BACKGROUND AND CONTEXT

1. **Indonesia has weathered challenging economic conditions well**. The economy has navigated safely the commodity price shocks, tightening financial conditions, and repeated bouts of turbulence in global financial markets, assisted by broadly appropriate macroeconomic policies. Overall, economic fundamentals improved in 2015, even as the external environment became less supportive and more uncertain. Growth has continued at a solid pace and remains among the highest in EMs. Inflation has fallen to the lower end of the official target band. The current account deficit has narrowed and investment flows remained mostly supportive. The government has implemented a bold reform of energy subsidies, and made progress in boosting infrastructure investment and starting to streamline the burden of regulations. These actions have helped to shore up investor confidence. Indonesia has significant growth potential, with young demographics, rich endowment in natural resources, low public debt, a large domestic market, and a participatory and stable political system.

2. **The Indonesian economy, however, is still facing headwinds**. Like many EMs, Indonesia is facing pressures from ongoing shifts in the global economy related to lower growth and rebalancing in China, a severe down-cycle in commodity prices, and monetary policy normalization in the United States. These adverse developments have led to a slowdown in growth in recent years, tighter financing conditions, and increased risks and vulnerabilities. The economy has been adversely affected through commodity price, trade, and financial channels (Box 1). Government revenues, in particular from oil, have dropped significantly. Foreign direct investment (FDI) and portfolio inflows have slowed down, as foreign investors' appetite for EM assets in general has weakened. Following a period of rapid increase in foreign currency leverage, *albeit* from low levels, corporate performance has weakened and non-performing loans (NPLs) in the banking sector are creeping up.

3. **Against this backdrop, the 2015 Article IV consultation focused on the need to manage short-term vulnerabilities and to boost potential growth in the medium-term**. The challenge is to follow through on the reforms that the government has already launched and undertake further macro-critical reforms to boost productivity and diversify growth, while maintaining macroeconomic and financial stability. Policy priorities include: (i) enhancing revenue mobilization to create fiscal space for growth-enhancing spending, (ii) maintaining flexible exchange rates and market-determined government bond yields, (iii) completing the legal framework to support financial stability, and (iv) accelerating infrastructure development and structural reforms to unlock Indonesia's growth potential.

4. **Past Fund advice and the authorities' policies have been broadly aligned, although there has been some divergence**. The authorities kept a relatively tight monetary stance in 2015, made progress with strengthening financial supervision, and prepared legislation to improve the financial stability framework. The authorities also pursued a flexible exchange rate policy, with some FX intervention to prevent disorderly market conditions during episodes of external pressures. On the fiscal front, actions were strong on subsidy reform, notably the landmark fuel pricing reform in early 2015 that was followed by further actions on electricity reforms. Government bond yields

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moved in line with market conditions. However, the fiscal deficit in 2015 is estimated to be higher than recommended, in part reflecting weak revenue performance as no significant revenues measures were taken, with the focus instead being placed on tax administration to raise compliance.

RECENT DEVELOPMENTS, OUTLOOK, AND RISKS

5. **Macroeconomic performance**. Despite the sharp fall in international oil prices, episodes of capital outflows, and turbulent global financial markets, the Indonesian economy performed well in 2015. Growth is estimated to have stabilized at 4.7 percent (y/y) (down from 5.1 percent in 2014). Headline inflation fell to 3.4 percent at end-2015 on account of lower food and fuel prices, and dissipating effect of the fuel price increases in late 2014. Inflation expectations appear to be well anchored, with surveys indicating price expectations within the target band. The current account deficit is estimated to have fallen to 2.0 percent of GDP in 2015, mainly due to a contraction of imports. Substantially lower oil prices reduced oil imports by almost 2 percent of GDP from 2014 levels. Portfolio inflows remained supportive on balance, although equity outflows have continued in line with developments in other EMs. Gross international reserves fell somewhat to US$105.9 billion (or 7.4 months of imports of goods and services) at end-2015, but remained adequate at 119 percent of the IMF's reserve adequacy metric. The rupiah depreciated by about 10 percent relative to the U.S. dollar but remained broadly stable in nominal effective terms, while bond yields rose by about 100 basis points—in both cases relatively modest compared with other EMs. The government successfully placed international bonds amounting to US$3.5 billion in December 2015.

6. **The near-term outlook** continues to be supported by domestic demand yet affected by the severe commodity down-cycle and weak global growth, in particular in major trading partners.

- **Real GDP growth**. In 2016, growth is projected to increase moderately to 4.9 percent. Domestic demand would be the main driver of growth, while exports are expected to remain weak reflecting low commodity prices. Growth will be led by capital spending of the government and state-owned enterprises (SOEs) in the first half of the year, and by private investment later in the year conditioned on positive reform momentum. Private consumption will increase somewhat on account of lower fuel prices, but the recovery will be constrained by reduced commodity income in rural areas and cuts in electricity subsidies.

- **Inflation** is projected to remain within the BI's target band in 2016, aided by anchored inflation expectations and lower fuel prices, with core inflation remaining stable. However, moderate upward pressures may arise from food price increase due to the El Niño phenomenon and further cuts in electricity and LPG gas subsidies.

- **The current account deficit (CAD)** is projected to increase to around 2½ percent of GDP in 2016, on the back of a pickup in fixed investment and a further deterioration in commodity export prices, while the balance of payments (BOP) is projected to return to a small surplus.

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7. Risks and contingencies. The economy faces a combination of risks tilted to the downside, mainly from external factors (Appendix I). The main risk is more volatile global financial conditions, with poor market liquidity possibly amplifying volatility in the event of capital outflows. A further surge in the U.S. dollar could also add strains to corporate balance sheets arising from foreign currency (FX) denominated debt. A deeper-than-expected slowdown in EM trading partners, notably China, could further weaken external demand and commodity prices. On the domestic front, slow progress in investment-enabling structural reforms and public investment projects and continued declines in government revenue could negatively impact growth.

8. Macro-financial linkages. A confluence of external and domestic factors could exacerbate strains on banks and corporates. The main transmission channels would be from heightened risk aversion leading to a sudden stop of capital flows and increased exposure of the banking sector to the corporate sector (Boxes 2–4). If a surge in investor risk aversion were to result in a sudden stop, corporates would be forced to increase borrowing from domestic banks, leading to the migration of risks across sectors (Box 4) and increased net exposure and vulnerability of the banking sector (Box 2). Moreover, the corporate sector could become more exposed to higher refinancing and default risk (Box 3). However, the economy is expected to be able to withstand an adverse BOP shock, with a policy response consisting of tighter aggregate demand management, continued exchange rate flexibility and market-determined government bond yields, combined with judicious use of FX intervention to prevent disorderly market conditions. Contingency financing (amounting to about US$77 billion) is in place, consisting of the Chiang Mai Initiative Multilateralization and bilateral swap arrangements**.**

9. Medium-term outlook. Growth is expected to reach 6 percent by 2020, factoring in strong infrastructure investment and structural reforms that support productivity growth. The business environment would improve with progress in addressing supply-side bottlenecks. Tax revenue-to-GDP ratio would increase gradually and help create additional space for investment and other high priority spending, but a significant spending gap would remain over the medium term. The CAD would remain near 2½ percent of GDP on account of an increase in investment-related imports, as well as expansion of domestic demand. FDI and portfolio inflows would remain supportive, with international reserves expected to remain at around six months of imports.

10. Authorities' views. The authorities generally agreed with staff on macroeconomic developments in 2015, but expected a stronger pickup in growth for 2016 contingent on an improvement in global growth and on the back of positive support from the government's reform initiatives. Views were broadly aligned on the inflation forecast and the external outlook. The authorities generally concurred on the assessment of major risks facing the economy. They noted that the strengthening of the policy framework since mid-2013 has enhanced macroeconomic stability and helped Indonesia weather several episodes of external turbulence relatively well. In addition, the authorities strongly believe that the fiscal reforms that are commencing, including on revenues, expenditures, and financing, will support the outlook for economic growth.

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11. External position and Debt Sustainability Assessment (DSA). Indonesia's external position in 2015 is assessed to be broadly consistent with medium term fundamentals and desirable policies. Staff estimates the current account (CA) gap to be -0.7 percent to 1.3 percent of GDP, consistent with the REER gap in the range of -6.5 percent to 3.5 percent (Box 5 and Appendix II). Policy actions since mid-2013, including monetary policy tightening, fuel subsidy reform, and greater exchange rate flexibility, have helped improve the external position. The main conclusions from the debt sustainability analysis (DSA) are broadly unchanged from the last Article IV (Appendix III). At 36½ percent of GDP (about half of which is public), external debt remains at a moderate level, notwithstanding a rise in recent years. External financing appears sustainable, but could be affected by domestic and external shocks.

POLICY DISCUSSIONS

A. Fiscal Policy and Reforms—Creating Fiscal Space for Priority Spending

12. Fiscal Strategy. The government's fiscal strategy is to create fiscal space via revenue mobilization and energy subsidy reform to allow for higher investment in infrastructure and social welfare programs. Some early successes were reached in 2015 although important challenges have emerged that require early actions. The authorities introduced an ambitious energy subsidy reform that eliminated subsidies on gasoline and rationalized those on diesel and electricity. These measures, as well as low world oil prices, reduced energy subsidies by about 2 percentage points of GDP in 2015. Social protection has improved somewhat in recent years, including with the launch of universal health insurance.[1] However, government revenues fell sharply mainly due to the impact of lower oil prices, offsetting the gains from subsidy reforms. Absent decisive reform to strengthen the revenue base, the underperformance of government revenues would pose a significant risk to the authorities' fiscal strategy.

13. Developments in 2015. The central government deficit is estimated to have reached 2.8 percent of GDP, leaving the deficit of the general government (projected at the same level) close to the statutory limit.[2] About half of government bond issuance in 2015 is estimated to have been financed by nonresident investors, who purchased both global and local currency bonds. Government revenues decreased by 1.7 percentage points to 13 percent of GDP, mainly due to the sharp fall in oil prices. The ratio of non-oil-and-gas tax revenues to GDP remained similar to the level in 2014, despite one-off tax collections (such as prepayment of income and excise taxes)

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[1] The universal health insurance was launched in 2014. The main features of the reform are to consolidate multiple schemes and to increase coverage to self-employed and the informal sector. The increase in coverage has not yet taken place, as the authorities are evaluating its modality. So far, the fiscal impact of this reform has been small. For more detail, see *Indonesia—Selected Issues* (IMF Country Report No. 15/175), "Managing Fiscal Risks in Indonesia."

[2] Indonesia's fiscal rule limits the deficit of the general government to 3 percent of GDP and the public debt to 60 percent of GDP. While having some drawbacks, including the procyclicality of fiscal policy associated with commodity cycles, this rule has provided an important policy anchor that, combined with rapid economic growth in recent years, has contributed to the public debt falling from near 90 percent of GDP in 2000 to 27.5 percent in 2015.

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recorded in December 2015. Capital spending (including local transfers for infrastructure) expanded by 0.8 percentage points of GDP (to 2.5 percent of GDP), reflecting a concerted government effort to improve project execution.

14. Outlook. For 2016, under current policies, staff project central government revenue to decline further, by almost one percentage point of GDP to 12.1 percent, mainly reflecting even lower oil prices. To keep the deficit under the legal limit, spending would need to be curtailed even after taking account of additional subsidy savings of 0.4 percent from better targeting of electricity subsidies and lower oil prices. In the staff's baseline scenario, some of the progress achieved in expanding priority spending in 2015 will need to be rolled back this year. In addition, a more uncertain external environment may make foreign investors less willing to invest in Indonesian bonds. For the medium term, in the baseline scenario, the general government deficit is expected to remain near the statutory limit, which would result in an increase in the debt-to-GDP ratio to about 30 percent of GDP by 2020, which is still relatively moderate. While the baseline envisages a modest increase in the tax-to-GDP ratio and further progress in energy subsidy reform, on current policies, capital spending at the general government would only reach 4 percent of GDP by 2020, significantly below the authorities' objectives and the regional average of 8 percent.

Indonesia: Central Government Operations, 2014–2016

(In percent of GDP)

	2014	2015		2016		
		Budget	Est.	Budget	Baseline	Reform
Revenues and grants	14.7	15.1	13.0	14.3	12.1	12.7
Oil and gas revenues	2.9	1.1	1.1	0.9	0.8	0.8
Non-oil and gas revenues	11.8	13.9	11.8	13.4	11.3	11.9
Tax revenues	10.0	12.3	10.3	11.8	9.9	10.5
Nontax revenues	1.7	1.6	1.5	1.5	1.5	1.5
Grants	0.0	0.0	0.0	0.0	0.0	0.0
Expenditure and net lending	16.9	17.0	15.7	16.5	15.0	15.3
Energy subsidies	3.2	1.2	1.0	0.8	0.6	0.6
Capital spending and transfers 1/	1.7	3.0	2.5	2.5	2.1	2.4
Other	11.9	12.7	12.2	13.2	12.2	12.2
Overall balance	-2.2	-1.9	-2.8	-2.2	-2.8	-2.5
Memorandum items:						
Net issuance of government securities	2.6	2.5	3.6	2.6	2.9	2.6
SOE recapitalization	...	0.6	0.6	0.3	0.3	0.3

Sources: Indonesian authorities; and IMF staff estimates.

1/ Sum of capital spending, physical DAK transfers, and village fund transfers.

15. Staff position. The authorities' fiscal strategy is broadly appropriate. However, it needs to be strengthened in light of recent developments; in particular, revenue mobilization needs to be enhanced significantly in the context of a medium-term fiscal framework.

- **Medium-term fiscal framework**. To boost confidence and provide guidance to government plans, the authorities should consider developing a medium-term fiscal strategy that targets an increase in the ratio of non-oil-and-gas tax-to-GDP by 2-3 percentage points over the medium

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term, together with the policies to achieve this. This target seems reasonable given the low tax ratio of Indonesia compared to EM peers. The pace of the increase in the tax ratio should take into account the cyclical position of the economy.

- **2016 Budget**. The authorities' intention to adjust the approved 2016 budget early in the year based on actual revenue of 2015 is well placed as the revenue and expenditure levels are unrealistically high. The authorities should also consider taking early actions to increase revenues in 2016, including through an increase in excises on fuel, tobacco, and vehicles. The latter could raise an additional 0.6 percent of GDP of revenue. Combined with some savings from rationalizing lower priority spending, these measures would allow for the reduction of the general government deficit to 2.5 percent of GDP, rebuilding buffers against the deficit ceiling and mitigating financing risks. At the same time, they would secure space to maintain priority expenditures at a level similar to 2015.

- **Revenue mobilization**. There is a clear need to implement a comprehensive strategy that comprises both tax administration and tax reform actions.

    - Tax administration: ongoing reforms should be adapted to focus on risk, including targeting high-potential segments of the economy; ensuring tax withholding obligations, in particular for employers; and the use of a few priority sources of external information for tax audit. The progress with VAT e-invoicing is a positive development which would pave the way for risk-based audits. In addition, risk-based compliance strategies by tax type and by taxpayer size would support these efforts.

Indonesia: General Government Operations, 2015-20

(In percent of GDP)

	2015	2020		(B) - (A)
		Baseline (A)	Reform (B)	
Total revenue and grants	14.7	15.0	17.5	2.5
Oil and gas revenue	1.1	0.9	0.9	0.0
Non-oil and gas revenue	13.6	14.1	16.6	2.5
Grants	0.0	0.0	0.0	0.0
Total expenditure	17.5	17.8	20.0	2.2
Development expenditure	4.5	5.3	7.5	2.2
Capital Spending	3.5	4.0	5.5	1.5
Social Spending	1.0	1.3	2.0	0.7
Current spending	13.0	12.5	12.5	0.0
Interest	1.4	1.8	1.8	0.0
Non-interest	11.7	10.7	10.7	0.0
Of which: energy subsidies	1.0	0.1	0.1	0.0
Primary balance	-1.4	-1.0	-0.7	0.3
Overall balance	-2.8	-2.8	-2.5	0.3
Central government	-2.8	-2.8	-2.5	0.3
Local government	0.0	0.0	0.0	0.0

Sources: the Indonesian authorities and IMF staff projection.

    - Tax policy: there is a need to broaden the tax base by rationalizing exemptions, which could pave the way to raising VAT rate over the medium term. Tax reform should also aim to rationalize income taxes, including unifying various existing rates and rationalizing tax incentives, and strengthen property taxes. Staff cautioned against basing the revenue mobilization plan in 2016 largely on the tax amnesty bill being discussed in Parliament because of the significant uncertainty surrounding its approval and impact on government revenues. The tax amnesty aims at the repatriation of financial assets by levying a small tax rate on declared assets.

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- **Infrastructure investment**. The authorities' infrastructure plan could significantly improve productivity and crowd-in private investment through public-private partnerships (PPP) and the establishment of a coordinating body (Committee for Accelerated Infrastructure Delivery) to focus on priority projects (Box 6).[3] Progress has been made in project planning and selection. However, the pace of implementation needs to be aligned with capacity constraints, including those of local governments, and should carefully consider fiscal risks and macroeconomic spillovers, including on interest rates and the current account. Moreover, the authorities should minimize the granting of tax exemptions, which are likely to be less effective at raising potential output than reform of the business environment. The increases in contingent liabilities for the government and public debt will be affected by the uncertainty in international financing conditions, which imply the need to manage this process prudently. Expanded infrastructure spending should be complemented with improved financial management of public investment and strengthening governance at state-owned enterprises and capacity at local governments.

16. Subsidy reform. The fuel subsidy reform has been very successful and can serve as a model for other countries. The authorities' plan to continue with these reforms through improved targeting of subsidized electricity rates in 2016 is commendable. The authorities should introduce a transparent pricing formula that ensures timely adjustments of fuel prices to changes in international oil prices and the exchange rate.

17. Authorities' views:

- The authorities concurred with staff's assessment on the need to revise the budget and further improve the composition of public spending, although they differed on the actions needed to mobilize revenue. The 2016 budget revision is planned earlier in the year, after reviewing tax collections in 2015. The authorities agreed on the need to increase fiscal space for infrastructure investment, which they view as a key driver of growth. Nevertheless, they also acknowledged that there are some limitations in the level of financing available for execution of the infrastructure plan. Therefore, implementation will be steady and gradual. The relevant public agencies have already started the development of the legal framework to support infrastructure development, including by issuing the implementing regulations of the land acquisition law to facilitate public investment.

- The authorities noted that the efforts to shift from general price-based subsidies to well-targeted subsidies will continue with the 2016 budget, focusing on enhancing targeted support for farmers and fishermen, and conditional cash transfers. On revenue mobilization, the authorities viewed that Indonesia's low tax-to-GDP ratio stems mainly from problems in tax administration and compliance, including arising from a complex VAT refund system and the strict bank secrecy rule that prevents access to taxpayers' financial data. In their view, staff's proposal to raise excise taxes would require a large increase, especially for selected excises, to

[3] See the accompanying selected issues paper, "Infrastructure Development in Indonesia."

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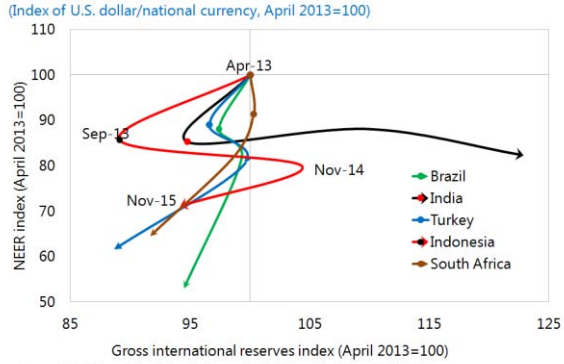
boost revenue in the short run. They also believe that Indonesia will need to enhance the menu of tax incentives to promote FDI, in line with those offered by other ASEAN countries. These reforms will also be supported by more sustainable financing policies. High reliance on market financing is being reduced with alternative instruments that are being developed, including financing from bilateral and multilaterals sources.

B. Monetary Policy and Foreign Exchange Management—Navigating a Volatile Environment

18. Developments in 2015. Financial volatility increased in the first nine months of 2015, in the early months due to the slowdown of EMs growth and external uncertainty, and in August-September due to depreciation of the renminbi and turbulence in the Shanghai stock market. In October, markets recovered strongly in line with the region, and have since been broadly stable. In 2015, BI had kept the policy rate unchanged since February, with the policy rate being 175 basis points higher at the year-end compared to mid-2013. Despite episodes of capital outflows, declines in international reserves were moderate, especially compared to the taper tantrum episode. The exchange rate and government bond yields moved flexibly in line with market conditions and orderly market conditions were maintained. BI continued its efforts to promote money market deepening, supported by Fund technical assistance, taking actions to reduce structural excess liquidity in the banking system by introducing new instruments for liquidity management and reducing its presence in the interbank FX swap market. The latter was accompanied by more fluctuations in interbank rates as banks' adjusted to tightening liquidity conditions.

Gross Reserves versus Exchange Rates
(Index of U.S. dollar/national currency, April 2013=100)



Sources: IMF, *Information Notice System*; and IMF, *International Financial Statistics*.

19. Monetary policy stance. Against the backdrop of lower inflation and with an estimated negative output gap of about 0.4 percent of GDP, Bank Indonesia (BI) has started a process of gradually unwinding its tightening cycle. Exchange rate pass-through has been limited thus far. Effective in December, BI reduced the primary reserve requirement in rupiah by 50 basis points (bps) to 7.5 percent. Moreover, in January, the policy rate was reduced by 25 bps to 7.25 percent, following the broadly mild reaction of financial markets to the increase in the U.S federal funds rates in December and higher financial volatility in China in January. BI's deposit and lending rates were similarly reduced. With the decline in inflation, real interest rates have turned positive in real terms.

20. Staff position. With a more volatile and uncertain external environment, BI faces the challenge of calibrating policies towards preserving stability, against the backdrop of weaker growth.

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- **Monetary policy stance**. The relatively tight monetary stance of 2015, which reflected the authorities' emphasis on stability, helped the economy to face external turbulence and bring inflation back to within the target band. Against the background of much lower inflation, a small negative output gap, and the apparent easing of external pressures, the gradual unwinding of the tightening cycle is appropriate to support the economy, but should be implemented very cautiously. In this context, the authorities should remain vigilant and stand ready to respond if external pressures resume or inflationary pressures reemerge.

- **Managing external volatility**. The authorities' response to higher global financial market volatility in 2015 was broadly appropriate, allowing for flexible exchange rates and market-determined government bond yields, together with modest use of international reserves to ensure orderly market conditions. Maintaining such policy flexibility, combined with the strengthening of financing contingencies, is critical.

- **Financial market deepening**. The authorities' recent actions to deepen the money markets should continue, including by introducing reserve requirement averaging to reduce the need for banks to hold high precautionary reserves. The launch by the financial services agency (OJK) in January 2016 of the Global Master Repurchase Agreement aimed at developing the collateralized interbank market is a positive development.

