

INDONESIA ECONOMIC QUARTERLY
Private investment is essential

March 2016



Preface

The Indonesia Economic Quarterly (*IEQ*) has two main aims. First, it reports on the key developments over the past three months in Indonesia's economy, and places these in a longer-term and global context. Based on these developments, and on policy changes over the period, the *IEQ* regularly updates the outlook for Indonesia's economy and social welfare. Second, the *IEQ* provides a more in-depth examination of selected economic and policy issues, and analysis of Indonesia's medium-term development challenges. It is intended for a wide audience, including policymakers, business leaders, financial market participants, and the community of analysts and professionals engaged in Indonesia's evolving economy.

The *IEQ* is a product of the World Bank's Jakarta office and receives editorial and strategic guidance from an editorial board chaired by Rodrigo Chaves, Country Director for Indonesia. The report is compiled by the Macroeconomics and Fiscal Management Global Practice team, under the guidance of Shubham Chaudhuri, Practice Manager, Ndiame Diop, Lead Economist and Hans Anand Beck, Senior Economist. Led by Elitza Mileva, Country Economist, and with responsibility for Part A, editing and production, the core project team comprises Magda Adriani, Arsianti, Masyita Crystallin, Ahya Ihsan, Taufik Indrakesuma, Yue Man Lee, and Violeta Vulovic. Administrative support is provided by Titi Ananto. Dissemination is organized by Indra Irnawan, Jerry Kurniawan, and Nugroho Sunjoyo, under the guidance of Dini Djalal.

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Table of contents

| | |
|---|-----------|
| EXECUTIVE SUMMARY: PRIVATE INVESTMENT IS ESSENTIAL..... | I |
| A. ECONOMIC AND FISCAL UPDATE | 1 |
| 1. Global growth, trade and capital flows remain subdued | 1 |
| 2. Higher fiscal spending underpinned growth in 2015 | 2 |
| 3. Inflation is expected to remain moderate in the near term..... | 5 |
| 4. The current account deficit narrowed in 2015 but external risks remain..... | 8 |
| 5. Currency appreciation and lower inflation have allowed monetary easing | 10 |
| 6. Revenue performance is expected to constrain the expansionary fiscal stance | 11 |
| 7. Poverty reduction has stalled | 17 |
| 8. External risks to the macro-fiscal outlook remain significant | 18 |
| B. SOME RECENT DEVELOPMENTS IN INDONESIA’S ECONOMY | 19 |
| 1. Beyond the ten economic policy packages: addressing significant binding constraints | 19 |
| a. Logistics reforms..... | 20 |
| b. Trade policy..... | 21 |
| c. Investment climate..... | 21 |
| d. Financial markets | 22 |
| 2. Public support for action on inequality has grown | 24 |
| a. Public concern about rising inequality has increased in recent years..... | 24 |
| b. Actual inequality is worse than Indonesian perceptions indicate..... | 25 |
| c. There is strong support for policies that address the main drivers of inequality..... | 26 |
| C. INDONESIA 2016 AND BEYOND: A SELECTIVE LOOK..... | 28 |
| 1. Improving the freight logistics system in Indonesia | 28 |
| a. Some consequences of failing to reform Indonesia’s logistics system..... | 29 |
| b. Major “symptoms” of poor logistics in Indonesia..... | 30 |
| c. Essential reforms and a framework for policy action | 35 |
| 2. Aligning pricing, regulations and investments to support sustainable energy development..... | 37 |
| a. Pricing | 39 |
| b. Regulations..... | 40 |
| c. Investments | 40 |
| APPENDIX: A SNAPSHOT OF INDONESIAN ECONOMIC INDICATORS | 44 |

LIST OF FIGURES

| | |
|---|----|
| Figure 1: Global trade flows have weakened | 2 |
| Figure 2: Indonesian bonds offer higher returns | 2 |
| Figure 3: Public spending provided a boost to GDP growth in Q4 2015 | 3 |
| Figure 4: The mining sector remains under significant pressure | 3 |
| Figure 5: Monthly indicators show some improvement in economic activity | 4 |
| Figure 6: Headline inflation has moderated, but food price pressures remain | 5 |
| Figure 7: Rice is increasingly more expensive in Indonesia than abroad..... | 7 |
| Figure 8: ... with higher prices starting at the farm gate | 7 |
| Figure 9: The current account deficit narrowed significantly in 2015..... | 8 |
| Figure 10: Manufacturing was the biggest contributor to the export decline in Q4 2015 | 9 |
| Figure 11: Imports may have bottomed out in Q3 2015..... | 9 |
| Figure 12: The Rupiah has stabilized over the past three months... .. | 10 |
| Figure 13: ... and Indonesian equities have performed better than most emerging markets . | 10 |
| Figure 14: Despite lower funding costs, bank lending rates remain high..... | 11 |
| Figure 15: Oil and gas-related revenues were the main driver of the 2015 revenue decline..... | 13 |
| Figure 16: Capital spending in H2 2015 exceeded recent historical levels..... | 13 |
| Figure 17: Poverty reduction has worsened in recent years | 17 |
| Figure 18: The poorest Indonesians are far below the poverty line | 17 |
| Figure 19: Indonesia still trails its neighbors in adult access to bank accounts | 23 |
| Figure 20: Inequality has risen sharply since 2000... .. | 24 |
| Figure 21: ... but past surveys of perceptions found that few favored lower inequality | 24 |
| Figure 22: Indonesians think that the distribution of income is not equal..... | 25 |
| Figure 23: Half of respondents believe inequality has risen recently | 25 |
| Figure 24: People think inequality is high, reality is even more unequal | 25 |
| Figure 25: A majority of Indonesians believe that inequality reduction is an urgent priority | 25 |
| Figure 26: Respondents support protecting the poor and fair wealth acquisition..... | 27 |
| Figure 27: Indonesia's maritime supply chains are long and fragmented..... | 31 |
| Figure 28: Shipping times are closely correlated with port turnaround times... .. | 32 |
| Figure 29: ... while cargo volumes do not explain long container dwell times | 32 |
| Figure 30: Electricity generation by source of primary energy, 2014 | 38 |
| Figure 31: Projected electricity generation by source of primary energy, 2015-2024..... | 38 |

LIST OF APPENDIX FIGURES

| | |
|---|----|
| Appendix Figure 1: Quarterly and annual GDP growth..... | 44 |
| Appendix Figure 2: Contributions to GDP expenditures | 44 |
| Appendix Figure 3: Contributions to GDP production..... | 44 |
| Appendix Figure 4: Motorcycle and motor vehicle sales | 44 |
| Appendix Figure 5: Consumer indicators | 44 |
| Appendix Figure 6: Industrial production indicators | 44 |
| Appendix Figure 7: Balance of payments | 45 |
| Appendix Figure 8: Current account components | 45 |
| Appendix Figure 9: Exports of goods | 45 |
| Appendix Figure 10: Imports of goods..... | 45 |
| Appendix Figure 11: Reserves and capital flows | 45 |
| Appendix Figure 12: Inflation and monetary policy..... | 45 |
| Appendix Figure 13: Monthly breakdown of CPI | 46 |
| Appendix Figure 14: Inflation comparison across countries..... | 46 |
| Appendix Figure 15: Domestic and international rice prices..... | 46 |
| Appendix Figure 16: Poverty and unemployment rate..... | 46 |
| Appendix Figure 17: Regional equity indices | 46 |

| | |
|---|----|
| Appendix Figure 18: Selected currencies against USD | 46 |
| Appendix Figure 19: 5-year local currency govt. bond yields..... | 47 |
| Appendix Figure 20: Sovereign USD bond EMBIG spread | 47 |
| Appendix Figure 21: Commercial and rural credit and deposit growth..... | 47 |
| Appendix Figure 22: Banking sector indicators..... | 47 |
| Appendix Figure 23: Government debt..... | 47 |
| Appendix Figure 24: External debt | 47 |

LIST OF TABLES

| | |
|--|-----|
| Table 1: In the base case, GDP growth is projected at 5.1 percent in 2016 | iii |
| Table 2: In the base case, GDP growth is projected to pick up to 5.1 percent in 2016 | 6 |
| Table 3: The current account deficit is expected to widen | 9 |
| Table 4: The 2016 Budget targets a fiscal deficit of 2.2 percent of GDP..... | 15 |
| Table 5: Sub-national governments deliver more than half of total public investment | 16 |
| Table 6: Indonesians support social protection, job creation, and eradicating corruption.... | 26 |

LIST OF APPENDIX TABLES

| | |
|--|----|
| Appendix Table 1: Budget outcomes and projections | 48 |
| Appendix Table 2: Balance of payments..... | 48 |
| Appendix Table 3: Indonesia's historical macroeconomic indicators at a glance..... | 49 |
| Appendix Table 4: Indonesia's development indicators at a glance..... | 50 |

LIST OF BOXES

| | |
|---|----|
| Box 1: Why are domestic rice prices higher than international prices? | 7 |
| Box 2: Sub-national governments play an important role in delivering public investment..... | 16 |
| Box 3: A snapshot of the logistics industry in Indonesia | 35 |
| Box 4: Indonesia's clean energy policies can yield local and global benefits | 37 |
| Box 5: Lessons in sound power sector planning from Latin America | 41 |
| Box 6: Energy efficiency – the cleanest, but under-appreciated domestic resource | 42 |

Executive summary: Private investment is essential



Indonesia needs to adjust to a global economy marked by slower growth, low commodity prices, and weaker trade and capital flows

Global growth disappointed in 2015 and a gradual recovery is projected for 2016. The trajectory of the global economy for the next few years will be characterized by more modest growth in large emerging markets, low commodity prices and global trade and capital flows that are weaker than in the decade before the global financial crisis. With export revenues contracting for a fourth consecutive year, Indonesia's economy, too, slowed down in 2015. GDP grew by 4.8 percent, a respectable growth rate, especially for a commodity exporter, but one which is not sufficient to absorb new entrants into the labor force and to reverse the recent trend of slower poverty reduction. To accelerate the pace of growth, Indonesia will need to adapt to a less favorable external environment, relying on fiscal expansion in the short run but focusing on facilitating investment and reducing the cost of doing business in the medium term.

In the short term, fiscal stimulus will help, but higher private investment is required for a firm recovery

Gaining momentum in the second half of the year, central government investment increased by 42 percent year on year (yoy) in 2015. The shift in the composition of expenditure away from poorly-targeted fuel subsidies, which accounted for 20 percent of central government spending in 2014, created the fiscal space for the significant rise in public investment which supported the economy last year. In 2016, fiscal stimulus will be necessary to support the economic recovery. Revenues are likely to be weaker than the target in the 2016 Budget, owing largely to lower than expected global oil and gas prices. Thus, preserving capital spending would require a higher fiscal deficit of 2.8 percent of GDP and cuts in non-priority expenditures. However, in 2016 this fiscal expansion alone may not raise growth above 5 percent. That will depend on an improvement in private sector activity, in particular investment.

Growth picked up in the final quarter of 2015, supported mostly by public spending...

Driven mostly by public spending, as mentioned above, GDP growth increased to 5.0 yoy in Q4 2015, from 4.7 percent in each of the preceding three quarters. Central government fixed investment is estimated to have increased by 74.0 percent yoy in real terms in Q4, compared with 49.5 percent yoy in the previous quarter. The strong performance of public investment, however, implies that private capital formation weakened further in the last quarter of 2015. Private consumption growth remained moderate, while export and import volumes continued to decline.

... while export revenues, both from commodities and manufacturing, continued to decline

A significant external adjustment was observed in 2015, with the current account deficit narrowing to 2.1 percent of GDP, from 3.1 in 2014. However, the improvement in the trade balance was due to significant import contraction, while export revenues fell by 14.4 percent relative to 2014. In the fourth quarter, subdued global growth and a real exchange rate appreciation of 6.0 percent weighed on exports, with the year-on-year decline in both goods and services exports accelerating. Manufacturing exports, the biggest contributor to the overall decline, decreased by 13.4 percent yoy. As commodity prices continued to fall, commodity revenues remained a drag on exports, with oil and gas, coal and palm oil each declining by 42.1, 26.5 and 19.3 percent yoy.

Foreign investment into government bonds in Q4 2015 stemmed the outflow of capital from Indonesia...

In 2015, Indonesia's financial account balance declined sharply too, as capital fled emerging markets in the summer. Total 2015 capital flows to Indonesia declined to USD 17.1 billion, from USD 45 billion in 2014. With the decline in global financial volatility towards the end of last year, Q4 net portfolio inflows rose to USD 4.8 billion, USD 3.5 billion of which was investment in a government global bond. Overall, Indonesia performed better than the 30 emerging economies tracked by the Institute of International Finance, that cumulatively (excluding Indonesia, and China which experienced massive outflows of USD 676 billion) recorded an aggregate outflow of about USD 70 billion in 2015. Despite the recent return in foreign investor appetite towards Indonesia, external financing risks from weak trade and capital flows remain elevated in the near term.

... stabilizing the Rupiah and, coupled with lower inflation, allowing monetary easing in 2016

Higher government bond inflows since November have resulted in Rupiah appreciation. In addition, headline CPI inflation, at 4.4 percent yoy in February, is expected to stay within the Bank Indonesia (BI) target range in 2016. A stronger Rupiah and lower inflation allowed the central bank to begin easing monetary policy in January with two consecutive interest rate cuts of 25 basis points each. Despite better domestic and foreign funding conditions, bank credit remains tight and lending rates have not yet responded to policy rate cuts. Nevertheless, monetary easing is likely to be gradual on account of two factors. First, there is a risk of higher than projected headline inflation as domestic food prices remain volatile, partly owing to El Nino-related harvest delays. Second, BI is expected to remain concerned about Rupiah stability amid continuing global financial market volatility.

The baseline outlook of 5.1 percent GDP growth in 2016 has been revised down from the December 2015 *IEQ*...

Looking ahead, the World Bank projects GDP to increase by 5.1 percent in 2016 and 5.3 percent in 2017, with the growth outlook continuing to depend on fiscal expansion (Table 1). The growth forecast for

this year has been revised down by 0.2 percentage points relative to the December 2015 *IEQ*. One reason for this is weaker than previously expected external conditions. The second factor is subdued revenue growth which is likely to constrain the Government's ability to spend significantly more than last year to support growth. The projected pickup in economic activity in 2016 also relies on private sector spending picking up later in the year.

... with global risks on the downside and weak revenues remaining a major policy challenge

Downside risks, both domestic and external, continue to dominate the World Bank's outlook for Indonesia. Lower than projected global import demand and commodity prices could further weaken export revenues and government finances. Although energy subsidy reform reduced the impact of oil prices on spending, state revenues remain significantly affected by the global commodity price cycle. Oil and gas revenues fell sharply from 3.4 percent of GDP in 2012 to 1.1 percent in 2015, reducing the revenue-to-GDP ratio to 13.0 percent last year. In 2014 and 2015, the Government undertook several short-term measures, such as a lower tax tariff to encourage asset revaluation and increase tax revenues, but their effect was not enough to compensate for the decline in natural resource revenues. The administration also plans medium-term reforms, such as revisions of the income tax and VAT laws. Given the time lag of the effects of these measures on revenue collection, a revision of the 2016 Budget is likely if the capital spending momentum is to be sustained.

Beyond 2016, the recovery will rely on policies to improve the business climate, attract higher private investment, and diversify the economy

Although fiscal stimulus is expected to support near-term growth, Indonesia's recovery will depend on the Government's efforts to attract private investment. Since September 2015, ten economic policy packages of comprehensive and wide-ranging reforms have been announced. Part B.1 of this *IEQ* discusses additional measures in a select number of key sectors which have the potential to address important binding constraints to higher growth in Indonesia. For example, lower capital requirements for setting up logistics companies to increase competition and clearly defined roles for port authorities and port operators to encourage higher investment would increase logistics efficiency. A centralized review system could help to raise the quality of Indonesia's trade regulations. A more objective and systematic approach to stock-take, review and cancel conflicting and unnecessary business, investment and trade regulations, as well as a licensing inventory and a relaxation of local content requirements, would contribute towards improving the investment climate. Finally, financial education, better institutional coordination, and improvements to the Government's partial microcredit guarantee scheme would increase saving and access to finance.

Table 1: In the base case, GDP growth is projected at 5.1 percent in 2016

| | | 2015 | 2016p | 2017p |
|--------------------------------|-------------------------|------|-------|-------|
| Real GDP | (Annual percent change) | 4.8 | 5.1 | 5.3 |
| Consumer price index | (Annual percent change) | 6.4 | 4.0 | 4.6 |
| Current account balance | (Percent of GDP) | -2.1 | -2.3 | -2.5 |
| Budget balance | (Percent of GDP) | -2.5 | -2.8 | n.a. |

Source: BI; BPS; Ministry of Finance; World Bank staff calculations

Logistics sector reform is essential both for the development of Indonesia's remote regions and for economic diversification

Part C.1 of this edition further explores the issue of logistics sector reform. As Indonesia's economy expanded rapidly since 2000, its freight logistics system has struggled to keep up. Logistics costs, driven by under-utilized logistics assets, are high relative to neighboring countries. High costs are exacerbated by long and fragmented supply chains to eastern Indonesia. The sector also suffers from long turnaround times, low levels of port efficiency, and road congestion. Onerous bureaucratic requirements result in poor trade facilitation and long container dwell times. A fragmented regulatory environment, complex investment rules and restrictions on FDI further contribute to logistics inefficiency. Indonesia's internal integration (as remote regions struggle to connect to growth-generating opportunities), integration into global value chains, and production and export diversification all depend on a reformed freight logistics system.

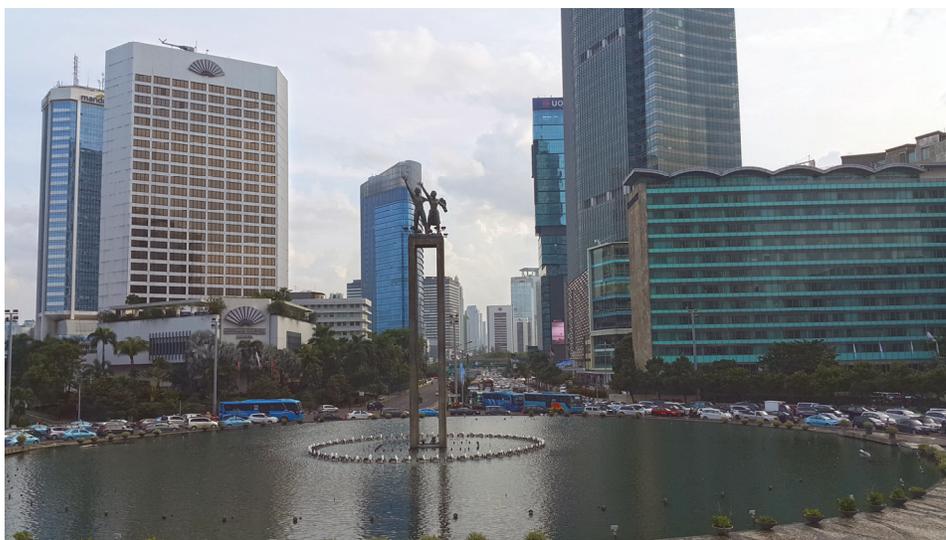
Indonesia's transition to a more sustainable energy path can be supported by aligning pricing, regulations, and investment policies

The Government's 23 percent renewable energy target sets the stage for a re-evaluation of the energy mix in Indonesia towards a more sustainable energy future. Meeting this objective requires sharper and well-coordinated pricing, regulation and investment policies. Better pricing can help incentivize efficiency, production and the use of renewables, with attention to how incremental costs of renewables are covered. Sustainable energy policies need supporting regulations to maximize their effectiveness, for instance in the case of the 2014 Geothermal Law. And above all, meeting the government's energy targets requires investment, which is carefully planned and prepared through a consultative process. In the gas sector, the crisis of under-investment may be overcome by action in three areas: infrastructure planning, revising upstream contractual terms, and mid-stream regulation. Finally, the Government could accelerate completing its universal access goals with a coordinated national approach that could identify more clean energy opportunities.

The ultimate objective of the reform agenda is to reverse the recent trend of slower poverty reduction and rising inequality

In the end, the measure of success of the Government's short- and medium-term reform agenda will be an improvement in development outcomes. Moderating economic growth, weaker job creation, significant Rupiah depreciation since 2013, and persistently high consumer (especially food) price inflation have resulted in slower poverty reduction in recent years, with the poverty rate increasing by 0.2 percentage points between 2014 and 2015, to 11.1 percent. In addition, inequality has risen sharply since the early 2000s, with the Gini coefficient, a measure of inequality where 0 represents perfect equality and 100 represents perfect inequality, up from 30 in 2000 to 41 in 2014. A 2014 survey found that 88 percent of Indonesians think reducing inequality is an urgent government priority. In addition to social protection programs and eradicating corruption, policies that create better work opportunities topped the list of policies respondents identified as important to address inequality.

A. Economic and fiscal update



1. Global growth, trade and capital flows remain subdued

Downward revisions to global growth mean stronger headwinds for Indonesia

Global growth disappointed again in 2015, declining to 2.4 percent, from 2.6 percent in 2014 (Figure 1).¹ The World Bank now projects growth to remain below 3.0 percent in 2016. A key reason for the prolonged growth slowdown is weaker economic activity in emerging and developing economies. China's economy is forecast to continue to decelerate and rebalance, with growth at 6.7 percent this year. Output in Brazil and Russia is expected to contract for a second year. Among the BRICS², only growth in India remains buoyant. Spillovers to other countries from the slowdown in the BRICS could be significant. The World Bank estimates that a one-off, one-percentage-point decline in China's growth rate reduces growth in Indonesia – via trade and financial links – by about 0.4 percentage points after two years.³

Commodity prices have continued to decline...

Given the more modest growth trend in large emerging markets, Indonesia will have to adapt to a global economy in which commodity prices remain low and global trade flows are weaker than in the decade before the global financial crisis. Energy prices have fallen to about 50 percent and non-energy prices to 70 percent of their 2011 peak levels. In January, the World Bank revised down the projected 2016 prices of all of Indonesia's major export commodities, except coal: by 19 percent for liquefied natural gas, 16 percent for rubber, 13 percent for copper, and 5 percent for palm oil.⁴ These developments are likely to strain both export revenues and government finances in Indonesia in the near term.

¹ World Bank, January 2016, "Global Economic Prospects: Spillovers amid weak growth."

² Brazil, Russia, India, China, and South Africa – the largest emerging markets in their respective regions.

³ See footnote 1.

⁴ World Bank, January 2016, "Commodity Price Outlook."

... and international trade flows have diminished

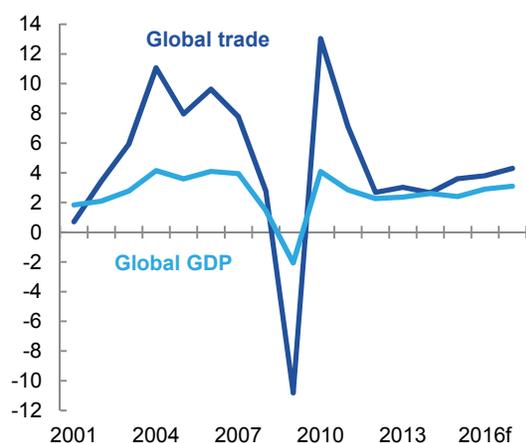
Largely driven by declining import demand from emerging and developing countries, global merchandise trade contracted in the first half of 2015.⁵ Although trade growth is forecast to improve, the relationship between global trade and global growth is expected to remain weaker than in the years before the global financial crisis (Figure 1). Among the reasons for this are the slowing pace of international vertical specialization, the loss of trade liberalization momentum, and a lower share of investment (which has a larger import content than, say, private consumption) in aggregate demand in the post-crisis period.⁶

Indonesia has benefited from global portfolio rebalancing in 2016, but uncertainty is still high

The reversal of capital flows to emerging markets, which began in July 2015, has tapered off in recent months. According to the Institute of International Finance (IIF), portfolio flows to Latin America turned positive in January this year, while other regions continue to see outflows. Global financial markets have favored Indonesia in recent months, with positive foreign capital flows into government bonds since October 2015 and into equities in February 2016 (after six consecutive months of net outflows). Indonesian assets are attractive to investors owing to better growth prospects relative to peer countries and higher real returns (Figure 2). Despite the recent decline in global risk aversion, there are still risks of renewed financial market volatility and higher borrowing costs.

Figure 1: Global trade flows have weakened

(annual growth, percent)

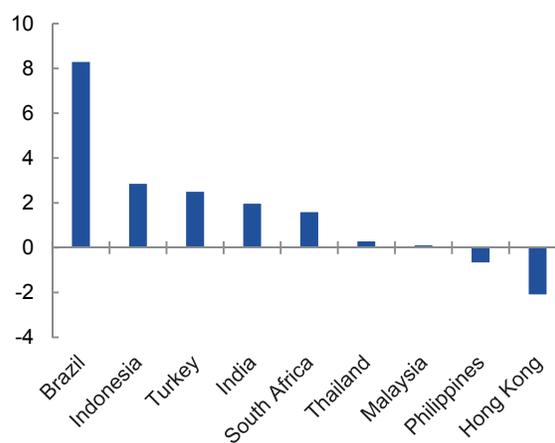


Note: 2016 and 2017 data are forecasts.

