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BETTER POLICIES FOR BETTER LIVES

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This Survey was prepared in the Economics Department by Petar Vujanovic and Patrice Ollivaud, with the assistance of Agung Raden, under the supervision of Peter Jarrett.

Research assistance was provided by Anne Legendre.

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BASIC STATISTICS OF INDONESIA, 2015

(Numbers in parentheses refer to the OECD average)[a]

LAND, PEOPLE AND ELECTORAL CYCLE

Population (millions)	255.7		Population density per km²	134.3	(35.4)
Under 15 (%)	28.1	(18.0)	Life expectancy (years, 2014)	68.9	(80.8)
Over 65 (%)	5.4	(16.3)	Men	66.9	(78.1)
			Women	71.0	(83.4)
Latest 5-year average growth (%)	1.2	(0.6)	Lastest presidential election	July 2014	

ECONOMY

Gross domestic product (GDP)			Value added shares (%)		
In current prices (billion USD)	863.1		Primary	21.8	(2.4)
In current prices (trillion IDR)	11 540.8		Industry including construction	33.4	(26.6)
Latest 5-year average real growth (%)	5.8	(0.8)	Services	44.7	(71.1)
Per capita, (current prices, 000 USD PPP)	10.8	(40.1)			

GENERAL GOVERNMENT

Per cent of GDP

Expenditure[b]	15.6	(42.3)	Gross financial debt	26.8	(115.5)
Revenue[b]	13.0	(39.1)			

EXTERNAL ACCOUNTS

Exchange rate (IDR per USD)	13 372		Main exports (% of total merchandise exports, 2014)		
PPP exchange rate (USA = 1)	4167		Mineral fuels, lubricants and related materials		29.0
In per cent of GDP			Manufactured goods		12.9
Exports of goods and services	21.1	(54.1)	Animal and vegetable oils, fats and waxes		12.6
Imports of goods and services	20.8	(49.7)	Main imports (% of total merchandise imports, 2014)		
Current account balance	-2.0	(0.1)	Machinery and transport equipment		28.7
Net international investment position	-40.4		Mineral fuels, lubricants and related materials		24.7
			Manufactured goods		15.1

LABOUR MARKET, SKILLS

Employment rate for 15 and over year olds (%)	52.3	(57.0)	Unemployment rate, Labour Force survey (15 and over) (%)	6.2	(6.8)
			Youth (age 15-24) (%)	22.6	(13.9)
Participation rate for 15 and over year olds (%)	68.1	(61.8)	Tertiary educational attainment 25-64 year-olds (%, 2012)	7.9	(31.5)

ENVIRONMENT

Total primary energy supply per capita (toe, 2013)	0.9	(4.2)	CO_2 emissions from fuel combustion per capita (tonnes, 2012)	1.8	(9.7)
Renewables (%, 2013)	33.9	(9.0)			
Fine particulate matter concentration (PM2.5, μg/m^3, 2013)	14.8	(13.8)			

SOCIETY

Income inequality (Gini coefficient)	0.40	(0.31)	Education outcomes (PISA score, 2012)		
Poverty headcount ratio at $3.10 a day (PPP)			Reading	396	(496)
(% of population, 2012)	41.7	(1.5)	Mathematics	375	(494)
Public and private spending (% of GDP)			Science	382	(501)
Health care (2014)	2.8	(9.1)	Share of women in parliament (%, April 2016)	17.1	(27.9)
Education (2013)	3.7	(5.3)			

Better life index: *www.oecdbetterlifeindex.org*

a) Where the OECD aggregate is not provided in the source database, a simple OECD average of latest available data is calculated where data exists for at least 29 member countries.

b) Central government for Indonesia

Source: Calculations based on data extracted from the databases of the following organisations: OECD, International Energy Agency, Eurostat, World Bank, International Monetary Fund Eurostat and Inter-Parliamentary Union.

Abbreviations

AEC	ASEAN Economic Community
AIIB	Asian Infrastructure Investment Bank
ASEAN	Association of Southeast Asian Nations
ASEAN-6	Association of Southeast Asian Nations: Brunei, Indonesia, Malaysia, Philippines, Singapore and Thailand
BBK	FTZ Batam, Bintan and Karimun Free Trade Zone
BI	Bank Indonesia
BKSP	Regional development coordinating body
BOS	School Operational Assistance Grant
BPK	Supreme Audit Agency
BSM	Scholarship for poor students
BULOG	National Logistics Agency
CDB	China Development Bank
DAK	Special Allocation Fund
DAU	General Allocation Fund
DBH	Revenue-Sharing Fund
DID	Special Incentives Grants
EOI	Exchange of information
FDI	Foreign direct investment
FLEGT	Forest Law Enforcement Governance and Trade
FTA	Free trade agreement
FTZ	Free trade zone
GHG	Greenhouse gases
GVC	Global value chains
IDB	Islamic Development Bank
IE-CEPA	Indonesia-European Union comprehensive economic partnership agreement
IIGF	Indonesia Infrastructure Guarantee Fund
JKN	National Health Insurance Program
JMR	Jakarta Metropolitan Region
KADIN	Indonesian Chamber of Commerce and Industry
KAPET	Integrated Economic Development Zones
KIP	Smart Indonesia Card
KKS	Family welfare card
KPK	Corruption Eradication Commission
KPS	Social protection card
KPPIP	Committee for the Acceleration of Prioritized Infrastructure Provision
KUR	Credit for business
LKKP	National public procurement agency
LPG	Liquefied petroleum gas

LST	Luxury Sales Tax
MDG	Millennium Development Goals
MP3EI	Masterplan for Acceleration and Expansion of Indonesia's Economic Development
NDB	New Development Bank
NEET	Not in education, employment or training
NPL	Non-performing loan
NTT	East Nusa Tenggara
OBA	Output-Based Approach subsidy
P2D2	DAK Reimbursement
PAD	Own-source revenues
PDAMs	Local water-supply utilities
PKH	Family Hope Programme
PLN	Perusahaan Listrike Negara (state-owned electricity company)
PNPM	Programme based on community empowerment
PPP	Public private partnership
PPLS14	National registry of poor and vulnerable households (2014 iteration)
PT PLN	The state-owned electricity distribution monopoly
PTSP	Enterprise registration one-stop-shop programme
RASKIN	Emergency food security programme
RPJMN	Medium Term Development Plan
RPJPM	Long Term Development Plan
SEZ	Special economic zone
SOE	State-owned enterprises
SME	Small and medium enterprise
TB	Tuberculosis
TNP2K	National Team for the Acceleration of Poverty reduction
TPP	Trans-Pacific Partnership
UDB	Unified database
UHC	Universal health-care coverage
VAT	Value added tax
WISMP-2	Water Resources and Irrigation Sector Management Project – Phase 11

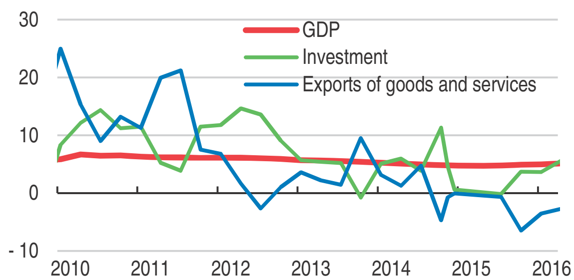
Executive summary

- *The policy framework has been improving rapidly*
- *Boosting the efficiency of public spending would free up resources for more productive uses*
- *The performance of sub-national governments could be improved*

The policy framework has been improving rapidly

Economic growth has slowed

Year-on-year % growth, volumes



Source: OECD Economic Outlook database.

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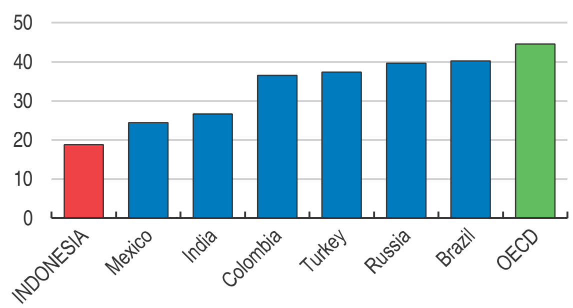
Indonesia has made great strides in improving its economic and social outcomes. Despite a weak global context and lower export prices, growth has remained relatively robust. Policy has appropriately shifted towards strengthening product markets, improving the business climate and reducing corruption. The fiscal position remains in good shape, in part thanks to energy subsidy reform. Poverty is also being addressed by expanding various social programmes, but food policies do not do enough to protect the most vulnerable. And subsidies and poor regulation, especially in energy and forestry, continue to distort activity and undermine environmental outcomes.

Boosting the efficiency of public spending would free up resources for more productive uses

The government is small

Government spending in % of GDP, 2014 or latest



Source: OECD Government at a Glance 2015.

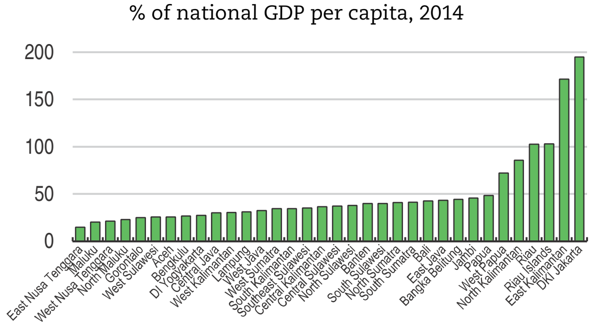
StatLink http://dx.doi.org/10.1787/888933420540

Public spending and taxation are low, even in comparison with other countries at similar levels of development. Increasing revenues is a priority to fund needed infrastructure and social programmes. In addition, strengthening public-sector governance and capacity (notably at the sub-national level) and reallocating expenditure away from personnel and subsidies would raise the efficiency of public spending and make it more inclusive. Increased government spending, specifically capital spending linked to government-led infrastructure projects, has provided recent fiscal stimulus.

The performance of sub-national governments could be improved

Inequality across provinces is large

% of national GDP per capita, 2014



Source: Statistics Indonesia.

StatLink http://dx.doi.org/10.1787/888933420754

Decentralisation, which began in 1998, has brought government closer to the people. However, large inter-regional disparities persist, suggesting that best practices have not been fully adopted. In some regions governance remains weak and rent seeking is widespread, and in many cases incentives are poor. In the short term more direction from the central government can help, but the fundamental solution is to strengthen the capacity of sub-national governments over time.

MAIN FINDINGS	KEY RECOMMENDATIONS
Setting macro policies for stable and sustainable growth	
Sound macroeconomic policy frameworks have allowed impressive performance, but important challenges remain.	
Growth is likely to continue at a near-5% pace, although downside risks predominate, mainly on the external side.	If growth disappoints, employ a prudent monetary response to stabilise output without endangering financial stability.
Tax revenues are low, even relative to peer countries, which is constraining the government's role in development.	Raise revenue by increasing the number of taxpayers through better compliance and improving the efficiency of tax collection.
Facilitating structural change	
To accelerate structural change towards high-value-added, high-productivity sectors, fundamental reforms are required.	
Employment protection discourages formal jobs and skills investment and reinforces labour-market segmentation.	Reduce impediments to hiring and dismissal, and provide incentives for investment in skills.
Despite good progress, corruption is still holding back growth and well-being.	Continue the fight against corruption by all means. Support the Corruption Eradication Commission (KPK), and provide it with more resources and authority.
Ensuring the sustainability and inclusiveness of economic growth	
Environmental, health and other issues remain serious impediments to sustainability and inclusiveness.	
Energy subsidies represent about 7% of public spending. They encourage pollution-intensive activities and are poorly targeted. Coal-fired power generation is still expanding.	Phase out all remaining energy subsidies. To meet rising power needs, invest in low-carbon generating capacity, including renewables and geothermal sources.
Deforestation continues, as enforcement of laws against clearing forest land by burning is poor.	Tighten and strengthen enforcement of laws on forest clearing. Improve productivity in the palm oil and timber industries.
Food resilience measures often protect large and inefficient farmers, to the detriment of low-income consumers. Food prices tend to be relatively high and volatile.	Liberalise the importation of food. Refocus National Logistics Agency (BULOG) activities on managing emergency supplies. Phase out fertiliser subsidies.
Poor nourishment and exposure to disease have left over one third of all children under five stunted.	Expand existing programmes to tackle stunting, including by encouraging breastfeeding.
Enhancing regional development	
Large inter-regional disparities persist. Regional development is increasingly determined by sub-national governments.	
The administrative burden on firms varies significantly across regions.	Work with the sub-national governments to move the regulation of business to best practice.
More special economic zones (SEZs) are to be established, in spite of their limited success to date.	Experiment with different incentives in special economic zones, including more flexible labour regulation, with a view to extending proven good practices to the whole economy.
Sub-national governments, which now account for half of all public spending, often underspend their budgets, impeding infrastructure investment in particular.	Expand assistance to help regions to improve budget planning and implementation capacity. In the interim, make greater use of special allocation funds to prioritise sub-national spending.

MAIN FINDINGS	KEY RECOMMENDATIONS
Boosting the efficiency of public spending	
Increasing the efficiency of public spending would allow more resources to be allocated to priority areas.	
Government spending in key areas is shaped by specific targets: for example, 20% for education and 5% for health. While this provides ring-fencing, controls on how funds are spent are inadequate.	Move ahead with the implementation of performance-based budgeting ("money follows the programme"). Improve evaluation of existing and future programmes, and reinforce links with medium-term objectives.
Central government transfers cover the entire cost of sub-national governments' public service payroll.	Revise the system of transfers from central to sub-national governments to remove the link with payroll.

Assessment and recommendations

- *Recent macroeconomic outcomes and short-term prospects*
- *Equality and inclusiveness*
- *Advancing industrialisation by getting the fundamentals right*
- *Promoting regional development*
- *Improving public spending*
- *Ensuring food resilience*
- *Deforestation and other environmental challenges*

Over the past half century Indonesia has made remarkable progress across a broad range of economic and social dimensions. In general, health, education and other social outcomes have never been better, and higher standards of living are being enjoyed by more and more Indonesians. Over the past two decades democracy has taken hold, and bold strides in decentralisation have brought government closer to the people. As a member of the G20, Indonesia is actively engaged in world affairs, and economic integration with regional ASEAN (Association of Southeast Asian Nations) partners is moving ahead. Indonesia has strong growth potential: its population is young, the domestic market is large, it has a rich endowment of natural resources, public debt is low, and its political system is broad-based and stable.

The challenges for the years ahead are to diversify the economy by enhancing the nation's human resources, thereby allowing skill- and labour-intensive sectors of the economy to flourish, and to ensure that living standards and well-being rise for all Indonesians. The key messages of this *Survey* are:

- Indonesia's policy is moving in the right direction to meet the challenges the country faces. Monetary and fiscal frameworks are strong. The government is advancing policy reforms to reduce impediments to doing business, improve the regulation of investment, shift budget resources away from subsidies to social security, health and infrastructure, and rationalise foreign investment rules.
- The "big-bang" decentralisation that accompanied democratisation has proven to be very popular and has brought government closer to the people. To take full advantage of this initiative, however, the capacity of many sub-national governments needs to be strengthened: a task that will take some time.
- Public spending and taxation are low, even compared with countries at similar levels of development. Increasing revenues is a priority, but there remains substantial scope to improve the efficiency and effectiveness of public spending at all levels of government.

Recent macroeconomic outcomes and short-term prospects

Low commodity prices and persistently weak external demand reduced GDP growth in Indonesia through 2015 (Table 1 and Figure 1). The fragile rupiah – which has depreciated by over one third against the US dollar over the past five years – and above-target inflation constrained the degree to which monetary policy could support activity. As exports weakened the current account deteriorated, further pressuring the rupiah (Figure 2). The authorities have taken measures to better manage foreign exchange to try to shore up the currency, including allowing more options for hedging.

The end of the commodities super cycle in early 2011 and weaker global growth (including in Indonesia's biggest export markets: Japan, China, the United States, India and Korea) have reduced fossil fuel, metal and agricultural export volumes and prices. Six of Indonesia's top eight exports, accounting for 45% of goods exports, fall into these categories: palm oil, coal, natural gas, crude oil, rubber and copper (Figure 3). The impact of the fall in

Table 1. **Selected indicators for Indonesia**

	1995	2000	2005	2010	2013	2014	2015
Population							
Total, million	205.9	208.9	224.5	240.7	249.9	252.8	255.5
Age distribution (%)							
0-14	33.6	30.7	30.0	29.8	28.9	27.6	27.3
15-65	62.2	64.7	65.1	65.2	65.9	67.2	67.3
65+	4.2	4.7	4.9	5.0	5.2	5.3	5.4
Absolute poverty rate (%)[1]		19.1	16.0	13.3	11.4	11.1	11.2
Gini coefficient[1]		0.30	0.36	0.38	0.41	0.41	0.41
Net enrolment ratio (secondary education, %)				60.0	70.8		
Employment and inflation							
Employment (million)	80.1	89.8	95.4	109.6	112.8	114.6	114.8
Informal employment, % of employment			70.5	68.4	60.1	59.6	57.8
Unemployment rate (%)	7.2	6.1	10.5	7.0	6.2	5.9	6.2
Inflation (CPI, end of year, %)	9.0	9.3	17.1	7.0	7.7	8.4	3.4
Supply and demand							
GDP (in current trillion IDR)	546.4	1 520.7	3 035.6	6 864.1	9 524.7	10 565.8	11 540.8
GDP (in current billion USD)	243.6	182.4	313.2	756.2	916.8	890.7	863.1
GDP growth rate (real, in %)	8.2	4.9	5.7	6.4	5.6	5.0	4.8
GDP growth rate (real, in per capita terms, %)	6.1	5.1	4.2	4.9	4.3	3.8	3.7
Demand (growth in %)							
Private consumption	12.6	1.6	4.0	4.1	5.4	5.3	4.9
Public consumption	1.3	6.5	6.6	4.0	6.9	2.0	4.4
Gross fixed investment	10.3	10.8	9.5	11.5	3.9	6.3	2.3
Exports	14.0	16.7	10.9	6.7	5.3	4.1	5.3
Imports	7.7	26.5	16.6	15.3	4.2	1.0	-2.0
Supply (in % of nominal GDP)							
Agriculture		14.3	13.1	14.3	13.7	13.7	14.0
Mining		11.0	11.1	10.7	11.3	10.1	7.9
Manufacturing		25.4	27.4	22.6	21.6	21.5	21.5
Services[2]		49.4	48.3	52.3	53.4	54.7	56.7
Public finances (in % of GDP)[3]							
Revenue	13.1	13.5	16.3	14.5	15.1	14.7	13.0
Expenditure	12.0	14.6	16.8	15.2	17.3	16.8	15.6
Nominal balance	1.1	-1.1	-0.5	-0.7	-2.2	-2.1	-2.6
Gross debt (general government)		81.1	43.3	24.5	24.9	24.7	26.8
Balance of payments (in % of GDP)							
Trade balance (goods)	2.7	13.7	5.6	4.1	0.6	0.8	1.5
Current account balance	-2.6	4.9	0.1	0.7	-3.2	-3.1	-2.0
In USD billion	-6.4	8.0	0.3	5.1	-29.1	-27.5	-17.7
International reserves (gross, USD billion)			34.7	96.2	99.4	111.9	105.9
Outstanding external debt		77.7	41.7	26.8	29.0	32.8	36.0

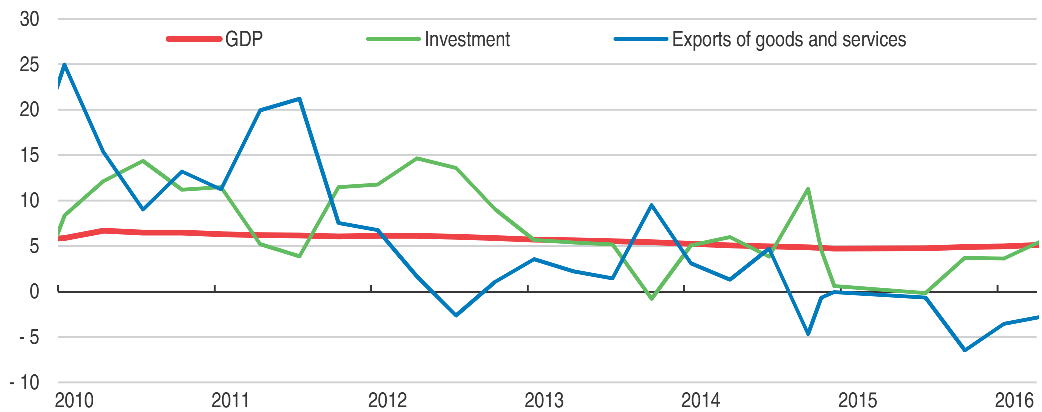
1. Based on per capita expenditure. The Gini index has a range from zero (when everybody has identical incomes) to one (when all income goes to only one person). Increasing values of the Gini coefficient thus indicate higher inequality in the distribution of income. Absolute poverty is the percentage of people below the national poverty line, where the latter is the value of per capita expenditure per month needed for a person to enjoy decent living conditions.
2. Includes electricity, gas, water and construction.
3. Central government unless otherwise noted.

Source: Statistics Indonesia; Indonesian government financial statement (audited); World Bank; OECD estimates.

commodity prices has been partly offset by the falling rupiah, in line with other so-called commodity currencies such as the Malaysian ringgit (which has depreciated by around one fifth over the past five years), the Australian dollar (about one third) and the South African rand (more than one half) (Figure 4, Panel A). At the same time high rates of inflation has meant much smaller gains in competitiveness, limiting the boost to exports (Panel B).

Figure 1. **Components of GDP growth**

Year-on-year % growth, volumes



Source: OECD Economic Outlook database.

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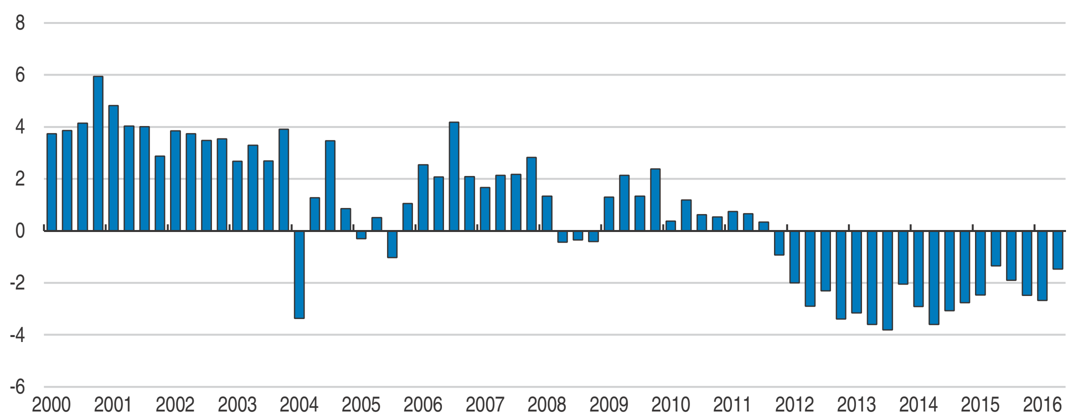
Figure 2. **Current account balance**

% of GDP



Source: OECD Economic Outlook database.

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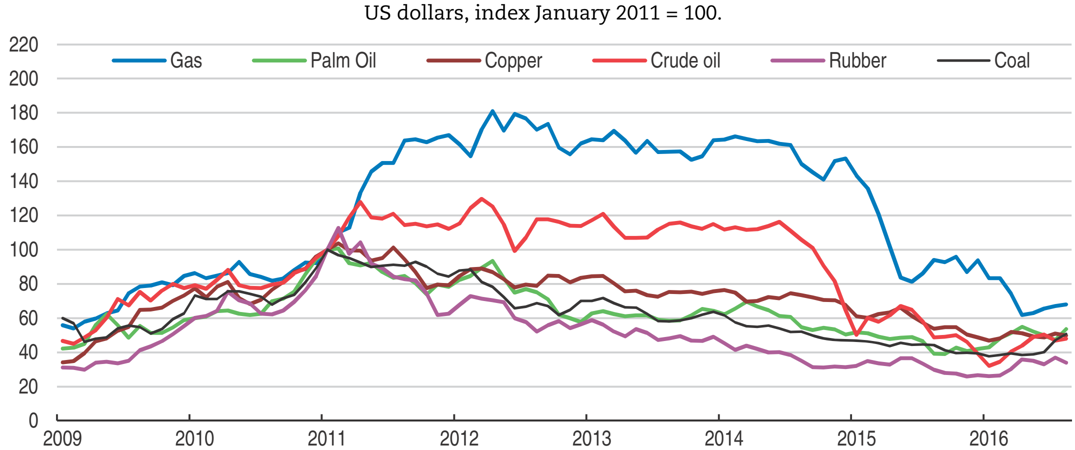
Figure 3. **Prices of selected commodities**

US dollars, index January 2011 = 100.



Source: IMF Commodity Price database.

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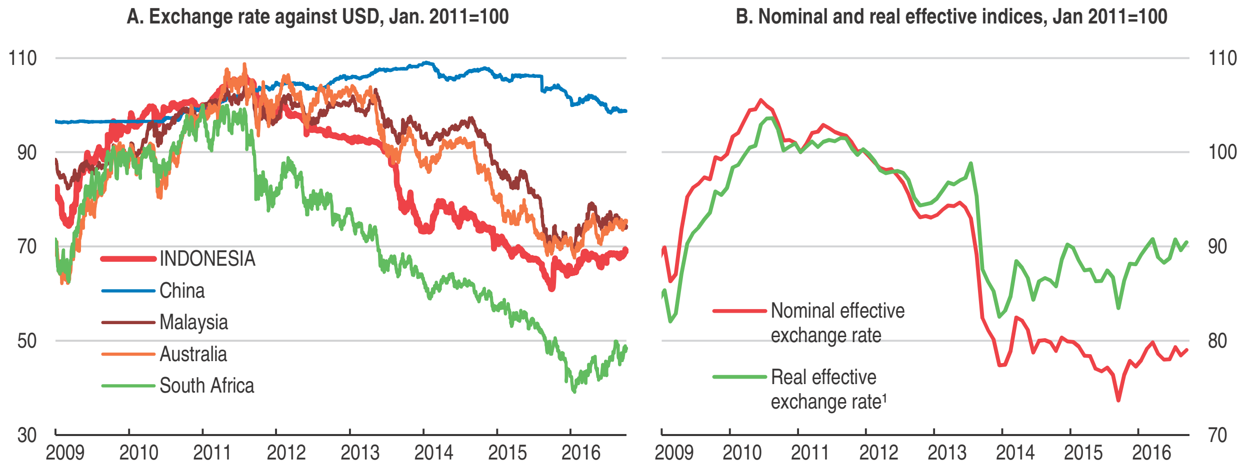
Figure 4. **The market exchange rate and the real effective exchange rate**



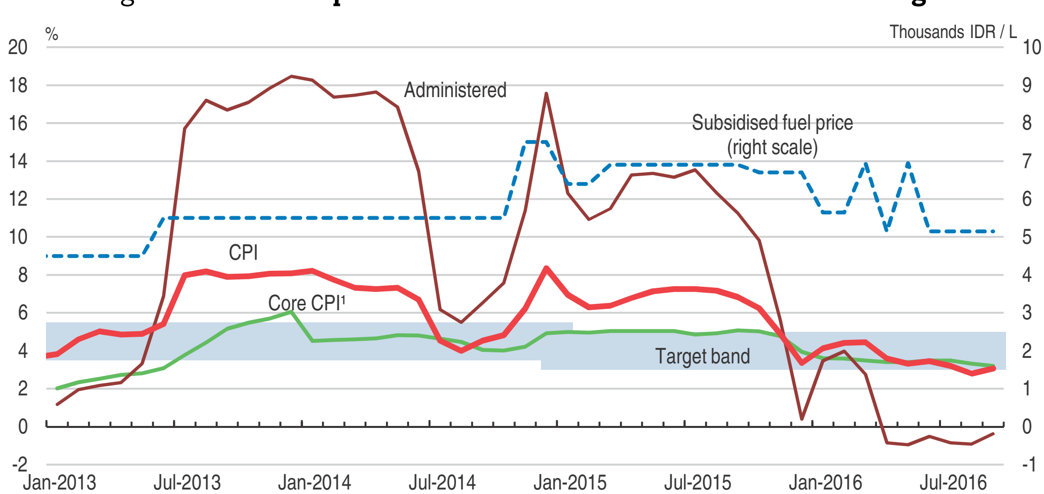
1. Effective exchange rate deflated by the CPI.
Source: Thomson Reuters; OECD Economic Outlook database.

