

# Macroeconomics & Fiscal Management

## MFM PRACTICE NOTES

### Closing Indonesia's infrastructure gap: the key role of fiscal policy reforms

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#### Introduction

Fiscal policy in Indonesia has delivered a dramatic reduction in the government debt burden, after it exploded as a result of the 1997/98 crisis. This success has been supported by strict rules that cap the fiscal deficit and debt ratios at 3 percent and 60 percent of GDP, respectively. Policymakers now face the added challenge of funding a sustained lift-off in public infrastructure spending, a key objective of the current administration. The task is a formidable one as the government seeks to decisively close Indonesia's large infrastructure gap while maintaining its hard-won reputation for fiscal prudence, even as revenues have been weakened by the global commodities downturn and slower GDP growth. Meeting this challenge will require consolidating and extending recent energy subsidy reforms, significantly improving fiscal revenue collection and improving budget management, including by enhancing the quality of key Budget assumptions.

#### Indonesia's fiscal policy performance examined

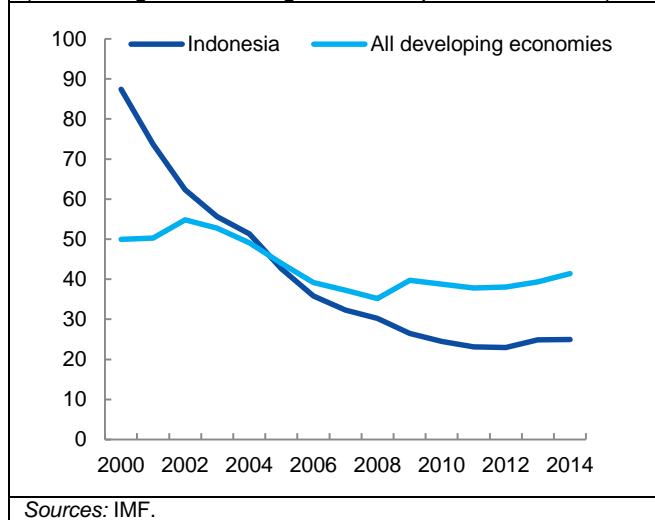
##### *Low deficits, low debt, fiscal prudence*

Indonesia has a hard-won reputation for sound fiscal management, based on its adherence to strict fiscal rules, and falling government indebtedness over the 2000s. The government debt burden fell sharply following the immediate recovery period from the 1997/8 crisis, from over 87 percent of GDP in 2000 to a low of 23 percent of GDP in 2012. This rapid reduction was driven by consistent surpluses of revenue, notably natural resource-related revenues, over non-interest spending (there were primary Budget surpluses every year from 2001-2011, averaging 1.5 percent of GDP), coupled with rapid nominal GDP growth (the value of total output rose more than five-fold over this period in current US dollar terms). Consequently, Indonesia's government debt burden fell not only to a moderate level in absolute terms, but also to well below peer economy levels (Figure 1), culminating in Indonesia regaining an investment grade sovereign credit rating in

<sup>1</sup> This Practice Note has been cleared by Shubham Chaudhuri, Practice Manager, GMF06.

2012.<sup>2</sup>

Figure 1: The government debt burden fell sharply over the 2000s, bottoming out in 2012. (General government gross debt, percent of GDP)



From 2012 onwards, however, macroeconomic conditions have become more challenging; global commodity prices have slumped and overall external demand growth has been sluggish, weakening Indonesia's external balances, and requiring significant monetary policy and exchange rate adjustments. Nominal GDP growth has fallen sharply, with the value of annual output contracting by over 3 percent in current US dollar terms from 2011 to 2014. During this period, Indonesia's fiscal stance became more expansionary (with the primary balance swinging into modest but sustained deficits, averaging 0.9 percent of GDP from 2012-2014), and the government debt burden inched up (by 2 percent of GDP, to 25 percent, in 2014). Yet, overall, Indonesia's fiscal management has remained prudent; fiscal deficits have continued to be capped at low levels; and, aided also by the robust risk profile of its debt stock, government debt distress risks remain low. Consequently, government

debt sustainability is not a concern for Indonesia at present.<sup>3</sup>

### ***Significant under-spending in infrastructure***

For much of the period 2005-2014, the central government's spending on infrastructure was significantly crowded out by large energy subsidies. Energy subsidies rose in the mid-2000s and reached unsustainable levels in recent years despite several ad hoc, episodic retail price increases. In 2014, spending on energy subsidies accounted for more than one-fifth of the central government's budget. This was more than three times the allocation for infrastructure such as roads, water, electricity and irrigation networks, and three times government-wide spending on health. Total investment in infrastructure—that is, investment by the central government, sub-national governments, state-owned enterprises and the private sector—has remained at only 3 to 4 percent of GDP over the past decade. This is far below the rates of above 7 percent of GDP before the 1997 Asian financial crisis and the 10 percent and 7.5 percent spent by China and India, respectively (Ihsan 2012, 2013).

### ***High volatility of spending and revenues***

The fiscal picture in the last decade also shows significant in-year and year-to-year volatility in major budget components, especially energy subsidy and capital expenditures, and natural resource-related revenues. Overall, the fiscal balance shifted towards moderate deficits in recent years (Figure 2). During 2010-2012, higher energy subsidy spending relative to nominal GDP was the major drag on the

<sup>2</sup> Defined as having investment grade sovereign credit ratings from two out of the three large international credit ratings agencies. As of April 2016, only Standard & Poor's rated Indonesian sovereign credit below investment grade (by one notch, at BB+).

