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INDONESIA ECONOMIC QUARTERLY

December 2015

Reforming amid uncertainty

THE WORLD BANK
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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 Arsianti, Magda Adriani, Masyita Crystallin, Fitria Fitrani, Ahya Ihsan, Yue Man Lee and Violeta Vulovic with additional editing by Edgar Janz, Matt Wai-Poi and Sinead Maguire. Administrative support is provided by Titi Ananto. Dissemination is organized by Indra Irnawan, Jerry Kurniawan, Gb Surya Ningnagara and Nugroho Sunjoyo, under the guidance of Dini Djalal.

This edition of the IEQ also includes contributions from Mattia Makovec (Part A.7, Labor), Magda Adriani, Mubariq Ahmad, Ann Jeannette Glauber, Iwan Gunawan, Elitza Mileva, Sarah Moyer (Part B.1, Forest fires), Samuel Clark, Ihsan Haerudin, Jennifer Noveck, Kevin A. Tomlinson, Kathleen A. Whimp (Part B.2, the Village Law), Agnesia Adhissa, Evarist Baimu, Massimiliano Cali, Brasukra Sudjana (Part C.1, Trans-Pacific Partnership). Key data and inputs (Part B.1, Forest fires) were received from Massimiliano Cali, Letizia Ferlito, Pandu Harimurti, Muhammad Farman Izhar, Anita Ellen Kendrick, Ruby Mangunsong, Rosfita Roesli, George Henry Stirrett Wood, Rinsan Tobing. Special thanks to Fauziah Alhasanah, Augustan, Nugraheni Setyaningrum (BPPT) and Ridho Benardo Becken, Paulina Laurentia Diana, Gita Febriyanti, Rina Octavia, Owen Podger, Dian Puspita (*Yayasan Pengurangan Resiko Bencana*, PRB). The report also benefited from discussion with and in-depth comments from Ernest Berthe and Triyanto Fitriyardi (IFC), Sudhir Shetty, Nikola L. Spatafora, Maria Monica Wihardja and John Burch (Australia-Indonesia Government Partnership Fund).

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Executive summary: Reforming amid uncertainty

In a challenging international and domestic environment, made worse by the fire and haze disaster, the government has committed to improve growth

Although global financial markets have stabilized since October, external conditions remain unfavorable. At home, already moderate GDP growth was negatively affected by an economic and environmental crisis which was caused by man-made fire and haze and cost Indonesia an estimated IDR 221 trillion (1.9 percent of GDP) in five months. In this difficult environment, the government has demonstrated a clear intent to implement wide-ranging reforms focused on raising the investment rate, revitalizing the domestic industry, and facilitating trade. One indication of this is the significant increase in public capital spending by an estimated 49.8 percent year on year (yoy) in real terms in the third quarter, reversing the negative trend of 2014 and early 2015. Moreover, the 2016 State Budget calls for further improvement in the composition of spending by shifting resources from energy subsidies to infrastructure, health and targeted social assistance. A second signal is the reform agenda initiated in September through the announcement of seven policy packages of regulatory and structural reforms and fiscal stimulus.

However, significant revenue-related risks may limit the ability of fiscal policy to boost investment and growth

The government's commitment to accelerate public spending in 2015, despite lower than projected revenue collection, has expanded the fiscal deficit to 2.5 percent of GDP in October and, based on recent trends, possibly even higher in November. However, increasing the deficit to the legal limit of 3 percent for the general government is unlikely to provide enough space to reach the expenditure targets set in the July revision of the fiscal outlook. Furthermore, reaching the 2016 total revenue target could be challenging, given the revenue shortfall in 2015 and continuing weak macroeconomic conditions and low commodity prices. If revenue collection were to remain weak in 2016, the ongoing strong public infrastructure spending momentum and its growth impulse may be at risk.

Investor risk aversion has moderated but global economic activity remains subdued

Emerging market assets rebounded in October after the sharp losses recorded in August and September, when the uncertainty about the Chinese economic slowdown and the U.S. interest rate outlook was particularly high. Despite a more favorable market sentiment, capital flows to emerging economies have remained weak and borrowing costs relatively high. In addition to tight financing conditions, Indonesia still faces subdued external demand for its exports in the near term and persistently low commodity prices over the medium run. Recent data point to subdued GDP growth across the globe for a fourth consecutive quarter.

Public spending supported growth in the third quarter, with private investment still weak

In the third quarter, real GDP grew at 4.7 percent yoy, the same pace as in Q1 and Q2 2015. Growth was supported by an increase in public sector spending both on consumption and capital. At the same time, private sector investment is estimated to have remained subdued, with some high-frequency (leading) data pointing to a pick-up in the fourth quarter, while others, in particular business sentiment indicators, signaling persistent weakness. The aggregate unemployment rate increased to 6.2 percent, from 5.9 percent in August 2014, reversing the declining trend observed in the past decade. Moreover, the sectors that are still creating jobs – construction and trade – are low productivity sectors.

Man-made fire and haze cost Indonesia IDR 221 trillion in just five months, contributing to slower growth

Another factor constraining GDP growth in the third quarter was the fire and haze-related losses in several provinces. Between June and October 2015, more than 100,000 man-made fires burned 2.6 million hectares of land, an area four and a half times the size of Bali. The World Bank estimates that the fires cost Indonesia at least IDR 221 trillion (USD 16.1 billion), equivalent to 1.9 percent of 2015 GDP and more than twice the reconstruction cost after the Aceh tsunami. Partly due to the El Niño-related drought and to the forest fires, real agricultural output declined at a quarter-on-quarter seasonally adjusted annualized rate (qoq-saar) of 4.9 percent in Q3 2015, the first significant decline in over four years. Kalimantan, where much of the country's fragile peatlands are located, was the hardest hit, with GDP declining by 1.2 percent qoq-saar in the third quarter (-5.1 percent qoq-saar in East Kalimantan). The government has called for a moratorium on new peatland concessions, a cancellation of existing, non-developed concessions, and peatland restoration. Additional efforts should focus on conserving the remaining peat forests and stopping the drainage of deep peat or high biodiversity areas.

Despite a relatively low current account deficit, external pressures remain as net capital flows contracted further…

Turning to the external sector, trade continued to weaken in the third quarter, with both exports and imports reaching their lowest levels since 2010. As in previous quarters, imports declined more than exports, thus supporting a narrower current account deficit. Although this eased some of Indonesia's external pressures, declining net capital flows resulted in a balance of payments deficit. Even though capital flows were resilient in the first half of 2015, owing to government bond inflows, total net capital flows in the first three quarters, at USD 9.6 billion, decreased by almost 70 percent compared with the same period last year. Compared with its level up to October last year, net foreign purchases of Rupiah-denominated sovereign bonds (SUNs) are down by 54.4 percent, while government foreign-currency debt increased by 80 percent. SUNs have lost some of the appeal to foreign investors, as the volatility of the Rupiah rose this year.

… constraining monetary policy in the very short term, even with inflation easing

Domestic credit also remains tight, though there are some signs of a pick-up in investment loan growth. Headline inflation declined below 5 percent yoy in November, owing in large part to the base effect from last year's sharp increase in retail fuel prices. Nevertheless, monetary policy remains constrained in the very short term on account of weaker capital flows and continued exchange rate depreciation pressures. In response to heightened Rupiah volatility since August, Bank Indonesia (BI) unveiled a set of measures to stabilize the currency. The measures range from foreign exchange interventions in the forward market to issuing Bank Indonesia Certificates (SBIs) in foreign currency. In addition, BI renewed its bilateral currency swap agreement with China.

The baseline outlook of 4.7 percent GDP growth in 2015 and 5.3 percent in 2016 remains unchanged…

Looking ahead, the World Bank forecast for GDP growth remains at 4.7 percent for 2015 and 5.3 percent for 2016 (Table 1). Although the headline projections are unchanged from the October 2015 *IEQ*, public consumption and investment are now expected to contribute slightly more to growth both this year and next, while export growth has been revised down once again. The baseline projections reflect the government's commitment to higher capital allocation in the approved 2016 Budget, which may crowd in private investment and support overall growth. The growth pick-up in our baseline is also based on gradually improving external conditions.

Table 1: In the base case, GDP growth is projected at 5.3 percent in 2016

		2014	2015p	2016p
Real GDP	(Annual percent change)	5.0	4.7	5.3
Consumer price index	(Annual percent change)	6.4	6.3	4.6
Current account balance	(Percent of GDP)	-3.1	-2.0	-2.4
Budget balance*	(Percent of GDP)	-2.2	-2.5	-2.2

Note: * October realization reported for 2015; Projection of the Ministry of Finance for 2016.
Source: BI; BPS; Ministry of Finance; World Bank staff calculations

… with risks to the outlook continuing to weigh on the downside

The main external risks, unchanged from the October 2015 *IEQ*, include a stronger than projected slowdown in emerging market economies, including China's, weaker than expected global trade recovery, lower than projected commodity prices, and the possibility of renewed increases in financial market volatility. On the domestic front, as the driver of growth in the short term has shifted to the public sector, a key risk to the outlook is weaker than expected fiscal revenues. The full implementation of the government's current expenditure plans for 2016 is at risk, if revenue collection is to remain weak. For the remainder of 2015, frontloading of government securities issuance and greater reliance on multilateral financing have helped mitigate financing risks. As of December 2, the government had already secured IDR 510.4 trillion from securities issuance and USD 3.89 billion (around IDR 53 trillion) in foreign official lending.

Village transfers have been substantially increased and, despite early implementation challenges, have the potential to address rural inequality

Part of the planned increase in public infrastructure spending in the 2016 Budget is expected to materialize through higher transfers to local governments, including the Village Fund (*Dana Desa*, DD) whose resources will more than double next year. Villages can play an important role in ensuring that basic services respond to village residents' needs. However, limited village capacity is likely to continue to constrain the use of funds, particularly in remote and less developed areas. There have been considerable disbursement delays this year, suggesting poor preparation by both districts and villages. In addition, the revised formula for DD distribution allocates 90 percent of the funds equally among villages (the remaining 10 percent depend on

demography and geography). As a result, large villages, where most of the poor and near poor live, receive a much lower allocation per person, which is contributing to higher inequality.

The TPP impact on trade may be limited, but the diversion of investments may be a more important issue

Another potential step in Indonesia's new reform process is the country's signaling its intention to join the Trans-Pacific Partnership (TPP) agreement in the near future. Whether membership materializes or not, the agreement is likely to have a limited impact on trade, because import tariffs in member countries are already low and Indonesia has trade agreements with most of them. However, the effect on investment may be more important, as the pact increases access to a sizable share of the global economy and affords higher legal protection for foreign investors than domestic legislation usually does. These factors may induce foreign investment re-allocation away from third countries, including Indonesia, to TPP members. On the other hand, joining the pact is likely to influence policy-making beyond merchandise trade, for example by requiring regulations to ensure equal treatment of foreign and domestic companies. Although the TPP allows implementation flexibility with respect to current laws and regulations, it restricts in some ways the room for future economic policy-making. For instance, TPP members have limited leeway to make laws and regulations more restrictive towards other member countries. This could be particularly important for Indonesia, the most active user of restrictive trade and investment measures in South East Asia.

A. Economic and fiscal update

1. Unfavorable external conditions persist, despite improvement in market sentiment

Global growth disappointed once again…

Third-quarter data point to subdued global economic activity for a fourth consecutive quarter. Growth softened in the U.S. and in the Euro Area, while Japan entered a technical recession. Among major emerging economies, China's slowdown continues, Brazil's challenges have intensified, and Russia's economy contracted. Only India's GDP growth, at 7.4 percent yoy, remained solid in the third quarter.

… prompting downward revisions to commodity price forecasts

The overall growth slowdown has weighed on global trade and on the demand for commodities. The World Bank revised down its commodity price forecast once again in October (Figure 1).[1] In addition to weaker than previously expected global growth, high stocks in OECD countries, resilient non-OPEC output, and greater projected Iranian production next year have further lowered projected oil prices. As a net oil importer, low oil prices tend to benefit Indonesia but put pressure on the government's budget which relies on the oil and gas sector for about 20 percent of its revenues.

Global risk aversion has declined, but borrowing costs remain high

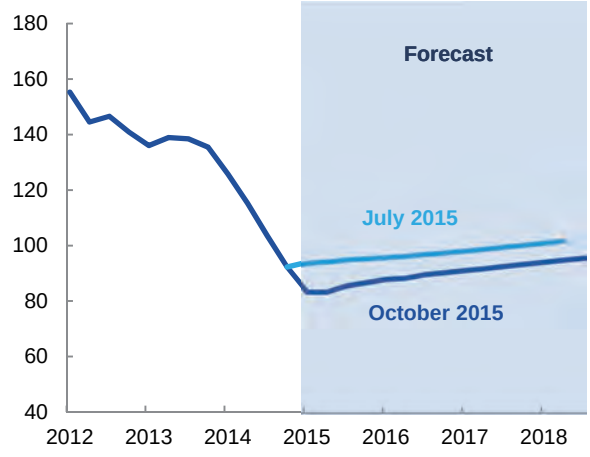
Turning to financial developments, emerging market assets rebounded in October after the sharp losses recorded in August and September, when the uncertainty about the Chinese economic slowdown and the U.S. interest rate outlook were particularly high. However, some countries, such as Brazil, Turkey and South Africa, have experienced renewed volatility in December. Despite a more favorable market sentiment, capital flows to emerging economies have remained weak and borrowing costs high relative to 2014 and early 2015 (Figure 2).

[1] World Bank, Commodity Markets Outlook, October 2015: http://www.worldbank.org/en/research/commodity-markets.

Indonesia's government has taken advantage of the recent financial market stabilization

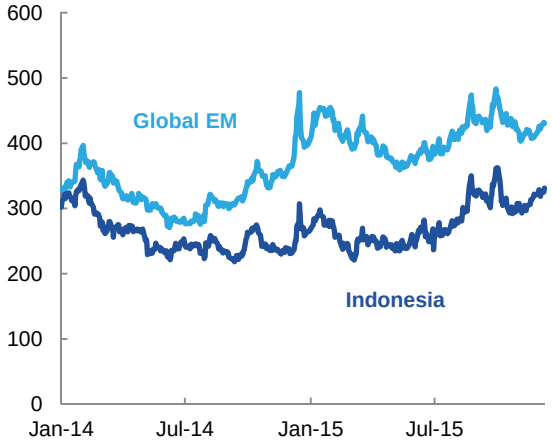
In Indonesia, foreign borrowing by the government has shown signs of stabilization, while the stock market continues to experience foreign outflows (see Section 5). For the first time since June, net purchases of Rupiah-denominated government bonds by foreign investors turned positive in October (USD 391 million). As several other emerging countries have done in recent weeks, on December 1 Indonesia raised USD 3.5 billion in an international bond sale (to pre-finance the 2016 budget) ahead of a potential U.S. interest rate hike.

Figure 1: The outlook for commodity prices has weakened further
(index of Indonesia's six main export commodity prices)



Note: The index includes the prices of coal, copper, oil, gas, palm oil and rubber.
Source: World Bank; World Bank staff projections

Figure 2: Global financial conditions remain tight for emerging markets
(EMBIG spread, basis points)



Source: JP Morgan; World Bank staff calculations

2. Moderate third-quarter GDP growth was supported by public spending

Moderate growth in Q3 2015 confirmed expectations that stronger policy efforts are needed to support growth in the near term

In the third quarter, real GDP grew at 4.7 percent yoy, the same pace as in Q1 and Q2 2015. Growth was underpinned by an increase in public sector spending both on consumption and on capital. At the same time, private sector investment is estimated to have remained subdued, with some high-frequency (leading) data pointing to a pick-up in the fourth quarter, while others, in particular business sentiment indicators, signaling persistent weakness. The El Niño-related drought and losses caused by forest fires and haze in several provinces are estimated to have had a material negative impact on GDP (see also Section B.1). Real agricultural output declined by 4.9 percent qoq-saar in Q3 2015, the first significant decline in over four years. Kalimantan was the hardest hit, with GDP declining by 1.2 percent qoq-saar in the third quarter (-5.1 percent qoq-saar in East Kalimantan). Amid heightened uncertainty, and significant downside risks to the outlook, the World Bank maintains its baseline growth forecast at 4.7 percent for 2015 and 5.3 percent for 2016. The projections reflect gradually improving external demand and higher government capital spending.

Higher government spending drove the pickup in consumption growth …

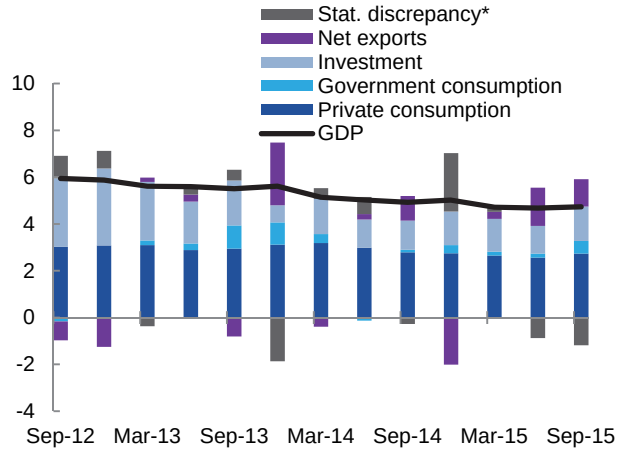
Private consumption grew by 5.0 percent yoy, up from 4.7 percent in Q2. However, this rise was entirely due to the growth in consumption of non-profit institutions which increased as the effect of high H1 2014 election-related spending dropped out of the annual comparison. Household expenditure growth has remained at 5.0 percent yoy for four consecutive quarters. The public sector's contribution to GDP

growth also rose as expenditure disbursement, including on infrastructure development, accelerated. Government consumption grew by 6.6 percent yoy (up from 2.1 percent in Q2), contributing 0.5 percentage points yoy to growth (Figure 3).

… and the improvement in investment growth

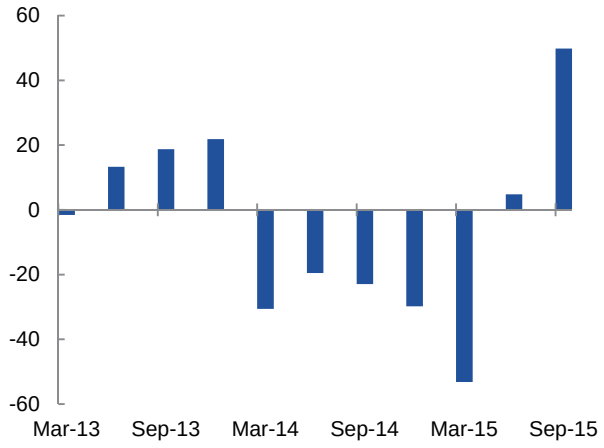
Fixed investment growth increased to 4.6 percent yoy, from 3.7 percent in Q2, contributing 1.5 percentage points yoy to growth. The pick-up in investment was driven by improving construction, machinery and equipment, and vehicle spending. Although Statistics Indonesia (*Badan Pusat Statistik*, BPS) does not publish a breakdown of public versus private investment, an estimate of real government capital spending (deflated by the implicit total investment deflator[2]) shows a significant growth acceleration to 49.8 percent yoy in Q3 2015, reversing the negative trend of 2014 and early 2015 (Figure 4).

Figure 3: GDP growth stabilized at 4.7 percent yoy in Q3 2015…
(contributions to GDP growth yoy, percentage points)



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

Figure 4: … supported by a significant rise in real public sector capital spending
(growth yoy, percent)



Note: Real government capital spending is deflated using the total fixed investment deflator from the national accounts.
Source: BPS; Ministry of Finance; World Bank staff calculations

However, both import and export volumes remained weak

Net exports continued to contribute positively to growth (1.2 percentage points yoy), albeit by less than in the second quarter (1.6 percentage points). Import volumes declined by 6.1 percent yoy, compared with -7.0 percent in Q2. Exports decreased by 0.7 percent yoy in real terms, after falling by 0.1 percent in the second quarter. According to data from the Netherlands Bureau for Economic Policy Analysis, export volumes continued to decline across Asia by an average of 4.3 percent yoy in Q3, versus -2.5 percent in Q2, as emerging market import demand continues to weigh on global trade.

