

CONSTRAINTS TO INDONESIA'S ECONOMIC GROWTH

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No. 10

December 2015

ADB PAPERS ON INDONESIA



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The ADB Papers on Indonesia is an ongoing, quick-disseminating, informal publication whose titles could subsequently be revised for publication as articles in professional journals or chapters in books. The series is maintained by the ADB Indonesia Resident Mission based in Jakarta, Indonesia.

CURRENCY EQUIVALENTS

(as of 1 September 2015)

Currency unit	–	Rupiah (Rp)
Rp1.00	=	\$0.00007
\$1.00	=	Rp14,095

ABBREVIATIONS

ASEAN	–	Association of Southeast Asian Nations
BAPPENAS	–	<i>Badan Perencanaan dan Pembangunan Nasional</i> (National Development Planning Agency)
ICOR	–	incremental capital output ratio
ICT	–	information and communication technology
IMF	–	International Monetary Fund
PRC	–	People's Republic of China
PPP	–	public–private partnership

INDONESIA: CONSTRAINTS TO ECONOMIC GROWTH

I. Recent Growth Performance

1. From 1965 to 1997, the Indonesian economy grew at an average annual rate of 7%. This enabled Indonesia to graduate from the ranks of 'low income countries' into the ranks of 'lower middle income countries'. However, the Asian financial crisis of the late 1990s severely impacted the economy, resulting in gross domestic product (GDP) falling by 13.6% in 1998, followed by real economic growth of just 0.3% in 1999.

2. During 2000–2004, Indonesia recovered slowly from the financial crisis, with GDP rising by an average of 4.6% per annum. From 2005 to 2011, growth increased to an average of 6% per annum on the back of a strong recovery in global commodity prices, triggering a commodity boom period. Since peaking in the second quarter of 2010, economic growth has declined steadily to 6.2% in 2011, 6.0% in 2012, 5.6% in 2013, and 5.0% in 2014. The slowdown is attributed to falling global commodity prices, volatile global financial conditions, fiscal and monetary tightening, and steadily weakening competitiveness. Despite the slump, per capita income has steadily increased, from \$1,643 in 2006 to \$3,523 in 2014, with the overall economy growing to \$888 billion in 2014 (Table 1).¹

Table 1: GDP Growth 2009–2014

	2009	2010	2011	2012	2013	2014
GDP (in billion dollars)	578.1	755.6	845.5	878.7	871.1	888.4
GDP (annual percent change)	4.7	6.4	6.2	6.0	5.6	5.0
GDP per capita (in dollars)	2,498	3,250	3,667	3,761	3,663	3,523

Source: IMF, BPS–Statistics Indonesia, and ADB estimates

3. While economic growth averaged 5.7% from 2009–2014, it remains below the 7% rate recorded before the Asian financial crisis. The contribution of investment to growth has declined and that of private consumption has risen. From the production side, growth has been driven by non-tradables, mainly services, while the performance of tradables, particularly manufacturing, has been lackluster. Accelerated structural reform—to support productivity improvement—and higher levels of investment and exports are required if economic growth is to return to pre-crisis levels.²

4. Investment in Indonesia has recovered to pre-crisis levels, but the productivity of capital investment has not. From 2011–2014, the incremental capital output ratio (ICOR) in Indonesia was 6.7 compared to 3–4 in Singapore, Thailand, Malaysia, and Vietnam (i.e. the lower the ICOR, the more productive the capital investment). The productivity of capital investment in

¹ ADB. 2014. *Indonesia Country Information Note*. 27 November. Jakarta.

² *Ibid.*

Indonesia in the 1990s and early 2000s was, similarly, in the range of 4–5. Part of the reason that capital investment levels remain high, despite low economic returns, is the comparatively high returns to passive investment in financial rather than real assets.³

5. Slowing economic growth has contributed to a slowdown in poverty reduction. Economic growth from 2005–2014 has helped to lift 8 million people out of poverty. Yet 28 million Indonesians continue to live below the government's poverty line. Around 68 million are classified as poor or near poor and would join those below the poverty line in the event of even a small reduction in their incomes. Poverty is high in some eastern provinces, reaching 24.1% in Maluku and Papua. Indonesia's overall reported poverty incidence fell by 4.5% between 2006 and 2010 (from 17.8% to 13.3%), but fell by just 1.5% between 2011 and 2014 (from 12.5% to 11%).⁴

6. The benefits of Indonesia's recent economic growth have not been widely shared. The Gini coefficient has widened from 0.31 in 2000 to 0.43 in 2013, and the income share of the richest quintile has risen while that of the lowest quintile has fallen. The ultra-rich appear to have gained the most during the commodity boom years. It is estimated that the 43,000 richest Indonesians, who represent 0.02% of the population, hold some 25% of the country's total wealth, and that the 40 richest Indonesians account for nearly 10% of the country's GDP.⁵

7. During the recent commodity boom, Indonesia became a less equal society because of the slow rate of job creation. Economic growth was insufficient to absorb the 2 million new entrants to the labor market each year, as fewer than 1 million new formal sector jobs were created annually. Some 62% of workers are in the informal sector, where incomes are low. From 1990–2012 the estimated elasticity of employment to growth was 0.5, which implies that growth rates would need to be in the order of 7%–8% per annum to keep pace with growth in the labor force.⁶

8. Numerous factors are contributing to rising inequality and low labor absorption. Most significant is that recent growth has been largely driven by increases in low-productivity service sector activity, which is in line with a process of consumption-driven growth. The agriculture sector, which absorbs about 40% of the labor force, has consistently grown at a slower rate than the country's average GDP growth. At the same time, the manufacturing sector has experienced slower growth, averaging 4.5% from 2001–2010. Mining, industrial crops, timber, telecommunications, and financial services have grown at their most rapid pace in the past 5 years, while ownership in these sectors is highly concentrated and production tends to be capital-intensive. As a result, the recent economic growth benefited mostly the richest population segment and generated relatively few jobs.

