration, which had been promoting industrialization, met its demise in 1998, and Indonesia experienced a long period of political turmoil and has been transformed amidst rapid changes in the international economic environment. A government-led industrialization policy could not be adopted anymore, and the industrial structure of Indonesia changed greatly.

The current state of de-industrialization can be considered a result of the absence of industrialization policies and the resource-export-dependent economic structure. In the 2000s, terms of trade began to rise and have been improving since 2005, with natural resources prices increasing. During this period, the value of the rupiah against the US dollar had been stable thanks to the efforts of the central bank, which called for a strong rupiah. Meanwhile, the real effective exchange rate tended upwards throughout the 2000s. This appreciation of the real effective exchange rate was unfavorable for manufacturing exports, while imports became easier due to the continued improvement in terms of trade; the increase in imports of low-cost

7 Under the “full-set principle” industrialization, the goal was to create a “full set” of finished product, component, and raw material industries in the country, all the way from light industry and resource processing to heavy industry.
8 Mihira and Sato (1992).

foreign products such as Chinese goods might lead to a stagnation in Indonesian manufacturing.

Upgrading industry is a prerequisite for becoming an advanced country, but for Indonesia, just aiming at becoming an upper-middle-income country, by using the manufacturing sector as a source of job creation, is also important. The percentage of workers in manufacturing was 11.8% in 2004, and has been gradually rising to 12.7% in 2007 and 13.9% in 2012, but productivity is declining.

Increasing productivity and international competitiveness while absorbing an expanding labor force is a challenge for the manufacturing sector. To achieve this, a variety of policy efforts are required, including reforming the rigid labor market where it is difficult to lay off workers, nurturing human resources, developing infrastructure for the facilitation of transportation and trade, improving access to funding, increasing the transparency and efficiency of policies, and the like.[9]

4. The fragility of the Indonesian economy

4.1 Weak governance and administration

The surfacing problems arise from the common fragility of the economic system of Indonesia. In a survey by the World Bank comparing the state of the business environment in the world ("Doing Business 2013: Comparing Business Regulations for Domestic Firms in 185 Countries"), Indonesia ranked 128 out of 185 countries. This indicates that the institutions and the capabilities of the administration are still those of a developing country.

The need for infrastructure development is absolutely certain, but financing is also a vital issue. Infrastructure investment requires that a huge amount funds be covered from various sources. Although the government's development investment budget is 10% of the whole, one large problem is not the amount, but the ability to sufficiently enforce the allocated budget.

The problem has been noted that every year towards the end of the year, a significant fraction of the budget allocated to many ministries and agencies is unused. For the 2013 budget as well, as of October, only 67% of the total expenditures had been spent. Based on the distributed amount to each ministry, agency, and national body, excluding personnel expenditures, the executed amount was only 58%, which means that the remaining 40% or so must be spent in two months.

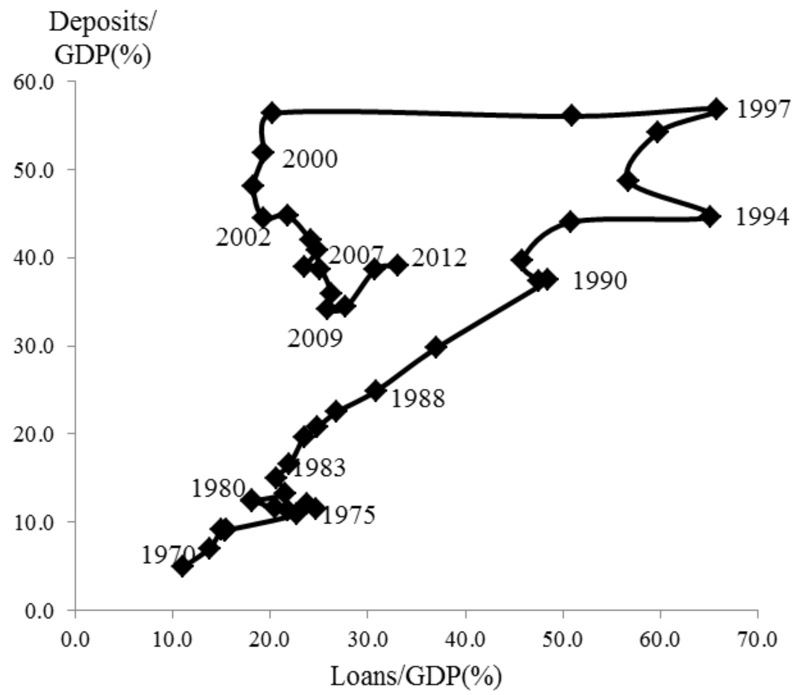
[9] Farole (2012).