Monthly investment activity indicators suggest a pick-up, though business

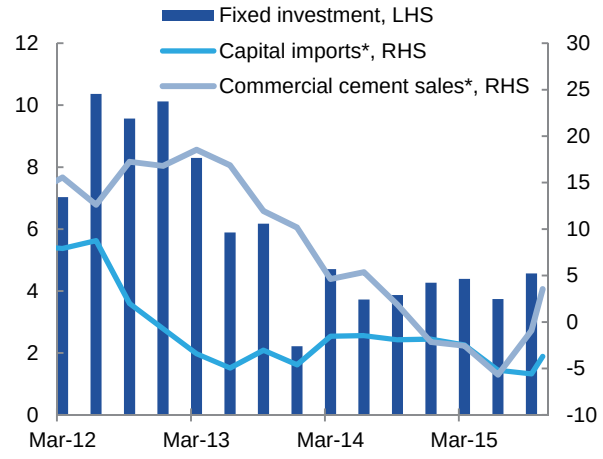
Investment growth improved in sequential terms from 1.8 percent qoq-saar in Q2 to 7.4 percent in Q3. There is some evidence of further improvement in the fourth quarter. The acceleration in government investment spending continued in October, with monthly (nominal) capital expenditure reaching IDR 22 trillion, up 11.8 percent relative to September and almost double the October 2014 level.

[2] The implicit total investment deflator is calculated as the ratio of total nominal gross fixed capital formation to total real fixed capital formation, both taken from the national accounts.

sentiment remains subdued

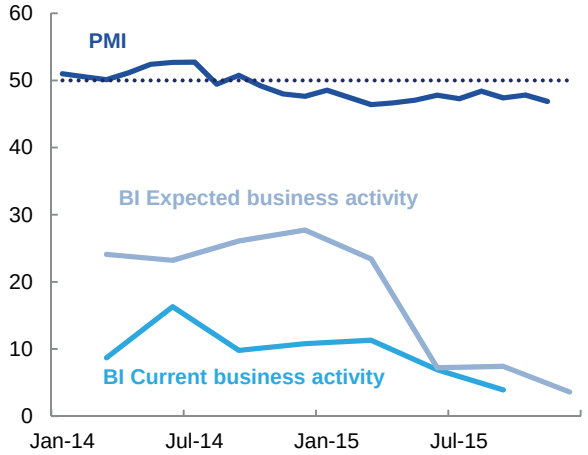
Furthermore, commercial cement sales picked up momentum and capital goods imports, a leading indicator for investment, may have bottomed out in Q3 (Figure 5). However, business sentiment indices have not yet reversed their declining trend. Both the current and expected business activity indicators complied by BI continue to decline. The Nikkei/Markit's purchasing managers index (PMI) for manufacturing, at 46.9 in November, continues to signal weaker activity (Figure 6).

Figure 5: Monthly indicators of investment activity may signal a pickup…
(four-quarter moving average of growth qoq-saar, percent)



Note: * Last observation is October 2015.
Source: BPS; World Bank staff calculations

Figure 6: … although business sentiment remains subdued
(seasonally adjusted indices)



Source: BI; Nikkei/Markit; World Bank staff calculations

In the base case, GDP is projected to increase by 4.7 percent in 2015 and 5.3 percent in 2016…

Looking ahead, the World Bank's forecast for GDP growth remains at 4.7 percent for 2015 and 5.3 percent for 2016 (Table 2). Although the headline projections are unchanged from the October 2015 *IEQ*, public consumption and investment are now expected to contribute slightly more to growth both this year and next, at the expense of exports. This revision reflects the government's commitment to higher capital allocation in the approved 2016 Budget (see Section 6), which may crowd in private investment and support overall growth. The growth pick-up in the baseline is also based on gradually improving external conditions. The World Bank expects global growth to increase to 3 percent in 2016, from 2.5 percent estimated for this year.[3] However, the balance of risks, both external and domestic, to the baseline scenario is still to the downside (see Section 8).

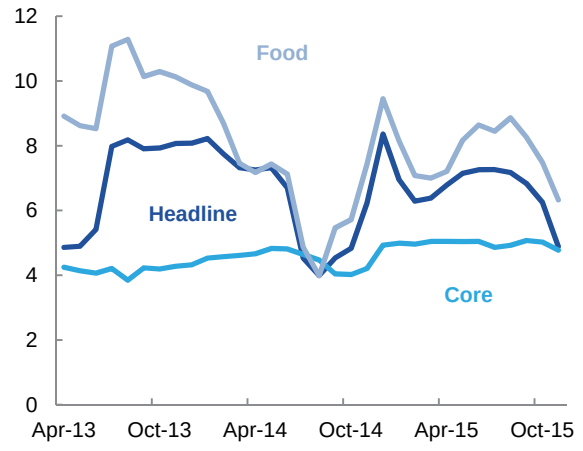
[3] See the East Asia Pacific Economic Update, October 2015: Staying the Course.

3. Inflation has moderated due to base effects but El Niño-related risks remain

Headline inflation declined below 5 percent yoy due mainly to last year's high base of comparison

CPI inflation dropped to 4.9 percent yoy in November, from 6.2 percent in October, owing in large part to the base effect from the sharp increase in retail fuel prices a year ago (Figure 7). Core inflation, which excludes the more volatile food and energy prices, also eased to 4.8 percent yoy in November, from 5.0 percent in the previous month. After decelerating somewhat in September and October, food price inflation rose again in November in month-on-month terms. Although retail rice prices have increased at a more subdued pace in the past two months, likely on the back of higher stockpiles, the prices of other food commodities, such as meat and vegetables, picked up. The moderate to severe El Niño conditions have adversely affected agricultural output across Indonesia this year, increasing the volatility of food prices.[4]

Figure 7: CPI inflation eased due to base effects
(change yoy, percent; last observation November 2015)



Note: Food prices are a weighted average of the raw and processed food price components of the CPI.
Source: BPS; World Bank staff calculations

Inflation is projected to decline, though El Niño-related upward price pressures are expected in early 2016

The World Bank expects an annual average CPI inflation rate of 6.3 percent in 2015, declining to an average rate of 4.6 percent in 2016. In the base case, the forecast accounts for a moderate effect of El Niño on food prices early next year.[5] According to the Food and Agriculture Organization, planting of the 2016 main season paddy crop, which accounts for the bulk of annual production, has been delayed as a consequence of below-average rainfall in large parts of Indonesia.[6] Moreover, the dry weather is expected to lower the yields of early-planted crops, particularly in rain-fed areas. As El Niño remains the main risk to the inflation outlook, the government's response to the supply constraints (e.g. allowing rice imports to replenish stocks) is an important determinant of the near-term trajectory of food prices.

[4] See Section B.1 for estimates of the negative impact of fire and haze on agriculture (and other sectors) in June-October 2015.
[5] See Part B.1 of the October 2015 *IEQ* for more details on these estimates.
[6] Global Information and Early Warning System (GIEWS) on food and agriculture, November 13, 2015, Indonesia Country Brief: http://www.fao.org/giews/countrybrief/country.jsp?code=IDN.

Table 2: In the base case, GDP growth is projected to pick up to 5.3 percent in 2016
(percentage change, unless otherwise indicated)

	Annual			YoY in Fourth Quarter			Revision to Annual	
	2014	2015	2016	2014	2015	2016	2015	2016
1. Main economic indicators								
Total Consumption expenditure	4.8	4.8	4.9	4.3	5.3	3.9	0.4	0.0
Private consumption expenditure	5.3	4.9	5.2	4.7	5.4	4.1	0.2	0.0
Government consumption	2.0	3.6	3.2	2.1	4.1	2.4	1.5	0.0
Gross fixed capital formation	4.1	4.5	5.2	3.7	5.6	4.0	0.8	0.2
Exports of goods and services	1.0	-0.7	2.3	-0.1	1.7	4.0	-0.5	-2.4
Imports of goods and services	2.2	-5.7	1.8	-7.0	1.5	3.7	-2.5	-1.8
Gross Domestic Product	5.0	4.7	5.3	4.7	5.2	4.1	0.0	0.0
2. External indicators								
Balance of payments (USD bn)	15.3	6.3	16.5	-	-	-	1.3	-0.8
Current account balance (USD bn)	-27.5	-16.9	-22.2	-	-	-	0.9	2.7
As share of GDP (percent)	*-3.1*	*-2.0*	*-2.4*	-	-	-	0.0	0.2
Trade balance (USD bn)	-3.0	6.7	1.9	-	-	-	0.8	0.7
Capital & financial acc. bal. (USD bn)	45.4	23.2	38.7	-	-	-	0.4	-3.5
3. Other economic indicators								
Consumer price index	6.4	6.3	4.6	6.5	4.7	5.0	-0.2	-0.6
GDP Deflator	5.4	4.2	4.5	4.8	4.3	3.8	-0.7	-0.8
Nominal GDP	10.7	9.2	10.1	9.6	9.5	8.1	-0.5	-0.8
4. Economic assumptions								
Exchange rate (IDR/USD)	11800	13400	13800	-	-	-	0	-200
Indonesian crude price (USD/bl)	98	51	50	-	-	-	-7	-11

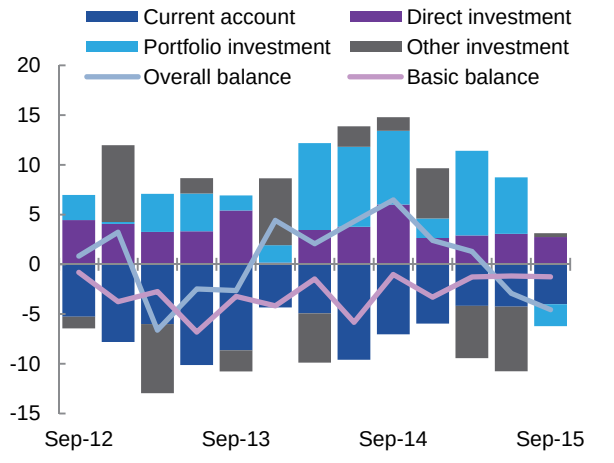
Note: Exports and imports refer to volumes from the national accounts. All figures are based on revised and rebased GDP. Exchange rate and crude oil price assumptions are based on recent averages. Revisions are relative to projections in the October 2015 *IEQ*.
Source: BPS; BI; CEIC; World Bank staff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

4. Capital flows declined further, in line with the emerging market trend

Despite a sizable trade surplus, external pressures remain as net capital flows contracted further

Although a narrower current account deficit eased some of Indonesia's external pressures, declining net capital flows resulted in a balance of payments deficit in the third quarter (Figure 8). Even though capital flows were resilient in the first half of 2015, owing to government bond inflows, total net capital flows in the first three quarters decreased by almost 70 percent compared with the same period last year. Although capital flows to emerging economies are expected to rebound in the first half of 2016, external financing risks remain elevated due to the uncertainty about the timing of the normalization of U.S. monetary policy.

Figure 8: The financial account balance deteriorated further
(USD billion)

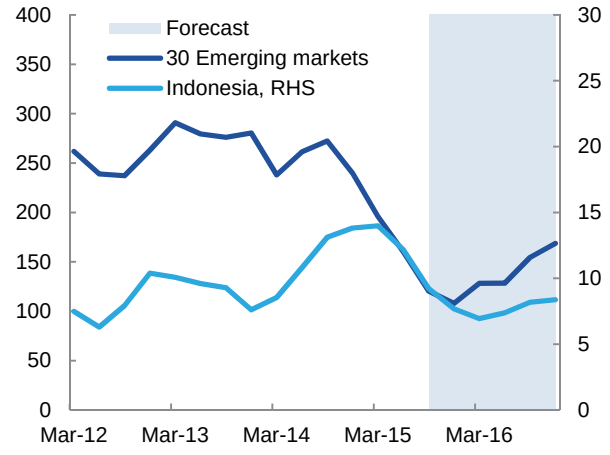


Note: Basic balance = direct investment + current account balance.
Source: BI; World Bank staff calculations

The broad-based slowdown in trade continued in the third quarter

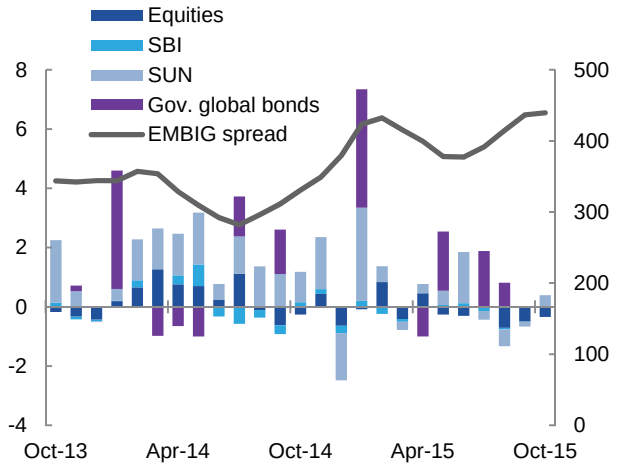
A trade surplus of USD 4.1 billion was recorded in Q3 2015. Both exports and imports declined, by 17.4 percent yoy and 24.6 percent yoy, respectively, reaching their lowest levels since 2010. The slowdown in trade was broad-based: both commodity and manufacturing exports declined, as did energy and non-energy imports. An increase was observed only in copper exports which grew by 47.5 percent yoy due to the temporary export permits issued to PT Newmont Nusa Tenggara and PT Freeport Indonesia, both of which expired at the end of September.

Figure 9: Capital inflows to emerging markets are expected to bottom out in Q4
(four-quarter moving average, USD billion)



Source: The Institute of International Finance; World Bank staff calculations

Figure 10: Foreign investors sold off Rupiah-denominated portfolio assets in Q3 2015
(net foreign purchases, USD billion; Indonesia EMBIG spread, basis points)



Note: SUN – Rupiah-denominated government bonds; SBI – BI certificates.
Source: BI; JP Morgan; World Bank staff calculations

After two resilient quarters, third quarter capital flows weakened significantly…

Net capital inflows this year have been weaker compared with last year, despite strong government bond issuance in the first two quarters. Total net capital flows in the first three quarters of this year were USD 9.6 billion, equivalent to only 27 percent of their year-ago level or 72.5 percent compared with 2013, the year of the Fed taper tantrum. In the third quarter, net capital flows were USD 1.2 billion, compared with USD 14.7 billion in Q3 2014 and USD 4.6 billion in Q3 2013. This was in line with the global trend of weaker capital flows to emerging markets (Figure 9). The Institute of International Finance projects that the capital flows slowdown to thirty major emerging economies will bottom out at the end of this year,[7] which is consistent with the expected growth pick-up for these countries.

… as both FDI and portfolio flows were lower compared with last year

In the three quarters of 2015, FDI decreased by 34.2 percent relative to the same period in 2014. There have been net equity outflows in most months, with a cumulative net outflow of USD 1.3 billion so far this year (Figure 10). This compares with USD 3.9 billion of net inflows in January – October 2014. In the third quarter, there were USD 1 billion of net foreign sales of SUNs, though foreigners have purchased USD 5.3 billion of SUNs in net terms year to date. However, compared with their level up to October last year, net foreign purchases of SUNs are down by 54.4 percent. At the same time, government foreign-currency debt increased by 80 percent relative to the same period last year. International

[7] The Institute of International Finance capital flows database.

bonds have remained attractive to foreign investors at the expense of local-currency ones, as the volatility of the Rupiah rose this year.

The World Bank forecast for the current account deficit is 2 percent of GDP in 2015 and 2.4 in 2016

The projected 2015 current account deficit remains at 2 percent of GDP (Table 3). Although imports have not yet picked up as expected, with both raw material (net of fuel) and capital goods imports declining – by 9.1 percent and 3.4 percent yoy, respectively, in Q3 2015, a smaller decrease in imports is expected in the last quarter in line with higher public capital spending (see Section 2). Since the October 2015 *IEQ*, the World Bank has revised down its commodity price outlook once again.[8] Low commodity prices and demand are expected to constrain Indonesia's export revenues over the medium term. At the same time, manufacturing exports have continued to decline despite the small depreciation (of 3.8 percent between January and October) of the real exchange rate this year. The current account deficit in 2016 has been revised down to 2.4 percent of GDP, as the projected public infrastructure-related pick-up in imports is smaller than previously expected.

Table 3: A current account deficit of 2.0 percent of GDP is projected for 2015

(USD billion unless otherwise indicated)

	2014	2015	2016
Overall balance of payments	15.3	6.3	16.5
As percent of GDP	*1.7*	*0.7*	*1.8*
Current account	-27.5	-16.9	-22.2
As percent of GDP	*-3.1*	*-2.0*	*-2.4*
Goods trade balance	7.0	15.8	12.1
Services trade balance	-10.0	-9.1	-10.2
Income	-29.7	-29.0	-29.4
Transfers	5.2	5.4	5.3
Capital and financial accounts	45.4	23.2	38.7
As percent of GDP	*5.1*	*2.7*	*4.2*
Direct investment	15.9	11.4	13.1
Portfolio investment	26.1	10.9	22.9
Financial derivatives	-0.2	0.1	-0.1
Other investment	7.8	0.8	2.7
Memo:			
Basic balance	-11.6	-5.5	-9.1
As percent of GDP	*-1.3*	*-0.6*	*-1.0*

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

Source: BI; World Bank staff calculations

5. Financial conditions remain tight, driven partly by lower foreign inflows

Though global financial volatility has subsided since September, financing conditions remain tight

Indonesian asset prices have recovered most of the losses incurred during the recent global financial turbulence episode. The Rupiah appreciated by 5.6 percent between September 30 and December 7. However, net short-term capital outflows in the third quarter limited the availability of external financing (see Section 4). Higher borrowing costs have also reduced the demand for external funding, especially from the private sector. At the same time, there are signs of a pick-up in domestic credit growth, in particular investment loans, since June.

Indonesian equities and the Rupiah have recovered most of the August — September losses…

The JCI increased by 7.0 percent between September 30 and December 7, after declining by 11.1 percent between August 10 and September 30 (Figure 11). Equity prices in most emerging economies have recovered from the lows reached during the equity market turbulence triggered by the Renminbi depreciation on August 11.[9] However, some countries, such as Brazil, Turkey and South Africa, have experienced renewed volatility in December. After a significant appreciation of 8.1 percent between October 2 and 9, the Rupiah has stabilized at its early-August level, following the general emerging market trend.

[8] World Bank, October 2015 Commodity markets outlook: Understanding El Niño: http://pubdocs.worldbank.org/pubdocs/publicdoc/2015/10/22401445260948491/CMO-October-2015-Full-Report.pdf

[9] See also Part A Section 5 in the October 2015 *IEQ*.

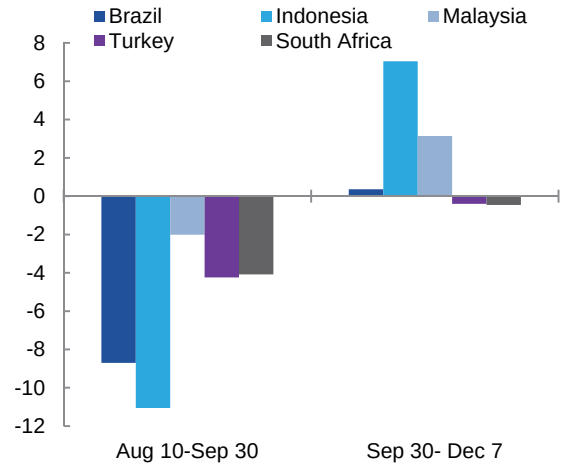
… and borrowing costs have also declined from their recent highs

JP Morgan's Emerging Market Bond Index - Global (EMBIG) spread for Indonesia decreased by 49 basis points between September 30 and November 20, after increasing by 125 basis point between June 30 and September 30. The corresponding changes in the global EMBIG spread, which measures average emerging market US dollar borrowing costs, were a decline of 67 basis points and a rise of 83 basis points. Similarly, Indonesia's domestic 10-year government bond yield declined by 105 basis points between September 30 and November 20, after increasing by 145 basis points in the previous quarter.