<sup>3</sup> In particular, IMF staff assess that "public debt is sustainable and robust to macroeconomic shocks", IMF Article IV Staff Report, March 2015.

fiscal balance, followed since 2013 by declining revenues relative to GDP, especially from natural resources. In addition, there were pronounced swings in capital expenditures from year to year.

The key sources of year-to-year fluctuations in the Budget have been similar when evaluated over a longer period (Table 1, for 2004-2014). The major year-to-year fluctuations on the spending side were subsidies and capital expenditures. In addition, these same expenditure components have been very volatile *within* years, with outturns typically deviating significantly from initially budgeted amounts for the year (Table 1).

On the revenue side, the major source of year-to-year and within-year fluctuations in the last decade has come from natural resource non-tax revenues (Table 1, for 2004-14). Indonesia remains reliant on natural resource revenues, which

comprised an average of 30 percent of revenues from 2004-14. This reliance, sharpened by the decade-long commodity boom in commodity prices and production, has come with risks, as commodity prices are volatile, both within-years and across years, and prices of significant commodity exports for Indonesia have fallen significantly since their peak in 2011 (Figure 3), in turn driving down the value of exports and state revenues. The baseline expectation of World Bank staff is for global commodity prices to remain subdued in coming years (Figure 3). Consequently, in the absence of significant increases in non-resource revenues, the downward trend in the natural resource sector is likely to put significant pressure on revenue collection and fiscal deficits in the medium term.

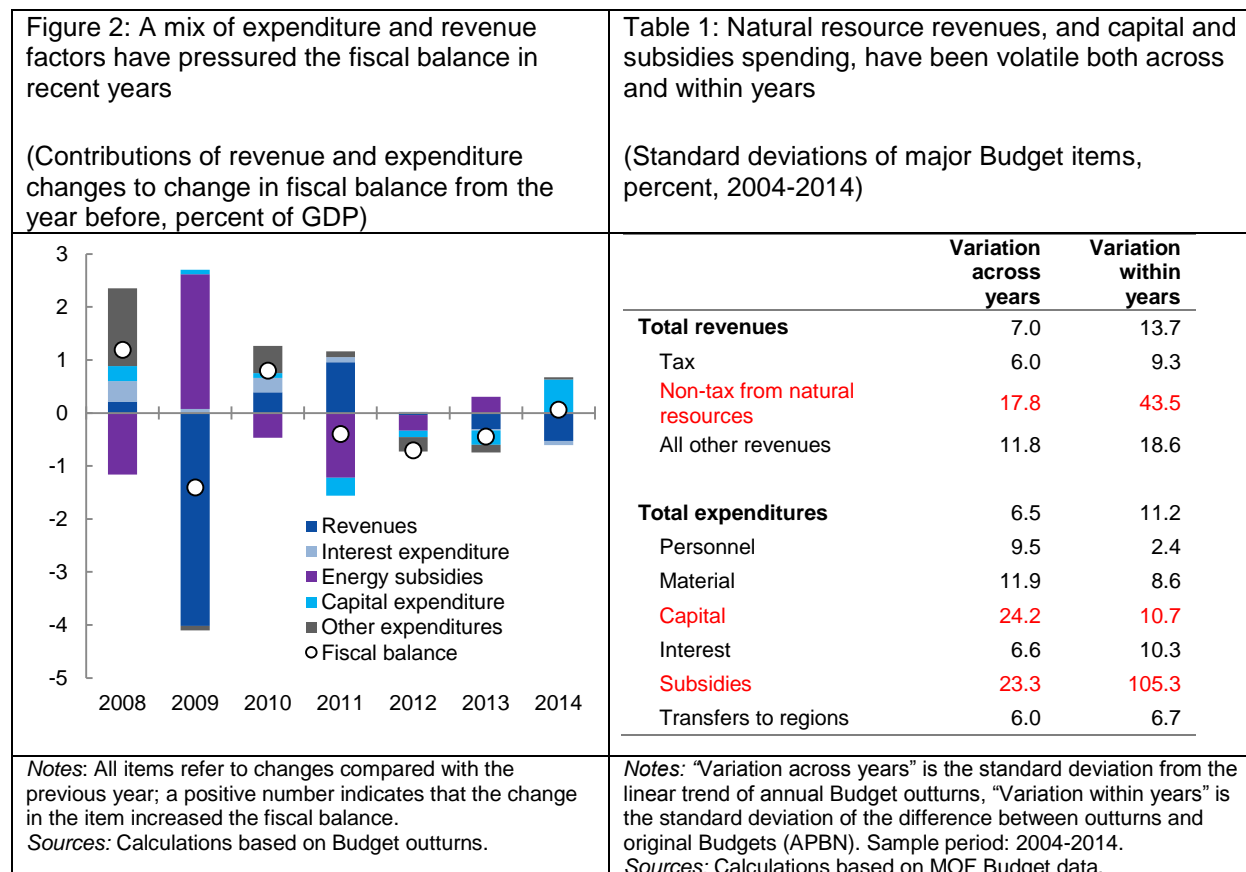
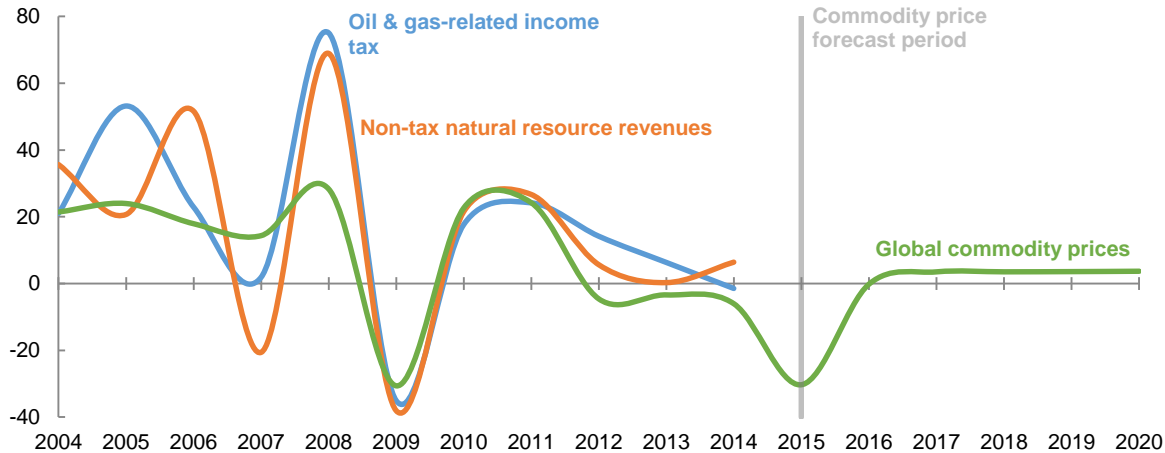