21. Authorities' views. The authorities broadly agreed with staff's assessment of recent developments and the thrust of policy recommendations. BI noted that it had decided to maintain its monetary policy stance in 2015, having weighed the impact of external developments, but recently saw some scope to ease given moderating inflation and growth. Going forward, BI would need to take into consideration a shift in the balance between stability and growth due to the rising risk of adverse spillbacks from declining growth on financial stability. Thus, priority would continue to be placed on stability, although with policy calibrated carefully to support economic growth. To help manage external financial volatility, the authorities pointed out that further progress on financial market deepening is a continued priority, while bilateral swap arrangements for contingent financing have been expanded over the past few years.

C. Financial and Corporate Sector Issues—Sailing with Greater Vigilance

22. Recent performance of the banking sector. The banking system appears to be broadly sound but has pockets of rising vulnerability (Box 2). On average, the banking system is well capitalized and profitable, with a capital adequacy ratio of near 19 percent and return on assets of 2.7 percent, well above major EMs. The high level of banks' capital and profitability continues to help weather a slower pace of economic growth and the impact of rupiah depreciation on corporates. However, soundness varies across different types of banks. Some medium and smaller size banks are vulnerable to a liquidity shock due to their higher reliance on short maturity deposits. In addition, profitability has been showing signs of weakening and NPLs have started to creep up (to 2.6 percent

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of total loans in September), while special mention loans[4] jumped to 5.7 percent. Staff analysis suggests that subdued economic growth and rupiah depreciation, if continued, would push NPLs higher. Finally, the corporate sector is under growing pressure from a combination of sluggish growth, low commodity prices, and tighter funding conditions, which could spillover to banks.

23. Institutional developments. The financial sector supervisory and regulatory function in Indonesia is in transition. Bank supervision and regulation were moved from BI to the new financial supervisory agency (OJK) in 2014, while BI retained regulatory responsibilities for macroprudential policies. There is a need to align the legislations pertaining to the financial sector agencies, including their mandates, to the new institutional arrangement. In addition, there are gaps in the frameworks for emergency liquidity assistance and bank resolution, including inadequate bank resolution tools available to the deposit insurance agency and lack of legal protection for supervisors. There is also a need to strengthen coordination and cooperation for crisis management. The authorities have submitted to Parliament a draft bill (FSSN), which aims at clarifying these frameworks and mandates and provides for more tools for the resolution of systemic banks.

24. Supervision and regulation. OJK is developing a framework for consolidated supervision of banks and non-banks and upgrading risk-based supervision, including for AML/CFT, supported by Fund technical assistance. BI has made further progress in Basel III implementation. Liquidity coverage ratio (LCR) requirements are being adopted to help banks manage liquidity risk and, most recently, the counter-cyclical capital buffer has been introduced. Responding to the slowing economy, in July 2015, OJK introduced policies to facilitate loan restructuring for banks with relatively strong risk management capacity. In addition, BI has also unwound part of the tightening of macro-prudential measures, undertaken in 2012–13 to address systemic financial stability risks from rapid credit growth.[5]

25. Corporate sector. The corporate sector remains relatively strong compared to EM peers, but risks are increasing, notably from a rapid rise in FX debt over the past years and weakening performance (Box 3). Performance indicators suggest that the corporate sector as a whole appears to be sound, as aggregate corporate leverage is still moderate and profitability remains the highest among EM peers. Nonetheless, corporates have been impacted by commodity price falls and a weak rupiah, exacerbated by increased FX debt. Corporate FX debt (including FX debt to domestic banks) reached around 20 percent of GDP as of June 2015, double the level seen in 2010, and concentrated in the commodity and a few non-tradable sectors. Against this backdrop, some corporates, in particular those below investment grade, have been facing rising refinancing risk or default risk: (i) while progress has been achieved with hedging of the FX debt, it is still incomplete, making some corporates vulnerable to currency depreciation: (ii) rollover risk is likely to grow this

[4] These are loans late up to 90 days, not classified as NPLs (August data).

[5] In 2012–13, loan-to-value (LTV) limits on residential mortgage lending and down payments on auto loans were tightened, and additional reserve requirements were placed on banks having capital adequacy ratios below 14 percent and having loan-to-deposit ratios exceeding prescribed thresholds. In June 2015, both of these measures were partly unwound for banks having NPL ratios below 5 percent, to avoid undue credit and liquidity tightening.

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year, as maturing FX debt securities are set to peak; or (iii) some corporates are facing higher default risks, with an increasing number of corporates finding it difficult to meet interest expenses. While disorderly defaults of large systemically connected corporates could create negative spillovers to the banking system and damage confidence, the risk is small. The results of the empirical analysis confirm these observations (Boxes 3 and 4).[6]

26. Anti-money laundering/financing of terrorism (AML/CFT) issues. Indonesia was removed from the Financial Action Task Force's (FATF) monitoring process in late 2015 in recognition of the significant improvements in the AML/CFT regime. The country's financial intelligence unit (PPATK) is working on a national risk assessment.

27. Staff position. To safeguard financial stability, the financial stability architecture needs to be enhanced expeditiously, while the banking and corporate sectors need to be monitored.

- **Banking sector soundness**. The financial sector appears broadly sound although this assessment could be somewhat overstated by lagging indicators in an environment of slower economic growth and rupiah depreciation. Moreover, there are pockets of vulnerabilities that need to be monitored closely. Measures introduced in July to facilitate restructuring of NPLs should be accompanied by stronger supervision to ensure adequate implementation (Box 2).[7]

- **Corporate sector soundness**. The authorities are rightly monitoring the corporate sector closely and both the BI and OJK have strengthened their surveillance framework. In addition, BI's innovative FX hedging regulations have helped corporates manage currency risks and contain the rapid growth of external debt in the recent periods. These regulations require FX hedging by corporates starting in 2015:Q4 of a gradually rising share of foreign liabilities falling due and limiting external borrowing to investment grade firms. The corporate resolution framework (including the bankruptcy regime) should be reviewed to ensure that it is capable of dealing with large and systemically connected conglomerates. In the medium term, deeper financial markets will help reduce the costs of hedging and facilitate development of the domestic corporate bond market.

- **Supervision and regulation**. Staff welcomes the further progress made in the implementation of Basel III requirements. Staff considers the authorities' decision to ease macroprudential measures in 2015 as appropriate, intended to reduce systemic financial risks derived from a tightening of credit conditions. Building on the progress in improving the AML/CFT regime, the authorities are encouraged to further expand customer due diligence measures.

- **Financial stability architecture**. An early approval of the FSSN bill is critical, which should be followed by the simultaneous and closely-coordinated revisions of the laws of BI, the Deposit

[6] See the accompanying selected issues papers on "Corporate Vulnerabilities and Analysis of Macro-Financial Linkages in Indonesia."

[7] For more details, see the accompanying selected issues paper on "Banking System Soundness in Indonesia."

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Insurance Corporation (LPS), and OJK, to ensure the overall consistency of the legal framework to the new institutional arrangements. These revisions should provide clarity on the mandates and policy responsibilities of each institution. In this regard, it will be important to grant LPS additional powers and instruments to resolve small banks.

28. Authorities' views. The authorities generally agreed with staff's views and recommendations. The banking sector is considered to be strong, and while banks' asset quality has worsened somewhat, it remains manageable. OJK is monitoring the process of NPL restructuring closely to ensure financial stability. The authorities are placing a strong emphasis on strengthening the financial stability architecture. On the corporate sector, the authorities have closely monitored corporate debt, and expressed confidence that the risks could be managed. The authorities have gathered useful information, partly through the FX hedging regulations, which would be improved in the future.

D. Structural Reform Priorities—Diversifying Growth Engines

29. Macro-critical issues. Over the decade prior to 2012, the commodity boom underpinned benign macro-financial developments in Indonesia, including strong economic expansion and rapid credit growth, assisted by a prudent macroeconomic policy mix. With the end of the commodity super-cycle, the economy needs to find new drivers of growth, including in manufacturing, agriculture, tourism, and other service industries. This will require critical structural reforms to facilitate the diversification of the economy and to boost potential growth. These reforms need to address a number of structural impediments, including a large infrastructure gap, complex and burdensome regulations, protectionist tendencies, rigid labor markets and shallow financial markets. The investment climate remains weak,[8] complicated by the need for numerous permits from different levels of governments,[9] as well as restrictive FDI regulations, notably the negative investment list (on foreign ownership and location or license restrictions).

30. Recent reforms. The authorities have begun a series of reforms with a view of improving the business climate and the efficiency of investment (Appendix IV). A series of policy packages since August focused on a range of issues, including reducing the excessive burden of various layers of regulations, facilitating trade, and taking initial steps to improve the functioning of the labor markets. Moreover, the authorities issued the implementing regulations for the new land acquisition legislation to address issues that had historically hampered investment, including in public infrastructure. Energy subsidy reforms were combined with institutional changes to facilitate private participation in the various stages of energy provision. The authorities have indicated that they intend to review the opportunities available for foreign investment in Indonesia (the so-called

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[8] In the World Bank's *Doing Business 2016* report, Indonesia ranks 109 out of 189 countries in terms of the ease of doing business, far below its regional peers.

[9] According to the World Bank, it takes 52.5 days to start a business in Indonesia, compared to 5.5 days in Malaysia and 2.5 days in Singapore. In the case of a manufacturing business, in Indonesia it takes up to 794 days by law to obtain the licenses needed to start the business, and 930 days to obtain permits to construct a power station.

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negative investment list) and consider participation in regional trading arrangement, including the Trans Pacific Partnership (TPP).

31. Staff position:

- **Investment climate**. The policy packages are an auspicious start of a process to improve the business climate. These actions, and their implementation, should be followed by additional measures to reduce the burden of excessive regulation. Bold actions on supply-side reforms and trade liberalization will help increase investment and attract FDI inflows.

- **Labor market and human capital**. Introducing flexibility to rigid labor practices can promote employment and attract new sources of investment (e.g., easing complex restrictions on wage setting as well as hiring and layoff procedures).[10] Reducing skill gaps and strengthening human capital (e.g., vocational training and stronger links with firms) will help Indonesia benefit from positive demographic trends and foster inclusive growth.

- **Financial deepening**. The financial markets and institutions have ample scope for development in order to channel savings to needed investment and to increase the stability in the financial system. Concerted efforts should be made to deepen capital markets, including corporate bond markets, to strengthen long-term institutional investors and to develop a range of funding instruments and investment options, while keeping the financial sector open to foreign participation.

32. Authorities' views:

- The authorities expressed a strong commitment to continuing structural reforms to establish new drivers of growth and encourage investment. They indicated that these reforms were prepared comprehensively to cover both fiscal issues (revenue, spending, and financing) and actions to enhance productivity and competitiveness. Diversifying the economy to move away from the longstanding reliance on natural resources is also part of the reform agenda. To this effect, long-term policies are being developed, while, at the same time, actions are being implemented to help the economy navigate the current global setting.

- The authorities noted that they have closely followed up on the announced reform measures and that most of the targeted regulations have been streamlined, although they recognize that it may take time for the impact to fully materialize. Efforts will continue to enhance the investment environment and streamline regulations, particularly at the local government level. The authorities have also expressed their intention to open new sectors of the economy to FDI and review Indonesia's participation in regional trading arrangements, including the Trans Pacific Partnership (TPP).

[10] Provincial minimum wages rose by 30 percent of average in 2013 and in Jakarta by 44 percent.

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33. **Despite a weaker external environment in 2015, macroeconomic performance in Indonesia has been satisfactory, underpinned by sound macroeconomic management**. While the weaker external environment contributed to lower growth and tighter and more volatile financial conditions, economic growth remained among the highest in EMs, inflation fell sharply to within the official target band and has remained well anchored, and the current account deficit narrowed. Building on Indonesia's strengths coming from its young demographics, low public debt, large domestic markets, natural resource endowment, and participatory and stable political system, economic fundamentals continued to improve.

34. **While the near-term outlook remains positive, the economy faces elevated risks that are tilted to the downside**. In 2016, economic growth is expected to recover moderately, inflation to remain low, and the current account deficit to remain manageable. However, the economy faces a combination of risks tilted to the downside, heightened mainly from adverse external developments. Reliance on external financing makes Indonesia susceptible to funding reversals. Other external risks include further fall in commodity prices, tighter global financial conditions, and a larger decline in trading partners' growth, notably in China. On the domestic front, delays in structural reforms and in infrastructure spending could dampen growth. A confluence of external and domestic factors could exacerbate strains on corporates and banks.

35. **The authorities' fiscal strategy is appropriate, but important challenges emerged in 2015**. The actions to create fiscal space through revenue mobilization and reform of subsidies in order to expand infrastructure investment and well-targeted social welfare spending achieved some significant successes, including a historic subsidy reform and the expansion of priority spending. However, government revenues underperformed significantly due mainly to the fiscal impact of lower commodity prices, offsetting much of the gains from subsidy reform. Against this backdrop the authorities reduced the level of spending to comply with the deficit ceiling of the fiscal rule.

36. **The authorities should consider adopting a medium-term fiscal framework with key objectives and actions to achieve them**. The authorities' intention to adjust the revenue and expenditure levels of the 2016 budget to be more consistent with 2015 actual outturns is appropriate. Given Indonesia's low tax ratio and the authorities' ambitious development goals, there is space to increase the tax-to-GDP ratio by 2–3 percentage points of GDP over the medium term, in order to allow for priority spending, while rebuilding fiscal buffers. Increasing the tax burden should be gradual and take into account the cyclical position of the economy.

37. **There is an immediate need to reinvigorate policies to mobilize government revenues, with actions framed in a medium-term plan**. In the short-run, excises on selected products should be increased, including tobacco, fuel, and cars. Over the medium-term, tax reform should aim at broadening the tax base and increasing the VAT rate, while tax administration should adopt a

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risk-based approach. Collections from a planned tax amnesty are very uncertain and, should they underperform, the authorities may be forced to reverse some of the gains achieved in 2015 in increasing public investment.

38. **The unwinding of the monetary policy tightening cycle should be gradual and cautious**. While the tight monetary policy bias in 2015 has helped to anchor inflation and support the external position, the recent decline in inflation and the emergence of a small negative output gap provide support for BI's recent decisions to ease monetary policy and reduce reserve requirements. Moreover, financial market indicators were relatively stable since October 2015—including after the increase in the U.S. Federal Funds rate and higher financial volatility in China. Further actions, however, should be carefully considered and paced, and take into account inflationary and external developments

39. **Maintaining flexible exchange rates and market-determined government bond yields is critical to help the Indonesian economy navigate through volatile external financial conditions**. The authorities have appropriately allowed the exchange rate to reflect market forces with judicious foreign currency interventions to ensure the orderly functioning of markets. Allowing government bond yields to be market determined has ensured financing of the budget deficit even during turbulent financial conditions.

40. **While manageable, rising corporate sector vulnerabilities need to be monitored closely and contingency plans considered**. Lower corporate performance comes after a period of rapid increase in foreign currency leverage, although from low levels. So far, the corporate sector has adjusted well to the sharp fall in commodity prices, depreciation of the rupiah, and lower growth. Profitability remains high relative to EM peers, but some corporates are under higher stress. The authorities have taken action to promote hedging of foreign currency risk and are monitoring the situation closely.

41. **Overall, the banking sector appears sound, although there are pockets of vulnerabilities**. Financial soundness indicators, including capital and profitability, remain relatively strong. However, profitability has started to weaken and small banks face higher liquidity risks. While the banking sector is expected to be able to weather slower economic growth, the authorities should remain vigilant on possible spillovers from adverse external developments and corporate strains on banks.

42. **Completing the authorities' plans to strengthen the financial stability architecture remains a top priority**. In particular, the early approval of the FSSN bill will address some of the critical gaps in bank resolution and enhance financial stability. Subsequently, aligning the legislations of the various financial agencies to the new institutional framework should be done in a coordinated fashion.

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43. Finding new drivers of growth and diversifying away from commodities require better infrastructure and structural reforms to improve competitiveness and the productivity of investment. The policy packages issued since August 2015 signal a new direction of policies, aimed at revamping the business climate and addressing the excessive burden of multiple layers of regulations. The authorities need to build on these actions and push on with their reforms, including the revision of the negative investment list and leveraging regional trading arrangements.

44. It is recommended that the next Article IV consultation take place on the standard 12-month cycle.

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Box 1. Indonesia: Macroeconomic Impact of Commodity Price Decline

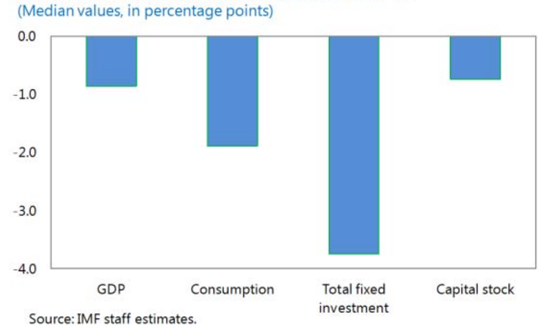
After rising by 40 percent over a decade, the prices of Indonesia's key traded commodities have dropped sharply since 2011. Notwithstanding declining production and export values in recent years, the share of commodities sector in Indonesia remains significant at just under 10 percent of GDP, and major commodities still comprise about half of all merchandise exports.

Transmission channels. The global commodity price decline affects Indonesia—a small, open, net exporter of non-oil commodities—primarily through the income and investment channels.

- The price decline causes exporters' revenues and profits to fall at existing production levels. Lower income in turn dampens domestic demand and imports. The government budget constraint becomes tighter (on top of the direct hit to oil and gas revenue through profit-sharing arrangements between the government and contractors), undercutting ability to finance existing spending. Reduced corporate net worth increases the premium paid to obtain financing, lowering credit demand and capital inflows.
- In addition, the price decline, increasingly viewed as permanent, weakens private incentives to invest in the commodity sector and supporting industries such as construction, transportation, and logistics, with knock-on effects to the rest of the economy, lowering incomes further.
- The two channels are mutually reinforcing. Over time, capital accumulation steadily slows, and pressure for labor reallocation from the commodities and supporting sectors into other tradables is expected to increase.

Macroeconomic impacts. Estimates from cross-country regressions[1] reveal that the decline in Indonesia's commodity terms of trade over the past three years (around 8 percent) may have led to about one percentage point reduction in GDP growth. The average decline in fixed investment growth[2] is about double that of consumption. A separate estimate shows that the current account balance has improved by around ½ percent of GDP during 2014–15, owing to import contraction. The fiscal impact of lower oil prices was negative in 2015, as the decline in oil and gas revenues (1.8 percentage points of GDP) was not fully offset by lower spending for LPG and electricity subsidies (0.5 percentage point of GDP). Looking ahead, a further decrease in oil and gas prices by 10 percent would raise the fiscal deficit by just under 0.1 percentage point of GDP in 2016.

Macroeconomic Variables in the Aftermath of an 8 percent Decline in Commodities Terms of Trade, 2012–15
(Median values, in percentage points)



Source: IMF staff estimates.

On the supply side, the capital stock is estimated to have declined by a cumulative 0.7 percentage point over the past three years as a result of the terms of trade shock. Impacts on labor supply and TFP are relatively muted (and statistically insignificant), suggesting that potential output could be affected mainly via lower capital accumulation.

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1/ Aslam, A., S. Beidas-Strom, R. Bems, O. Celasun, S. Kılıç Çelik, and Z. Kóczán, 2015, "Trading on Their Terms? Commodity Exporters in the Aftermath of the Commodity Boom," IMF Working Paper (forthcoming).
2/ The impact on total fixed investment is broadly consistent with estimates from the terms-of-trade-investment regression in *Indonesia—Selected Issues*, IMF Country Report No. 12/278.

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Box 2. Indonesia: Banking System Soundness 1/

The banking system is well capitalized and profitable but asset quality and liquidity conditions need to be monitored closely. Using end-2014 data for a wider cross-country comparison, the regulatory capital ratio of 18.7 percent and return on assets (ROA) of 2.7 percent were substantially above those of major emerging market economies. However, profitability has started to moderate more recently. Moreover, the NPL ratio of 2.1 percent and liquid assets relative to short-term liabilities of 33 percent were closer to the weaker end of the banking sectors compared, creating pockets of vulnerabilities particularly with some small and medium sized banks. These banks have relatively low capital and high NPL ratios partly as profitability tends to be low due to their high funding costs. Another source of vulnerability is potential migration of special mention loans, which surged from 4.2 percent in end-2014 to 5.7 percent in August 2015, to NPLs especially if economic growth remains subdued. Small and medium sized banks are also exposed to greater liquidity risk given their greater reliance on shorter-maturity deposits.

Soundness varies across different type of banks. Asset quality is lower for regional development banks, with their NPLs about twice those of other types of banks. Risks from asset quality for some private commercial banks are mitigated by their higher capital ratios. State-owned banks are very profitable, with their ROA notably above the industry average. Funding risk could become an issue for foreign/joint-venture banks as their Loan-to-Deposit (LTD) ratios are significantly above the industry average and these banks rely more on wholesale funding compared to their peers.

The banking system appears to be able to withstand relatively large shocks to NPLs at the aggregate level but pockets of vulnerabilities remain. Staff analysis suggests that NPLs in Indonesia are driven mainly by GDP growth and the rupiah's performance, which imply that the banking system could be vulnerable to further growth slowdown and currency depreciation. For instance, in a simulation, if real GDP growth moderated from 4.7 percent in $t = -1$ to 2 percent in $t = 0, 1, 2, 3$ and rupiah depreciation accelerated from 7.4 percent in $t = -1$ to 15 percent in $t = 0, 1, 2, 3$ a stylized bank's NPL ratio would rise by 1½ percentage points at the end of the simulation period. Their strong capital buffers and profitability provide an important source of resilience for Indonesian banks.[2] However, pockets of vulnerabilities remain with smaller banks with relatively high NPLs. Looking ahead, the impact of a measure introduced in July 2015 to facilitate NPL restructuring needs to be monitored closely.

Similarly, the aggregate banking sector appears to be in a strong position to withstand liquidity shocks, but with pockets of vulnerabilities. Systemic liquidity risk appears limited as retail deposits represent a large share of overall short-term liabilities (except for some small banks). Based on end-December 2014 data and assumptions similar to those made in the last Staff Report (additional assumptions made on asset availability, haircut, and encumbrance), the total liquidity gap of banks facing liquidity shortages was estimated at Rp 14 trillion (0.34 percent of total funding), comparable to the result reported in the last Staff Report. Yet a handful of foreign-owned/joint venture banks and small and medium sized banks are faced with a relatively small amount of liquid assets and are vulnerable to larger than assumed shocks.

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1/ For further information, see accompanying selected issues paper chapter on "Banking System Soundness in Indonesia."