4.2 The small financial sector

The Indonesian economy has been steadily growing since the latter half of the 2000s, but it is difficult to say that it has been financed by the domestic financial market.[10] Figure 5 plots the outstanding loans of commercial banks and deposit balances as a percentage of GDP from 1970 to 2012. From 1970 until the Asian currency crisis of 1997, bank loans/deposits expanded relative to GDP. Loans, which stood at 65.8% of GDP in 1997 just prior to the currency crisis, fell to 20.3% in 1999 due to debt that had gone bad after the crisis was transferred to the Indonesian Bank Restructuring Agency (IBRA).

Loans began to increase in 2002, and from 2010, loans and deposits finally resumed increasing together. However, the current loans/deposits ratio to GDP remains at pre-1990 levels, and so the Indonesian banking sector had been set back by over 20 years. Furthermore, at least approximately 30% of the bank loans are for consumption, including housing loans and automobile loans, which exceeds the approximately 20% that are long-term investment funds. The domestic banking market is a place for financing short-term operating capital, and has a reduced intermediate function of long-term production funding.

Figure 5: The development of the banking sector



Source: Bank Indonesia, *Indonesian Financial Statistics*

[10] Hamada (2013).

As source of funds, other financial markets also cannot be said to be sufficient. While bank loan balances as a percentage of GDP is 33%, stock market capitalization is 50% of GDP, and bonds are around 10% (in 2012). The private companies' financing from the capital markets is only around 100 trillion rupiah, combining stocks and bonds. This is less than 5% of the bank loan balance, equivalent to 2,731 trillion rupiah (in 2012). If the net increase in bank loans from 2011 to 2012 is equivalent to 514 trillion rupiah, these funds, which are regarded as fundraising from banks, are equivalent to five times the new financing from the capital markets.

Indonesia's financial sector has not reached a sufficient scale to support not only infrastructure investment but also future economic growth.. According to the World Bank, the percentage of adults 15 years or older who had an account at a formal financial institution in 2011 was only 20%. In order to develop the Indonesian economy to grow from the bottom, providing comprehensive and inclusive financial services is crucial.

4.3 Lack of human capital

To evade the middle-income trap—namely, achieving sustainable growth—there is no high road, and it is important to enhance human capital adaptable to high-level technology and technological innovation. To this end, the importance of education goes without saying, and there is a need to enhance educational institutions. Indonesia has a 95% primary education enrollment rate, which is high just in terms of the numbers, but there is also the question of quality. Enrollment in middle school (pre-secondary education) became required in 1994, but complete implementation at a national level has not yet been reached.

According to the population census in 2010, the national average number of years of education of the citizenry was 7.9, which is shorter than the required education period of 9 years, and the average value exceeded 9 years only in certain urban areas such as Jakarta and Yogyakarta. The high school enrollment rate was 45%, and the tertiary education enrollment rate was 11%. From the recent steady economic growth and the size of the population, the rate of advancement to tertiary education is expected to rise. While management-class human resource training is an issue, the enhancement of secondary and tertiary education, including high school, is important.

Meanwhile, in Indonesia, which has many workers, the maintenance and expansion in labor-intensive industries that can absorb unskilled workers who have completed only primary and secondary education is also important. Worker wages in recent years have largely continued to increase. In 2013, the minimum wage in Jakarta and similar cities in the capital region was raised by 44% year-over-year, and it was decided to be increased by 11% in 2014, but there is a worker backlash. Raising wages without an accompanying productivity could become a factor decreasing Indonesia's international competitiveness.