External debt growth has declined, as the service burden has increased

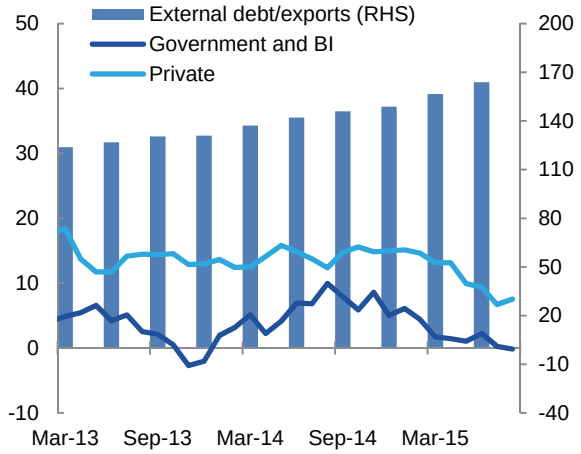
The overall increase in external borrowing costs this year (including because of the depreciating Rupiah), coupled with weaker profits and higher foreign exchange hedging costs,[10] have resulted in slower external debt growth. Foreign borrowing grew by 2.7 percent yoy in September, down from 6.3 percent in June and an average of 11.4 percent in 2011-2013 (Figure 12). Private external debt growth decelerated to 4.1 percent yoy in September, from 9.6 percent in June. Foreign borrowing by the trade, services, transport and communication, and manufacturing sectors declined by 22.0, 18.6, 16.6 and 4.7 percent yoy in the third quarter. Although the external debt-to-GDP ratio remains moderate, at 34.9 percent in September, Indonesia's ability to repay debt from export revenues has worsened with the significant contraction in exports this year (by 13 percent yoy in January-September 2015).

Figure 11: Emerging market equities have recorded gains since September
(period change, percent)



Source: BI; JP Morgan; World Bank staff calculations

Figure 12: Private external debt growth has tapered with the rise in debt burden
(growth yoy, percent, LHS; ratio to exports, percent, RHS)



Source: BI; World Bank staff calculations

BI announced several measures to reduce volatility in the foreign exchange market

In response to heightened Rupiah volatility in August and September, on September 30 BI unveiled a set of measures to help stabilize the currency. The measures include: foreign exchange interventions in the forward market; lengthening the maturity of the BI deposit facility to three months; easing the reporting requirements for forward foreign exchange transactions; issuing SBIs in foreign currency; and decreasing the SBI holding requirement from one month to one week. The new measures notwithstanding, BI continues to intervene in the foreign exchange spot market in periods of high volatility. In addition, on November 16 BI

[10] The IDR-USD one-year onshore swap rate averaged 12.3 percent in Q3 2015, up from 8.5 percent in the previous quarter.

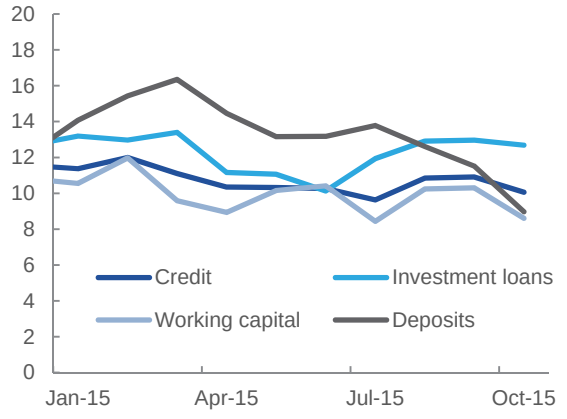
renewed its bilateral currency swap agreement with China and raised the maximum amount to RMB 130 billion (USD 20 billion), from RMB 100 billion previously. BI also has bilateral swap agreements with Japan for USD 23 billion and with South Korea for KRW 10.7 trillion.

Investment credit growth picked up in June

Credit growth recorded a slight pick-up from 9.6 percent yoy in July to 10.1 percent in October, mainly because of an increase in investment credit growth (Figure 13). Investment credit growth rose from 10.1 percent in June to 12.7 in October. In line with the decline in deposit rates since August 2014, deposit growth eased to 9.0 percent yoy in October, from 13.8 percent in July. Bank performance has been relatively stable, with non-performing loans at 2.7 percent in September and net interest margins at 5.3 percent between July and September.

Figure 13: The pick-up in credit growth since July has been driven by investment loans

(growth yoy, percent)



Source: BI; World Bank staff calculations

6. Higher budget execution rates supported growth in the third quarter

By October, the realized deficit reached 2.5 percent of GDP, as fiscal policy prioritized growth

Fiscal policy in 2015 features a strong tension between lower than projected revenue collection and the desire to accelerate public spending disbursement to support growth. As a result, by October the realized fiscal deficit reached 2.5 percent of GDP, exceeding the Ministry of Finance's full-year target (revised in July) of 2.2 percent (Table 4).[11] If recent trends continue into November and December, the fiscal deficit is likely to be higher than 2.5 percent by the end of the year. The large revenue shortfall is likely to constrain the implementation of the 2016 Budget, due to a "base" effect, and poses a risk of another revenue shortfall next year (see below).

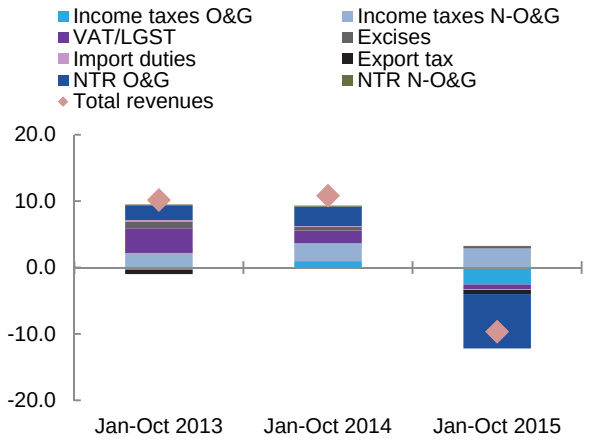
The broad-based weakening in revenues continued in October 2015

Overall revenue collection in the first ten months of 2015 declined by 9.7 percent relative to the same period in 2014, reflecting low oil and gas prices and a weak macroeconomic environment (Figure 14). By the end of October, total revenue outturns reached IDR 1,099.7 trillion, which is equivalent to 66.7 percent of the Ministry of Finance's revenue outlook set in July 2015. This revenue realization compares with an average of 76 percent in the last five years. Cumulative tax revenue declined by 1.2 percent yoy, significantly below the targeted increase of 19 percent in the latest revenue outlook. Oil and gas revenues, both tax and non-tax, continue to be a major driver of the 2015 revenue slowdown. In January – October, oil and gas revenues contributed -10.7 percentage points yoy to the overall nominal revenue decrease, mostly owing to lower international oil and gas prices. VAT collection also continued to decline in line with the moderation in nominal growth of private consumption (8.0 percent yoy in Q1-Q3 2015versus an average of 11.8

[11] First Semester 2015 Government State Budget Implementation Report (*Laporan Pemerintah Tentang, Pelaksanaan Anggaran Pendapatan dan Belanja Negara, Semester Pertama Tahun Anggaran 2015*).

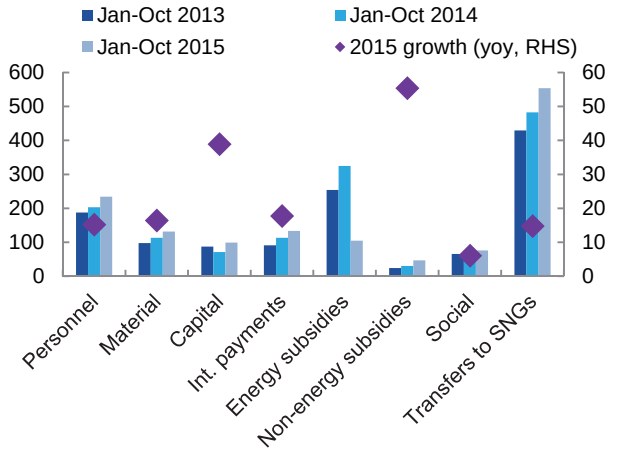
percent yoy in the corresponding periods in 2012-2014) and the decrease in imports in the first three quarters of 2015.

Figure 14: Oil and gas revenues continue to drive the revenue slowdown
(contributions of selected revenue categories to nominal revenue growth yoy, percent)



Note: O&G stands for "oil and gas", N-O&G – "non-oil and gas"; LGST – "luxury goods sales tax"; NTR – "non-tax revenues".
Source: Ministry of Finance; World Bank staff calculations

Figure 15: Except for energy subsidies, disbursement rates were higher than in previous years
(IDR trillion, LHS; percent yoy, RHS)



Note: Energy subsidies declined by 68 percent yoy (not shown on chart).
Source: Ministry of Finance; World Bank staff calculations

Public spending accelerated across expenditure categories in H2 2015…

After a slow start in the first half of the year, expenditure disbursement accelerated and reached IDR 1,384 trillion in October – 72.4 percent of the full-year allocation in the revised 2015 outlook. All expenditure items, except energy subsidies, experienced a strong 20 percent yoy nominal growth (Figure 15). In particular, the disbursement of capital expenditure increased by 39 percent yoy, though it remained low relative to the ambitious target in the revised 2015 Budget.

… though project implementation varied across ministries and between the central and sub-national governments

According to data from the Budget Realization Evaluation and Monitoring Team,[12] public spending disbursement varied across line ministries. For example, spending by the Ministry of Public Works and Housing reached 48.5 percent of the target, while the Ministry of Transport only 28.4 percent, and the Ministry of Energy and Mineral Resource 28.6 percent. In addition, transfers to sub-national governments, including the Village Fund, accounted for 83 percent of the full-year allocation, up by 14.7 percent yoy. However, actual spending by local governments remains a challenge.[13]

The recently approved 2016 Budget foresees further improvements in the composition of spending…

The 2016 Budget, which was approved by Parliament on October 30, contains further improvements in the composition of spending, including further reduction in energy subsidies and higher spending on health, infrastructure and social assistance. However, reaching the 2016 total revenue target could be challenging, given the revenue shortfall in 2015 and continuing weak macroeconomic conditions and low commodity prices. The government projects a fiscal deficit of 2.2 percent of GDP (IDR 273.4 trillion) next year.

[12] http://monev.lkpp.go.id/tepraPerubahan/summary?instansi=K18&tahun=2015
[13] According to media reports citing the Ministry of Home Affairs, by September 22 provincial governments spent on average only 50 percent of their budgets (19 percent in the case of DKI Jakarta): http://m.republika.co.id/berita/nasional/umum/15/10/03/nvm246354-penyerapan-apbd-pemprov-dki-jakarta-terendah-dari-34-provinsi-seindonesia.

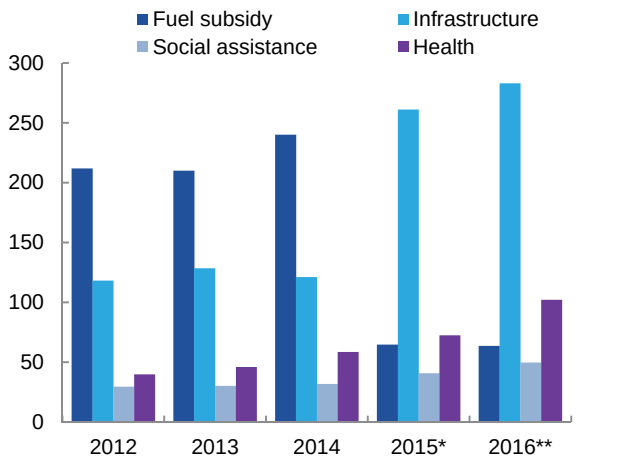
… though the optimistic revenue target will require significant tax collection improvements

The revenue target for 2016 is set at IDR 1,822 trillion (14.3 percent of GDP). The rise in revenues is expected to come entirely from higher tax receipts, up 13.1 percent relative to the latest 2015 revenue outlook, while non-tax revenues are projected to contract by 2.0 percent. The 2016 Budget includes several tax measures which, if implemented effectively, are expected to help mobilize additional tax revenues in 2016. Apart from a planned adjustment in excise tariffs, all of the proposed measures refer to improvements in tax administration by increasing the capacity for revenue collection of the Directorate General of Tax and the Directorate General of Customs and Excises through improvements in IT, audit procedure, and law enforcement.

Further reduction in energy subsidies in 2016 will allow for more spending on development priorities…

Total public expenditure, at IDR 2,096 trillion (16.6 percent of GDP), is set to rise by 9.7 percent relative to the revised 2015 outlook. The main reason for the increase is the significant rise in transfers to local governments, including the Village Fund (see also Part B.2), by 15.9 percent yoy. Energy subsidies are expected to decline by 27 percent compared with the allocation in the revised 2015 outlook, providing further fiscal space for spending on infrastructure, health, and targeted social assistance (Figure 16).[14] The government plans to further improve the targeting of electricity subsidies, in particular for households with 450VA – 900VA power supply, by using the unified database which is managed by the National Team for the Acceleration of Poverty Reduction (TNP2K) and which compiles social economic information for 96 million individuals (around 40 percent of Indonesia's population).[15]

Figure 16: Higher health, infrastructure and social assistance spending is planned for 2016
(IDR trillion)



Note: See footnote 3 in main text.
Source: Ministry of Finance; World Bank staff calculations

… such as infrastructure, health and targeted social assistance

According to the 2016 Budget, the allocation for infrastructure development will rise by 7.2 percent from the level in the revised 2015 Budget. Most of the increase is expected to materialize through higher transfers to local governments (mainly through the Special Allocation Find (*Dana Alokasi Khusus*, DAK) and the Village Fund (*Dana Desa*)) and capital injections into state-owned enterprises,[16] which will

[14] Infrastructure and health spending refers to the definition outlined in the draft 2016 Budget Financial Note. Infrastructure spending includes expenditures of the ministries of Public Works and Housing, Transport, Energy and Mineral Resources, and Agriculture; transfers to sub-national governments through DAK (see next paragraph) and the Village Fund; as well as capital injections into state-owned enterprises. Health spending includes expenditures by the Ministry of Health and the Medicine Control Agency, and transfers to local governments through DAK. Social assistance follows the World Bank definition and excludes the health insurance subsidy for the poor (PBI), which is included in health spending, and the temporary programs to compensate for subsidized fuel price increases.

[15] Global Subsidy Initiative, Indonesia Energy Subsidy Briefing November 2015: https://www.iisd.org/gsi/news/indonesia-news-briefing-november-2015.

[16] Parliament has made the planned capital injection of IDR 40.2 trillion conditional on discussions to revise the 2016 Budget, which are likely to happen in Q1 2016.

offset the 15-percent decline in central line ministry budgets. To support the implementation of the national health insurance program (*Jaminan Kesehatan Nasional*, JKN) and to achieve universal access to healthcare by 2019, the government plans to expand the coverage of subsidized health insurance (*Penerima Bantuan Iuran*, PBI) from 88.2 million people in 2015 to 92.4 million people in 2016. The budget allocation for this will rise from IDR 20.3 trillion in the revised 2015 Budget to IDR 25.5 trillion next year. The government has also allocated more funds for other health spending (central and estimated sub-national spending), reaching the minimum 5 percent of total expenditure threshold mandated by Law 36/2009 concerning Health (compared with 3.7 percent in the revised 2015 Budget). In addition, the government plans to double the number of conditional cash transfer (*Program Keluarga Harapan*, PKH) beneficiaries from 3 million households in 2015 to 6 million in 2016 and the budget allocation from IDR 6.1 trillion to IDR 13.8 trillion.

Table 4: The Ministry of Finance projects a fiscal deficit of 2.2 percent of GDP in 2016
(IDR trillion, unless otherwise indicated)

	2015 Revised Budget	2015 Ministry of Finance revised outlook	2015 January – October Budget realization	2016 Budget
A. Revenues	**1,762**	**1,650**	**1,100**	**1,822**
1. Tax revenues	**1,489**	**1,367**	**894**	**1,547**
Income tax	679	678	441	757
Oil and gas	50	52	43	41
Non-oil and gas	630	596	397	716
VAT/LGST	577	498	308	572
International trade taxes	49	40	28	40
Import duties	37	35	25	37
Export taxes	12	5	3	3
2. Non-tax revenues*	**269**	**279**	**205**	**274**
B. Expenditures*	**1,984**	**1,910**	**1,384**	**2,096**
I. Central government	1,320	1,246	830	1,326
Personnel	293	N/A	234	N/A
Material	239	N/A	132	N/A
Capital	276	N/A	99	N/A
Interest payments	156	157	133	185
Subsidies	212	214	151	183
Energy subsidies	138	140	105	102
Fuel	65	66	*59*	*64*
Electricity	73	75	*45*	*38*
Non-energy subsidies	74	74	47	81
Grants	5	N/A	1	4
Social	104	N/A	76	0
Other expenditures	36	N/A	4	0
II. Transfers to regions	665	664	554	770
C. Primary balance	**-67**	**-103**	**-151**	**-89**
D. Overall balance	**-223**	**-260**	**-284**	**-273**
as percent of GDP	*-1.9*	*-2.2*	**-2.5**	**-2.2**
Key economic assumptions				
Real GDP growth (percent)	5.7	5.2		5.3
CPI (yoy, percent)	5.0	4.2		4.7
Exchange rate (IDR/USD)	12,500	13,100		13,900
Crude-oil price (USD/barrel)	60	59		50
Oil production ('000 barrels/ day)	825	825		830

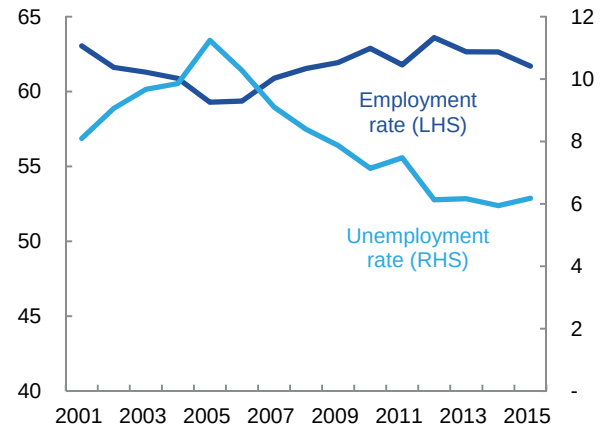
Note: * Unpublished Ministry of Finance data.
Source: Ministry of Finance

7. Job creation has weakened and become even more reliant on low-productivity sectors

The growth moderation has resulted in higher unemployment in 2015…

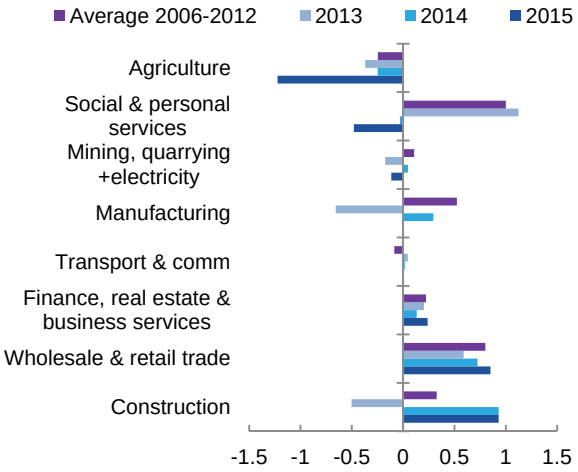
Indonesia's recent labor market performance has been adversely affected by the economic slowdown and weaker external conditions which followed the end of the commodities boom. Job creation in the past year has been modest, with less than 200,000 new jobs created between August 2014 and August 2015. This compares with an average of 2.6 million new jobs created yearly between 2006 and 2012, and with an increase in the working-age population by 3.1 million. As a result, the aggregate employment rate declined to 61.7 percent, the lowest it has been since 2008. The aggregate unemployment rate increased to 6.2 percent, from 5.9 percent in August 2014, reversing the declining trend observed in the past decade (Figure 17).