Source: World Bank; World Bank staff projections

Figure 2: Indonesian bonds offer higher returns

(real one-year government bond yields in January 2016, percent)



Note: Real yield = Nominal yield – 2016 Consensus inflation forecast.

Source: Consensus; Haver; World Bank staff calculations

2. Higher fiscal spending underpinned growth in 2015

The public sector contributed to a growth pickup in the fourth quarter...

Overall 2015 GDP growth decreased to 4.8 percent, from 5.0 percent in 2014, as external conditions remained unfavorable and weaker purchasing power weighed on household consumption. However, boosted by higher public investment and consumption spending, economic activity grew at 5.0 percent yoy in Q4, compared with 4.7 percent yoy in each of the preceding three quarters (Figure 3). Looking ahead, the World Bank forecasts a gradual increase in GDP growth to 5.1 percent in 2016 and 5.3 percent in 2017, with both projections adjusted down from the

⁵ See also Constantinescu, C., A. Mattoo, and M. Ruta, March 2016, “Global trade watch: Trade developments in 2015.”

⁶ See, for example, IMF, 2015, “The global trade slowdown: Cyclical or structural?”, IMF Working Paper 15/6.

December 2015 *IEQ*. In an environment of subdued global growth and weak trade, the strengthening of economic activity in Indonesia in the short run will depend on the public sector spending momentum being maintained in 2016. However, medium-term growth will depend on structural reforms of the type discussed in Part B and Part C of this *IEQ*.

... through a significant boost in capital spending...

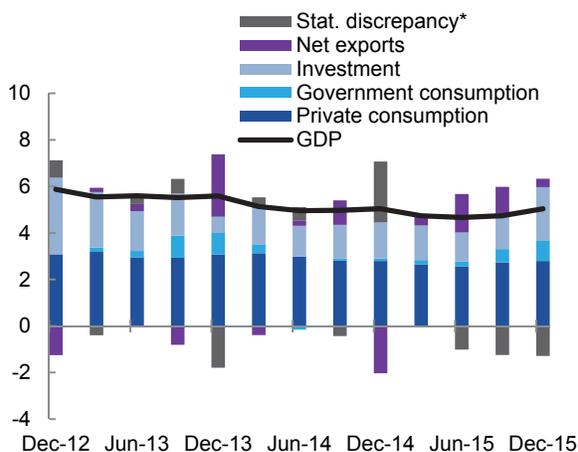
Driven mostly by public spending, fixed investment grew by 6.9 percent yoy in Q4, contributing 2.3 percentage points to year-on-year GDP growth. This was the highest investment growth seen since Q1 2013. According to the preliminary budget outturns, public capital expenditure was IDR 132.1 trillion in the fourth quarter, up from IDR 49.9 trillion in the previous quarter and IDR 26.9 trillion in the first six months of 2015. In real terms (i.e. deflated by the implicit fixed investment deflator from the national accounts), central government fixed investment increased by 74.0 percent yoy in Q4 compared with 49.5 percent yoy in the previous quarter. The strong performance of public investment, however, implies that private capital formation weakened further in the last quarter of 2015.

... with private consumption increasing at a relatively moderate pace...

Private consumption expenditure grew at 5.0 percent yoy, the same pace as in Q3. This was somewhat better than the 4.7 percent growth rate in the first half of 2015 but is still below the average growth of 5.4 percent yoy in 2012-2014. Household incomes were constrained by lower job creation, significant Rupiah depreciation since 2013, and persistently high consumer (especially food) price inflation. In contrast, government consumption expenditure grew by 7.3 percent yoy, up from 7.0 percent yoy in the previous quarter and more than the double the pace of increase in H1 2015. Public consumption contributed 0.9 percentage points to growth yoy in the final quarter of last year.

Figure 3: Public spending provided a boost to GDP growth in Q4 2015

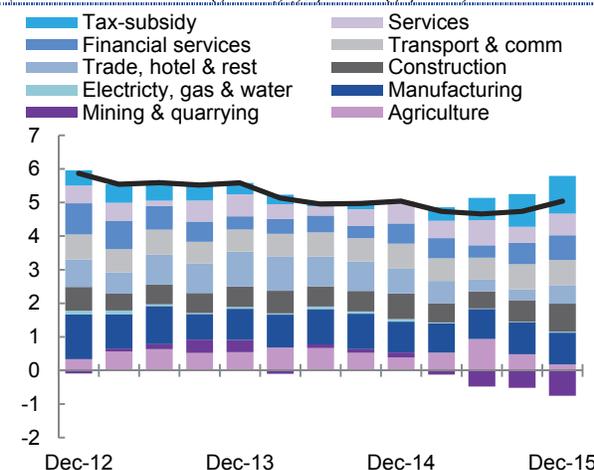
(contributions to GDP growth yoy, percentage points)



Note: * Statistical discrepancy includes changes in inventories.
Source: BPS; World Bank staff calculations

Figure 4: The mining sector remains under significant pressure

(contributions to GDP growth yoy, percentage points)



Source: BPS; World Bank staff calculations

... and both export and import volumes contracting significantly

Net exports contributed 0.4 percentage points to growth in Q4, down from 1.1 percentage points in Q3. Real exports disappointed again, contracting by 6.4 percent yoy compared with -0.6 percent yoy in Q3. Import volumes declined by 8.1 percent yoy (-5.9 percent yoy in Q3). For the year as a whole, net exports contributed 0.9

percentage points to GDP growth, owing mainly to significant import compression driven by weaker overall domestic demand.

Mining output decreased for four consecutive quarters, while El Niño limited agricultural output

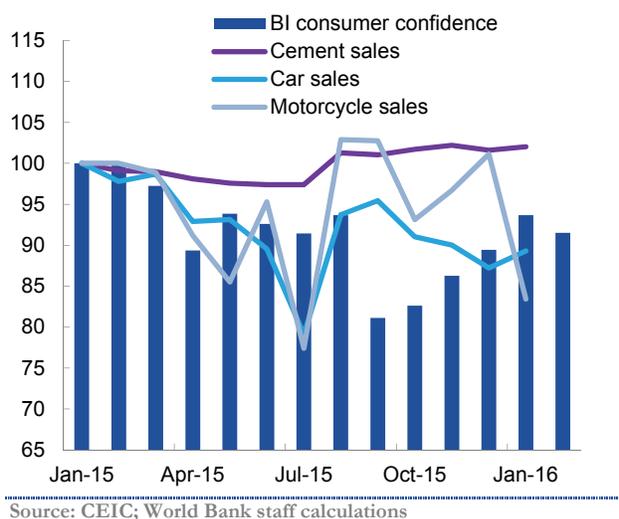
From the production perspective, mining and quarrying output continued to decline in the fourth quarter, while construction and services improved (Figure 4). Weak global demand for Indonesia's commodities continues to put pressure on mining and quarrying output which contracted by 7.9 percent yoy in Q4, bringing annual average growth in the sector to -5.1 percent. Adversely affected by El Niño and the forest fires in the second half of 2015, agriculture sector growth declined to 1.6 percent yoy, the slowest quarterly pace observed since Q1 2007.

Recent high-frequency data signals some improvement in sentiment

Although the latest indicators remain below their year-ago levels, there are some signs of consumer and business confidence picking up in monthly terms (Figure 5). The Bank Indonesia (BI) consumer confidence index has been gradually recovering from the sharp drop in September 2015, when the Rupiah approached 15,000 per one US dollar, but remains below its year-ago level. Similarly, the BI expected business activity indicator improved considerably in January, from a very low end-2015 level. Although the Nikkei/Markit's purchasing managers index (PMI) remains below 50, signaling weak economic activity, it has increased from 46.9 in November 2015 to 48.9 in January 2016. In contrast to somewhat improving sentiment indicators, actual sales of cars and motorcycles have lagged behind.

Figure 5: Monthly indicators show some improvement in economic activity

(seasonally adjusted indices, January 2015=100)



In the base case, GDP growth is projected to increase to 5.1 percent in 2016 and 5.3 percent in 2017...

Looking ahead, the World Bank projects GDP to increase by 5.1 percent in 2016 and 5.3 percent in 2017. The growth forecast for this year has been revised down by 0.2 percentage points relative to the December 2015 *IEQ*, mainly on account of weaker than previously expected external conditions (see Section 1) and the subdued revenue growth constraining the Government's ability to spend sufficiently more than last year to support growth. Nevertheless, the World Bank expects the growth outlook for 2016 to remain dependent on fiscal expansion, with private sector spending picking up later in the year. Maintaining the fiscal stimulus in 2016 would require an expansion of the fiscal deficit to 2.8 percent of GDP and non-priority expenditure cuts (see Section 6).

... subject to a risk of weaker than expected fiscal revenues and business sentiment

There are two main risks associated with the baseline scenario. First, weaker than expected revenue collection due to relatively unfavorable external conditions, including persistently low commodity prices, may hinder the government's spending plans. Second, there have been no signs yet of a pick-up in private sector investment as a result of either the public infrastructure boost (e.g., crowding in of private

investment), or the announcement and partial implementation of the government's economic policy packages (via improving business confidence).

3. Inflation is expected to remain moderate in the near term

Overall inflationary pressures are limited, but food prices remain volatile

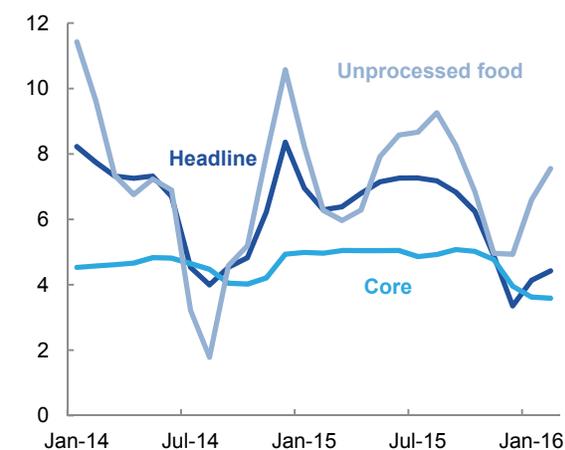
Headline CPI inflation rose to 4.4 percent yoy in February, from 3.4 percent yoy in December 2015 (Figure 6). Core inflation, which excludes the more volatile food and energy prices, continued to decelerate from 4.0 percent yoy at the end of 2015 to 3.6 percent yoy in February. Although food prices declined in monthly terms in February, unprocessed food price inflation increased to 7.6 percent yoy, from 4.9 percent yoy in December. Affected by the El Niño-related harvest delay, rice price inflation remains significant, though it eased somewhat, to 4.3 percent yoy in February, after the Government allowed rice imports (see also Box 1). The recent appreciation of the Rupiah and drop in global oil prices allowed the state-owned electricity company PLN to lower the unsubsidized tariffs by IDR 100 per kWh in January and another IDR 20 in February, thus contributing to lower inflation.

Headline inflation is projected to stay within the BI target range

The World Bank expects an annual average CPI inflation rate of 4.0 percent in 2016, increasing to an average rate of 4.6 percent in 2017 as economic activity gradually picks up. The Government's response to insufficient rice stocks in H2 2015 – allowing about 1.5 million tons of imported rice from Thailand and Vietnam – has helped limit food price pressures. However, the main season rice harvest has been delayed and food prices are expected to remain volatile in the next few months. The risk of higher than projected headline inflation and the need to maintain Rupiah stability amid continuing global financial market volatility are likely to keep monetary easing gradual.

Figure 6: Headline inflation has moderated, but food price pressures remain

(change yoy, percent; last observation November 2015)



Source: BPS; World Bank staff calculations

Table 2: In the base case, GDP growth is projected to pick up to 5.1 percent in 2016
(percentage change, unless otherwise indicated)

| | Annual | | | YoY in Fourth Quarter | | | Revision to Annual |
|--|--------|-------|-------|-----------------------|------|------|--------------------|
| | 2015 | 2016 | 2017 | 2015 | 2016 | 2017 | 2016 |
| 1. Main economic indicators | | | | | | | |
| Total Consumption expenditure | 4.9 | 5.0 | 5.2 | 5.4 | 4.9 | 5.4 | 0.1 |
| Private consumption expenditure | 4.8 | 4.9 | 5.2 | 5.0 | 5.3 | 5.2 | -0.3 |
| Government consumption | 5.4 | 6.0 | 5.2 | 7.3 | 3.0 | 6.1 | 2.8 |
| Gross fixed capital formation | 5.1 | 5.1 | 5.2 | 6.9 | 4.3 | 5.3 | 0 |
| Exports of goods and services | -2.0 | -3.9 | 3.6 | -6.4 | 2.0 | 3.6 | -6.2 |
| Imports of goods and services | -5.8 | 0.2 | 2.8 | -8.1 | 2.3 | 2.8 | -1.6 |
| Gross Domestic Product | 4.8 | 5.1 | 5.3 | 5.0 | 5.0 | 5.4 | -0.2 |
| 2. External indicators | | | | | | | |
| Balance of payments (USD bn) | -1.1 | 1.5 | 7.7 | - | - | - | -18.5 |
| Current account balance (USD bn) | -17.8 | -21.1 | -26.0 | - | - | - | 1.1 |
| <i>As share of GDP (percent)</i> | -2.1 | -2.3 | -2.5 | - | - | - | 0.2 |
| Trade balance (USD bn) | 4.8 | 2.1 | -1.9 | - | - | - | 0.2 |
| Capital & financial acc. bal. (USD bn) | 17.1 | 22.6 | 33.7 | - | - | - | -19.6 |
| 3. Fiscal indicators | | | | | | | |
| Central gov. revenue (% of GDP) | 13.1 | 12.2 | | - | - | - | - |
| Central gov. expenditure (% of GDP) | 15.6 | 15.1 | | - | - | - | - |
| Fiscal balance (% of GDP) | -2.5 | -2.8 | | - | - | - | - |
| Primary balance (% of GDP) | -1.2 | -1.4 | | - | - | - | - |
| 3. Other economic indicators | | | | | | | |
| Consumer price index | 6.4 | 4.0 | 4.6 | 6.5 | 4.7 | 5.0 | -0.6 |
| GDP Deflator | 4.2 | 4.6 | 4.9 | 4.2 | 4.6 | 4.9 | 0.1 |
| Nominal GDP | 9.2 | 9.9 | 10.5 | 9.2 | 10.0 | 10.4 | -0.2 |
| 4. Economic assumptions | | | | | | | |
| Exchange rate (IDR/USD) | 13389 | 13800 | 13800 | - | - | - | 0 |
| Indonesian crude price (USD/bl) | 49 | 40 | 47 | - | - | - | -14 |

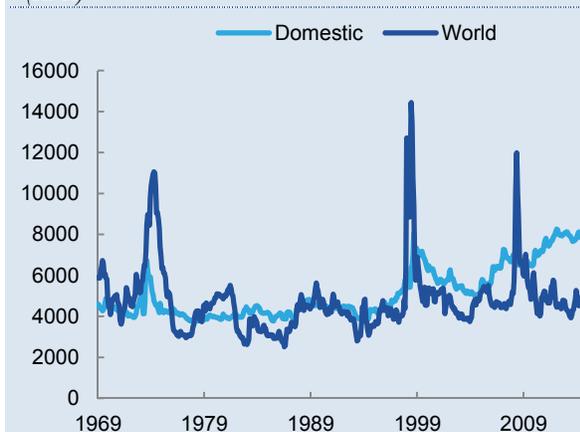
Note: Exports and imports refer to volumes from the national accounts. All figures are based on revised and rebased GDP. Exchange rate and crude oil price assumptions are based on recent averages. Revisions are relative to projections in the October 2015 IEQ.

Source: BPS; BI; CEIC; World Bank staff projections

Box 1: Why are domestic rice prices higher than international prices?

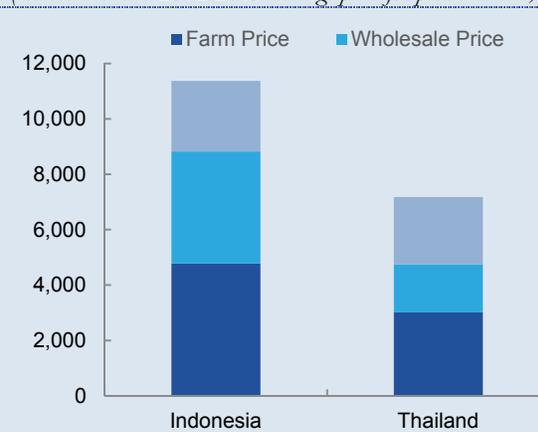
In the 1970s through the 1990s, the Government succeeded in stabilizing domestic rice prices, which tracked the long-term global trend and were less volatile (Figure 7). However, retail prices in Indonesia have diverged from declining world prices in recent years. The reason for this is both higher farm prices and higher wholesale prices in Indonesia compared to neighbors such as Thailand (Figure 8). High domestic rice prices benefit wholesale traders and 8.4 million rice-growing households which are net producers, but hurt 53 million households which are net rice consumers.¹

Figure 7: Rice is increasingly more expensive in Indonesia than abroad...
(IDR)



Source: Food and Agriculture Organization, Bangkok

Figure 8: ... with higher prices starting at the farm gate
(contributions to 2012-2015 average price for premium rice, IDR)



Source: CEIC, WB Staff Calculation

There are three main reasons for the divergence of Indonesian rice prices from the international trend since the mid-2000s. First, demand continues to outpace supply, while imports are restricted. While per capita consumption of rice has been declining, total consumption continues to grow with the increase in population and in the consumption of derived rice products. At the same time, since 1990 total production has grown at less than half the rate of 1961-1990, with falling yields as the main driver. Second, the political balance has shifted towards well-organized agricultural producers lobby groups supporting policies to keep the rice price high.² Third, the government's main rice price stabilization measures: market operations, a government rice purchasing program, and import restrictions, have only partially met their objectives.

Considering the Government's price stabilization programs in more detail: the Government sells rice through market operations (*Operasi Pasar*, OP) when the medium-quality rice price has remained 10 percent higher than the average of the previous three months for more than one week. OP are usually conducted with delay and do not target consumers well. The second program sets a Government Purchasing Price (*Harga Pembelian Pemerintah* or HPP) at which Bulog, the national logistics agency, procures domestic rice or paddy. During harvest seasons, as supply increases and prices fall, the HPP should in theory become a price floor for rice producers. However, in recent years, market prices have always been higher than the HPP, a sign of market rice shortages. Finally, instead of improving Bulog's capacity to stabilize rice prices, the Government's discretionary rice import policy has actually undermined it. The difficulty of anticipating rice shortages and correctly timing imports has resulted in market speculation and hoarding behavior, raising rice price volatility.

Based on empirical estimates of the drivers of rice prices at Jakarta's main wholesale market, we find that keeping a sufficient Bulog stock level has a significant price-reducing effect in January, before the main season harvest. Rice for the Poor (*Raskin*), a social assistance program, which subsidizes up to 15 kg of rice per month for targeted poor households, has about ten times the marginal effect of reducing prices compared to market operations.³ We also find evidence that high wholesale rice stocks relative to wholesale sales are associated with higher rice prices. This seems to indicate hoarding behavior by wholesale traders.

Notes: ¹ The calculations are based on the 2013 National Social Economic Survey (*Survei Sosial Ekonomi Nasional*, Susenas). Because Susenas does not collect data on rice production (except in 2004), we proxy rice production by adding rice consumed from own production and rice sold as main income of households in paddy agriculture.

² Fane, G., and P. Warr, 2008, "Agricultural Protection in Indonesia," *Bulletin of Indonesian Economic Studies*, 44:1, pp. 133-150.

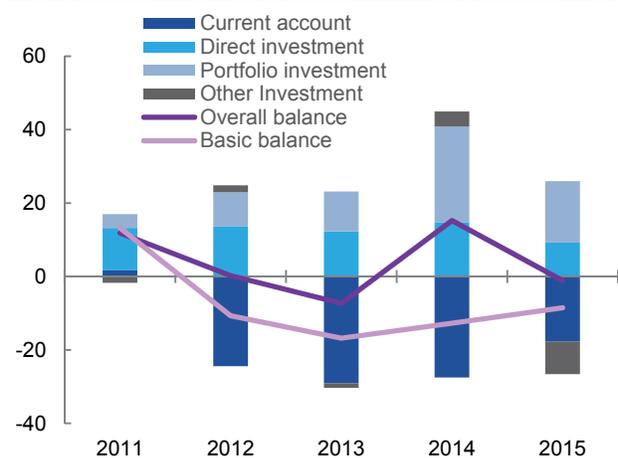
³ Note that, although Raskin targets an equal amount of distribution every month, it actually varies every month, leading to changes in rice prices.

4. The current account deficit narrowed in 2015 but external risks remain

A sharper decline in imports offset weak exports in 2015, improving the external balance

A significant external adjustment was observed in 2015, with the current account deficit narrowing to 2.1 percent of GDP, from 3.1 in 2014 (Figure 9). However, the improvement in the trade balance was due to significant import contraction, while export revenues fell by 14.4 percent relative to 2014. Indonesia's financial account balance declined sharply too, as capital fled emerging markets in August 2015. Despite the recent return in foreign investor appetite towards Indonesia, external financing risks from weak trade and capital flows remain elevated.

Figure 9: The current account deficit narrowed significantly in 2015
(USD billion)



Note: Basic balance = direct investment + current account balance.
Source: BI; World Bank staff calculations

The broad-based decline in trade continued in Q4 2015

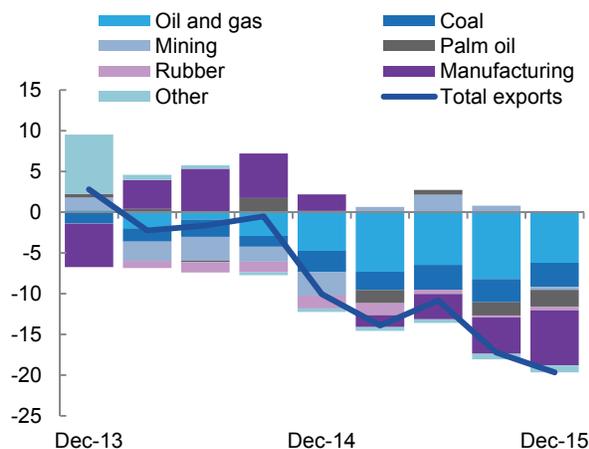
Subdued global growth and a real exchange rate appreciation of 6.0 percent in Q4 2015 weighed on exports, with the year-on-year decline in both goods and services exports accelerating. Manufacturing exports, the biggest contributor to the overall decline, decreased by 13.4 percent yoy in the fourth quarter. As commodity prices continued to fall, commodity revenues remained a drag on exports, with oil and gas, coal and palm oil each declining by 42.1, 26.5 and 19.3 percent yoy, respectively (Figure 10). In contrast, imports – across categories – seem to have bottomed out in Q3 2015, although they still contracted by 18.4 percent yoy in Q4 (Figure 11).

Capital inflows were stronger in Q4 due to a successful government pre-financing effort, easing external financing pressures

Portfolio flows stood at USD 4.8 billion in the last three months of 2015. The significant improvement over the USD 2.2 billion third-quarter portfolio outflows was driven by a USD 3.5 billion government global bond issuance. The other components of the financial account also improved relative to the previous quarter, with net FDI at USD 2.3 billion. Despite the recent improvement, total 2015 capital flows to Indonesia declined to USD 17.1 billion, from USD 45 billion in 2014. Nevertheless, Indonesia fared better than the 30 emerging economies tracked by the Institute of International Finance, that cumulatively (excluding Indonesia, and China which saw massive outflows of USD 676 billion) recorded an outflow of about USD 70 billion in 2015.