2/ Specific provisions to NPLs rebounded to 51 percent of total loans in Q3:2015, from 47 percent in 2014 (Table 8).

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Box 3. Indonesia: Corporate Sector Vulnerabilities 1/

Indonesia's corporate sector remains relatively strong compared to EM peers. Corporate leverage is low—the overall corporate debt relative to GDP remains small at around 32 percent (compared with around 70 percent on average for peers) and the liability-to-asset ratio is less than 50 percent as of June 2015, slightly lower than peers. Profitability remains relatively high, despite having weakened recently with return on assets (ROA) falling from 19 percent in mid-2012 to is around 13½ percent as of September 2015.

Nonetheless, foreign currency-denominated (FX) debt of corporates has risen rapidly over the past few years. FX debt of corporates (including FX debt to domestic banks) amounted to around US$ 160 billion or 20 percent of GDP as of June 2015, doubling from 2010, mainly because of easy external borrowing conditions especially during the commodity booms. Moreover, shallow domestic financial markets have led corporates to tap offshore debt markets. FX debt issuance has been concentrated in the commodity (i.e., mining) and some non-tradable sectors (i.e., telecommunications, utilities). The major instruments have been debt securities, particularly syndicated loans.

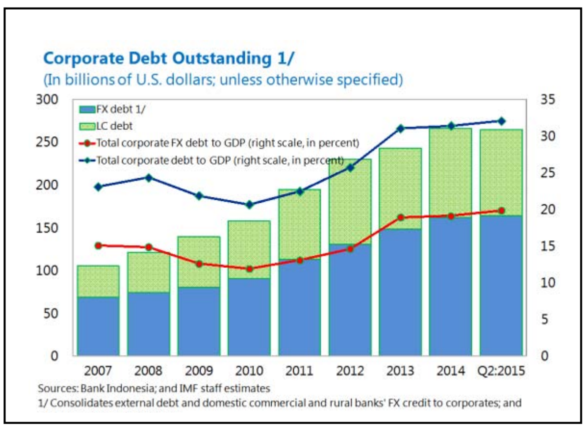
Some corporates, particularly those below investment grade, are exposed to growing risks, under pressure from a combination of sluggish growth, rupiah depreciation, and rollover risk. Disorderly default of large systemically connected corporates may damage confidence and create negative spillovers to the banking system. Close monitoring of the corporate sector, therefore, is essential, particularly in regards to maturing debt securities and linkages to mid-sized banks. Risks to monitor include:

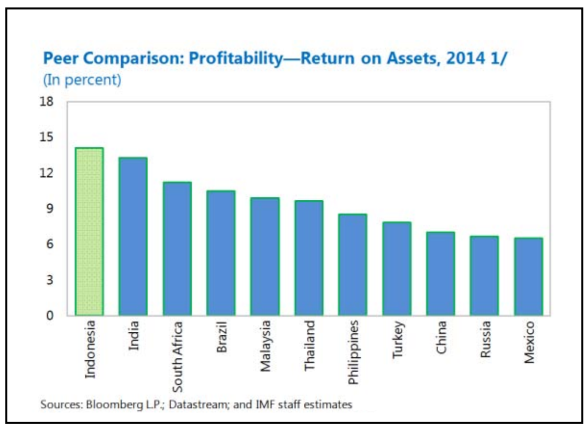
- ***FX exposure***. A portion of the FX debt remains unhedged, making them vulnerable to rupiah depreciation. BI's FX hedging regulations have generally helped corporates reduce currency risk. Although a portion of corporates were not completely hedged as of mid-2015, the extent of hedging will likely improve with administrative measures in place starting from 2015:Q4. However, some corporates appear to be only partially hedged—some hedging instruments have ceilings to reduce hedging costs.
- ***Refinancing risk***. Rollover risk is likely to grow in 2016 due to a rising level of maturing debt, weak investor appetite for EM assets, and a weak rupiah. Notably, maturing FX debt securities (i.e., syndicated loans or bonds) are likely to peak this year, concentrated in March. Still, a large proportion of short-term maturing debt comes from offshore affiliate corporates, which will help mitigate the rollover risk.
- ***Default risk***. Groups of corporates are running into a heightened default risk. Corporates in the resource sector are under most pressure, with the interest coverage ratio below 1.5 for a third of the sector, followed by those in the telecommunication industry.

To encourage corporates with external debt to enhance risk management, BI introduced a set of prudential measures in October 2014.1/

Moreover, staff analysis suggests that corporates may have become more susceptible to adverse shocks. After a period of subdued economic activity and exchange rate depreciation, corporate balance sheet conditions are expected to provide smaller buffers against negative macroeconomic shocks going forward. Indeed, simulation results suggest that corporates may have become more vulnerable to adverse shocks compared to after the "taper tantrum." The projected median default probabilities under the baseline scenario rise to somewhat above those during the taper tantrum in 2013 despite projected macro fundamentals being broadly comparable to those in 2013.

Under staff's adverse scenario, corporate distress could reach high levels. The median default probability would rise to some 1/2 of the maximum registered during the Lehman crisis. This reflects the assumptions of a sharp GDP growth slowdown and deterioration in other macro variables. The 95th percentile estimate, with remote chance of occurrence, is very close to the maximum during the global financial crisis. Moreover, inward spillovers of a negative external shock could be large in an environment of elevated uncertainty and financial market volatility. Under such circumstances, a low-probability, high-impact outcome could become a real threat.





1/ For further information, see accompanying selected issues paper chapter on "Corporate Sector Vulnerabilities." Box 1 elaborates on the BI's foreign exchange regulations.

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Box 4. Indonesia: Balance Sheet Analysis (BSA) of the Economy[1,2]

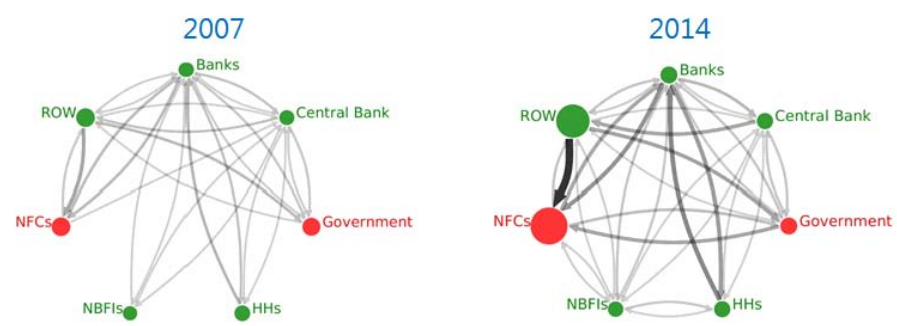
The BSA matrix presents a snapshot of outstanding gross and net balance sheet positions (stocks) of different sectors in the Indonesian economy, and can be used to study balance sheet exposures and vulnerabilities in individual sectors, as well as cross-sectoral linkages. The BSA for Indonesia is based on outstanding amounts (stocks) and uses the following statistics as source data: monetary and financial statistics (MFS) using standardized report forms (SRFs) (covering the financial sector), international investment position (IIP) (covering the external sector), and (3) government finance statistics (GFS) (covering the government sector). In addition, the from-whom-to-whom information in the datasets is used to populate the matrix for nonbank financial institutions (NBFIs) and the nonfinancial sectors (households—HHs and nonfinancial corporations—NFCs).

Reflecting the openness of its economy, overall external funding in Indonesia accounts for the largest share of total inter-sectoral net credit. This share is stable at about 33 percent of total allocated liabilities in the 2014 BSA, corresponding to about 60 percent of GDP.

BSA analysis suggests two key vulnerabilities for Indonesia: NFCs and banks. Among Indonesia's resident sectors, NFCs rely heavily on funding from abroad (net external funding is close to 60 percent of GDP). Therefore, they are exposed to foreign currency risk, as well as to funding risk. In turn, the banks in Indonesia are mostly exposed to NFCs. This large exposure may be a source of vulnerability should the NFC balance sheet be adversely affected by the aforementioned shocks. For instance, a shock to the balance sheet of NFCs may significantly increase the level of nonperforming loans (NPLs).

Figure below compares the network map representation of the Indonesian BSA as of end-2007 and end-2014. It shows gross inter-sectoral exposures and contains several dimensions. Arrows represent the flow of funds from creditor to debtor, and their thickness indicates the size of the link relative to total allocated assets. Nodes size represents the size of the net imbalance between funds borrowed and lent within a sector and nodes color represents whether a sector is a net debtor (red) or creditor (green).

BSA Matrix in Network Map Form
(Gross exposures)



Sources: IMF; and IMF staff estimates.

The main findings of the intertemporal comparison are: (i) net creditors in 2007 remained net creditors in 2014; (ii) gross exposures (thickness of the arrows) and net exposures (size of the nodes) have overall become larger in the period; and (iii) the largest exposure for both periods concerns the NFC sector borrowing from the ROW.

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[1] Prepared by Elena Loukoianova and Giovanni Ugazio (STA).
[2] For further information, see accompanying selected issues paper on "Analysis of Macro-Financial Linkages in Indonesia."

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Box 5. Indonesia: External Stability Assessment[1]

Overall assessment. Indonesia's external position in 2015 is assessed to be broadly consistent with medium-term fundamentals and desirable policies. While much of the recent external rebalancing have been driven by commodity price-led import compression, policy actions since mid-2013, including monetary policy tightening, fuel subsidy reform, and exchange rate flexibility have helped improved the external position. Easing trade and investment restrictions, deepening financial markets, and improving labor markets would help strengthen overall competitiveness over the medium term. External financing appears sustainable, but susceptible to risks (see below).

Foreign asset and liability position and trajectory. As of June 2015, the net international investment position (NIIP) position stood at -48 percent of GDP, compared to -47 percent of GDP at end 2014. Strong net portfolio inflows offset other net outflows in 2015:H1, resulting in a stable overall NIIP. At end-2015, gross external debt is moderate at 36½ percent of GDP, with about 5 percent of GDP denominated in rupiah. The level and composition of the NIIP and gross external debt indicate that Indonesia's external position is sustainable, but nonresident holdings of rupiah debt could be affected by global volatility. With the exception of SOEs borrowing, private external debt growth is expected to slow as global financial conditions tighten.

Current account. Drawing on various approaches including the IMF's model-based External Balance Assessment (EBA) regression exercise (after adjusting the results to account for Indonesia-specific factors), staff assesses the cyclically-adjusted current account balance to be -0.7 percent to 1.3 percent of GDP away from the level consistent with medium-term fundamentals and desirable policies for 2015. Much of this gap could be accounted for by low public social spending in Indonesia and fiscal policy gaps in other countries.

Real exchange rate. Despite an NEER depreciation of around 2 percent compared to the 2014 average, the REER has appreciated by 3 percent in 2015, a result of a temporary increase in inflation related to the reduction in domestic fuel price subsidies. EBA level and index REER results suggest the REER gap to be about -6 percent, in line with staff's REER gap assessment in the range of -6.5 percent to 3.5 percent in 2015, consistent with the CA gap a and standard elasticities.

Indonesia: Estimated Policy Contributions to Current Account Gap, 2015

(In percent of GDP)

Cyclically-adjusted CA	-1.5
Cyclically-adjusted CA norm	-0.8 to -2.8
Estimated CA gap	-0.7 to 1.3
Of which:	
Policy gaps	
Partners' fiscal deficits	0.6
Domestic social spending	0.5
Residual	-1.1
EBA REER index and level gaps 1/	-5.8 and -6 percent
Ext. Sustainability CA and REER gaps 1/	1 and -5.6

1/ Negative value implies REER is below levels consistent with fundamentals and desirable policies.

Capital and financial accounts. Indonesia's gross external financing requirement is expected to be about 9 percent of GDP in 2015, with amortization at about 7 percent of GDP. Net FDI and new borrowing are projected at 1.4 percent and 7.8 percent of GDP, respectively. Net and gross financial inflows appear sustainable, but could become weaker or reverse in the event of large domestic or external shocks. Continued strong policies focused on strengthening the fiscal position, keeping inflation in check, and easing supply bottlenecks would help sustain capital inflows in the medium term.

FX intervention and reserves level. Indonesia's floating regime has had better facilitated adjustments in exchange rates to market conditions since 2013. Reserves are assessed to be adequate as assessed against the IMF's composite reserve adequacy metric, sufficient to absorb most shocks, with predetermined drains also manageable. Intervention should aim primarily at smoothing volatility, while allowing the exchange rate to adjust to external shocks.

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1/ For more details, see Appendix II.

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Box 6. Indonesia: Infrastructure Reforms 1/

Indonesia's infrastructure gap remains wide compared to its peers, particularly in transport and power. Infrastructure investment has been subdued over the last decade at around 3–4 percent of GDP per year, very low compared to major Asian EMs (e.g., 10 percent and 7.5 percent of GDP by China and India, respectively).[2/] As a result, Indonesia scores lower than its peers on survey-based measures of infrastructure quality. Its infrastructure gap is manifested in high logistics costs, estimated at around 24 percent of GDP (20 percent in Thailand, 18 percent in China, and 13 percent in Malaysia). Also, electricity production per capita is only 20–60 percent of its peers, implying significant constraints on power generation.[3/]

To close the infrastructure gap, the government has formulated ambitious plans for infrastructure development. The government has set a target of around US$480 billion (about 50 percent of GDP) of infrastructure investment during 2015–19.[4/] The plans center on the transport and energy sectors, with the largest category of projects comprising expansion of power generation capacity by 35GW, which would cost 9 percent of GDP. On funding sources, the public sector is expected to finance two-thirds of the total investment (around 30 percent from the central government, 11 percent from local governments, and 22 percent from SOEs). The rest is to be financed by the private sector, mainly through public-private partnerships (PPPs).

The government has made a strong push to develop infrastructure since 2015. The government has taken a series of measures, including accelerating budget execution, ramping up fiscal transfers to local governments, injecting equity to SOEs, and upgrading the institutional and regulatory framework.

- **Central and local government**. Capital spending by the central government increased to 1.9 percent of GDP in 2015 (from 1.4 percent in 2014), reflecting efforts to accelerate the budget execution in the second half of the year. The government has strengthened the budget monitoring system, such as creation of a dedicated team for budget realization evaluation and monitoring (chaired by the Ministry of Finance and reporting to the President every two weeks). Local governments are also set to play a greater role, aided by a boost in fiscal transfers earmarked for investment (by ½ percent of GDP over 2014–16).
- **SOEs**. To strengthen investment capacity and provide confidence, the government has undertaken the SOE equity injection program, focused on electricity, construction, transportation SOEs, with 0.6 percent of GDP executed in 2015 and 0.3 percent of GDP planned in 2016. The government has also limited the dividend payments from SOEs as long as the retained earnings are channeled into infrastructure investment, while allowing asset revaluation. On the back of the strengthened balance sheets, SOEs are set to step up infrastructure investment. Capital expenditure of SOEs is projected to rise to 2.8 percent of GDP in 2015 and 3.1 percent of GDP in 2016, compared to 2.4 percent of GDP in 2014.[5/]
- **Institutional and regulatory framework**. The institutional and regulatory framework improved, particularly in regard to prioritizing and monitoring infrastructure projects. KPPIP (The Committee for Accelerated Infrastructure Delivery) was established as a coordinating body to focus on the delivery of priority projects. KPPIP has identified 22 priority projects so far, with the amount totaling 8 percent of GDP. A PPP Unit was also set up in 2014 in the Ministry of Finance, and acts as one-stop-shop for PPP coordination and facilitation. Currently, eight PPP projects are in the pipeline, totaling around 2 percent of GDP. The review process to assess PPP-related contingent liabilities has been strengthened. The government has also revamped the regulatory framework, notably streamlining the investment licensing process and encouraging foreign participation in PPPs (see Appendix IV structural reforms).

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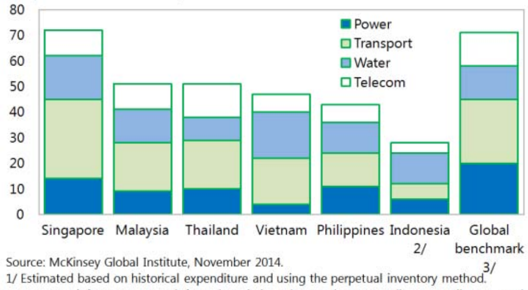
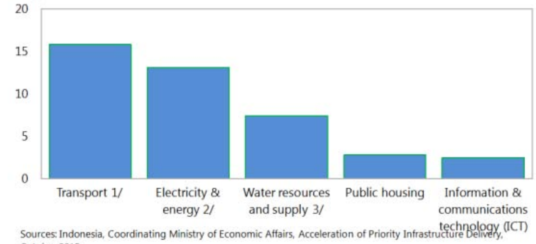
Box 6. Indonesia: Infrastructure Reforms (Concluded) 1/

Infrastructure Stock 1/
(In percent of GDP, 2012)



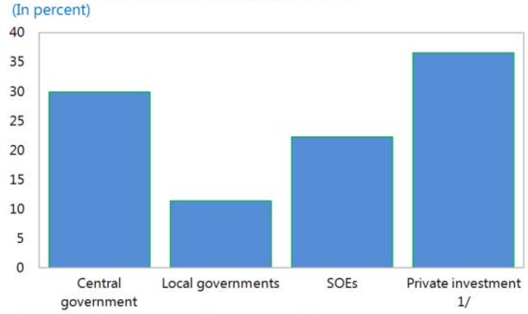
Source: McKinsey Global Institute, November 2014.
1/ Estimated based on historical expenditure and using the perpetual inventory method.
2/ Transport infrastructure stock for Indonesia is understated, as expenditure on rail, ports, and airports is not available.
3/ Includes Canada, China, Germany, India, Italy, Poland, South Africa, Spain, U.K., and U.S.

Need for Infrastructure Investment, 2015-19
(In percent of GDP)



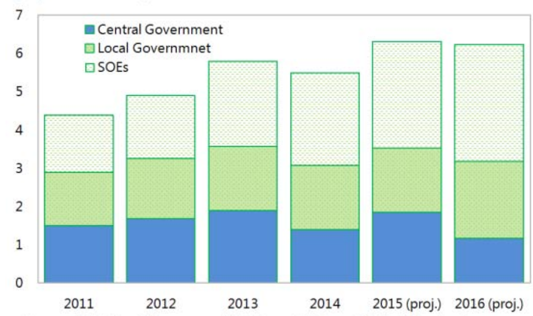
Sources: Indonesia, Coordinating Ministry of Economic Affairs, Acceleration of Priority Infrastructure Delivery, October 2015
1/ Includes roads (Rp 733 trillion), sea transport (Rp 591 trillion), railways (Rp 226 trillion), air transport (Rp 144 trillion), urban transport (Rp 86 trillion), and ferries & inland waterways (Rp 47 trillion).
2/ Includes gas.
3/ Includes water resources (Rp 450.9 trillion) and water supply & sanitation (Rp 403 trillion).

Source of Infrastructure Financing, 2015-19
(In percent)



Source: Indonesia, Coordinating Ministry of Economic Affairs.
1/ Includes PPPs, Off Balance Sheet, Loan, Obligations.

Capital Spending of Government and SOEs
(In percent of GDP)



Sources: Ministry of Finance; and Ministry of SOEs; and IMF staff estimates

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1/ Based on the accompanying selected issues paper chapter on "Infrastructure Development in Indonesia."
2/ World Bank, 2014, "Indonesia: Avoiding the Trap," *Development Policy Review 2014*.
3/ *Indonesia—Staff Report for the 2014 Article IV Consultation*, Box 4.
4/ Coordinating Ministry of Economic Affairs, *Acceleration of Priority Infrastructure Delivery*, October 2015.
5/ Ministry of SOEs.

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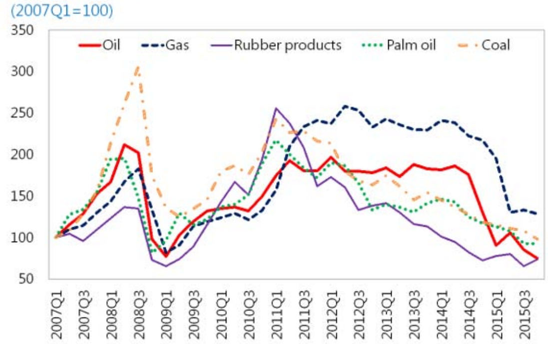
Figure 1. Indonesia: Macro-Financial Developments

Key commodity prices have declined since 2012, with significant macro-financial implications for Indonesia…

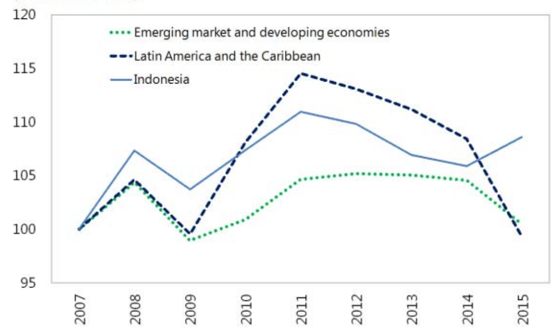
Key Commodity Prices
(2007Q1=100)



Sources: IMF, Commodity Price System database; and staff estimates.

…and the terms of trade peaked in 2011, despite latest uptick on lower oil prices for Indonesia as a net oil importer.

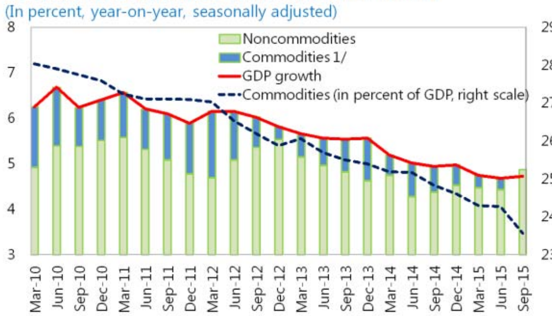
Global Terms of Trade
(Index 2007=100)



Source: IMF, *World Economic Outlook*.

Economic growth has stabilized in 2015:Q3, after having slowed with a shrinking contribution of the commodity sector.

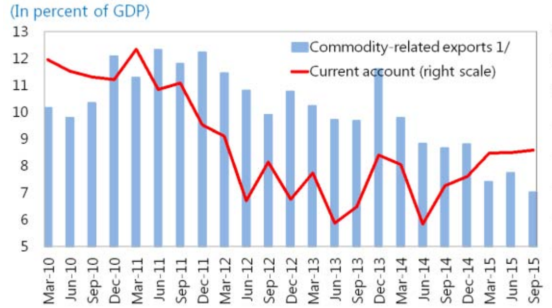
Commodity Share and Contribution to Real Growth
(In percent, year-on-year, seasonally adjusted)



Sources: Haver Analytics; and IMF staff estimates.
1/ Includes agriculture, mining and quarrying, manufacturing coal, petroleum and gas.