Figure 17: Moderate growth has resulted in higher unemployment…
(share of labor force, percent)



Source: BPS; World Bank staff calculations

Figure 18: … with only the construction and trade sectors driving job creation
(change in the number of employed yoy, millions)



Source: BPS; World Bank staff calculations

… with agriculture and social and personal services losing jobs

The sectors that have experienced the largest job losses are agriculture, with over 1.2 million jobs lost, and social and personal services, with 500,000 jobs lost (Figure 18). While the decline in employment in agriculture has been an ongoing trend during the last fifteen years, in the last year job losses in this sector were the worst since 2011. Social and personal services, on the contrary, have been one of the sectors with the highest contribution to job creation during the past decade, with 1 million new jobs created each year between 2006 and 2012. Therefore, its recent slowdown can be particularly worrying, as informal and low-skilled workers formerly employed in this sector may have difficulties finding new opportunities under weaker macroeconomic conditions. An additional worrying signal is coming from the manufacturing industry, where employment has been stagnant, likely reflecting lower external and domestic demand.

While construction and trade continue to create jobs…

The sectors that still contribute significantly to job creation are construction, which in the past two years has created more than twice as many jobs as during 2006-2012, and wholesale and retail trade. Furthermore, advanced services, such as banking, finance, and real estate, although still contributing modestly to overall job creation, have exhibited an encouraging trend.

… those jobs are low-productivity ones

Although the rise in unemployment has so far been moderate, the underlying trends are a cause for concern. The sectors currently creating jobs may simply be absorbing unskilled labor shed by other sectors, such as agriculture, personal services and manufacturing. Moreover, the sectors that are still creating employment – construction and trade – are low-productivity sectors. It is, therefore, unlikely that their expansion, without a revitalization of the manufacturing sector, will lead to the productivity jump that Indonesia still needs to address its structural challenges in the midst of the current economic slowdown.

8. The improvement in investment hinges on the government's reform effort

Risks related to global growth, trade and financial markets remain to the downside

Risks to the World Bank's economic outlook for Indonesia are tilted to the downside. The main external risks, unchanged from the October 2015 *IEQ*, include a stronger than projected slowdown in emerging market economies, including China's, weaker than expected global trade recovery, and lower than projected commodity prices. Despite recent stabilization in global financial markets, renewed increases in financial market volatility remain a risk. Higher external borrowing costs may further constrain investment. Moreover, a weaker than expected Rupiah, in addition to higher emerging market interest rate spreads, may raise private sector balance sheet pressures, with negative consequences for investment as well.

Public financing risks in 2015 are limited…

On the domestic front, as the driver of growth in the short term has shifted to the public sector, a key risk to the outlook is weaker than expected fiscal revenues. Higher budget disbursement rates, coupled with weak revenue collection, have resulted in larger than expected budget deficit and gross financing needs in 2015. According to the Directorate General of Budget Financing and Risk Management, 2015 gross financing needs are IDR 497.2 trillion with a budget deficit of 2.2 percent of GDP. If the 2015 budget deficit reaches the legal limit of 2.7 percent of GDP for the central government,[17] gross financing needs will increase by IDR 52 trillion (0.6 percent of GDP). As of December 2, the government has already secured IDR 510.4 trillion from securities issuance and USD 3.89 billion (around IDR 53 trillion) in foreign official lending. Frontloading of government securities issuances and greater reliance on multilateral financing have helped mitigate fiscal risks in 2015.

… but expenditure cuts may be needed, if revenues weaken further…

Although financing risks are limited, if revenues were to weaken further in the remaining weeks of 2015, expenditures may have to be cut. For example, the government may need to postpone capital projects or delay payments. This, in turn, will limit the public infrastructure spending momentum and may reduce growth. The full implementation of the government's current expenditure plans for 2016 is also at risk, if revenue collection is to remain weak.

… putting the onus on regulatory reform implementation to improve investor sentiment

On the upside, the recent policy reform packages' focus on deregulation (see Box 1) may help lift private sector sentiment and private investment going forward. Because the policy space for economic stimulus remains constrained, attention has turned to the structural reform measures announced in September—December this year. So far, however, a comprehensive assessment of the impact of the packages is not available and private investment growth has remained subdued (see Section 2). Early signs of effective reform implementation may help provide a much needed boost to business confidence.

[17] PMK No. 183/PMK 07/2014. See also page 17 of the July 2015 *IEQ*.

Box 1: An important and wide-ranging reform process was initiated in September

The Government started a significant effort of regulatory reform with seven economic policy packages announced between September 9 and December 4, 2015. Further packages are expected over the coming years. The recently announced reforms go beyond regulatory simplification and fiscal stimulus, and include structural reforms (Table 5). The Government's intent is fourfold: to increase investments, revitalize domestic industry, facilitate trade and improve logistics, and ease the procurement of raw materials, particularly in such sectors as agriculture, marine affairs and fisheries, and mining products. As usual, implementation will be the crucial test. While some measures could be adopted immediately (e.g. the electricity subsidies), most regulatory reforms require structured and broad-based consultation (including with consumers, users of intermediate inputs or services and producers) to ensure policy consistency and economy-wide benefits and to avoid unintended consequences.[1]

Table 5: The government's reform agenda is broad-based*

Package	Focus	Main proposed reforms
I	Regulatory simplification	- Rationalize regulations by eliminating redundancies and inconsistencies (134 new regulations which largely revise existing ones; 16 ministries and agencies responsible for enacting them).
II	Investment climate	- Simplified procedures to obtain a license to invest in industrial estates; - Accelerated procedures to obtain tax incentives; - Development of new bonded logistics parks.
III	Small enterprises and cooperatives	- Subsidized access to fuel, electricity and gas; - Reduced interest rates for micro-loans under the Micro-, Small- and Medium-sized Enterprise Credit (*Kredit Usaha Rakyat*, KUR) program; - Simplified land licensing.
IV	Minimum wage determination	- Formula-based minimum wages; - Expansion of KUR's coverage.
V	Tax relief	- Asset revaluation with a lower income tax revaluation tariff;** - Removal of double taxation on real estate, property and infrastructure to encourage the development of real estate fund investment products; - Deregulation in sharia banking.
VI	Special economic zones (SEZs)	- Tax incentives, licensing and customs processing simplification, etc., to make investment in SEZs more attractive; - New regulations to provide legal certainty for private companies that operate drinking water supply systems; - Fully paperless electronic applications for import licenses for drugs, raw materials for drugs and traditional medicines, cosmetics, food, and supplements.
VII	Access to collateral through land titles	- Accelerate the process of land title registration to help enable micro- and small-sized enterprises to use the land as collateral, as well as introduce an electronic land registration system; - Reduce the income tax for enterprises and workers in labor intensive industries in all provinces in Indonesia.

Note: *The table highlights the main proposed reforms. More information on the packages can be found on the Coordinating Ministry for Economic Affairs website: http://ekon.go.id/ekliping. ** From 10 percent to 3-6 percent, depending on submission date.
Source: Coordinating Ministry for Economic Affairs

Most of the proposed reforms are work in progress, with some regulations already enacted, and some in the pipeline. For instance, as of November 4, the Ministry of Trade had revised 15 regulations, which included removing/ simplifying 10 selected import licenses (i.e. forest products, textile and batik textile products, sodium polyphosphate, clove, tire, optical disks, cooling system based goods, ozone destroying materials, horticulture products). The reduced fuel and electricity prices for industry entered into effect immediately, with the gas price reduction to enter into effect on January 1, 2016. The Indonesia Investment Coordinating Board enacted regulation to facilitate a three-hour investment licensing service. Others are work in progress, requiring inter-ministerial coordination and agreement, or are being reviewed by the Ministry of Law and Human Rights to ensure format compliance and conformity with more superior regulations already in effect as part of the so-called 'harmonization process'.

For the reforms to be felt on the ground, local government buy-in and implementation capabilities are critical. National reforms will not have much impact without local adoption and implementation.[2] Starting in Surabaya, Jakarta, Bali, Batam, Semarang, and Banjarmasin, the Coordinating Ministry for Economic Affairs recently initiated a consultation process with sub-national governments to communicate about the packages, as well as to collect new ideas. Progress at the local level is likely to happen at different speeds across the archipelago. To accelerate the process, local

governments could be given incentives to participate in the ongoing reform drive. Reform champions can be identified and supported through a dedicated program.

To sustain the reform effort, an institutionalized, empowered and centralized review process for new regulations against government objectives would be needed to manage the ongoing reform implementation and the "flow" of incoming regulations. The experiences of countries that successfully accelerated business climate reforms show the importance of a dedicated reform team with frequent reporting to the highest level of government. In addition, strengthened and broad-based private sector participation can promote transparency and facilitate effective communication of successful reforms. In some countries, such as South Korea, Sweden, Mexico, Hungary and Mongolia, a comprehensive inventory of all licenses has led to concrete reform actions. They introduced a "regulatory guillotine", which tests the legality, necessity and business friendliness of a given regulatory requirement, with three possible outcomes: abolish, amend or leave as-is. International experience offers different ways in which government agencies can improve the quality of the "flow" of incoming regulations (e.g., relying on regulatory impact assessment), minimize the disruption that comes from unexpected rule-making (e.g., through notice-and-comment processes), and avoid unintended negative impact on the private sector (e.g., via public-private dialogue). Finally, complementary process improvements areimportant. For instance, in the case of easing imports, the implementation of process improvements, such as fully paperless electronic applications, parallel processing, and a risk-based import approval regime, would significantly enhance reform outcomes.

Note: [1] For instance, two newly enacted regulations (Ministry of Trade Regulation Nos. 87/2015 and 70/2015) created controversy by making it more difficult for producers to import, and their implementation is currently on hold by virtue of Minister of Trade Regulations; [2] For example, in October 2014, twelve years after passing the law on building, less than half of the regions in the country had passed regulations on building permits; not all regions with regulations had actually implemented them; and only 16 regions had appointed expert teams to appraise applications. Presentation by Ministry of Public Works (MoPW), October 2014: http://www.academia.edu/8832085/Implementasi_Peraturan_Daerah_Mengenai_Bangunan_Gedung**; information verified with MoPW officials.**

B. Some recent developments in Indonesia's economy

1. Indonesia's fire crisis: Who benefits and who pays?

Man-made fire and haze cost Indonesia IDR 221 trillion in just five months

According to the government, 2.6 million hectares of land burned between June and October 2015,[18] an area four and half times the size of Bali. Man-made fires – more than 100,000 of them[19] – were used to prepare land for agriculture and to gain access to land cheaply. The absence of controlled burning measures or sufficient law enforcement meant that the fires grew out of control, fed by drought and exacerbated by the effects of El Niño. This vast economic and environmental crisis is repeated year after year, as a few hundred businesses and a few thousand farmers seek to profit from land and plantation speculation practices, while tens of millions of Indonesians suffer health costs and economic disruptions. In 2015, fires cost Indonesia an estimated IDR 221 trillion (USD 16.1 billion) (see Section b). Regional and global costs would be much higher. The government has pledged to prioritize a response and the president has called for action. Now is the time for Indonesia to address the underlying drivers of man-made fires, enforce laws and revise policies in order to reduce the risk of these economic disasters from recurring.

[18] Communicated by Indonesia's Ministry of Environment and Forestry at the Meeting of Communication Forum for Disaster Data and Information in Jakarta November 10, 2015.
[19] Global Fire Emissions Database: http://www.globalfiredata.org/index.html.

Unlike years past, fires in Papua were a big part of the 2015 fire crisis

By October 2015, eight provinces had burned more than 100,000 hectares each. In line with historical patterns, the islands of Sumatra and Kalimantan – where most of the country's fragile peatlands (*lahan gambut)* are located – were the hardest hit. The provinces of South Sumatra and Central Kalimantan represented 23 percent and 16 percent of the total burned area, respectively. Unlike past years, however, fires in Papua were particularly widespread, resulting in 10 percent of the total area burned nationally. Draining and conversion of peatlands, driven largely by palm oil production, contributes to the intensity of haze from fire. About 33 percent of the total area burned was peatlands, leading to noxious haze that blanketed parts of Indonesia and the region, disrupting transport, trade, and tourism, forcing school closures and negatively affecting health. The 2015 fires also contributed significantly to Indonesia's substantial greenhouse gas (GHG) emissions (see Box 3).

Table 6: Hectares burned by province, June – October 2015

	Province	Thousand hectares	Percent
1	S. Sumatra	608	23
2	Cen. Kalimantan	429	16
3	E. Kalimantan	388	15
4	S. Kalimantan	292	11
5	Papua	268	10
6	W. Kalimantan	178	7
7	Riau	139	5
8	Jambi	123	5
	Other	186	7
Total		**2,611**	**100**

Source: Agency for the Assessment and Application of Technology (*Badan Pengkajian dan Penerapan Teknologi*, BPPT); Ministry of Environment and Forestry; World Bank staff calculations

Box 2: Certification standards could encourage environmentally friendly production practices

In 2015, the estimated economic cost of fire to Indonesia (IDR 221 trillion) was larger than the estimated value added from Indonesia's 2014 gross palm oil exports (IDR 115 trillion) and the value added from the country's entire 2014 palm oil production (IDR 168 trillion).[1] While not all fires are set to clear land for oil palm, oil palm – an important and growing sector of the economy – is a large driver of land conversion. Given government support for its continued expansion,[2] coupled with the negative externalities of use of fire in some oil palm production, a consideration of the relative costs of both is warranted.

Indonesia has a mandatory certification scheme – the Indonesian Sustainable Palm Oil Initiative (ISPO) – governing oil palm production on plantations greater than 25 hectares that promotes sustainably-produced oil palm. In addition, most large companies subscribe to the Roundtable on Sustainable Palm Oil (RSPO) – a voluntary certification scheme globally accepted as the mark of sustainability. In addition, the Indonesia Palm Oil Pledge (IPOP) is a platform where participating companies pledge to produce and trade only deforestation-free oil palm within their supply chains. This means not sourcing palm oil produced on peat or old shrub lands or from areas that were once primary or secondary forests. Traceability is a key element of the IPOP commitment as it mandates that the palm fruit produced or traded is consistent with deforestation-free and sustainable agriculture practices. Given that IPOP members represent 60-65% of Indonesia's (2013) 33 million tons of annual crude palm oil production, commitment to such standards implies a significant part of Indonesian production should be deforestation-free. However, there are technical challenges to ensuring the IPOP pledge is met. Specifically, government has expressed concern that some producers, namely smallholders, may not be able to comply and have pushed for these producers to be exempted. Monitoring is impeded, in part, by the absence of a transparent, agreed-upon map of sensitive areas that are off-limits to development.

Several steps could make certification schemes and pledges more robust, leading to more sustainable production practices. On the policy side, a government regulation for peatland protection, restoration, and management, including a roadmap for transitioning people and production off of sensitive peatland areas, should be formalized and enforced. Technical follow-up is also needed. Specifically, given that some certification standards, including the RSPO, call for the protection of lands with high conservation value and/or high carbon stock, a government-led, publically-consulted inventory– including on peatlands – would provide a single set of data to inform a baseline upon which policy and investment decisions could be made. Additionally, monitoring and implementation of responsible production standards would be strengthened considerably with the finalization of the OneMap initiative, which aims to integrate relevant land-use and boundary data into a single, publically-available database for Indonesia. Such a map could help guide investment decisions by demarcating forest from non-forest lands. Data could also be integrated to include additional

information on sensitive ecosystems (e.g., peatlands and primary forest), and identify lands that may need further protections.

Note: [1] Based on a gross export value of USD 17.5 billion in 2014 and total palm oil production value of IDR 302.5 trillion (USD 25.5 billion) multiplied by the palm oil industry value added share 0.556 of total palm oil output taken from the Indonesian 2008 Input-Output table. The data sources are Food and Agriculture Organization, Indonesian Palm Oil Producers Association, and Indonesian Ministry of Agriculture; [2] The government aims to increase crude palm oil production to 40 million tons by 2020, from around 31 million tons in 2014 (Krisnamurti, B., 2008, "Government strategic policies in sustainable oil palm development," presentation at the Indonesian Palm Oil Conference and Price Outlook 2009, Bali.

Few gain, many lose from repeated fire and haze events

Fire has long been a tool for agriculture in Indonesia. Informally, it also plays an important role in land acquisition. This means that, while many suffer extensive fire and haze-related losses, there are a few who make significant gains. This article looks at this winner-loser dynamic, estimating the economic losses and damages associated with fire and haze in 2015 from eight provinces and relating these to profits gained from one area of agriculture – oil palm.

a. Palm oil production is worth billions: who benefits?

Fire is a cheap way to clear land for agriculture…

Indonesia's fire story is not just one of loss and damage; fires contribute to significant economic upside for a diverse, if concentrated, group of actors. Fire is an integral part of the process of large-scale conversion of the nation's rich forest assets, particularly peatlands, into agricultural lands for private benefit. The growth in the prevalence of fire correlates with the expansion of lucrative agricultural commodities such as palm oil and acacia for wood fiber. Land conversion by fire is prohibited by Law No. 32/2009 and penalties include fines and prison terms. Yet, the alternative of mechanical clearing with heavy equipment can be many times more expensive.[20]

…and an effective tool for land acquisition

There are three common uses for fire in Indonesia: (i) land clearing and preparation; (ii) land acquisition; and (iii) as a mechanism to force inhabitants off the land. As a tool for acquisition, landholders burn beyond their concession boundaries or those with no formal claim to the land burn land and then claim it. Without effective enforcement there is no control; and, given the profitability of crops such as oil palm, there is a strong incentive to continue the practice.

The cashflow generated in just three years on one hectare of low-productivity oil palm is about USD 3,000

Analysis by the Center for International Forestry Research (CIFOR) provides an example of the role of fire in the lucrative palm oil industry. Looking at 11 sites outside of concessioned plantations across 4 districts in Riau, CIFOR concluded that using fire for land acquisition and clearing generates a cashflow of at least USD 3,077 per hectare of oil palm in just three years.[21] While the production process involves illegal means for land clearing, the resulting palm oil is processed at the same facilities as legally-produced palm fruit before both types are sold for consumption. If every hectare burned in 2015 were converted to oil palm, the value would be about USD 8 billion, highlighting the scope for high profit in a short period of time. Poor land management and governance allow this ecologically-destructive activity to continue. Peatlands are a target as they are generally uninhabited and relatively free of overlapping claims.

[20] Simorangkir, D., 2007, "Fire use: Is it really the cheaper land preparation method for large-scale plantations?", Mitig Adapt Strat Glob Change, 12: 147—164.

[21] Purnomo, H., Shantiko, B., Gunawan, H. 2015, Political economy study of fire and haze, presented at the International Seminar "Toward a sustainable and resilient community: Co-existence of oil palm plantation, biodiversity and peat fire prevention", August 5, 2015, University of Riau, Pekanbaru, Bogor, Indonesia: Center for International Forestry Research.

A concentrated few benefit significantly from Indonesia's pervasive fires

The CIFOR work finds that 85 percent of the cashflow generated goes to local elites – i.e., those in power or able to take financial risk – and to plantation developers. Smaller profits accrue to the land claimant (1 percent), land broker (2 percent), tree cutters (3 percent), slashers (3 percent) and burners (1 percent), and the oil palm farmer (5 percent). Without alternative commensurate economic opportunities, it is no surprise oil palm plantation expansion (especially on peat) continues. However, the rapid expansion also incurs negative impacts that carry domestic, as well as regional and global losses, affecting far more people than the relatively few who benefit.

Box 3: Peat fires have significant consequences for climate change

Calculating the GHG emissions from Indonesia's fires is difficult and hinges primarily on quantifying the amount and depth of peatlands burned. While all fires produce GHG emissions, the CO_2 emissions from fire are usually balanced by regrowth after the fire. However, this is not the case for peat fires because they burn carbon that has been deposited over thousands of years and cannot be replaced. Peatlands have long been a target for land conversion – draining seemingly unproductive swamp land and then clearing it with fire for agriculture. Dry peatland is quick to burn and difficult to extinguish.

Most peat is found on Sumatra, Kalimantan, and Papua but there is no agreed map nor a complete baseline of peatland areas. Allowing drainage and burning of peatlands has significant, even global, consequences for climate change, as well as on health and the economy in Indonesia and the region. In addition to contributing significantly to GHG emissions, peat fires also produce haze due to their high content of aerosols.