Figure 10: Manufacturing was the biggest contributor to the export decline in Q4 2015

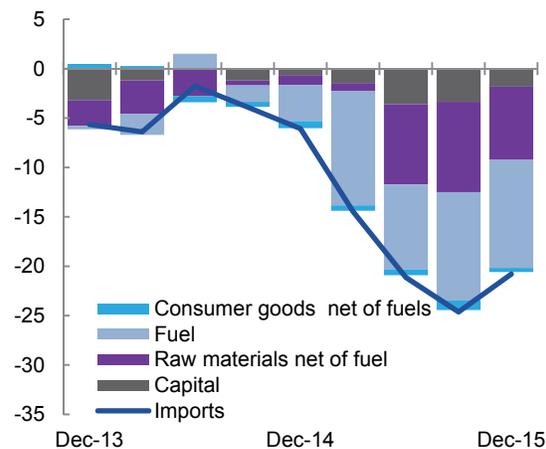
(contributions to year-on-year growth, percentage points)



Source: BPS; World Bank staff calculations

Figure 11: Imports may have bottomed out in Q3 2015

(contributions to year-on-year growth, percentage points)



Source: BPS; World Bank staff calculations

The current account deficit is forecast to widen in 2016, but by less than expected in the December 2015 IEQ

The World Bank has revised its current account deficit forecast for 2016, from 2.4 percent of GDP projected in December to 2.3 percent currently (Table 3). The main reason for the revision is a weaker-than-expected domestic private demand outlook. In addition, given the downward revision to commodity price forecasts (see Section 1), export revenues are likely to remain weak. Capital inflows are projected to be higher than in 2015, in line with the expected increase in capital flows to emerging economies in general. Despite higher financing needs in 2016 (see Section 6), net government bond flows are likely to be lower due to the government's pre-financing of USD 3.5 billion in December 2015. The overall balance of payments is expected to improve to USD 1.5 billion or 0.2 percent of GDP in 2016, resulting in net international reserve accumulation.

Table 3: The current account deficit is expected to widen

(USD billion unless otherwise indicated)

| | 2015 | 2016 | 2017 |
|--------------------------------|-------|-------|-------|
| Overall balance of payments | -1.1 | 1.5 | 7.7 |
| <i>As percent of GDP</i> | -0.1 | 0.2 | 0.7 |
| Current account | -17.8 | -21.1 | -26.0 |
| <i>As percent of GDP</i> | -2.1 | -2.3 | -2.5 |
| Goods trade balance | 13.3 | 12.6 | 15.8 |
| Services trade balance | -8.5 | -8.4 | -10.4 |
| Income | -28.0 | -30.7 | -26.0 |
| Transfers | 5.5 | 5.4 | 5.4 |
| Capital and financial accounts | 17.1 | 22.6 | 33.7 |
| <i>As percent of GDP</i> | 2.0 | 2.4 | 3.3 |
| Direct investment | 9.3 | 9.6 | 11.4 |
| Portfolio investment | 16.7 | 14.9 | 20.9 |
| Financial derivatives | -0.0 | -0.1 | -0.1 |
| Other investment | -8.9 | -1.9 | 1.4 |
| Memo: | | | |
| Basic balance | -8.5 | -11.4 | -14.6 |
| <i>As percent of GDP</i> | -1.0 | -1.2 | -1.4 |

Note: Basic balance = current account balance + net direct investment

Source: BI; World Bank staff calculations

5. Currency appreciation and lower inflation have allowed monetary easing

Global financial markets have favored Indonesia recently

Higher capital inflows into Indonesian government bonds since November have contributed to the stabilization of the Rupiah. Indonesian assets have outperformed emerging markets in recent months. A stronger Rupiah and lower inflation allowed BI to begin easing monetary policy in January. Nevertheless, bank credit conditions remain tight. To strengthen banking sector resilience, the supervisory authorities issued new macro-prudential regulations.

The Rupiah has appreciated over the past three months...

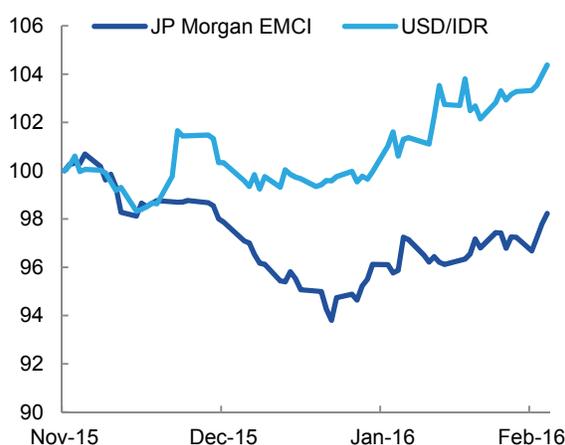
With the decline in global financial volatility towards the end of 2015 the Rupiah appreciated by 3.8 percent against the US dollar between November 30 and March 8 (Figure 12). Strong foreign inflows into government bonds, including a USD 3.5 billion global bond issued in December, have supported the currency. The net equity outflows from Indonesia tapered off in December and turned into net inflows in February 2016. The Rupiah has performed better than other emerging economies in recent months. Since the end of November to March 8, the JP Morgan Emerging Market Currency Index (EMCI) has depreciated by 1.1 percent.

... and Indonesian equities have outperformed emerging markets

Despite equity market outflows in December and January, the Jakarta Composite Index (JCI) increased by 4.7 percent between November 30 and March 8 (Figure 13). The JCI increased sharply by 8.9 percent between January 21 and February 5 during the emerging market rally after the Bank of Japan announced new stimulus measures and oil prices climbed up. Driven (until February) by domestic investors, Indonesia's recent equity market performance has been better compared to peers (Figure 13). Signaling better than expected earlier prospects for private consumption and investment, the top performing sectors in the year to March 8 are consumer goods (up by 13.0 percent), manufacturing (up by 10.5 percent), and miscellaneous industry (up by 8.4 percent). On the other hand, the sectors which recorded a decline were trade (down by 2.2 percent) and property (down by 2.3 percent).

Figure 12: The Rupiah has stabilized over the past three months...

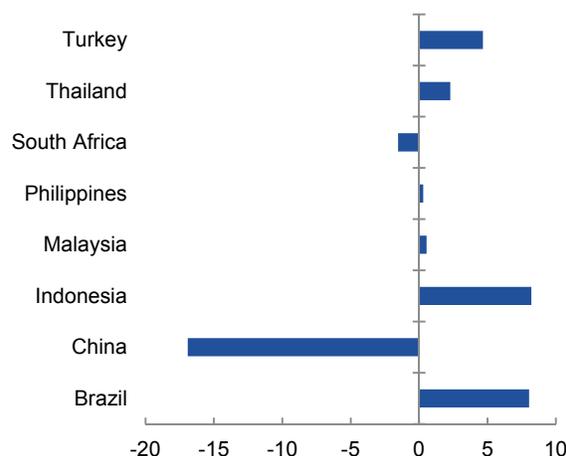
(indices, November 30, 2015 = 100)



Source: BI; JP Morgan; World Bank staff calculations

Figure 13: ... and Indonesian equities have performed better than most emerging markets

(change between November 30, 2015 and March 8, 2016, percent)



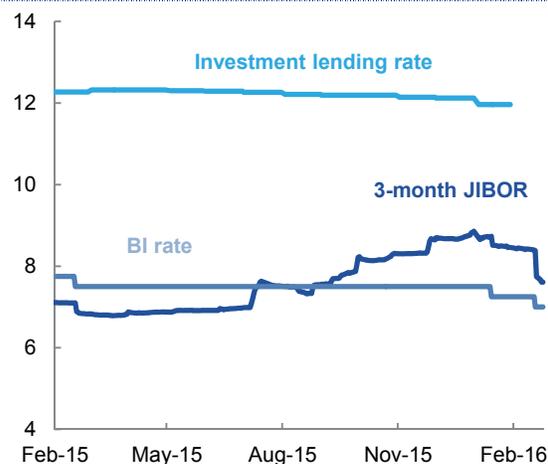
Source: CEIC; World Bank staff calculations

Monetary policy easing has not yet been transmitted to lower lending rates

Given the recent Rupiah stabilization and inflation falling within the BI target range, the central bank cut its main policy rate by 25 basis points twice, on January 14 and February 18, 2016, to 7.0 percent. At the second policy-setting meeting, BI also lowered the deposit and lending facility rates by 25 basis points each and reduced the Rupiah reserve requirement ratio by 100 basis points, to 6.5 percent. Interbank market rates fell in response to the policy changes (Figure 14). However, better funding conditions, both as a result of domestic monetary easing and higher external financing since November 2015, have not yet been transmitted to lower domestic lending rates (Figure 14).

Figure 14: Despite lower funding costs, bank lending rates remain high

(percent per year)



Source: BI; World Bank staff calculations

New macro-prudential measures aim to strengthen banking sector resilience

Complying with Basel III, a voluntary global regulatory framework for bank capital adequacy, stress testing, and market liquidity risk, BI introduced a countercyclical capital buffer that requires banks to form additional capital during economic booms. The objective of this macro-prudential measure is to protect banks from excessive risk-taking behavior during economic upturns, which could increase banking systemic risk. The magnitude of the countercyclical buffer ranges from zero to 2.5 percent of risk-weighted assets. BI has set the current rate at zero percent and will evaluate the size at least once every six months. In line with this measure, the Financial Services Authority (*Otoritas Jasa Keuangan*, OJK) issued a regulation on the determination of systematically important banks and a capital surcharge for these banks that aims to minimize the risk of systemic bank failures. Both regulations are expected to strengthen banking sector resilience to potential risk of losses during economic downturns.

6. Revenue performance is expected to constrain the expansionary fiscal stance

Fiscal policy supported growth in H2 2015, despite weak revenue collection

A higher fiscal deficit, as well as lower energy subsidy spending and natural resource non-tax revenue sharing transfers to sub-national governments, allowed the Government to preserve public investment amid lower than expected revenues. The 2015 preliminary realized fiscal deficit was 2.5 percent of GDP, higher than the revised Budget target of 1.9 percent. Both revenue collection and expenditure disbursement picked up significantly in December, recording stronger monthly outturns than in the previous years. The Government was able to limit the financing risks of a higher than targeted deficit by frontloading bond issuance and borrowing from multilateral donors. In fact, the Ministry of Finance raised IDR 341.2 trillion

(3.0 percent of GDP) of net debt to finance 2015 needs and an additional USD 3.5 billion to pre-finance its 2016 budget.⁷

Revenues, especially from the oil and gas sector, decreased in 2015...

Total 2015 preliminary realized revenues were IDR 1,504 trillion, IDR 258 trillion below the revised Budget target and 3.0 percent less than in 2014 (Table 4). Oil and gas-related revenues contributed 11.4 percentage points to the decline in total revenues, owing to the significant drop in international oil and gas prices and lower than targeted oil production (Figure 15). Although falling short of the revised Budget target by IDR 249 trillion, tax revenues rose by 8.5 percent in 2015. In particular, tax collection in December increased significantly to IDR 225 trillion, compared with a January-November monthly average of IDR 92 trillion and with IDR 144 trillion in December 2014. A strong pickup in December was recorded across all major tax categories, including non-oil and gas income taxes, VAT, and excises.

... despite unusually high income and excise tax collection in December

While historically December is one of the strongest months for tax collection, the increase observed in 2015 was significantly higher than in previous years. A key reason for this was the fixed asset revaluation facility.⁸ Between October 15, 2015, when the facility was established, and December 31, 2015, total tax revenue from asset revaluation was IDR 20.1 trillion.⁹ In addition, a change in the rules on the payment of excise taxes by tobacco producers resulted in a fourfold increase in the monthly excise tax collection, to IDR 37.2 trillion in December.¹⁰

Maintaining the infrastructure spending momentum was a priority in H2 2015

In 2015, the Government increased the fiscal deficit to 2.5 percent of GDP, from 1.9 percent of GDP in the revised Budget, to preserve public investment. Lower energy subsidy spending and natural resource non-tax revenue sharing transfers to sub-national governments provided some fiscal space too. In addition, the Government made several expenditure adjustments: used the space provided by the contingency budget; introduced measures, such as stricter rules for spending on travel and meetings, to manage and control other expenditures; and improved budget execution monitoring.¹¹ As a result, capital expenditure increased by 42 percent relative to 2014, though it was 24 percent short of the target set in the revised 2016 Budget (Figure 16).

⁷ Ministry of Finance, February 2016, Central Government Debt Profile:

<http://www.djppr.kemenkeu.go.id/page/loadViewer?idViewer=5769&action=download>.

⁸ This facility allows individuals and companies to apply for revaluation of their fixed assets, where the increase in fixed assets resulting from the revaluation (i.e., the difference between the new value of assets and the tax book value before revaluation) is subject to a reduced rate of “final income tax” ranging from 3 to 6 percent, depending on when the application is filed. This compares to a standard rate of 10 percent as stated in the Income Tax Law.

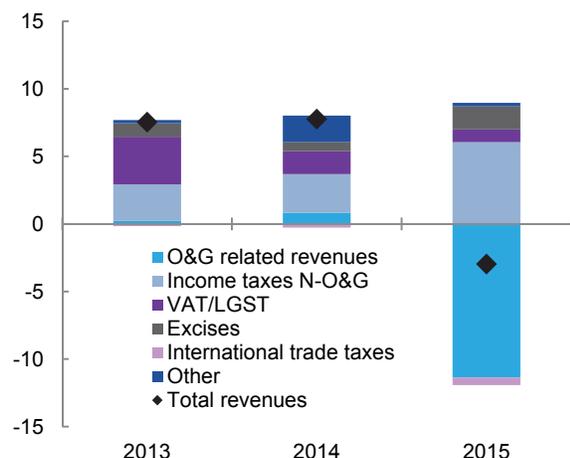
⁹ <http://www.indonesia-investments.com/news/todays-headlines/tax-in-indonesia-asset-revaluation-generates-additional-tax-revenue/item6458>.

¹⁰ Minister of Finance regulation PMK-20/2015, issued on February 2, 2015. In the past, producers were allowed to postpone the payment of excise tariffs for 2 months after they ordered the excise stamps, regardless of the month of order. Starting 2015, all payments for stamps orders have to be made by December 31 of the current year. As a result, the December 2015 collection of IDR 37.3 trillion consists of payments for October, November and December 2015 orders of stamps (including around IDR 7 trillion of advance orders for 2016).

¹¹ The President formed a new team, TEPR (see Part A.6 of the December 2015 *IEQ*), to monitor and eliminate constraints to budget execution. In addition, the Government delayed payments for energy subsidy arrears and the transfer of non-tax revenue sharing to sub-national governments from 2015 to 2016.

Figure 15: Oil and gas-related revenues were the main driver of the 2015 revenue decline

(contributions to nominal revenue growth yoy, percentage points)

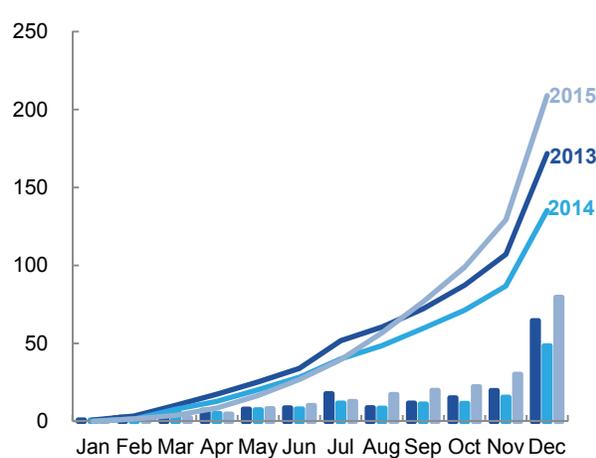


Note: O&G stands for “oil and gas”, N-O&G – “non-oil and gas”; LGST – “luxury goods sales tax”.

Source: Ministry of Finance; World Bank staff calculations

Figure 16: Capital spending in H2 2015 exceeded recent historical levels

(IDR trillion)



Note: Bars indicate monthly disbursement; lines show cumulative spending.

Source: Ministry of Finance; World Bank staff calculations

In 2016, the Government expects lower oil and gas revenues and improvements in tax collection...

Looking to 2016, the Budget approved in October 2015 sets a revenue target of IDR 1,822 trillion, which is 3.4 percent higher than the revised 2015 Budget and 21.1 percent higher than the 2015 preliminary revenue realization. This projection assumes a decline in oil and gas-related revenues due to lower oil and gas prices. At the same time, a significant increase in non-oil and gas income taxes of 29.6 percent is expected. The 2016 Budget accounts for the impact of several tax measures, including a planned adjustment in excise tariffs and improvements in tax administration through IT, audit procedures, and law enforcement. The Government expects around IDR 100 trillion of revenues from a tax amnesty, the bill for which has been submitted to Parliament.¹²

... and further improvement in the composition of spending

As discussed in the December 2015 *IEQ*, the 2016 Budget foresees further improvements in the composition of spending, including further reduction in energy subsidies and higher spending on health, infrastructure and social assistance. In contrast to 2015, the increase in public infrastructure investment will be channeled through transfers to local governments ear-marked for capital spending and capital injections into state-owned enterprises rather than central government spending. Total expenditure is set at IDR 2,096 trillion (16.5 percent of GDP), an increase of 16.7 percent relative to the 2015 preliminary outcomes. As with infrastructure, the overall expenditure increase is primarily driven by a sharp rise in transfers to local governments, including the Specific Allocation Grant (*Dana Alokasi Khusus*, DAK) and Village Funds to support the Government’s priority to accelerate rural development (see also Box 2).

Budget execution is expected to improve in 2016

With respect to budget implementation, in 2015 the Government introduced measures to increase the use of early procurement, particularly for infrastructure projects.¹³ In early January, the Ministry of Public Work and Housing signed contracts worth IDR 8.8 trillion for a number of infrastructure projects (644

¹² <http://www.ft.com/intl/cms/s/0/3c6b4472-e02a-11e5-b072-006d8d362ba3.html#axzz41v612Sx4>.

¹³ INPRES No. 1/2015.

contract packages).¹⁴ Additional measures aim to strengthen the regulatory framework to facilitate private sector participation in infrastructure development.¹⁵ To reduce the high level of accumulated cash (“idle money”) at the sub-national level, the Ministry of Finance issued a regulation that allows the central government to provide government bonds instead of cash transfers to local governments with a large surplus.¹⁶ This policy is expected to be implemented in March 2016.

The World Bank expects revenues to increase to IDR 1,547 trillion in 2016...

The World Bank projects revenues to increase to IDR 1,547 trillion in 2016, which is broadly consistent with recent press statements made by the Ministry of Finance.¹⁷ The baseline forecast accounts for the sharp fall in international oil and gas prices, lower oil production, and continuing moderate rates of growth in nominal GDP, import and private consumption expected in 2016 (see Section 2). The World Bank baseline includes additional revenue mobilization from intensified tax enforcement efforts and tax administration reforms implemented in 2014-2015, including the roll-out of electronic VAT invoicing, expansion of electronic tax filing, establishment of a unique taxpayer ID system, and improvement in access to land asset data for audit purposes. The baseline forecast does not include any revenues from the tax amnesty, as it is still unclear if and when the Amnesty bill would be passed and implemented.¹⁸

... and a fiscal deficit to reach 2.8 percent of GDP

Constrained by the relatively weak revenue growth projected for 2016, the Government has two policy options to support public investment and growth: expand the general government deficit within the fiscal rule of 3 percent GDP, and reduce non-priority (non-infrastructure related) spending. Assuming the Government takes advantage of both options, in the base case the World Bank expects 2016 expenditure disbursement to be limited to about 91 percent of the target, at 1,906 trillion, and the fiscal deficit to reach 2.8 percent of GDP, higher than the 2.2 percent of GDP target in the 2016 Budget.

Several policy options could help deal with weak revenues in the medium run

Looking beyond 2016, the Government has either undertaken or plans to introduce a number of reforms to increase tax collection in the medium term. Some of these measures provide an opportunity to broaden the tax base and reduce economic distortions: e.g. revisions of the VAT and the Income Tax Laws planned for submission to Parliament in 2016, and a planned revision of the final tax regime for micro-, small- and medium-sized enterprises (MSMEs). On the administration side, the Directorate General of Tax plans to ease the process of registering for and filing taxes electronically, to make e-filing mandatory for certain types of taxes and taxpayers, and to improve auditing processes and law enforcement. However, all of these measures will need to be supported by strengthened IT and data management

¹⁴ Presidential Instruction 1/2015; Minister of Public Works and Housing Instruction 3/2015; and Minister of Finance Circular S-577/2015.

¹⁵ For example, PerPres 38/2015 allows line agencies to engage in a wider range of contract types with the private sector, including Availability Payment Contracts; Perpres 3/2016 provides for a priority project list; Ministry of Finance regulation PMK 265/2015 establishes a Project Development Facility to support the preparation of public-private partnership (PPP) projects.

¹⁶ Ministry of Finance Regulation PMK No. 235/2015. This policy will be applied to local governments that have accumulated cash balances higher than the sum of operational expenditure and 30 percent of capital expenditure for the following three months.
<http://www.jdih.kemenkeu.go.id/fullText/2015/235~PMK.07~2015Per.pdf>

¹⁷ See, for example, Kompas from February, 18, 2016 or
<http://www.starbrainindonesia.com/berita/media/42731/3/target-meleset-rp-290-triliun>.

¹⁸ In addition to differences in macroeconomic assumptions and the treatment of the tax amnesty, the World Bank revenue forecast is lower than the 2016 Budget, because the latter was prepared in July 2015 when the full extent of the 2015 revenue shortfall was not known.

systems. In the short and medium term, weak revenue collection could also be a motivating factor to further improve the quality of public spending by improving the efficiency and effectiveness of existing expenditure policies and programs, such as non-energy subsidies and sub-national transfers and the Village Fund.

Table 4: The 2016 Budget targets a fiscal deficit of 2.2 percent of GDP

(IDR trillion, unless otherwise indicated)

| | 2014 | 2015 | 2015 | 2016 |
|-----------------------------------|----------------|----------------|--------------------|--------------|
| | Actual audited | Revised Budget | Preliminary actual | Budget |
| A. Revenues | 1,550 | 1,762 | 1,504 | 1,822 |
| 1. Tax revenues | 1,147 | 1,489 | 1,240 | 1,547 |
| Income taxes | 546 | 679 | 602 | 757 |
| Oil & Gas | 87 | 50 | 50 | 41 |
| Non-Oil & Gas | 459 | 630 | 553 | 716 |
| VAT/LGST | 409 | 576 | 424 | 572 |
| Property taxes | 23 | 27 | 29 | 19 |
| Excises | 118 | 146 | 145 | 146 |
| International trade taxes | 44 | 49 | 35 | 40 |
| Import duties | 32 | 37 | 31 | 37 |
| Export duties | 11 | 12 | 4 | 3 |
| Other taxes | 6 | 12 | 6 | 12 |
| 2. Non-tax revenues | 399 | 269 | 254 | 274 |
| Natural resources revenues | 241 | 119 | 102 | 125 |
| Oil & Gas | 217 | 81 | 78 | 79 |
| Non-Oil & Gas | 24 | 38 | 24 | 46 |
| Other non-tax revenues | 158 | 150 | 151 | 149 |
| 3. Grants | 5 | 3 | 10 | 2 |
| B. Expenditures | 1,777 | 1,984 | 1,796 | 2,096 |
| 1. Central government | 1,204 | 1,320 | 1,173 | 1,326 |
| Personnel | 244 | 293 | 281 | 348 |
| Material | 177 | 239 | 232 | 325 |
| Capital | 147 | 276 | 209 | 202 |
| Interest payments | 133 | 156 | 156 | 185 |
| Subsidies | 392 | 212 | 186 | 183 |
| Energy | 342 | 138 | 119 | 102 |
| Fuel | 240 | 65 | 61 | 64 |
| Electricity | 102 | 73 | 58 | 38 |
| Non-energy | 50 | 74 | 67 | 81 |
| Grants | 1 | 5 | 3 | 4 |
| Social | 98 | 104 | 97 | 55 |
| Other | 12 | 36 | 9 | 25 |
| 2. Transfers to regions | 574 | 665 | 623 | 770 |
| Overall Balance | -227 | -223 | -292 | -273 |
| (% of GDP) | -2.2 | -1.9 | -2.5 | -2.2 |
| <i>Assumptions</i> | | | | |
| Real GDP growth rate (%) | 5.1 | 5.7 | 4.8 | 5.3 |
| CPI | 8.4 | 5.0 | 6.4 | 4.7 |
| Exchange rate (IDR/USD) | 11,878 | 12,500 | 13,389 | 13,900 |
| Crude-oil price (USD/barrel) | 97 | 60 | 51 | 50 |
| Oil production ('000 barrels/day) | 794 | 825 | 779 | 830 |

Source: Ministry of Finance

Box 2: Sub-national governments play an important role in delivering public investment

Following decentralization in 2001, both provincial and local governments have played an important role in delivering public services, including investment. Management of and investment in local roads, schools, hospitals, and government building, and the provision of water supply are among the functions assigned to sub-national governments.

Recent data suggest that sub-national capital expenditure increased on average by 19 percent nominally between 2011 and 2015, but remains low as a share of total expenditure (24 percent) compared to 43 percent for personnel and administration (Table 5). Nonetheless, sub-national capital spending, equivalent to 1.9 percent of GDP, comprised more than half of total national public investment in 2015. The funding for subnational public investment comes from several sources: earmarked transfers (*Dana Alokasi Khusus*, DAK) which represented 25 percent of total sub-national capital spending in 2015 and are mainly used by local governments; own generated revenue; revenue sharing transfers from the central government; and non-earmarked transfers (*Dana Alokasi Umum*, DAU), and the Village Fund (*Dana Desa*).