Falling commodity exports have resulted in a CA deficit, although recently narrowing due to a compression in imports.

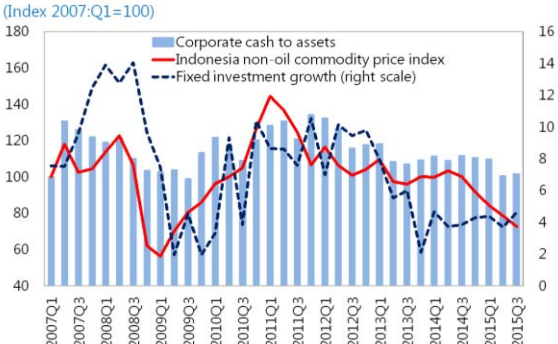
External Developments
(In percent of GDP)



Sources: CEIC Data Co. Ltd.; and IMF staff estimates.
1/ Includes agriculture products, palm oils, processed rubber, oil products, and mining products.

The corporate sector has been impacted by the commodity down cycle, with reduced cash flows and slowing investment.

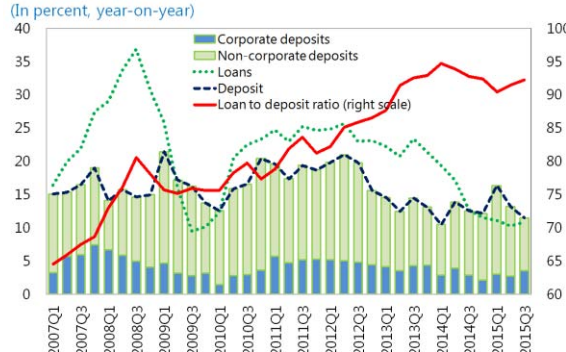
Commodity Prices, Corporate Cash and Fixed Investment
(Index 2007:Q1=100)



Sources: CEIC Data Co. Ltd; Bloomberg L.P.; and IMF staff estimates.

The commodity down cycle has weighed on loan growth, and deposit growth remains tepid.

Loan and Deposit Growth
(In percent, year-on-year)



Sources: CEIC Data Co. Ltd.; and IMF staff estimates.

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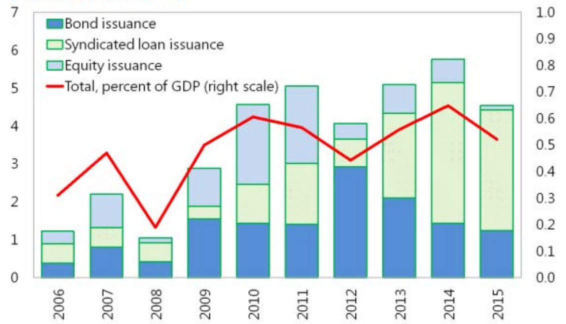
Figure 1. Indonesia: Macro-Financial Developments (Concluded)

Corporate borrowing has risen significantly in recent years, as corporates have tapped low-cost foreign currency debt.

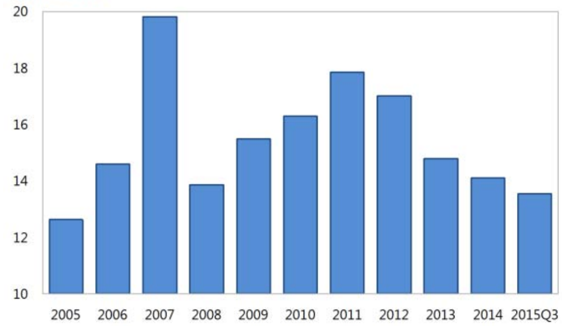
Indonesia: Issuance of Debt and Equity Securities
(In billions of U.S. dollar)



Sources: Dealogic; and IMF staff estimates.

However, the corporate sector has shown growing signs of strains, with its profitability continuing to shrink, inter alia.

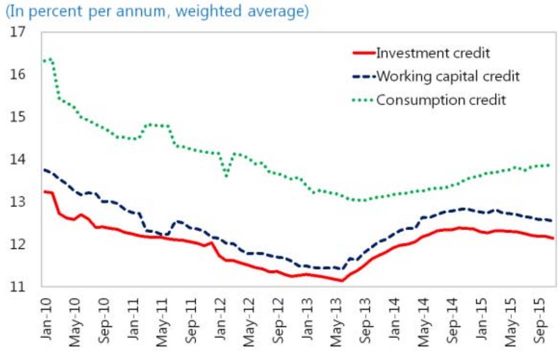
Profitability – Return on Assets of Listed Companies
(In percent)



Sources: Bloomberg LP.; and IMF staff estimates.

Lending rates remain elevated, probably reflecting heightened credit risk, particularly in consumer credit.

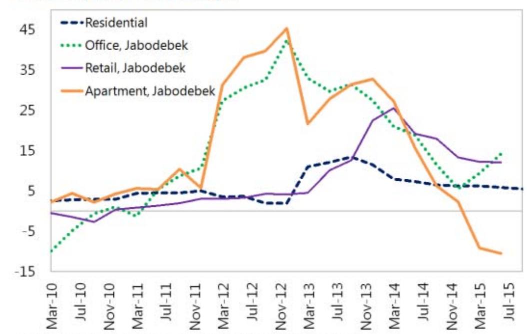
Commercial Banks' Lending Rates
(In percent per annum, weighted average)



Source: CEIC Data Co. Ltd.

Property prices have been subdued, in tandem with slowing economic growth and weak business sentiment.

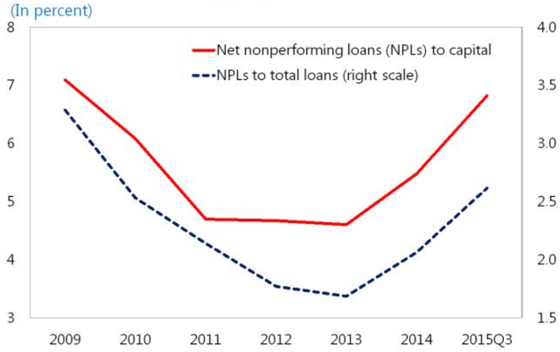
Property Prices
(Year-on-year percent change)



Source: Bank Indonesia, *Commercial Property Survey*.

NPLs in the banking system have been creeping up, particularly in the commodity and construction sectors.

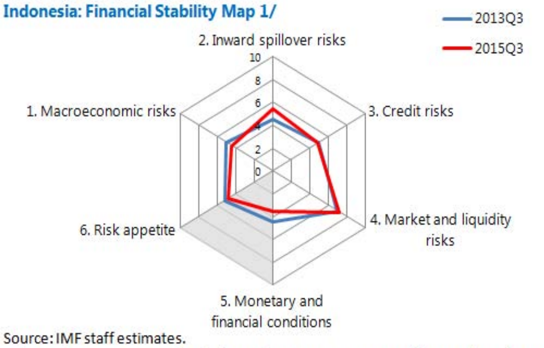
Commercial Bank Loan Quality
(In percent)



Sources: CEIC Data Company Ltd.; and IMF staff estimates.

On balance, macro-financial risks remain manageable, but spillover risks and market and liquidity risks have been rising.

Indonesia: Financial Stability Map 1/



Source: IMF staff estimates.
1/ Away from center signifies higher risks, easier monetary and financial conditions, or higher risk appetite.

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Figure 2. Indonesia: Recent Market Developments

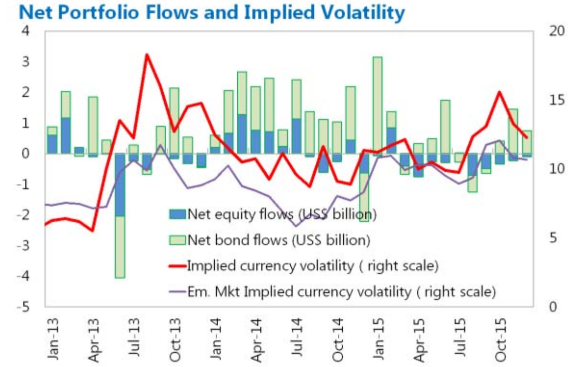
Despite U.S. Fed lift off and volatile global markets, financial markets have held up but remain sensitive to regional trends.

Financial Conditions

Source: Bloomberg LP; and IMF staff estimates.

…with portfolio inflows remaining less supportive and implied volatility elevated.

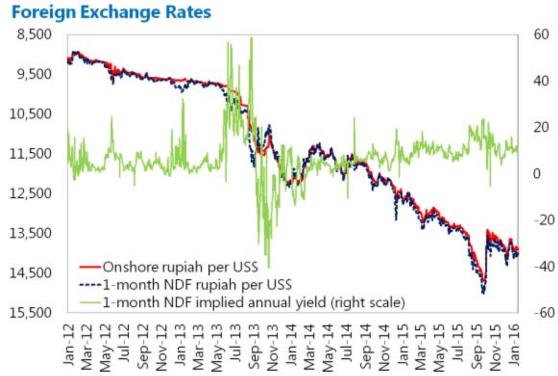
Net Portfolio Flows and Implied Volatility



Sources: Bloomberg L.P.; and IMF staff calculations.

The rupiah has depreciated significantly over the past years and remains flexible, helping absorb external pressures…

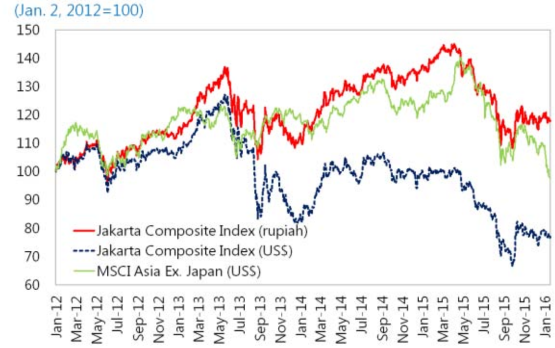
Foreign Exchange Rates



Source: Bloomberg L.P.

…while equity prices have slumped before recouping some of their losses in recent months.

Equity Market Indices
(Jan. 2, 2012=100)



Sources: Bloomberg L.P.; and IMF staff estimates.

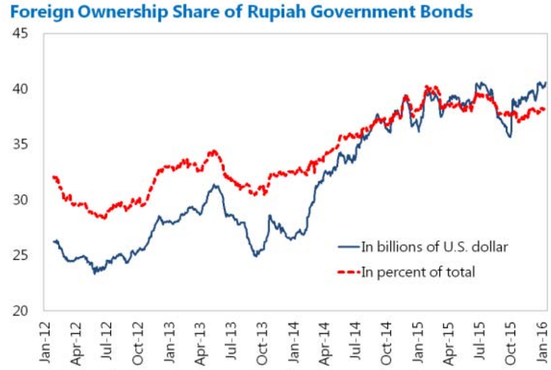
Domestic bond yields have been less volatile than in mid 2013…

Domestic Government Bond Yields
(In percent per annum)

Source: Bloomberg L.P.

…driven by substantial presence by foreign investors, with their ownership of rupiah government bonds rising again.

Foreign Ownership Share of Rupiah Government Bonds



Sources: Bloomberg L.P.; CEIC Data Co., Ltd.; and IMF staff estimates.

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Figure 3. Indonesia: Real Sector

Growth has stabilized in 2015:Q3, supported by a pickup in public investment.

Contribution to Real GDP Growth

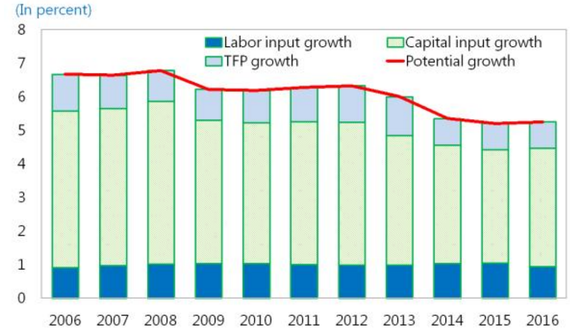
(In percent, year-on-year)

Sources: CEIC Data Company Ltd.; and IMF staff estimates.

Declines in potential growth reflect lower capital input growth and TFP growth likely related to the commodity down cycle.

Contribution to Potential GDP Growth

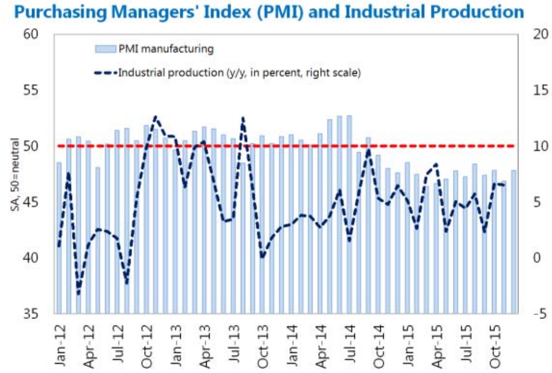
(In percent)



Source: IMF staff estimates.

PMI and industrial production ticked up more recently, although they still remain weak…

Purchasing Managers' Index (PMI) and Industrial Production

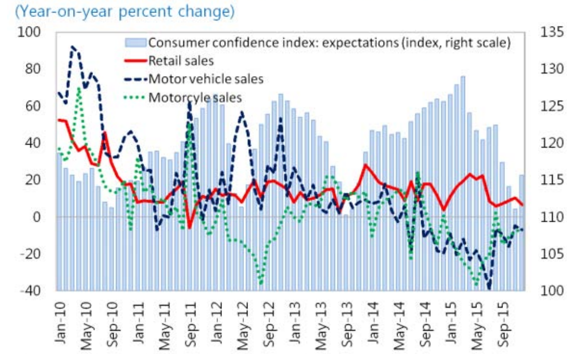


Sources: Haver Analytics; and CEIC Data Company Ltd.

… and consumption indicators, notably vehicle sales, suggest a gradual recovery in private consumption.

Retail and Transport Sales and Consumer Sentiment

(Year-on-year percent change)

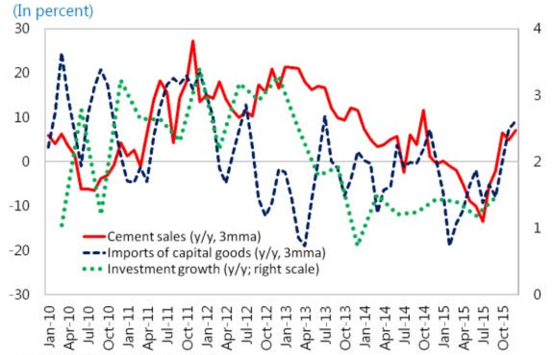


Sources: CEIC Data Company Ltd.; IMF staff estimates.

Latest cement sales and capital goods imports have turned positive, pointing to the expansion in public investment.

Investment Activity Indicators

(In percent)

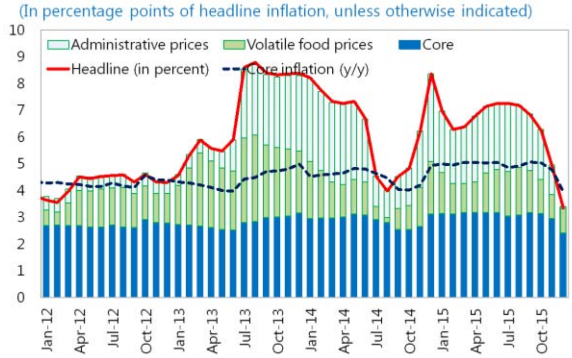


Source: CEIC Data Company Ltd.

Headline inflation has fallen back to BI's target band due to base effect as well as stable food prices and weak demand.

Inflation Developments

(In percentage points of headline inflation, unless otherwise indicated)



Sources: CEIC Data Company Ltd; and IMF staff estimates.

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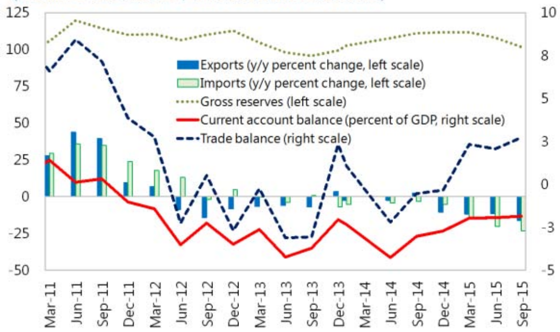
Figure 4. Indonesia: External Sector

Despite a decline in exports, the current account deficit has narrowed mainly on a compression in imports…

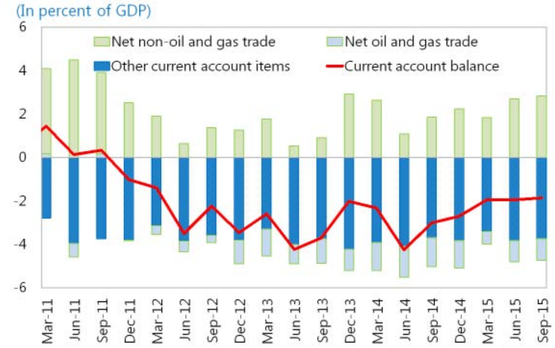
External Developments
(In billions of U.S. dollar, unless otherwise indicated)



Sources: CEIC Data Company Ltd; and IMF staff estimates.

…particularly driven by improvement in the non-oil and gas trade balance.

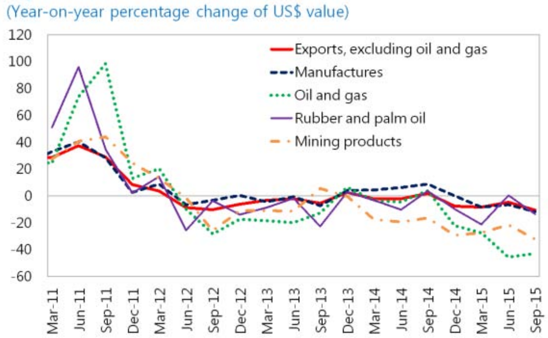
Current Account Balance
(In percent of GDP)



Sources: CEIC Data Company Ltd.; and IMF staff estimates.

The contraction in exports is broad-based, with both the commodity and manufacturing sectors shrinking….

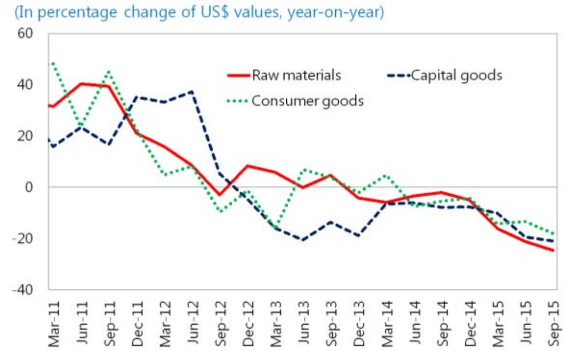
Exports of Goods
(Year-on-year percentage change of US$ value)



Sources: CEIC Data Company Ltd.; and IMF staff estimates.

…while overall import weakness suggests still sluggish domestic demand.

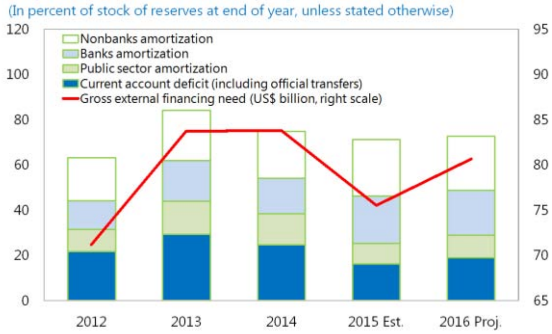
Imports of Goods
(In percentage change of US$ values, year-on-year)



Source: CEIC Data Company Ltd.

External financing needs will remain sizable, though risk will likely be contained…

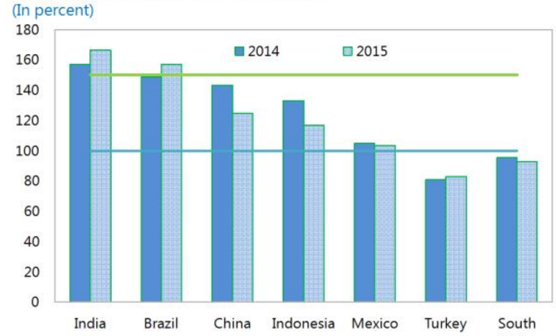
Projected Gross External Financing Needs
(In percent of stock of reserves at end of year, unless stated otherwise)



Source: IMF staff estimates.

…as Indonesia's level of reserves is seen as sufficient to deal with most shocks and compares well against EM peers.

Reserve Adequacy Composite Matrix
(In percent)



Sources: IMF, *International Financial Statistics*; and IMF staff estimates.

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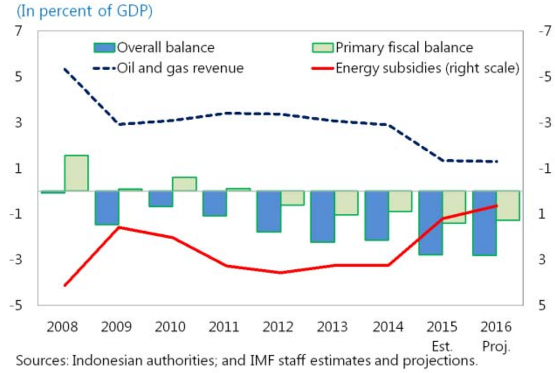
Figure 5. Indonesia: Fiscal Sector

The fiscal deficit continues to widen, mainly driven by a fall in oil and gas revenues, despite cuts in energy subsidies.

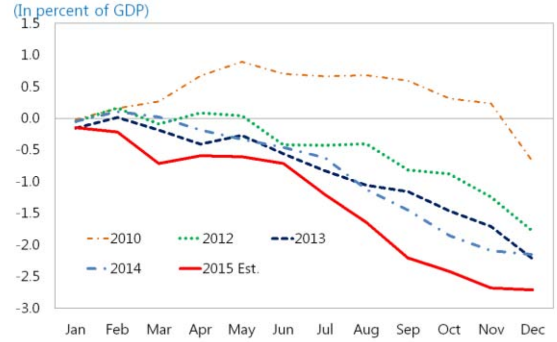
Fiscal Developments
(In percent of GDP)



Sources: Indonesian authorities; and IMF staff estimates and projections.

Budgetary pressures have intensified in 2015, due to a considerable fall in revenue and a jump in capital spending.

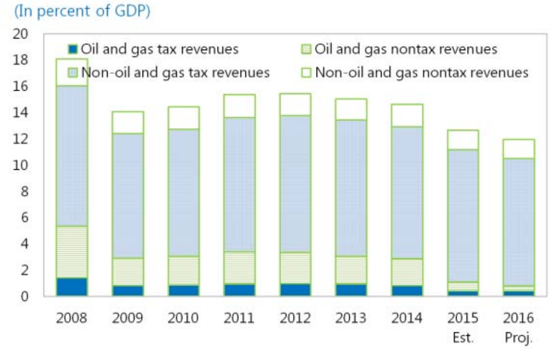
Fiscal Deficit Path, 2010-2015
(In percent of GDP)



Sources: Indonesian authorities; and IMF staff estimates.