The Global Fire Emissions Database version 4 (GFED4) provides a best, if uncertain, estimate of the GHG emissions impact of the 2015 fires by extending estimates of earlier years based on satellite-derived burned area and fuel consumption with satellite detections of active fires.[1] GFED estimates that in 2015 Indonesian fires contributed roughly 1,750 million metric tons of carbon dioxide equivalent ($mtCO_2e$) to global emissions in 2015. By comparison, based on its 2nd National Communication to the United Nations Framework Convention on Climate Change, Indonesia estimates that its annual economy-wide emissions are 1,800 $MtCO_2e$. Indonesia has pledged to reduce emissions by 29 percent (or 41 percent with international financial support) compared with a business-as-usual scenario by 2030 as part of its contribution to keep global temperatures from exceeding 2 degrees Celsius. Fires like those in 2015 will make reaching this target impossible.

Note: [1]This approach is described in Van der Werf et al. (2010), "Global fire emissions and the contribution of deforestation, savanna, forest, agricultural, and peat fires (1997–2009)" Journal of Atmospheric Chemistry and Physics, and further detailed on the GFED website.

b. The 2015 fires cost Indonesia an estimated IDR 221 trillion: who pays?

In 2015, fire in Indonesia cost nearly twice that of reconstruction following the 2004 tsunami in Aceh

The World Bank estimates that the 2015 fires cost Indonesia at least IDR 221 trillion (USD 16.1 billion), equivalent to 1.9 percent of 2015 GDP. This is more than twice the reconstruction cost following the Aceh tsunami.[22] The analysis estimates impacts on agriculture, forestry, trade, tourism, and transportation. The short-term effect of haze exposure on health and school closures are also included. Other costs captured include those to the environment, emergency response, and fire suppression. However, the estimate does not fully capture long-term impacts on health of sustained exposure to haze, nor the loss of all ecosystem services. Furthermore, it does not incorporate regional or global losses.

The analysis is based on the UN disaster loss and damage assessment methodology and

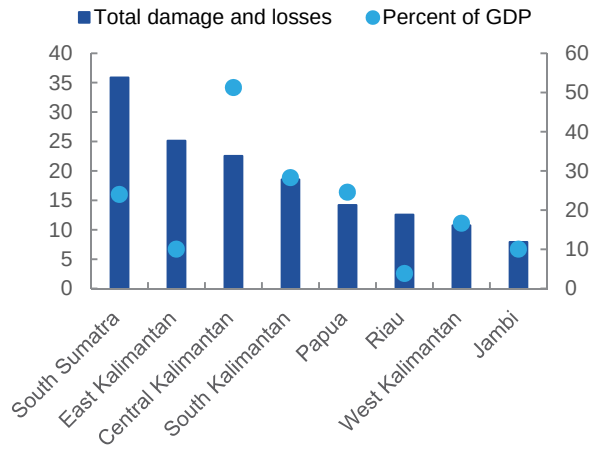
The estimates presented here cover the period June 1 - October 31, 2015 and 2.4 million of the 2.6 million hectares – or 94 percent – of the burned area in South Sumatra, Central Kalimantan, South Kalimantan, West and East Kalimantan, Riau, Jambi, and Papua. The analysis uses a disaster assessment methodology developed by the UN Economic Commission for Latin America and the Caribbean

[22] As reported by the World Bank: http://www.worldbank.org/en/news/feature/2012/12/26/indonesia-reconstruction-chapter-ends-eight-years-after-the-tsunami.

covers almost all burned areas reported by the government

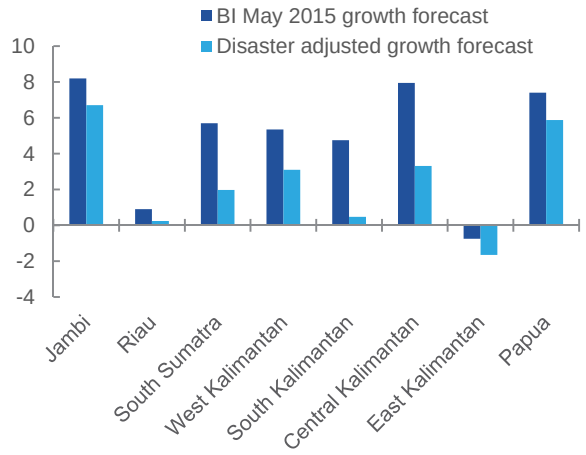
(ECLAC).[23] Costs are based on an analysis of the types of land burned as reported by the Government of Indonesia.[24] Where available, actual costs are used. Damages are an estimate of the amount of financing needed for reconstruction and rehabilitation, while losses represent the reduction in economic activities and income resulting from the disaster.

Figure 19: Affected provinces have suffered damage and losses due to fire and haze…
(percent, LHS; IDR trillions, RHS)



Source: BPS; World Bank staff calculations

Figure 20: …which has reduced 2015 GDP growth
(percent)



Note: The provincial growth forecasts are from BI Archipelago Report (*Laporan Nusantara*), August 2015.
Source: BI; BPS; World Bank staff calculations

Fire and haze are estimated to have caused substantial reductions in GDP growth in the affected provinces

According to the estimates, fire and haze have resulted in damage and loss values ranging between IDR 11.9 trillion (USD 866 million) in Jambi to IDR 53.8 trillion (USD 3.9 billion) in South Sumatra (Figure 19). As a share of provincial GDP, Central Kalimantan is estimated to have suffered the most – 34 percent – half of which came from agriculture, mainly oil palm plantations. Real GDP growth in the affected provinces may be lower by between 0.7 and 4.7 percentage points in 2015, all else equal.

The impact assessment for 2015 indicates agriculture and forestry losses of IDR 120 trillion…

Agriculture and forestry have sustained estimated losses and damages of IDR 120 trillion in 2015 (USD 8.8 billion) (Table 7). Damages to agriculture include those to infrastructure and equipment, while losses capture the cost of reclaiming burned lands for planting and the foregone production revenue during this reclaiming period. As a result, the 2015 fires are estimated to cause additional losses of about IDR 11 trillion per year for the next three in the case of estate crops (e.g., palm oil, rubber, and coconut) and five years for forests. Damages to estate crops affected companies and small-holder farmers. Costs to food crops (IDR 23.7 trillion) translate into lower incomes for farmers and possible impacts on food security. Forestry losses of IDR 54 trillion include the lost value of timber and the cost of reforestation.

[23] ECLAC (2014), Handbook for Disaster Assessment: http://caribbean.eclac.org/content/handbook-disaster-assesment.
[24] For 33 percent of the land these details are unknown. In these cases the lowest land value is applied.

Table 7: Estimated losses and damages from forest fires and haze in June-October 2015 reached IDR 221 trillion
(IDR billion)

	Jambi	Riau	South Suma-tra	West Kaliman-tan	South Kaliman-tan	Central Kaliman-tan	East Kaliman-tan	Papua	Total
Agriculture	2,890	2,482	14,190	4,793	7,187	17,051	15,488	2,370	**66,452**
Estate crops	1,839	1,841	3,575	3,274	2,315	14,765	13,813	1,311	**42,734**
Food crops	1,052	641	10,615	1,519	4,872	2,286	1,675	1,059	**23,718**
Environment	3,109	3,139	16,552	5,158	5,317	10,660	7,282	7,188	**58,406**
Biodiversity loss	233	335	988	312	369	455	449	803	**3,943**
Carbon emission	2,876	2,805	15,565	4,846	4,947	10,205	6,833	6,386	**54,462**
Forestry	1,863	4,175	13,348	2,309	9,583	1,260	11,194	10,246	**53,977**
Manufacturing and mining	396	2,511	1,823	836	1,678	196	943	0	**8,382**
Trade	2,528	4,008	3,982	1,652	1,913	1,804	1,481	929	**18,298**
Transportation	280	430	1,106	237	912	1,522	435	185	**5,107**
Tourism	140	1599	1626	740	523	571	225	50	**5,474**
Health	495	298	388	165	327	230	167	8	**2,079**
Education	53	55	123	61	77	72	61	39	**540**
Firefighting costs	137	155	677	198	325	477	431	299	**2,700**
Total in IDR million	**11,892**	**18,853**	**53,814**	**16,149**	**27,843**	**33,842**	**37,708**	**21,314**	**221,415**

Note: Losses do not account for the economic benefit to those who set fires.
Source: Bogor Agricultural University; BPPT; BPS; CIFOR; media reports; Ministry of Health; regional governments; World Bank staff calculations

… and IDR 59 trillion in biodiversity losses and loss of carbon storage

Costs to the environment were substantial (26 percent of the total) and include losses to biodiversity (applying the government's biodiversity value per hectare), as well as losses to ecosystem services. Because the impact on ecosystem services is especially difficult to quantify, the assessment focuses on a single foregone service – carbon storage.[25] Lost capacity for carbon storage represents the single biggest cost of the fires, underscoring their global impact.

Transport, trade, tourism, manufacturing, and mining also suffered

High levels of haze through most of September and October cost the transportation sector IDR 5.1 trillion. Most of the losses were borne by seaports as cargo shipping was interrupted by poor visibility. Transport costs contributed to slower growth in trade services which suffered IDR 18.3 trillion in losses. Tourism lost IDR 5.5 trillion in revenues due to the fires and haze. The costs to manufacturing and mining totaled IDR 8.4 trillion.

Additional significant costs to society include death and illness…

Haze has also contributed to the death of 19 people and more than 500,000 cases of acute respiratory infections.[26] Immediate health costs[27] totaled IDR 2.1 trillion.[28] The long-term costs cannot yet be quantified. Existing research suggests long-term exposure to air pollutants correlates with increased cardiovascular and chronic respiratory illness. A study on the effects of the 1998 Indonesian haze crisis on fetal, infant and under-three child mortality showed that air pollution led to 15,600 fewer surviving children.[29]

[25] This number is not meant to be an exact accounting of GHG emissions; rather, it serves to give a sense of the potential magnitude of lost ecosystem services. A value of USD5 per ton is applied to an approximation of the average carbon content of the lands impacted by fire.
[26] "Indonesia Forest Fires: Widodo to Visit Stricken Regions as Death Toll Mount," The Guardian, October 28, 2015.
[27] Direct health costs include increased incidence of inpatient and outpatient care, medical equipment and health worker overtime pay due to haze-induced illness. Data on utilization and facility visits are from The Center for Health Crisis Management at the Ministry of Health. Unit costs are based on local regulation on Community Health Centre (Puskesmas) user fees, and case base group payment for inpatient cases (INA CBG).
[28] In addition, lost wages as a result of missed work due to illness totaled IDR 54 trillion.
[29] Jayachandran, S., 2008, "Air Quality and Early-life Mortality: Evidence from Indonesia's Wildfires," NBER Working Paper No. 14011.

… as well as prolonged school closures

Haze also forced school closures for up to 34 days, resulting in IDR 540 billion in costs.[30] In some instances, schools closed for weeks at a time, obliging teachers to accommodate take-home assignments. Conditions were worst in October, impacting 24,773 schools and 4,692,537 students. Child-care costs and foregone wages increase when parents must care for children normally in school; these costs are not included in the World Bank assessment. Long-term, sustained school closures could contribute to weaker graduation rates if reclaiming lost school days becomes burdensome.

Box 4: Other costs – the unknown cumulative impact of fire and haze on flora and fauna

The full impact of Indonesia's systemic fire and haze on flora and fauna is unknown. Fire destroys natural genetic variability, which helps species adapt resistance to parasites and infectious diseases. Burning biomass produces the precursors of ground-level (tropospheric) ozone (O_3), which impacts plant growth and photosynthesis and leads to long-term effects on ecosystem structure and function. O_3 has been shown to reduce yields of major food crops and to affect the nutritional quality of wheat, rice, and soybean. It can also reduce the capacity of land to act as a carbon sink. The particulate matter in haze has also been shown to reduce local rainfall, which could in turn impact recently planted crops.

Sustained exposure to haze could also lead to the "volcano effect", i.e., a decrease in plant productivity in the short term due to limited sun exposure and a deleterious effect on plant physiology and photosynthesis. In the longer term, it could lead to an overall weakening in the ability of plant species to recover from shocks as a result of cumulative exposure to stress. In extreme cases, haze exposure could affect a species' ability to survive. Fire and haze also negatively affect pollinators, in turn affecting agricultural production. Chronic exposure to haze creates a sustained environment of stress, the impacts of which – on productivity and evolution – are unknown.

The recurring nature of Indonesia's fire crisis is of particular concern. While species can adapt, adaptations may not always be beneficial or possible. Fire wipes out living soil organisms, requiring years before pioneer species can recolonize. More concerning, however, is that long-term environmental stress will eventually lead to a tipping point, after which ecosystems will be altered irreversibly. How or when ecosystems will change is not known but the impact of this process could extend beyond Indonesia.

c. The case for peatland moratorium and restoration

A moratorium on new peatland concessions, coupled with peatland management and restoration, is necessary…

On October 23, 2015, President Widodo called for a moratorium on new peatland concessions and a cancellation of existing concessions that have not been developed, thereby halting the legal conversion of peatland and peat swamp forests into agricultural land. He also called for peatland restoration, including re-wetting priority areas. This should be accompanied by efforts to conserve remaining peat swamp forests and to stop drainage in areas of deep peat or high biodiversity. Fewer fires on peat will reduce haze, which in turn will reduce the economic and environmental costs.

… but short-term impacts to revenue need to be considered

The following back-of-the-envelope calculations for the two provinces that will be most impacted – Riau and Central Kalimantan (which together have 151,471 hectares of peatland) – could help better understand the cost of a moratorium. A moratorium includes two primary costs: (i) lost tax and fee revenue to local and national government, and (ii) a reduction in land value for concession holders. The estimated loss in annual revenue to local governments (but not the central government) in Riau and Central Kalimantan would amount to about IDR 2.0 trillion (USD 154 million) and IDR 1.2 trillion (USD 92 million), respectively. To accommodate the lost land value, the moratorium could be accompanied by a concession buy-back, land substitution offer, or a combination of both. At IDR 135

[30] The World Bank estimates an average daily loss of productivity in the seven provinces covered in this section (excluding East Kalimantan) multiplied by the number of school closures as a result of haze.

million (USD 10,000) per hectare – a reasonable estimate for well-managed certified oil palm plantations – a one-time land buy-back would cost IDR 131.6 trillion (USD 9.8 billion) in Riau and IDR 72.8 trillion (USD 5.4 billion) in Central Kalimantan.

Table 8: The estimated lost public revenue over one year as a result of a moratorium on peatland development is substantial

Province	Hectares impacted	One-time licensing fees	Land tax revenue (annual)	Personnel tax revenue (annual)	Royalties (annual)	Total annual revenue
			(IDR billions)			
Riau	975,000	390	1,131	284	554	**1,969**
Central Kalimantan	539,071	216	625	122	405	**1,152**

Restoration is possible but should be targeted

Indonesia has targeted two million hectares of degraded peatlands for restoration. To be effective, restoration must be planned carefully and include a long-term management plan. Poorly implemented, restoration could have unintended effects and costs, especially in areas where local populations depend on these lands for their livelihood. A quick estimate of initial restoration costs for basic canal blocking in two million hectares is IDR 27 trillion. This does not include recurrent costs of long-term management. It also excludes costs to businesses that must adapt to low-drainage practices or transition to activities that are compatible with wet peatlands. Effective restoration will prioritize areas where investment offers the greatest return, such as those where only a small portion of the peat dome has been impacted. Moreover, international experience demonstrates that conservation of intact wetland habitats is less expensive than restoration.

Table 9: Estimated construction cost of peatland restoration

Peatland to be restored	460,000 hectares identified as priority (Musi Banyu Asin + Ogan Komering Ilir + Pulang Pisau)
Cost per hectare	Land reconstruction and/or water management IDR 13,500,000 per hectare
Cost to restore 460,000 hectares	IDR 6.2 trillion
Cost to restore 2 million hectares	IDR 27 trillion

Note: Restoration cost per hectare is assumed to be $1,000, which includes the cost for heavy equipment for canal blocking, etc.
Source: World Bank staff calculations

In the long term, a comprehensive landscapes approach is needed

The moratorium and restoration pledges are welcome first responses from the government and are much cheaper than the costs that accrue from repeated incidence of fire and haze disasters. However, they will not solve Indonesia's fire crisis as both only target peatlands, which represent only one-third of the fires in 2015. A long-term commitment to sustainable landscapes management is needed. This means taking action to improve governance and management of land and natural resources, including: transparently defining land boundaries and allowable uses that recognize and balance trade-offs among land uses and users; improving tenure and use rights with a focus on local communities and customary practice (*adat)*; completing and enforcing spatial planning, taking into consideration ecosystem services and strengthening land licensing procedures accordingly; and aligning institutions, policies and incentives across sectors and levels of government to promote sustainable landscape management. Completion and dissemination of OneMap is an important step.

2. Realizing the potential of the Village Law

The Village Law has the potential to address rural inequality in Indonesia

Enacted in early 2014, Law 6 of 2014 (Village Law) establishes a new institutional framework for community development in Indonesia's 74,091 rural villages (*desa*). The law increases the authority and responsibility of villages, while recognizing traditional village government arrangements (*adat)*. Rural areas have consistently higher rates of poverty (14.7 percent compared to 8.3 percent in urban areas), connectivity is poor, and the quality of basic services is consistently lower than in urban areas. With an average population of 2,500, villages are better connected to citizens compared to rural districts (*kabupaten*), which govern an average population of almost half a million. While villages are not a substitute for the delivery of effective services from district governments, they can strengthen the demand for basic services and ensure that they respond to village residents' needs. Indonesia has an established track record of successfully delivering small scale infrastructure at the sub-district level (*kecamatan*), with strong community involvement, through the National Program for Community Empowerment (*Program Nasional Pemberdayaan Masyarakat Mandiri,* PNPM Mandiri), which was progressively rolled out to 67,100 villages between 2007 and 2014.

The Village Law substantially increases direct transfers to villages

Under the Village Law, fiscal transfers to villages are substantially increased compared with previous years. At full implementation in 2017, an average-sized village is expected to receive IDR 1.7 billion a year. Transfers are financed partly from the national budget through an envelope (Village Fund, *Dana Desa*, DD) equivalent to ten percent of transfers to regions, and partly by districts redirecting 10 percent of their untied revenue sources[31] to villages. DD is being increased to the full required level over three years (Table 10), but the district allocation is expected to be financed in full from 2015. Even for 2016, transfers to villages are comparable in size to the conditional capital grants to districts (*Dana Alokasi Khusus*, DAK), which are budgeted at around IDR 90 trillion for 2016.