Given the large share of sub-national spending in total public investment, improving the quality of sub-national capital expenditure is an important policy challenge. Recent studies suggest that, though sub-national spending on roads has increased, the road condition has not improved. Spending on new road development has been prioritized at the expense of road maintenance.¹ In the water and sanitation sector, despite a sevenfold real increase in total government spending in the sector since 2005, the usage of piped water for drinking has fallen and the use for cleaning purposes has been broadly flat.² In addition, a substantial proportion of local government investment spending has gone to relatively unproductive assets, such as administrative office buildings.³ This was most likely driven by the increasing number of local governments following decentralization, from 336 in 2001 to 508 in 2015.

Table 5: Sub-national governments deliver more than half of total public investment

| | 2005 | 2010 | 2011 | 2012 | 2013 | 2014* | 2015* |
|--|------------|------------|------------|------------|------------|------------|------------|
| Capital expenditure by level of government (IDR trillion) | | | | | | | |
| Central government** | 33 | 80 | 118 | 145 | 181 | 147 | 209 |
| Province | 10 | 25 | 26 | 30 | 36 | 61 | 59 |
| District | 27 | 69 | 82 | 100 | 151 | 153 | 159 |
| Total | 70 | 174 | 226 | 275 | 368 | 361 | 428 |
| Capital expenditure by level of government (percent of total expenditure) | | | | | | | |
| Central government | 9.1 | 11.5 | 13.3 | 14.4 | 15.9 | 12.2 | 16.8 |
| Province | 27.6 | 28.8 | 25.7 | 21.2 | 22.6 | 30.2 | 21.1 |
| District | 20.7 | 21.0 | 21.2 | 22.9 | 27.7 | 25.5 | 23.5 |
| Capital expenditure by level of government (percent of GDP) | | | | | | | |
| Central government | 1.1 | 1.2 | 1.5 | 1.7 | 1.9 | 1.4 | 1.8 |
| Province | 0.3 | 0.4 | 0.3 | 0.3 | 0.4 | 0.6 | 0.5 |
| District | 0.9 | 1.0 | 1.0 | 1.2 | 1.6 | 1.4 | 1.4 |
| Total | 2.4 | 2.5 | 2.9 | 3.2 | 3.9 | 3.4 | 3.7 |

Note: * Sub-national data are from budgets; ** 2015 excludes the capital injection for state-owned enterprises of IDR 70.4 trillion.

Source: Indonesia Consolidated Fiscal Database (COFIS) of the World Bank Office Jakarta. Indonesia COFIS relies on data from the Ministry of Finance. Indonesia COFIS can be accessed online at <http://wbi.worldbank.org/boost/country/indonesia>

Notes: ¹ World Bank, 2012, "Investing in Indonesia's roads: Improving efficiency and closing the financing gap." Available at <http://documents.worldbank.org/curated/en/2012/06/16847940/investing-indonesias-roads-improving-efficiency-closing-financing-gap>.

² World Bank, "More and Better Spending: Connecting People to Improved Water Supply and Sanitation in Indonesia" (forthcoming).

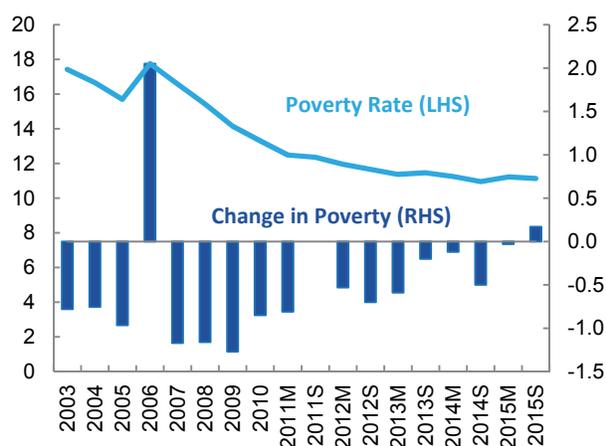
³ Lewis, B. D. and A. Oosterman, 2011, "Subnational government capital spending in Indonesia: Level, structure, and financing," Public Administration and Development, 31, pp. 149–158.

7. Poverty reduction has stalled

High food prices continue to significantly impact the poverty rate

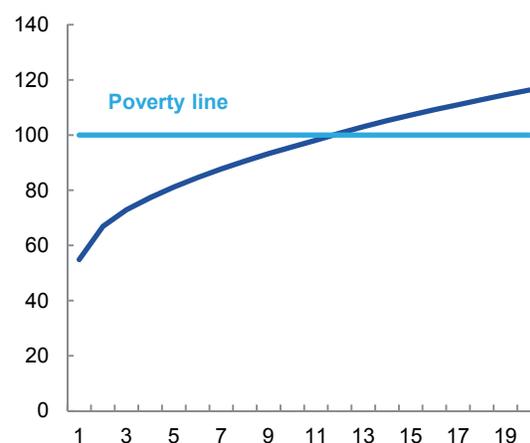
The latest estimates by Statistics Indonesia (*Badan Pusat Statistik*, BPS) show an official poverty rate of 11.1 percent in September 2015, 0.2 percentage points higher than a year earlier (Figure 17).¹⁹ Slowing poverty reduction can be attributed to moderating economic growth, slower job creation, significant Rupiah depreciation since 2013, and persistently high consumer (especially food) price inflation. Unprocessed food prices in Indonesia rose by 7.2 percent in 2015, contributing to an overall CPI inflation rate of 6.4 percent. With food making up 73.1 percent of the poverty line in September 2015, the high levels of food price inflation have resulted in a poverty line increase to IDR 344,809, up 10.4 percent from September 2014. The relative stability of the Rupiah and lower inflation since November 2015 may be reflected in better poverty outcomes in 2016.

Figure 17: Poverty reduction has worsened in recent years
(poverty rate, LHS, percent; change in poverty yoy, RHS, percentage points)



Source: Susenas; World Bank staff calculations

Figure 18: The poorest Indonesians are far below the poverty line
(March 2015 average per capita household consumption of poorest 20 percent, percent of poverty line)



Source: Susenas; World Bank staff calculations

The trend of slower poverty reduction observed in recent years has continued

The latest poverty rate follows the trend of slowing poverty reduction in recent years. Since 2010, the poverty rate has decreased by an average of 0.5 percentage points per year, compared with the relatively large average declines of 1.2 percentage points between 2007 and 2009. In addition to the cyclical factors mentioned above, there are several long-term causes of the slowdown in poverty reduction. Structural factors in the agricultural sector, such as falling productivity, poor infrastructure, and restricted imports, have driven domestic food prices higher when global food prices have been declining (see Section 3). Second, there are persistent pockets of poverty which appear relatively little affected by growth. The poorest one percent of Indonesians were able to afford just over half of their basic needs in March 2015 (i.e. their consumption comprised 55 percent of the poverty line) (Figure 18). This means that higher consumption growth – if shared equally – is required to maintain the rate of poverty reduction. Finally, there are many Indonesians (67.5 million in

¹⁹ Although this is a slight drop from the March 2015 poverty rate of 11.2 percent, income seasonality makes comparisons between the March and September rates difficult. Note also that recent changes in the Susenas methodology, implemented with the March 2015 survey, have made the latest data not directly comparable to data from previous years. See also Part A, Section 7 of the October 2015 *IEQ*.

2014), who live just above the poverty line but below 1.5 times the poverty line, which makes them vulnerable to economic shocks such as high food price increases.

8. External risks to the macro-fiscal outlook remain significant

The risks to the projected global growth and trade recovery are tilted to the downside...

Downside risks continue to dominate the World Bank's outlook for Indonesia. With respect to the external environment, the risks have become increasingly linked to the economic performance of emerging and developing countries. A stronger-than-expected slowdown in China could have substantial spillovers on other countries, including Indonesia. The impact could be transmitted through both lower import demand volumes and weaker commodity prices, as well as financial links. Despite the significant decline in exports to China – which in 2015 were at two-thirds of their 2011 level – the country remains one of Indonesia's largest trading partners with a 10-percent share in total exports (three quarters of which commodities). Finally, although Indonesian assets have become relatively more attractive to foreign investors in recent months, the country remains exposed to the risk of renewed increases in global risk aversion.

... while fiscal stimulus may require a higher deficit and non-priority spending cuts

In a difficult macroeconomic environment and with growth dependent on fiscal stimulus, weak revenue performance has emerged as a major policy challenge. Although energy subsidy reform reduced the impact of oil prices on spending, state revenues remain significantly affected by the global commodity price cycle. In 2014 and 2015, the Government undertook several short-term measures, such as a lower tax tariff on asset revaluation, to raise revenue collection, but their effect was not enough to compensate for the decline in oil and gas related revenues. Therefore, weaker than expected revenues this year are likely to be offset by expenditure adjustment (by reducing material and contingency spending) and a higher fiscal deficit (but within the legal ceiling of 3 percent of GDP for the general government), so that capital spending cuts are minimized as in 2015. On the upside, the tax amnesty, if approved by Parliament in the first half of 2016 as planned, may bring in additional revenues this year.

Despite more favorable fiscal financing conditions, risks remain in 2016

Given a projected fiscal deficit of 2.8 percent of GDP and the debt amortization and non-debt needs estimated by the Ministry of Finance,²⁰ the World Bank estimates gross financing needs at IDR 711 trillion (5.6 percent of GDP). Such a significant increase, of around 19 percent relative to 2015, in financing needs may be associated with higher financing risks and costs. Despite declining borrowing costs, with local currency sovereign yields down by about 80 basis points in the year to March 9 for the 10-year bond, financial conditions remain volatile (see Section 1). However, as in 2015 the Government has proactively taken measures to manage such risks, frontloading its market financing strategy. As of February 16, the government has secured IDR 136 trillion from securities issuance.

²⁰ Ministry of Finance, February 2016, Government Debt Profile:
<http://www.djppr.kemenkeu.go.id/page/loadViewer?idViewer=5769&action=download>.

B. Some recent developments in Indonesia's economy



1. Beyond the ten economic policy packages: addressing significant binding constraints

The Government has released ten economic policy packages of diverse policy measures

Since September 2015, the Government has released ten economic policy packages aimed at attracting foreign investment, revitalizing industry, facilitating trade and logistics, and easing access to raw materials. The packages are comprehensive and wide-ranging, covering areas such as trade, energy, investment licenses, small- and medium-sized enterprises (SMEs), minimum wage setting, tax relief, special economic zones, land title registration, logistics, and investment liberalization. To give one example, the revision of the Negative Investment List (*Daftar Negatif Investasi*, DNI), announced on February 11, 2016, opens 29 business fields (e.g., crumb rubber and cold storage) to 100 percent foreign ownership. It also raises the foreign equity limit to 67 percent for 29 business fields (e.g., one- and two-star hotels, warehousing, and loading/unloading cargo) and opens 19 business fields (e.g., passenger land transport, electricity installation), previously closed to foreign owners, for foreign investment with some restrictions.²¹

This article proposes additional reforms which could help relax binding constraints to growth

The current packages are focused on micro-level regulations, aiming at dismantling unnecessary regulatory barriers for product markets in various sectors and for different types of businesses (foreign, domestic, large, and small). This section attempts to contribute to the public policy dialogue by offering a list of several reforms in a select number of key sectors – logistics, trade, investment, and financial markets – which have the potential to address important binding constraints to higher growth in Indonesia.

²¹ However, the revision also introduces several restrictive measures. For example, 19 business fields in the public works sector are reserved for MSMEs and firms in 3 business fields (e.g. retail trade through mail order or internet) are added to the list requiring partnership with MSMEs.

a. Logistics reforms

The Indonesian logistics sector will benefit from efficiency gains...

Efficient freight logistics are key in integrating domestic supply chains into global value chains. However, Indonesia's logistics sector is far from efficient (see Part C.1). Surveys conducted by the World Bank suggest that almost two thirds of Indonesian manufacturers have in-house as opposed to outsourced logistics activities, a clear signal of the lack of trust in the capability of local logistics service providers (LSPs). In addition, on average 19 out of 100 orders delivered to manufacturers will either be late or some units will be missing, a higher share than most countries. Logistics services are also expensive in Indonesia, with total logistics costs comprising 20 percent of sales of manufacturers compared with 15 and 13 percent in Thailand and Malaysia.

... such as those obtained by lowering the high minimum capital requirements for LSPs...

One important reason for inefficient logistics in Indonesia is the high minimum capital and reserve requirements for LSPs. For example, the capital requirements for freight forwarders, a key player in the logistics chain, are USD 1.8 million. This requirement for foreign operators can be as high as USD 10 million. By comparison, the capital requirement is USD 79,000 in Singapore and USD 65,000 in Thailand.²² Evidence shows that such high capital and reserve requirements significantly deter firm entry and reduce the ability of firms to spend on hiring, training, equipment or developing services.²³ At the same time, such requirements also fail to serve their intended purpose of protecting consumers and creditors from hastily established and potentially insolvent firms. Drastically reducing, or removing, these capital requirements for LSPs can go a long way in increasing competition, as well as firms' investment in improving the quality and efficiency of their operations.

...and clarifying the investment responsibilities of port authorities and port operators

Another key factor behind the inefficient logistics services is the lack of clarity on the roles of port authorities and port operators, which has led to severe under-investment in port infrastructure. According to the Shipping Law, the port authority is responsible for investing in the port's infrastructure. In practice, only the port operators – the state-owned enterprises Pelindos – have been able to invest in infrastructure development in recent years. The disconnect between the law and reality has led to a general under-investment in port infrastructure, as no entity appears to have both capacity and responsibility to invest in port development. Under-investment, such as in berth length, access channels, yard space, gates, access roads, and cargo handling equipment, is particularly severe in medium and smaller public ports, especially in Eastern Indonesia. Most Indonesian public port infrastructure is inadequate to host modern vessels and ensure rapid turn-around times. Limited port capacity also hampers the expansion of cargo traffic.²⁴ In

²² The minimum capital requirement for terminal operators is USD 72 million in the main ports, including ports like Ambon. Back-of-the-envelope calculations suggest that over 7 years of revenues are needed to fulfill such a capital requirement. For shipping liners the capital requirement is USD 3.6 million, compared with USD 35,000 in Singapore.

²³ World Bank, 2013, "Why are minimum capital requirements a concern for entrepreneurs?", in *Doing Business 2014: Understanding Regulations for Small and Medium-Size Enterprises*. Available at <http://www.doingbusiness.org/reports/case-studies/2013/why-are-minimum-capital-requirements-a-concern-for-entrepreneurs>.

²⁴ For example, the ports of Jayapura and Kupang are expected to reach full capacity in 2016 and 2017, respectively. On the other hand, when infrastructure expansion does happen, such as in the case of the recent berth extension in the port of Ambon, then larger and more modern vessels are employed, turn-around time is reduced and logistics costs are reduced. World Bank, 2015, "Port development priority projects and financing strategy". Available at <http://documents.worldbank.org/curated/en/2014/03/19319448/indonesia-port-development-priority-projects-financing-strategy-advisory-services-project>.

addition, the lack of clarity also hinders the ability of the state to act as an effective regulator of the port terminal operators. The Pelindos effectively operate the ports - sometimes in conjunction with private firms - and at the same time regulate much of the ports' operations. Unless the government clarifies the roles of port authorities and port operators in the development and management of the ports, investment in port infrastructure will remain inadequate.

b. Trade policy

Numerous trade-related non-tariff measures remain in place despite recent deregulation efforts

Trade-related non-tariff measures (NTMs) are a legitimate tool to protect the health, safety, and security of consumers. However, governments often use NTMs to restrict trade. In 2015, 62 percent of about 10,000 product categories of goods traded internationally were restricted with NTMs in Indonesia.²⁵ As part of its first economic policy package, the Government announced a large number of revisions to trade regulations. These included the elimination of a number of NTMs, including product-specific import licenses such as surveyor verifications, registered and producer importer licenses, and technical and administrative requirements. As these regulations are product-specific, they make up only a small portion of all NTMs.

Improving NTM regulations requires a centralized review system

As part of the Government's deregulation drive, an inter-ministerial team could be tasked with reviewing, rejecting or approving NTMs. The team could focus on reviewing existing NTMs based on a number of simple criteria: whether the regulation in question conflicts with another, whether it addresses a particular market failure, and whether it is in line with Indonesia's international trade obligations. The team could also review future flows of NTMs to ensure that markets remain competitive and businesses are not burdened by unnecessary regulations. The creation of such an office, similar to the regulatory review body proposed below, could play an important part in improving the quality of Indonesia's trade regulations.

c. Investment climate

To improve the investment climate, the Government has further accelerated and simplified several licensing services

In the last two years, the establishment of an One Stop Service (OSS) for investment licenses has been a priority of the Government to improve the investment climate at the national and sub-national level. The economic policy packages introduced several simplified and accelerated licensing and non-licensing services. At the national level, approximately 160 such services have been delegated to the national OSS hosted by Indonesia's Investment Coordinating Board (*Badan Koordinasi Penanaman Modal*, BKPM).²⁶ However, investors and businesses need to obtain many other licenses from various levels of government. Also, there is no up-to-date, comprehensive list of the licensing and regulatory requirements that firms need to comply with.

An objective and systematic regulatory review mechanism is needed...

A more systematic approach is needed to take stock of existing business, investment and trade regulations and identify and cancel ones that are conflicting and unnecessary.. This applies especially to local regulations, which thus far have not received much attention in the economic policy packages. There are 561 different

²⁵ Munadi, E., 2016, "Non-tariff measures in Indonesia." Workshop on Improving NTM Review Mechanism, Jakarta, February 4, 2016.

²⁶ BKPM press release, January 5, 2016: http://www.bkpm.go.id/images/uploads/file_siaraan_pers/Siaraan_Pers_BKPM_050116-Kejar_Target_Investasi_BKPM_Sinergikan_Tim_Pemasaran_dan_Pelayanan_Investasi.pdf.

sub-national governments and agencies that have the authority to issue licenses,²⁷ resulting in a complex and confusing environment for businesses and investors to navigate. As is the case with NTMs, investment and business licensing lacks an objective regulatory review mechanism. The National Regulatory Reform Roadmap, as announced in the first economic policy package, could be the basis for such an effective regulatory review process.

... as is a licensing inventory

The Government could start by gathering information on licenses in a comprehensive licensing depository of regulatory requirements that can be accessed online. For the depository to remain up to date, its governance arrangements would need to ensure that the various license-issuing bodies provide the latest information. Collecting all licenses in a single depository can lead to concrete reform actions: in some countries, such as South Korea, Sweden, and Mexico, a “regulatory guillotine” was subsequently organized to test the legality, necessity and business friendliness of a given regulatory requirement with three possible outcomes – abolish, amend or leave as is.

Local content requirements could also be relaxed, if they hurt firm competitiveness

An additional area for investment reforms is local content requirements. In the past few years, the Government issued several measures that regulate minimum local content for several manufactured products and services. In the telecommunication industry, a recent measure introduced a minimum 30-40 percent local content requirement for 4G/LTE equipment.²⁸ The Ministry of Trade imposed local content measures for the franchise business sector (including for food and beverage and modern retail) that require the franchisee to source domestically a minimum of 80 percent of its raw materials, equipment and inventory.²⁹ Other business sectors impacted by these measures include electricity and oil and gas.³⁰ Although local content requirements aim to stimulate domestic production, they could inadvertently hurt firm competitiveness because this competitiveness depends on the firm’s capacity to source raw materials and components where they are of best quality, best fit and cheaper.

d. **Financial markets**

The revised KUR partial microcredit guarantee scheme may benefit from sectoral differentiation

Another component of the economic policy packages was a significantly higher disbursement target (of up to 2 times the historical annual average amount) and the introduction of a subsidized interest rate, at 9 percent per year, for loans under the partial microcredit guarantee scheme (*Kredit Usaha Rakyat*, KUR). As of December 2014, IDR 178.8 trillion were disbursed to 12.4 million feasible but unbankable micro-, small-, and medium-sized enterprises (MSMEs) under KUR. As of end-

²⁷ Based on Presidential Regulation No.97/2014, OSS is administered by national and local governments, including in free trade and free port areas and special economic zones. Thus, 34 provinces, 416 districts, 98 cities, 5 free trade and free port areas, and 8 special economic zones issue licenses in Indonesia.

²⁸ As stated in Ministry of Communication and Information Regulation No. 27/2015, the minimum local content requirements for 4G/LTE equipment are 30 percent (40 percent in 2017) for base station and 20 percent (30 percent in 2017) for subscriber station.

²⁹ Ministry of Trade Regulation No. 53/M-DAG/PER/8/2012 (on Franchising) requires Indonesian franchisees to source 80 percent of their raw materials, equipment and inventory domestically. Regulation No. 7/M-DAG/PER/2/2013 (on Food and Beverage Franchises) requires the franchisee to utilize 80 percent of raw materials and equipment from domestic sources. Regulation No. 70/M-DAG/PER/12/2013 (Modern Retail Franchises) also requires modern retailers, such as shopping centers, minimarkets, and hypermarkets, to sell 80 percent domestic products.

³⁰ Upstream Oil & Gas Project: Ministry of Energy and Mineral Source Regulation No. 15/2013 states different rates of local content for machinery, equipment, and services, ranging from 15-80 percent.

2014, KUR's non-performing loan rate was only 3.3 percent. However, there is a risk that the revised, low-interest rate, high-disbursement rate KUR program may encourage looser bank credit standards, thus weakening bank asset quality. The current scheme could be improved by introducing sectoral differentiation of loans, as MSMEs in different economic sectors face different constraints and risks. For instance, farmers need several months to repay a loan as they wait for the harvest, while movable food stall owners are able to repay after a month.

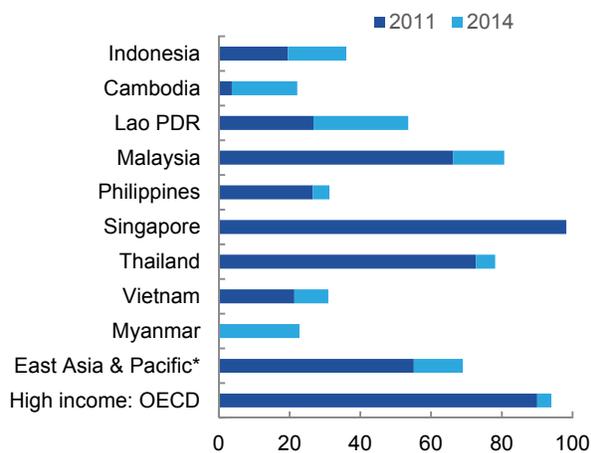
Financial education and better institutional coordination could help increase financial inclusion

A long-standing financial sector challenge in Indonesia is limited financial inclusion. Despite significant strides made in recent years, such as increasing adult access to a transaction account from 20 percent in 2011 to 36 percent in 2014 and raising the number of adults with a loan in a regulated financial institution from 9 to 13 percent in the same period, Indonesia lags behind peer countries in the region (Figure 19).

Several policies have been proven effective in improving financial

inclusion in other countries: (i) increase awareness and basic knowledge of financial services through consumer protection programs; (ii) promote existing financial inclusion products to increase demand; and (iii) streamline products and services to reduce overlap³¹.

Figure 19: Indonesia still trails its neighbors in adult access to bank accounts
(percent of adults age 15+)



Note: * Developing countries only.

Source: World Bank Global Findex database; World Bank staff calculations

³¹ One example of financial products that were developed for the underserved, but which also created confusion in the market, are BI's Digital Financial Service (*Layanan Keuangan Digital*, LKD) and OJK's Branchless Banking (*Laku Pandai*).

2. Public support for action on inequality has grown

a. Public concern about rising inequality has increased in recent years

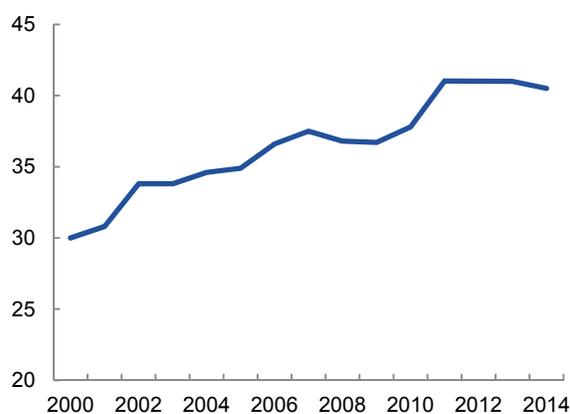
Inequality in Indonesia has risen sharply since the early 2000s...

Inequality in Indonesia has risen sharply in recent years. During the Suharto era, it remained stable even through periods of high economic growth, only increasing slightly in the mid-1990s. During the 1997/98 Asian Financial Crisis, inequality fell as those who were better off bore the brunt of the economic shock and saw their incomes slow to recover. Since the crisis, however, Indonesia's inequality has risen steadily: the Gini coefficient, a measure of inequality where 0 represents perfect equality and 100 represents perfect inequality, increased from 30 in 2000 to 41 in 2014 (Figure 20).