³ World Bank. 2014. *Development Policy Review: Indonesia: Avoiding the Trap*. Jakarta.

⁴ ADB. 2014. *Asian Development Outlook: Indonesia chapter*. Manila. Indonesia Investments. 2014. Gross Domestic Product of Indonesia. <http://www.indonesia-investments.com/finance/macroeconomic-indicators/gross-domestic-product-of-indonesia/item253>.

⁵ Indonesia Investments. 2014. *Poverty in Indonesia*. Jakarta.

⁶ World Bank. 2014. *Development Policy Review: Indonesia: Avoiding the Trap*. Jakarta.

9. In the near-term, growth is likely to be influenced by continuing weaknesses in global economic activity, weak international commodity prices, and rising foreign financing costs. In the medium-term, however, Indonesia's growth prospects are good. Rising domestic demand, productivity improvement, increased urbanization, the shift of labor from agriculture to manufacturing and service sector activity, and increased trade and investment flows should drive higher rates of economic growth and development. The country's large population and growing ranks of middle-income consumers will continue to propel growth in domestic demand. The McKinsey Global Institute forecasts that the number of middle-income urban consumers in Indonesia will increase from 45 million in 2012 to 135 million in 2030, accompanied by a near tripling in discretionary consumption spending.⁷ With more than 60% of the population below the age of 40, demographic change (i.e. the demographic dividend) will add to the growth momentum as the share of the economically active population rises steadily until 2030.⁸ Adoption of new technologies, in information and communication technology (ICT) in particular, and an increase in the number of skilled school leavers, will augment human capital and help boost productivity.⁹

10. The commencement of the Association of Southeast Asian Nations (ASEAN) Economic Community on 31 December 2015 will also open up new growth opportunities for Indonesia. The ASEAN vision is to create a stable, prosperous, and highly competitive economic region, in which there is a free flow of goods, services, investment, and capital. ASEAN has a young population and a growing middle-class base of 608 million people. It has a combined income of \$2.18 trillion and average GDP per capita of \$3,578. There is strong demand in ASEAN for products that Indonesia produces (e.g. rubber, minerals, coal, and natural gas) and it has a fast-growing services industry. Regulatory cooperation under ASEAN is expected to contribute to a reduction in Indonesia's trade costs, and should boost trade and foreign direct investment, particularly in services.¹⁰

11. Rising wages and production costs in the People's Republic of China (PRC) should create new export opportunities for Indonesia as firms shift labor-intensive manufacturing capacity from the PRC to ASEAN and other parts of the Asia-Pacific. The PRC in 2012 accounted for 17% of global manufactured exports and 36% of the world market for garments and textiles. Should the PRC shift out of labor-intensive exports, this will leave a gap of more than \$1 trillion in trade for other countries to fill.

12. Indonesia is operating far below its economic growth potential because of several factors, which are discussed in detail in Section II. Many of these are long-standing, structural constraints to higher and more inclusive economic growth.¹¹ When taken in combination, they raise costs, reduce competitiveness, distort incentives, and impede innovation. Were these constraints eased, there would be more investment and higher returns. In most instances, the

⁷ McKinsey Global Institute. 2012. *The archipelago economy: Unleashing Indonesia's Potential*. Washington D.C.

⁸ World Bank. 2014. *Development Policy Review: Indonesia: Avoiding the Trap*. Jakarta.

⁹ McKinsey Global Institute. 2012. *The archipelago economy: Unleashing Indonesia's Potential*. Washington D.C.

¹⁰ World Bank. 2014. *Indonesia Economic Quarterly: Delivering Change*. December 2014. Jakarta.

¹¹ Several of these constraints are discussed in detail in ADB and ILO. 2010. *Indonesia: Critical Development Constraints*. Manila.

constraints also hinder the inclusiveness of the growth process, since the larger firms, which are located in the best-endowed urban areas, are able to work around the impediments, while firms in more remote and poorly endowed regions face further challenges.¹²

II. Key Growth Constraints

A. Macroeconomic Competitiveness and Vulnerability

13. **Macroeconomic vulnerabilities.** Indonesia's macro-economic fundamentals remain solid despite the recent growth slowdown. However, vulnerabilities remain due to the nation's open economy, increased dependence on private capital inflows, and widening external imbalances. Financial markets were rattled by the sharp deterioration in the current account deficit, to the equivalent of 4.4% of GDP in the second quarter of 2013, the widest gap since the 1997/98 Asian financial crisis. This led to a 26% devaluation of the rupiah against the US dollar and a tightening of monetary policy. The widening current account deficit was triggered by a slump in export earnings, stemming from a downturn in prices for agricultural and mineral export commodities, as well as a softening in demand from major trading partners. A deteriorating external balance also reflected a number of decade-long trends. Imports have been rising due to an upturn in capital inflows, rupiah appreciation, rising real wages, and rising demand for foreign goods from the country's growing middle class. Sluggish performance in export-oriented manufacturing has added to the strains on the current account. During the past decade, the share of commodities in Indonesia's exports has increased, making its external accounts more vulnerable to cyclical swings in global commodity prices.¹³

14. From 2005–2014, Indonesia's export competitiveness, particularly in manufacturing, has eroded. The rupiah has appreciated in real effective terms, and labor productivity in manufacturing has fallen below rates achieved in neighboring countries. Indonesia's real effective exchange rate appreciated by more than 20% between January 2000 and July 2013.¹⁴ The real exchange rate has been volatile, depreciating during periods of domestic political instability and global shocks (late 2005, early 2009, and late 2013), and appreciating otherwise due to a combination of nominal appreciation, short-term capital inflows in search of higher yields, and strong terms of trade. Given that the factors pushing up Indonesia's real exchange rate are structural—i.e. a high and growing dependence on commodity exports, and openness to capital flows—longer-term strengthening of the country's external position will require reforms to achieve sustained gains in productivity, to diversify exports, and to boost competitiveness to support the stronger exchange rate.