StatLink http://dx.doi.org/10.1787/888933420583

While core inflation has been stable over the past few years, headline inflation exceeded Bank Indonesia's (BI) target range for much of 2015 (4±1%) – driven by large increases in food and administered prices (subsidised fuels, electricity, transport fares) – before dipping back into it this year. However, inflation for administered-price items has fallen dramatically, as the government has passed through lower energy prices to consumers by cutting transport fares and electricity prices. On the other hand, retail fuel prices have not fallen to the same extent as world crude prices, as subsidies were removed. By January 2016 inflation had fallen back within the target range (Figure 5), and the rupiah staged a rebound against the dollar (Figure 4).

On the back of the inflation moderation, the stabilisation of the exchange rate and a return to a more sustainable external balance, BI has cut interest rates five times since

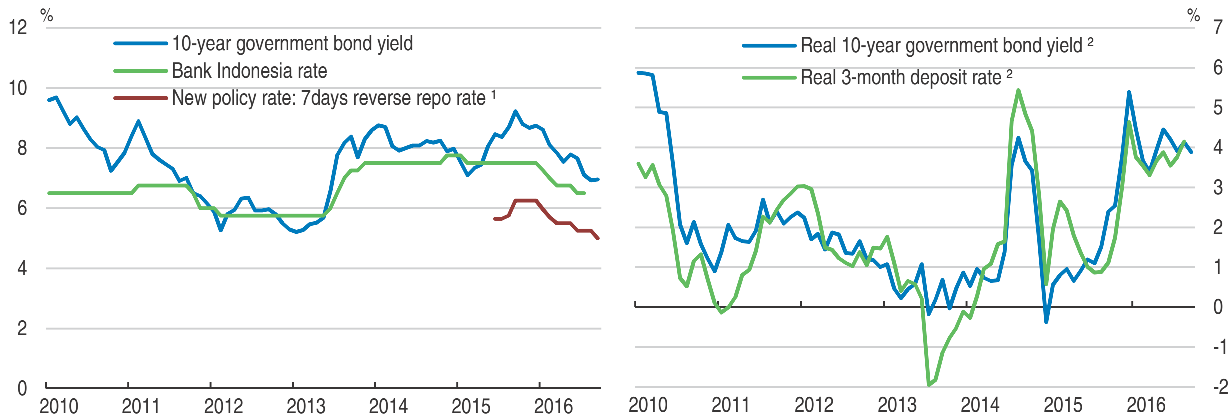
Figure 5. **The components of CPI inflation and the inflation target**



1. The core measure of inflation excludes volatile foods and administered prices.
Source: Bank Indonesia.

StatLink http://dx.doi.org/10.1787/888933420596

Figure 6. **Official and long-term interest rates, nominal and real**



1. As of 19 August 2016 Bank Indonesia switched to a new policy rate known as the BI 7-Day Reverse Repurchase (repo) Rate.
2. Deflated with year-on-year CPI inflation rate.

Source: Thomson Reuters; OECD Economic Outlook database; Bank Indonesia.

StatLink http://dx.doi.org/10.1787/888933420601

January 2016, each time by 25 basis points, taking the (new) official rate down to 5.0% (Figure 6, Panel A). In addition, BI also reduced the rupiah-denominated primary reserve requirement by 100 points. Adjustments were also made to the macro-prudential framework to encourage lending. In August 2016 the Bank changed from targeting the 12-month rate to the 7-day reverse repo rate to improve the monetary policy transmission mechanism. Neverthess, real interest rates in Indonesia remain high (Panel B).

GDP growth is expected to continue to pick up over the course of 2016 and into 2017 (Table 2). Despite persistently weak external conditions, confidence is returning, with

Table 2. **OECD economic projections for Indonesia**

Annual percentage change, volume (2007 prices)

	2013	2014	2015	2016	2017
Gross domestic product (GDP)	**5.6**	**4.8**	**4.8**	**5.1**	**5.3**
Private consumption	5.5	5.3	4.5	5.1	5.0
Government consumption	6.7	1.2	5.4	5.4	3.5
Gross fixed capital formation	5.0	4.6	5.1	5.4	6.1
Stockbuilding[1]	–0.3	0.8	–0.9	–0.3	0.1
Total domestic demand	5.0	5.4	3.9	4.9	5.5
Exports of goods and services	4.2	1.0	–2.0	–0.9	3.1
Imports of goods and services	1.9	2.2	–5.8	–2.3	4.2
Net exports[1]	0.6	–0.3	0.9	0.3	–0.2
Other indicators (growth rates, unless specified)					
GDP deflator	5.0	5.4	4.2	2.6	3.9
Consumer price index	6.4	6.4	6.4	3.1	3.5
Trade balance[2]	–0.8	0.8	0.3	0.1	–0.6
Current account balance[2]	–3.1	–3.1	–2.1	–2.0	–2.5
Central government fiscal balance[2]	–2.4	–2.5	–2.3	–2.6	–2.9
Three-month money market rate	6.3	8.8	8.3	7.2	6.4
Ten-year government bond yield, average	6.9	8.2	8.2	7.8	7.4

1. Contribution to changes in real GDP.
2. As a percentage of GDP.

Source: OECD staff estimates.

government investment in infrastructure gathering pace, inflation moderating and a stable rupiah. Motor vehicle sales are trending upwards, credit growth is picking up, and the Purchasing Managers Index is recovering, suggesting stronger consumption and a rebound in business investment.

As for most of the world, the risks are largely on the downside, the most significant of which are international. If external conditions worsen significantly and the current account deficit widens, the exchange rate may come under renewed pressure from capital outflows, and the monetary authorities would have to delay, or even reverse, interest rate cuts. Domestically, if revenues continue to weaken, the government would have to make further expenditure cuts to avoid hitting the legal 3%-of-GDP deficit ceiling. If the shift from public to private participation in infrastructure investment does not happen as planned, activity will weaken, and confidence will suffer. Some extreme but unquantifiable potential shocks are described in Table 3.

Table 3. **Possible extreme shocks to the Indonesian economy**

Shock	Possible impact
Dramatic slowdown in Asia	Indonesia is a major exporter of raw and slightly transformed commodities and is particularly exposed to China. A sharp downturn there and/or in other regional trading partners would have a major impact on Indonesia through the demand and price channels. Government finances rely heavily on royalty revenues from the mining and oil/gas sectors. Many firms are exposed due to high levels of short-maturity foreign-currency-denominated borrowing.
Natural disasters	Indonesia is prone to natural disasters such as extreme weather, volcanic activity and earthquakes. These disasters have the potential to cause enormous economic and humanitarian upheaval. Man-made disasters, such as the 2015 forest fires, can also have major economic, health and ecological impacts. These could be mitigated by adopting a comprehensive mechanism for handling such risks (including issuing so-called catastrophe bonds), as Mexico did in 2006.

The financial sector is healthy

Despite the slowdown in economic activity, the financial sector remains in good shape and is one of the most profitable globally. Banks' non-performing loan ratio (NPLs) stood at 3.2% in July 2016, a slight increase over the previous three months. The deterioration in NPLs has been larger for banks that are more exposed to corporate borrowing and is increasingly reflected in their share prices. Going forward, the sector will be challenged, with sub-par economic growth, low commodity prices, pressure from the government to lower lending rates and the depreciated rupiah all weighing on asset quality and profitability. Nevertheless, sound capital levels and adequate liquidity will provide buffers against downside risks, and lower interest rates provide extra protection. The new Financial System Crisis Prevention and Resolution law clarifies the mechanisms for bank resolution (including bail-in provisions) and aligns the functions of the various supervisory agencies.

Corporate debt, at around 32% of GDP, remains low (IMF, 2015), although it has doubled over the past five years, and around two-thirds of it is denominated in foreign currency. Significantly more favourable lending conditions abroad and shallow domestic financial markets, particularly the thin corporate bond market, have discouraged domestic borrowing and driven firms to borrow actively in global bond and syndicated loan markets. In October 2016, out of a total of USD 170 billion of private foreign debt, less than one third (27.6%) had remaining maturities less than one year. However, a 2014 BI survey of 159 of the largest private borrowers that constitute over 80% of total private debt, only 35% undertook hedging transactions. The survey also revealed that 52% of companies that did not engage in hedging activity were purely domestically oriented and therefore did not benefit from a natural hedge. As a result of foreign-currency exposure, over the past two years there have been payment defaults in the telecommunications and mining sectors. In 2014 regulations were imposed on nonbank corporations to enhance risk management of foreign debt by mitigating liquidity mismatch, overleverage risk and currency risk through hedging. BI reports that since Q2 2015 Indonesian corporations as a whole have hedged their open position in foreign currency for up to three months more than required by these regulations. The authorities must continue monitoring the situation carefully.

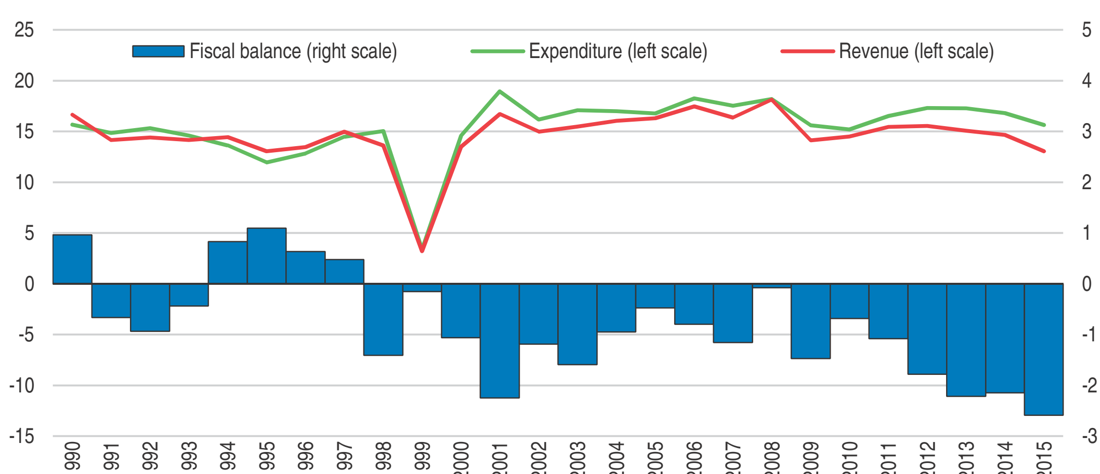
The fiscal framework is strong

Indonesia's fiscal position is in good shape, supported by legal caps on the fiscal deficit and public debt at 3% and 60% of GDP, respectively. The deficit has come closer to the limit for the last four years, reflecting to some extent the authorities' desire to revive declining output growth (Figure 7); the OECD projects that the fiscal deficit will stay near 3% in the next two years due to both revenue constraints and ambitious spending programmes. However, public debt is low (about 27% of GDP in 2015), which is also a consequence of the relatively small size of the Indonesian government (Chapter 2). Nevertheless, even with limited indebtedness, debt service costs are a relatively high share of government revenues (Figure 8, Panel A). Moreover, the implicit interest rate paid on the stock of Indonesia's public debt is also high (Panel B), reflecting exchange rate uncertainty and sovereign risk.

Public spending has undergone a major overhaul since the 2014 election. In particular, fuel subsidies have been mostly scrapped: they comprised nearly 14% of total expenditures in 2014 but dropped to about 3% in 2015. However, remaining energy subsidies (including for electricity), representing about 7% of public spending, should also be phased out completely. A welcome reform related to electricity began to limit government subsidies as of mid-2016 to only 25 million households in need, about half as many as in 2015. The implementation of this reform is targeted for completion by the end of 2016.

Figure 7. **Central government revenue, expenditure and balance**

% of GDP



Source: CEIC database.

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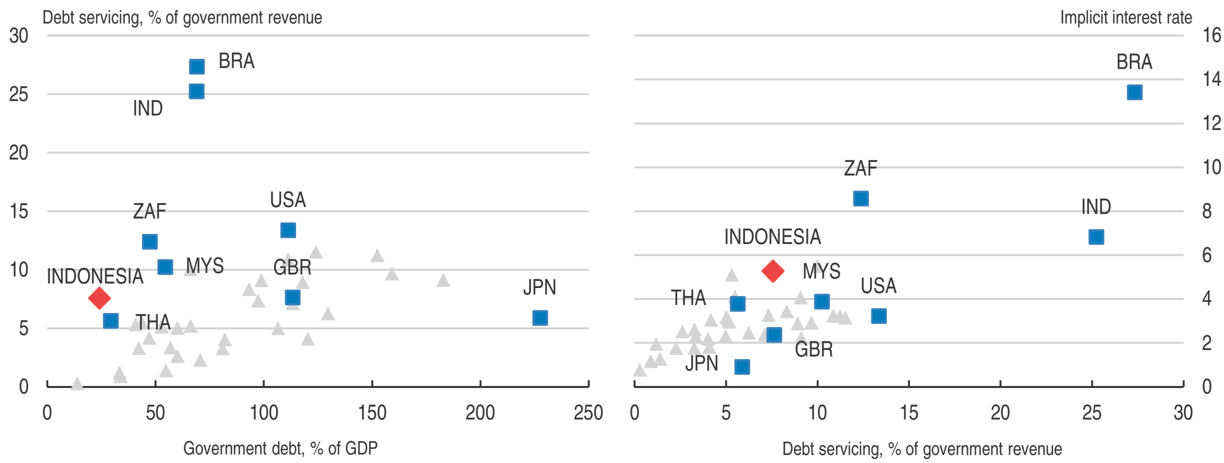
Figure 8. **Government debt, servicing costs and implicit interest rates**

Selected countries, 2014



Note: Fiscal year 2014/2015 for India. 2015 for Brazil.

Source: OECD Economic Outlook database; World Bank World Development Indicators database; IMF Government Financial Statistics database; Reserve Bank of India; South African Ministry of Finance; CEIC.

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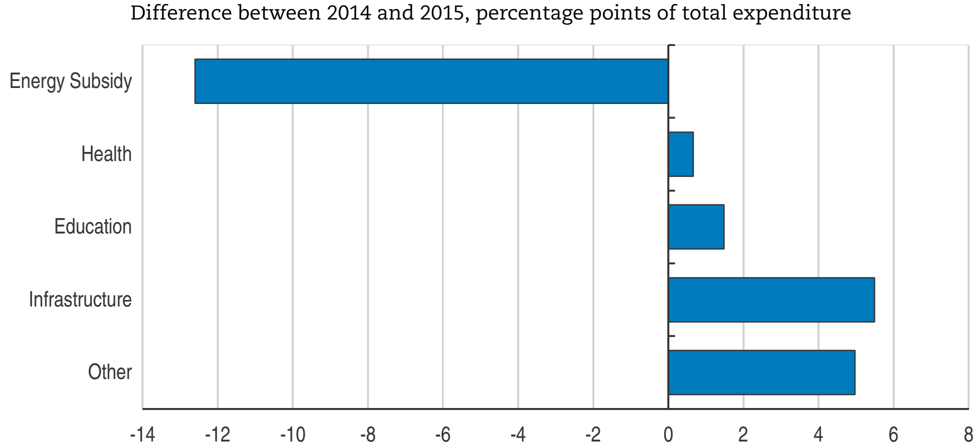
Consistent with OECD (2015a) recommendations, much of the fiscal space created from lower energy subsidies has been used for social spending and higher infrastructure spending (Figure 9). The authorities are also using direct capital injections into public enterprises to boost infrastructure investment. While this seems an easy way to expedite prioritised projects, it is critical to follow sound corporate governance principles (OECD, 2015d), particularly given that such projects potentially represent large contingent fiscal liabilities.

Over the last three years revenues have been over-estimated in both preliminary and revised budgets (Figure 10), partly due to lower oil prices. Lower-than-projected GDP growth also raised the deficit. The mid-term revisions, which in the past have diminished gaps that emerge in the preliminary budget, have, in the last three iterations, reduced the errors only marginally. For 2016, the preliminary budget projected revenues over 20%

Figure 9. **Change in government spending**

Difference between 2014 and 2015, percentage points of total expenditure



Source: CEIC database.

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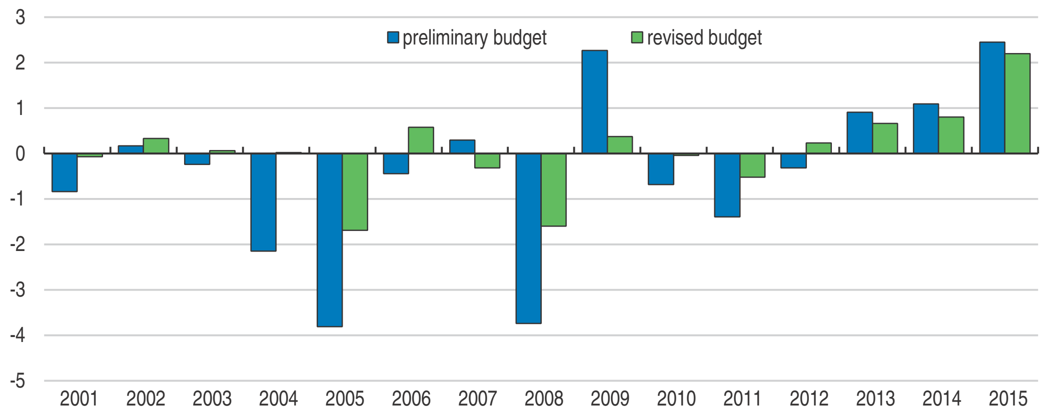
Figure 10. **Difference between projected and realised government revenues**

% of GDP



Source: CEIC database.

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higher than the 2015 realisation, and the mid-year revision assumed revenues only about 2% lower than initially expected. Based on first-semester collections, which were down about 5% year-on-year, the government cut expenditure by less than 1% as part of the official budget revision in June. It subsequently decided to further revise down spending in August, with an additional reduction of 6.5%.

Budgets need to adopt more realistic projections so as to significantly reduce foreseeable shortfalls. Adjusting expenditures and financing late in the year should be avoided. Otherwise, Indonesia is at risk of harming its fiscal credibility, unexpectedly postponing projects involving third parties (which may entail heavy compensation) and borrowing at unfavourable interest rates. Indeed, approaching the end of 2015, the government dipped into its reserve fund (unspent revenues accumulated from previous years) and also issued IDR 25 trillion (almost USD 2 billion) in debt with yields exceeding market levels. Annual budgeting should be more closely linked to an explicit medium-term fiscal plan, and consideration should be given to establishing an independent fiscal authority to ensure unbiased projections.

Revenues need to increase

As discussed in the previous *Survey*, tax revenue is low in Indonesia, at only 10.7% of GDP in 2015 – down from 11.4% in 2012. In order for the government to play a greater role in the provision of public services – including by strengthening the social safety net, improving the skills of the citizenry and enhancing public infrastructure – it needs to raise more revenue. Greater non-tax revenues are available from, for example, marine sources and, if public enterprise efficiency can be boosted, from dividends. As to taxes, Indonesia should review its corporate income tax (CIT) system in general, and the CIT holidays for specific sectors and investment projects in particular (OECD, 2012a). The government should also consider expanding immovable property taxes (IMF, 2016). Also, as discussed in previous *Surveys*, the value-added tax (VAT) could raise significantly more revenue if the framework were simplified, including reducing exemptions (OECD, 2012a). As discussed in Chapter 1, sub-national governments rely heavily on central government transfers to fund their mandated activities. They should be given the legal wherewithal to fully exploit their revenue potential, provided that they can improve their fiscal management and budgeting through greater technical assistance from central government. This would both lighten the fiscal burden on the central government, while also increasing autonomy and accountability at the local level.

Tax evasion is high and voluntary compliance low (OECD, 2015b). Only 27 million taxpayers were registered in 2014, out of a population of 260 million, and only 900 000 of those paid what they owed. Past efforts have resulted in improvements: there were only 10 million taxpayers in 2008. The authorities should continue strengthening tax administration and improving tax collection and enforcement. Digitalisation, cross-checking sources of information for tax audits and allocating greater resources to the Directorate General of Taxes should all be stepped up. The ongoing expansion of electronic invoicing for the VAT is a positive development, but easier access to personal financial data by authorities would also be useful. The 2013 measure to allow SMEs (with turnover below IDR 4.8 billion or USD 360 000) a special low turnover tax rate of 1% in order to formalise has been quite successful. The current tax amnesty programme (see below), makes provision for SMEs to regularise their tax arrangements, which should also help draw them into the formal sector. Making personal social security contributions and disbursements through the income tax system would also encourage participation in the tax system more generally.

The government is undertaking a tax amnesty to bolster incentives for wealthy taxpayers to repatriate overseas assets. Concessional tax rates are applied, including lower rates for repatriated assets. The government expects immediate benefits of repatriation in addition to tax revenues, including underpinning the external balance, supporting government bond issuance (accredited banks will invest repatriated funds in government bonds, including specific infrastructure bonds) and boosting liquidity and private investment in a period of relatively slow GDP growth. Expectations of tax revenues from the amnesty vary enormously. The first phase expired in September 2016 and there are to be two subsequent phases with higher penalties applying. As at end-September, over 400 000 Indonesians had declared assets to the value of IDR 3 500 trillion (USD 280 billion). To date, the programme has generated IDR 90 trillion in revenue, 50% of the government target of IDR 165 trillion. Indonesia previously implemented amnesties in 1984 and 2008. Experiences of repeated tax amnesties in OECD countries have been characterised by only temporarily increased tax revenues and encouragement of future evasion. That said, with the OECD's Automatic Exchange of Information (AEOI) regime due to come into force in the next two years, the timing of the amnesty is good, as it provides taxpayers with an opportunity to regularise past non-compliance prior to the entry into force of AEOI standard (OECD, 2015e). However, authorities must communicate clearly that this offer will not be repeated and that henceforth the AEOI will be used to locate undeclared assets and that full penalties will apply.

Equality and inclusiveness

As noted in the previous *Survey*, over recent decades Indonesia has made impressive inroads into poverty, aided by strong per capita income growth and targeted poverty-reduction programmes. It has been largely successful in achieving its Millennium Development Goal (MDG) targets of reducing poverty, increasing access to primary education and reducing the prevalence of certain diseases. However, income inequality is high and rising, and outcomes for remote indigenous populations continue to lag. The current mix of social programmes, including cash transfers conditioned on school attendance and a subsidised rice programme, are not well targeted, although greater use of the single registry of vulnerable households should help to address this. Investment in social infrastructure is also lagging. While PISA outcomes are in line with Indonesia's current stage of development, the education system still suffers from serious quality and access problems.

Gender equality in Indonesia has improved significantly over the last two decades. Female life expectancy, at 73, is now higher than the global average of 71. Innovative microcredit schemes are assisting more women in becoming entrepreneurs. Female participation in education has also improved greatly at all levels. Nonetheless, there are areas for improvement. Labour market participation by women, at around 51%, is relatively low, and maternal mortality remains high.

The regional aspect of equality and inclusiveness is important in a large and diverse country like Indonesia, most especially since decentralisation has put more and more responsibilities for the delivery of social services into the hands of sub-national governments (see below). The successful achievement of Indonesia's Sustainable Development Goals (SDGs) will need to involve all levels of government.

Advancing industrialisation by getting the fundamentals right

Indonesia has a long history of policies designed to bring about structural change to diversify the economy, mainly so as to lessen the reliance on commodities and promote local value added by shifting activity towards manufacturing, and promoting exports and import substitution. At the same time policies have sought to bolster the agricultural sector by increasing productivity and protecting it from competition. This has often been implemented in the name of food security (see below). However, factors such as endemic corruption, skills shortages, excessive bureaucratic regulation, and poor infrastructure have held back structural transformation.

The previous *Survey* discussed in detail the policies required to promote inclusive and sustainable structural change, including the critical importance of putting the fundamental framework conditions in place. Being more open to foreign trade and investment would allow greater engagement in global value chains (GVCs), thereby creating high-skill, well-paid employment and facilitating technology transfer.

The ASEAN Economic Community and other international economic agreements

On 31 December 2015 the ASEAN Economic Community (AEC) came into effect. The AEC aims for economic integration among the 10 Southeast Asian member countries, including the launch of a single market, the tariff-free flow of goods, services and investment, and lower restrictions on the flow of capital. The agreement has a strong focus on promoting small and medium-sized enterprises (SMEs), which will boost inclusive growth, and skilled labour in eight occupational areas will be free to move between countries. While it is estimated that there are almost no explicit tariffs on goods and services traded among the ASEAN-6 (Brunei, Indonesia, Malaysia, Philippines, Singapore and Thailand), much progress is required on lowering non-tariff barriers operating across the AEC countries (Ernst & Young, 2015).

In October 2015, President Widodo announced his intention to push for Indonesia to sign up to the Trans-Pacific Partnership (TPP), an agreement among 12 Pacific Rim countries (Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, United States and Viet Nam), which together constitute around 40% of global GDP and 800 million consumers. The TPP's goals are to "promote economic growth; support the creation and retention of jobs; enhance innovation, productivity and competitiveness; raise living standards; reduce poverty; and promote transparency, good governance, and enhanced labour and environmental protections." The TPP includes strong support for SMEs, a recent focus of Indonesian reforms. SMEs stand to gain the most by cutting through shipping and other bureaucratic "red tape." For example, it provides for more efficient and transparent customs procedures, advance rulings on how products will be treated to prevent surprises at the border, expedited shipping, and reduced paperwork. This is especially important for SMEs, which typically do not have the resources that larger companies have to navigate through complicated and restrictive trade bureaucracy.

Indonesia already has free trade agreements (FTAs) with seven of the 12 TPP countries, but not with either the United States or Canada. With regional competitors like Malaysia and Viet Nam having signed up, Indonesia may miss out on market access for its exports and as a consequence may not be as attractive to foreign investors (Cheong, 2013). Signing up to the TPP will require considerable political will, especially in overcoming resistance to the TPP investment chapter (which includes an investor-state dispute settlement mechanism) and restrictions on the role of state-owned enterprises (SOEs), which are important in Indonesia.

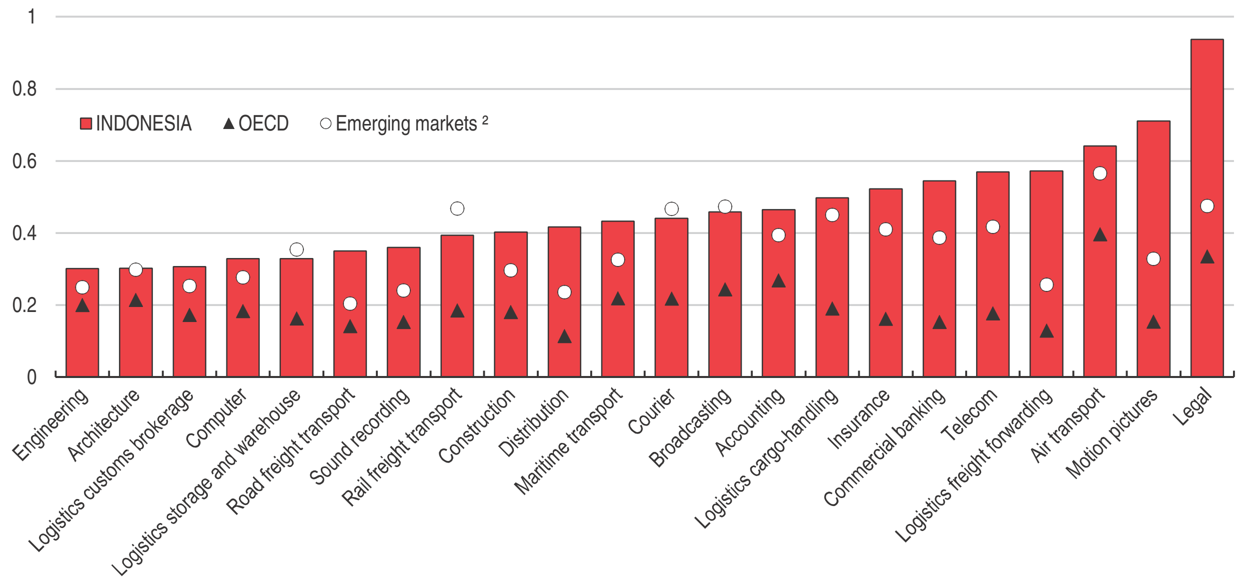
The European Union is the second largest investor in the Indonesian economy and fourth largest trading partner, representing almost 10% of its total external trade. The Indonesia-European Union comprehensive economic partnership agreement (IE-CEPA) has faced significant delays, but renewed political will means that it is now expected to be concluded by 2019. Indonesia and the European Union have signed but not yet ratified the Forest Law Enforcement Governance and Trade (FLEGT), which will help Indonesia obtain a license to export legally sourced timber and other forest products to Europe. In March 2016, Australia and Indonesia restarted negotiations of the Indonesia-Australia Comprehensive Economic Partnership Agreement (IA-CEPA), which covers trade, investment and economic cooperation.