Tax revenue relative to GDP continues to decline with slow progress in nonresource revenue mobilization…

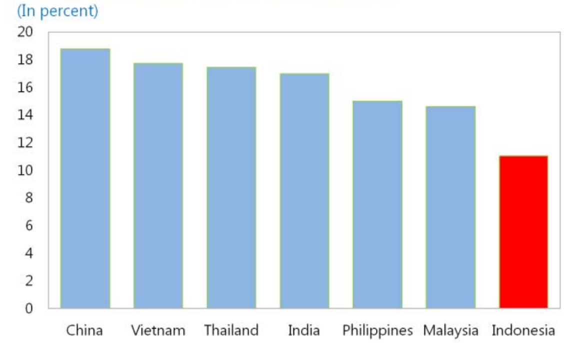
Central Government Revenue
(In percent of GDP)



Sources: Indonesian authorities; and IMF staff estimates and projections.

…with Indonesia's tax-to-GDP ratio ranking the lowest among regional EM peers.

General Government Tax-to-GDP Ratio, 2015
(In percent)



Sources: IMF, *WEO Database*; and Authority data.

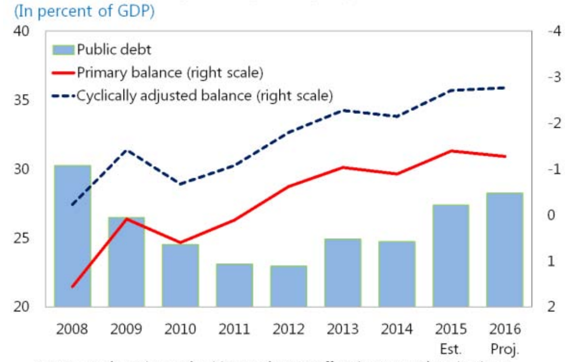
Capital spending increased considerably in 2015, aided by the government's strong push as well as energy subsidy reforms which freed up space for capital spending.

Central Government Expenditure 1/
(In percent of GDP)

Sources: Indonesian authorities; and IMF staff estimates and projections.
1/ Excludes transfers to local governments.

The public debt-to-GDP ratio has risen on weak fiscal performance and rupiah depreciation, but is expected to remain at a comparatively low level.

Public Debt, Primary, and Cyclically Adjusted Balance
(In percent of GDP)



Sources: Indonesian authorities; and IMF staff estimates and projections.

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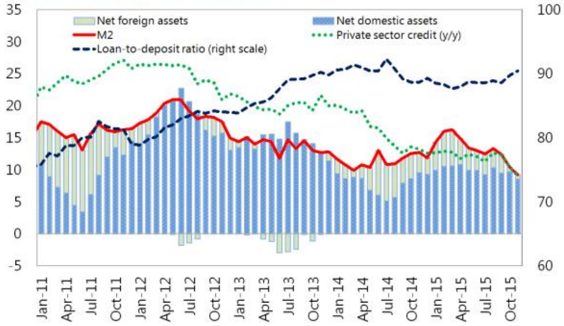
Figure 6. Indonesia: Monetary Sector and Bank Liquidity Developments

Credit growth has moderated, on the back of a slowdown in the economy…

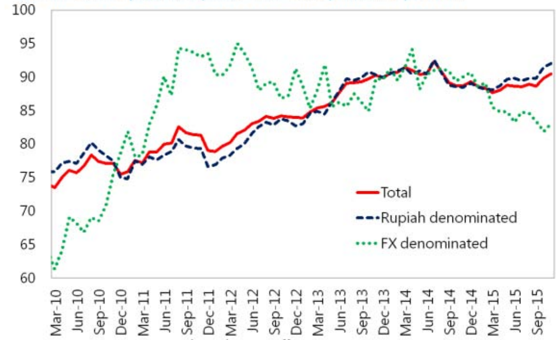
Monetary Aggregates and Loan-to-Deposit Ratios
(Contribution to growth, year-on-year)



Sources: CEIC Data Company Ltd; and IMF staff estimates.

…and tighter liquidity seen in an uptick in loan-to-deposit ratios due to the slowdown in deposit growth.

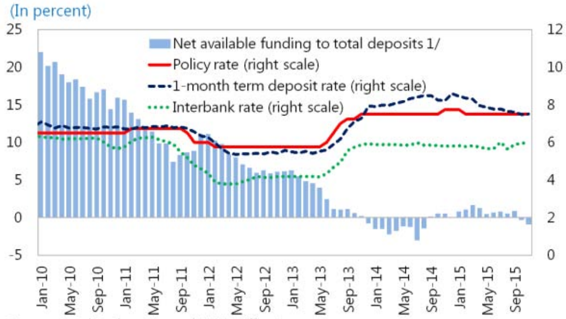
Commercial Bank Loan to Deposit Ratios
(Credit to third parties/deposits from third parties, in percent)



Sources: CEIC Data Co., Ltd.; and IMF staff estimates.

Net available funding continues to be constrained due to less supportive capital flows and slowing deposit growth…

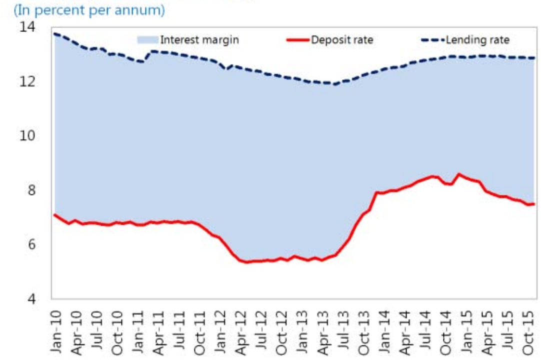
Funding Pressure
(In percent)



Sources: Bank Indonesia; and IMF staff estimates.
1/ Net available funding is defined as third-party funding less third-party credit and statutory reserves.

…although banks' interest margins remain wide.

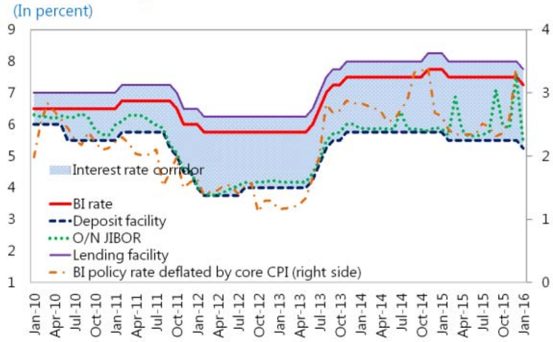
Banking System Interest Margin
(In percent per annum)



Source: Bank Indonesia.

BI reduced its policy rate in January on more stable external financial conditions, amidst slow growth and low inflation.

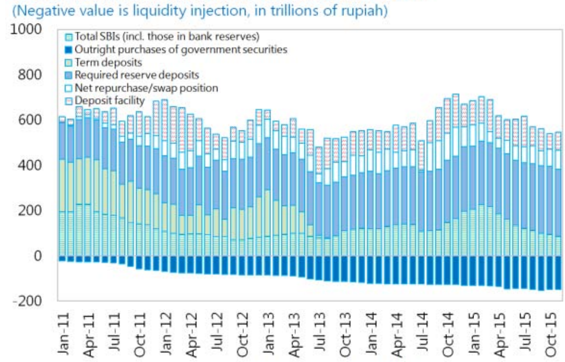
Monetary Policy and Interbank Rates
(In percent)



Sources: CEIC Data Co., Ltd.; and IMF staff estimates.

…and BI has also reduced liquidity absorption, with excess liquidity declining.

Bank Indonesia's Liquidity Absorption by Instrument
(Negative value is liquidity injection, in trillions of rupiah)



Sources: Bank Indonesia; CEIC Data Co. Ltd; Bloomberg LP; and IMF staff estimates.

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Table 1. Indonesia: Selected Economic Indicators, 2011–16

Nominal GDP (2014): Rp 10,543 trillion or US$889 billion
Population (2014): 252.2 million
Main exports (percent of total, 2014): Oil and gas (17.2), coal (11.8), palm oil (9.9), textile & textile products (7.3)
GDP per capita (2014): US$3,524
Unemployment rate (August 2015): 6.2 percent
Poverty headcount ratio at national poverty line (2014): 11.3 percent of population

	2011	2012	2013	2014	2015			2016
				Est.	Prel.	Latest outturns		Proj.
Real GDP (percent change)	6.2	6.0	5.6	5.0	4.7	4.7	Q1-Q3	4.9
Domestic demand	6.0	7.3	5.1	4.7	4.0	4.0	Q1-Q3	5.1
Of which:								
Private consumption 2/	5.1	5.5	5.4	5.3	4.8	4.8	Q1-Q3	4.9
Government consumption	5.5	4.5	6.9	2.0	4.0	3.9	Q1-Q3	5.0
Gross fixed investment	8.9	9.1	5.3	4.1	4.4	4.2	Q1-Q3	5.7
Change in stocks 3/	-0.2	0.8	-0.3	0.2	-0.5	-0.4	Q1-Q3	0.0
Net exports 3/	0.2	-1.5	0.6	-0.3	0.8	1.0	Q1-Q3	0.0
Saving and investment (in percent of GDP)								
Gross investment 4/	33.0	35.1	34.0	34.7	34.3	...	...	34.8
Gross national saving	33.2	32.4	30.9	31.6	32.3	...	...	32.3
Prices (12-month percent change)								
Consumer prices (end period)	3.8	3.7	8.1	8.4	3.4	...	...	4.5
Consumer prices (period average)	5.3	4.0	6.4	6.4	6.4	...	...	4.5
Public finances (in percent of GDP)								
Central government revenue	15.5	15.5	15.1	14.7	13.0	...	...	12.1
Central government expenditure	16.5	17.3	17.3	16.9	15.7	...	...	15.0
Of which: Energy subsidies	3.3	3.6	3.3	3.2	1.0	...	...	0.6
Central government balance	-1.1	-1.8	-2.2	-2.2	-2.8	...	...	-2.8
Primary balance	0.1	-0.6	-1.0	-0.9	-1.4	...	...	-1.3
Central government debt	23.1	23.0	24.9	24.7	27.5	...	...	28.4
Money and credit (12-month percent change; end of period)								
Rupiah M2	17.4	14.4	9.4	13.5	13.5	9.7	Oct.	14.0
Base money	18.3	14.9	16.7	11.6	6.4	4.7	Nov.	11.0
Private Sector Credit	25.4	22.3	20.0	11.8	11.4	10.4	Oct.	12.6
One-month interbank rate (period average)	6.2	4.4	5.8	7.5	7.2	...	...	...
Balance of payments (in billions of U.S. dollars, unless otherwise indicated)								
Current account balance	1.7	-24.4	-29.1	-27.5	-16.8	-12.4	Q1-Q3	-22.8
In percent of GDP	0.2	-2.7	-3.2	-3.1	-2.0	-1.9	Q1-Q3	-2.5
Trade balance	33.8	8.7	5.8	7.0	14.9	11.2	Q1-Q3	10.8
Of which: Oil and gas (net)	-0.7	-5.2	-9.7	-11.8	-7.7	-5.5	Q1-Q3	-7.6
Inward direct investment	19.2	19.1	18.8	23.0	18.8	14.3	Q1-Q3	20.4
Overall balance	11.9	0.2	-7.3	15.2	-4.3	-6.2	Q1-Q3	2.5
Non-oil and gas exports, volume growth	12.6	4.5	2.5	3.3	-1.5	...	...	3.5
Non-oil and gas imports, volume growth	12.2	16.5	-1.2	-0.8	-8.3	...	...	9.6
Terms of trade, percent change (excluding oil)	5.3	-0.7	-2.2	-1.8	-8.3	...	...	-0.2
Gross reserves								
In billions of U.S. dollars (end period)	110.1	112.8	99.4	111.9	105.9	105.9	Dec.	108.4
In months of prospective imports of goods and services	6.2	6.4	5.9	8.0	7.3	7.3	Dec.	6.8
As a percent of short-term debt 5/	236	206	177	192	177	177	Dec.	175
Total external debt 6/								
In billions of U.S. dollars	225.4	252.4	266.1	293.7	314.0	...	...	330.7
In percent of GDP	25.2	27.5	29.2	33.1	36.6	...	...	36.6
Exchange rate								
Rupiah per U.S. dollar (period average)	8,774	9,375	10,414	11,862	13,389	...	...	...
Rupiah per U.S. dollar (end of period)	9,075	9,638	12,171	12,435	13,788	...	...	...
Memorandum items:								
Jakarta Stock Exchange (12-month percentage change, composite index)	3.2	12.9	-1.0	22.3	-12.1	...	...	...
Oil production (thousands of barrels per day)	907	860	830	794	800	...	...	830
Nominal GDP (in trillions of rupiah)	7,832	8,616	9,525	10,543	11,516	...	...	12,629

Sources: Data provided by the Indonesian authorities; and IMF staff estimates and projections.

1/ For 2015, if an observation is shown in the "Latest" column, then the "Prel." column is a projection.
2/ Includes NPISH consumption.
3/ Contribution to GDP growth (percentage points).
4/ Includes changes in stocks.
5/ Short-term debt on a remaining maturity basis.
6/ Public and private external debt.

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Table 2. Indonesia: Selected Vulnerability Indicators, 2011–16

	2011	2012	2013	2014	2015 Prel.	2016 Proj. or latest	Observation
Key economic and market indicators							
Real GDP growth (in percent)	6.2	6.0	5.6	5.0	4.7	4.9	Proj.
CPI inflation (in percent, end of period (e.o.p.))	3.8	3.7	8.1	8.4	3.4	4.5	Proj.
Short-term (ST) interest rate (in percent, e.o.p.) 1/	4.9	4.8	7.6	6.6	8.6	7.9	Jan. 2016
Ten-year government bond yield (in percent, e.o.p.)	6.0	5.3	8.5	7.8	8.7	8.6	Jan. 2016
Indonesia EMBI spread (basis points (bps), e.o.p.)	274	179	292	266	329	363	Jan. 2016
Exchange rate (rupiah per U.S. dollar (e.o.p.))	9,075	9,638	12,171	12,435	13,788	...	
External sector							
Current account balance (in percent of GDP)	0.2	-2.7	-3.2	-3.1	-2.0	-2.5	Proj.
Net FDI inflows (in percent of GDP)	1.3	1.5	1.3	1.8	1.4	1.5	Proj.
Exports of goods and nonfactor services (GNFS) (percentage change, in US$ terms)	27.8	-0.9	-2.8	-3.0	-12.5	0.4	Proj.
Real effective exchange rate (e.o.p.; 2010=100)	99.4	94.4	83.5	92.3	91.3	...	Dec. 2015
Gross international reserves (in US$ billion)	110.1	112.8	99.4	111.9	105.9	108.4	Proj.
In percent of ST debt at remaining maturity (RM)	235.5	206.4	176.6	191.6	177.3	175.1	Proj.
Total gross external debt (in percent of exports of GNFS)	105.8	119.6	129.8	147.7	180.5	189.3	Proj.
Gross external financing requirement (in US$ billion) 2/	41.2	71.2	83.8	83.8	75.2	82.6	Proj.
Public sector (PS) 3/							
Overall balance (in percent of GDP)	-1.1	-1.8	-2.2	-2.2	-2.8	-2.8	Proj.
Primary balance (in percent of GDP)	0.1	-0.6	-1.0	-0.9	-1.4	-1.3	Proj.
Gross PS financing requirement (in percent of GDP) 4/	2.5	3.7	4.0	4.4	4.5	4.6	Proj.
Public sector gross debt (PSGD) (in percent of GDP)	23.1	23.0	24.9	24.7	27.5	28.4	Proj.
Of which : Exposed to rollover risk (in percent of total PSGD) 5/	7.9	6.9	6.4	6.9	7.2	8.3	Proj.
Exposed to exchange rate risk (in percent of total PSGD) 6/	45.1	44.5	46.7	43.3	45.0	42.9	Proj.
Exposed to interest rate risk (in percent of total PSGD) 7/	8.3	7.4	5.2	4.0	2.8	2.0	Proj.
Financial sector (FS)							
Capital to risk-weighted assets (in percent) 8/	16.1	17.3	19.8	18.7	20.2	...	Sep. 2015
Nonperforming loans (in percent of total loans)	2.1	1.8	1.7	2.2	2.7	...	Nov. 2015
Foreign currency deposits at commercial banks (in percent of total deposits)	13.6	14.3	17.0	15.9	16.5	...	Nov. 2015
Foreign exchange loans at commercial banks (in percent of total loans)	15.6	15.0	16.5	15.7	14.4	...	Nov. 2015
Government debt held by financial system (percent of total financial system assets)	6.4	5.7	5.9	6.0	7.5	...	Nov. 2015
Total credit outstanding of banking system (annual percentage change)	24.7	23.1	21.4	11.6	9.6	...	Nov. 2015

Sources: Data provided by the Indonesian authorities; and IMF staff estimates and projections.

1/ One-month Jakarta Interbank Offered Rate.
2/ Defined as current account deficit, plus amortization on medium- and long-term debt and short-term debt at end of previous period.
3/ Public sector covers central government only.
4/ Overall balance plus debt amortization.
5/ Short-term debt and maturing medium- and long-term debt.
6/ Debt in foreign currency or linked to the exchange rate.
7/ Government securities at variable interest rates.
8/ Includes capital charge for operational risk.

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Table 3. Indonesia: Balance of Payments, 2011–16

(In billions of U.S. dollars, unless otherwise indicated)

	2011	2012	2013	2014 Est.	2015 Proj.	2016 Proj.
Current account	1.7	-24.4	-29.1	-27.5	-16.8	-22.8
Goods, net (trade balance)	33.8	8.7	5.8	7.0	14.9	10.8
Exports, f.o.b.	191.1	187.3	182.1	175.3	149.3	149.0
Oil and gas	38.1	35.6	33.6	28.8	15.7	13.3
Non-oil and gas 1/	153.0	151.8	148.5	146.5	133.6	135.7
Of which: Manufacturing	111.5	112.2	109.3	115.4	106.0	108.2
Palm oil	16.7	17.7	16.5	17.5	15.3	16.6
Rubber products	14.1	10.4	9.3	7.0	6.1	6.2
Other manufacturing	80.7	84.1	83.5	91.0	84.6	85.4
Mining	34.3	31.4	30.4	21.8	19.3	18.6
Imports, f.o.b.	-157.3	-178.7	-176.3	-168.3	-134.5	-138.3
Oil and gas	-38.7	-40.8	-43.3	-40.6	-23.4	-20.9
Non-oil and gas	-118.6	-137.9	-133.0	-127.7	-111.1	-117.3
Services, net	-9.8	-10.6	-12.1	-10.0	-8.7	-10.0
Income, net	-26.5	-26.6	-27.1	-29.7	-28.5	-29.3
Current transfers, net	4.2	4.1	4.2	5.2	5.5	5.8
Capital and financial account	13.6	24.9	22.0	45.4	16.8	25.3
Capital account	0.0	0.1	0.0	0.0	0.0	0.0
Financial account	13.6	24.9	21.9	45.3	16.7	25.3
Direct investment, net	11.5	13.7	12.2	15.9	12.0	13.3
Abroad, net	-7.7	-5.4	-6.6	-7.1	-6.8	-7.1
In Indonesia (FDI), net	19.2	19.1	18.8	23.0	18.8	20.4
Portfolio investment, net	3.8	9.2	10.9	26.1	15.0	15.6
Assets, net	-1.2	-5.5	-1.3	2.6	-1.1	-1.2
Liabilities	5.0	14.7	12.1	23.6	16.2	16.9
Equity securities	-0.3	1.7	-1.9	3.3	-2.5	2.3
Debt securities	5.3	13.0	14.0	20.3	18.7	14.6
Other investment	-1.8	1.9	-0.8	3.5	-10.1	-3.4
Assets	-6.8	-5.4	-3.4	-4.3	-12.7	-6.8
Public sector	0.0	0.0	0.0	0.0	0.0	0.0
Private sector	-6.8	-5.4	-3.4	-4.3	-12.7	-6.8
Liabilities	5.0	7.3	2.6	7.8	2.6	3.3
Public sector	-2.3	2.5	-1.4	-4.2	0.9	-1.6
Private sector	7.2	4.8	4.0	12.0	1.7	4.9
Total	15.3	0.5	-7.1	17.9	-0.1	2.5
Errors and omissions	-3.5	-0.3	-0.2	-2.6	-4.2	0.0
Overall balance	11.9	0.2	-7.3	15.2	-4.3	2.5
Valuation changes	2.1	2.4	-6.1	-2.8	-1.7	0.0
Change in reserve assets (- = increase)	-13.9	-2.7	13.4	-12.5	5.9	-2.5
Memorandum items:						
Reserve assets position (eop)	110.1	112.8	99.4	111.9	105.9	108.4
In months of prospective imports of goods and services	6.2	6.4	5.9	8.0	7.3	6.8
In percent of short-term (ST) debt at remaining maturity (RM)	236	206	177	192	177	175
In percent of ST debt at RM plus the current account deficit	155	135	119	149	128	125
Current account (- deficit, percent of GDP)	0.2	-2.7	-3.2	-3.1	-2.0	-2.5
Non-oil and gas exports, volume growth	12.6	4.5	2.5	3.3	-1.5	3.5
Non-oil and gas imports, volume growth	12.2	16.5	-1.2	-0.8	-8.3	9.6
Terms of trade, percent change (excluding oil)	5.3	-0.7	-2.2	-1.8	-8.3	-0.2
Terms of trade, percent change (including oil)	3.3	-1.0	-2.6	-1.0	2.6	2.4
Gross external financing requirement (in US$ billion) 2/	41.2	71.2	83.8	83.8	75.2	82.6

Sources: Data provided by the Indonesian authorities; and IMF staff estimates and projections.

1/ Includes "other exports" category.
2/ Defined as current account deficit, plus amortization on medium- and long-term debt and short-term debt at end of previous period.