... but few Indonesians worried about inequality in the first half of the decade

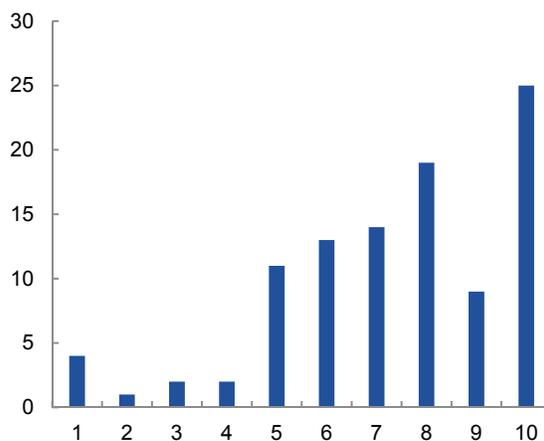
In the decade following the Asian Financial Crisis, the Indonesian public showed little concern about rising inequality. When the World Values Survey was conducted in 2001, at a time when Indonesia's inequality was still at a post-crisis low, a majority of Indonesians favored higher inequality as an incentive for individual effort. The 2006 World Values Survey revealed that beliefs regarding the incentive value of inequality had not yet changed, although inequality had risen significantly by then (Figure 21).

Figure 20: Inequality has risen sharply since 2000...
(Gini coefficient)



Source: Susenas, World Bank calculations

Figure 21: ... but past surveys of perceptions found that few favored lower inequality
(beliefs on income inequality in Indonesia, percent)



Note: The x-axis is the response on a scale of 1-10 with 1 = "incomes should be made more equal" and 10 = "we need larger income differences as incentives".

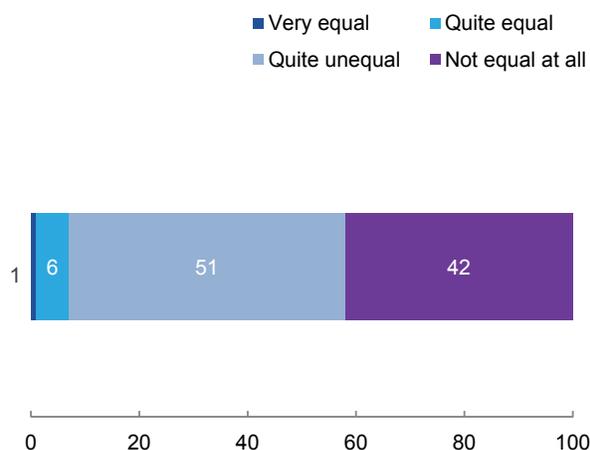
Source: World Values Survey (2006)

However, this is changing

However, a 2014 nation-wide survey, conducted in May 2014 by the Indonesian Survey Institute (*Lembaga Survei Indonesia*, LSI), showed that Indonesian perceptions of inequality have changed. Contrary to past surveys, 88 percent of respondents reported that reducing inequality was an urgent government priority. A vast majority described the income distribution in Indonesia as "quite unequal" or "not equal at all" (Figure 22), and half of all respondents felt that Indonesia has become more unequal over the past five years (Figure 23).

Figure 22: Indonesians think that the distribution of income is not equal

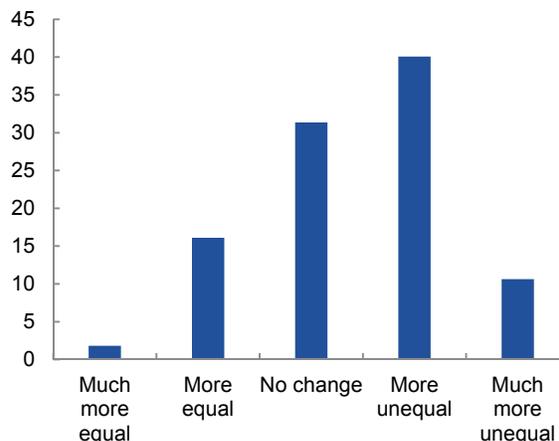
(responses to question: “How equally is income distributed in Indonesia?”, percent)



Source: Indonesian Survey Institute (2014)

Figure 23: Half of respondents believe inequality has risen recently

(responses to question “How has the income distribution in Indonesia changed in the last five years?”, percent)



Source: Indonesian Survey Institute (2014)

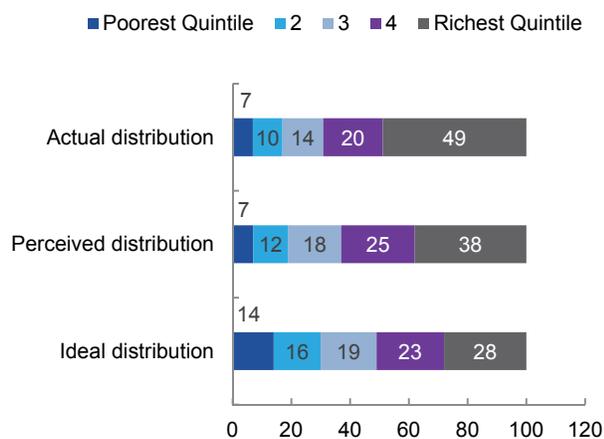
b. Actual inequality is worse than Indonesian perceptions indicate

Indonesians today perceive income inequality as high...

Indonesians think that the current level of inequality is higher than what they would consider ideal. The 2014 survey respondents indicated that the ideal income distribution would be one where the richest 20 percent of the population earn as much as the poorest 40 percent (Figure 24). This “ideal distribution”, if realized, would put Indonesia’s Gini coefficient at a level of 14, lower than any income distribution found in the real world. The respondents also estimated that the actual income distribution is higher, with the top 20 percent earning as much as the bottom 60 percent, roughly corresponding to a Gini coefficient of 30.

Figure 24: People think inequality is high, reality is even more unequal

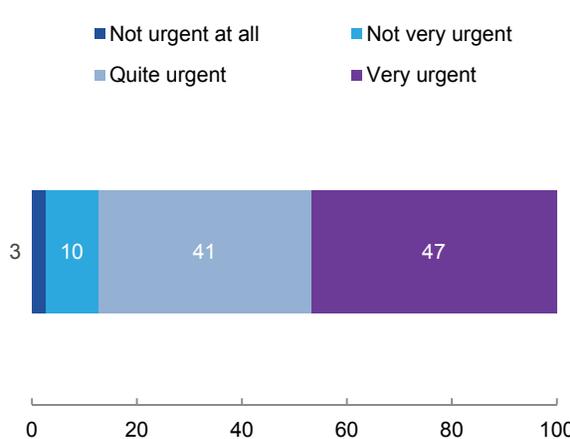
(ideal and perceived distributions of national income for each per capita income quintile, and actual consumption distribution based on Susenas data)



Source: Indonesian Survey Institute (2014), Susenas

Figure 25: A majority of Indonesians believe that inequality reduction is an urgent priority

(responses to question “How urgent is it for the government to reduce inequality?”, percent)



Source: Indonesian Survey Institute (2014)

... while the actual level of inequality is even higher

However, the actual income distribution in Indonesia is even worse than people think. The 2014 National Socio-economic Survey (Susenas) suggested that the richest 20 percent actually consumed³² as much as the rest of the population combined, with an actual Gini coefficient of 41. Furthermore, because household surveys typically do not capture the incomes of the richest Indonesians, the real level of inequality in Indonesia is likely to be even higher.

c. **There is strong support for policies that address the main drivers of inequality**

The LSI survey demonstrates a public mandate for greater action to address inequality

The 2014 survey results indicate that there is a clear opportunity for the Government to pursue policies that are effective in reducing inequality. A majority of Indonesians today feel that inequality is too high and is an urgent problem (Figure 25). The growing importance of the issue should bolster the Government's resolve in tackling inequality head on, and make it more confident in emphasizing and setting an agenda that focuses on ways of increasing equity.

Table 6: Indonesians support social protection, job creation, and eradicating corruption (responses to question "What are the most important policies for reducing inequality?", percent)

| Policy | Percent reporting as top 3 |
|--|----------------------------|
| Social protection programs | 49 |
| Creating more jobs | 48 |
| Eradicating corruption | 37 |
| Free education for all | 30 |
| SME credit | 27 |
| Free healthcare for all | 17 |
| Increasing the minimum wage | 17 |
| Infrastructure improvements (roads, power, etc.) | 14 |
| More subsidies (e.g., for agriculture, fuel, etc.) | 14 |
| Improving schools | 10 |
| Grants to village level, e.g. National Community Empowerment Program (<i>Program Nasional Pemberdayaan Masyarakat, PNPM</i>) ³³ | 7 |
| Loans for the poor (not business loans) | 7 |
| Increasing the tax on the rich | 2 |
| Unemployment insurance | 2 |
| Equitable asset ownership (e.g., for land, forests, mines, etc.) | 2 |

Source: Indonesian Survey Institute (2014)

Indonesians support policies that protect the poor from shocks...

There is strong public support for social protection policies that provide direct assistance to the poorest 40 percent of the population. When asked about the main causes of poverty, 57 percent of respondents cited external reasons that are beyond an individual's control, such as coming from a poor family (22 percent) or having bad luck (16 percent). So, when the perceptions survey asked respondents to identify top priorities to address inequality, nearly half of all respondents supported social protection programs as a key policy measure (Table 6). The survey provides the following examples of social protection programs: subsidized rice (*Beras untuk Rumah Tangga Miskin, Raskin*), unconditional cash transfers (*Bantuan Langsung Tunai, BLT*), financial aid for poor students (*Bantuan Siswa Miskin, BSM*), and health insurance (*Jaminan Kesehatan Masyarakat, Jamkesmas*).

³² The LSI survey asks specifically about income distributions. Susenas data measure consumption, which is a standard proxy for income. However, income is always more unequal than consumption, because the richest households do not use all of their income for consumption. Thus, consumption distribution data usually underestimate actual income inequality.

³³ The Rural PNPM program was phased out in 2015 and replaced by the 2014 Village Law (UU Desa), which increased national and district government transfers directly to the country's 74,000 rural villages.

... create more and better jobs ...

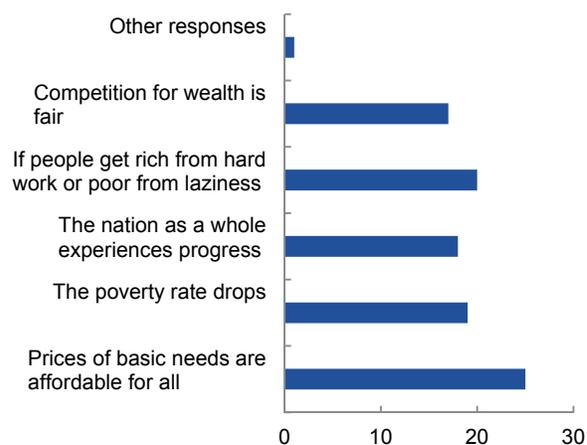
Equally important to Indonesians were policies that reduce inequality by creating better work opportunities for people. When asked whether it was possible for people to pull themselves out of poverty if they worked hard enough, 52 percent of respondents answered that that would be easy to do, 41 percent said that it would be difficult but doable, and only 7 percent believed that it was impossible. Accordingly, nearly half of all respondents considered job creation policies a top priority, while complementary policies, such as credit for small- and medium-sized enterprises and improving the quality of education, were also supported.

... and reduce corruption ...

Eradicating corruption was also cited as a top priority for inequality reduction. Respondents felt strongly that there was a need to achieve a more meritocratic state where competition for wealth is fair and income is gained only through hard work. Many survey respondents stated that inequality was only acceptable if wealth and poverty are correlated with effort, and if competition for wealth is fair (Figure 26). Thus, eradicating corruption was a top three priority for 37 percent of respondents, making it the third most supported policy option.

Figure 26: Respondents support protecting the poor and fair wealth acquisition

(responses to question "What is the number one factor that would make inequality acceptable?", percent)



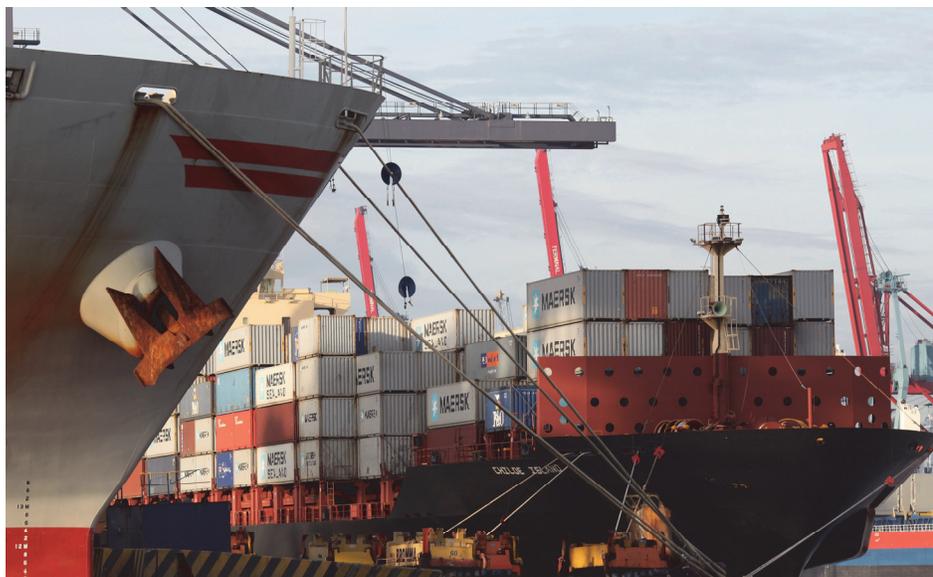
Source: Indonesian Survey Institute (2014)

... all of which address the key drivers of inequality

The policy choices revealed by survey respondents resonate closely with recent research findings. A 2015 World Bank flagship report on inequality in Indonesia³⁴ assessed four drivers of Indonesia's inequality: inequality of opportunities, fragmentation of the labor market, inequality of wealth accumulation, and unequal resilience to shocks. The report then identified four main policy response areas. First, public service delivery improvements are needed to provide an equal start in health and education for all children. Second, the poor need access to more and better jobs in order to address inequality in the labor market. Third, unequal accumulation of wealth through financial assets can be addressed through making the tax system more progressive and eradicating corruption. Finally, it is important to introduce measures to help all people, but especially the poor and vulnerable, mitigate and cope with shocks. The overlap between these research findings and the perceptions survey results provides the Government with an opportunity to pursue policies that are both publicly supported and proven effective in practice.

³⁴ See World Bank (2015), *Indonesia's Rising Divide: Why inequality is rising, why it matters and what can be done*.

C. Indonesia 2016 and beyond: a selective look



1. Improving the freight logistics system in Indonesia³⁵

Indonesia needs better connectivity to lower poverty and boost growth

Indonesia's unique geography means that connecting spatially separated sources of supply and demand is crucial for economic development. Connectivity enables the flow of goods, services and people. Improved connectivity supports higher growth rates and helps reduce poverty. This section of the *IEQ* looks at the consequences of failing to reform the logistics sector in terms of missed opportunities, highlights the main challenges Indonesia faces in strengthening its freight logistics system and improving connectivity, and discusses how some of the “symptoms” of Indonesia's poor logistics system might be addressed.

Indonesia needs to help lagging regions to access growth-generating opportunities

If the higher rates of growth necessary to reduce poverty and share prosperity are to be achieved, Indonesia will need to remove barriers currently preventing lagging regions from linking to more growth-generating opportunities. Lagging regions are home to some of the poorest people in Indonesia: 55 percent of the population in Papua is poor and vulnerable,³⁶ compared with 30 percent in West Java.

Poor connectivity stokes inflation, the burden of which is felt the most by poor households

Price differences between regions in Indonesia are often considered to be one of the most unfavorable consequences of poor connectivity, as unreliable supply chains prevent traders and local producers from responding rapidly to price changes. Poor logistics hampers the ‘tradability’ of goods and services in remote areas, triggering faster price increases when demand surges. The resultant inflation reduces purchasing power and spending on health and education, in turn increasing poverty and vulnerability.

Indonesia's logistics are failing to keep up

A key component to achieving better connectivity is through a more efficient freight logistics system. Indonesia's freight logistics system has not kept up with the rapid

³⁵ Unless otherwise noted, the various surveys and data used in this section are from World Bank, 2015, “Improving Indonesia's Freight Logistics System: A Plan of Action”.

³⁶ “Poor and vulnerable” refers to the bottom 40 percent of the household consumption distribution.

with demand and are making firms uncompetitive

economic expansion of the last 15 years. Furthermore, as exposure to more intense competitive pressures from globalization has increased, the country has fallen behind its G20 and ASEAN peers. Indonesia ranks 53 out of 160 countries in the 2014 Logistics Performance Index, below all other G20 members and the other middle-income ASEAN countries. Traders sending freight from Java or Sumatra to other islands are confronted with long and fragmented supply chains, uncertainties in delivery time, and high costs needed to compensate for 70 percent empty volume on the return voyage (backhaul). Consequently, it is cheaper to ship a container from Shanghai, China to Jakarta than from Jakarta to Padang in West Sumatra, despite Shanghai and Jakarta being six times farther apart than Jakarta and Padang.

a. Some consequences of failing to reform Indonesia's logistics system

Indonesia is missing out on crucial opportunities, both from poor internal integration and weak participation in GVCs

Without improving its freight logistics system, Indonesia faces missed opportunities, not only from weak internal integration, as low connectivity impairs efforts by remote regions to diversify their economies, but also from its failure to integrate more fully into global value chains (GVCs). Indonesia will also struggle to diversify its production and exports, as businesses will be less exposed to competition and will fail to develop competitive advantages in higher value-added manufactured or processed goods. Such higher value-added goods go hand-in-hand with efficient logistics: they need to meet tight delivery schedules in a cost-effective, reliable and predictable manner.

Resource-producing outer islands need to ship to markets and manufacturing concentrations in Java and Sumatra

Poor freight logistics make it problematic to connect resource-producing regions in the outer islands with markets and manufacturing concentrations in Java and Sumatra. Most raw commodities need to be brought from the outer islands to be processed in Java. Meanwhile, manufactured products, including processed foods, need to be transported from Java to the outer islands. Similarly, for manufacturing industries to grow, closer to primary inputs, the freight logistics system and logistics infrastructure have to be supportive.

Without improved logistics, it will be hard to increase domestic value added...

Despite being high on the Government's list of priorities, developing vertically integrated industries with more domestic value-added will prove unattainable without improved logistics. Investing in processing facilities on the outer islands is economically unsustainable if the existing freight logistics system fails to allow producers to access domestic and international markets through the main gateways in Java and Sumatra. For example, poor freight logistics infrastructure and high local fees are preventing the development of cattle farming and meat packaging in Nusa Tenggara. Similarly, a lack of cold storage facilities and reliable energy to power them is also preventing regions in eastern Indonesia from fully developing a competitive fisheries industry.

...and Indonesia's participation in GVCs

Furthermore, without efficient and reliable freight logistics Indonesia will find it hard to integrate its domestic supply chains with GVCs. This would be a serious missed opportunity, given that countries that doubled GVC-linked trade between 1995 and 2008 saw income per-capita increase 12 percent more than others.³⁷ Indonesia's participation in GVCs lags behind other middle-income countries in ASEAN. While Indonesia accounts for more than half of all manufacturing labor in ASEAN, it produces less than 20 percent of the region's manufacturing exports by

³⁷ Asian Development Bank, 2014. "Asian Development Outlook 2014 Update: Asia in Global Value Chain."

value, indicating the high price that the country pays for its poor freight logistics, among other challenges.

b. Major “symptoms” of poor logistics in Indonesia

(i) *High costs incurred by under-utilized logistics assets*

Indonesia’s logistics costs exceed those of its competitors

Logistics costs can be measured in various ways. One commonly used method is to estimate logistics costs as a percentage of GDP. Recent estimates show that logistics costs comprise about 24 percent of GDP in Indonesia, while in neighboring Thailand and Malaysia they account for 16 percent and 13 percent of GDP, respectively. Micro-level, manufacturing firm surveys carried out by the World Bank in Indonesia, Thailand and Malaysia, also show that logistics costs, at 20 percent of sales, are significantly higher in Indonesia than in both Thailand (15 percent) and Malaysia (13 percent).

A significant component of logistics costs is inventory costs, which are also significantly higher than in neighboring countries

A recent World Bank survey of Greater Jakarta, Surabaya, Semarang, Palembang, Medan and Makassar provides a detailed breakdown of logistics costs in manufacturing firms in Indonesia. For manufacturers, the average total logistics costs of 20 percent of sales can be broken down as follows: 17 percent logistics administration, 17 percent warehousing, 26 percent inventory, and 40 percent transport and cargo handling. Indonesia’s inventory costs are significantly higher than those of its peers: in Thailand they contribute 16 percent and in Malaysia 13 percent to total logistics costs. This reflects the uncertainty in supply chains in Indonesia. Many manufacturers simply do not know when their inputs or parts will arrive due to uncertainty in port handling, paperwork and road transport. To avoid production delays, firms keep inventories high, which increases overall logistics costs.

The under-utilization of assets is a common thread running through all the components of logistics costs in Indonesia

High logistics costs in Indonesia correlate with a low productivity of assets (trucks, vessels, warehouses, inventory, etc.). Most logistics assets are poorly utilized and therefore unproductive. However, these costs are hard to quantify in isolation. Examples include the excessive time ships spend in transit due to long turnaround times of vessels in port, the time needed to have goods released from ports, the fact that trucks have to wait for hours at ports before cargo can be picked up, and poor port-hinterland connections and congested roads. The same World Bank survey of manufacturers found that trucks travelling between industrial estates in West Java and the Tanjung Priok port in Jakarta spent 60 percent of their time either queuing or stuck in traffic. Apart from reducing the productivity of trucking assets, this can lead to trucks missing a vessel for cargo transfer or the late departure of a vessel from port.

Maritime supply chains in Indonesia, especially to the eastern islands, are long and fragmented

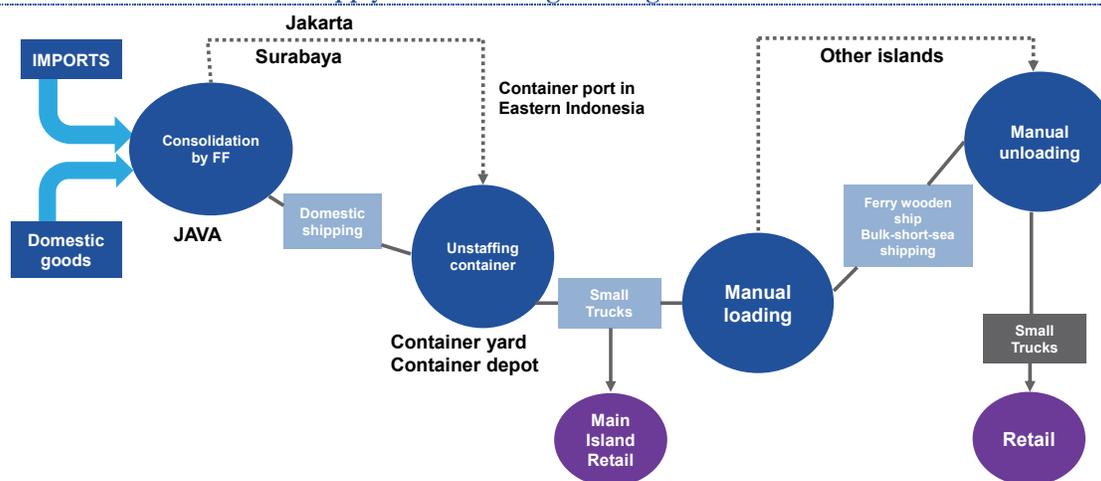
(ii) Long and highly fragmented supply chains to eastern Indonesia

The high logistics costs incurred by the poor utilization of logistics assets are exacerbated by long and broken supply chains to eastern Indonesia (see Box 3). A standard shipment from Java to eastern Indonesia makes stops at two ports, and the goods are loaded and unloaded manually at least three times before arriving at the destination (Figure 27). The typical supply chain also includes hinterland connections in small trucks, and the use of small ferries and/or wooden ships to arrive at the outer-most islands. These modes of transport are inefficient in terms of time, handling, and ensuring goods arrive in good condition, further driving up costs. In addition, the purchaser is usually unaware of the status of his shipment, as tracking and tracing capabilities are limited. These information gaps and supply-chain operating inefficiencies usually push both producers and retailers to carry larger inventories than would normally be necessary, tying up cash and raising inventory costs and overall logistics costs.

Fragmented supply chains add to backhaul problems, with returning vessels often less than half full

Such fragmented supply chains make it challenging to provide cost efficient logistics in the return direction (backhaul) to help bring products from the outer islands to meet domestic demand in Java and Sumatra, or for export markets. Often vessels returning to Java and Sumatra from eastern Indonesia are more than 70 percent empty (this is known as the backhaul problem). This compares with most vessels being 80-90 percent full on their outward voyage.