15. **Prioritizing fiscal stability.** One of the reasons for the recent slowdown in Indonesia's economic growth is that the government has prioritized financial stability over higher growth. Slowing growth since 2012 has led to a widening current account deficit, which peaked at 4.4% in the second quarter of 2013. Authorities responded by adopting prudent fiscal and monetary

¹² World Bank. 2014. *Indonesia Economic Quarterly: Delivering Change*. December 2014. Jakarta.

¹³ ADB. 2014. *Asian Development Outlook: Indonesia chapter*. Manila. G. Papanek, R. Pardede, and S. Nazara. 2014. *The Economic Choices Facing the Next President*. Jakarta. G. Papanek. 2014. *How well are the Government and the Economy Performing?* Transformasi Progress Report. Jakarta.

¹⁴ H. Aswichahyno et al. 2014. *Competitiveness Issues in Indonesia*. Jakarta (draft).

policies to restore macro–financial stability. The government reduced its subsidy on fuels (in 2012, 2013, and 2014) to combat the widening current account deficit and to free up budget resources for social and economic development. To help stem inflationary pressures resulting from higher fuel prices, Bank Indonesia raised its key interest rate gradually from 5.75% in June 2013 to 7.75% in November 2014 and has targeted slower credit expansion. A combination of fiscal restraint and monetary tightening is reducing aggregate demand and easing pressures on the current account, but at the expense of lower short–term growth. In addition, the government has steadily reduced its public debt, from 80% of GDP in 2002 to 28.7% of GDP in 2013, to help reduce macro–financial risks associated with sudden changes in capital flows, at the expense of higher long–term growth.¹⁵

B. Infrastructure Gaps

16. **Spending on infrastructure is extremely low.** Extremely insufficient infrastructure is a prime constraint to economic growth because infrastructure gaps raise costs, discourage investment, and reduce opportunities to participate in the growth process. Indonesia’s infrastructure investment collapsed during the Asian financial crisis and has not recovered since. Infrastructure expenditure has averaged less than 2%–3% of GDP over the 2000–2014 period—compared to about 6% in the Soeharto era, and about one–third of what regional peers have invested.¹⁶ That government infrastructure spending is so low can be attributed partly to funding constraints, partly to poor spending choices, and partly to constraints on public sector borrowing.

17. Indonesia’s revenue–to–GDP ratio remains low, both relative to peers and to potential, and has been declining in recent years. Tax collections were only 11.9% of GDP in 2013, while domestic revenues were 15.9% of GDP, falling to 14.6% in 2014. A low and declining revenue mobilization effort implies that the government has limited financial resources with which to meet growing infrastructure investment requirements.¹⁷ On the spending side, public investment has been squeezed by subsidies, while funds allocated to subnational governments have tended to be allocated disproportionately to administrative functions and personnel.¹⁸ Moreover, the 2003 Fiscal Law, which caps the budget deficit at 3% of GDP, has constrained Indonesia’s capacity to tap concessional long–term infrastructure finance.

18. **PPPs have not delivered.** Public–private partnerships (PPPs) have been promoted by successive governments, but they have proved difficult to deliver and have not played a major role in infrastructure development. Inter–government coordination has been difficult to achieve and the government has been unable to produce a strong pipeline of bankable projects. PPPs have also been hampered by difficulties in risk–sharing and tariff setting. A dearth of land for infrastructure development, combined with difficult procedures for involuntary land acquisition

¹⁵ IMF. 2014. *IMF Statement at the End of the 2014 Article IV. Mission to Indonesia*. Press Release No. 14/584. 18 December. Washington D.C. and Indonesia Investments. 2014. *Prudent Fiscal Management: IMF Positive About Indonesian Economy*. 29 December. Jakarta.

¹⁶ H. Aswichahyno et al. 2014. *Competitiveness Issues in Indonesia*. Jakarta (draft).

¹⁷ World Bank. 2014. *Indonesia Economic Quarterly: Delivering Change*. December 2014. Jakarta

¹⁸ Lewis, B. (2014), ‘Twelve years of Fiscal Decentralization: A Balance Sheet’, in H. Hill (ed). Forthcoming. *Regional Dynamics in a Decentralized Indonesia*. Institute of Southeast Asian Studies. Singapore.

and resettlement, has also hampered infrastructure investment.¹⁹

19. **Poor infrastructure causes high logistics costs.** Indonesia's economic infrastructure is ranked far below that of, for example, Malaysia and Thailand on the World Bank's Logistics Performance Index. Indonesia's logistics costs are about 14% of total production costs, much higher than Japan's approximately 5%. Congested ports and rising logistic costs are major constraints to the expansion of manufacturing. For example, at the country's major port, Tanjung Priok, where throughput doubled over the period 2007–2013, there has been no expansion in facilities.²⁰ High inter-island transport costs push up the general cost structure, particularly in remote regions, and contribute to large inter-regional price differences. Regulatory constraints on competition and inefficient service provision compound the problems. The 2008 Shipping Law introduced cabotage principles that limit the movement of cargo between Indonesian ports to Indonesian-flagged vessels, adding to inter-island shipping costs.²¹

20. **Obsolete road network.** With the limited number of, and access to, ports, airports, railways, and road-based logistics facilities, shipping costs within Indonesia are often more expensive than the costs of importing from Singapore or the PRC. Although spending on road infrastructure was increased to about \$6 billion per annum in 2013, this has been insufficient to keep pace with the double-digit growth in the country's vehicle fleet, leading to enormous congestion and rapidly rising transport costs. Little progress has been registered in expressway and toll road development during the past decade. Indonesia has just 778 km of toll roads compared to 65,000 km of toll roads in the PRC. Road funding has primarily been used to repair and maintain national roads. While progress has been registered in repairing national roads, surveys suggest that 41% of district roads and 24% of provincial roads throughout Indonesia are in bad condition.