Indonesia's broader engagement in international trade, more intensive participation in GVCs and fuller exploitation of its comparative advantages, including in service exports, are also being held back by regulatory impediments (Figure 11). Indeed, its reliance on imports of certain basic services, such as international freight transport and logistics, could be lessened if domestic competition were stimulated in these sectors. The successful implementation of the reform packages recently announced by the government will help in this regard (see below).

Competitiveness and the business climate

One of the keys to economic development through structural change is the promotion of a competitive, innovative and dynamic private business sector. The challenges facing Indonesia are illustrated by global competitiveness rankings (Figure 12): labour market efficiency, primary education outcomes, technological readiness, and infrastructure. The government is making progress in some of these domains, like the provision of infrastructure, while in others, such as labour market regulation, a lot remains to be done. The sub-national aspect is also important, not least in a decentralised country like Indonesia, where much of the regulatory oversight of corporate activity has been devolved to sub-national jurisdictions (Chapter 1).

Figure 11. **Indonesia's services trade restrictiveness, 2015**[1]



1. The Services Trade Restrictiveness Index (STRI) components take values between zero and one, one being the most restrictive. The STRI database records measures on a most-favoured-nation basis; preferential trade agreements are not taken into account. The database has been verified and peer-reviewed by OECD members.
2. Emerging markets are an average of Brazil, China, Colombia, India, Indonesia, Russia and South Africa.

Source: OECD Services Trade Restrictiveness Index database.

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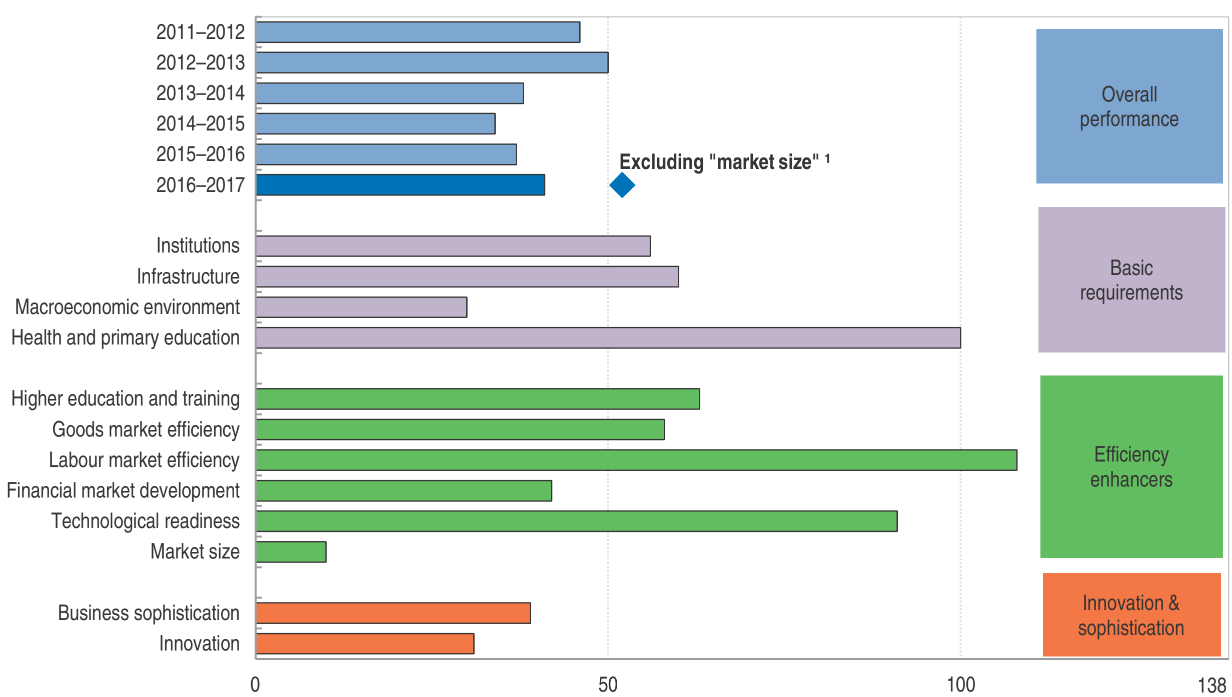
Figure 12. **Indonesia's global competitiveness rankings, aggregate and subcomponents, 2016**



1. Recalculated ranking for Indonesia when excluding "market size" subcomponent.

Source: World Economic Forum, *Global Competitiveness Report 2016-2017.*

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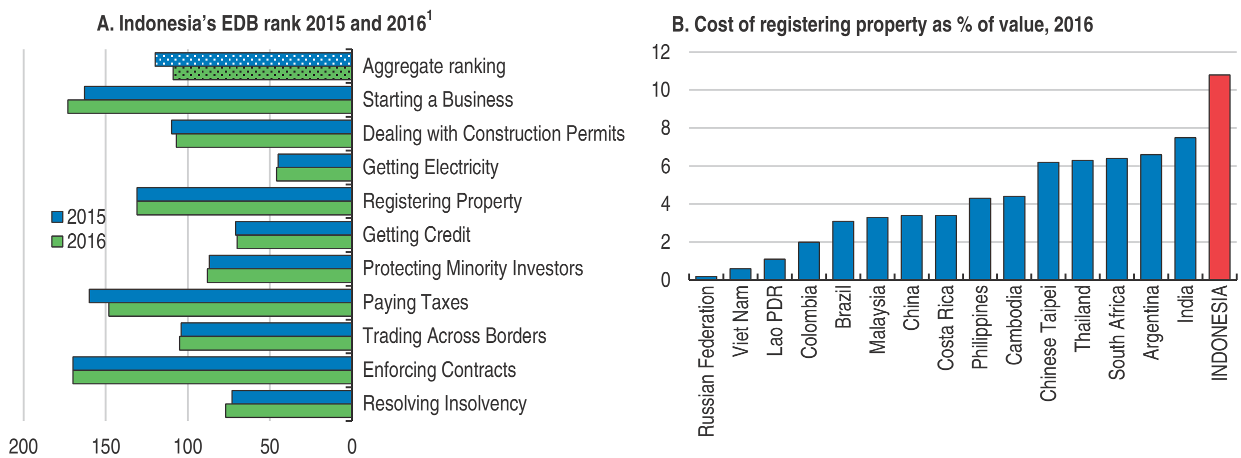
The government has put heavy emphasis on improving the business climate. The series of reform packages released beginning in September 2015 bear witness to the government's determination to improve conditions for businesses – both domestic and foreign – particularly with regard to promoting investment (Table 4). However, some proposed changes still require further implementing regulations. The government has also acknowledged that a significant part of the problem resides at the sub-national level – and, indeed, in July 2016 3 000 sub-national government regulations that were inconsistent with national legislation were scrapped. The President has set a target to elevate Indonesia to at least 40th place among 189 economies in the World Bank's Doing Business report.

Some progress has been made. In the Doing Business rankings Indonesia moved from 120th to 109th between 2015 and 2016. However, the bulk of this improvement came from changes to corporate tax rules, a subcategory in which Indonesia still ranks just 148th (Figure 13, Panel A). For example, the number of tax payments a firm is required to make in

Table 4. **Economic reform packages, September 2015 to August 2016**

Number	Date	Package details
1.	11 September 2015	• Improve investment climate by cutting bureaucracy and more one-stop shops. • Accelerate national priority projects. • Deregulate housing and property investment.
2.	29 September 2015	• Rationalise permit and license services in special economic zones. • Fast process for tax allowance and tax holiday (25 days). • Expedite forestry licenses processing. • Income tax cut for interest paid on savings deposits of exporters.
3.	7 October 2015	• Electricity price cut for industries and labour-intensive industries to defer payment. • Increase coverage of micro and small businesses to financing (KUR) • Simplify land permits for investments
4.	10 October 2015	• Clear and transparent formula for wage increases. • Lower interest rate and increase coverage of micro and small businesses financing.
5.	22 October 2015	• Tax incentives through asset revaluation. • Eliminate double taxation on real estate, property and infrastructure. • Simplify regulation in Islamic banking.
6.	5 November 2015	• Tax incentives in special economic zones including tax holidays, tax allowances and allowing property ownership by foreigners. • Simplify permit and license process for import of raw materials for the production of pharmaceuticals.
7.	4 December 2015	• Income tax rate cut for labour-intensive industries for two years, minimum 5 000 employees and 50% of output exported. • Accelerate land certification process for street vendors and small and medium businesses (free of charge for those having CCT card KKS).
8.	21 December 2015	• One Map policy to harmonise land utilisation. • Incentives for aviation industries. • Incentives for investing in oil refineries.
9.	27 January 2016	• Single billing system for port services conducted by SOEs. • Integrate National Single Window system national port IT system. • Mandatory use of Indonesian rupiah transportation-related payments. • Remove difference in prices for public and private postal services.
10.	11 February 2016	• Remove foreign ownership cap on 35 business sectors. • Protect small & medium enterprises as well as cooperatives.
11.	29 March 2016	• Lower tax rate on property acquired by local real estate investment trusts. • Harmonise customs checks at ports (to curtail dwell time). • Subsidised loans for export-oriented small & medium enterprises. • Roadmap for the pharmaceutical industry.
12.	28 April 2016	• Reduce time to register a business and to acquire a construction permit, register a property, and lower frequency of paying taxes. • Make taxes payable online.
13	26 August 2016	• Reduce red tape in the construction of housing for the poor.

Figure 13. **Ease of Doing Business subcomponents and the cost of registering a property**



1. Rankings of the subcomponents of Indonesia's Ease of Doing Business (EDB) index.
Source: World Bank, Doing Business.

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a year fell from 64 in 2015 to 54 in 2016, but Indonesia still ranks 180th in this subcategory. This contrasts with six tax payments per year in Singapore, 13 in Malaysia, and 22 in Thailand. In its 12th reform package the government stated its intention to reduce tax payments per year to just 10.

The cost to a business of registering a property, at over 10% of the value of the property, is well above that of comparator countries (Figure 12, Panel B). Likewise, despite efforts to set up one-stop shops in all regencies/cities (the second tier of sub-national government), starting a business is still relatively arduous, with the time to register a business still long (ranking 173th; Table 5) at around 47 days on average and a very high minimum paid-in capital requirement. Reforms in the April 2016 reform package aim to cut the time and cost of business registration and reduce the cost and number of procedures required to register a property.

Table 5. **Ease of Doing Business rank and subcomponents for selected countries, 2016**

	Malaysia	Thailand	China[1]	Viet Nam	Philippines	INDONESIA[1]	India[1]
Aggregate Rank	**18**	**49**	**84**	**90**	**103**	**109**	**130**
Starting a Business	14	96	136	119	165	173	155
Construction Permits	15	39	176	12	99	107	183
Getting Electricity	13	11	92	108	19	46	70
Registering Property	38	57	43	58	112	131	138
Getting Credit	28	97	79	28	109	70	42
Protecting Minority Investors	4	36	134	122	155	88	8
Paying Taxes	31	70	132	168	126	148	157
Trading Across Borders	49	56	96	99	95	105	133
Enforcing Contracts	44	57	7	74	140	170	178
Resolving Insolvency	45	49	55	123	53	77	136

1. The rankings of economies with populations over 100 million as of 2013 (Bangladesh, Brazil, China, India, Indonesia, Japan, Mexico, Nigeria, Pakistan, the Russian Federation and the United States) are based on data for only two cities.
Source: World Bank, Doing Business.

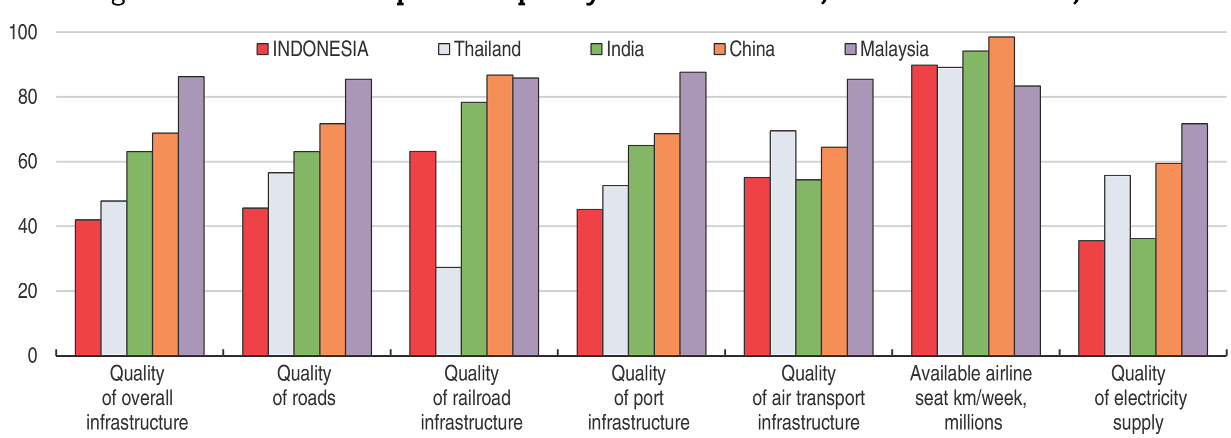
In many of these regulatory areas regional governments have principle administrative responsibility. If Indonesia is to make significant progress in improving the business climate, sub-national governments need to streamline and harmonise bureaucracy. As noted in Chapter 1, there is enormous regional variation in these regulations, with some matching international best practice and others that should be encouraged to emulate the leaders. To this end, the central government should offer greater incentives for sub-national governments to put in place policies that promote business development. For example, it could offer a greater share of corporate or payroll tax revenues or enforce greater regulatory harmonisation.

Further progress could be made putting in place policies that: i) reduce transaction taxes and the tax on the acquisition of land and buildings by imposing a ceiling or replacing them with fixed fees; ii) improve coordination among government agencies, so that businesses are not obliged to notify each agency of having completed administrative tasks in another; iii) step up monitoring of the implementation of national regulations across the country; iv) speed up procedures at the land registry office; and (v) make the business registry electronic. Most OECD countries have electronic business registries, and a significant number offer online registration (World Bank, 2016).

Infrastructure

A lack of infrastructure, especially in transportation, logistics and water treatment is hampering Indonesia's economic, business and social development. The World Economic Forum Global Competitiveness Report (2016-17) ranked Indonesia 60th out of 138 economies with regard to its infrastructure. Poor infrastructure inhibits Indonesia's international trade, competitiveness and foreign investment. Internal trade is also suffering. According to data published by the Indonesian Chamber of Commerce and Industry (KADIN), a typical Indonesian company devotes around 17% of its total expenditure to logistics, in contrast with around 10% in other economies in the region. Despite Indonesia's archipelagic geography, sea transport remains poorly developed (Figure 14). Weak transport infrastructure contributes to large disparities in prices across the country. For example, President Widodo himself recently noted that gasoline sold for around IDR 7 000 per litre in Jakarta, but as much as IDR 60 000 per litre in Wamena, Papua

Figure 14. **Index of comparative quality of infrastructure, selected countries, 2016**



Source: World Economic Forum, *Global Competitiveness Report 2016-17*.

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and that a sack of cement priced at IDR 60 000 in Jakarta could cost as much as IDR 2.5 million in the Papua highlands.

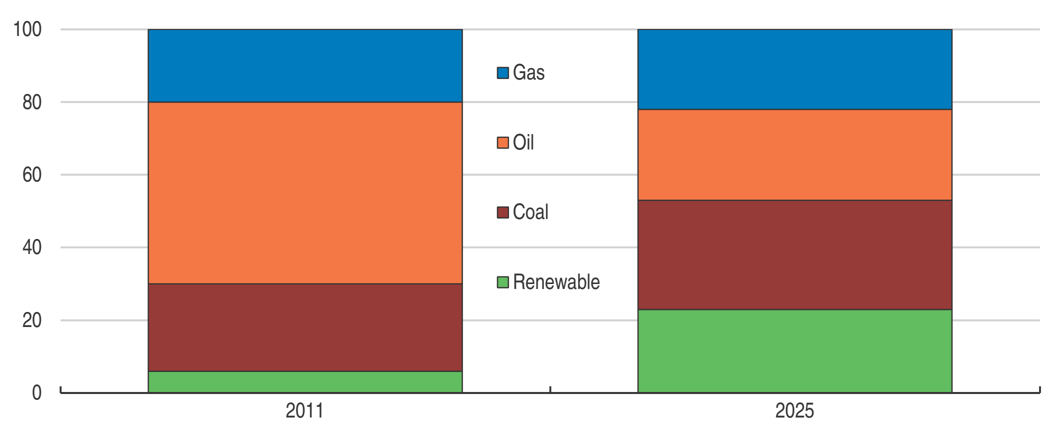
The quality and supply of electricity is also variable, with some areas plagued by blackouts. The state-owned electricity company, Perusahaan Listrik Negara (PLN), is a monopoly and is heavily dependent on government subsidies to bridge the gap between the cost of production and the administratively fixed selling price. It has had few financial resources for large-scale investments, and demand has therefore outstripped supply. The government plans to boost generation capacity by around 35 GW by 2020, while also almost eliminating the use of expensive fuel oil and increasing the use of coal and renewables, for which a variety of local community-based initiatives are underway (Figure 15). Coal-fired power plants will make the most significant contribution to the planned increase in supply. However, the expansion of coal-fired generation due to its relative abundance and low cost may undermine key environmental policy objectives (see below).

As discussed in the previous *Survey*, land disputes have stalled infrastructure projects for years or caused them to be cancelled altogether. But there have recently been steps to improve the land acquisition process. In 2012 a new Land Acquisition Law was promulgated to speed it up. However, infrastructure provision failed to improve owing to a lack of coordination and conflicting interests between central and local governments. In 2015, the President issued a decree to amend the 2012 law, allowing private actors to finance land procurement, thus opening up previously closed off financing channels. Also in 2015, a land bank was established, jointly managed by the finance, public works and transportation ministries, which facilitates government purchases of land required for infrastructure development.

No matter the sector it is crucial to ensure that infrastructure maintenance be scheduled and adequately financed, as this is often the cheapest means to ensure its quality and availability. For instance, as described in Chapter 1, in many provinces, more than half of all roads are classified as in disrepair. Furthermore, at least for new infrastructure, user charging is called for, not only to help in the financing of provision, but also to efficiently gauge when expanding capacity is appropriate. In addition, besides an

Figure 15. **Indonesia's energy mix**

% of total[1]



1. Indonesian authorities do not consider biomass as a renewable energy. This explains the difference with Figure 24 (Panel B).

Source: Ministry of Energy and Mineral Resources.

StatLink http://dx.doi.org/10.1787/888933420695

effective project selection process, including conformity with overall national priorities, the authorities need to ensure efficient implementation. Finally, despite longstanding government efforts to promote public-private partnerships (PPPs) to leverage up the impact of public spending, they have failed to take off in Indonesia. Projects are by nature risky and complex (requiring in-depth knowledge on the part of the government negotiators), and the returns are spread out over a long horizon. While minimum revenue guarantees can help get private firms involved, the government should take care not to assume all project risks itself. The OECD principles for the Public Governance of Public-Private Partnerships offer guidelines for the management of PPPs (OECD, 2012d).

Foreign direct investment and the Negative Investment List

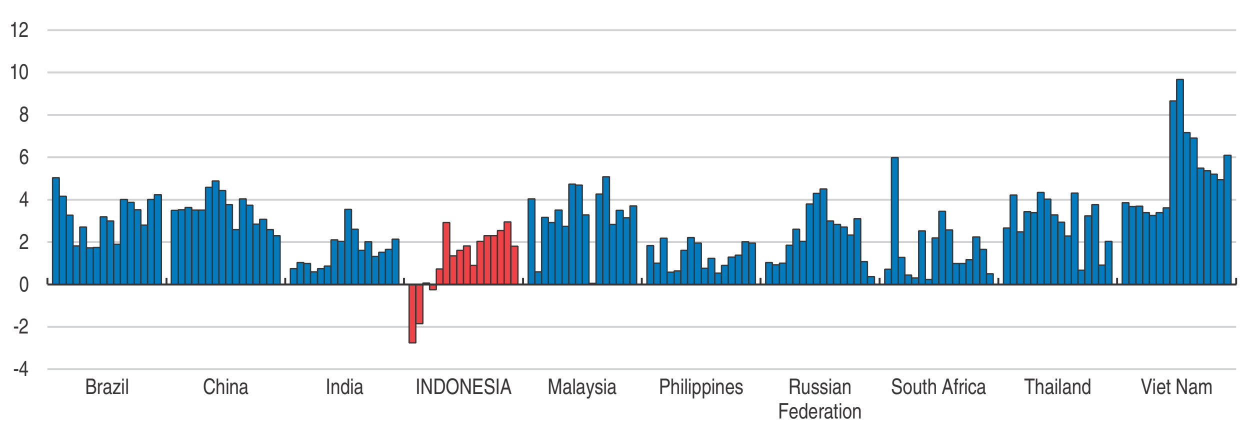
Indonesia's large domestic market, growth prospects, natural resource endowment and abundance of low-cost labour makes it a potentially attractive foreign direct investment (FDI) destination (Hornberger, 2011). Despite difficult international conditions, FDI inflows have picked up substantially over the past few years but remain lower than in some other countries (Figure 16).

The poor business environment is the key factor holding back FDI. Excessive and overlapping regulation, including across the different levels of government, have made establishing and conducting business difficult for both foreign and Indonesian entrepreneurs. Long-standing explicit limitations or outright bans on foreign participation in certain sectors have obviously limited activity. Seen from a broad perspective, Indonesia has significantly liberalised restrictions on inward investment over time, albeit at a slower pace more recently (OECD, 2010). Yet, there remains significant variation in terms of statutory restrictions on FDI in comparison with regional peers and other OECD countries (Figure 17). According to the OECD FDI Regulatory Restrictiveness Index, manufacturing has been widely liberalised, but many primary and service sectors remain partly off-limits to foreign investors, holding back potential economy-wide productivity gains.

Recently, things have been moving in the right direction with a May 2016 revision to the Negative Investment List that removed 35 sectors which are now fully open to foreign ownership, bringing Indonesia's FDI regime closer to international and regional levels of

Figure 16. **FDI net inflows in selected countries, 2000-15**

% of GDP



Source: International Monetary Fund, International Financial Statistics and Balance of Payments databases; World Bank, International Debt Statistics; OECD estimates.

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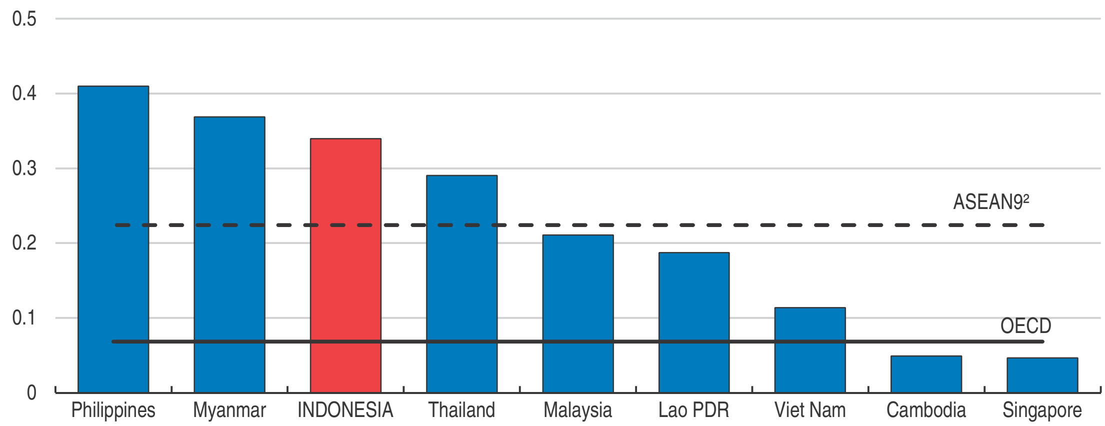
Figure 17. **FDI restrictiveness for selected countries, 2015**

FDI Regulatory Restrictiveness Index (Open = 0; Closed = 1)[1]



1. The OECD FDI Regulatory Restrictiveness Index covers only statutory measures discriminating against foreign investors (e.g. foreign equity limits, screening & approval procedures, restrictions on key foreign personnel, and other operational measures). Other important aspects of an investment climate (e.g. the implementation of regulations and state monopolies) are not considered. Data reflect regulatory restrictions as of December 2015. Data for Cambodia, Lao PDR, Singapore, Thailand and Viet Nam are preliminary.
2. ASEAN 9 is Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Viet Nam.

Source: OECD FDI Regulatory Restrictiveness Index database.

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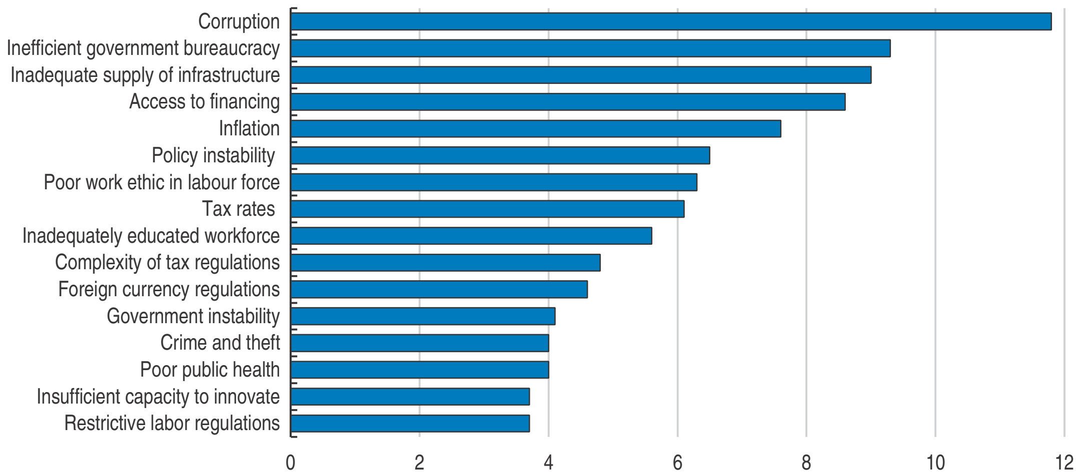
openness. Importantly, it also signals a more positive attitude towards foreign investment, notably with the lifting or easing of foreign equity restrictions in key sectors. For example, foreigners are now allowed to fully own geothermal power plants of more than 10 megawatts through PPPs and to hold 49% of smaller power plants. Foreigners will also be allowed to fully own e-commerce businesses, but the cap on foreign investment in the retail sector remains. This comes at a critical moment as the previous negative list, issued in 2014, had adopted a more heterogeneous stance towards foreign investment by the government. However, despite some liberalisation, the 2014 list reversed some of the opening trend that had been observed in previous periods and notably made foreign investment in some key sectors, such as mining, more restrictive. In turn, these divestment rules have discouraged foreign investment in large, long-term, capital-intensive projects (Annex A.2), while seemingly arbitrary government decisions at the regional level (such as the case of Churchill Mining in East Kalimantan) have also discouraged foreign investors. Unfortunately, in the May 2016 revision, 20 additional sectors were added to the list, notably including formal education and certain activities in the construction industry. A much better approach would be to abolish the Negative Investment List except for sectors deemed essential to national security.