Figure 27: Indonesia's maritime supply chains are long and fragmented



Note: FF stands for freight forwarder.

Source: World Bank, 2015, "Improving Indonesia's Freight Logistics System: A Plan of Action"

(iii) Long turnaround times and low levels of efficiency in ports and port services

Shipping times are closely correlated with time spent in port

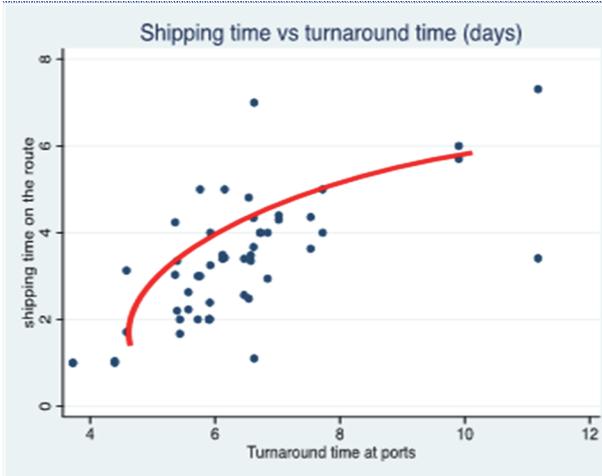
The time spent in port contributes to long shipping times on domestic routes (Figure 28). In addition, vessel turnaround times are often uncertain and unreliable. Shipping lines have to anticipate this uncertainty into their schedules, so shipping times increase by two days or more if a vessel stays at a given port for more than three days, thereby under-utilizing shipping assets.

Low levels of efficiency are prevalent in ports and port services...

Surveys of domestic shipping lines undertaken for the World Bank study mentioned above suggest that the low levels of efficiency in ports and port services are preventing shipping lines from meeting their schedules. For example, at the pre-berth stage, the availability of slots and the programming of berth windows can be

problematic. When berthing, the working hours of laborers/stevedores can be limited and labor productivity is often low, while once in the dockyard the manual stuffing or stripping of containers is often required before goods can leave the port. Although the survey results suggest that port performance has generally improved over the past five years, the time spent in some ports is still often as much as half the sailing time. This is especially common in eastern Indonesia.

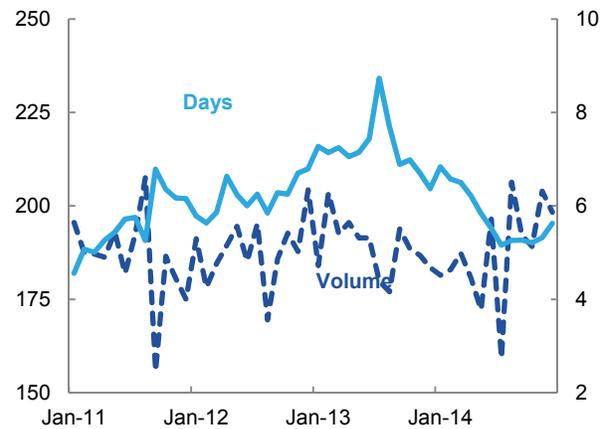
Figure 28: Shipping times are closely correlated with port turnaround times...



Source: World Bank staff estimates

Figure 29: ... while cargo volumes do not explain long container dwell times

(volumes, LHS, thousand TEUs; days, RHS)



Note: Data for Tanjung Priok Port, Jakarta. TEUs stands for 20-foot equivalent units

Source: Japan International Cooperation Agency; World Bank staff calculations

...and container-handling charges can be high

In addition, some ports have very high container-handling charges that are not commensurate with the quality of services. In fact, container-handling charges are higher in ports where turnaround times are longest, reflecting the bargaining power of unionized labor instead of the productivity of the services provided.

In road transport, uncertainties arise from congestion, delays and low-quality services

The sources of uncertainty in land freight transport come mainly from congestion, delays and the low quality of services. A World Bank survey of 83 trucking firms operating in the Greater Jakarta (*Jabodetabek*) region highlighted prolonged idle and waiting times due to congestion or queuing at the port (on average, one third of the total roundtrip time to and from Tanjung Priok is spent waiting at factories or the port), and low efficiency in synchronizing cargo deliveries and pick-ups. This represents another example of the under-utilization of logistics assets.

(iv) Poor trade facilitation and long dwell times caused by onerous bureaucratic requirements

Trade facilitation through full 24/7 operations remains elusive

Despite serious efforts in recent years to improve trade facilitation at Tanjung Priok port, reforms have lost momentum due to partial implementation. For example, 24/7 operations, which will require all port agencies to be properly funded to remain open throughout the weekend, are not yet available. Furthermore, some unnecessary rules such as pre-verification inspections, which provide no intrinsic value, remain.

Long dwell times add to already high costs

Container dwell time measures the total time spent removing containers from the port, from the time a vessel berths to the point when the container leaves the port premises. For producers, especially those of exports and re-exports, longer dwell

time means delays in the availability of inputs, increasing uncertainty and requiring higher inventory levels and carrying costs. Once again assets, both in the form of inputs and logistics resources, are tied up instead of being put to productive use.

Long dwell times are mainly caused by lengthy customs clearance procedures

The primary explanation for long dwell times is delays caused by administrative and bureaucratic procedures in submitting the customs declaration (*persetujuan impor barang*, PIB). Although Tanjung Priok operates close to full capacity (thus giving the terminal operators little physical room in which to maneuver), port infrastructure cannot fully explain the frequent long delays in clearing containers (Figure 29). There is very little correlation between the volume of cargo handled and dwell time. Instead, long bureaucratic processes are the main cause of delays in the pre-customs clearance stage and also during customs inspections.

(v) A fragmented regulatory environment, complex investment rules and restrictions on FDI

Too many institutions issue and implement too many regulations, raising logistics costs

Indonesia's logistics service providers (LSPs), such as trucking firms and freight forwarders, operate in a highly fragmented regulatory environment. Too many institutions issue and implement regulations. Nine national laws and many more ministerial decrees and local government regulations guide the logistics environment. This fragmentation means that laws and regulations are developed independently by each ministry, resulting in frequent conflicts of interest. Making matters worse, many local government regulations target logistics as an easy source of revenue, requiring duplicative and unnecessary permits, fees for which no services are provided, fees for the transport and loading/unloading of goods, and trade barriers between districts.

The regulatory environment in Indonesia does not facilitate investment in multi-activity companies and integrated services

As a growing sector, the logistics services industry is constantly evolving and trying to meet new demands. However, complex rules for investing in the sector and limited access to markets hamper this process. First, the regulatory framework does not fully recognize logistics as an activity in its own right, providing no facilitation for the integration of supply chain services. LSPs are required to separate their business into different legal entities for each specific activity. For instance, trucking, freight forwarding and warehousing all need to be registered with different agencies. Second, restrictions on FDI in logistics activities since 2014 have limited foreign ownership to either 30 or 49 percent (depending on the activity) and the flexibility needed to establish integrated LSPs. Third, transport operators are required to obtain 12 permits at the national and regional levels and, as a consequence, the Ministry of Transport has to process about 2,000 permits daily. Lastly, dominant players in the sector, such as labor unions and state-owned enterprises, often have monopoly control over bottlenecked infrastructure facilities such as ports and container terminals.

Warehouses are overwhelmed with reporting regulations, while FDI is restricted

Burdensome reporting requirements and an incoherent FDI policy for commercial warehousing also undermine the logistics sector. For instance, warehouse owners, managers or tenants must submit to the local government, and also copy the Ministry of Trade, a monthly administrative report on all item names, the number of items, time of entry, time of release and the daily amount of goods stored in the warehouse. In addition, in 2014 warehousing was listed under the Negative Investment List (*Daftar Negatif Investasi*, DNI) with a 33 percent foreign equity limit, while the cold-storage warehousing limit outside Bali, Java and Sumatra is 67 percent. On February 11, 2016, the Government announced a revision of the DNI, according to which cold storage is expected to become open to 100 percent foreign ownership and general warehousing to 67 percent.

Current fiscal rules also add to logistics costs

In addition, the existing value-added tax (VAT) regime contributes to higher logistics costs and reduced their international competitiveness. As sea and land transport services and domestic air services, which are an integral part of international air shipping, are exempt from VAT, firms cannot claim back the VAT paid on their inputs, including bunker fuel.³⁸ This places domestic companies at a disadvantage to international competitors, as most countries apply a zero VAT rate to international shipping, which allows them to claim the refund on their input VAT and reduces their business cost. Finally, the different VAT treatment of domestic and international shipping services results in higher accounting costs for large firms providing both services.

(vi) Infrastructure gaps in logistics

All ports in Indonesia, regardless of size, need upgrading

Lack of investment in infrastructure has long been one of the key impediments to Indonesia's economic development; this applies equally to freight logistics infrastructure.³⁹ From a sea freight logistics perspective, inefficiencies in port services due to the lack of appropriate infrastructure greatly affect the performance of the rest of the supply chain. Some of the larger and busier ports are currently able to operate at an acceptable performance level, but are subject to the constraints on hinterland connections and to the regulatory difficulties of expanding activities with private sector participation. In fact, all ports in Indonesia, regardless of size, are in need of capacity upgrades, better hinterland access, and/or technological enhancements.

Land transport is dominated by trucking, historically encouraged by fuel subsidies

From a land transport perspective, trucking is the main mode of transport for distributing final products from production centers to markets. Historically, one reason for this was the availability of subsidized fuel. Traders use trucking services widely as few reliable alternative modes of transport, such as rail or inter-island shipping, exist in Indonesia. Despite subsidized fuel, trucking costs in Java were higher than international benchmarks as a result of congestion. For example, the distance between West Java's industrial zones and ports is about 60 km on average, but trucks make only one trip per day. The average truck-trailer transport cost across Java is USD1.31/km, compared with a worldwide average of USD1.00/km with a likely longer average trip distance than trucks in Java.

³⁸ This VAT regime applies to companies with gross annual turnover exceeding IDR 4.8 billion.

³⁹ See Part B.2 of the October 2013 *IEQ* for a discussion of the issue of improving port infrastructure.

Box 3: A snapshot of the logistics industry in Indonesia

Indonesia's logistics industry is highly fragmented. With the exception of port operators, most LSPs are family-owned firms that focus on select markets or geographic areas. They usually operate as small freight forwarders arranging land and sea transport, especially from ports to inland destinations, and usually have few, if any, fixed assets. A small segment arranges inter-island shipments, but only a few LSPs have sufficient volume to act as non-vessel operating common carriers.

Third-party logistics providers (3PLs) include international firms operating in Indonesia through joint ventures and larger, more innovative domestic freight forwarders, especially those experienced in courier services. The core business of modern 3PLs is warehousing and distribution, providing a platform for value-added services. These 3PLs tend to prefer to lease storage facilities and manage warehouses for others. Warehousing involves inventory management and distribution by 3PLs for vendors or retailers. The largest 3PLs use warehouse management systems that are able to interface with clients' enterprise resource planning systems.

The road freight transport industry comprises two main segments: freight transport to and from ports and regional and urban freight transport. Small freight forwarders and road freight firms with heavy trucks dominate the first segment. Regional and urban freight transport is provided by both small and large firms with a wide variety of vans and trucks. The trucking market is highly fragmented: analysis of firms that provide trucking services in Tanjung Priok reveals that over 75 percent have 20 or fewer trucks. While some consolidation is taking place, there is little policy support to aid the process. This fragmentation means that small firms enter a vicious circle of low revenues in which traffic congestion increases idle time, making operations increasingly unprofitable. This results in overloading practices to compensate losses, jeopardizing road safety. Smaller firms often have old trucks, as they cannot afford new ones. Larger firms involved in regional transport replace trucks every 8 years, as their trucks clock 80,000 to 120,000 km per year, allowing them to cover operational and depreciation costs.

Inter-island container services are competitive. Five large lines operate a fleet of 170 vessels and carry about half the total traffic, while 52 smaller lines operate the remaining fleet of container vessels. Almost all container ships have cranes installed on deck (geared) and can call at ports that lack container-handling equipment. Capacity varies from below 100 TEUs up to 1,800 TEUs, with an average of about 300 TEUs. Larger vessels (>700 TEUs) account for only 14 percent of the container fleet, but about one-third of total fleet capacity. The average vessel age is about 20 years. Most vessels are purchased second hand, although some younger vessels in the 300-600 TEUs are new. Shipping lines continue to purchase geared vessels despite the potential savings in capital and operating costs of gearless vessels, as there is a reluctance to depend on ports to provide reliable services. In addition, there is a large number of *R0R0* (ferries) and wooden vessels that transport unitized cargo. *R0R0* vessels tend to be small, with an average gross register tonnage equal to container vessels with a 20 TEU capacity.

Interviews with firms suggest that the average operating speed of the container fleet is about 10 to 12 knots, even though the design speed for such ships is 15-18 knots. Slow steaming is a common practice in Indonesia because of the short distances travelled. For the shorter routes the inter-port distance can be covered in 1-2 days and so any increase in speed would only reduce the travel time by a few hours, which would then be spent waiting in port. The reduction in speed provides major savings in fuel costs, which account for most of the vessels' operating costs.

c. Essential reforms and a framework for policy action

Four key areas of logistics reform are evident, starting with the creation of a Logistics Task Force

Mapping of the various "symptoms" of Indonesia's poor freight logistics system reveals an interconnected relationship across four key areas: infrastructure, governance, supply chain fluidity, and service quality/competence. This inter-relationship requires a holistic approach to logistics reform. First, the creation of a Logistics Task Force with strong political backing and a clear mandate to implement and supervise cross-cutting reforms or public investments in the freight logistics system would help to improve inter-agency coordination. It would also serve to increase the quality and effectiveness of reform implementation.

Second, lower entry costs for LSPs and 3PLs can foster development of high quality logistics services

Regulatory changes of the logistics sector are needed to encourage investment in more efficient and diversified logistics services. Such changes could be implemented in areas such as barriers to entry, competition, the fiscal regime, and internal barriers, with a view to lowering the entry and operating costs of quality LSPs and 3PLs. One option would be to reduce the multiple restrictions on FDI in logistics and recognize the importance of FDI as a source of expertise.

Third, improved supply chain efficiency can help firms compete...

There is an urgent need to reduce regulatory bottlenecks in the supply chains which are essential for the competitiveness of firms and their ability to respond to market opportunities. Supply chain efficiency is undermined by, for instance, bottlenecks in ports with long dwell times and industrial centers with poor warehousing facilities. To shorten container dwell times, port operators could be mandated by the Government to measure dwell times in all international ports and domestic container terminals and make the data publicly accessible online.

... while genuinely paperless systems would help to improve trade facilitation

Indonesia has partially implemented a National Single Window (INSW) facility which allows parties involved in trade and transport to lodge standardized information and documents with a single entry point to fulfill all import, export, and transit-related regulatory requirements. However, no effort has yet been made to revisit existing clearance procedures and risk management in border agencies. However, the introduction of an INSW Agency in July 2015 is a step toward a fully-automated single window facility and bodes well for the future.

Finally, the prioritization of port expansion or relocation can help close urgent infrastructure gaps

To address the most urgent gaps in logistics infrastructure, decisions must be fast-tracked about which ports can be feasibly expanded in their current locations, and which ports are simply too constrained by their congested urban environments and should be relocated outside the cities they currently serve. Prioritized ports should receive sufficient investment funding to clear approach channels, extend existing quays to increase berthing capacity, and install dockside cranes to increase loading/unloading capacity and efficiency. Finally, the participation of private operators could be encouraged either through public-private partnerships (PPPs) or through private sector projects. At present, only the Pelindo state-owned port companies have an (international) private sector counterpart, which ensures that the terminals operate with the most sophisticated technology to keep productivity high.

2. Aligning pricing, regulations and investments to support sustainable energy development

The Government's stated 23 percent renewable energy commitment set the stage for a re-evaluation of the energy mix in Indonesia

At the 21st Conference of Parties (COP21) in Paris in December, President Jokowi committed to reach a target of 23 percent renewable energy in the primary energy mix by 2025. This is a clarion call to re-evaluate the energy mix in Indonesia, particularly in the power sector. The stakes are high. New energy infrastructure is urgently needed to meet rising demand. Indonesia's demand for electricity is projected by the Government to grow at about 8.8 percent per year from 2015 to 2024, from 219.1 to 464.2 terawatt hours (TWh).⁴⁰ Once built, infrastructure and the systems and policies that support it are hard to change, and their environmental and social footprint will be locked in for decades. Getting the right packages of pricing, regulations and investment policies, tailored to the characteristics of each clean energy source and to energy consumers, is no easy task. But the benefits to society, as well as the global community, are significant (Box 4). Given the complexities of Indonesia's diverse set of energy sector challenges, this article identifies a few areas that can help to accelerate the achievement of the Government's sustainable energy objectives.

Box 4: Indonesia's clean energy policies can yield local and global benefits

The World Bank estimates that the implementation of a host of policy measures could contribute to a significant reduction in Indonesia's greenhouse gas (GHG) emissions and provide net economic benefits.¹ Specifically, full implementation of the recent electricity tariff reforms, the Performance Based Regulation for calculating electricity subsidies to the state-owned power utility PLN, facilitation of licensing for Independent Power Providers (IPPs), and implementation of the 2014 Geothermal Law would yield a potential reduction of GHG emissions in the range of 254 to 487 million tons on a lifecycle basis. It also saves the economy a conservatively estimated USD28.8 million annually in avoided environmental damages. This excludes other financial benefits from reduced budget subsidies. It should be noted, however, that the GHG impact of policy interventions is inherently uncertain compared to specific investment projects particularly because the number, size and timing of investments that may materialize as a result of specific policy interventions are harder to estimate with any certainty.

¹ World Bank, 2015, Indonesia - sustainable and inclusive energy development policy loan program, p.36
<http://documents.worldbank.org/curated/en/2015/12/25251449/indonesia-sustainable-inclusive-energy-development-policy-loan-program>

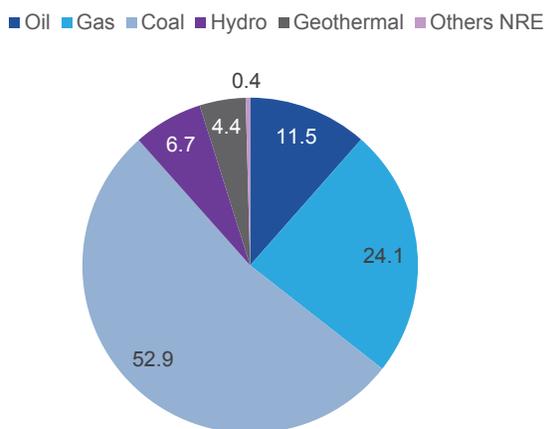
Coal is king in Indonesia's power sector, but does not have to dictate its energy future

Increasing reliance on cheap, domestic coal to meet growing demand and for energy security does not have to dictate Indonesia's energy future. Coal is the current dominant fuel source for domestic electricity generation, accounting for 52.9 percent of power supplied in 2014 (Figure 30). Current forecasts see this dominance increasing substantially from 2015 to 2024, both in terms of coal's share in total electricity generated (Figure 31) and share of installed generation capacity. The projected increase in Indonesia's installed generation capacity is 70.4 gigawatts (GW) in the same 10-year period, and under current plans around 60 percent of new generation capacity is expected to come from coal, 20.1 percent from gas, 13.2 percent from hydro, 6.8 percent from geothermal, and 0.1 percent from other renewables. But the archipelago is endowed with significant renewable energy potential as well as natural gas reserves. Hydropower and geothermal resources represent an estimated 75 GW and 29 GW of potential power capacity, respectively. Solar and biomass energy also offer new opportunities. In addition, Indonesia has the third largest conventional natural gas reserves in the Asia Pacific region (about

⁴⁰ PLN's General Business Plan (*Rencana Usaha Penyediaan Tenaga Listrik*, RUPTL) 2015-2024

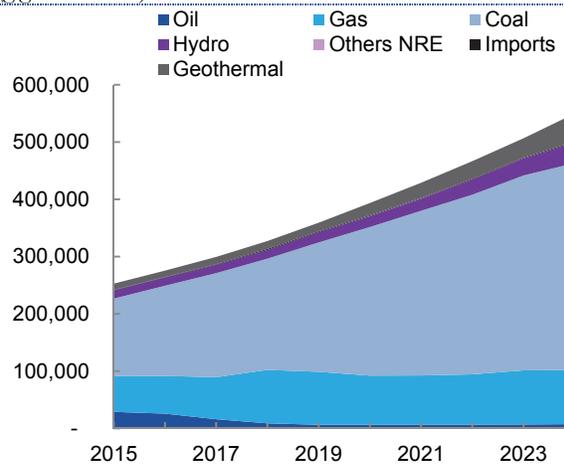
103 trillion cubic feet).⁴¹ These domestic resources are opportunities to diversify the fuel mix which can strengthen energy security, reduce the environmental impacts of coal use, and move Indonesia toward achieving the Government’s objectives of shifting toward a more sustainable energy pathway.

Figure 30: Electricity generation by source of primary energy, 2014
(share of total, percent)



Source: National Energy Council (DEN)

Figure 31: Projected electricity generation by source of primary energy, 2015-2024
(gigawatts hours)



Source: RUPTL 2015-2024

The Government has a road map to a more sustainable energy future

Government policy and targets help provide a framework to make the transition to a more sustainable energy path. In June 2015, the Ministry of Energy and Mineral Resources (MEMR) issued a roadmap, “Accelerated Development of New and Renewable Energy (2015-2019),” to support achieving a goal of 23 percent of Indonesia’s primary energy needs being met from new and renewable energy sources by 2025. In addition, the 2015-2019 National Medium-term Development Plan (*Rencana Pembangunan Jangka Menengah Nasional*, RPJMN) defines specific near-term objectives for the energy sector. These include

- To reliably and efficiently meet rising energy demand by expanding domestic, primary energy supply through increased oil and gas production, as much as possible, to address energy security concerns;
- To transition toward a sustainable energy sector development path through increased use of domestic gas, renewable energy and by scaling up energy efficiency measures;
- To achieve a more efficient and competitive energy sector; and
- To achieve nearly universal access to electric power.

In addition, as part of its Nationally Determined Contribution (NDC), Indonesia has committed to reducing its GHG emissions by 29 percent by 2030 (and by 41 percent with international assistance).

⁴¹ These reserves consist of mature and declining conventional gas fields, stranded conventional gas accumulations (which were not commercialized owing to a lack of infrastructure), and both conventional and unconventional gas resources that have yet to be fully evaluated.

To achieve the road map's objectives sharper pricing, regulations, and investment policies must work well together

As identified in MEMR's roadmap, harvesting Indonesia's clean energy potential can be accelerated with well-coordinated pricing policies, regulations, and well planned investments. New policies promoting cleaner fuels will interact with existing policies supporting infrastructure and short-term investments. A comprehensive and coordinated approach recognizes that no single instrument – pricing, regulations or investment policy – will provide a silver bullet. This article identifies some areas where supporting policies may be needed to achieve intended outcomes. Generally, well-coordinated policies, regulations and investments that lead to a cleaner fuel mix should be an outcome of a governance system where incentives and accountability mechanisms are in place to plan for and reach Government targets. Strengthening sector governance and improving its efficiency and competitiveness are essential to delivering on more ambitious clean energy targets. While the agenda is too broad to cover in one article, efforts towards greater clarity in institutional responsibilities and accountability for setting and implementing energy policies across and within government agencies should continue.

a. Pricing

Pricing can go a long way towards incentivizing efficiency and production and the use of renewables

Sound energy pricing policies are one of the sharpest instruments a government has to create incentives for efficient production and use of energy. In addition to the well-publicized reduction in fuel subsidies, the Government has made recent progress in the power sector. First, since 2014 it has adjusted most electricity tariffs to better reflect the actual costs of delivering electricity and customers' ability to pay. Second, an automatic electricity tariff adjustment mechanism has been introduced to respond to changes in fuel prices, exchange rates, and inflation on a monthly basis. These two measures have sent stronger signals to consumers to use electricity more efficiently. Third, the Ministry of Finance adopted a Performance Based Regulation with a new method to calculate PLN's general subsidy, known as the Public Service Obligation. When fully implemented, it will introduce multi-year efficiency benchmarks in areas that are within PLN's control. If PLN meets those benchmarks within the regulatory period, it can keep the cost savings for reinvestment. Benchmarks can be readjusted after each regulatory period. Importantly, the regulation allows for a pass through of costs not controlled by PLN. This is understood to include costs associated with PLN's purchase of renewable electricity, whose prices are fixed by the Government and not PLN. The Performance Based Regulation creates incentives for PLN to become even more efficient while ensuring the Government's obligation to ensure PLN is financially viable. A three year transition period is foreseen in the regulation, starting in 2017, and is overseen by an Inter-Ministerial Team comprising the Ministry of Energy and Mineral Resources, Ministry of Finance and the Ministry of State-owned Enterprises.