21. **Keeping up with rapid growth in power demand.** Most indicators suggest that Indonesia's energy sector is underperforming and may be heading toward a supply crisis in the medium-term. Power demand is growing by 8%–8.5% per year, outstripping supply capacities in many parts of the national grid. Generation capacity additions have been delayed, there is significant electricity theft, and underinvestment and infrastructural deficits extend to the transmission and distribution systems. This severely constrains the country's ability to provide power for industrial and commercial users, and to connect new households to the grid.²² At the same time, Indonesia's per capita annual consumption of electricity of about 700 kWh is very low relative to regional peers such as Thailand (2,300 kWh) and Malaysia (4,000 kWh). Energy services and consumption are oriented disproportionately toward Indonesia's economic growth centers, with large expanses of remote areas still lacking access to basic energy services. In order to meet the country's economic growth aspirations, the energy sector will have to grow at an annual 7% and the electricity sector will have to grow at a rate of 7.5%–8% to keep pace with

¹⁹ G. Papanek, R. Pardede, and S. Nazara. 2014. *The Economic Choices Facing the Next President*. Jakarta.

²⁰ H. Sandee et al. 2014. 'Challenges of Implementing Logistics Reform in Indonesia', in H. Hill (ed). Forthcoming. *Regional Dynamics in a Decentralized Indonesia*. Institute of Southeast Asian Studies, Singapore.

²¹ H. Aswichahyno et al. 2014. *Competitiveness Issues in Indonesia*. Jakarta (draft).

²² ADB. 2014. *Republic of Indonesia—ADB Knowledge Conference: Key Findings*. Jakarta.

demand. Fossil fuels dominate Indonesia's energy mix, though the sector's raw energy supply is shifting from its depleting oil resources to more readily available coal and natural gas. Indonesia has significantly underutilized potential in conventional gas. This is due to a combination of high export obligations, low domestic prices, aging fields, an uncertain regulatory framework, and long distances between production and consumption centers. While Indonesia is particularly well endowed with a range of renewable energy resources, including geothermal, biomass, solar, and hydropower, renewables account for just 5% of the raw energy mix and the country lags behind regional peers in using renewables for power generation and transportation.

22. **Fuel subsidies.** The fuel subsidy bill rose from about 0.7% of GDP in 2007 to an estimated 2.8% of GDP in 2014. Traffic congestion, energy-intensive investment and reliance on low-cost transport are some of the consequences of the ready availability and low cost of subsidized fuels. On 17 November 2014, President Joko Widodo announced increases of between 31%–36% in fuel prices, depending on the type of fuel. This, combined with falling global petroleum prices, has significantly reduced spending on fuel subsidies, leading to an estimated \$6 billion in budgetary savings in 2015. There is a need to ensure that automatic fuel tariff-setting mechanisms are in place so that this latest effort to phase down subsidies is not offset by inflation, global price developments, and currency devaluation; and that the subsidy savings are used to augment spending on productive infrastructure.

C. Skills Gap and Rising Minimum Wages

23. **Poor quality basic education.** Indonesia has achieved impressive gains in education since the 1970s, with enrolment growth at all levels. The country is now close to achieving universal literacy for its school-age population, and there is a general commitment to education funding, as manifested in a constitutional requirement that 20% of the state budget be allocated to the sector. However, human resource development is plagued by high post-primary dropout rates, and by the poor quality of Indonesia's education system according to most comparative quality indicators, such as international examination performance. According to the latest round of Program for International Student Assessment rankings, computed by the Organization for Economic Co-operation and Development, Indonesia ranked 65th out of 66 countries. There are also significant disparities in education services at the district level, with the country's eastern region lagging far behind in almost all key education performance indicators. In addition, 47% of the country's primary schools lack access to electricity, effectively excluding their students from advances in e-learning.

24. Higher growth in the medium-term will require a shift from primary products to services and manufactured exports. This, in turn, will require an increased supply of skilled labor and a sustained improvement in labor productivity in the manufacturing sector. Currently, the demand for advanced skills is increasing faster than the pace at which existing education systems are able to deliver. In addition, productivity improvement will also require better incentives for skills development at the firm level, and a more flexible labor market.

25. **Skill gaps.** There are now more than 30 million senior secondary graduates and more than 10 million tertiary education graduates in Indonesia's labor force. From 2010–2014, the number of workers with a tertiary education has increased by more than 1 million annually and

those with a senior secondary education by more than 2 million annually. However, there are signs that the quality of tertiary education is low, and that students' learning is inadequate. In a 2008 World Bank survey of employers, two-thirds complained that finding employees for professional and management positions was difficult or highly difficult. In certain sectors, the education system is not providing enough graduates, while in others, those who are graduating do not have the right skills. A large number of tertiary-educated individuals work in low-skill occupations, which suggests that despite holding degrees, they lack the right skills.²³ McKinsey estimates that demand for semi-skilled and skilled workers may rise from 55 million in 2012 to 113 million by 2030, and that Indonesia will face a shortage of some 9 million workers educated to secondary and tertiary levels.²⁴