Table 10: A higher fiscal effect of transfers to villages is expected in the medium term
(IDR trillion unless otherwise indicated)

	Basis for envelope	2014*	2015	2016	2017	2018	2019
National budget (*Dana Desa*)	10 percent of regional transfers, implemented gradually from 2015	N/A	20.8	47.7	81.2	103.8	111.8
District budget**	10 percent of fiscal balance funds net of DAK	12.6	34.2	37.6	42.3	55.9	60.3
	10 percent of district taxes and levies	4.2	4.1	4.3	4.9	5.7	6.4
Total transfers to villages		**16.8**	**59.1**	**89.5**	**128.4**	**165.4**	**178.5**
As share of GDP (percent)			*0.5*	*0.7*	*0.9*	*1.1*	*1.1*
Amount for average-sized village (IDR billion)			0.8	1.2	1.7	2.2	2.4

Note: *Before the introduction of the Village Law, villages received transfers from district-level governments only. ** Estimates for 2015-2019 are based on the legal liability under the Village Law as amounts actually budgeted in 2015 are not yet available.
Source: Ministry of Finance compilation of 2014 data from district budgets; revised 2015 Budget; 2016 Budget; 2017-2019 World Bank staff calculations

Village transfers can contribute to poverty reduction in the long

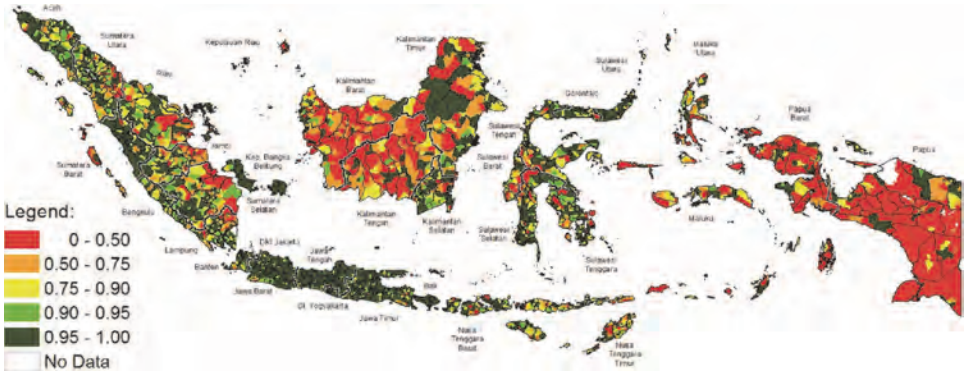
Village transfers can contribute to the reduction of poverty and inequality in at least three ways: (i) by providing temporary employment in infrastructure projects to absorb surplus agricultural labor during economic downturns and other shocks; (ii)

[31] Common Allocation Fund (*Dana Alokasi Umum*, DAU), Revenue Sharing Fund (*Dana Bagi Hasil*, DBH), and district taxes and fees.

term and cushion against economic shocks in the short term

by building and maintaining basic infrastructure in regions that have infrastructure gaps; and (iii) by improving access to quality basic services in parts of the country where infrastructure is less of a priority. Many villages in Indonesia still have large infrastructure gaps (Figure 21) and can focus initially on filling those. In areas that are better developed, villages should be encouraged to allocate funds to support health and education service delivery in ways that are appropriate for their scale and capacity. Given the size of village transfers, ensuring they are well used is crucial. The following analysis focuses on two aspects of implementation: making sure that transfers address inequality and overcoming district-to-village disbursement delays.

Figure 21: Infrastructure gaps vary greatly across Indonesia
(share of villages in district with gravel or stone main road, percent)



Source: Village Potential Statistics (PODES) 2011, Coordinating Ministry for Social Welfare /National Team for the Acceleration of Poverty Reduction (*TNP2K*)/PNPM Support Facility, 2014

a. Ensuring the Village Law targets the poor and near poor[32]

Attempts to treat villages fairly may overshadow equitable access to services by village residents

The formula initially approved for the distribution of *Dana Desa* was based on population, poverty, land area and geographic difficulty. In April 2015, the formula was changed to give a weight of only 10 percent to these factors, with the remaining 90 percent allocated on the basis of equal village shares (*bagi rata*). Under the equal share component, each village receives the same amount, regardless of the population it serves. The objective of the formula revision appears to be honoring the electoral commitment to provide IDR 1 billion (*satu milyar*) to each village, and to ensure that populous Java does not benefit unduly from a transfer that is intended to address underdevelopment. However, Indonesian villages vary greatly in size and treating them equally results in a significant variation in their capacity to deliver services.

Although the costs of delivering services by villages are driven mainly by population size…

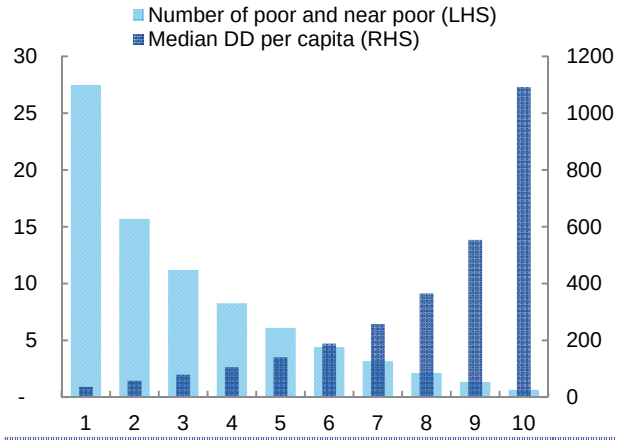
Differences in the cost of service delivery between locations are largely driven by three factors, the most important of which is population size. For example, early childhood infrastructure and staffing costs rise with the number of children, as a separate classroom and teacher are needed for every 40 students. So do the costs of learning materials, overhead and other operating expenses (at IDR 700,000 per child). Two other factors drive the variable costs of service delivery: remoteness (because of additional transport costs) and the number of poor people (because they are more likely to rely on public services rather than pay for private services).

[32] "Poor and near poor" refers to the bottom 40 percent of the income distribution.

…large villages receive a much lower *Dana Desa* allocation per person…

The 90/10 formula results in a large variation in the DD allocations villages receive for each resident. Grouping villages into deciles based on the per capita amount of DD they receive from the 90 percent that is allocated on an equal share basis[33] shows that large villages have far less per person to spend on service delivery than small villages (Figure 22).[34] The ten percent of largest villages receive a median per capita DD allocation of only IDR 36,500, whereas the median for the ten percent of smallest villages is IDR 1.1 million per capita. The much lower per capita DD allocation to large villages limits their capacity to deliver services to their residents.[35]

Figure 22: The 90/10 *Dana Desa* formula treats village residents inequitably
(millions, LHS; IDR thousands, RHS)



Source: Village Potential Statistics (PODES) 2011; National Social Economic Survey (SUSENAS) 2013; World Bank staff calculations

… resulting in an increase in inequality, because many more poor and near poor live in large villages

The inequitable impact of the formula results from the number of poor and near poor who live in large villages. Thirty-four percent of poor and near poor village residents, or 27 million people, live in the 10 percent of villages with the lowest per capital DD allocation. More than 50 percent of the poor and near poor live in the bottom two deciles—the villages receiving per capita allocation that is less than one tenth of the amount distributed to the villages in the highest two deciles. Almost 95 percent of the poor and near poor live in villages that receive less than the national average per capita distribution of the DD (see also Box 5).

Box 5: Assessing the equity of *Dana Desa* allocations by comparing two villages

The impact of the 90/10 formula on the capacity of villages to deliver services is illustrated by comparing the resources available to two villages in different parts of Indonesia. Birang village is located in the relatively well-off district of Berau in East Kalimantan. The village of Senaru is in the underdeveloped district of North Lombok in the province of West Nusa Tenggara.

Senaru's *Dana Desa* allocation in 2015 is just IDR 52,000 per capita. With a poverty rate of over 35 percent, Senaru has an estimated 2,000 poor residents. In contrast, Birang will receive IDR 932,000 per person in 2015—almost twenty times as much—to provide services to a population that includes fewer than 20 people that are classified as poor.

Village	Birang	Senaru
District poverty rate (percent)	4.8	35.9
Population	286	6,350
2015 DD 90 percent equal share allocation (IDR million)	266.5	328.0
DD allocation per capita (IDR)	932,000	52,000

[33] Because information on the geographic difficulty index and poverty are not publicly available at the village level, it is not possible to simulate the exact amount of DD allocations. Therefore, the analysis is based on the 90 percent of DD that is distributed using the equal share component.

[34] Districts have some discretion over the formula for distributing the district allocations to villages. Many districts have chosen to apply a weighting of 60 percent or more to equal shares. Given that total transfers to villages are currently dominated by the district allocation, this has a slightly equalizing effect on overall distributions. As the amount of DD increases to the full required level, which will exceed the district allocation, the inequality between villages will increase.

[35] Non-fiscal factors contribute to poor service delivery, but the absence of funding is a critical constraint.

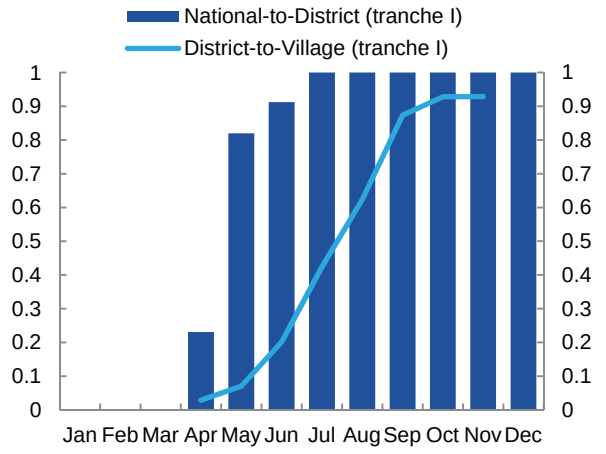
b. Streamlining village fund disbursement

DD implementation got off to a slow start this year, due in part to the 2015 allocation formula revision

Dana Desa allocations are passed to villages via district governments in three tranches: 40 percent in April, 40 percent in July and the final 20 percent in October. Although district governments are mandated to pass the transfers on to villages within seven days of receiving them, they are also obliged to ensure that villages have the basic requirements in place to be able to spend the funds—including having a plan, a budget, and a bank account. When the allocation formula was changed well into the 2015 fiscal year, both districts and villages were required to revise their budgets in order to disburse and spend DD lawfully. By the end of July all districts had received the first tranche, but it had only been passed on to an estimated 42 percent of villages (Figure 23). More recently disbursements have accelerated and, at the end of November, almost all villages are estimated to have received their first and second tranches. Ensuring disbursement occurs earlier in the year will be critical to improving the quality of spending in the future.

Figure 23: DD district to village disbursement was slow in 2015

(percent of districts, LHS; percent of villages in sample, RHS)



Note: Sample includes 314 districts covering 55,469 villages.
Source: Ministry of Finance; Coordinating Ministry of Human Development and Culture/World Bank Diagnostic Survey, November 2015; World Bank staff calculations

Early implementation challenges also contributed to disbursement delays in 2015

The Village Law and its implementing regulations establish a strong role for districts in the management of the village transfers. Both districts and villages were unprepared to implement new rules and procedures in 2015. Districts have struggled to put in place the regulatory framework of core local decrees that recently enacted national laws require of them (Table 11). Villages have not had a chance to learn and understand the new rules and procedures. In addition, delays in the appointment of senior civil servants in Jakarta meant that the roll-out of a nation-wide training program for village officials only began in August 2015, eight months after the new program was introduced. The establishment of a new ministry responsible for village development and community empowerment meant that community facilitators were without contracts for the first six months of the year.

Table 11: Districts have been slow to adopt the required regulatory framework

(in percent)

Core district decrees required	Percent of districts with decrees
Procurement	73
Village financial management	73
Village budget preparation	44
Village development priorities	29
Village authorities (functions)	15

Note: Sample covers 329 districts.
Source: Coordinating Ministry of Human Development and Culture/World Bank Diagnostic Survey, November 2015; World Bank staff calculations

Improved access to information will provide the basis for accelerating disbursements from districts to villages in 2016

The national government has struggled to effectively monitor disbursements to villages because of gaps in existing information systems. This could be addressed in the future by adapting existing district financial reporting systems, as well as the district chart of accounts, to collect real-time information on district disbursements. This could provide the basis for strengthening "carrot and stick" incentives for districts to speed up disbursements. Real-time information would allow the national government to identify poor performers, which could be used to quickly deploy "rapid appraisal teams" to assist local governments to address bottlenecks. Where district capacity is less of an issue, disbursement data could provide the basis for putting pressure on poorly performing districts. Similarly, by modifying the conditions for the disbursement of the second and third tranches, the Ministry of Finance could use its power of withholding future funds to ensure districts do not only disburse to select villages.

A professional facilitator network will be critical to support villages in absorbing funds

As DD allocations increase dramatically in the next few years, village capacity is likely to continue to constrain villages' use of funds, particularly in remote and less developed areas. The introduction of new procedures and increased revenues has exerted pressure on village planning and financial capacity. This could also test the technical capacity of existing community institutions to execute additional community development and empowerment activities. Maintaining a professional network of village facilitators to support village development planning, budgeting, execution, oversight and reporting would help the national government ensure that pressure to spend money, complex procedures, and low capacity do not lead to wasteful spending.

Community participation will help ensure funds are spent well, not just quickly

Indonesia has a unique and valuable legacy of community-driven development that provides a foundation for implementation of the Village Law. It is impossible for districts—and less so for the national government—to oversee the use of funds by all villages. Accountability at this scale will be most effective if villagers themselves are have more opportunities for participation in planning and implementation, have access to information about what their officials should be and are doing, and are provided with channels to give feedback.

Implementation challenges are to be expected and expectations need to be managed

Implementing transfers at this the village level is challenging. Few countries have attempted to push funding from the national level to villages on such a scale. Concerns about the slow pace of disbursement are understandable, but delays are to be expected given the scope and scale of the reform. Expectations of how quickly smooth implementation can be achieved need to be managed, and the emphasis should be on using the funds well, not just spending them quickly. The government has shown a willingness to make adjustments as implementation problems emerge, but some caution is needed. Given that the program that is being implemented in more than 70,000 villages, the government should resist the temptation to change procedures too frequently. The regulatory framework will inevitably need revising as problems are identified, but care should be taken to systematically diagnose its weaknesses and allow time for socializing revisions at the village level. Management of the Village Law is shared between three main ministries, and national leadership and improved coordination will be critical to success over the first five years.

C. Indonesia 2016 and beyond: a selective look

1. The Trans-Pacific Partnership agreement: opportunity or threat for Indonesia?

Twelve Pacific Rim countries have signed a new trade agreement covering 40 percent of the global economy

In October twelve Pacific Rim economies (Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, United States, and Vietnam) reached an agreement to strike the largest trade pact in two decades, the Trans-Pacific Partnership (TPP). When implemented, the TPP will cover some 40 percent of the global economy, over 30 percent of global merchandise trade, and should create a new Pacific economic bloc with reduced barriers to the trade of goods and services.[36] Tariffs between members on the vast majority of goods will be eliminated either immediately or after a transition period. The agreement also aims to reduce non-tariff barriers (NTBs) and to restrict members' ability to impose new NTBs in the future. Like other trade agreements, the TPP contains general provisions which apply to all members and specific provisions which apply to individual countries. The latter are typically in the form of exceptions to the general rules to allow countries to adjust to the agreement and maintain autonomy in areas of particular domestic interest.

The agreement is far reaching in scope, regulating many areas beyond trade

The 30 chapters of the agreement cover a host of areas well beyond merchandise trade, such as investments, cross-border services trade, temporary entry of business persons, government procurement, state-owned enterprises, intellectual property, competition, e-commerce, labor, the environment and regulatory coherence. Many of these areas have either been left outside the scope of World Trade Organization (WTO) negotiations ("WTO extra" measures) or have been difficult to fully resolve in the broader multilateral trading system ("WTO plus" measures). The aim of the agreement is to further liberalize most of these areas so as to promote foreign investments, trade in services, competition and cooperation between member countries.

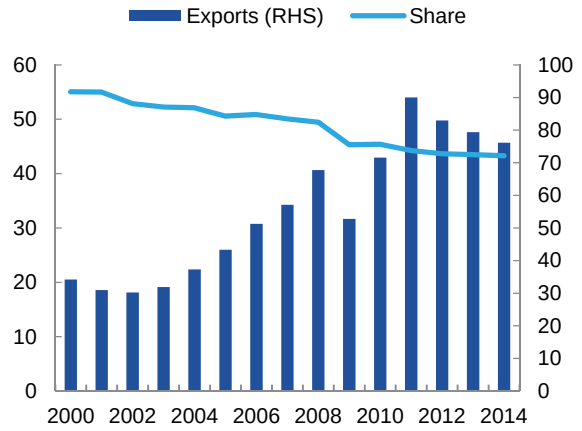
[36] As it allows for membership expansion, the TPP may well cover a larger share of the global economy in the future.

a. The TPP will affect the Indonesian economy

Whether Indonesia joins the TPP or not, the agreement is likely to have implications for its economy

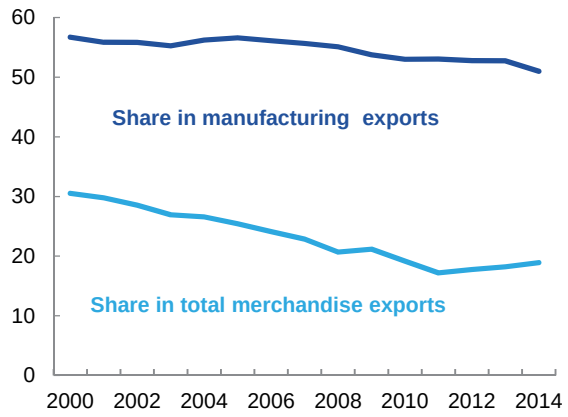
Indonesia is not yet a signatory to the TPP. However the country has signaled the intention to join the agreement in the near future. The Trade Minister recently declared that Indonesia aims to join within two to three years, an intention confirmed during the recent trip of President Widodo to the US.[37] Whether Indonesia actually joins or not, the agreement is likely to have implications for its economy. Carefully assessing the relative costs and benefits of TPP membership will be important to ensure the country uses it as an opportunity to revitalize its non-commodity tradable sector and spur economic growth. Such an assessment is well beyond the scope of this note, which provides only some reflections that may be a useful framework for analyzing these possible costs and benefits.

Figure 24: TPP countries' share in Indonesian goods exports is high, albeit slightly declining
(share of total exports, percent,LHS; total exports to TPP members, USD billion, RHS)



Source: UN COMTRADE database; World Bank staff calculations

Figure 25: TPP markets are even more important for Indonesian manufacturing exports
(share of manufacturing exports to TPP in total manufacturing exports and in total merchandise exports, percent)



Source: UN COMTRADE database; World Bank staff calculations

TPP member countries are responsible for a significant share of Indonesia's exports, particularly in manufacturing…

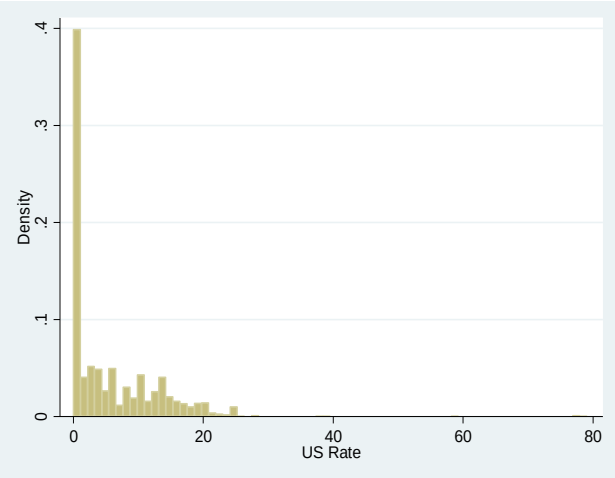
As for any Free Trade Agreement (FTA), the most basic effect of the TPP on third countries is the diversion of trade towards members of the new trading bloc and away from non-member countries. The extent of trade diversion depends on various factors, including the importance of the trading bloc for Indonesian exports, the initial level of trade barriers and the supply response of member and non-member countries. TPP countries account for a large share of Indonesian exports, although that share has been slightly declining in recent years (Figure 24), partly due to higher commodity exports to China. The TPP bloc is even more important for Indonesian manufacturing exports, although again the TPP share in these exports has been stagnant or declining in recent years (Figure 25). On the other hand, the share of manufacturing exports to TPP members in total merchandise exports has been rising since 2011, highlighting the importance of these markets for Indonesia's trade rebalancing strategy away from commodities.

[37] See http://www.thejakartapost.com/news/2015/10/11/ri-could-join-trans-pacific-partnership-within-two-years.html for Minister Lembong's words, and http://www.theguardian.com/world/2015/oct/27/indonesia-will-join-trans-pacific-partnership-jokowi-tells-obama for President Widodo's statement.