But fixed tariffs for renewables also need a reliable financing mechanism to cover any of their incremental costs

Among the many issues that need to be addressed to spur investment in renewables, the reliable financing of the incremental costs of renewable electricity needs urgent attention. Indonesia has chosen to place a value on environmental goals by setting targets for cleaner energy. While some tariff policies were introduced to reflect these goals, they have not delivered the expected results. Small-scale feed-in tariffs for hydropower and biomass have been adjusted because they were perceived to be too low for investors. A recent ceiling price system based on competitive tenders for large-scale geothermal power is also under review. Irrespective of how fixed tariffs for renewable energy are calculated (feed-in tariffs or competitive selection of qualified investors based on lowest evaluated prices up to a ceiling), there is a need

to have a credible, reliable financing mechanism in place to cover any incremental costs of renewables. While the Performance Based Regulation appears to give authority to cover these uncontrollable costs of PLN (because PLN does not set the renewable tariffs), the lack of a clear and reliable source of funds to cover the difference appears to be an obstacle for PLN and private investors. In other countries, this source of funds is usually secured through an electricity consumer surcharge as in the case of Germany, China and Malaysia.

b. Regulations

Sustainable energy policies also need supporting regulations to maximize their effectiveness

Regulations should facilitate policy implementation, set clear roles, accountabilities and align incentives so that government, state-owned enterprises, the private sector and civil society all contribute to achieving the Government's objectives. For instance, as noted above, the feed-in tariff will only be able to deliver results if accompanied with a policy decision and regulation on financing the resulting incremental costs. Also, passing the 2014 Geothermal Law was a great leap forward for geothermal power development and will help to remove many barriers. However, to take full effect it requires supporting regulations that adequately cover tariff setting and financing, environmental and social issues and provide a framework for private sector participation. There is no one-size-fits-all approach to renewables. For instance, the high upfront capital costs associated with geothermal power development make its risk profile more like oil and gas as opposed to wind and solar which require much less upfront capital. Wells drilled by investors may come up dry or short of their estimated potential. The Government is re-assessing the package of policies that promote geothermal power. Aside from getting the pricing right, it is essential that it adequately addresses these upstream drilling risks to help unlock private investment. In addition, the new Geothermal Law opened doors to development in conservation forest areas. Implementing regulations are needed to define requirements and procedures that provide a clear path to developing geothermal power in these areas while addressing environmental risks and ensuring local benefit sharing.

c. Investments

Investments are ultimately needed to achieve government objectives

The Government has undertaken a series of additional reforms aimed to improve the investment climate for the energy sector. This is critical particularly because achievement of its goals for the sector largely depend on private investment. Efforts should continue to de-bureaucratize investment approvals but without diluting essential government functions to identify and address environmental and social impacts. Strengthening the capacity of the Government to carry out these functions will be as effective as cutting red tape.

And planning is essential to ensure that investments are at the least cost to Indonesia

In addition to sound pricing and regulations, and a friendly clean energy investment climate, investments need a strong and transparent planning process. Investments in the power and gas sectors are most critical for achieving the Government's clean energy goals. As a developing country, Indonesia's decision to achieve new generation and electricity access goals with a cleaner fuel mix in the power sector means that only the most cost-effective projects should be implemented. This places a high premium on power sector planning. Irrespective of the technologies employed, a sound sector planning process is a foundational element to defining sector objectives, and transforming them into reality at the least cost to the country. While there is no single blueprint for Indonesia to follow, other countries that have

faced similar rates of electricity demand growth in the past. Chile, Brazil, Peru and Colombia offer some lessons (Box 5).

Box 5: Lessons in sound power sector planning from Latin America

- Detailed planning for power sector development by the central government (led by the energy ministry) is essential for the expansion of generation and transmission capacity in countries with high growth rates. The market cannot be expected to make policy decisions about a country's optimal energy mix.
- The sector ministry assesses the country's resources, defines projects that are least costly and are the most socially and environmentally acceptable, and identifies the projects for private investment. Such planning requires strong institutional capacity. Where this capacity is weak, power utilities have stepped in but found justifiable difficulties reconciling national and corporate objectives.
- Competition ensures that energy facilities are constructed and operated at the least cost. This requires appropriate contractual and regulatory arrangements implemented by competent entities. Serious investors will invest only in capital intensive projects that provide an assured revenue stream. For electricity, this implies credible, long-term contracts for production and an appropriate allocation of risks to parties that are best placed to manage them.
- Taxpayers ultimately pay for the outcomes of the planning process; therefore, public consultation on generation plans is a transparent way to obtain feedback and address criticism.

Consultation and planning can enhance public understanding of investments in sustainable energy

A transparent planning process can also help to evaluate trade-offs and balance objectives to find an acceptable pathway for a sustainable energy future. More ambitious, sustainable and cleaner energy policies will more likely be acceptable to a country only when they do not unreasonably compromise economic and social inclusion goals. More channels for public participation in the planning process can help build understanding of what is planned. Market sounding of new policy packages would gauge investor sentiment to improve the likelihood that policies can be implemented and results achieved. Transparent planning also needs strong policy analysis and planning capacity. The growing complexity of the sector – and increasing demands on it – requires a continuous upgrading of analysis and planning skills.

Indonesia can accelerate completing its universal access goals with a coordinated national approach that could identify more clean energy opportunities

While Indonesia has made major progress in connecting over 84 percent of its households to electricity, a new national approach to planning, financing and implementing its final push for achieving universal access by 2020 may be needed. Indonesia faces two formidable challenges in its access agenda. First, while a high share of Indonesians are connected, the quality of this service varies significantly across the country. Second, the remaining 16 percent may be the most difficult to connect. The government can achieve its 2020 universal access to electricity objective, either by grid-connected electricity or off-grid solutions involving gas, diesel and renewables. Selecting the optimal mix involves careful planning to answer questions about the quality of service needed, affordability, how the Government would finance the investments, who would implement them and how they will be monitored. This process may identify greater use of local renewable resources to help accelerate access.

The country faces a crisis of under-investment in the gas sector

Indonesia also faces a crisis of under-investment in gas supply, which requires policies in three areas: infrastructure planning processes, upstream contractual terms, and midstream regulation. First, gas infrastructure plans set out in the *2015 Gas Roadmap* will need to be developed rapidly but require a well-designed gas infrastructure planning process that addresses technical, economic, financial, environmental and social considerations. A successful planning process identifies project risks and informs decisions on which projects should be developed by the

public sector and which by the private sector. Second, the Government has begun to review the contractual terms for oil and gas exploration and production to make them more attractive while preserving the ability of the Government to capture rent.⁴² Third, the Government also recognizes the need to establish a regulatory framework to encourage incumbents in gas midstream to increase investment in gas transportation, processing and storage infrastructure, and to clarify a role for new entrants. In August 2015, MEMR proposed arrangements for a national gas “aggregator.” The function of an aggregator is to pool gas supplies received at different prices and assure delivery to power, industry and household consumers at regulated prices linked to an average of costs of gas flowing through the system.⁴³ International experience suggests that the efficient operation of national gas aggregation requires regulation to encourage and accelerate investment in mid-stream infrastructure and to guard against the possible abuse of monopoly power. While some countries (e.g., Pakistan and Nigeria) have experienced poor efficiency and governance outcomes which have been difficult to unwind once established, others (e.g., the Netherlands and Turkey) have found ways to accelerate investment and improve performance.

Box 6: Energy efficiency – the cleanest, but under-appreciated domestic resource

One important element that could receive greater policy attention is energy efficiency. High energy intensity of existing and especially new infrastructure – power plants, manufacturing, buildings, roads, vehicles – will lock Indonesia into a pattern of energy consumption that will push it to seek out greater amounts of energy supply. High energy intensity contributes to lower competitiveness by increasing unit costs of production. It also drives up energy bills, increasing the cost of living. With energy efficient industry, appliances, infrastructure and vehicles, people can do more with less, bringing down the cost of consuming energy because less is required to meet the same need.

Policy interactions matter more now than ever and Indonesia’s sustainable energy objectives depend on them

The Government has set in motion a process of adjusting energy policies that match with the RPJMN 2015-2019 and MEMR clean energy ambitions. This will be a formidable challenge. Will it be able to lock into a virtuous cycle of high quality growth of the energy sector or a vicious cycle of unsustainable development? Recent developments suggest the window of opportunity is still open. These include a commitment to reduce the energy sector’s draw on fiscal resources for subsidies, improve the investment climate in the power and gas sectors, expand access to modern, reliable energy, promote energy efficiency and remove constraints to renewable electricity development. This diversification strategy can strengthen energy security and extract maximum value from vastly untapped renewable energy resources. It can also reduce local pollution and environmental concerns from the use of coal. In addition to being good for Indonesia, reducing its heavy reliance on coal also contributes to global efforts to mitigate climate change—an effort that is both economically efficient and socially inclusive. However, in Indonesia’s increasingly complex energy sector, policies, regulations and government

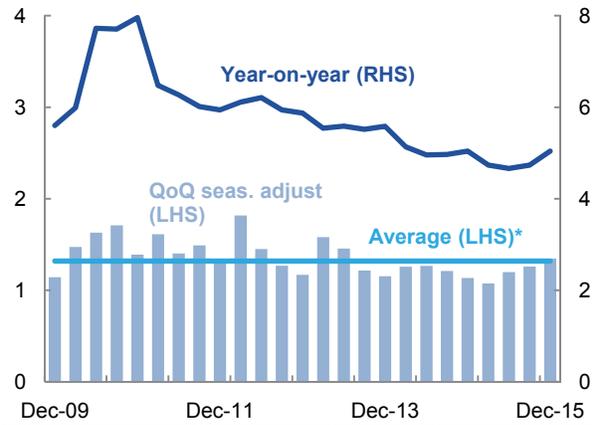
⁴²MEMR has prepared a Ministerial Regulation that adjusts the fiscal and non-fiscal terms of production sharing contracts for unconventional oil and gas. While such resources hold high potential and there has been some success in licensing, only a low level of investment has taken place. MEMR has expressed intentions to shift its focus to the terms and conditions for developing marginally economic conventional oil and gas fields, which may result in a package of incentive measures during the course of 2016.

⁴³The stated motivation for this arrangement is to reduce the burden of negotiation between sellers and buyers, minimize end-use price disparities, curtail the activities of rogue traders, and, where supply lags demand, allocate gas to the sectors in which gas has most economic value. The proposed model envisages that the aggregator will perform gas processing, transportation and storage services as well as the merchant function of taking and delivering gas.

investments often interact. This is especially true when introducing policies that aim to shift the energy mix toward cleaner energy. These interactions need to be evaluated when introducing new instruments, with efficient coordination mechanisms in place to iron out discrepancies. The appropriate allocation of roles and responsibilities between government, state-owned enterprises, the private sector and civil society in the planning, investment and operation of the energy sector is critical to this system. With massive energy infrastructure yet to be built, redoubling efforts to get the right packages of pricing policies, smart regulations, investments and transfers will be good for Indonesia and the world.

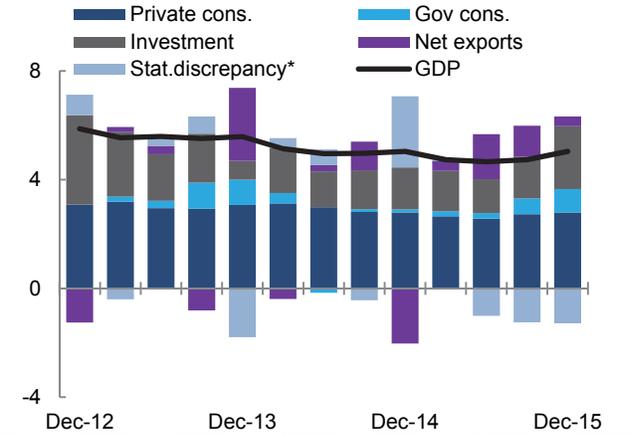
APPENDIX: A SNAPSHOT OF INDONESIAN ECONOMIC INDICATORS

Appendix Figure 1: Quarterly and annual GDP growth
(real GDP growth, percent)



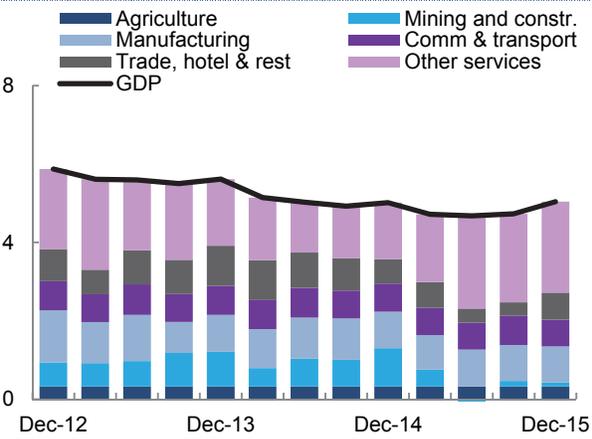
Note: *Average QoQ growth, Q4 2009–Q4 2015
Source: BPS; World Bank staff calculations

Appendix Figure 2: Contributions to GDP expenditures
(contribution to real GDP growth yoy, percent)



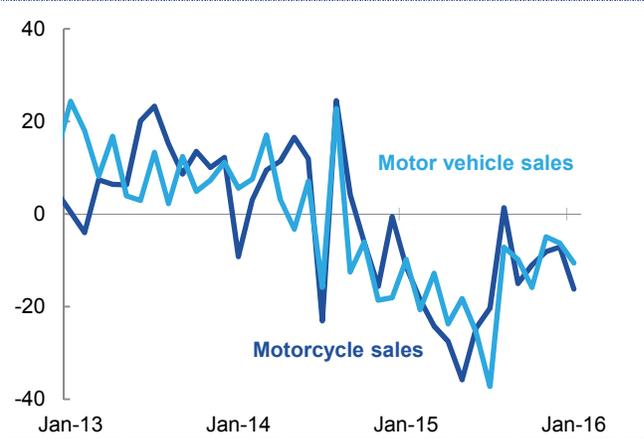
Note: * includes changes in stocks
Source: BPS; World Bank staff calculations

Appendix Figure 3: Contributions to GDP production
(contribution to real GDP growth yoy, percent)



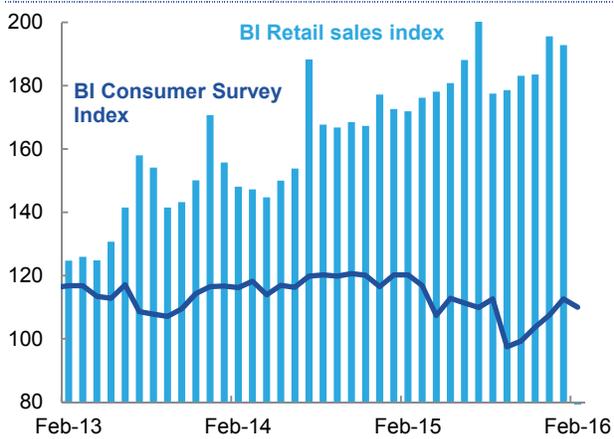
Source: BPS; World Bank staff calculations

Appendix Figure 4: Motorcycle and motor vehicle sales
(seasonally-adjusted sales growth yoy, percent)



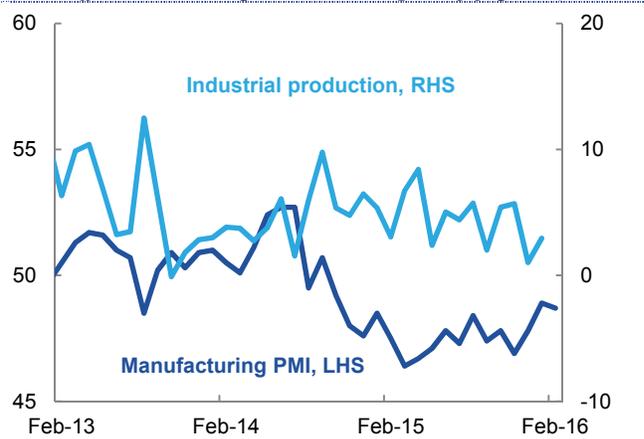
Source: CEIC; World Bank staff calculations

Appendix Figure 5: Consumer indicators
(retail sales index 2010=100)



Source: BI

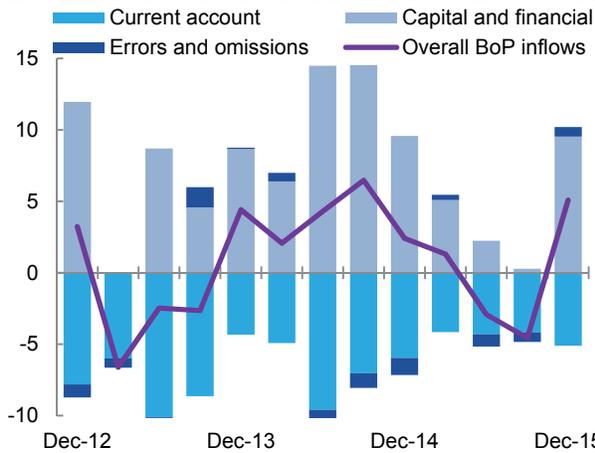
Appendix Figure 6: Industrial production indicators
(PMI diffusion index and production index growth yoy, percent)



Source: BPS; Nikkei Indonesia Purchasing Managers Index

Appendix Figure 7: Balance of payments

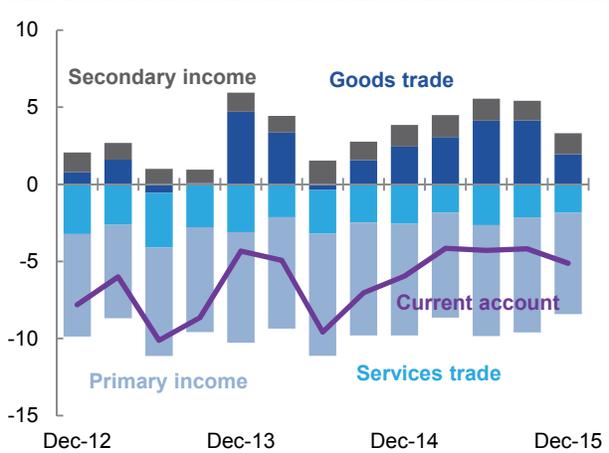
(USD billion)



Source: BI

Appendix Figure 8: Current account components

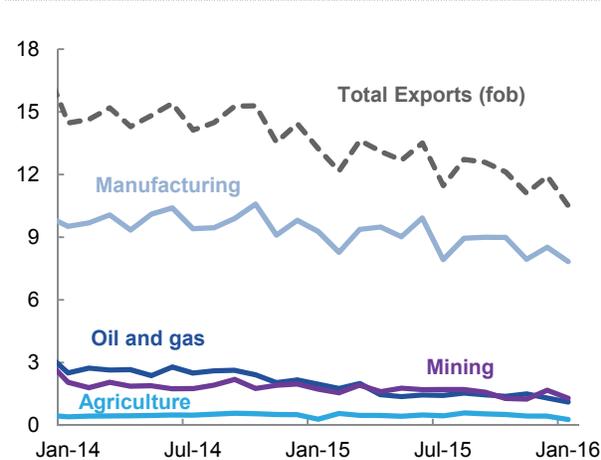
(USD billion)



Source: BI; World Bank staff calculations

Appendix Figure 9: Exports of goods

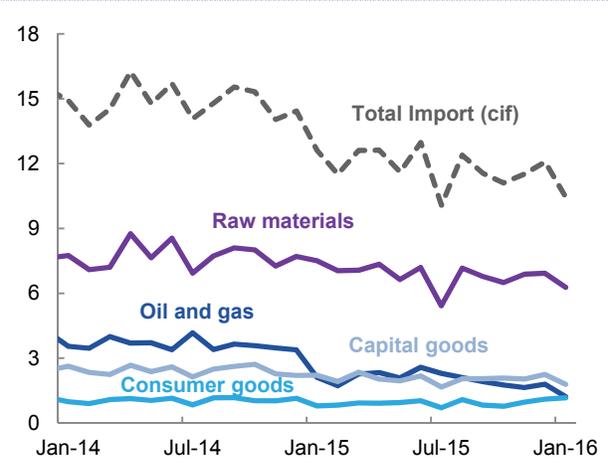
(USD billion)



Source: BPS

Appendix Figure 10: Imports of goods

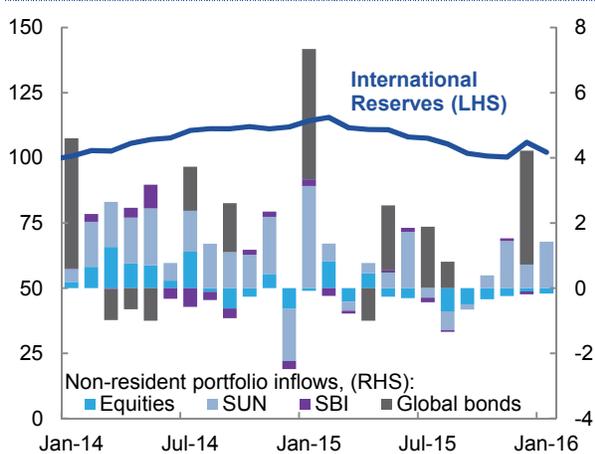
(USD billion)



Source: BPS

Appendix Figure 11: Reserves and capital flows

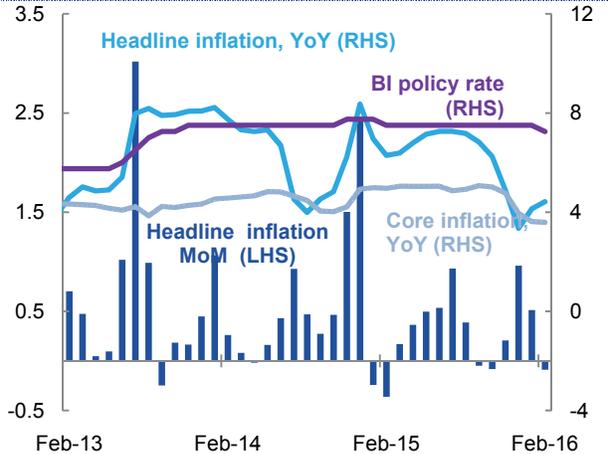
(USD billion)



Source: BI; MoF; World Bank staff calculations

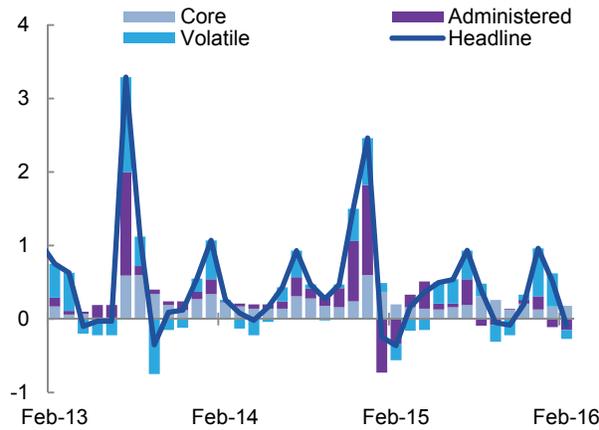
Appendix Figure 12: Inflation and monetary policy

(month-on-month and year-on-year growth, percent)



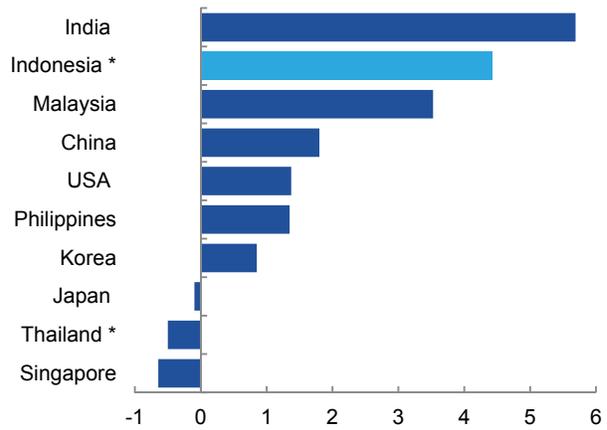
Source: BPS; BI; World Bank staff calculations

Appendix Figure 13: Monthly breakdown of CPI
(percentage point contributions to monthly growth)



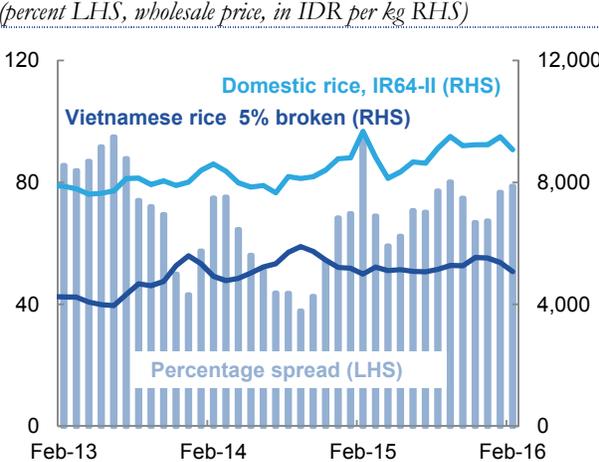
Source: BPS; World Bank staff calculations