26. Low numbers of vocational and technical graduates. Demand for students with quality vocational and technical skills is outstripping supply. Of the 5.2 million students enrolled in more than 3,000 Indonesian higher education institutions, just 110,000 receive polytechnic education, half of them at the 32 public polytechnics. Polytechnic training occupies less than 3% of enrollments in higher education, which is extremely low compared to other countries. The quality of polytechnic education is also generally poor. Polytechnic management tends to be rigid, work placements badly organized, financing support is low, links with the private sector are weak, and society tends to view polytechnic education as a second-class alternative to university education.²⁵

27. Variable quality of university graduates. State-run universities dominate the higher education system but receive low levels of government funding (i.e. some 0.3% of GDP) and are tightly regulated. Private funding has come to dominate higher education but without credible accreditation and quality control mechanisms in place. The quality of tertiary institutions tends to be highly variable, with small pockets of excellence alongside large numbers providing training of sub-standard quality. Funding support mechanisms, particularly for able but needy students, are limited. None of Indonesia's tertiary institutions rank prominently in international comparisons.

28. Low R&D outlays. There is very little new technology coming out of Indonesia. The World Bank's Innovation Index ranks Indonesia 103rd out of 145 countries assessed. Gross expenditure on research and development (R&D) is less than 0.1% of GDP and most R&D is undertaken by public research organizations. In addition to low expenditure on R&D, the number of patent applications and scientific and technical publications is relatively small. In 2011, high-technology exports constituted just 8% of Indonesian manufactured exports, compared to 41% in the Philippines, 43% in Malaysia, and 21% in Thailand.²⁶

29. Rising minimum wages have been pushing up production costs due to the growing strength of organized labor. From 2000 to 2012, unit labor costs in Indonesia's manufacturing

²³ World Bank. 2014. *Development Policy Review: Indonesia: Avoiding the Trap*. Jakarta.

²⁴ McKinsey Global Institute. 2012. *The archipelago economy: Unleashing Indonesia's Potential*. Washington D.C.

²⁵ ADB. 2012. *Polytechnic Education Development Project. Sector Assessment: Polytechnic Education*. Manila.

²⁶ ADB. 2014. *Republic of Indonesia-ADB Knowledge Conference: Key Findings*. Jakarta.

sector more than doubled, moderately outstripping gains in labor productivity.²⁷ This led to widening wage gaps between laborers in agriculture (and the informal sector) and those in the industrial sector. The supply of labor is increasing by some 2 million workers a year but only 1 million new jobs are being created in the formal sector. With labor supply exceeding labor demand, wages in the informal sector are falling. From 2008 to 2014, average incomes in Indonesia increased by 28%, while average wages of industrial workers rose by 39% and average wages in agriculture fell by 12%. Strong growth in the wages of industrial workers was a result of a 215% increase in minimum wages. In 2008, industrial wages were just 30% higher than those in agriculture—by 2014, industrial wages were more than double those paid in the agriculture sector.²⁸

D. Business Environment

30. **High business costs.** There is an urgent need for regulatory simplification because of the additional costs that Indonesia's regulatory regime imposes on businesses. The country continues to rank poorly in the ease of doing business, with few discernible improvements since 2005. In the World Bank's 2015 Ease of Doing Business rankings, Indonesia was ranked 114 out of 189 economies, far behind Malaysia, Thailand, Vietnam, and the Philippines. Indonesia's rankings for starting a business, dealing with construction permits, paying taxes, and enforcing contracts were very low, and more on par with those of low-income developing economies than middle-income countries. According to the latest Doing Business reports, the main impediments to starting and operating a business in Indonesia are related to poor coordination within and between government agencies, over-regulation by multiple agencies, and business licenses that are required by multiple layers of government. Added to this are difficulties in contract enforcement due to weaknesses in rule of law. Even a simple construction project can be an exercise in frustration—for example, 17 different procedures and permits were required before construction could take place, requiring more than 200 days to complete, which is over 50% higher than in other parts of East Asia and the Pacific.²⁹

31. **Corruption.** Indonesia has transformed itself since 1998 into a relatively open, stable, and democratic nation.³⁰ Simultaneously, efforts have been made to eradicate corruption and improve governance. Freedom of the press has been enhanced; authority was devolved to the regions; checks and balances between the executive, legislative, and judicial branches were strengthened; the formal role of the security forces in the political process was ended; and an institutional framework, including the creation of the Corruption Eradication Commission, was developed. Still, outmoded legislation and the heavy weight of administration-oriented instructions, combined with a badly paid and increasingly fragmented polity and civil service, have increased the scope for bureaucratic discretion and corruption. With decentralization, the number of individuals seeking bribes and kickbacks is reported to have increased, and the costs

²⁷ H. Aswichahyno et al. 2014. *Competitiveness Issues in Indonesia*. Jakarta (draft).

²⁸ G. Papanek, R. Pardede, and S. Nazara. 2014. *The Economic Choices Facing the Next President*. Jakarta. G. Papanek. 2014. *How Well are the Government and the Economy Performing?* Center for Public Policy Transformation. Jakarta.