Corruption and governance

Corruption also remains a real barrier to foreign investment, especially as other governments are cracking down on bribery in overseas jurisdictions, as per the OECD Anti-Bribery Convention. While Indonesia has made headway in tackling corruption in recent years, it remains the most significant barrier to doing business in Indonesia according to the Global Competiveness Report 2016-17 (Figure 18). Furthermore, according to Transparency International's Corruption Perception Survey, Indonesia ranked 88th out of 168 countries in 2015, improving only slightly from 2014. Statistics Indonesia compiles a

Figure 18. **The most problematic factors in doing business in Indonesia, 2016**[1]



1. Surveyed firms were asked to select the five most problematic factors for doing business in their country and to rank them between 1 (most problematic) and 5. The score corresponds to the responses weighted according to their rankings.

Source: World Economic Forum, *Global Competitiveness Report 2016-17*.

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survey-based corruption index, which shows that perceptions of corruption have increased in recent years, but experience of corruption has fallen somewhat.

As noted in the previous *Survey*, the work of the Corruption Eradication Commission (KPK) has had a great deal of success in combating corruption and raising awareness of its scale and pernicious nature. The KPK is limited to only investigating corruption implicating public officials and cases involving greater than IDR 1 billion (USD 76 000). The KPK remit should be extended to include the private sector, and it should be given the resources needed to do so. In recent years the integrity of the KPK has come under attack. For instance, in 2015, the institution was paralysed after its deputy chairman and two commissioners were arrested. In addition to increasing its resources, the government needs to vigorously defend the KPK. In particular, moves to scrap the KPK's surveillance powers should be strongly opposed, and the government should veto the proposal to give a parliamentary body the power to terminate KPK investigations.

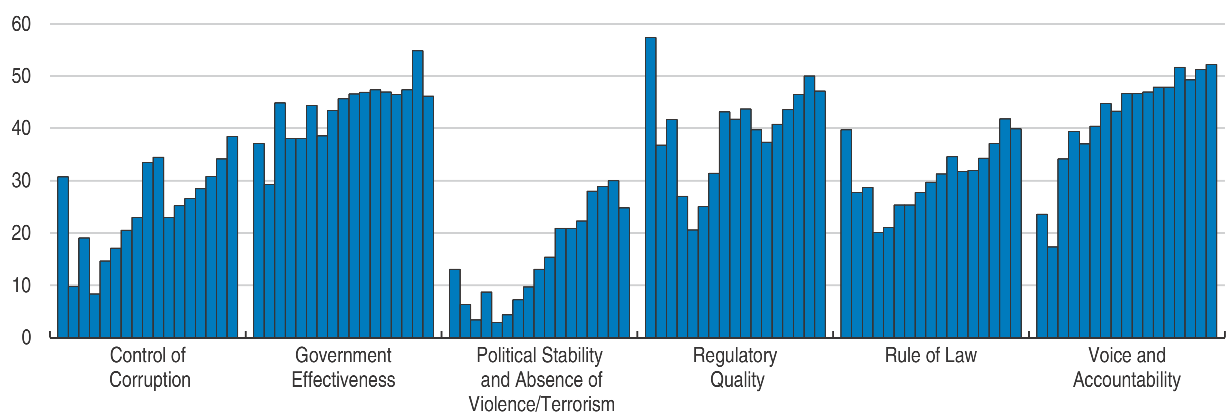
As described in Chapter 1of this *Survey*, corruption is a major issue in the regions, where understanding of what is involved is often poor. The issue has become more urgent as sub-national jurisdictions have proliferated and administrative responsibilities have been devolved. Given often weak legal and administrative capacity at the sub-national level, greater top-down monitoring has been found to be the most effective means of reducing corruption in Indonesia's regions (Olken, 2007). Taking further steps towards eradicating corruption would also help to improve tax collection, not just at the sub-national levels but also nationally. Indeed, perceptions of a high level of bribery have been found to contribute to lower tax compliance (Rosid et al., 2016). Survey data also suggest that taxpayer underreporting is more sensitive to variation in high-level corruption than to petty official misconduct.

In the medium term, however, the solution to corruption will require improving the administrative capacity of sub-national governments. The KPK should focus greater attention on corruption in the regions, including through workshops and training to assist sub-national governments to identify and address corruption. Public governance is a major issue in Indonesia, with inefficient bureaucracy ranking as second in the Global Competitiveness Report survey of impediments to doing business (Figure 17). While on many measures Indonesia has recorded notable improvements (Figure 19), in numerous aspects there is still a long way to go. The OECD's Open Government Review of Indonesia (OECD, 2016a) makes a number of recommendations aimed at improving governance by means of greater transparency and inclusiveness, including measures to address the complexities of Indonesia's decentralised governmental structure. Likewise, the OECD Review of Regulatory Reform for Indonesia (OECD, 2012c) identifies policies to promote institutional development and improve regulatory management. This includes better coordination of regulatory management practices and establishing clearer policy frameworks and institutional responsiveness, including at the sub-national level.

The capacity of sub-national governments to deliver high-quality public services is often lacking, and so are the frameworks that monitor the proper and efficient use of public resources. This has not been helped by the decision when setting up the decentralised structures to by-pass the provincial governments, which had previously borne most of the regional administrative and services delivery responsibilities and therefore had the greatest technical capacity. Smaller jurisdictional units suffer from a lack of economies of scale. Moreover, jurisdictions often remain ill-defined or overlap, and local legislation and regulations are frequently at odds with national policies. The continuing subdivision of political and administrative units, which has been termed "blossoming", is exacerbating the situation. Between 1999 and 2015 the number of provinces increased by over 30%, the number of regencies/cities by 55%, districts by 77% and villages by 20% (see Chapter 1).

Figure 19. **Indonesia's progress in public governance, 1996-2015**

Percentile rank among all countries ranging from 0 (lowest) to 100 (highest).



Source: World Bank Worldwide Governance Indicators (WGI).

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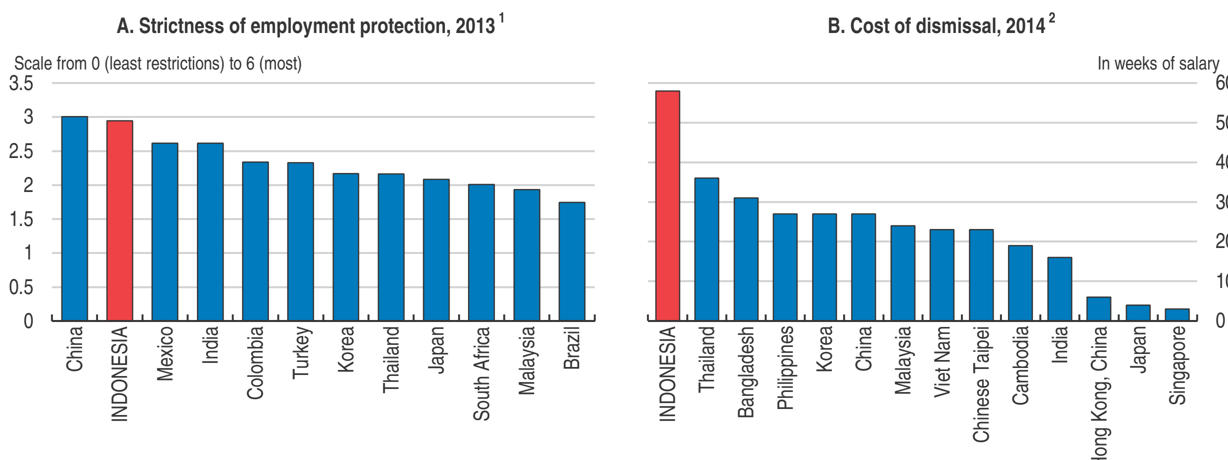
The labour market and informality

One of the factors holding back the competitiveness of the Indonesian economy is an inefficient labour market, as discussed in the previous *Survey*. Recent reforms to the minimum-wage-setting framework are welcome. Minimum wage increases will henceforth be limited to real GDP growth plus the rate of inflation, whereas previously they had been set by regional governments largely without regard to local labour market conditions (Chapter 1). Using this formula, GDP growth in Q2 2015 of 4.7% and September 2015 inflation at 6.8% resulted in a minimum wage increase of 11.5% across all provinces in 2016, well below the rises accorded in previous years.

However, one problem with this arrangement is that GDP may grow for reasons other than average productivity growth, for instance due to demographics or increases in the participation rate: there is no justification for wage increases for these reasons. In any case introducing a sub-minimum wage for youth would be useful.

The restrictiveness of hiring and dismissal rules in Indonesia far outstrips those of almost every other country in the world (Figure 20, Panel A). For instance, to dismiss a worker with one year's seniority, the mandated redundancy payment is 58 weeks of pay (Panel B). Putting in place a comprehensive unemployment insurance scheme, as was done in Chile in 2002 and in Korea in 2005, would obviate the need for these large severance payments (Holzmann et al., 2011). More broadly, besides high minimum wages, labour restrictions protect insiders and encourage enterprises to operate informally. Indeed, some 60% of the nation's labour force works in the informal sector and thus suffer from minimal employment security, volatile incomes, very limited workplace health and safety regulation and an absence of pensions. Provisions have recently been made to extend social security systems to the informal sector, but uptake has been limited.

Figure 20. **Labour market rigidities in selected countries**



1. The indicator of employment protection legislation (EPL) measures the procedures and costs involved in dismissing individuals or groups of workers and the procedures involved in hiring workers on fixed-term contracts.
2. The cost of dismissing a worker after one year of employment, in weeks of salary.

Source: World Economic Forum; OECD Employment Protection Database.

StatLink http://dx.doi.org/10.1787/888933420742

Improving worker skills

Access to compulsory education in Indonesia has improved greatly over recent years (MOEC, 2013), and, as noted in the previous *Survey*, the academic performance of 15 year-olds is in line with Indonesia's level of development. However, less than a third of adults aged between 25 and 60 have an upper secondary education (OECD and ADB, 2015). Likewise, the skills of workers, as measured by the 2015 OECD Survey of Adult Skills (conducted only in Jakarta) (OECD, 2016b), are weak, with low levels of proficiency in literacy and numeracy. The dispersion of proficiency scores across adults is also wider than in most other participating countries. The widest skill gaps across professional profiles are for English and computer skills followed by thinking and behavioural skills (di Gropello et al., 2011).

Skills mismatch is also a problem in Indonesia, with firms reporting difficulties finding skilled workers despite high unemployment among those with a tertiary education. In 2010, about 55% of tertiary graduates were "over-qualified" in their employment, the highest mismatch in South-East Asia (World Bank, 2010). Improving the skills of the workforce, particularly by improving the quality of schooling and access to adult education, is essential. Only around 5% of all firms in Indonesia offer formal training to their workers, considerably lower than in many other comparable countries (OECD, 2015a). Moreover, the dual nature of the labour market makes it unlikely that training will be offered to a large swath of the labour force working in the informal sector.

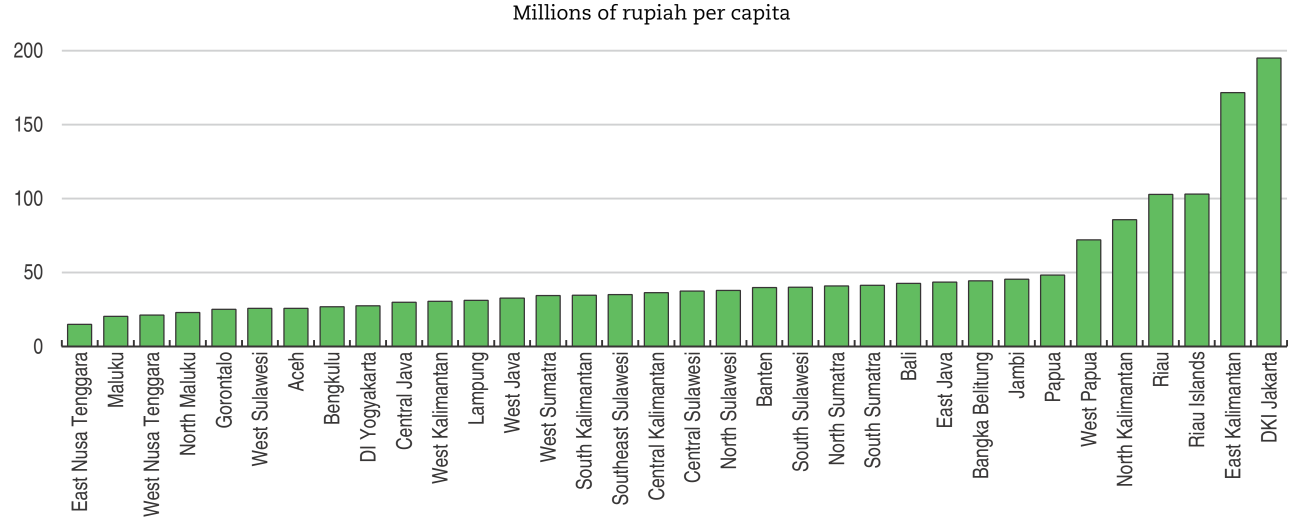
Promoting regional development

In large part for political reasons the "big bang" decentralisations in 2001 and 2005 in Indonesia devolved substantial funds and authority to local governments, including responsibility for the administration and delivery of many public services and also the regulation of business and natural resources. The rationale for government decentralisation is better accountability and service delivery through increased responsiveness to local needs (Faguet, 2014), often called "subsidiarity". Moreover, decentralisation can improve performance by promoting competition between regions in the efficient provision of services and attracting businesses – regions can draw lessons from each other and benefit from best practices (OECD, 2013). That said, care should be taken to avoid situations where inter-regional competition spurred by decentralisation leads to a race to the bottom in areas like fees and charges, and subsidies aimed at attracting business investment.

However, regional autonomy has not delivered the improvements that had been hoped for (Resosudarmo et al., 2014; Buehler, 2010; Moeliono et al., 2009; World Bank, 2009). The heterogeneity in economic and social outcomes remains large (Figure 21). This

Figure 21. **Per capita GDP across Indonesia's provinces, 2015**

Millions of rupiah per capita



Source: Statistics Indonesia.

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is despite a steady increase in transfers from central to sub-national governments, which now make up about half of the central government budget (net of subsidies and interest payments; about 6% of GDP).

Indonesia has set up special economic zones (SEZs) with a view to promoting investment in the regions. There are currently nine SEZs, and the government intends to set up 17 more by 2019. Free trade zones (FTZs) have been another strategy for promoting regional economic development. Only one FTZ was ever set up in Indonesia: the Batam, Bintan and Karimun Free Trade Zone (BBK FTZ), located on the Riau Islands close to Singapore. To date these zones have failed to attract significant investment or generate significant employment, due to their isolated locations, a shortage of infrastructure and lack of jurisdictional clarity. The government should experiment with different incentives in SEZs, including more flexible labour regulation, to extend proven good practices to the whole economy.

Better targeting fiscal transfers and improving regional revenue raising

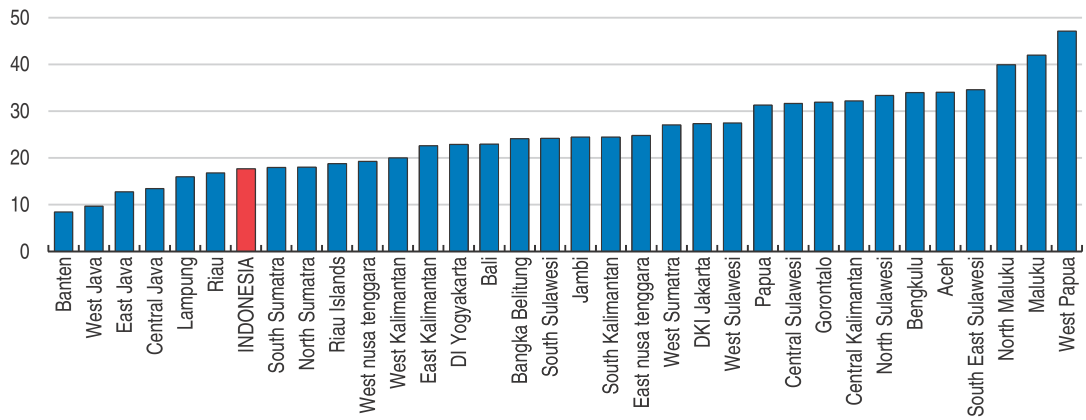
Sub-national governments in Indonesia have very limited revenue-raising capacity, and the majority of their funding comes from central government transfers. In 2015 89% of all government revenue was collected by the central administration, while it handled only 47% of expenditure. Transfers from the central government are allocated directly to three sub-national levels of government: namely the provinces, the regencies/cities and villages. Districts are funded and administered by the regencies/cities. In broad terms there are three categories of transfers: i) equalisation funds; ii) deconcentration funds (to finance central government offices or agencies in the regions that deliver services directly); and iii) village funds. Equalisation funds are the largest and have been broken down into a number of subcategories including a General Allocation Fund (DAU) and a Special Allocation Fund (DAK). The DAU is by far the largest source of revenue for regional governments, with half earmarked for public-sector wages and salaries and the remainder unconstrained. The DAK is small by comparison, accounting for only 5% of regency/city revenues and 1% of province revenues, and is earmarked.

However, the central government's commitment to fund regional public-sector employment has led to mushrooming public-service jobs. Public employee compensation represents about 28% of total public expenditures. This share is especially high at sub-national levels and higher than on average in the OECD (23%), where the size of government is generally much greater. In addition, some regions have up to four times as many public employees per capita as others (Figure 22). A side-effect of this large public service has been a large share of regional capital spending on government office space (Lewis and Oosterman, 2011).

In the longer term, regional governments should be given block grants according to some fiscal equalisation formula that reflects sub-national needs and national priorities. However, due to the lack of capacity, many regional governments in Indonesia struggle to spend all of their annual budget allocations. Deposits held by local governments increased from IDR 90 trillion (USD 6.8 billion) in December 2015 to IDR 220 trillion in April 2016 – an increase of 140%. This frustrates constituents, including local businesses, and is hampering the central government both in its attempts to pursue national priorities such as improving infrastructure and also to provide fiscal stimulus during the current economic slowdown. In the short term, sub-national fiscal performance could be improved by tying grants more closely to specific programmes, particularly in areas of national

Figure 22. **Public employment across Indonesia's provinces, 2014**

Per 1 000 people



Source: CEIC database.

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priority, such as infrastructure investment. One way of doing so would be to make more use of the DAK, in which funds are allocated for particular purposes. The DAK has recently increased significantly to accommodate regional aspirations in order to accelerate the development and provision of infrastructure facilities. Furthermore, in order to become well targeted, the government is continuing to try to improve the DAK's allocation and disbursement mechanism. At the same time, greater efforts are needed to improve the technical capacity of regional governments so that they are in a better position to formulate spending priorities, raise revenues and administer budgets. The programme of secondments of officials from the central government to sub-national governments to facilitate skills transfer should be expanded. The government should also promote and broaden the scope of the system of national public-service training schools.

Boosting regional infrastructure investment

The government has rightly emphasised infrastructure as a major impediment to Indonesia's economic development. However, infrastructure investment also needs to be encouraged at the sub-national level, given that half of all public spending is now at that level. A number of reforms could help in this regard. First, the central/sub-national budget process – including revenue estimation – could be improved to reduce uncertainties and interruptions that are inhibiting complex multi-year infrastructure projects. Second, greater efforts should be made to align sub-national projects with national strategies. Third, fiscal incentives should be sharpened so that sub-national governments ensure adequate upkeep of existing infrastructure, such as road maintenance. For example, national co-financing of sub-national road investment could be made conditional on such maintenance. Finally, land acquisition laws should be made more flexible to encompass regional diversity in land ownership traditions.

Improving public spending

Despite impressive improvements over the last 50 years, including in achieving the Millennium Development Goals (MDGs), Indonesia still lags behind many other middle-income countries in terms of development indicators, including health (mortality rates and stunting), poverty, and educational outcomes. Better use of public money would significantly boost the effectiveness of government policies and provide the fiscal space to further develop currently underfunded spending areas: for example, public health-care budgets represented only about 1% of GDP in 2015, although the government increased the budget allocation for health to 5% of total public expenditure in 2016 in a context of constrained public revenues.

Prioritising public governance by adopting best practices, especially at sub-national levels

Broad spending targets (for example, 20% for education and 5% for health) currently shape government priorities but are inefficient because there are no constraints on how to use the funds (Blöndal et al., 2009). Closer correspondence between annual expenditure and clear medium-term objectives, together with performance-based budgeting, could significantly improve efficiency. This should be accompanied by systematic evaluation of existing and envisaged programmes and administration. Improvements are planned for the 2017 budget but will only apply to the central government.

As discussed above, governance challenges are major barriers to the efficient delivery of public services, especially at the sub-national level. There is an extreme diversity in performance across levels of governments and across regions (see KPK, 2014 for examples in the mining sector). This raises the importance of ramping up capacity building, notably through training. The efforts should be targeted towards regions in need, including those with low official ratings and difficulties in spending their budget allocations or reporting statistics. Digitalisation should also be exploited, as it hastens the circulation of information, reduces errors and improves transparency. Additionally, eradicating corruption would help considerably (see above). In particular, broadening the use of electronic procurement would limit bribery and also have positive effects on the quality and right-sizing of government projects.

Enhancing education, social assistance and health

Education is an essential part of Indonesia's budget with a global spending target share of 20%, but outcomes have suffered from a lack of performance-related objectives. The education system should learn from the review of the teacher certification programme, which has generated an improvement in attained degrees for new teachers, but has above all increased the wage bill, with limited increases in teaching quality (Chang et al., 2014). The focus should gradually shift towards secondary education, because it is less well funded by international standards, especially for the poorest. Indeed, enrolment rates for those in the lowest income quintile are much improved for pupils under 15 but still drop significantly after that (World Bank, 2013).

Public outlays for social assistance (less than 1% of GDP) are particularly low, even compared with other middle-income countries (1.4% for India; 2.1% for China; 2.8% for Brazil; and 3.1% for South Africa), while poverty remains relatively prevalent. This justifies the expansion of conditional cash grant schemes, including replacing existing unconditional programmes, which tend to be fragmented and are not well-targeted. The development of a national poverty database (see below) is welcome and should be pursued through a comprehensive identification number system.

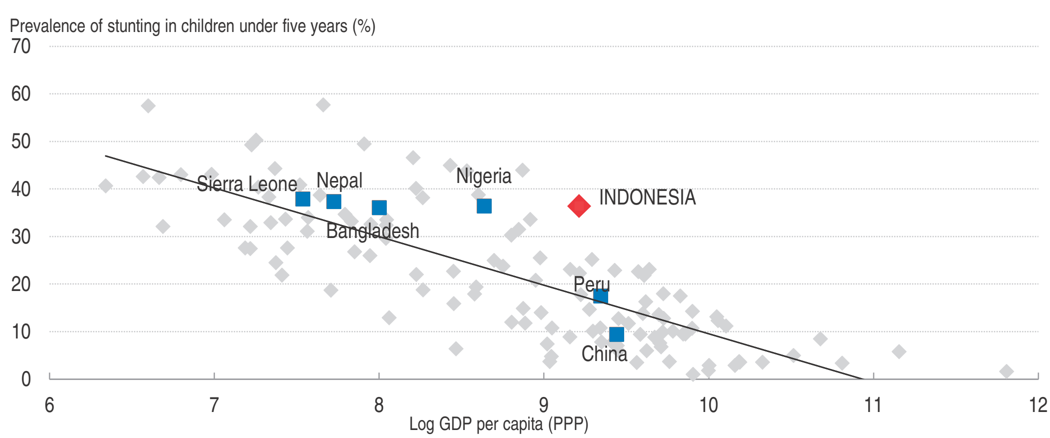
The goal of universal health coverage by 2019 involves a major fiscal commitment. Indeed, the extra amount required could be as much as an additional 2% of GDP by 2020 (Guerard et al., 2011), without considering expected increases in line with economic development (higher demand and supply, and lower out-of-pocket disbursements) and catching-up in health outcomes. Particular needs are to address shortages of hospital beds, especially in Java, and physicians. Chapter 2 of this *Survey* examines in more detail how to improve the efficiency of Indonesia's public spending, especially with regards to health, education and infrastructure.

Confronting the perniciousness of childhood stunting

One specific health issue that urgently deserves more targeted resources is stunting (children having a low height for their age), which is associated with frequent and early exposure to undernourishment and/or illness. In Indonesia in 2013, 36% of all children under the age of five (8.4 million) were stunted. This is one of the highest rates in the world and puts Indonesia on par with countries with much lower GDP per capita, such as Bangladesh, Nepal and Sierra Leone (Figure 23). In 15 of Indonesia's 34 provinces the prevalence of stunting is above 40%, peaking at 48% in East Nusa Tenggara. Furthermore, 20% of Indonesian children under five (totalling 4.4 million) are underweight. The incidence of stunting has actually increased marginally in recent years, which may be related to the decentralisation of health-care services and the lack of resources and capacity at the sub-national level.

The effects of stunting are devastating for a child's future, as they are life-long and largely irreversible. They include delayed motor development, impaired cognitive function, lower IQ and poor school performance (Hoddinott et al., 2011; Grantham-McGregor et al., 2007). Moreover, stunted children do worse in school, earn less in adult life and are more susceptible to non-communicable diseases and obesity in adulthood (Bhutta et al., 2013; Hoddinott et al., 2011; Martorell et al., 2010). Given that young people are one of any nation's most precious resources, especially in Indonesia where there is an ongoing demographic bonus, the prevalence of stunting and its associated effects on cognitive capacity is a national tragedy, not only in terms of economic development but also for the young victims.

Figure 23. **Prevalence of stunting in children under five years and GDP per capita, 2013**



Source: International Food Policy Research Institute Global Hunger Index database; World Bank World Development Indicators database.

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Hoddinott et al. (2013) examine the economic rationale for investments that reduce stunting by constructing estimates of benefit–cost ratios for a set of nutritional interventions in a sample of 17 countries. Their estimated benefit-cost ratios average 18 across all sample countries but are the highest in Indonesia at 48. This suggests that anti-stunting programmes compare favourably with other investments competing for public funds.

Policies are in place to tackle early-childhood undernourishment and illness. For instance, in September 2012, the government launched the "First 1 000 Days of Life Movement", which aims to accelerate nutrition improvement by promoting breastfeeding (only around 40% of infants under six months are exclusively breastfed) and distributing vitamins and nutrition supplements for pregnant and breastfeeding women and children and medicines to prevent and treat malaria in pregnant women and children. However, slow progress clearly suggests that more needs to be done. Indeed, high levels of food insecurity and relatively high prices for basic staples may well contribute to the prevalence of undernourishment (see below).