…but import tariffs in these countries are already low and Indonesia has trade agreements with most of them

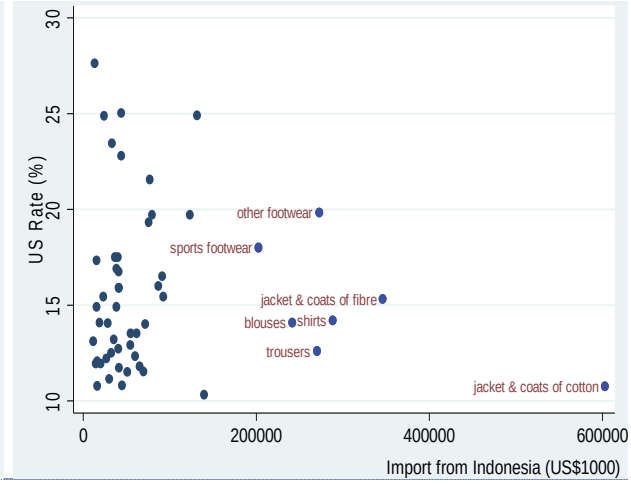
While TPP countries are important export destinations for Indonesia, the extent of trade diversion is likely to be limited by the generally low tariff rates currently applied by these countries. Even if the TPP is going to bring these tariffs to zero for TPP exporters, the price advantage thus created for those exporters vis-à-vis other exporters, including Indonesian ones, is going to be generally low. In addition, Indonesia has FTAs in place with various TPP countries, including Japan, Vietnam, Malaysia and Singapore, which ensure preferential market access to those countries. Indonesia would likely have no further market access gains in those countries from signing the TPP. Of the TPP countries which have no FTA with Indonesia, the US is by far the most important export destination. Like most other high income countries, the US has generally very low applied tariff rates (Figure 26). The majority of the applied rates are zero and there are only a handful of sectors in which Indonesia exports to the US with rates above 20 percent. Sectors protected by special non-tariff barriers, such as quotas, rather than by tariff barriers, are not included as the information on the tariff equivalent of such NTBs is not readily available. To the extent that these NTBs are eliminated following the TPP, they could give rise to trade diversion as well.

Figure 26: US applied tariff rates are generally very low
(frequency distribution of US applied tariff rates weighted by US imports from Indonesia in 2014)



Note: Imports are classified at the Harmonized System (HS) six-digit level.
Source: UN COMTRADE and TRAINS databases; World Bank staff calculations

Figure 27: Potential for trade diversion away from Indonesian exports is concentrated in apparel
(large Indonesian exports to the US in 2014 facing high tariffs and competition from Vietnam and Malaysia)



Note: Imports are classified at the Harmonized System (HS) six-digit level. To avoid clutter the figure only shows sectors with US imports from Indonesia above USD 10 million.
Source: UN COMTRADE and TRAINS databases; World Bank staff calculations

However, the diversion of investments may be a more important issue

The diversion of foreign investments towards TPP countries may be another possible risk of the trade agreement for non-member countries. The TPP increases commercial access to a sizable share of the global economy for producers located in TPP countries. There is evidence that this is an important factor affecting foreign firms' decision on where to invest.[38] In addition, the TPP affords higher legal protection for foreign investors than domestic legislation usually does. While this protection is subject to country-specific exemptions, it is potentially wide in scope, covering areas such as intellectual property rights, expropriation, performance

[38] Kenyon, T. and Y. Margalit, 2014, "Does joining international treaties attract foreign investment? Experimental firm-level evidence", mimeo, Columbia University.

requirements, and access to government procurement. These factors may increase foreign investors' appetite towards TPP markets, thus inducing foreign investment re-allocation away from third countries, including Indonesia, to TPP members. This could provide further impetus for Indonesia to accelerate the implementation of the ASEAN foreign investment protection agreement.

b. Joining the TPP will influence Indonesian economic policy-making

TPP membership is likely to influence policy-making beyond merchandise trade…

Joining the TPP could potentially imply important regulatory changes in several areas of the economy for a country like Indonesia. The spirit of the agreement is to make the member countries' regulations less discriminatory vis-à-vis the other members. Beyond the removal of tariff and non-tariff barriers for merchandise trade, a key objective of the agreement is the equal treatment of foreign investors and services providers with domestic competitors. In principle this could translate into regulation that ensures that sectors be fully open to investors from TPP countries; governments not favor domestic companies at the expenses of foreign ones through procurement or – in the case of state-owned enterprises - through non-commercial assistance; foreign investors not be subject to special performance requirements, such as local content in production, minimum level or percent of exports and technological transfer; temporary entry of business persons be facilitated; and competition policy be transparent and non-discriminatory. The TPP affects domestic legislation in other ways as well, including requiring minimum periods of protection for patents and trademarks along with strong enforcement mechanisms; promoting internationally recognized labor rights; and combatting the illegal trade in wild fauna and flora.

…afforded by an extra-territorial dispute settlement mechanism…

All of these measures are underpinned by an extra-territorial enforcement mechanism in the form of a Dispute Settlement Institution which allows members to address disputes between themselves over TPP implementation. To maximize compliance, the Dispute Settlement chapter allows for the use of trade retaliation (e.g., suspension of benefits), if a Party found not to have complied with its obligations fails to become compliant. While such a mechanism is relatively new for FTAs, it is quite common in bilateral investment treaties (BITs). In fact, foreign investments in Indonesia from countries which are signatories of a BIT with Indonesia can already resort to an international investor–state dispute settlement mechanism if the investor believes that the treaty has been violated.[39]

… although implementation flexibility may limit the extent of changes in current laws and regulations

The extent to which the TPP measures may lead to changes in a country's existing laws and regulations depends on the will of the member country to liberalize, as well as on the willingness of the other members to make concessions. In fact, the text of the agreement allows for a considerable amount of flexibility in its implementation. The liberalization measures in all of the main chapters do not necessarily apply to existing domestic regulations ("non-conforming measures") specified by members in their section of the agreement. For example, Indonesia could have the option, subject to the other parties' agreement, to continue discriminating against foreign investments in any of the sectors restricted in the country's negative investment list in force at the time of its eventual joining of the TPP. There are hundreds of pages of such exceptions in the countries' TPP schedules: for example, Malaysia maintaining a limit of 49 percent on foreign ownership of motor vehicle production, or Vietnam requiring foreign firms that win government contracts to use local labor

[39] In a recent case the British coal mining company Churchill Mining PLC brought Indonesia before the International Centre for Settlement of Investment Disputes.

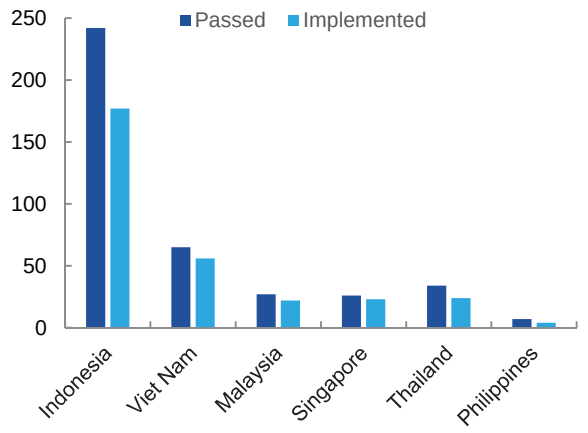
and materials. The level of flexibility, however, differs and the chapters on intellectual property, state-owned enterprises and government procurement allow for more limited exceptions. Those are some of the areas in which Indonesia may need to implement more sweeping changes in case of joining. However, to the extent that the decision to join the TPP is predicated on the desire to integrate with a large trading bloc, the utilization of such implementation flexibility may well be only temporary.

Finally, the TPP may restrict in some ways the room for future economic policy-making

In addition to its impact on the regulatory status quo, the TPP text is likely to limit in some ways the freedom of future economic policy-making. The agreement affords countries little flexibility to make laws and regulations more restrictive towards other member countries. As a result, the TPP provides the benefit of more certainty in the direction of future economic policies. This limitation could be particularly important for Indonesia, which is the most active user of restrictive trade and investment measures among South East Asian comparators (Figure 28). On the other hand, the cost of this TPP-imposed limitation would be the loss of some economic policy space.

Figure 28: Indonesia has actively used restrictive trade and investment measures

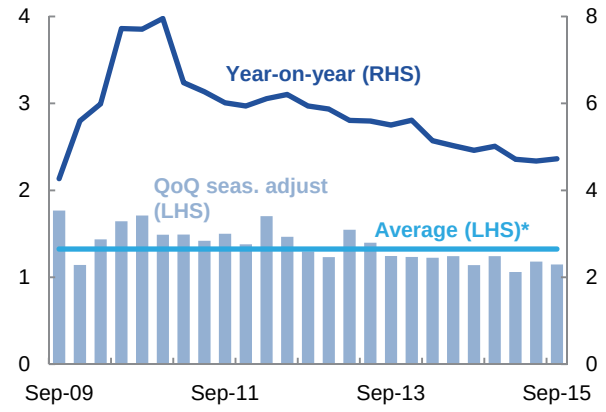
(number of restrictive measures on trade and investments passed and implemented June 2009-to date, select South East Asian countries)



Source: Global Trade Alert (accessed 13/11/2015); World Bank staff calculations

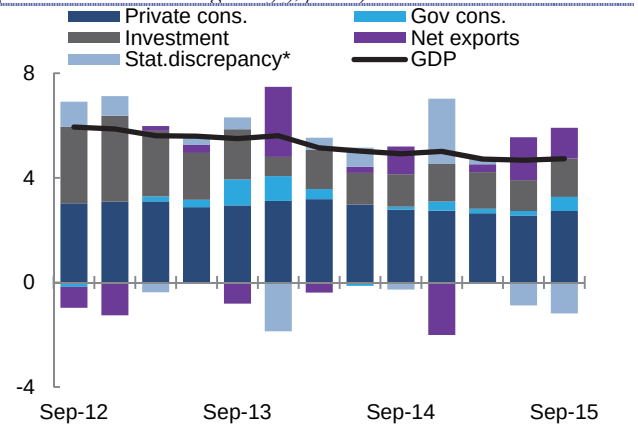
APPENDIX: A SNAPSHOT OF INDONESIAN ECONOMIC INDICATORS

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



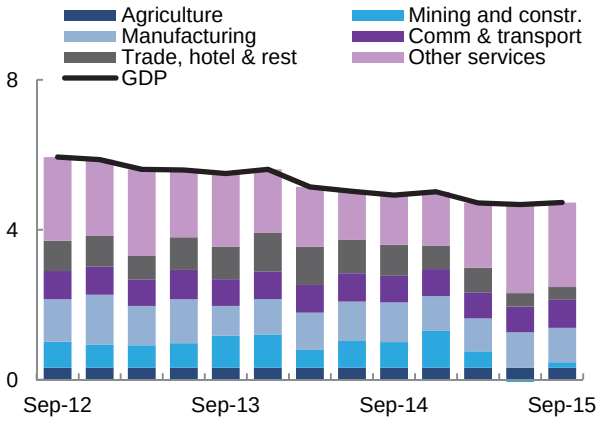
Note: *Average QoQ growth, Q3 2009–Q3 2015
Source: BPS; World Bank staff calculations

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



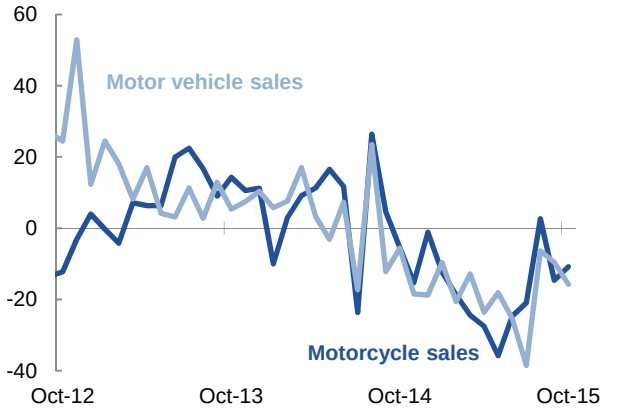
Note: * includes changes in stocks
Source: BPS; World Bank staff calculations

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



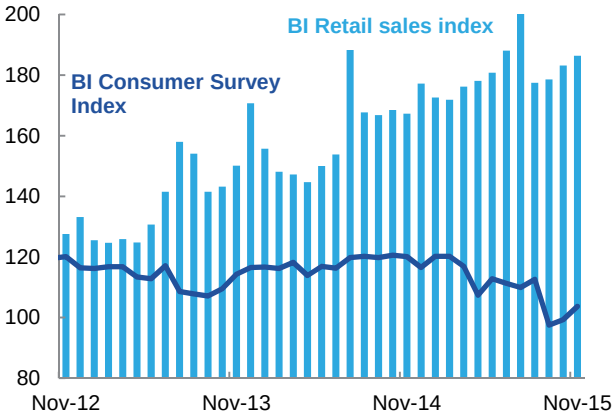
Source: BPS; World Bank staff calculations

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



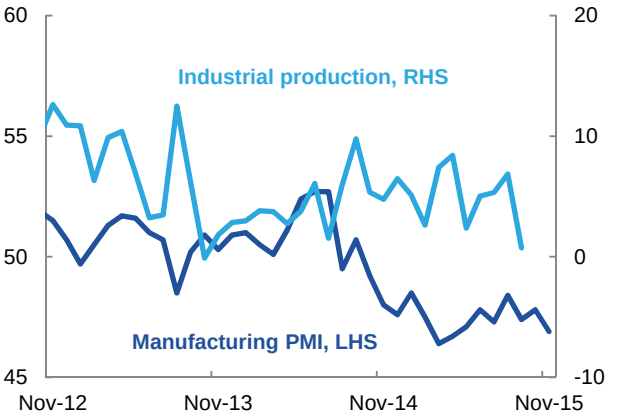
Source: CEIC; World Bank staff calculations

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



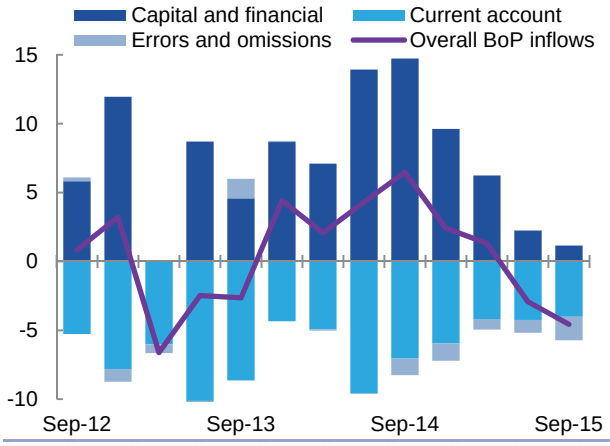
Source: BI

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



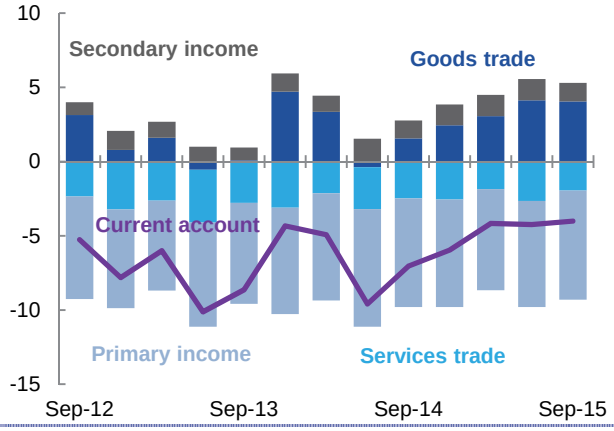
Source: BPS; Markit HSBC Purchasing Managers Index

Appendix Figure 7: Balance of payments
(USD billion)



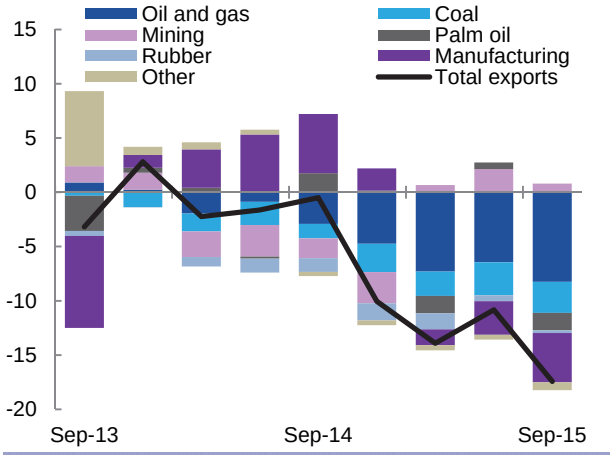
Source: BI

Appendix Figure 8: Current account components
(USD billion)



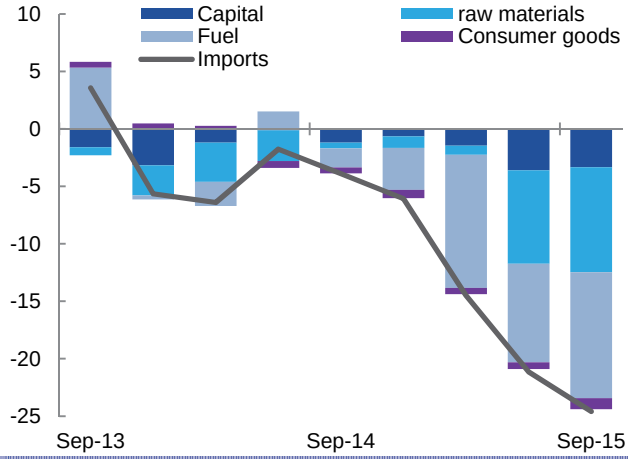
Source: BI; World Bank staff calculations

Appendix Figure 9: Exports of goods
(yoy contribution to total export growth, %)



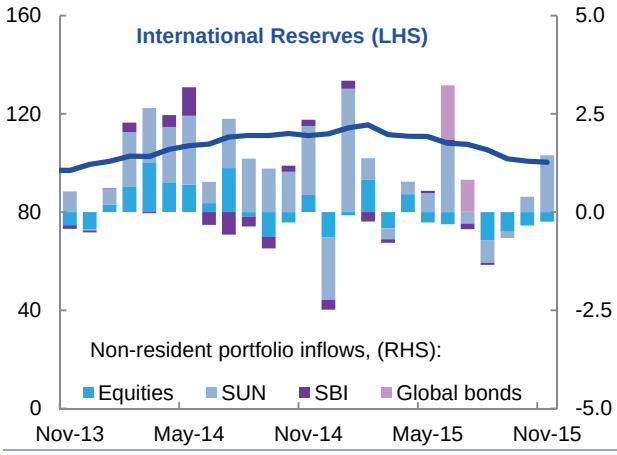
Source: BI

Appendix Figure 10: Imports of goods
(yoy contribution to total import growth, %)



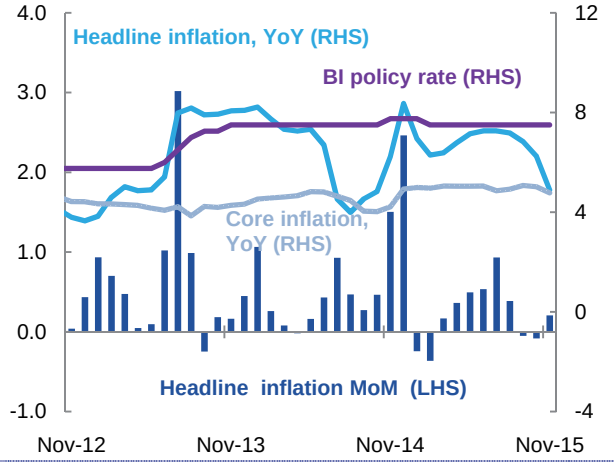
Source: BI

Appendix Figure 11: Reserves and capital flows
(USD billion)



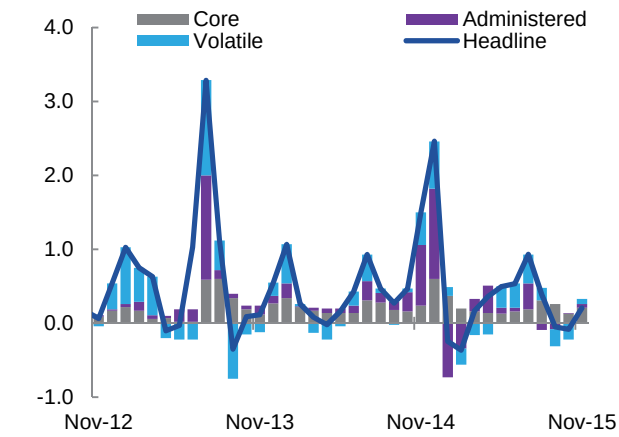
Source: BI; CEIC; World Bank staff calculations