²⁹ World Bank Group. 2015. *Ease of Doing Business in Indonesia*. <http://www.doingbusiness.org/data/exploreeconomies/indonesia#dealing-with-construction-permits>

³⁰ D. Harris and M. Foresti. 2010. *Indonesia's Progress on Governance*. ODI. London.

of corruption have become less predictable. Some 8 out of 10 Indonesians say that corruption is widespread in government and businesses, which is a higher percentage than in other parts of Southeast Asia.³¹

32. **A shallow financial sector.** Access to credit is a significant constraint to private sector activity in Indonesia, particularly for micro- and small businesses. The financial sector is dominated by banks (78% of assets) and its claims to the private sector stand at only 35%, compared to about 100% for Malaysia, Thailand, and the Philippines. At the end of 2015, stock market capitalization was just 50% of GDP (compared to 160% in Malaysia, 2012), and outstanding debt securities equivalent to 15% of GDP (compared to 120% in Malaysia, 2012). Both the money market and the foreign exchange market are thin, with limited use of swaps and options. Deeper financial markets are needed to mobilize savings to fund investments and to meet business transaction needs. While the banking sector is sound and well-regulated, substantial efforts are needed to develop the money market, the foreign exchange market, and the capital market. The emergence of e-banking, e-money, and peer-to-peer banking should improve financial inclusion, but raises new regulatory and oversight challenges.³²

E. Labor-intensive Manufacturing

33. **Slow growth in labor-intensive manufacturing.** Indonesia's manufacturing has grown at a far slower pace than in other large Asia-Pacific nations. From 1986 to 1992, Indonesia was a leader in labor-intensive manufacturing, with exports increasing by more than 40% per annum. Since 1993, Indonesia has fallen behind other large exporters of manufactured goods, including the PRC, Bangladesh, India, Vietnam, and more recently, Cambodia. Indonesia's share of the world market for manufactured goods fell from 1.2% in 1995 to just 0.6% in 2013, while the share in Bangladesh doubled, the PRC's tripled and Vietnam's increased eight-fold. Since 1997, manufactured exports from Indonesia have doubled in real terms, while those from Vietnam have increased 12-fold. Rising wages, logistics, and regulatory compliance costs have made Indonesia less competitive in producing labor-intensive manufactured goods (e.g. textiles, garments, footwear) for export.³³

34. **Low network participation.** Cross-border production networks are now the major form of intra-East Asian manufacturing trade, and within ASEAN, these networks account for almost 50% of trade within the region. Indonesia is a relatively minor participant in these networks. From 2010-2011, for example, Indonesia accounted for 0.5% of global 'network trade', much lower than its Southeast Asian neighbors Malaysia (2.6%), the Philippines (1.2%), and Thailand (1.6%). Participation in these networks requires open trade and investment policies, highly efficient logistics infrastructure, and competitive labor inputs. In all three dimensions, Indonesia is lagging behind its regional peers. Focusing industrial policy on improving Indonesia's participation in regional and global networks would help to tackle impediments to

³¹ Gallup New Service. 2014. Corruption Continues to Plague Indonesia. <http://www.gallup.com/poll/157073/corruption-continues-plague-indonesia.aspx>. Transparency International. 2014. Corruption Perceptions Index. <http://www.transparency.org/cpi2014>

³² IMF. 2013. *Staff Report for the 2013 Article IV Consultation*. Washington D.C.

³³ G. Papanek, R. Pardede, and S. Nazara. 2014. *The Economic Choices Facing the Next President*. Center for Public Policy Transformation. Jakarta.

competitiveness in the manufacturing sector.³⁴

35. **Protection of domestic industries.** In recent years, rising economic nationalism has deterred foreign investment, not only in the mining sector, but also in Indonesia's participation in global production networks for manufactured goods. On 12 January 2014, the government banned raw ore exports in a move to promote downstream processing of minerals. Mining companies are obliged to build smelters by 2017, and if they do, can export raw minerals before then. The 2014 Trade Law and the 2014 Industry Law endorse an industrial policy approach in which strategic industries are to be supported through a combination of tariff protection, subsidies, concessional credit, enterprise zones, and government ownership. Historically, an activist policy of promoting favored industries has had little success in Indonesia, and has tended to distort incentives, discourage competition, and shield favored firms from market pressures, ultimately raising costs.³⁵ The government should focus its reform and investments in enterprise support to facilitating greater competition.

F. Agriculture and Food Security

36. In the mid-1960s, the agriculture sector accounted for half of national output and two-thirds of employment. In 2013, agriculture accounted for 14.4% of GDP and was the second-largest employer in the country at 41%. Government efforts to foster rice self-sufficiency and thereafter to promote tree crop development for export have been a boon to rural incomes, employment, and poverty reduction.³⁶ From 2005 to 2014, growth in estate crops, fisheries, and livestock has grown at 6%–7% per annum, while growth in food production has averaged 3.1% per annum. Rice paddy production increased from 52 million tons in 2000 to 69 million tons in 2012. Productivity has also improved, with yields rising from 4.4 tons/ha in 2000 to 5.1 tons/ha in 2012.³⁷

37. **Government spending captured by subsidies.** Although the national budget for agriculture increased by 12% per annum in real terms from 2001 to 2010, some 55% of it was allocated to fertilizer, seed, and other agro-input subsidies for food crop production. Public investment in rural infrastructure and agricultural support services has fallen to exceptionally low levels, resulting in a deterioration in the quality and effectiveness of rural roads, irrigation systems, R&D, disease control, and extension services. Poor rural connectivity has contributed to inefficiencies in agricultural marketing, with loss rates for perishable crops estimated to be as high as 40%–50%. Public spending on agricultural R&D, at 0.27% of agricultural GDP, is extremely low, both by regional and global standards, and hampers efforts by small farmers to boost yields. Shifting public spending from input subsidies to rural infrastructure and agricultural support services can have a positive effect on productivity in the long-run.

³⁴ H. Aswichahyno et al. 2014. *Competitiveness Issues in Indonesia*. Jakarta (draft).

³⁵ Ibid.