Ensuring food resilience

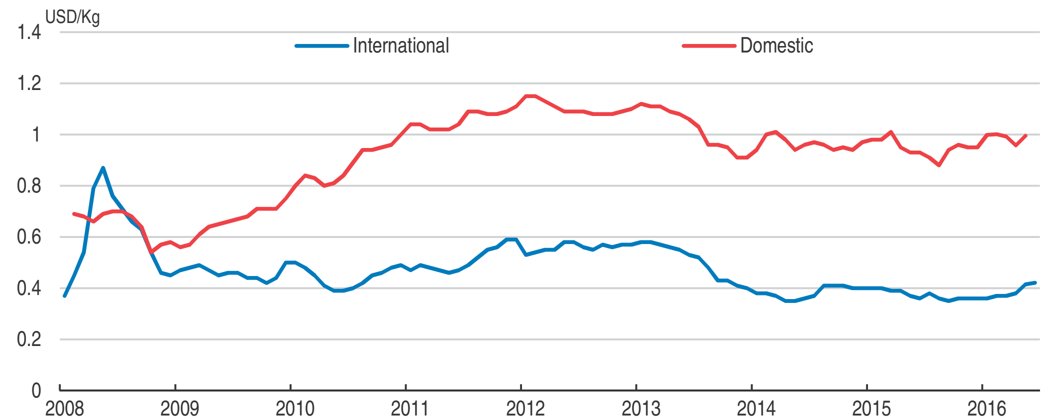
Food resilience is meant to ensure food availability, especially to the poor, at reasonable prices (Dawe and Timmer, 2012). This is not the same as self-sufficiency, which in Indonesia may be very hard to achieve due to the lack of well-suited land (Dawe, 2013). Indeed, pursuit of self-sufficiency may hinder resilience, as import restrictions to try to achieve self-sufficiency increase food costs, leaving people more exposed to local food-supply shocks, and hinder the agricultural sector's competitiveness and productivity (OECD, 2012b). Food resilience has improved in recent years, with only 15% of districts considered vulnerable in 2015, down from 22% a decade ago (FSC et al., 2015). The MDG target to halve hunger and extreme poverty between 1990 and 2015 was largely achieved.

Food policy in Indonesia encompasses a number of programmes and represents about 7% of total public spending. The authorities' focus has been mainly on price stability and national self-sufficiency in core products. Rice is key, as it makes up 50% of dietary energy supply. Rice prices in Indonesia over the last eight years have both been more volatile and higher than Thai export prices (Figure 24). Indeed, Indonesia has the highest wholesale rice price in emerging Asia, which is a particular burden on low-income households. OECD (2015c) concluded that global price hikes are not as important as domestic disaster scenarios as regards food resilience in Indonesia.

Intervention in the food market is in large part managed by National Logistics Agency (BULOG), a state-owned enterprise that manages stocks to moderate price fluctuations by buying rice directly from farmers and controlling imports. However, the ratio of rice stocks to domestic demand has been declining due to insufficient production and imports: in 2016 it was only 2.6% versus 4.7% in 2014, by far the lowest amongst ASEAN economies and also below what is considered the optimum level of 20% (AFSIS, 2015).

Relief to low-income households is provided by RASKIN, a government programme (about 1% of total spending in 2015) providing the poorest 15 million households with 15 kg of subsidised rice per month. However, as highlighted in the previous *Survey* (OECD, 2015a), only a third of this support goes to intended beneficiaries, who often end up paying more than the intended subsidised price and receive only a portion of their quota (Banerjee et al., 2015). Progress is being made in addressing this situation with the

Figure 24. **Indonesian and international rice price**[1]



1. Domestic refers to Indonesia national average retail price. International corresponds to the Thai export price (25% broken).

Source: FAO, Food Price Monitoring and Analysis Tool.

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implementation of a national poverty database (PPLS14) covering 40% of the lowest income households. To be effective, the database needs to be regularly updated (OECD, 2015a).

The government should replace RASKIN with a targeted voucher system to allow diversification of food consumption. BULOG's monopoly on the distribution of rice should also be removed to let other potential actors (domestic and foreign traders) compete, thereby obtaining likely efficiency gains. In addition, food supply should be further liberalised by removing most import barriers. Regional agricultural cooperation in Asia would also allow a better management of supply, while at the same time reducing import restrictions and providing some risk-sharing against crop failure. That said, a previous attempt at such cooperation (the ASEAN Emergency Rice Reserve) was ineffective due to very low national reserve requirements. The revised agreement (ASEAN Plus Three Emergency Rice Reserve), launched in early 2013, is more ambitious, with large commitments from China, Japan and Korea, but is untested. In Indonesia, BULOG's role should be refocused as the manager of emergency food reserves (OECD, 2015c).

Another facet of food policy is a set of fertiliser subsidies, totalling about 3% of public spending in 2015, that are intended for small farmers. Around a third of these subsidies was misallocated in 2015 and largely benefited the largest farms (Reuters, 2016). Moreover, there is strong evidence that fertiliser subsidies ultimately discourage farm output (Armas et al., 2012). OECD (2015c) argues that the subsidies are ineffective in strengthening food resilience and have only a weak impact on food prices. The government should instead provide insurance against bad harvests as the best means to maintain farmers' revenue and investment. There has been recent progress on this front. Fertiliser subsidies should be phased out, and outlays should be reoriented. In particular, the government should refocus its efforts to boost output on improving agriculture-related infrastructure.

Deforestation and other environmental challenges

Indonesia is rich in a wide variety of natural resources, which were generating as much as half of export revenue and a quarter of GDP before the recent downturn in commodity prices. However, exploiting them may produce important externalities. For example, dealing with climate change means that a large share of Indonesia's fossil fuel (especially coal) reserves may need to remain in the ground – at least until low-polluting technology becomes available. Indonesia's emissions of greenhouse gases per unit of output are relatively low by OECD standards (Figure 25, Panel A) but will need to fall substantially to meet its target of emissions 29% below business-as-usual projections in 2030 (41% with international support).

Figure 25. **Environmental indicators**

1. OECD considers biomass as a renewable energy. This explains the difference with Figure 15.

Source: OECD Green Growth Indicators.

StatLink http://dx.doi.org/10.1787/888933420794

Air pollution

Forest fires may be responsible for the most acute individual episodes of air pollution, affecting both Indonesia and neighbouring countries. Coal-fired power generation, neighbouring countries' activities, rapid urbanisation and concomitant increasing road traffic and congestion are also important causes of deteriorating air quality (Figure 25, Panel C).

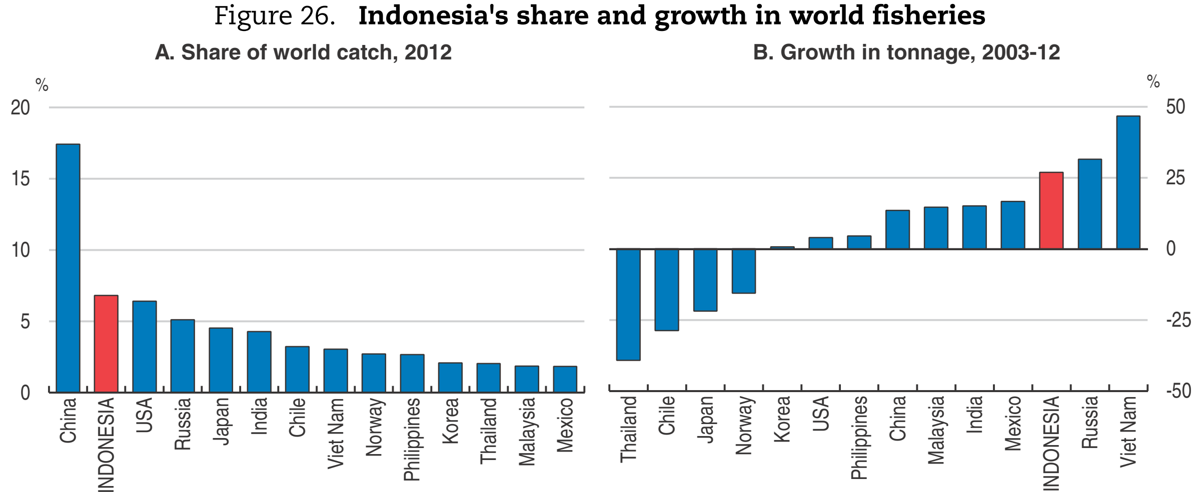
Between June and October 2015, large fires flared up in natural forests and peatlands, threatening unparalleled reserves of biodiversity. That year, about 2 million hectares of land burned, costing Indonesia USD 16.1 billion (World Bank, 2015). The smoke from a similar event in 1998 resulted in an estimated 11 000 deaths (Marlier et al., 2013) and affected 75 million people in six countries (Stolle and Tomich, 1999). Reductions in fire-related emissions account for a significant part of the 29% cut in greenhouse gas (GHG) emissions by 2030 promised by the Indonesia government in the context of COP21. The government estimates that deforestation and fires account for 63% of the country's GHG emissions (Indonesian Government, 2015). Fires are a cheap and frequently utilised tool for clearing land for cash crops, notably palm oil and plantation timber. Unclear land tenure is also a contributing factor, as initially burned areas were often appropriated illegally. Burning to clear land is prohibited, but enforcement has proven difficult due to diffuse responsibilities across different level of governments, weak capacity at the sub-national levels and low fines.

Palm oil in particular generates significant fiscal earnings and stimulates economic growth in rural areas, but its expansion often occurs at the expense of natural forests, endangered animal and plant species, and the quality of life of local and indigenous communities. While a 2011 Presidential moratorium (renewed in 2015) was declared on new plantation licenses, it does not limit activities or expansion by existing license holders and appears insufficient to curb GHG emissions from forest fires (Busch et al., 2015). Those failures should spur the authorities to tackle the issue by toughening legislation and its enforcement, and by increasing penalties. Spatial mapping should also be pursued to help stop illegal exploitation. Incentives to increase productivity rather than acreage (notably through the use of higher-quality seeds, better processing and transportation, and the grouping of smallholders into cooperatives) should be promoted, along with the use of environmental certification. Indeed, the labour productivity of the palm oil industry is about 40% higher in Malaysia (Sigit, 2015).

Fisheries

Indonesia is at the centre of one of the world's major fishing areas; its catch is the second largest in the world, after China's, and is growing rapidly (Figure 26, Panels A and B). While traditional informal management systems operate in some areas, most of the fisheries in the region are fully or over-exploited. Destructive fishing techniques are

Figure 26. **Indonesia's share and growth in world fisheries**



Source: FAO (2014), "The State of World Fisheries and Agriculture", United Nations Food and Agriculture Organisation.

StatLink http://dx.doi.org/10.1787/888933420801

damaging the environment, especially coral reefs, which are already at risk from global warming. Government support for the industry through fuel subsidies and infrastructure is significant. Though the main growth in Indonesian fishing is in pisciculture, the capacity of the traditional fishing industry is still growing, raising sustainability risks.

Renewables and energy

Indonesia's geothermal potential stands at nearly 30 gigawatts (GW) – about 40% of world capacity – of which only 5% is currently being used (Nasruddin et al., 2016). Similarly, only 4% of Indonesia's estimated 75GW of hydroelectricity potential is currently exploited. The government intends to tap those resources and increase the use of renewables to 23% of primary energy by 2025 from about 6% in 2011 (Figure 14). However, coal is projected to become the largest contributor to the energy mix (rising from 24% to 30%). This runs counter to efforts to fight climate change, since coal-fired generation produces approximately twice the GHG emissions as gas. Moreover, there is significant scope to improve the energy efficiency of Indonesia's coal-fired power plants (OECD, 2015a).

As discussed above, the supply of and access to electricity remains an issue in Indonesia, particularly in remote regions. The government plans to increase generating capacity by 35GW by 2019. To that end, further liberalisation of the foreign direct investment regime is required. The 45% limit on foreign ownership in power plants generating less than 10 MW should be removed as it particularly affects those using renewables (including energy from wind, photovoltaic and biomass) and those in remote regions.

Indonesia also supports biodiesel to decrease carbon emissions and reduce imports. In 2016 a mandatory blend of biodiesel with motor fuel was set at 20% (up from 15% in 2015): to that end about 8% of crude palm oil production is to be used for this purpose in 2016. To compensate for higher costs, the government has introduced a varying subsidy on biodiesel, currently at IDR 5 000 per litre, which is funded from a USD 50 per barrel levy on crude palm oil exports. However, biofuels are cost-inefficient, have a limited effect on GHG emissions and energy security, and push up world crop prices (OECD, 2008), though second-generation processing technologies seem to be better.

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ANNEX A.1

Progress in structural reform

This table reviews action taken on recommendations from previous *Surveys*. Recommendations that are new in this *Survey* are listed at the end of the relevant chapter.

Recommendations in previous *Surveys*	**Action taken since March 2015**
a. Fiscal, monetary and financial policy	
Deepen and broaden financial markets by making more room for non-banks and the stock market in financing the economy.	The Financial Market Deepening Blueprint was prepared as a guideline for the improvement and development of financial market structure for the upcoming 5-10 years. The Blueprint contains guidance for money market development programmes along with the foreign exchange market, sharia financial markets and bond market (coordinative). Financial market development shall be achieved through five strategies, namely (i) the development of instruments and the investor base; (ii) strengthening regulations and standardization; (iii) infrastructure development; (iv) institutional strengthening; as well as (v) effective education and dissemination. Development based on the five strategies is expected to create deeper, more liquid and efficient financial markets, thus supporting monetary policy effectiveness, financial system stability and economic development financing. Indonesia continues to accelerate financial market deepening initiatives to reduce the pressure on the foreign exchange market. The recent Bank Indonesia's (BI) recent initiatives include (i) simplifying foreign exchange transactions; (ii) allowing market participants to do netting in forward transactions; as well as (iii) expanding the documentation required in foreign exchange transactions
Further develop the foreign exchange market by reducing the role of BI, generalising hedging and options, and enlarging the class of assets underlying the transactions.	Bank Indonesia encourages the private sector to manage their foreign exchange risk through FX hedging transactions. On 1 January 2015 BI implemented regulations that require non-bank corporate borrowers of foreign debt to maintain a minimum hedging ratio of 20%. A current update of BI's Financial Deepening Programme include regulations concerning the Jakarta Interbank Offered Rate, Net Open Position of Commercial Banks, forex to IDR trading within banks and among domestic or foreign parties, and the Interbank Sharia Money Market.
Raise government tax revenues in order to fund a needed longer-term increase in government spending. Revenue could be raised by bringing more self-employed into the tax net and by improving the effectiveness of tax collection.	Since 2013, the Director General of Taxation (DGT) has been implementing simplified schemes to bring more SMEs into the tax net by setting the rate of tax on turnover at 1%. DGT is very active in strengthening cooperation and coordination with many other institutions with a view to sharing information to capture unregistered taxpayers and initiating shadow economy mitigation.
Introduce a carbon tax at an initially low rate.	No action taken.
Allocate more tax audits on the basis of risk assessments, and eliminate automatic audit requirements. Increase the number of government auditors.	To improve the effectiveness of tax collection, DGT started to develop and implement Compliance Risk Management (CRM) in 2014, which will assist in decision making and resource allocation based on taxpayer risk. In 2015 the project focused on audit and compliance assurance. Tax collection and other functions will follow in the coming years. In early 2015 DGT established a Centre for Tax Analysis (CTA), a unit dedicated to enhancing its capacity to identify and assess revenue risks. This unit distributes analysis containing potential uncollected revenue (tax gap) and taxpayers' non-compliance behaviour/pattern to all tax offices.

Recommendations in previous *Surveys*	Action taken since March 2015
B. Promoting inclusive and sustainable economic growth	
Direct more public resources to improving education access and outcomes. Continue regular teacher assessments and professional development, and link teacher salaries more closely to qualifications and performance.	No action taken.
Raise public spending on infrastructure. Focus on transportation and logistics to support industry, as well as natural disaster prevention and water treatment.	The government is supporting 14 industrial areas outside of Java with investments in roads, ports, railways, airports, and sanitation in 2016. Policy is targeting lowering port dwelling time to 3-4 days by 2019 and targeting lowering logistic cost to 19.2% of GDP by 2019.
Avoid protectionist measures that inhibit openness to trade and foreign investment with uncertain development payoff.	Indonesia has revised the negative investment list in 2016 to provide more opportunities for both foreign and domestic investors. Some trade restrictions have been relaxed as a result of implementation of economic policy packages.
Lower electricity subsidies, and have recourse to cash transfer schemes to compensate poor households for the rise in electricity prices.	Electricity subsidies are being further lowered in 2016.
In provinces where minimum wages are high in relation to average wages, resist real increases that exceed trend productivity gains. Introduce a subminimum wage for youth directly linked to the general minimum wage. Reduce onerous severance payments and ease dismissal procedures in the formal labour market. In return introduce unemployment benefits coupled with individual unemployment savings accounts.	As of 2016 minimum wage increases are limited to real GDP growth plus the rate of inflation. Using this formula, real GDP growth in Q2 2015 of 4.7% and September 2015 inflation at 6.8% resulted in a minimum wage increase of 11.5% across all provinces in 2016.
Improve the enforcement of intellectual property rights.	No action taken.
Remove formal education from the negative investment list.	No action taken.
Encourage tertiary education financing through student loans.	No action taken.
Create a national training fund to consolidate resources allocated to training and direct them to their most cost efficient use.	No action taken.
C. Reducing poverty and inequality	
Increase, and further improve targeting of, spending on poverty alleviation and health measures. Direct more public resources to improving education access and outcomes.	The target recipient of Healthy Indonesian Card *(Kartu Indonesia Sehat/KIS)* has been extended to also include Person with Social Welfare Problems *(Penyandang Masalah Kesejahteraan Sosial/PMKS)*, babies who were born using the Contribution Asistance Recipient *(Penerima Bantuan Iuran/PBI)*. In 2015, KIS has reached 88,2 million of poor community and less capable. In 2016, the participant of PBI is targeted to 92,4 million people, with additional 3,8 million of poor community, and 1,8 million of unregistered PMKS, as well as 400 thousand babies from PBI participants.
Increase financial inclusiveness by further developing branchless banking, drawing lessons from such countries as India, Mexico, the Philippines and Kenya.	The BI financial inclusion programme consists of a transformation from an inefficient cash society to less cash society entailing wider use of safe and efficient electronic money, and credit and debit cards. BI and relevant institutions (the Coordinating Ministry of Economic Affairs, Ministry of Finance, DKI Jakarta Province Government, and the Association of Indonesian Provincial Governments) as well as industry participants in the payment system under the Association of Payment System in Indonesia (ASPI) launched the Non-Cash National Movement (GNNT) in August 2014. Going forward, to expand financial access to unbanked and under-banked people in remote areas, BI provides a Digital Financial Services (DFS) programme. The DFS not only serves as a means to open financial access, but is in line with Non-Cash National Movement since its launch in 2014. There 24 561 DFS agents (individual and legal entity agents) in February 2015, including PT Post Indonesia, covering around 418 of 537 regencies/cities, and reaching over one million customers.
Tackle labour market informality by reducing rigidities in the formal sector, and by enhancing the effectiveness of the tax-transfer system for poverty alleviation and channelling other social benefits.	No action taken.
Continue building a single registry of vulnerable households to better target assistance.	The national poverty database (PSP14) is regularly updated and expanded. Statistics Indonesia conducts National Economic Social Survey *(Susenas) annually*, which includes data of national poverty rate.

Recommendations in previous *Surveys*	Action taken since March 2015
D. Better regulation and reducing corruption	
Improve mechanisms to prevent corruption, while further increasing efforts to combat all forms of corruption.	No action taken.
Expand support to sub-national governments for capacity building, including the provision of technical and administrative assistance by the central government.	No action taken.
E. Making the most of natural resources while preserving the environment	
Refocus the mineral ore export ban based on an evaluation of the costs and benefits of onshore processing for each mineral. Provide infrastructure and electricity to the new smelters.	The Power Supply Business Plan by PT PLN (the National Electricity Company) provides for smelter and new industrial area developers to build their own power plants to support their electricity demand. It also allows companies to use power plants owned by other Electricity Supply Business Licensees (IUPTL) and/or use distribution and PT PLN's transmission network through power wheeling schemes.
Increase agricultural productivity by providing technical assistance and training, including through agreements between smallholders and large estates. Increase farmers' access to credit by accelerating land titling. Lower food prices by decreasing trade restrictions.	An insurance scheme for small farmers is being introduced to protect farmer incomes in the case of poor harvest to low prices.
Devote more resources to enforcing laws against illegal forest clearing, logging and mining.	Since 2013, the Ministry of Environment and Forestry has been tackling and preventing illegal logging activities by implementing a timber legality verification system in the management of production forests in Indonesia. The timber legality verification system is a system that ensures sustainability of forest management and / or legality of timber and timber tracking through the Certification of Sustainable Forest Management Assessment and Certification of Timber Legality and Suppliers Declaration of Conformity. Negotiations of a timber verification agreement with the European Union have entered their final stage. A legality verification system has also been recognised by Australia and can meet the legality assurance with enforcement of the law on illegal logging prohibition. Additional funds have been allocated in the national budget to support activities related to the promotion, and capacity building in timber legality verification systems. The implementation of timber legality verification system in 2013 has resulted in a reduction of the number of cases of illegal logging but further monitoring will be needed in the years to come.
Reduce greenhouse gas emissions by further developing clean power, especially geothermal.	The Indonesian government encourages the development of geothermal power plants to facilitate the purchase of electricity from geothermal power and geothermal steam by PT PLN. Meanwhile, to speed up its development, geothermal capacity of 4.8MW has been added to the list of Power Plant Development Acceleration Program Phase II. The draft National Electricity General Plan for the period of 2015-34 implements the National Energy Policy which aims at a geothermal share of energy supply of at least 23% by 2025 and 31% in 2050.

ANNEX A.2

The ore export ban and mining sector divestment rules

In January 2014 the Indonesian government imposed a ban on the export of unprocessed minerals, including nickel, bauxite, copper and iron. As discussed in the previous Survey, the intention was to force companies to add value domestically before exporting, thereby stimulating activity and employment in the ore processing and smelting sector. The ban was legislated in 2009, but, in the face of strong resistance from industry, the government hesitated to pull the trigger until the end of the term of the previous president. The timing was particularly unfortunate, coinciding with a substantial decline in global demand and the end of the commodity super cycle.

In its original form the regulation banned the export of all unprocessed minerals, including unsmelted concentrates. The result was an almost complete cessation of the export of some minerals, including copper and nickel for a number of months in the beginning of 2014. A transitional arrangement was quickly put into place to account for the long lead times required for the construction of refining and smelting capacity and the required accompanying energy and transport infrastructure. Until January 2017 companies that export concentrates with a minimum purity of 15% and that provide sufficient demonstration of their commitment to build a refining facility can continue to export, although subject to progressively higher export taxes, starting at 20% in mid-2014 and reaching 60% by mid-2016.

Around the world, there was an increased incidence of export restrictions during and after the 2003-11 commodities super cycle. Indonesia's 2014 mineral export ban was nonetheless relatively unique. As documented by OECD (2014), of the 371 export restrictions in force on minerals and metals, only 23 were quantitative and only three were outright bans.

The ban had an immediate and dramatic effect on the production and export of a number of minerals. For instance, Indonesia's production of bauxite fell from 55.7 million tonnes in 2013 to only 2.5 in 2014 and an estimated 1.0 in 2015. Malaysia took this opportunity to increase production from 0.2 million tonnes in 2013 to 3.3 million in 2014 and estimated 21.2 in 2015 (US Geological Survey, 2016). Likewise exports of copper ore and concentrates effectively ceased for the first six months after the ban was imposed.

Some progress has been made in building smelters, but many companies are struggling to make the economics work, particularly in an environment of low prices and weak international demand. Lack of transport and energy infrastructure to support the construction and operation of smelters is holding back progress, as are the complicated multi-tiered regulatory requirements. As to nickel, of which Indonesia is the world's fourth largest producer, three smelters have been built, with another project expected to be completed in 2017. Low world nickel prices, which jumped with the announcement of the Indonesia export ban but have fallen steadily since, have caused delays and cancellation among the remaining smelter projects, meaning few, if any, are likely to be operational before 2017. The four new smelters will double Indonesia's nickel smelting capacity, creating an estimated 17 500 new manufacturing-type jobs (Terauds, 2016). In the bauxite sector progress has been particularly fraught. Alumina smelters are especially energy intensive, requiring large accompanying power-generating infrastructure. Despite a flurry of announced plans to build new alumina smelters immediately after the ban was put in place, not one new smelter has been constructed. The simple reasons are, first, that sufficient smelter capacity exists elsewhere in the world, and, second, alternative bauxite reserves have come on line in Malaysia and Australia to replace the interrupted supply from Indonesia (Home, 2015).

Overlaying the ore export ban are Indonesia's divestment requirements facing foreign owners of mining interests. As the rules currently stand, divestment to a maximum foreign investment of 49% is required after 10 years of commercial production. In the case that foreign interests take over an entity with some local ownership, the rules are even stricter. Recently, changes have been proposed aimed at providing relief to firms engaged in mineral processing. Specifically, a company with foreign investors that engages only in processing and refining will not be subject to any divestment requirements, and the foreign shareholders of a company that holds a mining permit and is also engaged in processing and refining will now be required to divest up to 40% of its shares to Indonesian interests by its 15th year of commercial production.

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Thematic chapters

Chapter 1

Decentralisation to promote regional development

In 1998 Indonesia embarked on an ambitious course of decentralisation. Over a period of a few years, facilitated by financial transfers from the central government, responsibility for many public services and administrative tasks were devolved to local authorities. This process is continuing. Regional development is now very much in the hands of the four sub-national tiers of government. However, the speed of the devolution means that much is being done without the required accompanying skills, technical capacities, resources and oversight. As a result, while good progress has been made nationally along a number dimensions, outcomes in health, education, infrastructure, corruption and the provision of other social services have not improved as quickly as was hoped, and the variance in results across the regions has been enormous. Rather than simply devolving more and more responsibilities to sub-national authorities, the central government needs to take a more strategic view of regional economic development. This includes monitoring the performance of sub-national governments, providing them with technical assistance where needed, encouraging them to emulate the best performers and in the short- to medium-term using grants to direct spending to priority areas. The inter-governmental transfer framework also would benefit from better oversight and a strategic vision. Moreover, the perverse incentives it embodies are driving rent-seeking and the fragmentation of local jurisdictions. In the longer term the objective should be tax autonomy and transfers based exclusively on block grants although this should be conditional on adequate oversight and administrative capacities within the sub-national authorities. Conflicting and overlapping laws and regulations across levels of government are also inhibiting regional development by obstructing private business development and investment.

Introduction

Indonesia is a vast and diverse country. An almost 2 million square kilometre archipelago spanning three time zones, it is made up of around 17 500 islands, of which around 1 000 are inhabited. Its population of 260 million people makes it the fourth most populous country in the world, and it has over 300 distinct ethnic groups. Moreover, the population is distributed very unevenly, with approximately 55% on the central island of Java, only 7% of the nation's land mass. While Bahasa Indonesia is the national language and lingua franca, there are around 34 other languages spoken by at least half a million people and 726 spoken languages in total. Cultural and religious diversity is also striking. While Islam is the majority religion (87%), significant populations of Christians (10%), Hindus (2%) and Buddhists (0.7%) are spread across the country. On top of this, Indonesia has been undergoing an impressively smooth political transition to democracy over the past two decades.

This democratic transition has gone hand in hand with a policy of decentralisation. This process accelerated rapidly in response to the Asian economic crisis. The "big bang" decentralisations in 2001 and 2005 handed greater political autonomy to the regions and devolved substantial responsibilities for administration and public services provision from the centre to sub-national governments.

While Indonesia's national motto, "Unity in Diversity", binds the country together, the diversity and complexity of the country makes governing especially challenging. This is true not only in a political sense, but also in formulating economic and social policies that promote the well-being of all Indonesians. Since decentralisation, the nation's diversity takes the political form of 34 provinces and 514 regencies/cities, each having its own government and legislative body (Table 1.1). A further level is 7 160 districts. Since 2005, four out of the five administrative levels of government have had directly elected leaders, the exception being districts, whose heads are appointed by the regencies/cities, one level above. The diversity across these sub-national entities is large. For instance, provincial populations range from 43 million in West Java to 525 000 in North Kalimantan – a ratio of 81:1. The variance in population across the regencies/cities is even greater, with the smallest (Tambrauw in West Papua) having just 6 144 residents, compared to the largest (Bogor in West Java) with 4.8 million. The variance in the size of villages is even greater (see below).