Figure 3: Indonesia's natural resource revenues have been tightly linked to volatile global commodity prices, which are expected to remain subdued in coming years (Annual change, percent)



Notes: Percent change in revenues refers to revenues in nominal Rupiah; "Global commodity prices" are the simple average of World Bank energy and non-energy commodity USD price indices and forecasts.  
Sources: Calculations based on MoF data; World Bank Commodity Outlook.

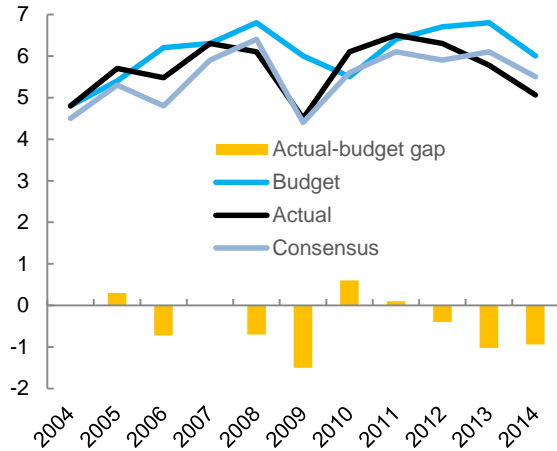
### Over-optimistic budget assumptions

The macroeconomic projections in the initial budgets presented to Parliament—notably for GDP growth (Figure 4) and also crude oil production—have tended, in many years, to be more positive than outcomes (Table 2). In contrast, private sector analyst forecasts have tended to be more accurate, at least for GDP growth (Figure 4), a key macroeconomic assumption, and the variable for which samples of analyst projections are readily available.

The tendency for Budget assumptions to be too optimistic, relative to contemporaneous independent projections and to outcomes, is widespread across countries, and applies in both advanced and developing economies (Frankel 2011). The reasons for this optimism bias are multiple and differ across countries, and are difficult to establish conclusively. In Indonesia, two plausible, and related, reasons stand out. First, some key assumptions, such as GDP growth and oil production, may have a perceived “targeting” function, signaling that the government is confident about the economic outlook and has ambitious objectives. Second, assumptions are

affected by political negotiations, being formulated by the Ministry of Finance (MOF) and then reviewed and revised by Parliament as part of the wider Budget approval process. This politicization of assumptions can be expected *prima facie* to generate less accurate Budget assumptions than if these were purely technically-driven so as to minimize forecast errors. In particular, a positive bias is to be expected given normal political pressures to spend more in the short-term.

Figure 4: Budgeted GDP growth assumptions have tended to exceed actual outcomes (Real GDP growth, percent)



Notes: "Budget" is assumption in original Budget (APBN); "consensus" is the average of commercial analysts' forecasts as of December of the prior year.  
Sources: MOF; Consensus Economics.

Table 2: Key Budget assumptions have differed considerably from outturns, especially since the post-2011 commodity down-turn

(Average difference between outturn and Budgeted assumption; percent discrepancy in parentheses)

	2004-2011	2012-2014	2004-2014
Nominal GDP (IDR billion)	393,498 (8.6%)	-112,614 (-1.2%)	255,468 (4.4%)
Real GDP (%)	-0.2 (-4.2%)	-0.8 (-13.8%)	-0.4 (-6.8%)
Inflation (%)	1.6 (20.9%)	1.8 (25.4%)	1.7 (22.0%)
Currency (Rp/US\$)	112 (1.2%)	1,038 (9.8%)	364 (3.8%)
Interest rate (SBI avg., %)	0.1 (1.9%)	-1.0 (-22.2%)	-0.2 (-2.3%)
Crude oil price (US\$pb)	15.8 (21.8%)	6.9 (6.5%)	13.3 (16.4%)
Oil production (1000 bpd)	-72.7 (-7.6%)	-80.0 (-9.7%)	-74.7 (-8.1%)

Sources: MOF.