³⁶ World Bank's World Development Indicators. <http://data.worldbank.org/data-catalog/world-development-indicators>

³⁷ C.P. Timmer. 2012. *Food Security and the Changing Role of Rice in Indonesia: An Historical Perspective on Food Policy*. Jakarta. Support for Economic Analysis Development in Indonesia (SEADI)–United States Agency for International Development (USAID).

38. **Boosting productivity** is the critical challenge for Indonesia's agriculture sector. Some 40 million hectares are dedicated to agriculture production with low-value paddy production, occupying about one-third of total cultivated land. Productivity in the sector, at about \$3,000 per worker, is low compared with neighboring countries such as Malaysia, where added-value per agricultural worker is closer to \$10,000 per annum. McKinsey estimates that shifting land resources out of low-value food crops and into higher-value cash crops, and increasing smallholder yields, could contribute \$95 billion in added value to the sector by 2030. Higher spending on agriculture R&D, accelerated privatization of irrigation systems, greater use of ICT-assisted agricultural extension, improved access to rural finance, more coordinated spatial planning for land use, and accelerated registration and land titling are amongst the measures that McKinsey suggests could help to boost smallholder yields.³⁸

39. **Food security versus government reform.** Government reforms of the agricultural sector in recent years have emphasized commercial development, allowing farmers and private investors to allocate land to its most productive uses; while authority for fostering agricultural development has been decentralized to local governments. This has resulted in an expansion of cropland outside Java, mostly for tree crops. Within Java and Bali, a small amount of land was reallocated from food and sugarcane towards higher-valued horticulture, animal, and aquaculture production. The government's food security policy continues to emphasize self-sufficiency in rice and other staple crops. Import restrictions on rice have pushed up domestic prices, effectively taxing the three-quarters of Indonesians who plant no rice at all, including low-income consumers and landless laborers. Rice self-sufficiency policies also encourage the continued use (and renovation) of run-of-the-river irrigation systems in Java and Bali. This limits cropping choices. While irrigation renovation is urgent to meet an existing need, new irrigation investments should consider emphasizing pipe and drip (demand-driven) systems to improve farmers' flexibility to move to higher value-added cropping. Opening the rice market to private trade and improving rural transport systems will, by boosting rural incomes and employment, further strengthen food security in Indonesia.³⁹

40. **Estate crop production.** Over the past decade, Indonesia has become a world leader in palm oil production. The country is likely to continue playing a major role in world markets for palm oil, rubber, cocoa, coffee, tea, and spices in the decades to come. Key challenges include the need to improve replanting support systems for smallholders, to replant deforested land with tree crops, and to ensure that the benefits of estate crop development are widely shared. Increasing the ownership stake of smallholders and workers on the estates, through enhanced PIR (private estate smallholder investment) or NES (nucleus estate) approaches, can ensure that the benefits of estate crop development are widespread. Continued government ownership and operation of estate crop plantations is questionable, given that these tend to be less profitable and productive than smallholder production, and because wages on the large-scale plantations tend to be extremely low.⁴⁰

³⁸ McKinsey Global Institute. 2012. *The archipelago economy: Unleashing Indonesia's Potential*. Washington D.C.

³⁹ J. Goldberg et al. 2013. *JICA Indonesia Country Study*. Jakarta.

⁴⁰ H. Sinaga. 2013. Employment and Income of Workers on Indonesian Oil Palm Plantations: Food Crisis at the Micro Level. *Indonesian Journal on Food, Agriculture and Society*, Vol. 1, No. 2.

41. **Sustainable fisheries.** Fish provides nearly two-thirds of protein requirements in the Indonesian diet. Fish consumption is rapidly rising as incomes increase and as more consumers reach middle-income levels. Better marine surveillance is required in the fisheries sector because of the large number of foreign and domestic fishing vessels that operate illegally in Indonesian waters and land their catches abroad. Coastal fisheries suffer from overfishing of many species, although with better management of coastal resources, production could be increased. The greatest scope for growth in the fisheries sector is in aquaculture, because less than 5% of the land suitable for aquaculture is allocated to it. Improved breeding stock and better bio-security measures to avoid disease outbreaks, improved cold-supply chains, and an increase in processing facilities would be required to support a substantial increase in aquaculture production.⁴¹

42. **Foreign agribusiness investment.** Legal restrictions on foreign ownership of agricultural land, together with public policies such as the 2010 Horticulture Law, discourage foreign investment in high-value agriculture sub-sectors. Better land titling and registration, improvements in rural contract enforcement, and a more welcoming attitude toward foreign investment can bring much-needed technology and market links that are necessary to boost production and productivity in high-value agriculture sectors.

G. Service Sector Development

43. **Harnessing ICT to enable disruptive technologies.** From 2005 to 2014, the services sector has been the prime driver of Indonesia's economic growth, with much of that growth concentrated in the retail, wholesale, and distribution subsector, telecommunications, and finance. New technologies are transforming the delivery of economic services worldwide. McKinsey identifies five such disruptive technologies—the mobile internet, big data, the 'internet of things' (i.e. incorporating connectivity to control household objects and store inventory), the automation of knowledge work, and cloud technology—which it estimates could add \$220 billion–\$635 billion in economic impact to Southeast Asia by 2030.⁴² Substantial progress will be required in improving access to broadband internet services if Indonesia is to benefit fully from e-commerce and e-banking, and to take full advantage of disruptive technologies.