Table 1.1. **The levels of government in Indonesia, as of end-2015**

Type	Type (Indonesian)	Head of administration (English)	Head of administration (Indonesian)	Number
Central	Central	President (elected)	Presiden	1
Province	Provinsi	Governor (elected)	Gubernur	34
Regency & City	Kabupaten & Kota	Regent & Mayor (elected)	Bupati & Wali kota	416 & 98
District	Kecamatan	Head of district (appointed)	Camat	7 160
Village	Desa & Kelurahan	Chief (elected for village, appointed for Kelurahan)	Kepala desa / Lurah	83 184

Source: Statistics Indonesia (based on Ministry of Home Affairs, Regulation no.56/2015).

The objective of regional development is to improve the well-being of all – to promote national development by assisting lagging regions to catch up with those at the frontier – not only in terms of just economic growth, but also education, health and environmental outcomes. Indeed, these are all co-requisites for sustainable and inclusive development – especially for a developing country like Indonesia (OECD, 2012d). In the Indonesian context this means not only giving sub-national governments the resources required to make the investments needed to enhance the competitiveness of their jurisdictions, but also the necessary resources to improve the provision of basic services and the capacity to put in place appropriate social, structural and regulatory policies.

With decentralisation, the goal of regional economic development is now very much in the hands of sub-national entities who are responsible for the delivery of public services, the rationale being better accountability and service delivery through increased responsiveness to local needs (Faguet, 2014), often called "subsidiarity". Indeed, the politics of decentralisation in Indonesia has meant that regencies/cities and districts have been favoured over provinces in terms of receiving downward devolved responsibilities (Malley, 2009). Decentralisation can improve performance by promoting competition between regions in the efficient provision of services and attracting businesses. Regions can also draw lessons from each other and benefit from best practice (OECD and KIPF, 2016).

In Indonesia regional autonomy has not delivered the improvements that were expected when launched in 2001, in terms of the provision of public services or in the management of natural resources (Resosudarmo et al., 2014; Buehler, 2010; Moeliono et al., 2009; World Bank, 2009). This is despite a steady increase in transfers from the central to sub-national governments – these now make up about half of the central government budget (net of subsidies and interest payments; about 6% of GDP), and in 2015 over 65% of this amount accrued to the regencies/cities (*kabupaten/kota*). Furthermore, despite some evidence of convergence across the regions, the variance in social-economic outcomes remains large. This includes fundamentals such as education, health, infrastructure, the rule of law (including corruption), the quality of business regulation and the capacity of sub-national governments to administer the provision of public services competently and efficiently. Indeed, research finds that fiscal decentralisation tends to increase regional disparities in poorer countries, while it is either neutral or tends to reduce disparities in richer countries (Rodríguez-Pose and Ezcurra, 2011; Lessmann, 2012). Institutional quality is an important factor: decentralisation seems to foster convergence when institutional quality is high, while it tends to exacerbate disparities in a low-quality environment, fuelling local capture (Kyriacou et al., 2015; Bartolini et al., 2016). This is first and foremost where policymakers' efforts need to focus. Without these fundamentals in place, the blossoming of economic activity in the regions will be constrained, and they will become increasingly dependent on central government funding.

This chapter looks at the challenges Indonesia faces in regional development from the perspective of decentralisation. Even though impressive progress has been made in improving the well-being of its citizens, advances have not been even across the archipelago, with a variance in outcomes considerably greater than in other countries at similar levels of development. The chapter will examine why regional development is particularly challenging, given Indonesia's geographical, historical and political context. The process of democratisation and decentralisation has happened very quickly; yet there is a sense that it is incomplete. Jurisdictions often remain ill-defined or overlap, and local legislation and regulations are frequently at odds with national policies. And because it has happened so quickly, the checks and balances needed for good governance have had very little time to evolve organically. Indeed, the capacity of the sub-national governments – from the 34 provinces to the 83 000 villages – to deliver high-quality public services is often lacking, and so are the frameworks that monitor the proper and efficient use of public resources. Corruption is also a huge issue at the regional level, which, given the lack of efficient legal and administrative means, is the way business is conducted. It nevertheless entrenches privilege and impedes equal opportunity for all. Finally, the programmes currently in place to promote business development in the regions have been ineffective. These programmes have focused excessively on attracting investment though fiscal incentives, rather than improving the business climate and assisting regional firms to become nationally and internationally competitive.

Progress in regional development has been mixed

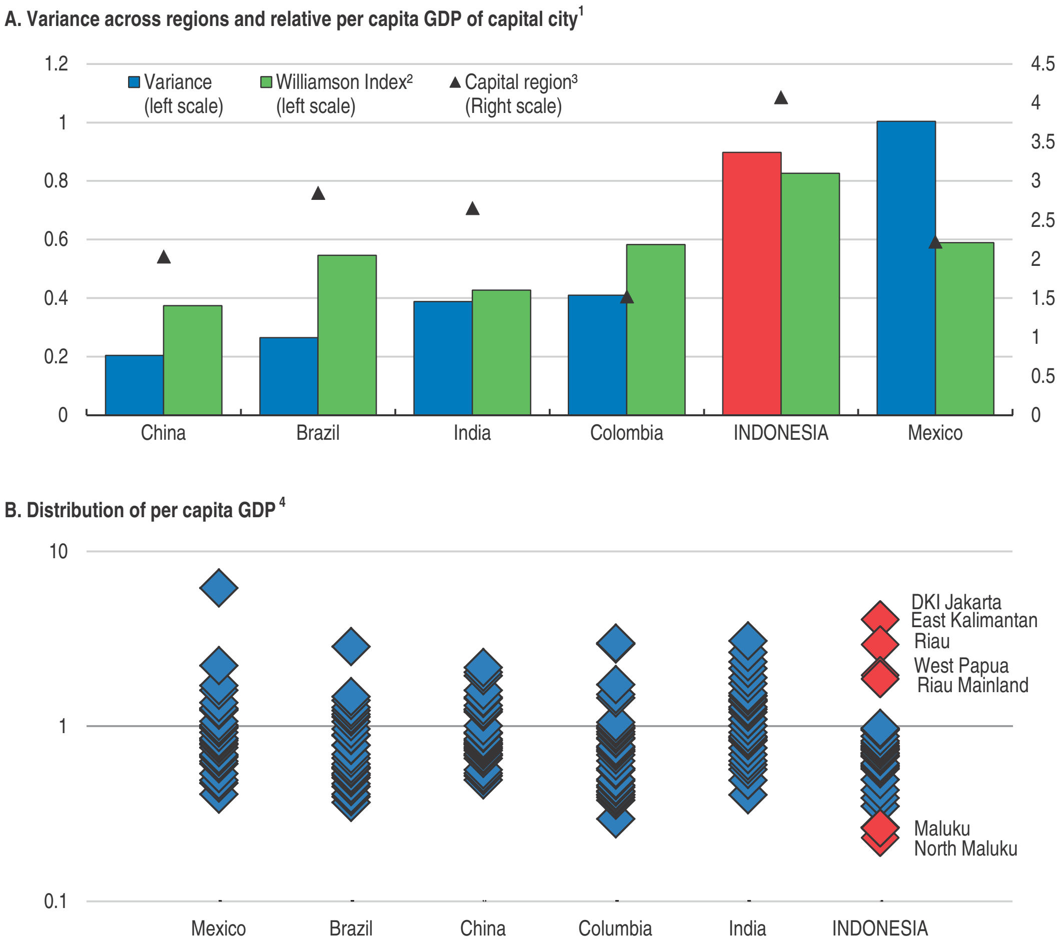
Indonesia has made great strides in improving the quality of life of its people. In the years since independence, social and economic outcomes have improved steadily, including in the realms of health, poverty and literacy. For instance, between 1960 and 2015 life expectancy at birth increased from around 49 to 69 years, and infant mortality (per 1 000 births) fell from 148 to 23. Likewise, the $1.90 (2011 PPP) per day poverty rate has dropped from 72% in 1984 to 16% in 2010. The female literacy rate increased from 57% in 1980 to 90% in 2011. Nevertheless, as in many other developing countries, these national averages mask large within-country variances. Moreover, on some metrics, these variances across regions are particularly pronounced in Indonesia.

Looking at real GDP per capita, the variance across the Indonesian provinces in 2013 was high compared to a range of other developing countries (Figure 1.1, Panel A). The difference in per capita GDP in the national capital compared to the national average was particularly pronounced – Jakarta's per capita GDP is over four times the national average. Besides the imbalance due to the capital city region, Panel B of Figure 1.1 points to other reasons for the high variance in provincial incomes in Indonesia. The richer regions are those that are resource rich, like East Kalimantan (oil), Papua (copper and gold), Riau and Raiu Island (oil, gas and palm oil). At the other end of the scale, the poorest regions tend to be remote islands that largely lack natural resources like Maluku. It is these outliers at both ends of the range that account fora large part of the high level of inter-regional variance in incomes. Yet, per capita GDP is not the best measure of the standard of living, in particular in these resource-rich provinces, where a significant proportion of the income from the extraction of commodities is likely to flow outside the province. This is confirmed when looking at the distribution of real consumption expenditures across provinces. For instance, West Papua's ranking drops from being the fourth richest province in real GDP per capita to sixteenth in real consumption per household. West Papua's low ranking by spending, despite its resource revenues, is corroborated when looking at poverty (Figure 1.2).

Inequality is higher within urban areas when compared to rural areas, but the prevalence of poverty is greater in rural areas. The strong trend to urbanisation over recent decades is therefore working to reduce aggregate poverty but is increasing income inequality.

Measures to address poverty operate at all levels of government. The fiscal equalisation formula used to calculate the level of transfers from the central to regional governments includes the prevalence of poverty as a parameter (see below for further

Figure 1.1. **Per capita GDP of regions in selected countries, 2013**



1. Variance of the ratio of regional GDP per capita in current local currency to national average. Sample restricted to those countries with around thirty TL2-size regions. 2012 data for Brazil and Indonesia.
2. The Williamson Index is a measure of variance that weights regions by their share of the national population.
3. Ratio of capital city region GDP per capita to national average.
4. Log of ratio of regional GDP per capita (current local currency) to national average.

Source: OECD Regional Database.

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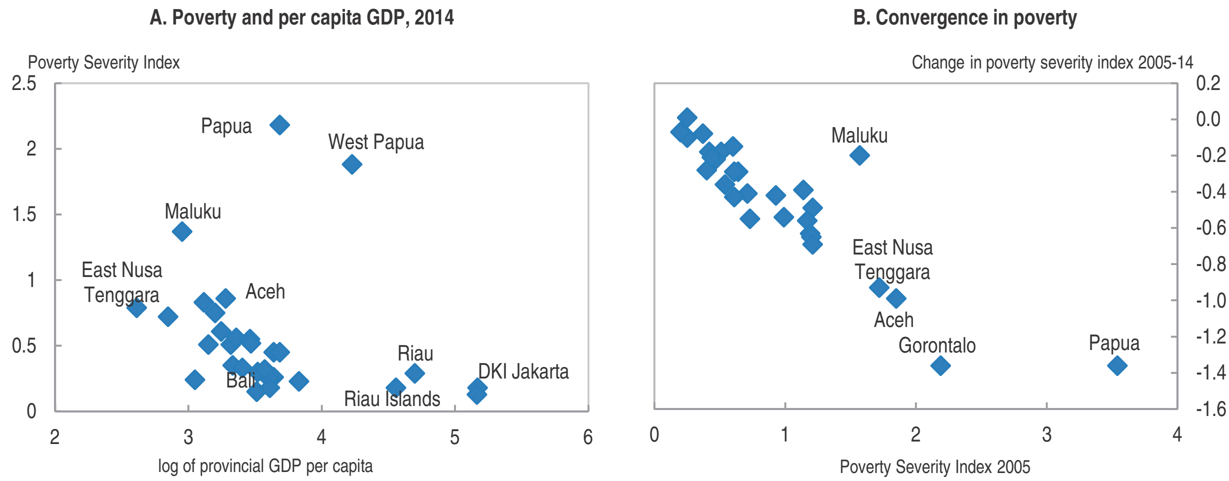
details). The minimum wage is also a poverty reduction strategy, although an imperfect one because those subject to it may come from affluent households, it may prevent jobs from being created, and it applies only to those employed in the formal sector. Additionally, there are various government measures that address poverty directly, including targeted conditional (Programme Keluarga Harapan or PKH) and unconditional cash transfers and the RASKIN rice programme. Nevertheless, regarding reducing poverty in the regions that most need assistance, it is the targeting of these programmes that is critical World Bank (2012d). This was discussed at some length in the previous *Survey* (OECD, 2015a). In particular, work on increasing the coverage and improving the accuracy of the PPLS14 database of the 40% poorest Indonesians should continue. At the regional level poverty-alleviation programmes still focus on meeting the basic needs of the poor, rather than addressing the underlying causes of poverty or providing long-term growth and employment opportunities. Most programmes are driven by national mandates and agency priorities, rather than by locally perceived needs. Unconditional transfers to sub-national

Figure 1.2. **Poverty severity and convergence in poverty across Indonesian provinces**[1]



1. The province of West Papua did not exist in 2005 and is included as part of Papua in Panel B.
Source: Statistics Indonesia.

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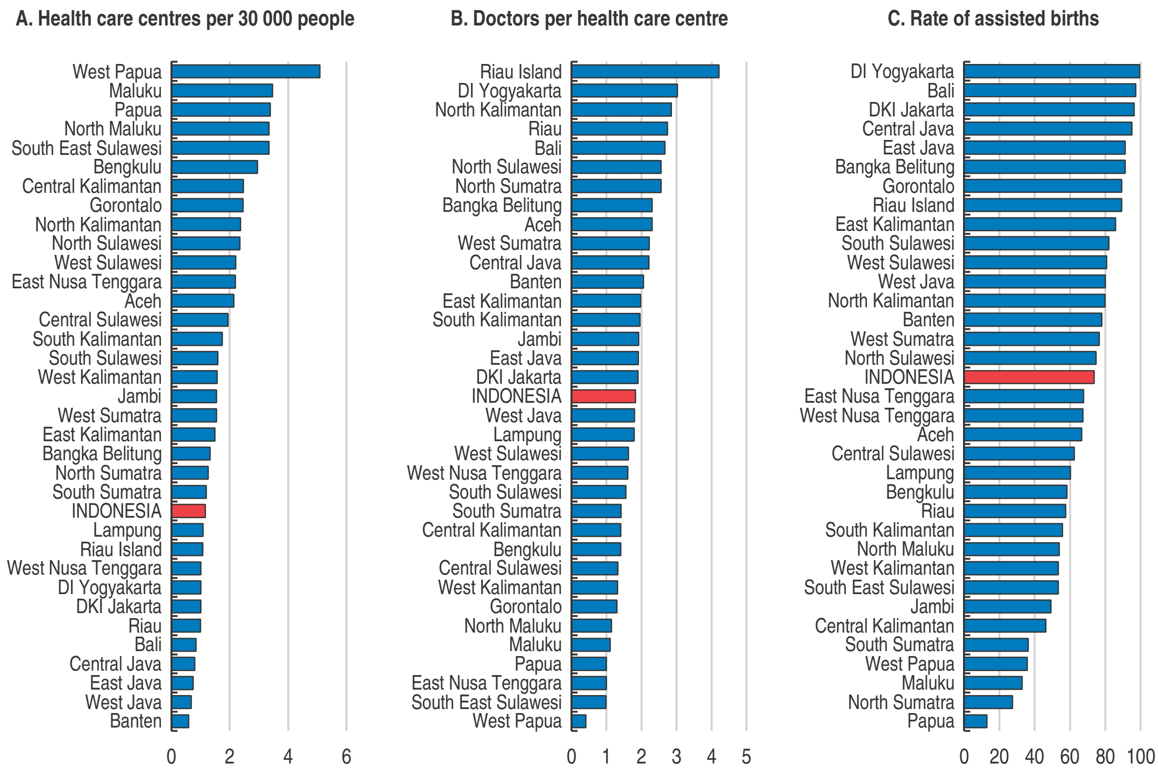
entities, such as provided for by the 2014 Village Law (see below), are mostly politically motivated and are unlikely to be helpful (Andrianto, 2006).

Health

Like poverty, health outcomes have improved markedly over the past few decades. There have been impressive increases in life expectancy and large reductions in infant mortality, for example. Moreover, the provision of health care services and related infrastructure has improved markedly. While this does not necessarily indicate anything about the quality of available health care, the target of having an accessible health care centre (*puskesmas*) for every 30 000 people has been achieved in all but a few of the most densely populated provinces (Figure 1.3, Panel A). However, the number of doctors working in these centres varies greatly (Panel B). The low rate of assisted births in some provinces bears testament to the low numbers of health professionals working in health care centres in these same provinces (Panel C).

Despite the broad access to health care facilities across the archipelago, as for poverty, large differentials in outcomes remain. Taking pulmonary tuberculosis (TB) as an example: with around 200 000 cases reported in 2014, Indonesia has the 13th highest incidence in the world (399 cases per 100 000 people). Moreover, across Indonesia the incidence of TB is not correlated to affluence: the highest incidences are found in the island provinces of Maluku, Sulawesi and Bangka Belitung, while the incidence in Papua is on a par with Bali. However, the differentials in the rates of success of treatment are striking. While in North Sulawesi the treatment success rate is close to 100%, in Papua it is just 26% (Figure 1.4). Moreover, this pattern of success rates across the Indonesian provinces is uncorrelated to the incidence of HIV, which in some countries is a major factor in the incidence and treatability of TB: just 2% of cases in Indonesia are HIV related (WHO, 2014). Particularly troubling is that the capacity to treat tuberculosis has worsened since decentralisation. In 1997, 53% of health centres (*pustu;* smaller and with less staff than a *puskesmas*) provided TB treatment, but only 30% did so in 2007 (GHWA, 2013). It is unclear why this situation worsened. Possible explanations include fewer staff at *pustus* than in 1997, reduced availability of

Figure 1.3. **Provincial health care indicators, 2014**



Source: Ministry of Health.

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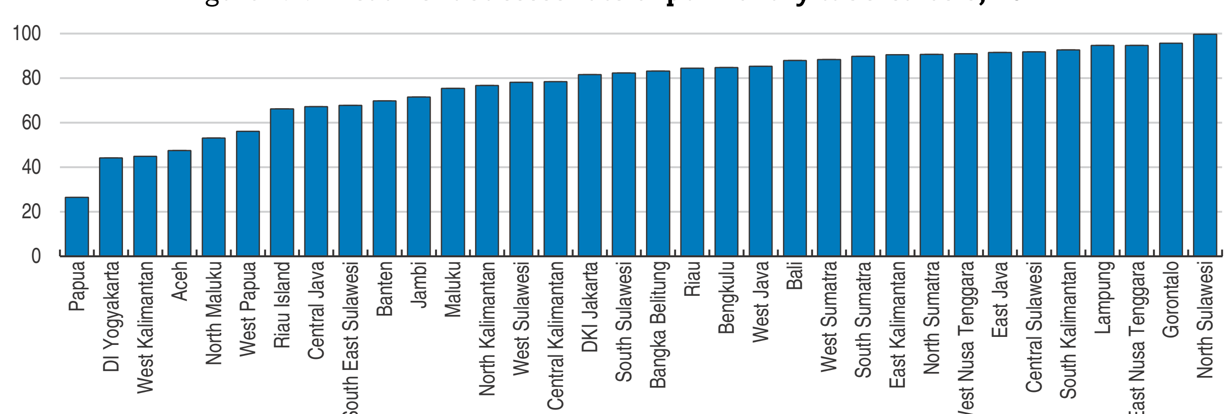
drugs, lack of operating funds after decentralisation and government prioritisation of maternal health, which may have diverted attention from other public health programmes.

While good progress has been made in the provision of health infrastructure, the focus needs to be on improving the quality of care across the country. This includes staffing health care centres adequately. As in many other countries, attracting qualified and competent professionals to small health care centres in remote regions is challenging. A number of districts have programmes that sponsor medical students through their studies,

Figure 1.4. **Treatment success rate of pulmonary tuberculosis, 2014**



Source: Ministry of Health.

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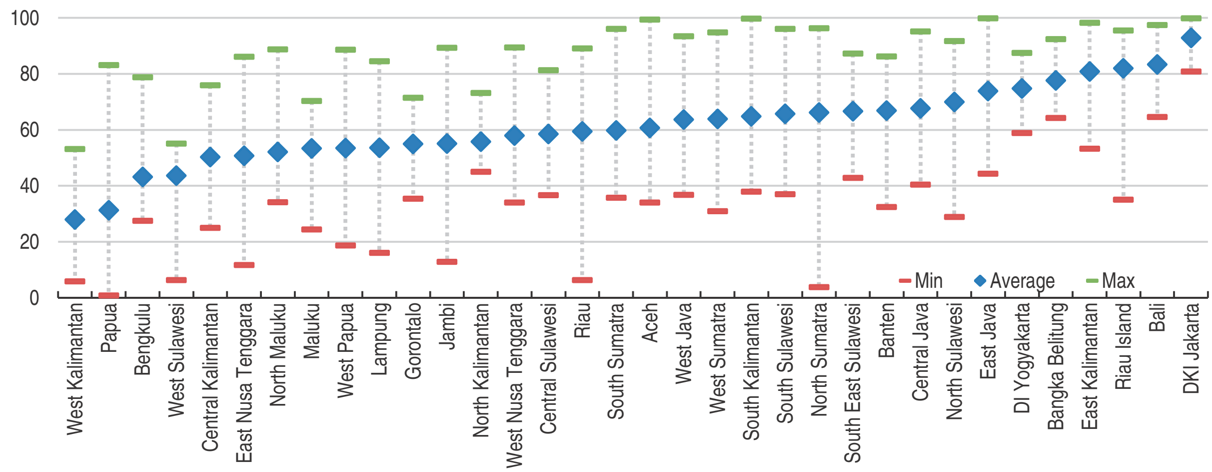
Figure 1.5. **Variation in household access to safe water, 2013**

% of households, provincial averages and within-province ranges[1]



1. Within-province ranges are at the regency/city level.

Source: Statistics Indonesia, National Social Economic Survey (SUSENAS).

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provided that after graduating they repay this by working for a time in medical centres in the sponsoring district. This practice could be adopted more widely, and indeed the central government could earmark funding for such programmes. Moreover, the low effective density of doctors could also be due to stringent rules that regulate entry into the medical profession, including by foreign medical professionals (OECD, 2012a).

Also from the standpoint of health, particularly children's health, households' access to safe water varies greatly, even across the regencies/cities within individual provinces (Figure 1.5). Indeed, not just in the poorer eastern provinces, but in almost half of all Indonesian provinces there are regencies/cities where less than a third of households have access to safe drinking water.

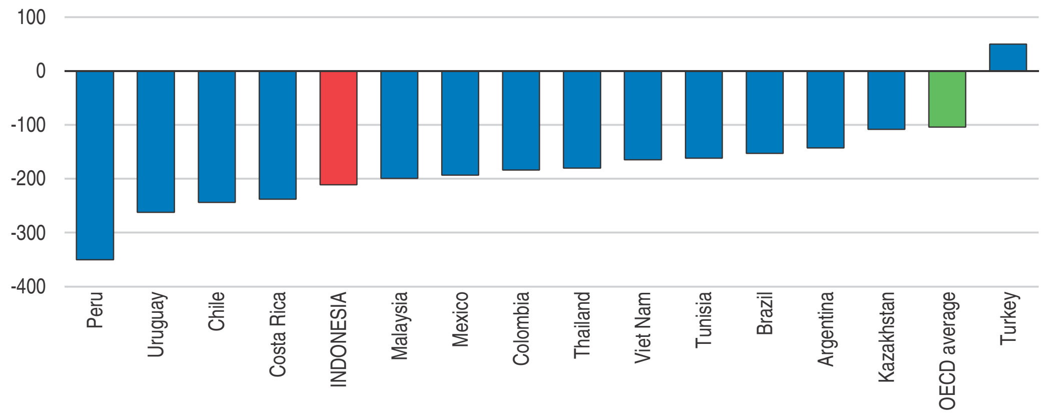
Education

Much headway has been made in ensuring greater access to education over the past few decades. Successive governments' focus on basic education has paid dividends, with improved attendance at all levels across the archipelago. Nevertheless, there is some way to go to achieve universal primary and lower secondary enrolment, the government's stated objective. For instance, in 2012 9% of regencies/cities had primary school enrolment rates of less than 90%. While this is down from 29% in 1996, it still amounts to 1.3 million children who did not go to primary school (UNESCO, 2015). Enrolment at higher levels is even more heterogeneous across the country and socio-economic groups. For instance, recently only 55% of children from low-income families were enrolled in lower secondary schools (World Bank, 2012c).

As highlighted in the previous *Survey* (OECD, 2015a), Indonesia's average PISA score is close to other countries' at a similar level of development. While a regional breakdown of Indonesia's PISA performance is unavailable, there is a breakdown based on town size. The difference in PISA performance between big cities and villages is comparatively large among developing countries (Figure 1.6). This might be caused by a number of factors, including accessibility and the quality of teachers (Hayashi et al., 2014).

Figure 1.6. **Rural-urban student performance differentials, selected countries**

Difference in PISA scores between villages and large cities[1]



1. Sum of PISA reading, science and mathematics scores.
Source: OECD 2012 PISA database.

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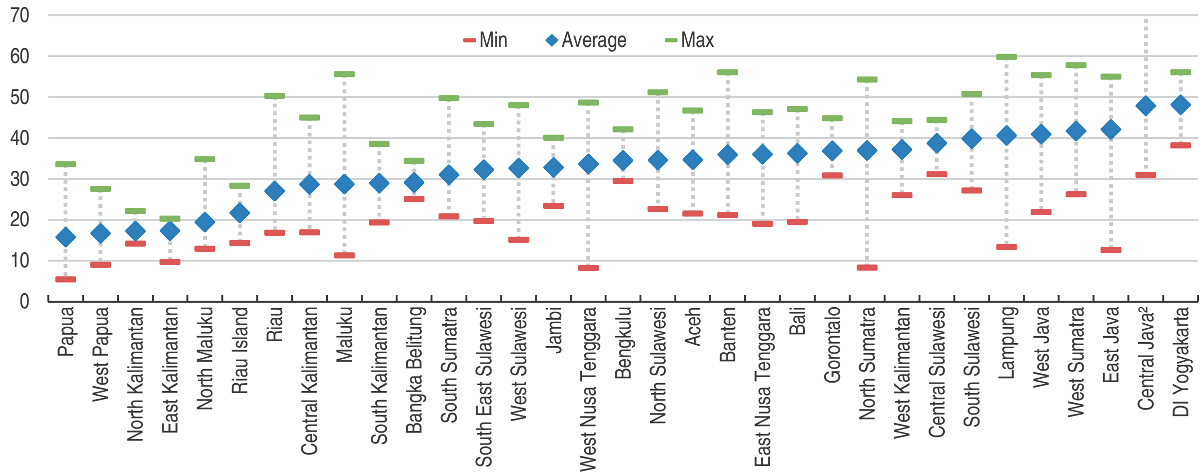
The supply of teachers and quality of teaching may help to explain variations in student performance across the country. Because of a general oversupply of teachers, Indonesia has one of the lowest pupil-teacher ratios worldwide, and teacher recruitment continues to outpace student enrolment at all levels. Over the past decade the number of teachers in all except Islamic schools rose by 51%, and the national pupil/teacher ratio declined from 20:1 to 15.4:1 (Suharti, 2013). Many rural districts have low pupil-teacher ratios because they have many small schools, but despite this, the rule is that each primary school should have a minimum of nine teachers. Moreover, teachers are attracted to remote locations by allowances that can triple their salaries. So, while it means that rural schools are not generally understaffed, staffing classes of 10 pupils or fewer with a qualified teacher is inefficient (OECD, 2015b).

While data on teacher financing are not readily available, it is clear that increased teacher numbers and increased salaries have accounted for a growing share of education budgets (World Bank 2013a; Kristiansen and Pratikno, 2006). With decentralisation, the number of teachers is set by the central government based on the number of students and schools. Recruitment and salaries are effectively set by the local governments who are fully compensated by central government transfers (see below). This creates a perverse incentive for the regions to increase teacher numbers regardless of needs or competencies. More should be done to assist sub-national governments to fully and efficiently allocate their education spending. This includes rewarding teachers for performance and not just academic qualifications and seniority.