### Strict adherence to fiscal rules

Indonesia's fiscal rule, set out in Regulation 23/2003, (1) limits the cumulative deficit of the general government Budget to a maximum of 3 percent of GDP for the year, and (2) constrains the cumulative general government debt to a maximum of 60 percent of GDP for the year. Implicitly, the rule has been interpreted to cap central government fiscal deficits at 2.5 percent of GDP, in order to allow a buffer for regional government cash deficits of up to 0.5 percent of GDP. These rules have conferred major advantages: they are simple and easy to understand, and have become closely associated with its track record of fiscal prudence and rapid debt burden reduction over the 2000s. In particular, they have provided a valuable, strong signal to lenders of a commitment to prudent borrowing including even, for example, during the 2008/9 global financial crisis period, when the non-cyclically adjusted budget deficit was kept at a small 1.5 percent of GDP despite slower growth.

However, the rules have also had unintended consequences, as can be seen by considering the changes adopted as part of annual revised Budgets (APBNP), promulgated around the middle of each year. The pattern has been for capital expenditures to be revised up in revised Budgets, only for the final outturn to be below the original Budget allocation (as has been the case in every recent year, except 2009; Figure 5). However, when Budget pressures are pronounced, as in 2008 or 2014, there have been substantial downward revisions. More generally, revised Budgets have tended to have three characteristics: (i) a proposed deficit that is close to the 2.5 percent of GDP ceiling for central government expenditure, (ii) understating (often significantly) actual subsidies expenditure, and (iii) overstating actual capital expenditure.

One hypothesis that would explain this pattern is that ministries have purposely underspent their capital Budgets in order to ensure that the fiscal rule is not breached. It may also be that ministries have been

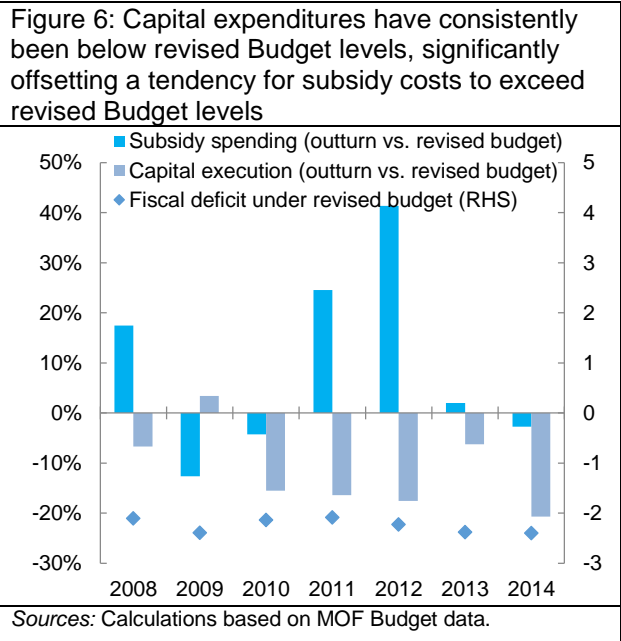
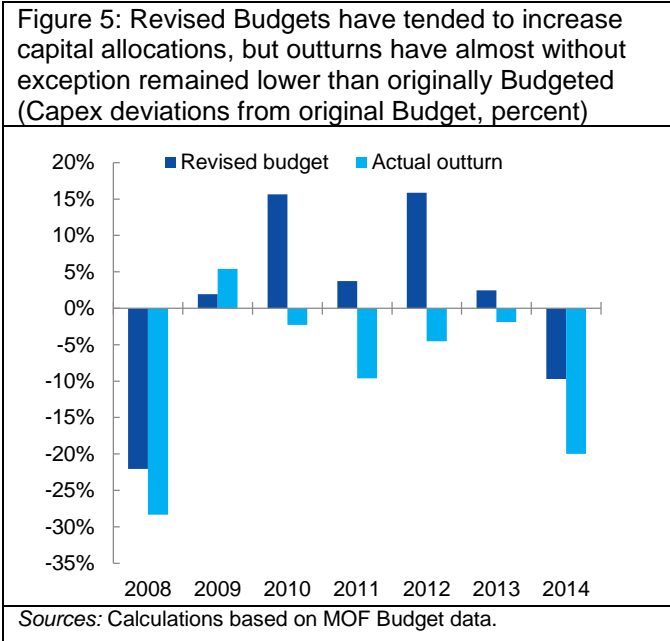


allocated additional money too late in the year (following the revised Budget) for it to be feasible to develop and execute investment spending. This would mean that the need to cap the fiscal deficit to less than the 3 percent of GDP limit has been a contributing factor to the volatility of capital expenditures, and especially to reduced capital spending at times of higher than expected energy subsidy spending (2010-2012; Figure 6) or lower than expected revenues (2012-present).<sup>4</sup>

A further indication that adhering to the fiscal rules may have affected Budget management in recent years is the presence of significant arrears, since pushing cash payments to subsequent years is a way of suppressing the fiscal deficit for the current period. The APBN-P 2014 estimated that at the end of 2014 government arrears amounted to IDR 45 trillion (approximately 0.4 percent of GDP).