5. Towards sustainable development

5.1 A blueprint for 2025.

In May 2011, the Indonesian government released a "Master Plan for Acceleration and Expansion of Indonesia's Economic Development (MP3EI) from 2011 to 2025." MP3EI upholds the target of expanding GDP from the previous year value of $700 billion more than six fold to $4.5 trillion by 2025, to become one of the top 10 economies in the world. A total amount of 4,012 trillion rupiah are planned, of which 45% are for infrastructure investment. The government intended to provide a quarter of the total amount; the remainder would take advantage of domestic and foreign funds including private funds. The plan specified projects and clarified the necessary investment amounts.

The promotion of six Indonesian Economic Development Corridors (IEDC) is a key element. The connections between domestic and overseas elements as well as the connections among the economic corridors and domestic development bases must be increased. Furthermore, the plan aims to strengthen human capital and scientific technology for carrying out the economic program. The economic program plans eight programs (agriculture, mining, energy, manufacturing, shipping, tourism, communication, and the development of special economic zones) comprising 22 important fields.[11] It is extremely broad in scope and contains many fields, and suggests the Indonesian government's intentions rather than specifying the primary industries for promoting economic growth; instead it redefines broadly the industrial base on which Indonesia stands."[12]

5.2 The 2015 establishment of the AEC and the Indonesian economy

Further economic growth should be achieved while taking advantage of the two strengths of large domestic demand and abundant natural resources, and taking into consideration the international markets. Since Indonesia was not incorporated into the global production networks, the effects of the global financial crisis in 2008 were less serious than for neighboring countries. However, without taking part in the global networks, it will not be able to become an upper-middle-income country.

---

[11] The 22 important fields are coal, nickel, copper, bauxite, petroleum/gas, tin, livestock, cacao, rubber, palm oil, defense equipment, iron, food and beverage products, textiles, shipping, ICT (Information Communication Technology), transportation devices, the Sunda Strait Strategic Area, the Jakarta capital region economic zone (Jabodetabek), food/agriculture, tourism, and fisheries.

[12] Sato (2013).

The Indonesian government has been emphasizing the importance of nurturing nine industries in preparation for establishing the ASEAN Economic Community (AEC) in 2015.[13] They are advantages to Indonesia in the ASEAN single market, and meanwhile seven industries[14] are required to increase competitiveness against imported products from ASEAN countries. While being wary of imports from other countries, it is starting to invest in the AEC single market; for example, the state-owned cement company, Semen Indonesia, is expecting to increase exports to neighboring companies alongside the launch of the AEC, and plans to build a cement factory in East Kalimantan by 2015.

Meanwhile, the size of the domestic Indonesian market is attractive to the other ASEAN countries. Indonesia's Industry Minister and Chamber of Commerce and Industry emphasized the necessity of strengthening competitiveness because the AEC will bring about great opportunities for Indonesia, but at the same time the Indonesian manufacturing industry will be tested by a large inflow of import goods. Behind this lies the lessons from the China-ASEAN FTA (ACFTA) in 2010. The launch of the ACFTA resulted in massive inflows of low-cost products from China at the beginning of 2010, and domestic industries were heavily damaged.

5.3 A year of politics in 2014

2014 is an election year. The elections for the national legislatures will be held in April, and the presidential election will be held in July.[15] Each political party debates over selecting presidential candidates. Since presidents are not allowed to serve a third term according to the constitution, the Indonesian people will select a new president in this next election.

The economic policy of the second term of the Yudhoyono Administration puts emphasis on growth, as seen in the MP3EI. However, “growth” vs. “distribution” is a constant political issue. Although the poverty and unemployment rates have decreased to 11.6% in 2012, the former is still in the double digits of 11.6% in 2012 and the latter is still 6.1%. The young working population is a strength of the Indonesian economy, but it works both ways. Every year two to three million people enter the labor market. If job creation fails to absorb these young workers, the unemployment rate will quickly rise.