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Table 4. Indonesia: Medium-Term Macroeconomic Framework, 2013–21

	2013	2014	2015	2016	2017	2018	2019	2020	2021
		Est.			Proj.				
Real GDP (percent change)	5.6	5.0	4.7	4.9	5.3	5.5	5.8	6.0	6.0
Domestic demand	5.1	4.7	4.0	5.1	5.4	5.5	5.7	5.9	5.9
Of which:									
Private consumption 1/	5.4	5.3	4.8	4.9	5.1	5.2	5.3	5.3	5.3
Gross fixed investment	5.3	4.1	4.4	5.7	6.5	6.7	7.1	7.4	7.4
Change in stocks 2/	-0.3	0.2	-0.5	0.0	0.0	0.0	0.0	0.0	0.0
Net exports 2/	0.6	-0.3	0.8	0.0	0.0	0.1	0.2	0.3	0.3
Statistical discrepancy 2/	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Saving and investment (in percent of GDP)									
Gross investment 3/	34.0	34.7	34.3	34.8	35.1	35.4	35.8	36.2	36.6
Gross national saving	30.9	31.6	32.3	32.3	32.6	32.8	33.2	33.5	33.9
Foreign saving (external current account balance)	3.2	3.1	2.0	2.5	2.5	2.6	2.6	2.7	2.7
Prices (12-month percent change)									
Consumer prices (end period)	8.1	8.4	3.4	4.5	4.4	4.4	4.2	4.0	4.0
Consumer prices (period average)	6.4	6.4	6.4	4.5	4.5	4.4	4.3	4.1	4.0
Public finances (in percent of GDP)									
Central government revenue	15.1	14.7	13.0	12.1	12.5	12.7	13.0	13.2	13.4
Of which: Non-oil and gas tax revenues	10.4	10.0	10.3	9.9	10.1	10.3	10.6	10.8	11.1
Central government expenditure	17.3	16.9	15.7	15.0	15.3	15.5	15.8	16.0	16.2
Of which: Energy subsidies	3.3	3.2	1.0	0.6	0.5	0.1	0.1	0.1	0.1
Development expenditure	2.9	2.3	2.7	1.9	2.1	2.6	2.7	2.8	2.9
Central government balance	-2.2	-2.2	-2.8	-2.8	-2.8	-2.8	-2.8	-2.8	-2.8
Primary balance	-1.0	-0.9	-1.4	-1.3	-1.2	-1.1	-1.0	-1.0	-1.0
Central government debt	24.9	24.7	27.5	28.4	29.2	30.0	30.5	31.0	31.4
Balance of payments (in billions of U.S. dollars)									
Current account balance	-29.1	-27.5	-16.8	-22.8	-24.8	-27.3	-29.7	-33.1	-36.6
In percent of GDP	-3.2	-3.1	-2.0	-2.5	-2.5	-2.6	-2.6	-2.7	-2.7
Trade balance	5.8	7.0	14.9	10.8	10.3	10.5	9.4	8.6	8.3
Of which: Oil and gas (net)	-9.7	-11.8	-7.7	-7.6	-8.9	-9.4	-9.7	-9.7	-9.1
Overall balance	-7.3	15.2	-4.3	2.5	5.4	3.5	2.9	5.1	6.8
Gross reserves									
In billions of U.S. dollars (end period)	99.4	111.9	105.9	108.4	113.8	117.3	120.2	125.3	132.1
In months of prospective imports	5.9	8.0	7.3	6.8	6.6	6.2	5.8	5.5	5.3
As a percent of short-term debt 4/	176.6	191.6	177.3	175.1	176.6	174.5	171.2	170.6	171.3
Total external debt									
In billions of U.S. dollars	266.1	293.7	314.0	330.7	350.5	371.6	393.2	417.3	445.0
In percent of GDP	29.2	33.1	36.6	36.6	36.0	35.1	34.5	33.8	32.6
Memorandum items:									
Oil production (thousands of barrels per day)	830	794	800	830	800	770	740	710	710
Indonesian oil price (period average, in U.S. dollars per barrel)	105.8	96.5	51.3	42.9	49.7	54.0	56.9	58.6	59.6
Nominal GDP (in trillions of rupiah)	9,525	10,543	11,516	12,629	13,890	15,301	16,887	18,638	20,552
Nominal GDP (in billions of U.S. dollars)	913	889	857	…	…	…	…	…	…

Sources: Data provided by the Indonesian authorities; and IMF staff estimates and projections.

1/ Includes NPISH consumption
2/ Contribution to GDP growth.
3/ Includes changes in stocks.
4/ Short-term debt on a remaining maturity basis.

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Table 5. Indonesia: Summary of Central Government Operations, 2011–16

	2011	2012	2013	2014	2015		2016	
					Revised Budget	Prel. Est.	Approved Budget	Proj.
					(In trillions of rupiah)			
Revenues and grants	1,211	1,338	1,439	1,550	1,762	1,492	1,823	1,531
Of which : tax revenues	874	981	1,077	1,147	1,489	1,236	1,547	1,297
Oil and gas revenues	267	289	292	304	131	128	120	100
Tax revenues	73	83	89	87	50	50	41	51
Nontax revenues	193	206	204	217	81	78	79	48
Non-oil and gas revenues	939	1,043	1,140	1,241	1,627	1,360	1,700	1,429
Tax revenues	801	897	989	1,059	1,440	1,186	1,505	1,245
Income tax	358	382	418	459	630	548	716	581
VAT	278	338	385	409	576	424	572	462
Other	165	178	186	192	233	215	218	202
Nontax revenues	138	146	151	182	188	174	195	184
Grants	5	6	7	5	3	3	2	2
Expenditure and net lending	1,295	1,491	1,651	1,777	1,984	1,810	2,096	1,889
Current expenditure	695	790	864	958	936	879	1,069	915
Personnel	176	198	222	244	293	281	348	325
Subsidies	295	346	355	392	212	188	183	159
Of which: energy subsidies	256	306	310	342	138	119	102	79
Fuel	165	212	210	240	65	61	64	46
Electricity	90	95	100	102	73	58	38	33
Interest	93	101	113	133	156	156	185	196
Other	130	145	175	189	275	255	354	235
Development expenditure	189	221	273	245	383	308	257	243
Capital spending	118	145	181	147	276	213	202	146
Social assistance spending	71	76	92	98	108	94	55	96
Transfers to local governments	411	481	513	574	665	623	770	731
of which: transfers for infrastructure 1/	25	26	31	32	80	76	132	119
Overall balance	-84	-153	-212	-227	-223	-319	-273	-358
Financing	84	153	212	227	223	319	273	358
Net issuance of government securities	120	160	225	274	298	411	327	363
Rupiah bond issuance	177	227	269	353	350	375	...	439
External bond issuance	30	56	59	86	102	160	...	77
Amortization	-87	-123	-103	-165	-155	-124	...	-152
Program loan	15	15	18	18	8	45	37	37
SOE recapitalization	...	...	...	...	-65	-65	-40	-40
Other	...	...	...	...	-18	-72	-50	-2
					(In percent of GDP)			
Revenues and grants	15.5	15.5	15.1	14.7	15.1	13.0	14.3	12.1
Of which : tax revenues	11.2	11.4	11.3	10.9	12.7	10.7	12.2	10.3
Oil and gas revenues	3.4	3.4	3.1	2.9	1.1	1.1	0.9	0.8
Tax revenues	0.9	1.0	0.9	0.8	0.4	0.4	0.3	0.4
Nontax revenues	2.5	2.4	2.1	2.1	0.7	0.7	0.6	0.4
Non-oil and gas revenues	12.0	12.1	12.0	11.8	13.9	11.8	13.4	11.3
Tax revenues	10.2	10.4	10.4	10.0	12.3	10.3	11.8	9.9
Nontax revenues	1.8	1.7	1.6	1.7	1.6	1.5	1.5	1.5
Grants	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Expenditure and net lending	16.5	17.3	17.3	16.9	17.0	15.7	16.5	15.0
Current expenditure	8.9	9.2	9.1	9.1	8.0	7.6	8.4	7.2
Personnel	2.2	2.3	2.3	2.3	2.5	2.4	2.7	2.6
Subsidies	3.8	4.0	3.7	3.7	1.8	1.6	1.4	1.3
Of which: energy subsidies	3.3	3.6	3.3	3.2	1.2	1.0	0.8	0.6
Fuel	2.1	2.5	2.2	2.3	0.6	0.5	0.5	0.4
Electricity	1.2	1.1	1.0	1.0	0.6	0.5	0.3	0.3
Interest	1.2	1.2	1.2	1.3	1.3	1.4	1.5	1.6
Other	1.7	1.7	1.8	1.8	2.4	2.2	2.8	1.9
Development expenditure	2.4	2.6	2.9	2.3	3.3	2.7	2.0	1.9
Capital spending	1.5	1.7	1.9	1.4	2.4	1.9	1.6	1.2
Social assistance spending	0.9	0.9	1.0	0.9	0.9	0.8	0.4	0.8
Transfers to local governments	5.3	5.6	5.4	5.4	5.7	5.4	6.1	5.8
of which: transfers for infrastructure 1/	0.3	0.3	0.3	0.3	0.7	0.7	1.0	0.9
Overall balance	-1.1	-1.8	-2.2	-2.2	-1.9	-2.8	-2.2	-2.8
Financing	1.1	1.8	2.2	2.2	1.9	2.8	2.2	2.8
Memorandum items:								
Net issuance of government securities	120	160	225	274	298	411	327	363
SOE recapitalization	...	...	...	...	65	65	40	40
Primary balance (percent of GDP)	0.1	-0.6	-1.0	-0.9	-0.6	-1.4	-0.7	-1.3
Cyclically-adjusted primary balance (percent of GDP)	0.1	-0.6	-1.1	-0.9	...	-1.3	...	-1.2
Capital spending and transfers (percent of GDP) 2/	1.8	2.0	2.2	1.7	3.0	2.5	2.6	2.1
General government debt (percent of GDP)	23.1	23.0	24.9	24.7	...	27.5	...	28.4
Indonesian crude oil price (US$ per barrel)	111.5	112.7	105.8	96.5	60.0	51.3	50.0	42.9
Oil production (thousands of barrels per day)	907	860	830	794	825	800	830	830
Nominal GDP (in trillions of rupiah)	7,832	8,616	9,525	10,543	11,701	11,516	12,705	12,629

Sources: Data provided by the Indonesian authorities; and IMF staff estimates and projections.

1/ Special purpose transfers (DAK) for infrastructure and Village Fund transfers.

2/ Sum of capital spending, special purpose transfers (DAK) for infrastructure and Village Fund transfers.

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Table 6. Indonesia: Summary of General Government Operations, 2011–16

	2011	2012	2013	2014	2015 Prel. Est.	2016 Proj.
			(In trillions of rupiah)			
Total revenue and grants	1,332	1,486	1,610	1,740	1,698	1,758
Taxes	953	1,075	1,192	1,274	1,374	1,449
Taxes on income, profits, and capital gains	431	465	506	546	597	633
Taxes on goods and services	355	433	493	527	568	588
VAT and luxury taxes	278	338	385	409	424	462
Excise	77	95	108	118	145	126
Taxes on international trade and transactions	54	50	47	44	36	39
Taxes not elsewhere classified	113	127	145	156	173	190
Grants	5	6	7	5	3	2
Other revenue	374	406	411	461	321	307
Total expenditure	1,387	1,623	1,822	1,967	2,017	2,116
Expense	1,161	1,343	1,481	1,642	1,610	1,714
Of which :						
Compensation of employees	406	465	511	564	631	708
Purchases/use of goods and services	125	141	170	177	237	216
Interest	93	101	113	133	156	196
Fuel subsidies	256	306	310	342	119	79
Social benefit	84	88	103	110	110	115
Net acquisition of nonfinancial assets	226	280	341	324	406	402
Net lending/borrowing	-55	-137	-212	-227	-319	-358
Net acquisition of financial assets	47	-1	7	35	115	12
Of which : policy lending	4	4	4	3	0	0
Net incurrence of liabilities	102	136	219	262	434	370
			(In percent of GDP)			
Total revenue and grants	17.0	17.2	16.9	16.5	14.7	13.9
Taxes	12.2	12.5	12.5	12.1	11.9	11.5
Taxes on income, profits, and capital gains	5.5	5.4	5.3	5.2	5.2	5.0
Taxes on goods and services	4.5	5.0	5.2	5.0	4.9	4.7
VAT and luxury taxes	3.5	3.9	4.0	3.9	3.7	3.7
Excise	1.0	1.1	1.1	1.1	1.3	1.0
Taxes on international trade and transactions	0.7	0.6	0.5	0.4	0.3	0.3
Taxes not elsewhere classified	1.4	1.5	1.5	1.5	1.5	1.5
Grants	0.1	0.1	0.1	0.0	0.0	0.0
Other revenue	4.8	4.7	4.3	4.4	2.8	2.4
Total expenditure	17.7	18.8	19.1	18.7	17.5	16.8
Expense	14.8	15.6	15.5	15.6	14.0	13.6
Of which :						
Compensation of employees	5.2	5.4	5.4	5.3	5.5	5.6
Purchases/use of goods and services	1.6	1.6	1.8	1.7	2.1	1.7
Interest	1.2	1.2	1.2	1.3	1.4	1.6
Fuel subsidies	3.3	3.6	3.3	3.2	1.0	0.6
Social benefit	1.1	1.0	1.1	1.0	1.0	0.9
Net acquisition of nonfinancial assets	2.9	3.2	3.6	3.1	3.5	3.2
Net lending/borrowing	-0.7	-1.6	-2.2	-2.2	-2.8	-2.8
Net acquisition of financial assets	0.6	0.0	0.1	0.3	1.0	0.1
Of which : policy lending	0.1	0.0	0.0	0.0	0.0	0.0
Net incurrence of liabilities	1.3	1.6	2.3	2.5	3.8	2.9
Memorandum items:						
General government debt (In percent of GDP)	23.1	23.0	24.9	24.7	27.5	28.4
Nominal GDP (In trillions of rupiah)	7,832	8,616	9,525	10,543	11,516	12,629

Sources: Data provided by the Indonesian authorities; and IMF staff estimates and projections.

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Table 7. Indonesia: Monetary Survey, 2011–2016

(In trillions of rupiah, unless otherwise indicated, end of period)

	2011	2012	2013	2014 Est.	2015 Proj.	2016 Proj.
Bank Indonesia						
Net foreign assets	958	1,056	1,166	1,349	1,417	1,491
Net domestic assets	-345	-351	-343	-431	-440	-407
Monetary base	613	705	823	918	977	1,084
Monetary survey						
Net foreign assets	904	965	1,008	1,108	1,231	1,343
Net domestic assets	1,973	2,343	2,723	3,072	3,497	4,004
Net claims on central government	403	471	493	625	703	766
Claims on other nonfinancial public sector	104	161	211	241	253	265
Private sector credit	2,111	2,581	3,098	3,465	3,859	4,344
Other items, net	-645	-871	-1,079	-1,258	-1,318	-1,371
Broad money 1/	2,877	3,308	3,730	4,180	4,728	5,257
Rupiah M2	2,513	2,874	3,144	3,568	4,050	4,617
Currency in circulation	308	362	400	529	608	669
Deposits	2,205	2,512	2,744	3,115	3,535	4,030
Foreign currency deposits	350	423	564	592	663	716
Annual percentage change:						
Broad money	16.4	15.0	12.8	12.1	13.1	11.2
Rupiah M2	17.4	14.4	9.4	13.5	13.5	14.0
Monetary base	18.3	14.9	16.7	11.6	6.4	11.0
Private sector credit	25.4	22.3	20.0	11.8	11.4	12.6
Memorandum items:						
Money multiplier (rupiah M2)	4.1	4.1	3.8	3.9	4.1	4.3
Base money velocity 2/	12.8	12.2	11.6	11.5	11.8	11.6
Rupiah M2 velocity 2/	3.1	3.0	3.0	3.0	2.8	2.7
Credit by borrower (annual percentage change)						
Corporate	22.8	27.9	25.8	12.1	...	...
Non-corporate	26.5	18.8	17.0	10.9	...	...
Credit by sector (annual percentage change)						
Agriculture	25.6	29.4	23.9	19.1	...	...
Mining	41.4	18.9	22.8	11.7	...	...
Manufacturing	25.0	29.5	29.3	14.0	...	...
Services	23.4	22.8	23.0	9.5	...	...
Household	24.4	19.9	14.1	11.8	...	...

Sources: Bank Indonesia; and IMF, *International Financial Statistics,* and staff projections.

1/ Includes securities classified as broad money.
2/ Calculated using end-period quarterly GDP, annualized.

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Table 8. Indonesia: Financial Soundness Indicators, 2011–2015

(In percent; unless otherwise indicated)

	2011	2012	2013	2014	2015:Q3
Depository institutions					
Capital adequacy					
Regulatory capital to risk-weighted assets	16.1	17.3	19.8	18.7	20.2
Regulatory Tier-1 capital to risk-weighted assets	14.7	15.7	18.3	17.8	18.6
Capital to assets	11.0	12.2	12.5	12.8	12.7
Nonperforming loans, net of provisions to capital	4.7	4.7	4.6	5.5	6.8
Large exposures to capital	0.5	0.5	0.8	1.0	1.1
Net open position in foreign exchange to capital	3.0	3.3	1.7	2.4	1.3
Gross asset position in financial derivatives to capital	1.8	1.6	4.2	2.4	4.8
Gross liability position in financial derivatives to capital	1.7	1.5	4.9	2.6	3.5
Asset quality					
Nonperforming loans to total gross loans	2.1	1.8	1.7	2.1	2.6
Specific provisions to nonperforming loans	60.7	52.0	50.9	46.8	50.6
Earning and profitability					
Return on assets	2.9	3.1	3.1	2.7	2.2
Return on equity	25.4	25.3	24.5	21.3	16.8
Interest margin to gross income	59.8	65.0	68.8	69.0	70.1
Trading income to gross income	3.5	3.2	3.2	2.7	1.9
Noninterest expenses to gross income	49.0	48.8	49.2	50.3	49.7
Personnel expenses to noninterest expenses	36.0	40.5	41.3	40.4	42.0
Liquidity and funding					
Liquid assets to total assets	26.2	25.7	23.5	22.9	25.1
Liquid assets to short-term liabilities	31.2	36.4	30.5	33.3	37.2
Non-interbank loans to customer deposits	84.4	93.2	99.6	99.2	98.2
Sensitivity to market risk					
Foreign currency denominated loans to total loans	16.6	15.2	17.0	16.3	17.0
Foreign currency denominated liabilities to total liabilities	16.3	18.6	24.4	22.9	25.3
Nonfinancial corporates					
Leverage					
Total liabilities to total assets	45.6	45.0	46.8	48.1	52.1
Profitability 1/					
Return on assets	17.8	17.0	14.8	14.1	14.1
Liquidity 1/					
Current assets to current liabilities	213.0	211.5	249.0	278.1	211.1
Liquid assets to current liabilities	131.4	123.8	171.8	204.2	137.0
Households					
Household debt (in percent of GDP)	15.2	16.4	17.1	17.1	17.1
Real estate markets					
Residential real estate prices (year-on-year percentage change)	5.0	6.8	11.5	6.3	5.5
Residential real estate loans to total loans	8.2	7.8	8.0	8.2	8.1
Commercial real estate loans to total loans	6.0	6.0	6.3	6.8	7.3

Sources: Bloomberg; IMF, *Financial Soundness Indicators* database; WorldScope; and IMF staff calculations.

1/ Based on capitalization-weighted average of listed companies.

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Table 9. Indonesia: Key Social Indicators

Population	252.2	millions	(2014)
Life expectancy at birth, total	70.8	years	(2013)
Mortality rate, under 5	29.3	per 1,000 live births	(2013)
Secondary school enrollment:			
Total	83.1	percent	(2013)
Female	82.1	percent	(2013)
Male	84.0	percent	(2013)
GINI index	41		(2013)
Income share held by highest 20%	43.7	percent	(2010)
Income share held by lowest 20%	7.6	percent	(2010)
Poverty rate	11.3	percent	(2014)
CO2 emissions	2.3	metric tons per capita	(2011)
Population with access to improved water	84.9	percent	(2012)
Population with access to sanitation	58.8	percent	(2012)
Human development index	0.68		(2013)
Rank	108		
Gender inequality index	0.50		(2013)
Rank	103		

Sources: World Bank; and United Nations Development Programme.

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Appendix I. Indonesia—Risk Assessment Matrix 1/

	Source of Risks	Relative Likelihood	Expected Impacts	Recommended Policy Responses
Global	**Tighter or more volatile global financial conditions**: • **Sharp asset price decline and decompression of credit spreads** as investors reassess underlying risk and respond to unanticipated changes in growth and financial fundamentals in large economies, Fed policy rate path, and increases in U.S. term premia, with poor market liquidity amplifying volatility.	**Medium**	**High** Portfolio and other capital inflows could be curtailed by weaker investor appetite for EM assets. Tighter funding conditions put additional pressure on the balance of payments (BOP), government financing, and the financial and corporate sectors. Bank funding could become constrained, raising domestic borrowing costs. Rollover risks for corporate external debt are high. A severe pinch in credit growth or spike in lending rates could hit corporate and household balance sheets (including property) and reinforce negative growth dynamics through asset price corrections and confidence losses.	Maintain exchange rate and market-determined bond yields. Further boost investor confidence by preserving a sound fiscal position, while allowing automatic stabilizers to work in case of an extreme economic slowdown and using contingent financing if market access is restricted. Monetary policy tightening would need to be combined with targeted measures to alleviate funding pressures faced by some segments of the banking system and preserve financial stability to avoid reinforcing financial stresses brought on by market volatility and capital outflows.
Global	• **Surge in the U.S. dollar**. Improving U.S. economic prospects versus the rest of the world, leads to a further dollar surge, boosting exports to the U.S. but creating balance sheet strains for dollar debtors.	**High**	**Medium** Capital outflows accompanied by a more persistent and disorderly adjustment of exchange rates could have disruptive effects on financial asset prices and tighten domestic financial conditions. Adverse financial spillovers associated with balance sheet mismatches could intensify corporate vulnerabilities, given the rise in foreign currency borrowing in recent years.	Similar policy response as above, combined with heightened monitoring of corporate sector vulnerabilities and firm implementation of measures to encourage hedging of corporate external debt. Maintain vigilance on exchange rate pass-through to inflation.
Global	**Significant China slowdown** triggered by corporate distress that propagates through shadow banks, precipitating deleveraging, uncertainty and capital outflows. Weak domestic demand further suppresses commodity prices, roils global financial markets, and reduces global growth	**Low** in the short term/ **Medium** thereafter	**High** Lower export volume and prices (particularly those of commodities) could widen the current account deficit, putting FX reserves and the exchange rate under pressure. The fiscal balance would deteriorate on weaker resource revenues and knock-on effects to domestic demand, with the financial sector exposed to losses from loans to the commodity sector and a broader economic slowdown. Corporate profits would decline from weak commodity related activities. Corporate balance sheets suffer from incomplete hedging of external borrowing.	Maintain exchange rate flexibility to help reduce the current account deficit and limit FX reserve losses. More stringent fiscal measures to contain the budget deficit might be necessary if the slowdown in EMs were accompanied by protracted financial market volatility that restricts funding. Accelerate infrastructure spending and structural reforms to boost productivity, employment in non-resource sectors and export diversification.
Global	**Persistently lower energy prices,** triggered by supply factors reversing only gradually.	**High** into the medium term	**Medium** Fiscal position would weaken further on lower oil related revenues, with adverse spillovers to growth if space for public investment is curbed.	Implement upfront revenue reforms to raise non-oil revenues, and accelerate structural reforms to boost private investment and productivity.
Domestic	**Sharper-than-expected growth slowdown**, possibly precipitated by sluggish execution of the capital budget and little progress in strengthening the investment climate, affecting investor confidence, with spillovers to the financial and corporate sectors.	**Medium**	**Medium** The growth slowdown would further deter investment, curb capital inflows, raise bank NPLs, increase the country risk premium, and raise costs for corporate external borrowing. The consequent layoffs could further weaken domestic demand.	Assuming inflation is well anchored, ease monetary policy. Accelerate infrastructure spending and structural reforms to the trade and investment regime to boost productivity, employment in non-resource sectors, and export diversification. Timely and well-coordinated supervisory actions to preserve banking system soundness and close monitoring of at-risk corporate borrowers.
Domestic	**An unanticipated failure of a major corporate group with** large FX and broader leverage, triggered by sharp rupiah depreciation, possibly exacerbated by commodity sector weakness, affecting investor confidence, with banking system spillovers.	**Medium**	**Medium** Business and investor confidence could be destabilized, with the failure raising NPLs, increasing the country risk premium, and creating knock-on effects in the banking system. A second-round impact could come through subsequent layoffs and weaker domestic demand.	Monitor closely corporate borrowers with high leverage and large FX exposures. Undertake expeditious corporate debt restructuring, with timely and well-coordinated supervisory actions to preserve banking system soundness. Ensure the crisis management measures are fully implemented and enforced, with clear lines of communications among regulators and with market.