Regardless of the exact causes, the historical pattern of setting a low initial capital spending Budget, significantly altering it during the year, and then underspending against plans, is very likely

to have hampered the quality of infrastructure spending. Delivering large amounts of infrastructure at the lowest price requires certainty. Ideally, certainty would be provided on a medium-term basis so that ministries can plan for future years but, at a minimum, there is a need to ensure that spending agencies have confidence that the Budget they receive at the start of the year is fixed (both in terms of not being changed explicitly, but also that they will not be discouraged from spending it in full). The gains from increased consistency and certainty of capital Budgeting could be material; for example, Infrastructure UK’s Infrastructure Cost Review indicates that extending funding certainty in OECD countries has been associated with unit cost savings of 10–20 percent, particularly for routine maintenance and renewals work. Raising the efficiency of existing spending by 10-20 percent, while also facilitating higher execution rates by making it easier to plan in advance, would constitute a significant boost to infrastructure spending outcomes.



<sup>4</sup> While this paper focuses on infrastructure spending challenges arising from the fiscal rule and fiscal policy, major public investment management challenges have also contributed to the

frequent under-execution of the capital budget, and volatility of capital spending, as outlined for example by Ahern et al. (2012).

In sum, the interaction of the fiscal rule with high and volatile energy spending, volatile resource-related revenues, and inaccurate Budget assumptions, has tended historically to make infrastructure spending a “residual” spending item.

### **Securing the fiscal space for an infrastructure lift-off: the challenge**

Indonesia’s current administration under President Joko Widodo took office in October 2014. A stated priority of this administration was to plug Indonesia’s infrastructure gap, by redirecting spending decisively away from energy subsidies, lifting revenues, and ramping up total (public and private) infrastructure spending to well above the 3-4 percent of GDP average achieved in the previous decade (World Bank 2013).

Now, in the second year of the current administration’s term, and after a slow start, public infrastructure spending has indeed gathered significant pace; nominal spending by the central government on infrastructure increased by 42 percent in 2015 even if the IDR 209 trillion spent fell short of the government target by a wide margin (IDR 67 trillion). In real terms, public spending in infrastructure increased by 14.5 percent, significantly lifting real gross fixed investment growth, to 5.1 percent. The public spending momentum is maintained in the 2016 Budget with IDR 313 trillion allocated for capital spending. To close the infrastructure gap in the years to come, achieving further increases in both the quantity, and the quality, of infrastructure spending, will be needed.

Policymakers confront a tension between the government’s infrastructure spending commitments, revenue collection constraints, and adherence to the fiscal rule. Revenues face headwinds from slower nominal GDP growth since 2012, and

weaker international commodity prices, notably oil. Consequently, against a target of increasing total nominal revenues by 13.6 percent in 2015, actual revenues collected fell by 11.4 percent in 2015 (World Bank 2015a). This poor performance highlights the need to broaden the tax revenue base from currently low levels (10.9 percent of GDP in 2014), which will require fundamental tax administration reforms to increase tax compliance, such as improving taxpayer data gathering and analytics – a major, medium-term challenge.

Within the context of weak medium-term revenue collection, sustaining the current, positive infrastructure spending impulse, let alone increasing it, will be challenging. Even the rise seen so far in infrastructure spending contributed to an increase in the fiscal deficit to 2.7 percent of GDP in 2015. This is close to the *de facto* fiscal deficit limit under Indonesia’s fiscal rule.

Budget credibility relies on recognizing explicitly, and responding effectively, to all these factors. If more and better-planned infrastructure spending is to be central to the budget allocation, as appears to be the strong commitment of the current government, then comprehensive fiscal management improvements will be needed.

### **Policy considerations for sustaining higher infrastructure spending**

#### ***Consolidate recent energy pricing reforms***

As discussed above, subsidy costs, the most significant of which have been for energy, particularly fuels, have been a major contributor to fiscal pressures and risks in Indonesia in recent years. By 2014, fuel subsidies had swollen to about a fifth of central government spending, or 2.4 percent of GDP. Not only did fuel subsidy

spending trend higher over the years due to rapidly increasing volumetric demand as a result of solid economic growth, but fluctuating global oil prices and exchange rates also made subsidy costs particularly difficult to project accurately and to plan for. Over 2010-2014, fuel subsidy spending averaged 2.2 percent of GDP per year and exceeded initially Budgeted costs by an average of 0.5 percent of GDP, driving much of the overall volatility in expenditures and accounting for about half (0.75 percent points) of the 1.5 percent of GDP deterioration in the fiscal deficit from 2010 to 2014. Consequently, fuel subsidies have been responsible for much of the adjustments required for discretionary items, especially capital expenditures.