No matter who becomes the next president, the problems that must be faced are the same.With the changing economic environment for emerging economies, amid the global attention being paid

[13] Agricultural products include crude palm oil, cacao, rubber, fish and processed fish, textiles, textile products and footwear, leather goods, furniture, food and beverage, fertilizers and petrochemical products, steel, and machinery.
[14] Automobiles, electronic components, cement, clothing, footwear, food and beverage, and furniture.
[15] If no candidate receives a majority in the first round of voting, a run-off election will be held in September between the top two.

to whether the Indonesian economy will keep on growing, Indonesia should devote effort to resolve the surfacing structural problems.

5.4 Moving on to further development

Indonesia’s honeymoon period with global investors, starting in 2009, showed changes in 2013. With capital flows changing greatly in an instant, the foreign exchange markets and stock markets fluctuate in the short term. The view of Indonesia becomes far stricter than one year prior. However, policy efforts tackling capital outflow and the fall in rupiah were well received, foreign currency reserves returned to a growth trend in August, and purchases by foreign investors of central bank certificates (SBI) and government bonds have started to increase. It is necessary to differentiate between short-term changeable market problems and structural problems such as those in industrial structure and economic institutions.

Furthermore, after foreign companies rushed to enter, a variety of business risks might emerge in the future while maintaining and expanding business. Aside from macroeconomic issues like the current account deficit, problems resulting from differences in business customs and values between trade partners or joint venture partners in Indonesia, as well as labor problems, are expected to arise, one after another. In Indonesia legal opacity is still high and legal predictability has been low; for instance new laws and regulations are suddenly introduced in fields such as labor, taxation, and customs, and then in-operation corrections are made due to requests from stakeholders.

In the second term of President Yudhoyono, comprehensive business environment reform was expected under favorable conditions. It is important to closely examine what worked and what did not work during this period. In order for Indonesia to become an upper-middle-income country, it is necessary to consider sincerely the next reforms on the basis of the examination results.

References

Aiyar, S., R. Duval, D. Puy, Y.Wu, and L. Zhang (2013) "Growth Slowdowns and the Middle-Income Trap," *IMF Working Paper* WP/13/7, IMF.

Farole, T and D. Winkler (2012) "Export Competitiveness in Indonesia’s Manufacturing Sector,” World Bank.

Hamada, Miki (2013) “Ajia tsuka kiki go no Indoneshia ginko bumon no henyo to sono eikyo,”Akiba, Mariko (ed.) *Gurobaizeshon no naka no Ajia*. Hirosaki University Press.

Mihira, Norio, Sato, Yuri (1992), *Indoneshia no Kogyoka—Furusetto Shugi Kogyoka no Yukue." Institute of Developing Economies.*

Mehlum, H., K. Moene and R. Torvik (2006) "Institutions and the Resource Curse," *The Economic Journal*, Vol.116, 508, pp.1–20, January 2006.

Odsuren, Jud、Sanae Ohno (2011) "Shigenkoku ni okeru gabanansu no joukyou: Gabanansu shihyou ni motozuku kousatsu,"*Musashi Daigaku Ronshu*. Vol. 58, No. 3, pp. 85-129.

OECD (2013), Economic Outlook for Southeast Asia, China and India 2014 -Beyond the Middle-income Trap.
http://www.oecd.org/site/seao/Web%20Pocket%20Edition%20SAEO2014.pdf Accessed October 1, 2013.

Sato, Yuri (2011) "Keizai taikoku Indonesia—21 Seiki no seicho joken," Chuokoron-Shinsha

————(2013) "Sangyo kozo no henka," *Gendai Indoneshia wo Shiru Tame no 60 Sho.* Asahi Shoten.

U.S. Commercial Service, "Doing Business in Indonesia: 2012 Country Commercial Guide for U.S. Companies,"
http://export.gov/Indonesia/doingbusinessinindonesia/index.asp Accessed 10 October 2013.

World Bank "DOING BUSINESS 2013"
http://www.doingbusiness.org/~/media/GIAWB/Doing%20Business/Documents/Annual-Reports/English/DB13-full-report.pdf Accessed November 1, 2013.