44. **Broadband development.** Telecommunications giant PT Telkom, majority-owned by the state, controls virtually all of the fixed-line telephone services in Indonesia. Fixed-line penetration is low. In 2013, only 5.9% of households had a fixed telephone line. In rural areas, the figure was just 2.2%. This is a significant constraint for increasing broadband services through landlines using ADSL technology. Low usage of landlines is also an issue for businesses that require always-on high speed internet access. In 2000, fewer than 5 million Indonesians used the internet. By 2014, there were over 70 million, mainly mobile, internet users. Fixed broadband connections accounted for just 2.2% of total internet usage. The heavy reliance on mobile networks for internet access is straining capacity and adversely affecting internet and telephony quality. In September 2014, the government launched a \$27 billion Indonesia Broadband Plan, which is to be implemented over 2014 to 2019. Under this plan, the

⁴¹ McKinsey Global Institute. 2012. *The archipelago economy: Unleashing Indonesia's Potential*. Washington D.C.

⁴² McKinsey Global Institute. 2014. *Southeast Asia at the crossroads: Three roads to prosperity*. Washington D.C.

government aims to provide fixed broadband access to all government offices, hospitals, schools, and public facilities throughout the country by 2019, with an internet connection speed of at least 2 megabytes per second. The Indonesia Broadband Plan recognizes that improved access to high-speed internet will require streamlined licensing policies, open-access and infrastructure sharing policies, improved spectrum management, and a more competitive, area-specific approach to fostering rural ICT access.⁴³

45. **Opening up trade in services.** While considerable progress has been made in opening up trade in goods, this is not the case for the services sector. Services trade is less than 7% of GDP, while the services sector contributes 39% to GDP, both of which are far below ASEAN averages. The World Bank reports that services trade restrictiveness indices for Indonesia are high, which suggests there is significant potential for gains from increasing services trade.⁴⁴ Opening up the services sector has the potential to lower costs and boost foreign investment inflows. An increase in services efficiency through trade will also directly improve productivity in agriculture and manufacturing because commercial services are tightly linked to production processes. Under the ASEAN Framework Agreement on Services, strong commitments have been made to open up the services sector and to ease restrictions on the mobility of skilled workers.

III. Conclusions

46. Indonesia has the potential to achieve higher rates of economic growth. A large and growing middle-income consumer population, a demographic dividend, higher levels of educational achievement, a steady shift of labor from low-productivity agriculture to other sectors, and technological catching-up should substantially improve the country's growth potential. ASEAN integration will add to competitive pressures, but it will also help integrate Indonesia into one of the most rapidly growing regions in the world. New investment and growth opportunities are also being created as the PRC rebalances and part of its labor-intensive manufacturing shifts to other production centers.

47. Indonesia has been operating far below its growth potential for many years because of numerous constraints. Macroeconomic management has been prudent, but it has not been sufficient to arrest a decline in macro-competitiveness. Heavy reliance on commodity exports has, during the commodity boom years, contributed to a real appreciation of the exchange rate, reducing the competitiveness of the non-commodity tradable sectors. It has also exposed Indonesia to volatility in export earnings and capital flows. Following the Asian financial crisis, the government prioritized fiscal and monetary stability over expansionary policies, and has sharply reduced public debt levels. Fiscal consolidation, while helping to build buffers against shocks, has also reduced the contribution of fiscal policy to growth.

48. A decade of underinvestment in infrastructure has resulted in some of the region's highest logistics costs, and with power demand rapidly outstripping supply, Indonesia may be on

⁴³ Bappenas. 2014. "Peraturan Presiden Republik Indonesia No. 96 Tahun 2014 Tentang Rencana Pitalebar Indonesia 2014–2019." September 22. <http://www.bappenas.go.id/index.php?cID=4848>

⁴⁴ World Bank. 2014. *Indonesia Economic Quarterly: Delivering Change*. December. Jakarta.

the brink of a power crisis. Public spending on infrastructure is less than half of what it was during the Soeharto era. A combination of low and falling government revenues, heavy public spending on subsidies and entitlements, and a 3% of GDP cap on the budget deficit has limited government financing for infrastructure projects. Efforts to foster infrastructure investment through PPPs have had little success. Land acquisition problems, difficult inter-agency coordination, and the government's inability to develop a robust pipeline of bankable projects are hampering private provision of infrastructure. Fuel subsidies were brought down substantially in late 2014, but whether these fiscal gains will persist depends on the government's ability to implement a tariff-setting mechanism with automatic adjustment to changes in border prices.

49. In the labor market, real wages in manufacturing have outstripped productivity gains as a result of rising minimum wages. Many more Indonesians receive formal education than ever before, but with modest learning achievement. The quality of Indonesia's basic education is inferior to that of neighboring countries, and skill shortages are pervasive in all sectors. Few students receive vocational education, and the quality of vocational training is poor. Higher education quality is mixed, and none of Indonesia's tertiary training institutions are ranked in the top league of Asia-Pacific universities. Very little new technology is developed in Indonesia, with innovation hampered by low levels of R&D spending.

50. Doing business in Indonesia is constrained by the heavy weight of over-regulation and a shallow financial sector. Indonesia is lagging behind its regional peers in reforms to improve the business environment and to deepen domestic financial markets. Nationalist sentiment is also contributing to restrictions on trade and foreign investment activity, which raises costs and weakens investor confidence in key sectors, such as mining and agribusiness.

51. There is considerable scope to improve productivity in agriculture, manufacturing, and the service sector. Prioritizing smallholder development and shifting resources from low-value food grain production to fisheries, livestock, and tree crop production will boost productivity and increase returns to agricultural labor. In manufacturing, opportunities exist to improve integration in regional production networks and to boost investment in labor-intensive manufacturing. Progress in the manufacturing sector hinges mainly on the extent to which costs can be reduced economy-wide, including costs that would result if an activist industrial policy stance is adopted. In the services sector, Indonesia has yet to benefit from the global ICT revolution, but this will change rapidly if broadband access can be improved countrywide. Opening up the services sector to trade, as part of the ASEAN Economic Community process, should bolster competition and contribute to efficiency gains in manufacturing and agriculture.