Recognizing the problem, and the strong case more broadly for eliminating energy subsidies in Indonesia as elsewhere (Diop 2015), the current government has already made major reforms (World Bank 2015b). As of the start of 2015, gasoline subsidies were eliminated and the diesel subsidy was capped at a maximum of IDR 1,000 per liter. Consequently, Budgeted fuel subsidy costs have fallen from 2.4 percent of GDP in 2014 to 0.6 percent of GDP in 2015. Ongoing reforms have also begun to reduce electricity subsidy costs (Budgeted at 0.6 percent of GDP in 2015).

However, while the government has remained publicly committed to lower fuel subsidy spending, implementation of the new fuels pricing system has thus far been uneven. In particular, the monthly adjustment of retail gasoline and diesel prices envisaged in the implementing regulations has not taken place. This risks undermining the credibility of the reform, and in particular raises concerns that fuel subsidies could reemerge over time. Avoiding this outcome will be a crucial element of raising and improving infrastructure spending in Indonesia.

### ***Optimize resource revenue collection, while reducing reliance on resource revenues***

The recent downturn, as well as continued volatility, in resource revenues, is unavoidable as it is linked to global resource prices which are volatile, on a downward trend, and outside of Indonesia's control as the country is a price taker for most commodities.

However, this does not mean that Indonesia cannot benefit from improvements in resource revenues collections. While the case for increasing tax and royalty rates is weakened by lower prices, there are still significant gains to be made from improving natural resource revenue administration. For instance, a joint World Bank and Ministry of Finance study found that close to 50 percent of mining royalties that could have been collected, given existing production, prices and royalty rates, were not collected from 2011-2014, accounting for close to 1 percent of GDP (World Bank 2014). Mining royalty, and likely also other resource revenue, administration could be significantly improved to being collection closer to its potential.

At the same time as optimizing resource revenue collection, the government could also look to reduce the dependence of the budget on resource revenues over the longer-term. Fiscal analysis has shown that revenue buoyancy in the last decade has remained stagnant, implying that non-resource revenues have not kept pace with expanding economic output (World Bank 2014). Reversing this trend is critical and involves actively broadening the tax base, improving revenue administration as well as improving compliance, among other measures.



***Improve the quality of macroeconomic forecasts to reduce the optimism bias in the Budget-setting process***

Indonesia's recent fiscal history suggests that Budget assumptions which over-estimate outcomes can have a direct bearing on public capital expenditures, since these are a major discretionary item that can be cut or delayed during the course of the year in order to ensure that the fiscal deficit rule is not breached. Such in-year adjustments impede not only the level, but also the efficiency, of infrastructure spending. More generally, transparent, plausible and mutually consistent underlying macroeconomic assumptions are crucial to the realism and credibility of a government's Budget (IMF 2007). As noted in the OECD's 2009 review of Budgeting in Indonesia, the greatest risk is for the assumptions to be "too optimistic", thus making it seem that more resources are available than is really the case (Blöndal, Hawkesworth and Choi 2009).

Best practice is to ensure the independence of those responsible for the calculations, to insulate them from political pressure. However, putting in place the institutions, and building the capacity, to ensure that transparent and credible economic assumptions form the basis for annual, and multi-year, Budgets continues to be a challenge faced by many, if not most, countries, which have responded with a wide variety of institutional frameworks. In some countries, such as the Nordic countries and Mexico, for example, assumptions are the responsibility of the economics departments within finance ministries. Similarly, in Australia, the macro assumptions used in the Budget are made independently by the Treasury department. This set-up is similar to that in Indonesia but the difference is that in Indonesia the assumptions are reviewed by Parliament rather than an independent body, which inevitably politicizes the discussion. In other countries, there are

separate and independent government bodies that calculate the economic assumptions, such as the Netherlands Central Planning Bureau. The economic assumptions may also be calculated by non-government organizations. Canada, for example, bases its assumptions on an average of leading private sector forecasts; Chile employs an independent non-governmental panel of experts as part of a comprehensive approach to budget formulation which has been seen as a strong model for resource-rich countries (Frankel 2011; Calitz, Siebrits and Stuart 2013). Regardless of the exact method used, the development of credible and capable institutional frameworks, such as separate government bodies to formulate the assumptions, takes time and effort.

In Indonesia, the OECD's 2009 review of Budgeting in Indonesia highlighted that the role of the House of Representatives (*Dewan Perwakilan Rakyat*, DPR) stands out when compared to that of most OECD member country parliaments, going beyond the usual democratic Budget oversight role played by the legislature. This includes the high degree to which the DPR is involved in the details of the Budget and in the number of occasions through the Budget process. In addition "the Indonesian practice of politically negotiating the economic assumptions, albeit within calculated ranges, between the government and Parliament is not applied in OECD countries" (Blöndal, Hawkesworth and Choi 2009, p.16).

The introduction of an independent institution which sets the underlying macro assumptions for the Budget is a longer-term institutional change which could be used to help to depoliticize the assumption-setting process. In the short-term, adding greater transparency and verification on how the Ministry of Finance formulates the government's assumptions could also strengthen the assumptions. For example, the MOF could highlight which variables

can be most clearly viewed as exogenous, and not as possible targets which can be influenced by government policy, and discuss with the DPR the possibility of setting such assumptions in a technical manner, limiting political discussion over their level. The calculation methodology could be described in detail in background notes or briefings to the DPR. Providing information on how other countries set similar variables could reassure the DPR on the appropriateness and robustness of such technical approaches.