Appendix Figure 12: Inflation and monetary policy
(month-on-month and year-on-year growth, percent)



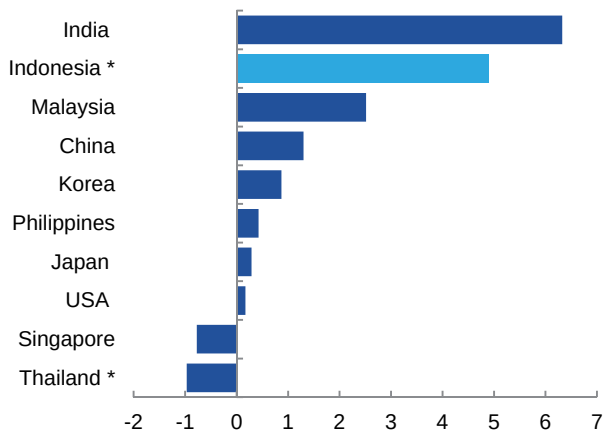
Source: BPS; World Bank staff calculations

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



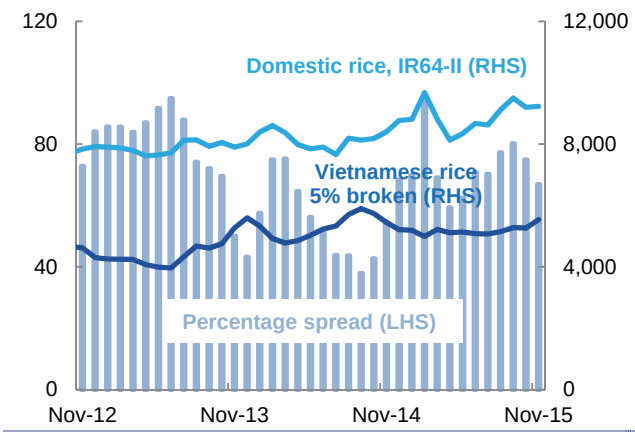
Source: BPS; World Bank staff calculations

Appendix Figure 14: Inflation comparison across countries
(year-on-year, November 2015)



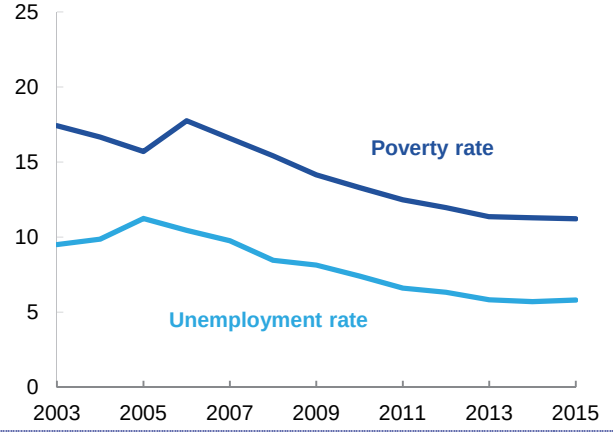
*November is latest available month, others October
Source: National statistical agencies via CEIC; BPS

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



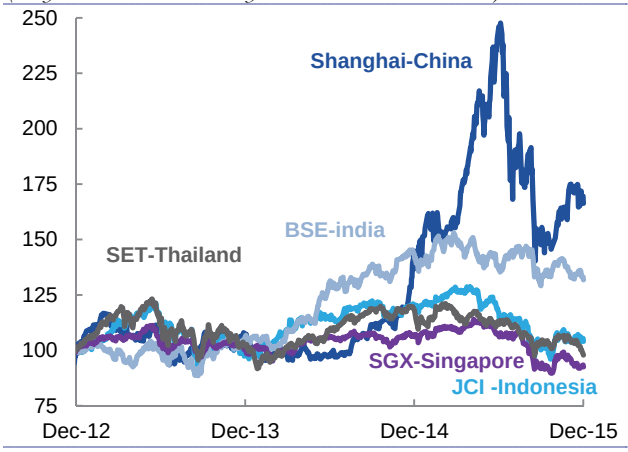
Source: Cipinang wholesale rice market; FAO; World Bank

Appendix Figure 16: Poverty and unemployment rate
(percent)



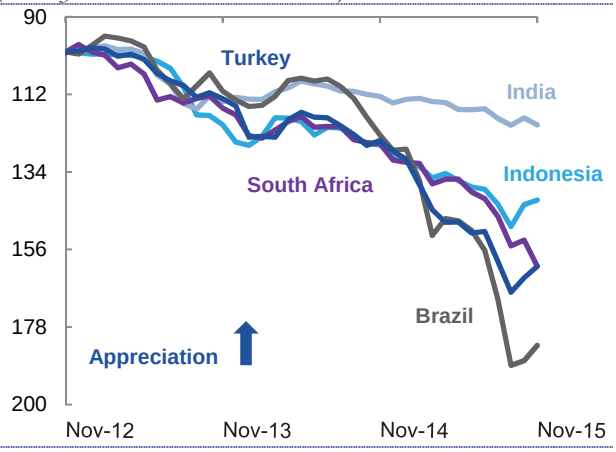
Source: BPS

Appendix Figure 17: Regional equity indices
(daily index in local currency, December 7, 2012=100)



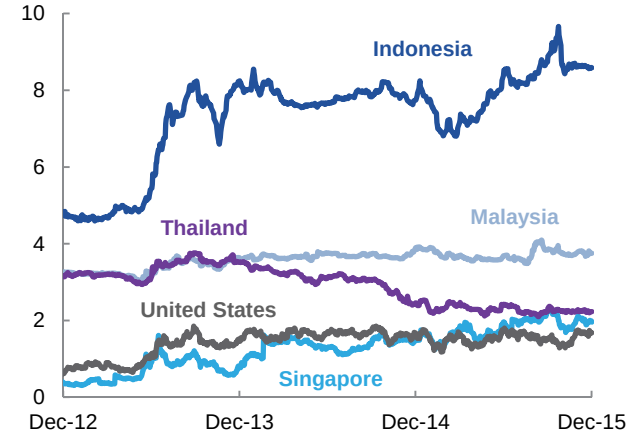
Source: CEIC; World Bank staff calculations

Appendix Figure 18: Selected currencies against USD
(monthly index November 2012=100)



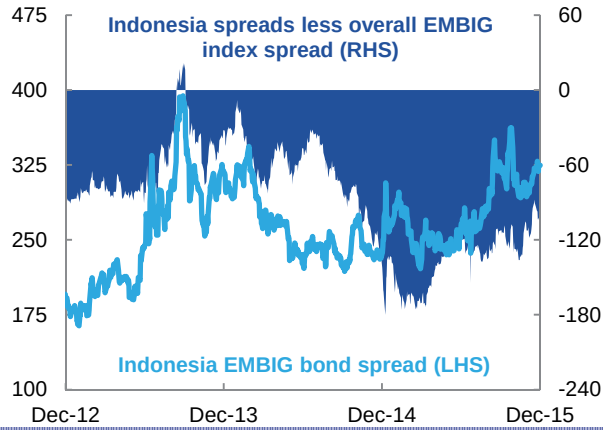
Source: CEIC; World Bank staff calculations

Appendix Figure 19: 5-year local currency govt. bond yields
(percent)



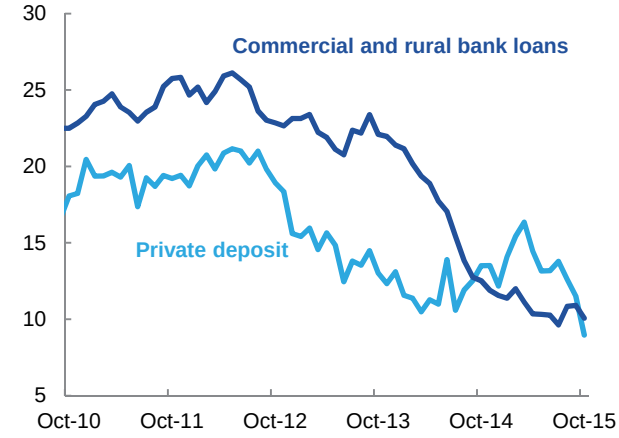
Source: CEIC

Appendix Figure 20: Sovereign USD bond EMBIG spread
(basis points)



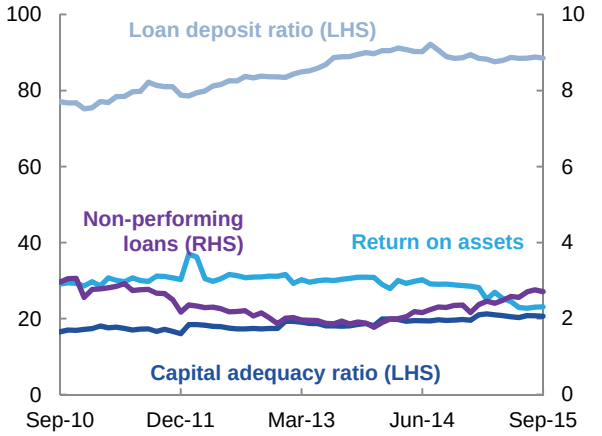
Source: JP Morgan; World Bank staff calculations

Appendix Figure 21: Commercial and rural credit and deposit growth
(year on year growth, percent)



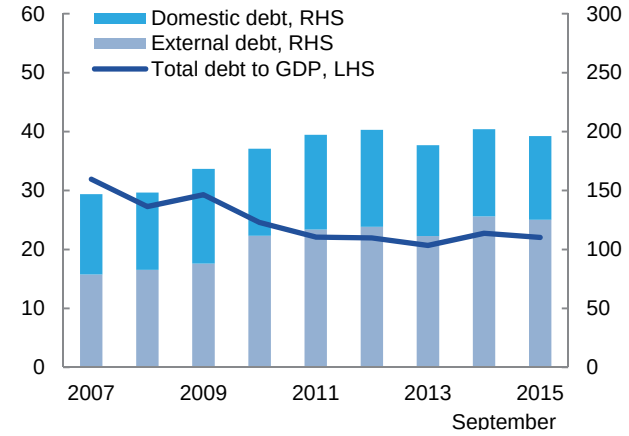
Source: BI; World Bank staff calculations

Appendix Figure 22: Banking sector indicators
(monthly, percent)



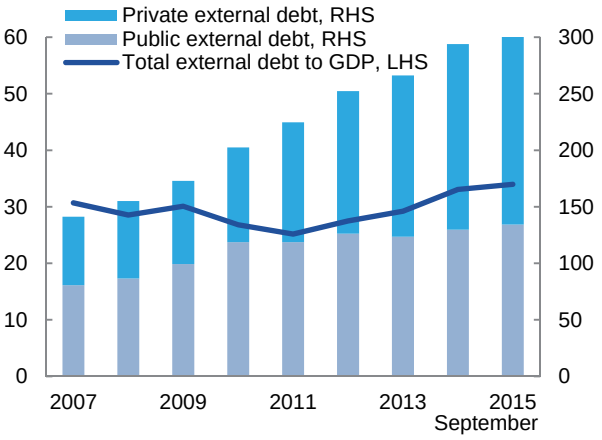
Source: BI

Appendix Figure 23: Government debt
(percent of GDP; USD billion)



Source: MoF; BI; World Bank staff calculations

Appendix Figure 24: External debt
(percent of GDP; USD billion)



Source: BI; World Bank staff calculations

Appendix Table 1: Budget outcomes and projections

(IDR trillion)

	2011	2012	2013	2014	2015	2015	2016
	Actual	Actual	Actual	Actual	Revised budget	Estimated annual realization	Budget
A. State revenue and grants	**1,211**	**1,338**	**1,439**	**1,550**	**1,762**	**1,650**	**1,822**
1. Tax revenue	874	981	1,077	1,147	1,489	1,367	1,547
2. Non-tax revenue	331	352	355	399	269	279	274
B. Expenditure	**1,295**	**1,491**	**1,651**	**1,777**	**1,984**	**1,910**	**2,096**
1. Central government	884	1,011	1,137	1,204	1,320	1,246	1,326
2. Transfers to the regions	411	481	513	574	665	664	770
C. Primary balance	**9**	**-53**	**-99**	**-93**	**-67**	**-103**	**-89**
D. SURPLUS / DEFICIT	-84	-153	-212	-227	-223	-260	-273
(percent of GDP)	-1.1	-1.8	-2.2	-2.2	-1.9	-2.2	-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)

	2012	2013	2014	2014				2015		
				Q1	Q2	Q3	Q4	Q1	Q2	Q3
Balance of payments	**0.2**	**-7.3**	**15.3**	**2.1**	**4.3**	**6.5**	**2.4**	**1.3**	**-2.9**	**-4.6**
Percent of GDP	0.0	-0.8	1.7	1.0	1.9	2.8	1.1	0.6	-1.3	-1.9
Current account	**-24.4**	**-29.1**	**-27.5**	**-4.9**	**-9.6**	**-7.0**	**-6.0**	**-4.2**	**-4.2**	**-4.0**
Percent of GDP	-2.7	-3.2	-3.1	-2.3	-4.3	-3.0	-2.7	-1.8	-1.9	-1.7
Trade balance	-1.9	-6.2	-3.0	1.2	-3.2	-0.9	-0.1	1.2	1.5	2.1
Net income & current transfers	-22.5	-22.9	-24.5	-6.1	-6.4	-6.1	-5.8	-5.4	-5.7	-6.1
Capital & Financial Account	**24.9**	**22.0**	**45.4**	**7.1**	**13.9**	**14.7**	**9.6**	**6.2**	**2.2**	**1.2**
Percent of GDP	2.8	2.4	4.9	3.4	6.5	6.8	4.3	2.8	1.0	0.5
Direct investment	13.7	12.2	15.9	3.5	3.8	6.0	5.1	2.9	3.1	2.7
Portfolio investment	9.2	10.9	26.1	8.7	8.0	7.4	2.0	8.5	5.7	-2.2
Other investment	1.9	-0.8	3.5	-4.9	2.1	1.4	5.1	-5.3	-6.5	0.4
Errors & omissions	**-0.3**	**-0.2**	**-2.6**	**-0.1**	**0.0**	**-1.2**	**-1.3**	**-0.8**	**-0.9**	**-1.7**
Foreign reserves*	**112.8**	**99.4**	**111.6**	**102.6**	**107.7**	**111.2**	**111.9**	**111.6**	**108.0**	**101.7**

Note: * Reserves at end-period
Source: BI; BPS

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

	1995	2000	2005	2010	2011	2012	2013	2014
National Accounts (% change)[1]								
Real GDP	8.4	4.9	5.7	6.2	6.2	6.0	5.6	5.0
Real investment	22.6	11.4	10.9	8.5	8.9	9.1	5.3	4.1
Real consumption	21.7	4.6	64.0	4.1	5.1	5.4	5.6	4.8
Private	22.7	3.7	0.9	4.8	5.1	5.5	5.4	5.3
Government	14.7	14.2	6.6	0.3	5.5	4.5	6.9	2.0
Real exports, GNFS	18.0	30.6	16.6	15.3	14.8	1.6	4.2	1.0
Real imports, GNFS	29.6	26.6	17.8	17.3	15.0	8.0	1.9	2.2
Investment (% GDP)	28	20	24	31	31	33	32	33
Nominal GDP (USD billion)	202	165	286	755	893	918	910	889
GDP per capita (USD)	1102	857	1,396	3,178	3,690	3,740	3,659	3,524
Central Government Budget (% GDP)[2]								
Revenue and grants	15.2	20.8	16.8	14.5	15.5	15.5	15.1	14.7
Non-tax revenue	4.8	9.0	5.0	3.9	4.2	4.1	3.7	3.8
Tax revenue	10.3	11.7	11.7	10.5	11.2	11.4	11.3	10.9
Expenditure	13.9	22.4	17.3	15.2	16.5	17.3	17.3	16.9
Consumption	3.9	4.0	2.8	3.6	3.8	3.9	4.1	4.0
Capital	4.6	2.6	1.1	1.2	1.5	1.7	1.9	1.4
Interest	1.4	5.1	2.2	1.3	1.2	1.2	1.2	1.3
Subsidies	..	6.3	4.1	2.8	3.8	4.0	3.7	3.7
Budget balance	1.3	-1.6	-0.6	-0.7	-1.1	-1.8	-2.2	-2.2
Government debt	32.3	97.9	44.3	24.3	22.8	22.6	24.1	23.8
o/w external government debt	32.3	51.4	23.4	11.1	10.2	9.9	11.2	10.2
Total external debt (including private sector)	61.5	87.1	47.1	26.8	25.2	27.5	29.2	33.1
Balance of Payments (% GDP)[3]								
Overall balance of payments	..	..	0.2	4.0	1.3	0.0	-0.8	1.7
Current account balance	3.2	4.8	0.1	0.7	0.2	-2.7	-3.2	-3.1
Exports GNFS	26.2	42.8	35.0	22.0	23.8	23.0	22.4	22.4
Imports GNFS	26.9	33.9	32.0	19.2	21.2	23.2	23.1	22.7
Trade balance	-0.8	8.9	2.9	2.8	2.7	-0.2	-0.7	-0.3
Financial account balance	..	..	0.0	3.5	1.5	2.7	2.4	5.1
Net direct investment	2.2	-2.8	1.8	1.5	1.3	1.5	1.3	1.8
Gross official reserves (USD billion)	14.9	29.4	34.7	96.2	110.1	112.8	99.4	111.6
Monetary (% change)[3]								
GDP deflator[1]	9.9	20.4	14.3	8.3	7.5	3.8	4.7	5.4
Bank Indonesia interest key rate (%)	..	..	9.1	6.5	6.6	5.8	6.5	7.5
Domestic credit (annual average)	..	..	28.7	17.5	24.4	24.2	22.1	15.9
Nominal exchange rate (average, IDR/USD)[4]	2,249	8,422	9,705	9,090	8,770	9,387	10,461	11,865
Prices (% change)[1]								
Consumer price Index (eop)	9.0	9.4	17.1	7.0	3.8	3.7	8.1	8.4
Consumer price Index (average)	9.4	3.7	10.5	5.1	5.3	4.0	6.4	6.4
Indonesia crude oil price (USD per barrel, eop)[5]	17	28	53	79	112	113	107	60

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), [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
Demographics[1]								
Population (million)	213	227	242	245	248	251	254	..
Population growth rate (%)	1.3	1.2	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 Force[2]								
Labor force, total (million)	98	106	117	117	120	120	122	128
Male	60	68	72	73	75	75	76	78
Female	38	38	45	44	46	45	46	50
Agriculture share of employment (%)	45	44	38	36	35	35	34	33
Industry share of employment (%)	17	19	19	21	22	20	21	21
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	5.8
Poverty and Income Distribution[3]								
Median household consumption (IDR 000 per month)	104	211	374	421	446	487	548	
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	11.2	..
Female-headed households	12.6	12.8	9.5	9.7	8.8	8.6	11.9	..
Gini index	0.30	0.35	0.38	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	..
Percentage share of consumption: highest 20%	38.6	41.4	40.6	46.5	46.7	47.3	46.8	..
Public expenditure on social security & welfare (% of GDP)[4]	..	0.4	0.4	0.4	0.4	0.6	0.5	..
Health and Nutrition[1]								
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 estimate, 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	..	..
Education[3]								
Primary net enrollment rate (%)	..	92	92	92	93	92	93	..
Female (% of total net enrollment)	..	48	48	49	49	50	48	..
Secondary net enrollment rate (%)	..	52	61	60	60	61	65	..
Female (% of total net enrollment)	..	50	50	50	49	50	50	..
Tertiary net enrollment rate (%)	..	9	16	14	15	16	18	..
Female (% of total net enrollment)	..	55	53	50	54	54	55	..
Adult literacy rate (%)	..	91	91	91	92	93	93	..
Public spending on education (% of GDP)[5]	..	2.7	3.5	3.6	3.8	3.8	3.6	..
Public spending on education (% of spending)[5]	..	14.5	20.0	20.2	20.1	20.0	19.9	..
Water and Sanitation[1]								
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
Others[1]								
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, Jamkesmas, BLT, BSM, PKH and actuals; [5] MoF; [6] Inter-Parliamentary Union

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