[1] The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). The relative likelihood of risks listed is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly.

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Appendix II. Indonesia—External Sector Report

	Indonesia	Overall Assessment
Foreign asset and liability position and trajectory	**Background**. At end June 2015, Indonesia's net international investment position (NIIP) position stood at -48 percent of GDP, compared to -47 percent of GDP at end 2014. The components as a percent of GDP were reserves (+12), net FDI (-27), net equities and portfolio debt (-22), and other investment (-11). Strong net portfolio inflows (mainly government debt) offset other net outflows in the first half of 2015, resulting in a stable overall NIIP. At end June 2015, gross external liabilities stood at -74 percent of GDP (up from 72 percent of GDP at end 2013). Indonesia's gross external debt is moderate at 36½ percent of GDP, with about 5 percent of GDP denominated in rupiah as of June 2015. **Assessment**. The level and composition of the NIIP and gross external debt indicate that Indonesia's external position is sustainable, but non-resident holdings of rupiah debt could be affected by global volatility. Public external debt may increase above the current baseline if the government increases reliance on external financing (including multilateral loans) to help fund infrastructure projects. With the exception of borrowing by SOEs, which may also be used for infrastructure development, the growth in private external debt is expected to slow owing mainly to a tightening in global financial conditions.	**Overall Assessment:** *In 2015, Indonesia's external position in 2015 was assessed to be broadly consistent with medium-term fundamentals and desirable policies.* Policy actions since mid 2013 (monetary policy tightening, fuel subsidy reform, exchange rate and bond yield flexibility) have helped improve the external position. External financing appears sustainable, but could be affected by domestic or external shocks. Potential Policy Responses: Monetary policy should continue to focus on containing inflation within Bank Indonesia's target band. Fiscal policy can help support external adjustment and contain vulnerability to funding pressures by aiming for a small primary deficit over the medium term, led by reforms aimed at increasing the tax take, while providing space for health spending and increased infrastructure spending to help ease supply bottlenecks. Continued flexibility of the exchange rate and use of market-determined interest rates would also help facilitate adjustment and absorb shocks. Easing trade and investment restrictions, deepening financial markets, and improving labor markets would also help promote growth and strengthen competitiveness over the medium term.
Current account	**Background**. Despite a decline in commodity exports, Indonesia's CA deficit is estimated to improve to about 2 percent of GDP in 2015 from 3.1 percent in 2014 mainly from import compression due to cyclical weakness in the domestic economy and sharply lower oil prices. In the near term, lower commodity prices and weak trading partner demand for commodity exports are expected to offset the benefits of lower oil prices and exchange rate depreciation. Over the medium term, a moderate increase in the CA deficit is expected from lower energy and mining exports, as well as a rise in capital goods and raw material imports tied to infrastructure investment and a pickup in domestic demand. Relatively low projected world oil prices should also help limit overall import increases. Adjustment would be supported over time by continued exchange rate flexibility and a prudent monetary and fiscal stance, in keeping with a moderate increase in domestic saving. In 2015, the oil and gas trade balance is expected to be about -1 percent of GDP and the non-oil and gas trade balance is expected to be about 2.5 percent of GDP. **Assessment**. The EBA CA results suggest a gap of 0.3 percent of GDP for 2015 (based on an estimated cyclically-adjusted CA balance of -1.2 percent of GDP and a norm of -1.5 percent of GDP), smaller than -1.9 percent for 2014. Since much of the recent improvement in the current account was cyclical (particularly from substantially lower oil prices which reduced oil imports by almost 2 percent of GDP), staff believes the underlying cyclically-adjusted current account balance is around -1.5 percent of GDP for 2015.1/ In the same vein, the EBA cyclically-adjusted CA norm estimate may not capture the effect of declines in commodity prices fully, and staff adjusted the mid-point of the norm to -1.8 percent. Taking uncertainties and Indonesia's investment needs into account, staff believes a norm of -0.8 to -2.8 percent of GDP is appropriate. 2/ This suggests that the CA gap range of about -0.7 to 1.3 percent of GDP for 2015, which reflects the domestic policy gaps including in social spending and external policy gaps (particularly fiscal deficits) in partner countries.	
Real exchange rate	**Background**. Compared to the 2014 average, the REER has appreciated by 3 percent in 2015, a result of a temporary increase in inflation related to the reduction in domestic fuel price subsidies. **Assessment**. EBA level and index REER results suggest the REER gap to be about -6 percent, in line with the REER gap assessed by staff in the range of -6.5 percent to 3.5 percent in 2015, the latter being consistent with the CA gap and standard elasticities.	
Capital and financial accounts: flows and policy measures	**Background**. Indonesia's gross external financing requirement is expected to be about 9 percent of GDP in 2015, with amortization at about 7 percent of GDP. Net FDI and new borrowing are projected at 1.4 percent and 7.8 percent of GDP, respectively. **Assessment**. Net and gross financial flows appear sustainable, but could dissipate or reverse in the event of large domestic or external shocks. Continued strong policies focused on strengthening the fiscal position, keeping inflation in check, and easing supply bottlenecks would help sustain capital inflows in the medium term.	
FX intervention and reserves level	**Background**. Since mid-2013, Indonesia has had a more flexible exchange rate policy framework. Its floating regime has better facilitated adjustments in exchange rates to market conditions. As of end-2015, reserves were US$105.9 billion (equal to 119 percent of IMF's reserve adequacy metric—assuming a floating exchange rate—and about 7¼ months of prospective imports of goods and services). In addition, the authorities have in place contingencies and swap lines amounting to about US$70 billion. **Assessment**. Volatile capital flows could cause reserves to decline significantly. While the composite metric may not adequately account for commodity price volatility, the current level of reserves should be sufficient to absorb most shocks, with predetermined drains also manageable. Intervention should aim primarily at smoothing volatility, while allowing the exchange rate to adjust to external shocks.	
Technical Background Notes	1/ The commodity shares used by the EBA in commodity terms of trade gap estimate for Indonesia has not fully reflected the rising share of oil in commodity imports. Therefore, a recent sharp oil price decline means the commodity terms of trade may be less than the EBA implies due to positive changes to the oil terms of trade, indicating a slightly larger improvement (about 0.3 percent of GDP) in the current account than warranted from a cyclical perspective in 2015. 2/ Making the same commodity terms of trade adjustment of 0.3 percent of GDP, staff estimates the cyclically adjusted CA norm at -1.8 percent of GDP, to which a range of +/- 1 percent is added to reflect uncertainty.	

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Appendix III. Indonesia—Debt Sustainability Analysis

Indonesia's external debt remains at a moderate level and is projected to be sustainable over the medium-term. Growth in private external debt is expected to slow as global financial conditions tighten and borrowing costs rise. Public debt remains low, but contingent liabilities arising from borrowing by state corporations pose some fiscal risk.

External Debt Sustainability

1. **Indonesia's external debt-to-GDP ratio has steadily increased in recent years, but total external debt remains at a moderate level**. The main reasons for the increase have been a rise in general government borrowing, through internationally issued bonds and holdings of nonresidents of domestic bonds, and private external borrowing, mainly through loans and debt securities, including by state-owned enterprises. As a share of GDP, external debt was 33 at end-2014, up from a low of around 25 percent at end 2011, and is estimated to have reached 36½ percent at end-2015 (Figure 1 and Table 1).

2. **Looking ahead, external debt is projected to stabilize in the medium term**. Under the baseline, debt would stabilize at 36½ percent of GDP at end-2016 before declining to 33¾ percent by end-2020 in line with favorable real GDP growth and slower nonbank private sector debt buildup due to less favorable global financial conditions. Public external debt may increase above the current baseline if the government increases reliance on external financing (including multilateral loans) to help fund infrastructure projects. With the exception of borrowing by SOEs, which may also be used for infrastructure development, the growth in private external debt is expected to slow owing mainly to an expected tightening in global financial conditions. Real growth is projected to average about 5½ percent over the medium term and 6 percent in the longer run.

3. **As in the last Article IV, external sustainability is robust to interest rate and GDP shocks, but is more sensitive to current account and exchange rate shocks** (Figure 2). A further deterioration in the current account balance from the current level would cause the external debt ratio to rise moderately (a one standard deviation shock would raise the external debt to GDP ratio to 39 percent by 2020). Exchange rate depreciation would have the largest impact—a 30 percent depreciation would raise the external debt to GDP ratio to about 51½ percent in 2016 followed by a small decline to 48 percent of GDP by 2020.

Public Debt Sustainability

4. **Public sector debt remains low in Indonesia**. General government debt as a percent of GDP declined steadily from 87 percent in 2000 to 25 percent in 2014, owing to a prudent fiscal stance, which has been anchored by the fiscal rule since in 2003 that caps the general government deficit at 3 percent of GDP a year. The debt dynamics have been also favorable, with strong GDP growth and moderate real interest rates. In 2015, the debt to GDP ratio is estimated to increase to 27.5 percent of GDP (from 24.7 percent of GDP in 2014), reflecting larger primary deficit than in the past, SOE recapitalization (around 0.6 percent of GDP), and exchange rate depreciation. At the same

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time, foreign currency denominated debt has fallen to less than half of total public sector debt, as issuance in the domestic rupiah bond market has grown rapidly and attracted strong foreign interests. Notwithstanding, dependence on foreign investors remains sizable, with nonresidents holding about 60 percent of general government debt. Moreover, the share of foreign ownership of rupiah-denominated government bonds rose from about 20 percent in 2009 to 38.2 percent as of end 2015.

5. Under the baseline scenario, public sector debt is expected to increase gradually over the medium term (Figure 3). The baseline envisages general government deficit to remain constant at 2.8 percent of GDP over the medium term, resulting in primary deficit of around 1 percent of GDP through 2020. Favorable debt dynamics, with a negative interest rate-growth differential (at about 4 percent), would limit the increase in the debt to GDP ratio, which is expected to reach 31 percent by 2020. Gross financing needs are also expected to remain at 5 percent of GDP over the medium term.

6. Public debt dynamics are robust to macroeconomic shocks (Figure 4). Standard stress tests suggest that the debt ratio would remain at a low level over the medium term (higher than the baseline by only about 1 percentage point of GDP in 2020) under shocks from lower revenues, sharp exchange rate movements, lower economic growth, and higher interest rates. Nevertheless, fiscal risks, in particular those arising from expanding balance sheets of key state corporations, will need to be managed carefully. Pertamina and PLN—the two largest SOEs in Indonesia—already had combined total liabilities equivalent to 9.4 percent of GDP at end-2013. Also, lower world oil prices will affect Pertamina's revenue from upstream activities.

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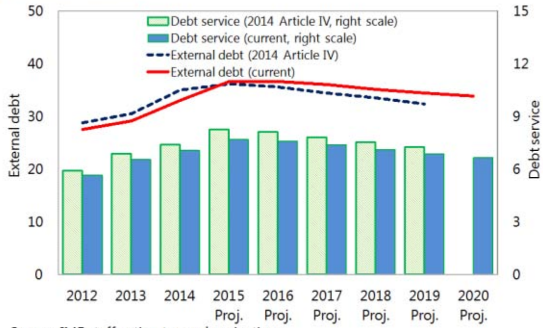
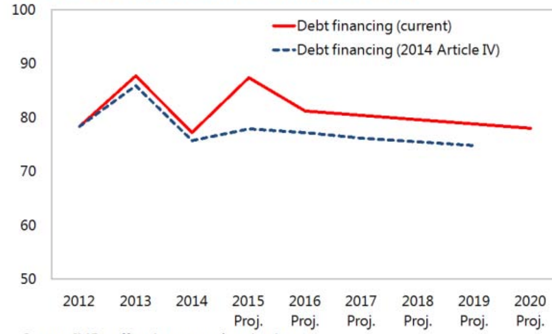
Figure 1. Indonesia: External Debt and Debt Service

Indonesia: External Debt Projections, 2012-20
(In percent of GDP)



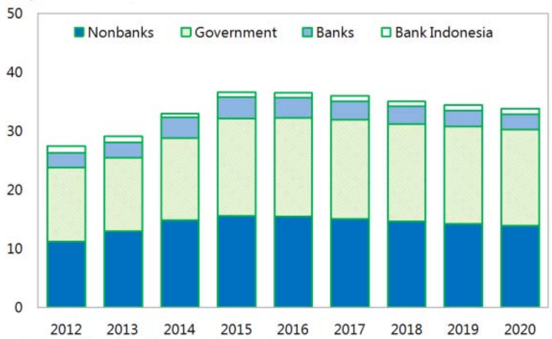
Source: IMF staff estimates and projections.

Indonesia: Debt Financing, 2012–20
(In percent of the gross external financing requirement)



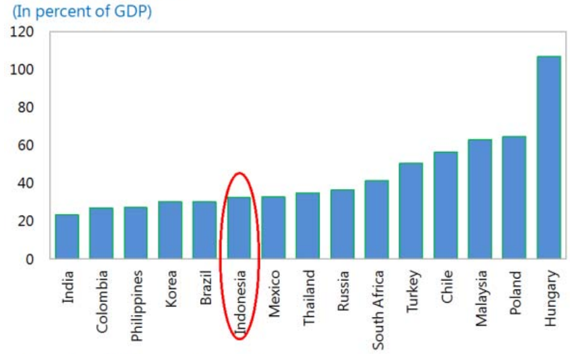
Source: IMF staff estimates and projections.

Indonesia: Composition of External Debt, 2012-20
(In percent of GDP)



Source: IMF staff estimates and projections.

External Debt, 2014
(In percent of GDP)



Source: IMF, *World Economic Outlook*.

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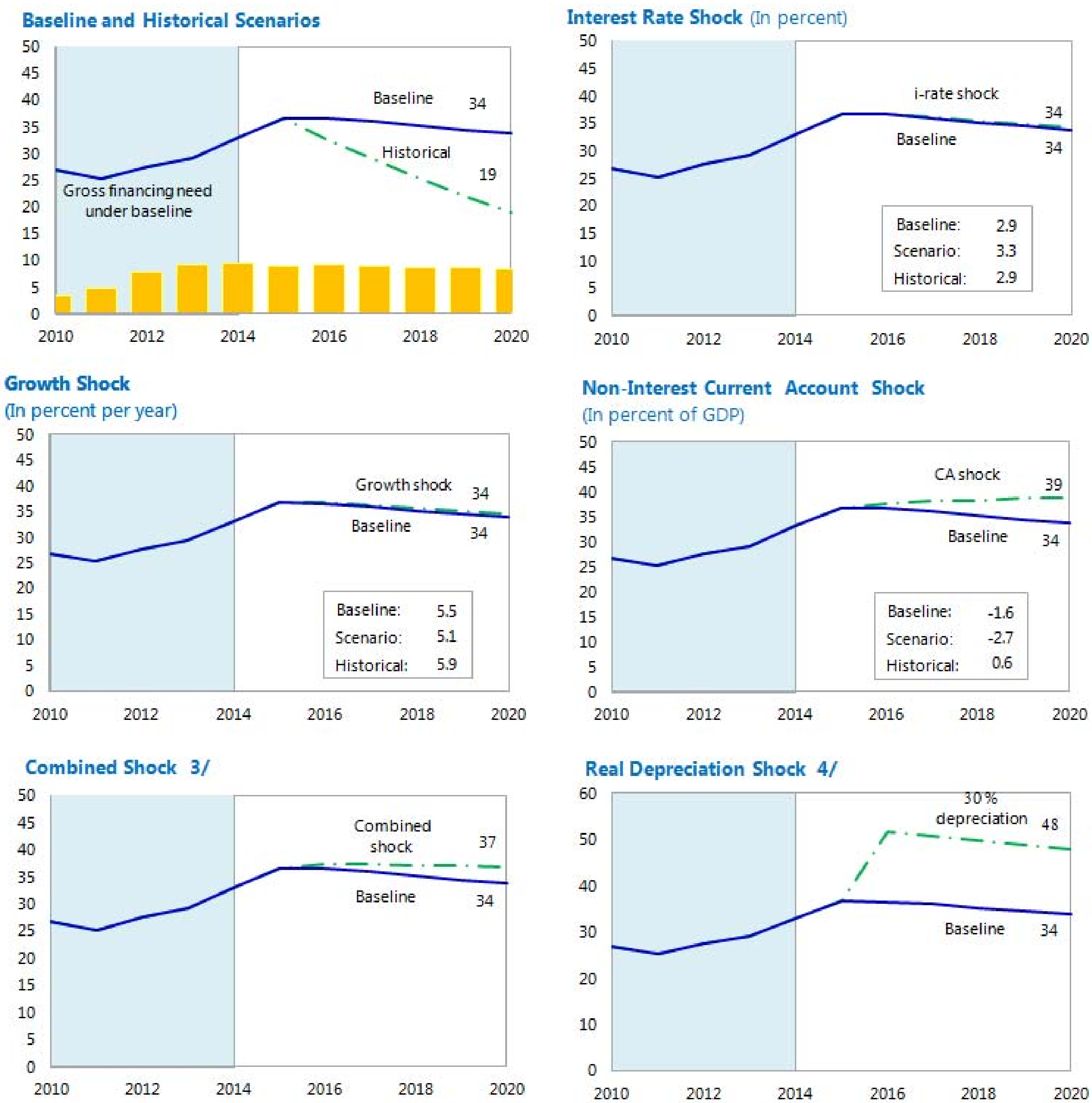
Figure 2. Indonesia: External Debt Sustainability: Bound Tests 1/ 2/

(External debt in percent of GDP)



Sources: International Monetary Fund; country desk data; and staff estimates.

1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks. Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.
2/ For historical scenarios, the historical averages are calculated over the ten-year period, and the information is used to project debt dynamics five years ahead.
3/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and current account balance.
4/ One-time real depreciation of 30 percent occurs in 2015.

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Table 1. Indonesia: External Debt Sustainability Framework, 2010–2020

(In percent of GDP, unless otherwise indicated)

	Actual							Projections						
	2010	2011	2012	2013	2014			2015	2016	2017	2018	2019	2020	Debt-stabilizing non-interest current account 6/
Baseline: External debt	26.8	25.2	27.5	29.2	33.1			36.6	36.6	36.0	35.1	34.5	33.8	-3.6
Change in external debt	-3.1	-1.6	2.2	1.7	3.9			3.6	-0.1	-0.6	-0.9	-0.6	-0.7	
Identified external debt-creating flows (4+8+9)	-9.3	-5.5	0.1	1.9	1.4			-0.8	-0.9	-1.0	-1.0	-1.1	-1.1	
Current account deficit, excluding interest payments	-1.3	-0.7	2.1	2.6	2.4			1.1	1.6	1.5	1.6	1.6	1.7	
Deficit in balance of goods and services	-2.8	-2.7	0.2	0.7	0.3			-0.7	-0.1	0.0	0.0	0.1	0.2	
Exports	22.1	23.9	23.0	22.5	22.4			20.3	19.3	19.5	19.6	19.8	20.0	
Imports	19.2	21.2	23.2	23.2	22.7			19.6	19.2	19.5	19.6	20.0	20.2	
Net nondebt creating capital inflows (negative)	-1.8	-1.3	-1.7	-1.1	-2.2			-1.1	-1.7	-1.7	-1.8	-1.8	-1.8	
Automatic debt dynamics 1/	-6.2	-3.5	-0.3	0.4	1.1			-0.7	-0.7	-0.8	-0.8	-0.9	-1.0	
Contribution from nominal interest rate	0.6	0.5	0.6	0.6	0.7			0.9	1.0	1.0	1.0	1.0	1.0	
Contribution from real GDP growth	-1.5	-1.4	-1.5	-1.5	-1.5			-1.6	-1.7	-1.8	-1.8	-1.9	-1.9	
Contribution from price and exchange rate changes 2/	-5.4	-2.6	0.6	1.4	1.9			...	...	...	...	...	...	
Residual, including change in gross foreign assets (2-3) 3/	6.1	3.9	2.1	-0.2	2.5			4.4	0.8	0.5	0.1	0.4	0.4	
External debt-to-exports ratio (in percent)	121.5	105.8	119.6	129.8	147.7			180.5	189.3	184.4	179.5	173.7	168.7	
Gross external financing need (in billions of U.S. dollars) 4/	26.4	41.2	71.2	83.8	83.8			75.2	82.6	86.7	91.8	97.0	103.3	
In percent of GDP	3.5	4.6	7.7	9.2	9.4			8.8	9.1	8.9	8.7	8.5	8.4	
Scenario with key variables at their historical averages 5/						10-Year Historical Average	10-Year Standard Deviation	36.6	32.4	28.7	25.3	22.0	19.0	-3.1
Key macroeconomic assumptions underlying baseline														
Real GDP growth (in percent)	6.4	6.2	6.0	5.6	5.0	5.9	0.8	4.7	4.9	5.3	5.5	5.8	6.0	
GDP deflator in U.S. dollars (change in percent)	22.9	11.3	-2.9	-6.0	-7.3	6.5	10.7	-7.9	0.6	2.2	3.0	1.9	2.1	
Nominal external interest rate (in percent)	2.8	2.2	2.3	2.0	2.4	2.9	0.7	2.6	2.8	3.0	3.0	3.0	3.0	
Growth of exports (U.S. dollar terms, in percent)	25.5	27.8	-0.9	-2.8	-3.0	9.5	14.1	-12.5	0.4	8.8	8.9	9.4	9.3	
Growth of imports (U.S. dollar terms, in percent)	30.2	30.1	12.7	-0.8	-4.5	12.4	18.4	-16.9	3.7	9.3	9.0	9.9	9.6	
Current account balance, excluding interest payments	1.3	0.7	-2.1	-2.6	-2.4	0.6	2.3	-1.1	-1.6	-1.5	-1.6	-1.6	-1.7	
Net nondebt creating capital inflows	1.8	1.3	1.7	1.1	2.2	1.3	0.5	1.1	1.7	1.7	1.8	1.8	1.8	

1/ Derived as [r - g - r(1+g) + ea(1+r)]/(1+g+r+gr) times previous period debt stock, with r = nominal effective interest rate on external debt; r = change in domestic GDP deflator in U.S. dollar terms, g = real GDP growth rate, e = nominal appreciation (increase in dollar value of domestic currency), and a = share of domestic-currency denominated debt in total external debt.