***Increase flexibility in less economically important Budget expenditure to absorb in-year pressures***

There is always a possibility that in-year expenditure adjustments will need to be made, even with appropriate forecasts, due to unforeseen developments in the presence of a fiscal deficit limit. The steps above set out how to minimize this risk, but it is also important to have effective modalities in place to respond as efficiently as possible should the risk transpire. A goal of this should be to insulate high value economic expenditure such as infrastructure investment from in-year changes in the overall resource envelope in the Budget.

This could be achieved in part by having a buffer, for instance only setting the Budget to target a 2 percent of GDP fiscal deficit, so that small adverse changes do not require remedial action. Arguably, recent fiscal management has included an element of this, although it has not been of sufficient magnitude to fully offset the positive skew of the final Budget assumptions. The downside of this approach, however, is that it leads to lower overall expenditure, which is sub-optimal given the potentially high returns to public investment and Indonesia's ambitious development goals.

An alternative would be to have a mechanism to absorb shocks by holding back until the revised Budget some major

spending decisions. One example would be the decisions around public sector pay rises. It would be possible to set aside money for the annual public sector pay increase in the original Budget (APBN), but to actually set the level in the revised Budget (APBN-P) later in the year, with the annual increase thus being awarded from June or July. This way, if there was a need to lower expenditure in the revised Budget then this could be done by setting the pay rise at a more affordable level rather than by all savings coming from front-line public services. Currently, despite being over a fifth of central government expenditure, personnel expenditure does not bear any of the risks associated with fluctuations in Budget resources.

***Progressively move towards a more medium-term fiscal framework***

The above discussion highlights improvements in fiscal management that could be made within the existing Budget policy framework. However, as set out above, the combination of annual Budget cycles and the fiscal rule has also been associated with significant capital expenditure fluctuations and squeezes, and periods of arrears building up. Put another way, the current annual fiscal rules have many positive elements: they are easy to understand, easy to manage and ensure conservative borrowing levels. However, they are also a blunt instrument, having assured fiscal discipline but at a high cost at times to the amount, and quality, of infrastructure spending.

There is rich international experience with fiscal rules, showing mixed results, in part because they have been implemented with many variations (Schaechter et al 2012; Bova et al 2015), including in the time-period over which they measure fiscal performance, the scope of the rule, the types of expenditure that they cover and whether they are measured on a cash or accruals basis. Perhaps the key lesson from

the international experience is that while fiscal rules can play a useful role in reinforcing fiscal discipline, they should not be seen as a panacea, as they can have unintended consequences, and their success depends critically on wider fiscal management, institutions and the political economy of the Budget. In Indonesia, there is little doubt that the fiscal rule serves as a vital anchor for policy, but this should not preclude examining whether the country could build further on this success.

The specific issue of arrears building up due to pressures to delay spending in order to stay within the fiscal deficit limit could be resolved by the government moving its fiscal reporting to an accrual basis (that is, reflecting costs and income when they are actually incurred, not when the cash changes hands). Line Ministries began reporting their accounts on an accrual basis from 2015. Building on this by moving the full fiscal accounting system to an accruals basis would remove any incentives to generate arrears to comply with the fiscal deficit limit, since delaying cash payments have no effect on the recorded fiscal deficit under a full accruals system, as well as conferring other benefits.

Ultimately, adopting a multi-year budgeting cycle is the natural solution to the problem of the current annual fiscal rule subjecting capital budgeting and spending to excessive uncertainty and in-year adjustments. Adopting such a medium-term approach to Budgeting would need to ensure that the significant benefits of the current annual fiscal rules are preserved. Consequently, reform objectives would need to include (i) ensuring the ability to continue to tightly control the overall fiscal position and net financing needs, and ensuring that they do not blunt incentives to continue improving overall efficiencies; (ii) creating an environment that is conducive to high quality public investment (i.e. that limits the need for in-year adjustments); (iii) is relatively easy to explain and for

stakeholders to monitor; and (iv) can be implemented given existing institutions, or the government is prepared to set up the necessary institutions.

For example, this could entail implementing a medium-term fiscal rule, such as moving from an annual fiscal deficit limit of 3 percent of GDP to a rule that the fiscal deficit not exceed 3 percent of GDP across a number of years. If appropriately implemented, such a rule would increase budget flexibility, especially enabling firm multi-year capital spending allocations. For such a medium-term rule to continue to enshrine fiscal discipline, it will need to be credible. Future years' projections for both revenue and expenditure would need to be based on realistic, technocratic forecasts, not on desired outcomes (i.e. "targets"), and any deviations from the plan would need to be clearly set out and explained. The change in rule would also need to be clearly communicated to financial markets, to ensure that investors saw the change as a positive step forward in fiscal management, given the need to plan infrastructure spending on a multi-year basis, and not a strategy to raise the trajectory of borrowing. A medium-term fiscal rule would therefore need to be implemented as part of a comprehensive, rolling medium-term budgeting framework, underpinned by credible, transparent forecasts (for a recent review of the international experience and evidence regarding pre-requisites for success, see Brumby et al 2012). This is a challenging fiscal reform agenda, the implementation of which will take time.