Appendix Figure 14: Inflation comparison across countries
(year-on-year, February 2016)



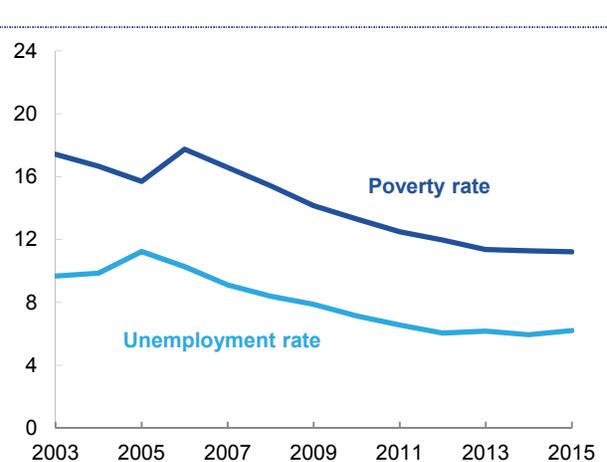
*February is latest available month, others January
Source: National statistical agencies via CEIC; BPS

Appendix Figure 15: Domestic and international rice prices
(percent LHS, wholesale price, in IDR per kg RHS)



Source: Cipinang wholesale rice market; FAO; World Bank

Appendix Figure 16: Poverty and unemployment rate
(percent)



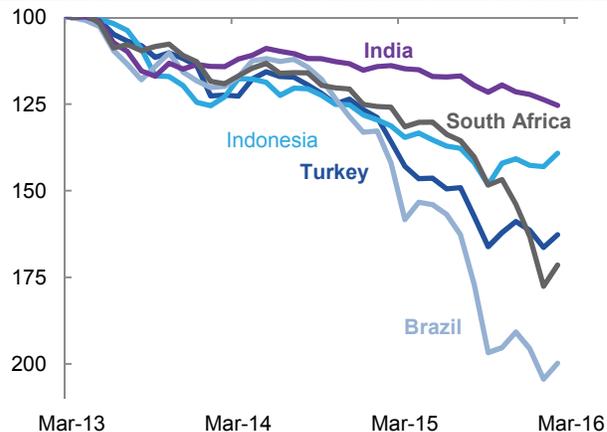
Source: BPS

Appendix Figure 17: Regional equity indices
(daily index in local currency, March 8, 2013=100)



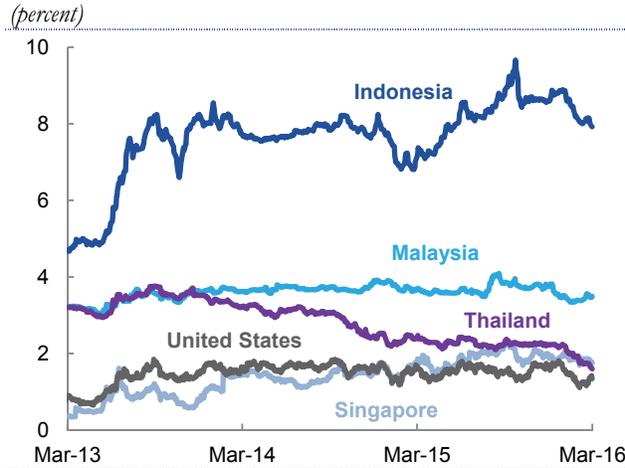
Source: CEIC; World Bank staff calculations

Appendix Figure 18: Selected currencies against USD
(monthly index March 2013=100)



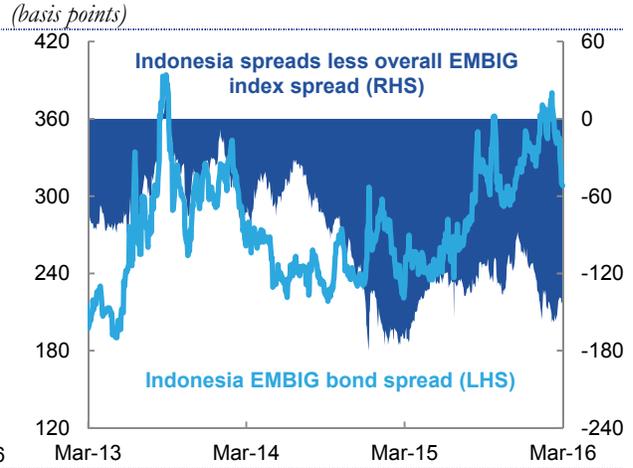
Source: CEIC; World Bank staff calculations

Appendix Figure 19: 5-year local currency gov. bond yields



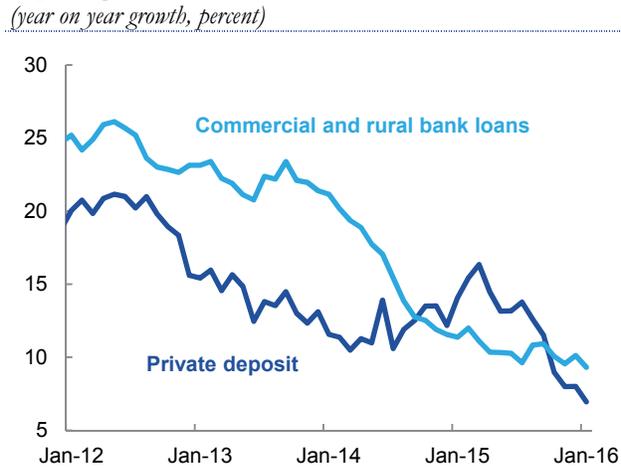
Source: CEIC

Appendix Figure 20: Sovereign USD bond EMBIG spread



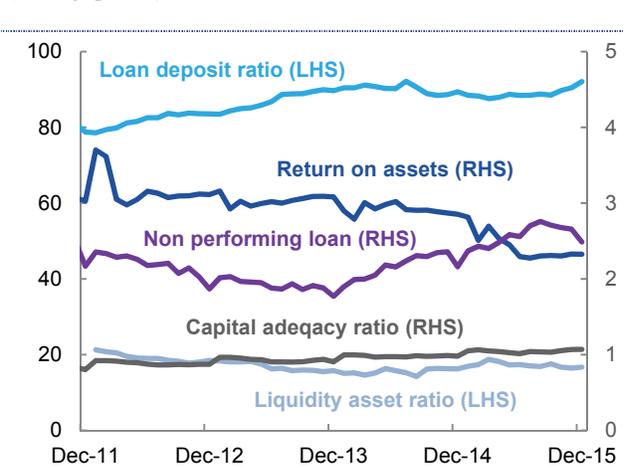
Source: JP Morgan; World Bank staff calculations

Appendix Figure 21: Commercial and rural credit and deposit growth



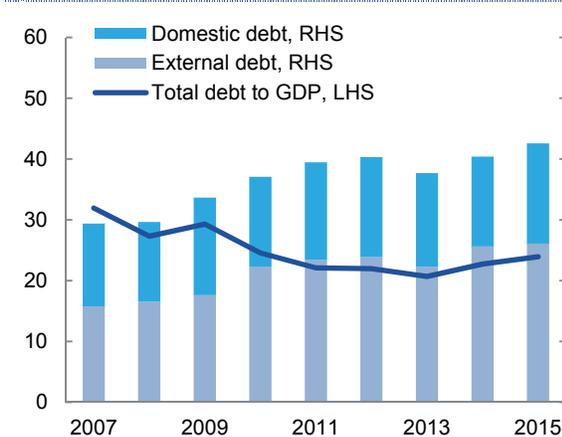
Source: BI; World Bank staff calculations

Appendix Figure 22: Banking sector indicators



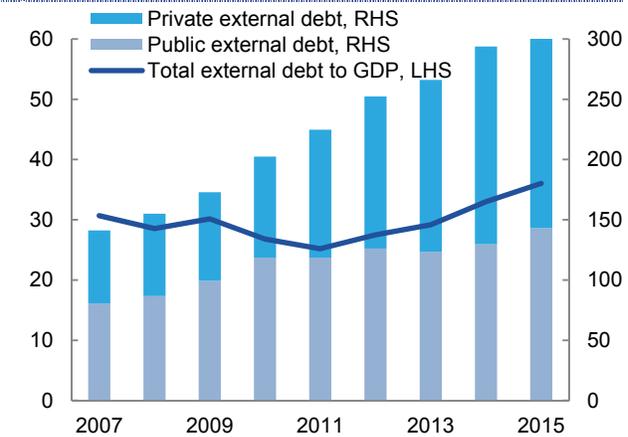
Source: BI

Appendix Figure 23: Government debt



Source: MoF; BI; World Bank staff calculations

Appendix Figure 24: External debt



Source: BI; World Bank staff calculations

Appendix Table 1: Budget outcomes and projections

(IDR trillion)

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|------------------------------------|--------------|--------------|--------------|--------------|-------------------------|--------------|
| | Actual | Actual | Actual | Actual | Preliminary realization | Budget |
| A. State revenue and grants | 1,211 | 1,338 | 1,439 | 1,550 | 1,504 | 1,822 |
| 1. Tax revenue | 874 | 981 | 1,077 | 1,147 | 1,240 | 1,547 |
| 2. Non-tax revenue | 331 | 352 | 355 | 399 | 254 | 274 |
| B. Expenditure | 1,295 | 1,491 | 1,651 | 1,777 | 1,796 | 2,096 |
| 1. Central government | 884 | 1,011 | 1,137 | 1,204 | 1,173 | 1,326 |
| 2. Transfers to the regions | 411 | 481 | 513 | 574 | 623 | 770 |
| C. Primary balance | 9 | -53 | -99 | -93 | -136 | -89 |
| D. SURPLUS / DEFICIT | -84 | -153 | -212 | -227 | -292 | -273 |
| (percent of GDP) | -1.1 | -1.8 | -2.2 | -2.2 | -2.5 | -2.2 |

Note: Budget balance as percentage of GDP is using revised and rebased GDP

Source: Ministry of Finance

Appendix Table 2: Balance of payments

(USD billion)

| | 2013 | 2014 | 2015 | 2014 | | 2015 | | | |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | | | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Balance of payments | -7.3 | 15.2 | -1.1 | 6.5 | 2.4 | 1.3 | -2.9 | -4.6 | 5.1 |
| <i>Percent of GDP</i> | -0.8 | 1.7 | -0.1 | 2.8 | 1.1 | 0.6 | -1.3 | -1.9 | 2.2 |
| Current account | -29.1 | -27.5 | -17.8 | -7.0 | -6.0 | -4.2 | -4.3 | -4.2 | -5.1 |
| <i>Percent of GDP</i> | -3.2 | -3.1 | -2.1 | -3.0 | -2.7 | -1.8 | -1.9 | -1.7 | -2.2 |
| Trade balance | -6.2 | -3.0 | 4.8 | -0.9 | -0.1 | 1.2 | 1.5 | 2.0 | 0.1 |
| Net income & current transfers | -22.9 | -24.5 | -22.5 | -6.1 | -5.8 | -5.4 | -5.8 | -6.2 | -5.2 |
| Capital & Financial Account | 22.0 | 45.4 | 17.1 | 14.7 | 9.6 | 5.1 | 2.2 | 0.3 | 9.5 |
| <i>Percent of GDP</i> | 2.4 | 5.1 | 2.0 | 6.3 | 4.4 | 2.2 | 1.0 | 0.1 | 4.2 |
| Direct investment | 12.3 | 14.8 | 9.3 | 5.8 | 5.0 | 1.7 | 3.5 | 1.8 | 2.3 |
| Portfolio investment | 10.9 | 26.1 | 16.7 | 7.4 | 1.9 | 8.5 | 5.6 | -2.2 | 4.8 |
| Other investment | -1.2 | 4.1 | -8.8 | 1.4 | 5.0 | -5.1 | -6.8 | 0.7 | 2.4 |
| Errors & omissions | -0.2 | -2.6 | -0.5 | -1.2 | -1.3 | 0.4 | -0.9 | -0.7 | 0.7 |
| Foreign reserves* | 99.4 | 111.6 | 101.7 | 111.2 | 111.9 | 111.6 | 108.0 | 101.7 | 105.9 |

Note: * Reserves at end-period

Source: BI; BPS

Appendix Table 3: Indonesia's historical macroeconomic indicators at a glance

| | 2000 | 2005 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|--|-------|-------|-------|-------|-------|--------|--------|--------|
| National Accounts (% change)¹ | | | | | | | | |
| Real GDP | 4.9 | 5.7 | 6.2 | 6.2 | 6.0 | 5.6 | 5.0 | 4.8 |
| Real investment | 11.4 | 10.9 | 8.5 | 8.9 | 9.1 | 5.0 | 4.6 | 5.1 |
| Real consumption | 4.6 | 64.0 | 4.1 | 5.1 | 5.4 | 5.7 | 4.7 | 4.9 |
| Private | 3.7 | 0.9 | 4.8 | 5.1 | 5.5 | 5.5 | 5.3 | 4.8 |
| Government | 14.2 | 6.6 | 0.3 | 5.5 | 4.5 | 6.7 | 1.2 | 5.4 |
| Real exports, GNFS | 30.6 | 16.6 | 15.3 | 14.8 | 1.6 | 4.2 | 1.0 | -2.0 |
| Real imports, GNFS | 26.6 | 17.8 | 17.3 | 15.0 | 8.0 | 1.9 | 2.2 | -5.8 |
| Investment (% GDP) | 20 | 24 | 31 | 31 | 33 | 32 | 33 | 33 |
| Nominal GDP (USD billion) | 165 | 286 | 755 | 893 | 918 | 913 | 890 | 862 |
| GDP per capita (USD) | 857 | 1,396 | 3,167 | 3,688 | 3,741 | 3,668 | 3,530 | 3,374 |
| Central Government Budget (% GDP)² | | | | | | | | |
| Revenue and grants | 20.8 | 16.8 | 14.5 | 15.5 | 15.5 | 15.1 | 14.7 | 15.3 |
| Non-tax revenue | 9.0 | 5.0 | 3.9 | 4.2 | 4.1 | 3.7 | 3.8 | 2.3 |
| Tax revenue | 11.7 | 11.7 | 10.5 | 11.2 | 11.4 | 11.3 | 10.9 | 12.9 |
| Expenditure | 22.4 | 17.3 | 15.2 | 16.5 | 17.3 | 17.3 | 16.8 | 17.2 |
| Consumption | 4.0 | 2.8 | 3.6 | 3.8 | 3.9 | 4.1 | 4.0 | 4.6 |
| Capital | 2.6 | 1.1 | 1.2 | 1.5 | 1.7 | 1.9 | 1.4 | 2.4 |
| Interest | 5.1 | 2.2 | 1.3 | 1.2 | 1.2 | 1.2 | 1.3 | 1.3 |
| Subsidies | 6.3 | 4.1 | 2.8 | 3.8 | 4.0 | 3.7 | 3.7 | 1.8 |
| Budget balance | -1.6 | -0.6 | -0.7 | -1.1 | -1.8 | -2.2 | -2.1 | -1.9 |
| Government debt | 97.9 | 44.3 | 24.3 | 22.8 | 22.6 | 24.1 | 23.8 | 26.6 |
| o/w external government debt | 51.4 | 23.4 | 11.1 | 10.2 | 9.9 | 11.2 | 10.2 | 10.7 |
| Total external debt (including private sector) | 87.1 | 47.1 | 26.8 | 25.2 | 27.5 | 29.2 | 33.0 | 36.0 |
| Balance of Payments (% GDP)³ | | | | | | | | |
| Overall balance of payments | .. | 0.2 | 4.0 | 1.3 | 0.0 | -0.8 | 1.7 | -0.1 |
| Current account balance | 4.8 | 0.1 | 0.7 | 0.2 | -2.7 | -3.2 | -3.1 | -2.1 |
| Exports GNFS | 42.8 | 35.0 | 22.0 | 23.8 | 23.0 | 22.5 | 22.3 | 19.7 |
| Imports GNFS | 33.9 | 32.0 | 19.2 | 21.2 | 23.2 | 23.2 | 22.7 | 19.2 |
| Trade balance | 8.9 | 2.9 | 2.8 | 2.7 | -0.2 | -0.7 | -0.3 | 0.6 |
| Financial account balance | .. | 0.0 | 3.5 | 1.5 | 2.7 | 2.4 | 5.1 | 2.0 |
| Direct investment | -2.8 | 1.8 | 1.5 | 1.3 | 1.5 | 1.3 | 1.7 | 1.1 |
| Gross official reserves (USD billion) | 29.4 | 34.7 | 96.2 | 110.1 | 112.8 | 99.4 | 111.6 | 101.7 |
| Monetary (% change)³ | | | | | | | | |
| GDP deflator ¹ | 20.4 | 14.3 | 8.3 | 7.5 | 3.8 | 5.0 | 5.4 | 4.2 |
| Bank Indonesia interest key rate (%) | .. | 9.1 | 6.5 | 6.0 | 5.8 | 7.5 | 7.8 | 7.5 |
| Domestic credit (eop) | .. | 24.3 | 22.8 | 24.6 | 23.1 | 21.6 | 11.6 | 10.4 |
| Nominal exchange rate (average, IDR/USD) ⁴ | 8,392 | 9,705 | 9,087 | 8,776 | 9,384 | 10,460 | 11,869 | 13,389 |
| Prices (% change)¹ | | | | | | | | |
| Consumer price Index (eop) | 9.4 | 17.1 | 7.0 | 3.8 | 3.7 | 8.1 | 8.4 | 3.4 |
| Consumer price Index (average) | 3.7 | 10.5 | 5.1 | 5.3 | 4.0 | 6.4 | 6.4 | 6.4 |
| Indonesia crude oil price (USD per barrel, eop) ⁵ | 28 | 53 | 79 | 112 | 113 | 107 | 60 | 36 |

Source: ¹ BPS and World Bank staff calculations, using revised and 2010 rebased figures. ² MoF and World Bank staff calculations (for 1995 is FY 1995/1996, for 2000 covers 9 months, for 2015 based on revised State Budget), ³ Bank Indonesia, ⁴ IMF, ⁵ CEIC.

Appendix Table 4: Indonesia's development indicators at a glance

| | 2000 | 2005 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|------|------|------|------|------|------|------|------|
| Demographics¹ | | | | | | | | |
| Population (million) | 213 | 227 | 242 | 245 | 248 | 251 | 254 | 258 |
| Population growth rate (%) | 1.3 | 1.2 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 |
| Urban population (% of total) | 42 | 46 | 50 | 51 | 51 | 52 | 53 | .. |
| Dependency ratio (% of working-age population) | 55 | 54 | 51 | 51 | 50 | 50 | 49 | .. |
| Labor Force² | | | | | | | | |
| Labor force, total (million) | 98 | 106 | 117 | 117 | 120 | 120 | 122 | 122 |
| Male | 60 | 68 | 72 | 73 | 75 | 75 | 76 | 77 |
| Female | 38 | 38 | 45 | 44 | 46 | 45 | 46 | 46 |
| Agriculture share of employment (%) | 45 | 44 | 38 | 36 | 35 | 35 | 34 | 33 |
| Industry share of employment (%) | 17 | 19 | 19 | 21 | 22 | 20 | 21 | 22 |
| Services share of employment (%) | 37 | 37 | 42 | 43 | 43 | 45 | 45 | 45 |
| Unemployment, total (% of labor force) | 8.1 | 11.2 | 7.1 | 7.4 | 6.1 | 6.2 | 5.9 | 6.2 |
| Poverty and Income Distribution³ | | | | | | | | |
| Median household consumption (IDR 000 per month) | 104 | 211 | 374 | 421 | 446 | 487 | 548 | 623 |
| National poverty line (IDR 000 per month) | 73 | 129 | 212 | 234 | 249 | 272 | 303 | 331 |
| Population below national poverty line (million) | 38 | 35 | 31 | 30 | 29 | 28 | 28 | 29 |
| Poverty (% of population below national poverty line) | 19.1 | 16.0 | 13.3 | 12.5 | 12.0 | 11.4 | 11.3 | 11.2 |
| Urban (% of population below urban poverty line) | 14.6 | 11.7 | 9.9 | 9.2 | 8.8 | 8.4 | 8.3 | 8.3 |
| Rural (% of population below rural poverty line) | 22.4 | 20.0 | 16.6 | 15.7 | 15.1 | 14.3 | 14.2 | 14.2 |
| Male-headed households | 15.5 | 13.3 | 11.0 | 10.2 | 9.5 | 9.2 | 9.0 | 9.3 |
| Female-headed households | 12.6 | 12.8 | 9.5 | 9.7 | 8.8 | 8.6 | 8.6 | 11.1 |
| Gini index | 0.30 | 0.35 | 0.38 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 |
| Percentage share of consumption: lowest 20% | 9.6 | 8.7 | 7.9 | 7.4 | 7.5 | 7.4 | 7.5 | 7.2 |
| Percentage share of consumption: highest 20% | 38.6 | 41.4 | 40.6 | 46.5 | 46.7 | 47.3 | 46.8 | 47.3 |
| Public expenditure on social security & welfare (% of GDP) ⁴ | .. | 0.4 | 0.4 | 0.4 | 0.4 | 0.6 | 0.5 | 0.6 |
| Health and Nutrition¹ | | | | | | | | |
| Physicians (per 1,000 people) | 0.16 | 0.13 | 0.29 | .. | 0.20 | .. | .. | .. |
| Under five mortality rate (per 1000 children under 5 years) | 52 | 42 | 33 | 32 | 30 | 29 | 28 | 27 |
| Neonatal mortality rate (per 1000 live births) | 22 | 19 | 16 | 16 | 15 | 15 | 14 | 14 |
| Infant mortality (per 1000 live births) | 41 | 34 | 27 | 26 | 25 | 24 | 24 | 23 |
| Maternal mortality ratio (modeled est., per 100,000 live births) | 265 | 212 | 165 | 156 | 148 | 140 | 133 | 126 |
| Measles vaccination (% of children under 2 years) | 74 | 77 | 78 | 80 | 85 | 84 | 77 | .. |
| Total health expenditure (% of GDP) | 2.0 | 2.8 | 2.9 | 2.9 | 3.0 | 3.1 | .. | .. |
| Public health expenditure (% of GDP) | 0.7 | 0.8 | 1.1 | 1.1 | 1.2 | 1.2 | .. | .. |
| Education³ | | | | | | | | |
| Primary net enrollment rate (%) | .. | 92 | 92 | 92 | 93 | 92 | 93 | 97 |
| Female (% of total net enrollment) | .. | 48 | 48 | 49 | 49 | 50 | 48 | 49 |
| Secondary net enrollment rate (%) | .. | 52 | 61 | 60 | 60 | 61 | 65 | 66 |
| Female (% of total net enrollment) | .. | 50 | 50 | 50 | 49 | 50 | 50 | 51 |
| Tertiary net enrollment rate (%) | .. | 9 | 16 | 14 | 15 | 16 | 18 | 20 |
| Female (% of total net enrollment) | .. | 55 | 53 | 50 | 54 | 54 | 55 | 56 |
| Adult literacy rate (%) | .. | 91 | 91 | 91 | 92 | 93 | 93 | 95 |
| Public spending on education (% of GDP) ⁵ | .. | 2.7 | 3.5 | 3.6 | 3.8 | 3.8 | 3.6 | n.a |
| Public spending on education (% of spending) ⁵ | .. | 14.5 | 20.0 | 20.2 | 20.1 | 20.0 | 19.9 | 20.6 |
| Water and Sanitation¹ | | | | | | | | |
| Access to an improved water source (% of population) | 78 | 81 | 85 | 85 | 86 | 86 | 87 | 87 |
| Urban (% of urban population) | 91 | 92 | 93 | 93 | 94 | 94 | 94 | 94 |
| Rural (% of rural population) | 68 | 71 | 76 | 77 | 77 | 78 | 79 | 80 |
| Access to improved sanitation facilities (% of population) | 44 | 53 | 57 | 58 | 59 | 60 | 61 | 61 |
| Urban (% of urban population) | 64 | 70 | 70 | 71 | 71 | 72 | 72 | 72 |
| Rural (% of rural population) | 30 | 38 | 44 | 45 | 46 | 47 | 48 | 48 |
| Others¹ | | | | | | | | |
| Disaster risk reduction progress score (1-5 scale; 5=best) | .. | .. | .. | 3.3 | .. | .. | .. | .. |
| Proportion of seats held by women in national parliament (%) ⁶ | 8 | 11 | 18 | 18 | 19 | 19 | 17 | 17 |

Source: ¹ World Development Indicators; ² BPS (Sakernas); ³ BPS (Susenas) and World Bank; ⁴ MoF, Bappenas and World Bank staff calculation, only includes spending on Raskin, Health insurance for the poor, scholarship for the poor, and PKH and actuals; ⁵ MoF; ⁶ Inter-Parliamentary Union