Whereas education policy and standards have remained the responsibility of the central government since 2001, the delivery of basic education has been that of the regency/city governments. This has provided more opportunities for parental participation, including greater flexibility and improved access to educational services in certain areas. Since 2005, the constitution has required that all levels of government dedicate 20% of government spending to education. In 2012, 13% of all regencies/cities spent under 20% of their budget on education, while many spend a great deal more (Figure 1.7).

Figure 1.7. **Variation in expenditure on education across and within provinces, 2012**

Education expenditure as a percentage of total revenue, provincial averages and within-province ranges[1]



1. Within-province ranges are at the regency/city level.
2. Within-province maximum for Central Java is 97.3%.

Source: Statistics Indonesia, National Social Economic Survey (SUSENAS); INDO-DAPOER database.

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Regional infrastructure

Access to basic infrastructure also varies enormously. Decentralisation devolved much infrastructure expenditure, such as on local roads and water treatment, to sub-national governments. The central government's share in infrastructure investment fell from around 80% before decentralisation (1995-2000) to about 35% a decade later (World Bank, 2013b). While local governments are in a better position to assess regional infrastructure needs, this poses the challenge of effective coordination of sub-national measures and regulations with national plans, such as the MP3EI (*Masterplan Percepatan dan Perluasan Pembangunan Ekonomi Indonesia*; Masterplan for the Acceleration and Expansion of Indonesian Economic Development). More generally, the experience of OECD countries is that greater decentralisation is associated with higher levels of public investment (Blöchliger et al., 2013; Fredriksen, 2013).

Electricity

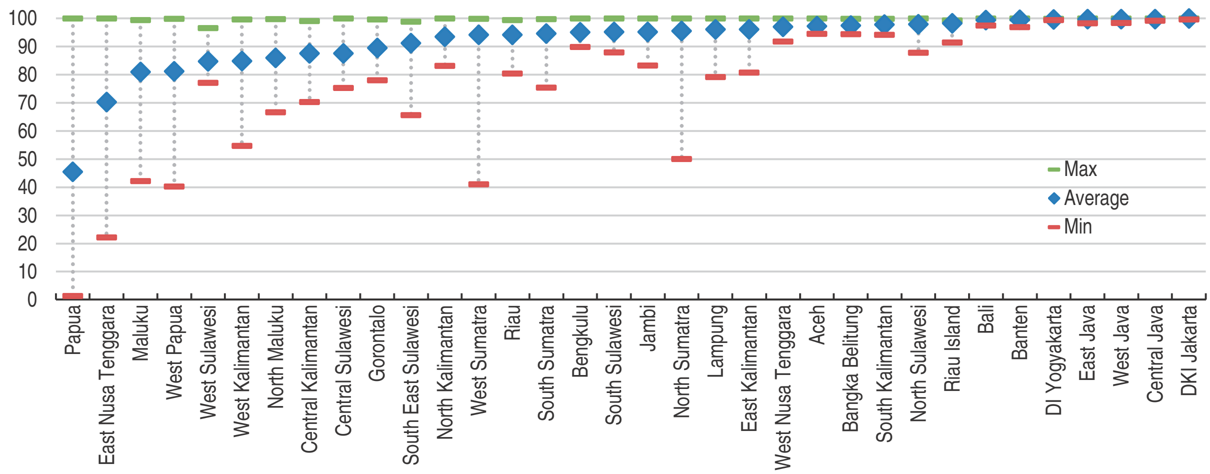
In terms of provincial averages, household access to electricity varies from 46% in Papua to 100% in the large metropolitan provinces like Jakarta (Figure 1.8). But the variance is particularly stark when looking at household electricity access across the regencies/cities within each province. For instance, in West Sumatra where the provincial average is 94%, on the island regency of Kepulauan Mentawai it is only 41%. The situation is even more severe in the two Papua provinces, East Nusa Tengarra and Maluku in which some regencies have almost no access to electricity. The government has recently inaugurated the Indonesia Terang (Bright Indonesia) programme, which is intended to develop electricity infrastructure in several remote areas and provide as many as 12 700 villages with access to electricity. In addition to improving households' quality of life, business will of course also benefit from cheaper and more reliable sources of power.

Transportation

While access to services like education, water and electricity is important for the quality of life, transportation links are crucial for regional economic development.

Figure 1.8. **Variation in household access to electricity across and within provinces, 2013**

% of households, provincial averages and within-province ranges[1]



1. Within-province ranges are at the regency/city level.

Source: Statistics Indonesia, National Social Economic Survey (SUSENAS).

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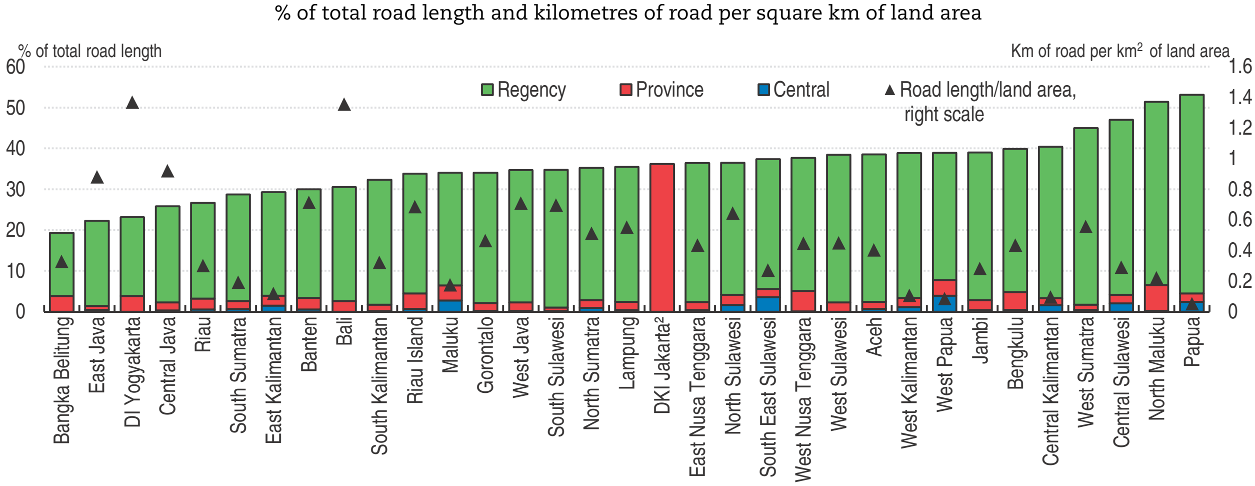
Insufficient in quantity and inadequate in quality, Indonesia's transport infrastructure is a serious bottleneck to its economic development (OECD, 2011a). According to the World Bank's World Development Indicators, the increase in road density (kilometres per land area) in Indonesia has been modest by comparison with many other rapidly developing countries, while the total length of railways has actually declined over the past 30 years. Moreover, the maintenance of transport infrastructure has also been poor, with most of the district and city roads, which account for nearly 80% of the network, recently considered in bad condition (World Bank, 2012b). Indeed, in some provinces, around half of roads are ill-maintained (Figure 1.9). While the total number of vehicles increased threefold between

Figure 1.9. **Road disrepair and road density by province**[1]

% of total road length and kilometres of road per square km of land area



1. Roads within each province are divided into three categories (central, provincial, regency) based on administrative responsibility. Roads in disrepair are those deemed to be damaged in the Statistics Indonesia survey.
2. All Jakarta roads are administered by the provincial government. Road length per km^2 land area is off the chart at 10.5.

Source: Statistics Indonesia.

StatLink http://dx.doi.org/10.1787/888933420891

2001 and 2010, the national road network, which serves more than one-third of vehicle traffic (in vehicle-kilometres), grew by only a quarter. Gertler et al. (2014) show that improved road quality increases firms' value added, total factor productivity and labour demand through new business entry. Structural shifts away from the agriculture/informal sector to the high-productivity manufacturing/formal sector are faster where road quality is higher. Fiscal incentives should be provided to sub-national governments to ensure adequate road maintenance. For example, national government co-financing of sub-national road investment could be made conditional on adequate road maintenance within sub-national jurisdictions.

Existing government programmes for regional development

The Integrated Economic Development Zones (Kawasan Pengembangan Ekonomi Terpadu; KAPET) programme was set up almost 20 years ago to promote development in the lagging eastern regions of the country. The target was to attract 20% of all national investment into these regions. Currently there are 13 areas designated as KAPETs, mostly in eastern Indonesia. Among other means, various tax facilities are offered to attract investment to them, including non-collection of VAT and Luxury Sales Tax (LST) on certain luxury goods purchases and postponement of import duty on capital goods and materials for processing. In 2011 a parliamentary committee concluded that KAPETs had not performed up to expectations, attracting only 3.4% of national investment over the period 2005 to 2010 (Farole, 2013). Their weak performance was attributed to: i) weak management, in particular a lack of capacity of local authorities; ii) poor central and local government coordination, especially after decentralisation; iii) deficient infrastructure and facilities; iv) a lack of funding for investor facilitation in infrastructure development, again especially after decentralisation when funding responsibility passed to the regions; v) distance of the KAPETs from key markets; and vi) insufficient tax incentives.

Indonesia has also set up special economic zones (SEZs) with a view to promoting investment in the regions. There are currently nine SEZs, and it is the government's intention to set up 17 more by 2019. Of the nine current SEZs, only two (Sei Mangkei in North Sumatra and Maloy Batuta in East Kalimantan both of which focus on palm oil processing) have started operations. In November 2015 the government added further inducements for firms to set up within them by offering corporate tax discounts of between 20 and 100% for up to 25 years depending on the level of investment. Under previous regulations, companies could acquire land rights for 30 years and were able to renew them for 10 more years twice, but now also foreigners are allowed to own land outright in SEZs. Moreover, foreign investors are now allowed to set up and manage SEZs. While it is still too early to assess the success of Indonesia's SEZs, most suffer from inadequate infrastructure, especially in light of their often isolated locations (Vidaurri, 2015). Moreover, their potential impact on broader economic development remains uncertain.

Free trade zones (FTZs) have been another strategy for promoting regional economic development. Only one FTZ was ever set up in Indonesia: the Batam, Bintan and Karimun Free Trade Zone (BBK FTZ), located on the Riau Islands close to Singapore. This FTZ was set up in 2007 and offered investors exemptions from import and export duties, and VAT-exempt imports. No corporate tax advantages were offered. The plan was to lure investment from Singapore, with the additional attraction of comparatively cheap labour and low rents. However, the BBK FTZ has not lived up to hopes, employing just 2 000 workers at end-2015, with its operation bogged down by bureaucracy. For example, the lack of demarcation between the central government-appointed FTZ authority and the regional government was never resolved, creating legal uncertainties for investors (ChannelNewsAsia, 2015). In December 2015, the government announced plans to dissolve this FTZ, converting it into a regular SEZ.

Beyond SEZs, tax incentives are available to promote investment both generally and in specific regions. The rules have been frequently modified, although this is in part due to the regular review and fine-tuning of these facilities. In 2015 (Regulation No. 18/2015) additional tax incentives were introduced for investments made in certain designated business sectors in specific regions. The matrix pairing eligible sectors and regions is voluminous, there being 66 qualified sub-sectors in the non-location-specific category and 77 qualified sub-sectors limited to very specific locations in various regions. While no longer setting a minimum threshold value of investment, these incentives are subject to strict conditions including requiring high local content including absorption of local manpower. The facility consists of an investment allowance of 30% of the total investment, accelerated depreciation, a lower income tax rate for dividends paid to non-residents, loss compensation for 5-10 years depending on the conditions of location, number of domestic workers, expenses on economic and social infrastructure, research and development outlays and the utilisation of domestic raw materials/components. It is still to be seen how effective these incentives will be in terms of attracting private investment to the designated regions.

MP3EI is the most recent plan for the economic development of the regions of Indonesia. Published in May 2011 under the previous Yudhoyono government, it set out a three-stage plan for Indonesia to become a developed country by 2025. The plan was based on accelerated economic growth, relying heavily on private-sector investment, and improving the investment climate through regulatory reform. Twenty-two economic activities that were considered to have high potential for growth were targeted for special attention under eight main programmes: agriculture, mining, energy, industrial, marine, tourism, telecommunications and the development of strategic areas. Among the 22 are bauxite, copper, nickel, coal and oil & gas, timber, oil palm, cocoa, rubber, food agriculture, tourism, steel, defence equipment and steel. The plan divided the archipelago into six main target "corridors", each with a different, but in many cases overlapping economic focus. The aim was to lift GDP growth rate within the economic corridors and to reduce the dominance of Java in Indonesia's economy. The total investment was valued at IDR 4 012 trillion (USD 437 billion). It was envisaged that the government would contribute around 10% in the form of basic infrastructure, while the remainder was to come from state-owned enterprises (19%), the private sector (51%) and public private partnerships (PPPs) (21%). The bulk of government investment was to be in road, rail, and power and energy infrastructure.

Despite these ambitions, much of the hoped-for investment did not happen within the envisioned timeframe. Right from the beginning, the plan faced challenges including: tight implementation schedules, enormously ambitious private-sector funding, limited capacity within governments to conclude the needed PPP agreements, low levels of human capital to meet the manpower needs across each regional corridor; and real regulatory constraints (OECD, 2012c). The plan was also criticised for focusing too much on ground transportation, for which land acquisition proved to be a real hurdle. Moreover, a large part of the envisaged investment was to take place in Java, already more developed than many other regions of the country.

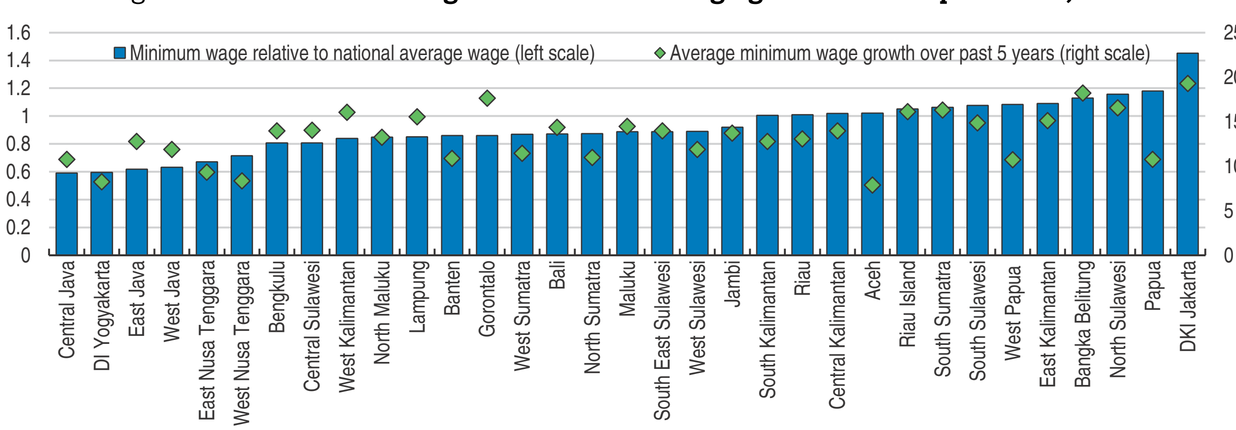
The current government's Medium Term Development Plan (RPJMN) 2015-19 does not explicitly address regional development in its seven goals or nine development agenda items, although it does aim to improve welfare and prosperity, while reducing inequality both across households as well as across regions and ensuring that development does not harm the environment.

More flexible wage policy and labour market regulations do not seem to have been considered for use as inducements to lure business investment into the regions, including in the SEZs and FTZ. Indeed, minimum wages, which are set at the regency/city level, do not correlate with economic or labour market conditions across the regions (Figure 1.10; OECD, 2015a). Moreover, the minimum wage is binding only in the formal sector, and in many of these jurisdictions where the minimum wage is set the government is the largest employer in the formal sector. And given that the minimum wage increases tend to cascade up through the higher pay scales, the considerable minimum wage increases seen over that past several years have effectively translated into large pay rises for regional public servants, the cost of which is covered entirely by transfers from the central government (see below). At the same time, these hefty wage increases have damaged the competitiveness of the regions in attracting business investment. In light of this, the central government's move to cap minimum wage increases to inflation plus annual real GDP growth is welcome, even though in 2016 the increase will be around 11.5%.

Another policy that has been rolled out to promote business growth is the enterprise registration one-stop-shop programme (Pelayanan Terpadu Satu Pintu; PTSP). The goal of the PTSP is to consolidate business registration and licensing functions in one office, making it easier for firms to register. By 2013 all but four of the 500-odd regencies/cities had set up a one-stop shop. However, research finds relatively little evidence that the programme has increased the rate of (formal) business registration across the regions (Rothenberg et al., 2015; Galiani et al., 2015).

Business surveys and academic research often confirm that fiscal incentives are not one of the most important determinants for attracting investments (OECD, 2010). Many incentives end up subsidising investments that would have been made even without

Figure 1.10. **Minimum wages and nominal wage growth across provinces, 2015**



Source: Statistics Indonesia.

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incentives, create rent-seeking opportunities and complicate tax administration. Indonesian authorities are aware of the limitation of using tax policy alone to influence investment decisions and have emphasised more important areas such as macroeconomic stability, infrastructure and public governance. The OECD *Checklist for FDI Incentive Policies* provides policy advice in designing investment incentives: they should be transparent to maximise their intended effects, reduce incentive-related tax planning opportunities and facilitate cost-benefit analyses.

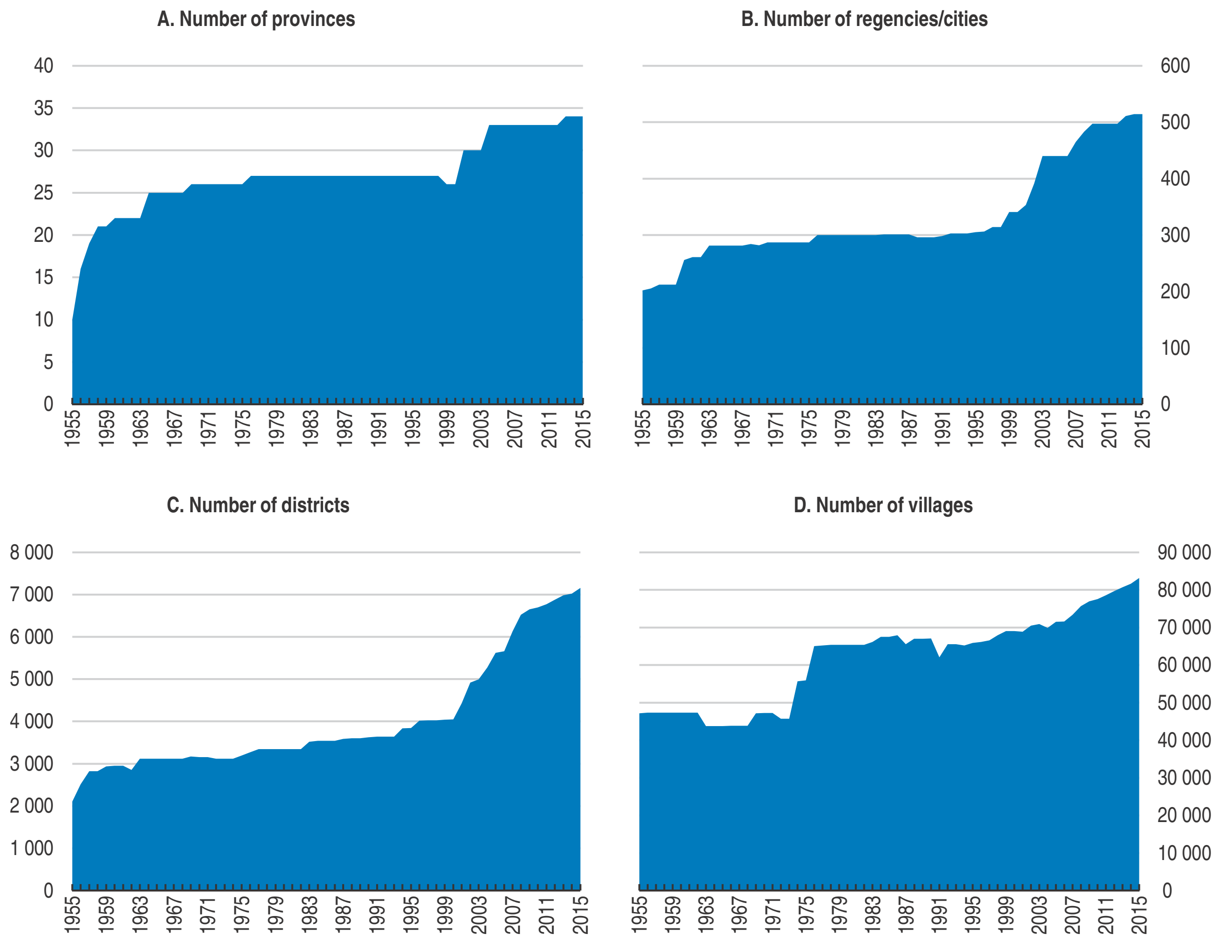
Outcomes have varied enormously. Looking simply at investment, over the five years to 2014 non-building investment per capita in both Jakarta and East Kalimantan (timber, oil and gas) has been 18 times higher than in East Nusa Tengarra. Despite the efforts of successive governments, investment in the regions outside Jakarta has very much focused on the low valued-added commodity extraction (oil and gas, coal, and metals), palm oil and timber industries. Beyond that there has been too little focus on addressing the investment climate, improving infrastructure and lifting firm-level competitiveness. Moreover, while national programmes such as corporate tax policy and inter-regional logistics are important, the predominant factor in regional development over the past decade and a half has been the massive shift to decentralise government, which has transferred the responsibility for the provision of public services and much of the regulation of business down to sub-national authorities. This includes the licensing of businesses, regulation of investment and land use. More than ever before, the development of the regions is in the hands of these sub-national entities. While the central government provides the financial resources, the regional governments are largely unconstrained in how they are used; indeed, there is an enormous variance across the regions in the mix of spending on public services, and, concomitantly, outcomes have vary widely across the country. Moreover, regional governments have been both discouraged and legally constrained in their capacity to raise their own revenue, and this has frequently pushed them to resort to instruments such as user fees and charges that have hindered business development.

Regional administrative fragmentation continues apace

One of the most striking aspects of decentralisation in Indonesia has been the proliferation and continuing subdivision of political and administrative units. This process, which has been named *pemekaran* (blossoming), has occurred at all sub-national levels of government (Kimura, 2013). Between 1999 and 2015 the number of provinces increased from 26 to 34, the number of regencies/cities increased by 55%, districts by 77% and villages by 20% to over 83 000 (Figure 1.11).

The subdivision of a country into small political regions is desirable from a number of perspectives. It brings the provision of public services closer to the people, thereby better meeting needs. A large number of smaller sub-national units also makes it easier for residents to vote with their feet and move to a jurisdiction offering a mix of services and taxes that better match their preferences (Tiebout, 1956). It also provides greater scope for civil participation and political accountability. However, the optimal granularity is very much open to debate, both in terms of size (topographical and demographic) as well as the range of services provided. There is a trade-off between catering for local preferences and the efficiency (the ability to exploit economies of scale, for example) and the technical capacity of small government units.

Figure 1.11. **Number of sub-national administrative units in Indonesia since 1955**



Source: Statistics Indonesia.

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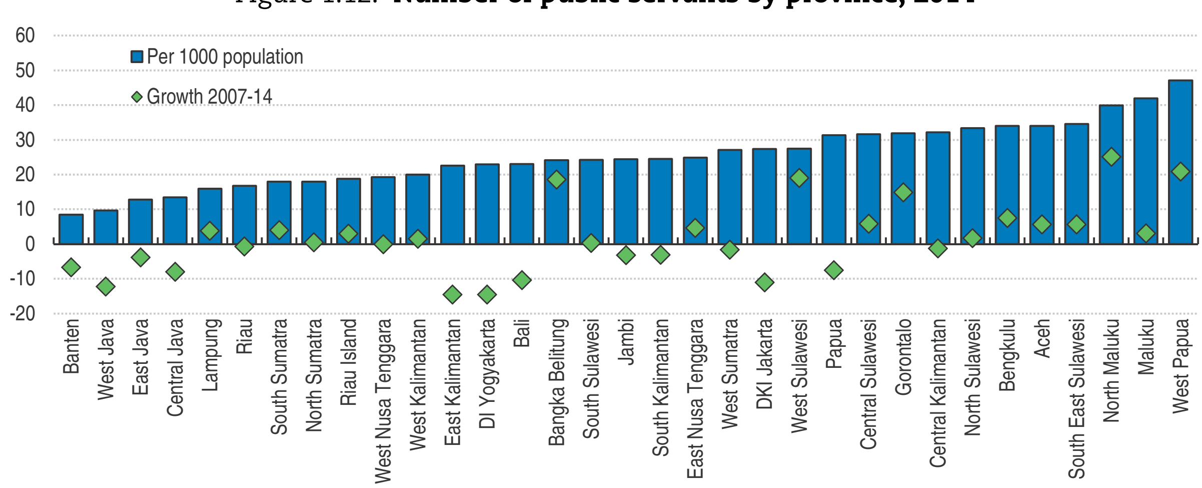
Sub-national politics is undergoing a process of atomisation that is allowing local elites to subdivide power. This process has been tolerated by the central government because it acts as a political pressure valve (Nolan et al., 2013). Kimura (2007) argues that fragmentation since the transition to democracy has largely been in response to vertical coalitions composed of politicians at the national, regional and local levels. Gone are the days when military men or national-level bureaucrats were parachuted in to implement central government policies. In 2005, the direct election of governors, district heads and mayors was introduced, and so political power is now contested by locals with local interests (Buehler, 2013). Burgess et al. (2012) document the pernicious impact that the multiplication of jurisdictions has had on the management of forests in Kalimantan.

The blossoming in the number of political entities at the sub-national level has been mirrored by a boom in the number of public-service jobs. At around 17.5 public servants per 1 000 population, Indonesia has a very high share of government employees compared to peer countries. Lewis (2015) concludes that Indonesian sub-national governments spend too much on administration and personnel and not enough on actual service delivery: indeed, district administrative expenditures are extremely high in international comparison. On average, districts spend around a third of their entire budget on general administration cost, such as wages, and not on public service delivery. Corresponding figures are 3% for US counties and UK districts, 8% for Norway and 13% for Tanzania (Suharnoko Sjahrir et al., 2014). In Indonesia, around 73% of government employees are at the regency/city level, and this is where the highest growth rates have been. This of course reflects the increase in service delivery responsibilities at this level of government, but those provinces with the highest civil-servant densities in 2007 were also those with the strongest growth in the number of civil servants over the subsequent seven years. Moreover, the variance across Indonesia's provinces in public servant density is enormous, ranging from around 10 per 1 000 population in Banten and West Java, to over four times that in Maluku and West Papua (Figure 1.12). Lewis and Oosterman (2011) argue that while the sub-national governments account for a significant proportion of public investment spending, a large share of this goes to towards relatively unproductive assets such as office buildings. All these indicators suggest that sub-national governments are, in this respect at least, not converging on best practice.

An important factor that has driven the rapid blossoming of new villages in Indonesia over recent years is the system that allocates funds on a per-village basis, largely without regard to population size or the individual needs of each village. This means that subdividing a village into two effectively almost doubles the per capita allocation from the central government. This applies to some degree to all levels of sub-national government; Fitrani et al. (2005) show that the lump-sum nature of Indonesia's general allocation grant (see below) means that "two new districts get effectively twice as much as the larger older district" from which they were formed.

The rise in the number of administrative units has also had broader economic consequences. For instance, the subdividing is frequently done in such a haphazard manner that the geographical boundaries of newly formed administrative units are often left undefined, making spatial planning and land-use zoning problematic, especially from the perspective of businesses wanting to build and invest. Since 1994 there has been a project led by Statistics Indonesia to produce digitised maps of regency/city, district and village-level boundaries. For a country like Indonesia with upwards of 83 000 villages, often in remote and hard-to-access locations, mapping is a massive task, not least because of the

Figure 1.12. **Number of public servants by province, 2014**



Source: Statistics Indonesia; INDO-DAPOER; OECD estimates.