## Conclusion

Indonesia has established a strong track record of overall public borrowing restraint and enjoys a low debt burden with minimal risks of debt distress. Its clear fiscal rules have underpinned this success. However, historically, the fiscal rules have not been costless, and they do not operate in a

vacuum. Rather, they have interacted with politicized budget assumptions, volatile energy subsidy spending and volatile resource-related revenues, to make discretionary, and especially infrastructure, spending highly volatile, both across and within annual budget cycles; infrastructure became something of a residual spending item and was frequently squeezed when circumstances caused there to be a risk of breaching the fiscal deficit limit.

Now, Indonesia's government is determined to implement a major infrastructure spending program. This has fiscal policy implications that need to be confronted and managed. In particular, delivering on infrastructure commitments while respecting the fiscal rule will require that energy subsidy spending be kept low and ultimately eliminated; the quality of infrastructure spending needs to be improved by planning and implementing multi-year projects; and revenues need to be increased. In parallel, fiscal reforms could work over time towards developing a solid medium-term fiscal framework based around a credible, sustainable borrowing trajectory, that would ultimately increase overall budget flexibility, capital budgeting certainty and, potentially, also the level of infrastructure spending.

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## References

Ahern, M., Ihsan, A., Purnomo, H., Sienaert, A., Thomas, T. and Taylor, A., 2012, “Identifying Constraints to Budget Execution in Indonesia’s Infrastructure Sector”, available at: <http://documents.worldbank.org/curated/en/2015/08/24881575/identifying-constraints-budget-execution-indonesia%E2%80%99s-infrastructure-sector>

Blöndal, J., Hawkesworth, I. and Choi, H., 2009, “Budgeting in Indonesia, OECD Journal on Budgeting, available at: <http://www.oecd.org/indonesia/45362389.pdf>.

Bova, E., Kinda, T., Muthoora P., Toscani F., 2015, “Fiscal Rules at a Glance”, IMF background document, available at: <https://www.imf.org/external/datamapper/FiscalRules/Fiscal%20Rules%20at%20a%20Glance%20-%20Background%20Paper.pdf>

Brumby, J. et al, 2013, “Beyond the Annual Budget: Global Experience with Medium-Term Expenditure Frameworks”, World Bank Directions in Development Series

Calitz, E., Siebrits, K. and Stuart, I., 2013, “Enhancing the credibility of fiscal forecasts in South Africa: is a fiscal council the only way?”, Stellenbosch Economic Working Papers: 25/13

Diop, N., 2014, “Why is reducing energy subsidies a prudent, fair and transformative policy for Indonesia?”, Economic Premise, World Bank, available at: <http://siteresources.worldbank.org/EXTPREMNET/Resources/EP140.pdf>

Frankel, J., 2011, “Over-optimism in forecasts by official budget agencies and its implications”, Oxford Review of Economic Policy, vol. 27 no. 44, pp. 536-562.

Ihsan, A., “Identifying the constraints to budget execution in the infrastructure sector”, in World Bank, July 2012, Indonesia Economic Quarterly “Rising to Present and Future Challenges”, available at: <http://siteresources.worldbank.org/INTINDONESIA/Resources/Publication/280016-1328062662077/8406495-1342061334479/IEQ-JULY-2012-English.pdf>

Ihsan, A., “Piecing together the picture of Indonesia's infrastructure investment trends”, in World Bank, March 2013, Indonesia Economic Quarterly “Pressures Mounting”, available at: <http://www.worldbank.org/content/dam/Worldbank/document/EAP/Indonesia/IEQ-MARCH-2013-English.pdf>

IMF 2015, Country Report 15/74 “Indonesia 2014 Article IV Consultation – Staff Report”.

IMF 2007, “Manual on Fiscal Transparency”, available at: <http://www.imf.org/external/np/fad/trans/manual.htm>

Infrastructure UK (HM Treasury), 2010, “Infrastructure Cost Review”, available at: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/192588/cost\\_review\\_main211210.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/192588/cost_review_main211210.pdf)

Jakarta Post, December 24, 2014, “Jokowi aims for 7 percent annual growth”, available at: <http://www.thejakartapost.com/news/2014/12/24/jokowi-aims-7-percent-annual-growth.html>

Schaechter, A., Kinda, T., Budina, N., and Weber, A. 2012, “Fiscal Rules in Response to the Crisis—Toward the ‘Next-Generation’ Rules. A New Dataset”, IMF WP/12/187.

World Bank, October 2013, Indonesia Economic Quarterly “Continuing adjustment”, available at: <http://www.worldbank.org/content/dam/Worldbank/document/EAP/Indonesia/IEQ-Oct2013-ENG.pdf>

World Bank, December 2014, Indonesia Economic Quarterly “Delivering change”, available at: <http://www.worldbank.org/content/dam/Worldbank/document/EAP/Indonesia/IEQ-DEC-2014-ENpdf.pdf>.

World Bank, December 2015a, Indonesia Economic Quarterly “Reforming amid uncertainty”, available at: <http://pubdocs.worldbank.org/pubdocs/publicdoc/2015/12/844171450085661051/IEQ-DEC-2015-ENG.pdf>.

World Bank, July 2015b, Indonesia Economic Quarterly “Slower gains”, available at: <http://www.worldbank.org/content/dam/Worldbank/document/EAP/Indonesia/IEQ-JUL-2015-english.pdf>.