2/ The contribution from price and exchange rate changes is defined as [-r(1+g) + ea(1+r)]/(1+g+r+gr) times previous period debt stock. r increases with an appreciating domestic currency (e > 0) and rising inflation (based on GDP deflator).

3/ For projection, line includes the impact of price and exchange rate changes.

4/ Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period.

5/ The key variables include real GDP growth; nominal interest rate; dollar deflator growth; and both non-interest current account and non-debt inflows in percent of GDP.

6/ Long-run, constant balance that stabilizes the debt ratio assuming that key variables (real GDP growth, nominal interest rate, dollar deflator growth, and non-debt inflows in percent of GDP) remain at their levels of the last projection year.

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Figure 3. Indonesia: Public Sector Debt Sustainability Analysis (DSA)—Baseline Scenario

(In percent of GDP unless otherwise indicated)

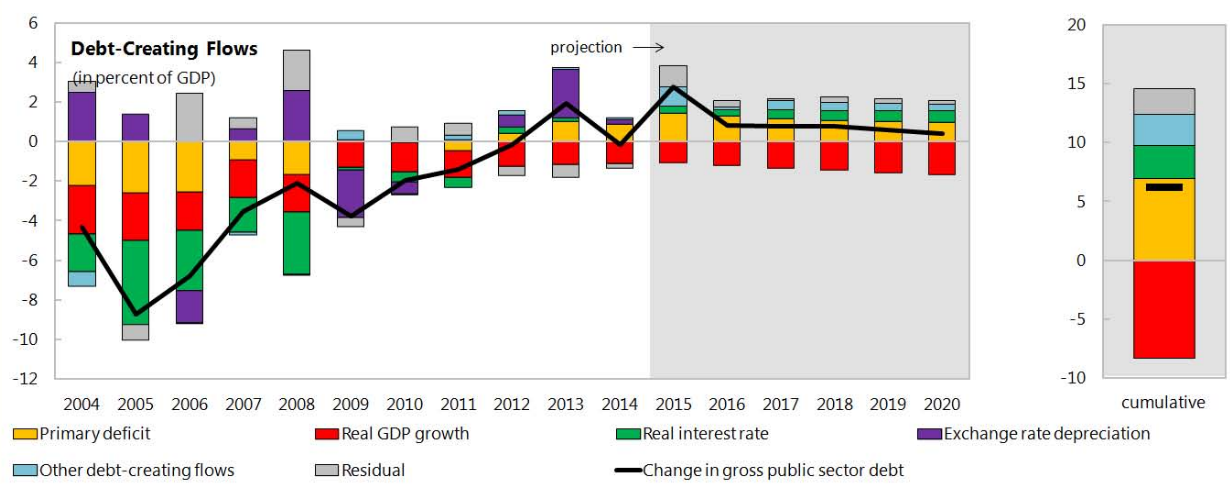
Debt, Economic and Market Indicators [1/]

	Actual			Projections					
	2004-2012 [2/]	2013	2014	2015	2016	2017	2018	2019	2020
Nominal gross public debt	32.2	24.9	24.7	27.5	28.4	29.2	30.0	30.6	31.0
Public gross financing needs	2.8	4.0	4.4	4.5	4.6	4.7	4.5	4.6	5.0
Real GDP growth (in percent)	5.9	5.6	5.0	4.7	4.9	5.3	5.5	5.8	6.0
Inflation (GDP deflator, in percent)	10.0	4.7	5.4	4.3	4.5	4.5	4.4	4.3	4.1
Nominal GDP growth (in percent)	16.5	10.6	10.7	9.2	9.7	10.0	10.2	10.4	10.4
Effective interest rate (in percent) [4/]	5.7	5.7	5.6	6.2	6.2	6.4	6.6	6.6	6.5

As of January 08, 2016		
Sovereign Spreads		
EMBIG (bp) 3/		335
5Y CDS (bp)		247
Ratings	Foreign	Local
Moody's	Baa3	Baa3
S&Ps	BB+	BB+
Fitch	BBB-	BBB-

Contribution to Changes in Public Debt

	Actual			Projections							
	2004-2012	2013	2014	2015	2016	2017	2018	2019	2020	cumulative	debt-stabilizing primary balance [9/]
Change in gross public sector debt	-3.6	1.9	-0.2	2.8	0.8	0.8	0.8	0.6	0.4	6.2	
Identified debt-creating flows	-4.2	2.6	0.1	1.7	0.5	0.7	0.5	0.4	0.2	4.0	
Primary deficit	-1.1	1.0	0.9	1.4	1.3	1.2	1.1	1.0	1.0	6.9	-0.7
Primary (noninterest) revenue and grants	17.4	16.9	16.5	14.7	13.9	14.3	14.5	14.8	15.0	87.2	
Primary (noninterest) expenditure	16.3	17.9	17.4	16.2	15.2	15.4	15.6	15.8	16.0	94.1	
Automatic debt dynamics [5/]	-3.1	1.5	-0.9	-0.7	-0.9	-0.9	-0.9	-1.0	-1.1	-5.5	
Interest rate/growth differential [6/]	-3.4	-1.0	-1.1	-0.7	-0.9	-0.9	-0.9	-1.0	-1.1	-5.5	
Of which: real interest rate	-1.7	0.2	0.0	0.4	0.4	0.4	0.5	0.5	0.6	2.8	
Of which: real GDP growth	-1.8	-1.2	-1.1	-1.1	-1.2	-1.4	-1.5	-1.6	-1.7	-8.4	
Exchange rate depreciation [7/]	0.4	2.5	0.2	...	...	...	...	...	...	...	
Other identified debt-creating flows	0.0	0.1	0.1	1.0	0.1	0.5	0.4	0.4	0.3	2.7	
Privatization (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Miscelleneous non-borrowing financing	0.0	0.1	0.1	1.0	0.1	0.5	0.4	0.4	0.3	2.7	
Residual, including asset changes [8/]	0.6	-0.7	-0.2	1.1	0.3	0.1	0.3	0.2	0.2	2.2	



Source: IMF staff.

1/ Public sector is defined as general government.

2/ Based on available data.

3/ EMBIG.

4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.

5/ Derived as $[(r - \pi(1+g) - g + ae(1+r)]/(1+g+\pi+g\pi))$ times previous period debt ratio, with r = interest rate; π = growth rate of GDP deflator; g = real GDP growth rate; a = share of foreign-currency denominated debt; and e = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

6/ The real interest rate contribution is derived from the numerator in footnote 5 as $r - \pi (1+g)$ and the real growth contribution as $-g$.

7/ The exchange rate contribution is derived from the numerator in footnote 5 as $ae(1+r)$.

8/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

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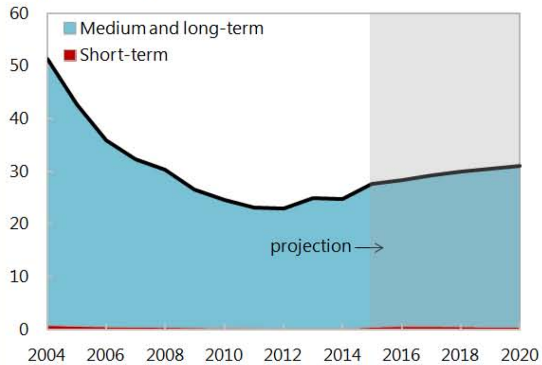
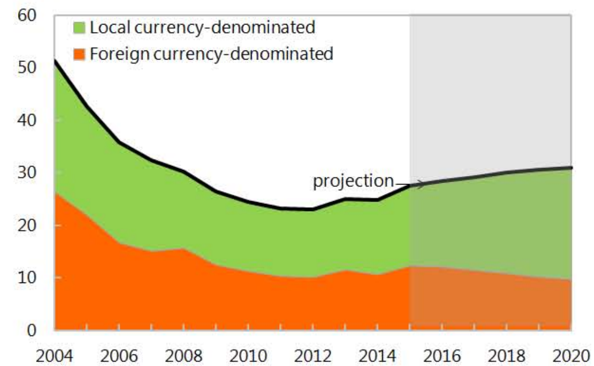
Figure 4. Indonesia: Public DSA—Composition of Public Debt and Alternative Scenarios

Composition of Public Debt

By Maturity
(in percent of GDP)



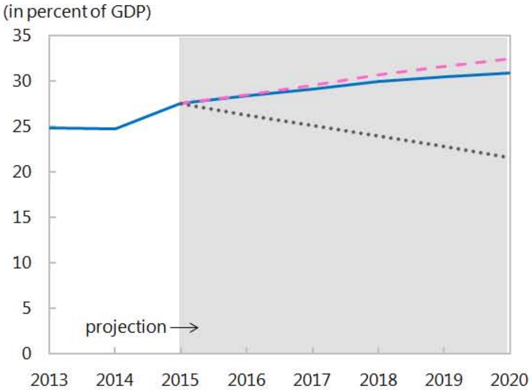
By Currency
(in percent of GDP)



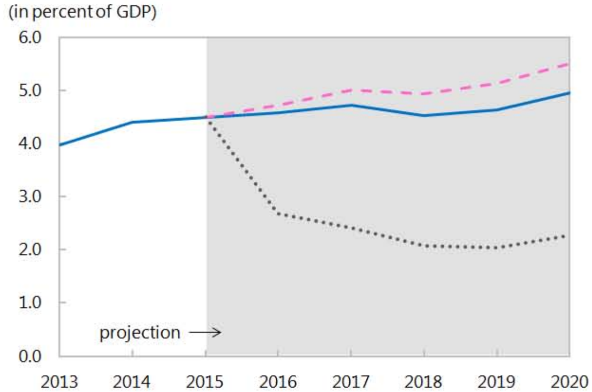
Alternative Scenarios

Baseline
Historical
Constant Primary Balance

Gross Nominal Public Debt
(in percent of GDP)



Public Gross Financing Needs
(in percent of GDP)



Underlying Assumptions
(in percent)

Baseline Scenario	2015	2016	2017	2018	2019	2020
Real GDP growth	4.7	4.9	5.3	5.5	5.8	6.0
Inflation	4.3	4.5	4.5	4.4	4.3	4.1
Primary Balance	-1.4	-1.3	-1.2	-1.1	-1.0	-1.0
Effective interest rate	6.2	6.2	6.4	6.6	6.6	6.5
Constant Primary Balance Scenario						
Real GDP growth	4.7	4.9	5.3	5.5	5.8	6.0
Inflation	4.3	4.5	4.5	4.4	4.3	4.1
Primary Balance	-1.4	-1.4	-1.4	-1.4	-1.4	-1.4
Effective interest rate	6.2	6.2	6.4	6.6	6.6	6.5

Historical Scenario	2015	2016	2017	2018	2019	2020
Real GDP growth	4.7	5.9	5.9	5.9	5.9	5.9
Inflation	4.3	4.5	4.5	4.4	4.3	4.1
Primary Balance	-1.4	0.6	0.6	0.6	0.6	0.6
Effective interest rate	6.2	6.2	5.9	5.6	5.2	4.7

Source: IMF staff.

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Appendix IV. Indonesia—Structural Reforms[1]

The government implemented a set of reforms in 2015 to address supply-side bottlenecks and revamp the investment environment. A number of regulations have been eased and clarified, including those in regard to PPPs and land procurement. The main reform measures include:

Land Acquisition Procedures

- **A revised land acquisition law came into effect in 2015**. Mandatory time limits (i.e., a maximum of two years) were placed on the acquisition of land for public projects. The law clarified, *inter alia*, that ongoing projects would be subject to this new law,[2] which can force relevant parties to sell their property for public infrastructure projects with fair compensation.

- **Other deregulation** includes: (i) the private sector is also allowed to procure land for PPP projects on behalf of the government[3]; (ii) if a SOE becomes a government-contracted agency, funding for land procurement can be sourced from the SOE's budget or a relevant cooperating developer; (iii) the document requirements for permit have been simplified; and (iv) processing time for permit issuance has been reduced.

Public-Private Partnership (PPP)

- **Institutional framework and role of SOEs strengthened**. (i) A PPP unit (Directorate of Government Support and Infrastructure Financing Management) was created in 2014 at the Ministry of Finance, in charge of feasibility studies and transaction of PPP projects; (ii) equity injection was made to selected major infrastructure SOEs and PT SMI (state-owned infrastructure financing facility) amounting to 0.6 percent of GDP in 2015. PT SMI is envisaged to become an infrastructure bank; (iii) incentives were also provided to the SOEs to revalue their assets to current market prices; and (iv) a direct lending scheme of international financial institutions (IFIs) is allowed, under a sovereign guarantee.

- **Types of PPPs expanded**: (i) in addition to economic infrastructure, a PPP modality can now be used for social infrastructure projects, including facilities for education, sports, art, tourism, and health, public housing, as well as for commercial facilities; and (ii) in addition to user-pay PPPs,

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[1] This appendix is based on AsDB's documents (including ADB, *Proposed Result—Based Loan, Republic of Indonesia: Electricity Grid Strengthening—Sumatra Program*, 2015).

[2] Previously, infrastructure projects that had acquired three-quarters of the required land were subject to the old 1960 law, and those whose land-acquisition process was less than 75 percent complete had to start again if entities want to acquire land under the new law.

[3] Direct land procurement by a private entity has been allowed: (i) a private entity can obtain an authority/proxy in land procurement from a relevant government institution or SOE and act as a proxy;[3] and (ii) with the authority/proxy mandate, a private entity can carry out compensation payment as well as all the preceding stages (i.e., preparation, consultations, valuation, and negotiation).

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availability-based PPPs (i.e., when the source of payment is the government) and hybrid PPPs (a mix of the user-pay and availability-based PPPs) are allowed.

- **Other deregulation**: (i) in addition to a tender mechanism, a direct appointment of concessionaire is allowed under certain conditions;[4] and (ii) bundling of projects is allowed to accommodate projects that extend beyond the boundary of one agency or local government; and (iii) in addition to acting as a concessionaire, a SOE can act as a government contracted agency; and (vi) private sector and IFIs are allowed to support the preparation of PPP projects.

Budget execution and support strengthened. (i) advance procurement for new projects was initiated, so that projects planned for the 2016 budget year could already be put out for bid for 2015; (ii) a Budget Realization Evaluation and Monitoring Committee was set up to identify and take action to remove bottlenecks facing priority infrastructure projects; and (iii) viability gap funding (VGF) has been budgeted to ensure commercial viability of projects that are important but are not commercially viable.

Restrictions on foreign ownership were eased. Restrictions on foreign ownership were eased in some of the transport and energy sectors. In the transport sector, the foreign ownership limit for a seaport facility increased to 50 percent from 49 percent. The 100 percent of foreign ownership for a power plan (greater than 10 MWV) has been allowed, compared with previous 95 percent.

Investment procedures and permitting time were curtailed. (i) the investment process has been streamlined through a one-stop service at the Indonesia Investment Coordinating Board (BKPM); (ii) construction permit regulations have been streamlined; (iii) processing time of investment permits has been cut (i.e., the mining and geothermal sectors, and mineral and coal mining license extension); (iv) obtaining land certificate has been made easier through deregulating notary's profession; and (v) regulations on SMEs' business activities on unused land were clarified.

Trade facilitation. (i) import procedures have been reduced for selected products (including sugar, rice for industry, horticulture products, textile products, steel, etc.) as well as raw materials for medical products; (ii) trade requirements have been eased with regard to the registered importer (IT), the national standard verification certificate for imported products (SPB-SNI), the labeling of Bahasa Indonesia language, and identification numbers for an importer; (iii) export license requirements have been eased for timber, rice, nonpharmaceutical precursors, palm oil, and minerals; and (iv) administrative procedures have been eased for Special Economic Zone (SEZ), through reducing the processing period for investment permits from 8 days to 3 hours[5], as well as

[4] A direct appointment of concessionaire is allowed, if (i) the project is an infrastructure development project which was developed or operated by the same developer; (ii) the project utilizes a new technology and only one developer can provide that technology; (iii) the developer has acquired all or a majority part of the land required for the project, and (vi) if only one investor is eligible after the pre-qualification process.

[5] for firms that invest more than IDR 100 billion or employ more than 1,000 people.

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tax incentives (e.g., exemption from VAT on immediate goods; and postponement of import duty payments).

Labor market. To increase predictability, a minimum wage formula for provinces was established, and some of rigid labor market regulations have been removed, including the need to hire ten local employees for every foreign employee; need to obtain work permit for non-resident commissioners or directors and for foreign workers attending meetings or provide training. Nonetheless, the sectoral minimum wage setting is allowed.[6]

$$\text{Minimum Wage}_{t+1} = \text{Minimum Wage}_t \times (1 + \text{National Inflation Rate}_t + \text{National GDP Growth Rate}_t)$$

Energy Sector

- **Sector governance improved**. The government has reduced the fiscal burden of energy subsidies by eliminating electricity subsidies for all but the poorest categories of consumers. The measures include: (i) the subsidy was phased out for industrial, business and large residential consumers; (ii) automatic indexation of tariff was adopted to ensure a full cost recovery for industrial/business and large residential consumers; and (iii) reforms were initiated to improve the performance of SOEs in the energy sector.[7]

- **Markets for private participation enabled**: (i) licensing for 10 electricity projects was delegated to BKPM; (ii) the licensing steps and time were reduced for setting up independent power producer (IPP) projects; (iii) greater private participation was enabled in the electricity sector by permitting electricity wheeling and power trade activities; and (iv) the government signaled its intent to enhance the domestic supply of gas by creating a market place.[8]

- **Regulatory environment was improved to increase access to clean energy and energy efficiency**: (i) key constraints were addressed that persist in the geothermal sector;[9] (ii) tariff incentives were provided to develop new forms of renewable energy;[10] and (iii) a market for key energy efficiency services was established.

[6] The government can allow a minimum wage setting outside the formula for certain sectors.

[7] PLN is required to improve metrics relating to its electricity distribution performance; and regularly report performance on these standards.

[8] A systemic and time-bound process was stipulated for managing expiring production sharing contracts (PSCs); and market rules were established for utilization of compressed natural gas (CNG) for land transport.

[9] New Geothermal Law was issued, which streamlines licensing and tendering of geothermal projects; and a new geothermal pricing regime was established using bidding under a regional ceiling price, by which PLN shall purchase the power from those plants and build the transmission required for geothermal power plants

[10] A feed-in tariff for biomass and biogas projects ≦10 MW and requires PLN to purchase this power; and a feed-in tariff for hydro projects ≦10 MW and requires PLN to purchase this power.

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Appendix V. Indonesia—Response to Recent IMF Policy Advice

Main Fund Recommendations	Authorities' Response
Monetary and Exchange Rate Policies	
• Maintain the relatively tight monetary stance, with adjustments conditional on reductions in inflation and external pressures.	Bank Indonesia (BI) has held its policy rate since February 2015, keeping the BI rate at 7.5 percent at end 2015, which was 175 bps higher than in mid 2013. This stance has helped lower inflation back within the BI target band by end 2015 and provided a bulwark against external pressures on the rupiah. With economic growth slowing in 2015, accompanied by a narrowing of the current account deficit, BI reduced the primary reserve requirement in rupiah by 50 bps effective in December 2015 to ease liquidity conditions. Policy communications have been clear.
• Continue flexibility in the exchange rate and government bond yields, limiting intervention to smoothing volatility and ensuring orderly market conditions.	The exchange rate and yields on government securities were allowed to move freely, and orderly market conditions were maintained. International reserve declines have been more moderate over the past year compared to the taper tantrum.
• Continue money market deepening efforts to strengthen monetary transmission and liquidity management.	BI has reduced structural excess liquidity over the course of 2015, introduced new instruments for liquidity management and lengthened tenors, and reduced its presence in FX swap operations, which has encouraged interbank activity. The financial services agency (OJK) launched in January 2016 the Global Master Repurchase Agreement for interbank collateralized lending.
Fiscal Policy	
• Keep the overall deficit around 2 percent of GDP in 2015, to reduce vulnerability to funding pressures.	The fiscal deficit in 2015 was 2.8 percent of GDP, higher than the revised budget target (1.9 percent of GDP) and that recommended by staff. This was mainly attributable to underperformance relative to budget of non-oil and gas tax revenues, driven by lower commodity prices and import related taxes. Funding remained manageable through frontloading of bond issuances and greater use of multilateral loans.
• Anchor credibility of the revised budget by upfront revenue measures and adjustments to capital spending targets in line with absorptive capacity.	No significant new revenue measures were introduced in 2015, with the focus instead on tax administration to raise compliance, increase registered taxpayers and improve IT systems. Capital budget absorption improved strongly in H2:2015 after transitional delays related to the new administration.
• Continue phasing out energy subsidies to raise fiscal space for growth-critical spending.	Following the landmark fuel pricing reform in January 2015, usage of non-subsidized fuel products was expanded during the year, while electricity subsidies were reduced through market-based pricing for more users and better targeting.
Financial and Corporate Sector	
• Monitor closely banks' liquidity buffers and corporate risks related to offshore foreign currency borrowing.	The OJK is implementing a liquidity coverage ratio (LCR) in 2016, BI issued regulations on hedging of corporate external borrowing, with quarterly reporting by corporates in place in 2015, and full effect from 2015:Q4. Bank Indonesia and OJK continue to develop tools to ensure systemic stability, including for stress testing with Fund TA.
• Enhance consolidated/group-wide supervision to ensure resilience among financial conglomerates.	To strengthen consolidated supervision, OJK has identified and mapped out a set of important financial conglomerates, and issued regulations for minimum group-level capital.
• Close crisis management gaps in the financial stability framework by expeditious passage of the draft Financial System Safety Net (FSSN) law, followed by revision of related regulatory laws.	A draft FSSN law is in discussion with Parliament, with passage expected in Q1:2016. Following this, laws related to regulatory agencies (e.g., central bank) and the banking industry would be taken up.

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