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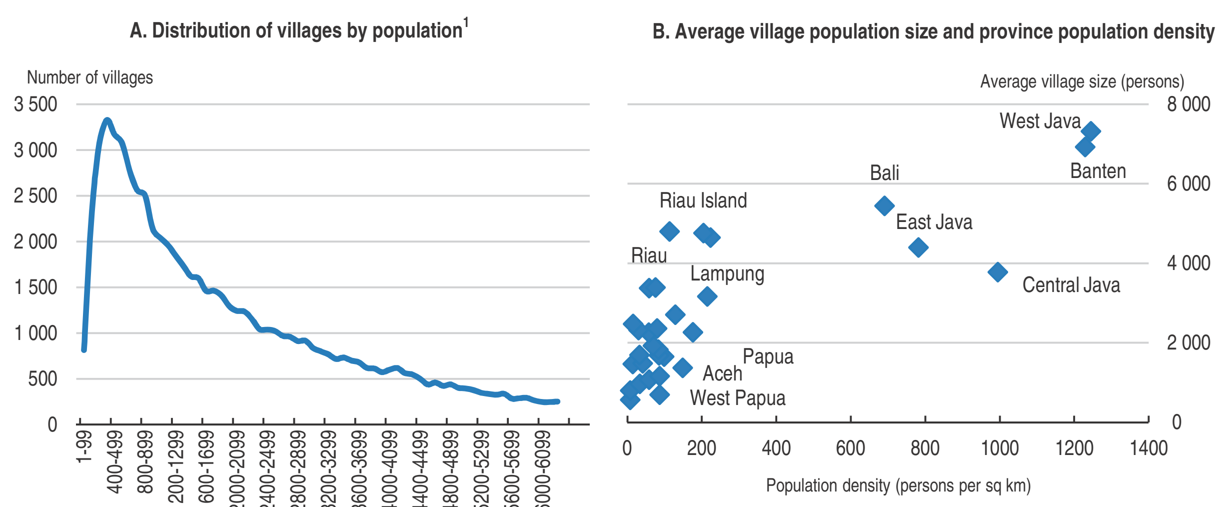
constantly changing administrative boundaries, but this project should be prioritised and properly funded.

As in many other countries, including OECD countries such as France, the Czech Republic, Finland and Denmark, very small political units can be costly from a public administration perspective. As mentioned earlier, fragmentation into small administrative units can improve outcomes as local governments closer to the people can implement policies that better match their needs, thus providing goods and services in a more efficient way. However, small operational unit sizes can conversely result in diseconomies of scale and policy and legal fragmentation that impedes firms from operating efficiently across jurisdictions (Bartolini, 2015). Moreover, the small talent pool might mean that the technical capacity of public-sector workers can be a problem. With decentralisation, the district level of administration in Indonesia has been tasked with a broad array of public service delivery responsibilities ranging from education to health. There are around 6 500 districts with a mean size of around 38 000 people and a median of just 24 000. Indeed, there are districts in Indonesia with as few as 200-odd residents (the Syujak district in Tambrauw regency in West Papua). Likewise, with the new 2014 Village Law, greater resourcing (to reach 10% of total intergovernmental transfers by 2017) and social service delivery responsibilities are being given to villages. However, while as yet the legal and regulatory framework provides only a general indication of village service responsibilities, with over 200 villages comprising less than 50 people (and indeed 13 with less than 10 people; Figure 1.13; Panel A), the technical capacity to administer these funds and deliver these services, let alone supervise their expenditure, is stretched. The issue of fiscal transfers and village-level governance is discussed in more detail below.

Measures have been taken to put a brake on the fragmentation of sub-national political entities. In 2008 a moratorium was imposed on the formation of new provinces, but then in 2013 the country's 34th province, North Kalimantan, with only 525 000 inhabitants, was sliced out of East Kalimantan province. The Village Law 2014, Article 8 (3.b) specifies

Figure 1.13. **Village population size, 2010**



1. There are 8 498 (11% of total) villages with a population of greater than 6 300, although the frequency continues to decrease monotonically with size.

Source: Statistics Indonesia, Census 2010.

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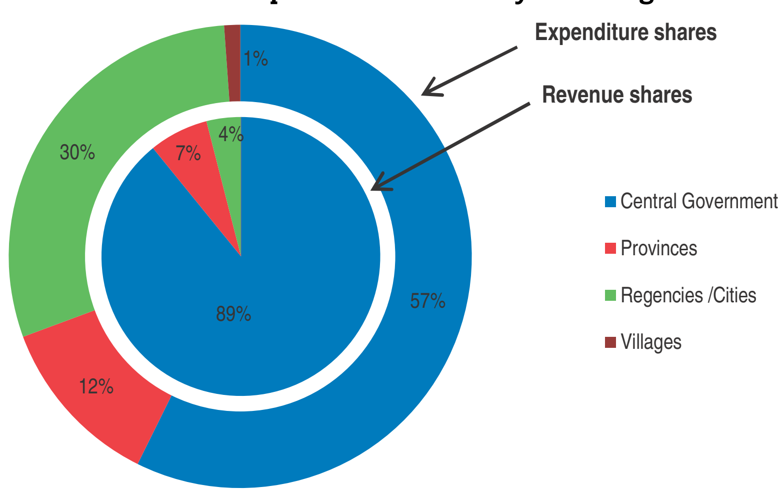
the minimum population required for new village formation (for example, in Java 6 000 persons or 1 200 households, and in Papua and West Papua 500 persons or 100 households).

Some fiscal aspects of decentralisation could be improved

Over the past decade and a half, Indonesia has gone from being one of the most centralised countries in the world in administrative, fiscal and political terms, characterised by a dominant and authoritarian central government, to one of the most decentralised. Starting in 2001, as devolution of responsibilities for the provision of public services began, the provincial governments, which had previously shouldered a lot of these responsibilities, were leap-frogged in favour of having service delivery responsibilities at lower levels of government. Given that the sub-national governments have very limited revenue-raising capacity, the majority of the funding for these services continues to come via central government transfers. Indeed, in 2015, 89% of all government revenue collected was by the central government, while only 47% of expenditure was incurred by central government (Figure 1.14).

Funds from the central government are allocated directly to three sub-national levels of government: namely the provinces, the regencies/cities and villages. Districts are funded and administered by the regencies/cities. In broad terms there are three categories of transfers: i) equalisation funds; ii) autonomy funds; and iii) village funds. Equalisation funds have a number of subcategories. The General Allocation Fund (DAU) is a large block grant, half of which is earmarked for wages and salaries, with the rest unconstrained. The Special Allocation Fund (DAK) is an targeted block grant. The Revenue-Sharing Fund (DBH) redistributes revenues earned from natural resources (forestry, mineral mining, fishery, oil, natural gas and geothermal), and non-natural resources (land and building tax, property tax and income tax). Autonomy funds provide a few resource-rich provinces with a larger share of resource royalties. Village funds are grants directly to villages. The details of each

Figure 1.14. **Revenue and expenditure shares by level of government, 2015**



1. The 2015 figure for village expenditure is an OECD estimate. Given the ramping up of the 2014 Village Law, the estimated 2015 village expenditure share is likely to be an underestimate.

Source: Ministry of Finance, Statistics Indonesia; OECD estimates.

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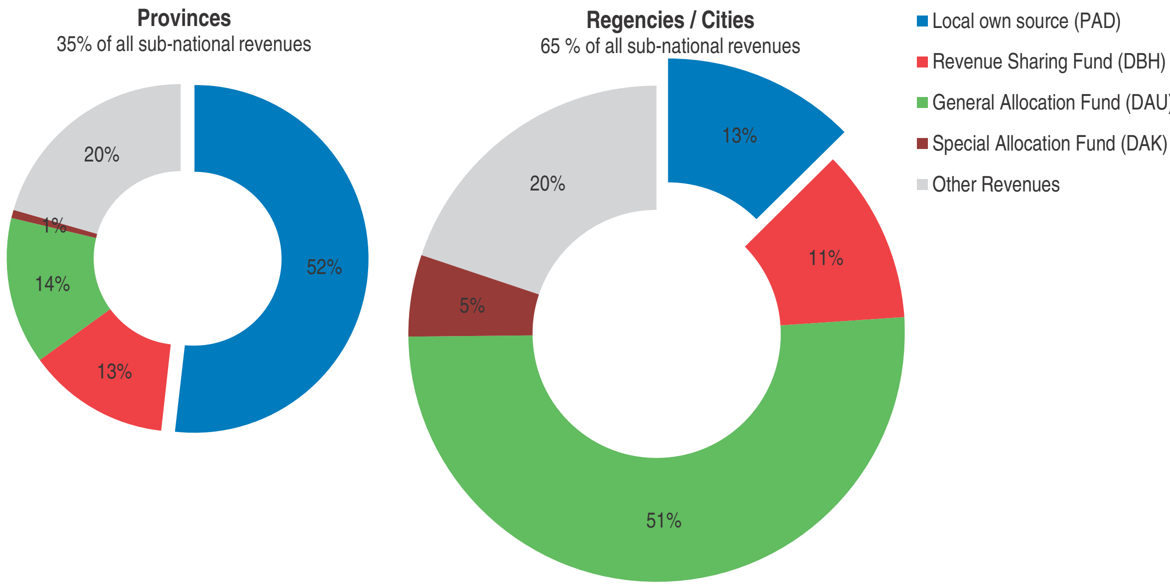
Figure 1.15. **Sub-national government revenues by source, 2015**[1]



1. Excludes transfers to villages. Other Revenues include Autonomous Regions Funds to Aceh, Papua and West Papua.
Source: Ministry of Finance.

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of these transfers, including the formulae used to calculate the distribution among sub-national governments, are discussed in detail below. Finally, there are also deconcentration funds which provide "off-budget" grants directly from central government line ministries to sub-national governments to fund specific national programmes.

In 2015 the regencies/cities accounted for around two-thirds of all revenues at the sub-national level (5.4% of GDP), while provincial revenues accounted for the remaining one-third (2.3% of GDP). By far the largest transfer is the General Allocation Fund (Dana Alokasi Umum; DAU) transfer to the regencies/cities, which accounts for around half of all central government transfers to these two sub-national levels. In addition to revenues from central government transfers, provinces and regencies/cities also raise their own revenues, but they account for only 52% and 13% of total revenues for provinces and regencies/cities, respectively (Figure 1.15).

The General Allocation Fund

The largest central government transfer to the regions is the DAU, accounting for 56% of total central transfers and financing 46% of sub-national expenditures. DAU is a block grant paid to the provinces and regencies/cities with a fixed 10/90 split between the two. The formulation that determines its distribution across regional government is heavily weighted towards a basic allocation for public service wages and salaries; this component is around half. Box 1.1 gives further details of the formula used to calculate the remainder, based on a fiscal gap.

By comparison to other federal countries, the formulation of this transfer is both complex and results in undesirable incentives. For instance, the blanket coverage for public service wages and salaries strongly encourages a large public payroll. The central government imposes some controls over local recruitment and staffing in order to mitigate this perverse incentive. However, at the regency/city level where the DAU represents over

Box 1.1. **Formula for the distribution of the General Allocation Fund (DAU)**

The total national DAU pool is calculated annually by the Ministry of Finance based on the total central government budget. This has typically been around one quarter of total domestic revenue in the national budget. The DAU pool is divided into two parts: i) the basic allocation and ii) the fiscal gap.

The basic allocation is intended to cover personnel costs for sub-national civil servants (including teachers and medical staff, etc.). This usually amounts to around half of the total DAU pool.

The remainder of the pool is divided among the provinces and the regencies/cities. The split is set by agreement between the government and parliament and is currently 10%-90%. The fiscal gap formula is used to decide how these shares are divided among the provinces and among the regencies/cities. The fiscal gap is the fiscal needs less fiscal capacity. The fiscal needs of a region are local expenditures adjusted by population, land area, construction prices and poverty. Fiscal capacity is local revenue adjusted by estimated revenue potential. This is represented by the sum of an industry index, a natural resources index and a human resources index. Local revenue is local own revenue plus any tax-sharing revenues received.

half of all revenues (compared to just 14% for provinces), the public payroll is much larger than at the provincial level and also compared to other local governments with similar service delivery responsibilities in peer countries (World Bank, 2005). Indeed, personnel accounted for 47% of all regency/city expenditure in 2014, up from 31% in 2009. This is in contrast to the provincial level where it accounted for just 16% of expenditure in 2014, down from 20% in 2009.

If direct compensation for the local level public payroll is to remain, for the sake of transparency the basic allocation should be separated from the fiscal gap allocation. Furthermore, payroll compensation should not cover 100% of the payroll: the salary of each additional public employee should be compensated at a fixed marginal rate of less than one, with the remainder coming from other non-compensated transfer streams or, even better, from local own-source revenues (see below for recommendations on increasing the share of own-source revenues in regional budgets) so as to encourage regional governments to economise on public-sector hiring.

The formula for the fiscal gap transfer also needs to be reconsidered. Indeed, in many developing countries (such as Brazil, India and Thailand, and in the United Kingdom) very simple per-capita revenue-sharing frameworks are used and explicit grants target social inequality, infrastructure exigencies and other regional inequality issues (Shah et al., 2012). While moving to such a system is very unlikely in Indonesia due to the political economy of decentralisation, reforms are needed that focus on simplicity, transparency and certainty, while enhancing efficiency and citizen-based accountability. Incentivising improvements in outcomes, such as achieving a target poverty rate or reducing road disrepair, should also be designed into the framework; that is not to say that being at or above a target should result in higher payments, but that improvements towards a target should be rewarded. Finally, as mentioned above, the formulation of the DAU perversely rewards regional fragmentation with higher per capita transfers after a province or regency/city is subdivided (Harjowiryono, 2011) and needs to be changed.

The Specific Allocation Fund

The Special Allocation Fund (Dana Alokasi Khusus; DAK) is a grant targeted at spending on areas of national priority. However, in reality the DAK has proven to be not much more specific than the DAU. Furthermore, the effectiveness of the DAK allocation mechanism in poverty alleviation, boosting economic growth, cutting unemployment and other specific dimensions has been disappointing (Wibowo et al., 2011). This might reflect the small size of the programme, which accounts for just 6% of central government transfers and finances just 5% of sub-national expenditures.

There are also Special Incentives Grants (Dana Insentif Daerah; DID) and Hibah, which used to be earmarked but since 2015 locals government have been free to use them according to local needs. DID is a small grant programme (accounting for less than 1% of total transfers) to better performing provinces and cities based on the quality of public financial management, level of tax effort, progress in improving the Human Development Index, economic growth, reductions in poverty, unemployment and inflation. Hibah transfers are intended to finance sub-national infrastructure and social development expenditures (Qibthiyyah, 2011).

Shah et al. (1994) suggest an alternative to DAK grants could be conditional open-ended matching grants, along with intensive ongoing evaluation and monitoring to align the allocation of funds to regions with regional development targets. The World Bank is currently funding a project allocates the DAK grants in a similar way to Output-Based Approach (OBA) subsidies, which reimburse service providers for independently verified, pre-agreed measurable physical outputs. Both of these approaches have merit and should be tested. More generally, a greater share of transfers should be in the form of earmarked special-purpose grants.

Autonomy transfers

The central government has entered into special arrangements with Aceh, Papua and West Papua to allocate a greater share of resource revenues to them through the tax sharing system. However the DAU offsets a large part of those gains by including 95% of tax sharing transfers as increases in fiscal capacity for the provinces and 63% for regencies/cities. Nevertheless, the total transfers to these three provinces in per capita terms are the highest of any. The use of the autonomy funds goes largely unsupervised by central government and is therefore extremely prone to fraudulent practices by officials from both central and local governments (Jakarta Post, 2011). The Supreme Audit Agency (BPK) found indications that between 2001 and 2010 around 20% of the IDR 19 trillion in special autonomy funds for Papua and West Papua may have been misused or embezzled (Jakarta Post, 2011).

The Revenue Sharing Fund

Dana Bagi Hasil (DBH) are revenue-sharing transfers. The central government collects taxes on personal income, property, and renewable and non-renewable natural resources and returns a pre-defined share of the revenues to the originating jurisdiction. The sharing formula is set out in Law (33/2004). In 2015 DBH accounted for 13% of all provincial revenues and 11% of regency/city revenues.

Village-level transfers

The 2014 Village Law instituted a new system of transfers directly to villages both from the central and regency/city governments (*Dana Desa*); it is to be phased in over a three-year period. In 2015, villages received over IDR 20 trillion (approximately USD 1.5 billion) in *Dana Desa*, which amounts to about 3% of total central-to-subnational transfers. In addition, regencies/cities will be required to contribute 10% of their own-source revenues (PAD), revenue sharing grants (DBH) and general purpose transfers (DAK) – an estimated IDR 40 trillion (USD 3 billion) – to village budgets. Taken together, these funds made up about 3% of all government spending in 2015, and this is set to increase as the scheme is implemented. The majority of the funds (90%) are to be distributed as equal allocations per village, with the remainder based on a "needs" formulation. Indeed, a popular refrain used by both candidates in the 2014 presidential election was "*satu desa, satu milyar*" ("one village, one billion rupiah"). The basic per-village allocation means a median-sized village will receive IDR 325 600 (USD 23) per capita. This uniform per-village allocation runs counter to the very large heterogeneity among villages, including in terms of population, land area and poverty – indeed there are 2 436 villages with one tenth the median population that are set to receive 10 times the median per capita allocation. This brings into question the scheme's equity. The allocation formula needs to be reassessed and an alternative scheme adopted that uses a simple formulation that accounts for population size and poverty prevalence. Also greater use should be made of earmarked grants for village capital needs.

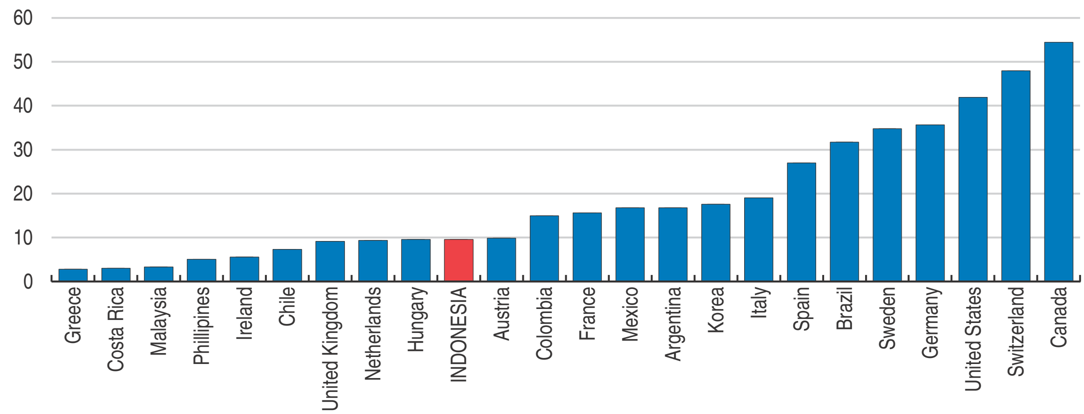
Beside the equity issue, the other major problem with the 2014 Village Law is that villages' service responsibilities are not clearly defined. The legal and regulatory framework provides only a general indication of these responsibilities. Central, provincial and regency/city governments will be responsible for detailing the actual tasks that villages will perform at a later date. Despite claims that "money follows function" – best practice in fiscal decentralisation – in this case the opposite is true. Furthermore, as yet, no provisions have been made for external audits of village-executed budgets.

Strengthening revenue raising in the regions

On the back of falling resource revenues and rising expenditure demands, including for infrastructure and social spending, the national government is seeking to increase tax revenues. However, while around half of all public spending is at sub-national level, only about a quarter of the revenue is raised locally. Or, put another way, only around 10% of total government revenue is raised at the sub-national level, which is low by international comparison, especially in contrast to other federal countries like Brazil, Canada, Germany, Switzerland and the United States (Figure 1.16).

Attempts have been made to promote revenue raising at the sub-national level. Law 34/2000 aimed to promote taxation at the regional level. However, while what constitutes an allowable regional tax under the law adheres to solid taxation principles, the criteria for what is allowed are couched in vague and imprecise terms (for example "not damaging to the economy"). As a consequence, a large proportion of the taxes and user charges that have proliferated are ill-advised and act to inhibit business development and investment (Butt and Parsons, 2012). Law 28/2009 on Regional Taxes and User Charges was intended to address concerns that regional governments were harming the investment climate, particularly by enacting "problematic" taxation and regulations. Additionally, the law transferred a number of taxes from regencies/cities to provinces, and since then total

Figure 1.16. **Sub-national own-revenue as a share of total government revenue, 2014**[1]



1. 2013 for Indonesia, Philippines, Malaysia, Brazil, Argentina, Colombia, and Costa Rica.

Source: OECD Fiscal Decentralisation Database; OECD (2015), *Revenue Statistics in Asian Countries 2015: Trends in Indonesia, Malaysia and the Philippines*, OECD Publishing; OECD (2016), *Revenue Statistics in Latin America and the Caribbean 2016*, OECD Publishing.

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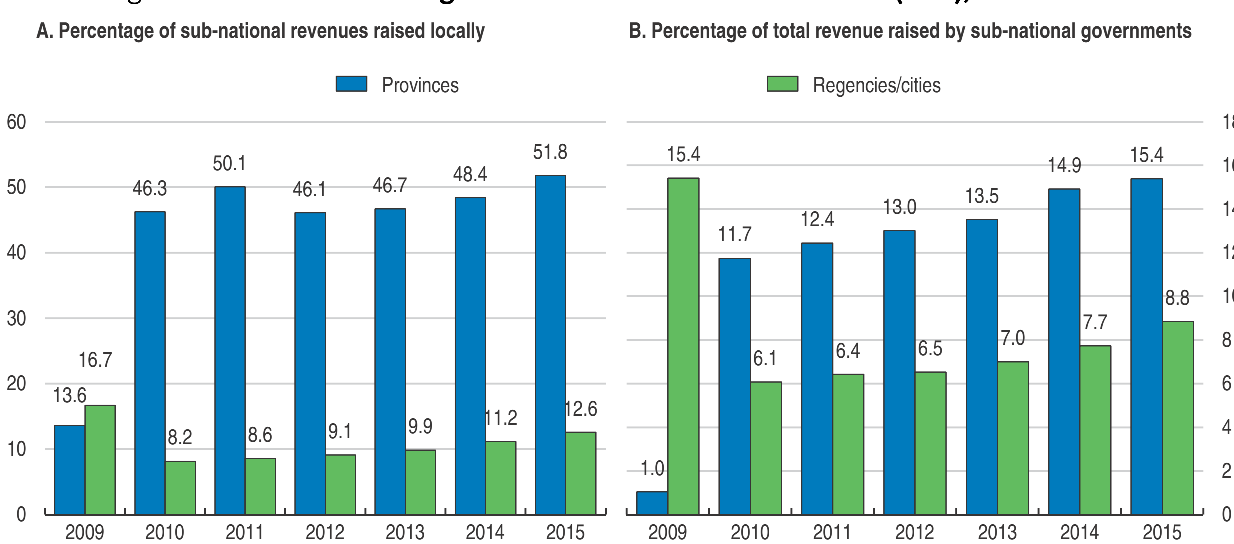
revenue raised at the sub-national level has increased appreciably, from 16.4% to 24.2% (Figure 1.17, Panel B). However, the problem with both Laws 34/2 000 and 28/2009, and the reason that local governments have resorted to what are often nuisance levies and user charges, is that these statutes do not provide for any major tax instrument, such as personal or business tax, to be collected by sub-national governments.

Greater efforts should be made to encourage the regional governments to raise revenue locally. Revenues raised at the local level are desirable on a number of grounds. Local taxation provides a strong incentive to grow the local economy, because that will expand the tax base. Better matching local revenue to local spending strengthens local responsibility and accountability. If the taxes are borne by local (voting) residents, it

Figure 1.17. **Sub-national government own-source revenues (PAD), 2009 to 2015**



Source: Ministry of Finance.

StatLink http://dx.doi.org/10.1787/888933420975

promotes local civic participation – local residents feel less ownership of transfers from central governments and are therefore less likely to hold local politicians and bureaucrats accountable for how these revenues are used or misused. Of course to the extent local accountability is lacking, there is a risk that the use of revenues raised locally is not scrutinised to the same extent as spending out of central transfers. Moreover, in the Indonesian context, the feasibility of local governments raising appreciable revenues through taxes and charges is in question – local capacity is often lacking, and revenue raising can encourage corruption and rent-seeking. Moreover, there is the fundamental question of which taxes, fees and charges should be allocated to sub-national jurisdictions. A number of principles of good regional taxation are outlined in Box 1.2.

In the Indonesian context, the principles of good regional taxation may mitigate against a local VAT because, while it could piggy-back on the national VAT or even simply be imposed as a surcharge on the national VAT, the tax credit mechanism and export redemption would make it difficult to administer, particularly given the still low

Box 1.2. **The principles of optimal regional taxation**

i) Local responsibility and accountability are enhanced if local residents are taxed to pay for the services they consume.

ii) The benefit-tax-link principle says that if residents are willing to pay for the public services they receive, then some form of taxation is efficient. This would enhance individual (and/or collective) welfare in the provision of public goods.

iii) Local taxation should ideally reflect a regionally equitable revenue pattern for reasons of distributional justice among jurisdictions. This is warranted on political grounds as social fairness and national cohesion enhance political stability. On these grounds, taxes on bases that are unevenly distributed across jurisdictions (like natural resources) are not suited for local use because they can entail large regional inequities. In Indonesia this is particularly relevant, given the importance but uneven distribution of the mineral extraction and oil/gas industries across the country.

iv) Local governments have to provide services on a continuous and reliable basis. Apart from investment in large local infrastructure projects, which is lumpy and therefore needs to be financed either through borrowing or with the assistance of higher-level governments, steady service provision calls for a reliable and sustainable revenue base that remains largely sheltered from the cyclical variations of economic activity. It is therefore questionable whether municipalities should be given the progressive personal income tax because it tends to exhibit greater fluctuations over the business cycle than other bases. Indeed, local governments may be willing to surrender volatile sources of revenue for more reliable and steady bases. Revenue risks related to the business cycle and risks arising from changes in the regional structure of the economy form yet another rationale for tax sharing between the lower tier and higher-level governments.

v) Local taxes have to be administered by all municipalities alike, large or small. Since smaller jurisdictions face potentially higher administrative costs per unit of revenue raised than larger ones, the local tax system as a whole is constrained by the former's ability to administer the taxes. Otherwise, regional inequities would result from the effective variance in taxes collected. This calls for a simple local tax system.

Source: P. Spahn (1995), "Local Taxation: Principles and Scope", The World Bank Institute; and OECD and KIPF (2016), *Fiscal Federalism 2016: Making Decentralisation Work*, OECD Publishing.

administrative capacity of many local governments. A local turnover tax would interfere with the national VAT. A local retail sales tax might be easier but would also impose a significant administrative burden. Despite their pro-cyclicality, more promising would be local personal income and local business taxes, which are not currently allowed to be levied by non-central governments. The former could take the form of a surcharge or piggy-back tax on the national income tax for reasons of administrative simplicity. Yet, under the conditions prevailing in Indonesia, where personal income tax collection at the national level is still very low, a local income tax would probably raise little revenue. A local business tax would be, however, feasible in the short run if care is taken to keep the base simple. While a local property tax would be the ideal local tax in theory, the existing property taxes levied at the regional level, raise little revenue in practice. Aside from the administrative complexities in determining the base, the reasons for its poor performance in most countries are the political impediments at play at the local level. Another option for motivating local revenue raising is to offer matching grants as Mexico has done since the 1970s (Campbell, 2003; OECD, 2015c).

Measures to improve the provision of infrastructure in the regions

The lack of infrastructure spending by the regions can be attributed to a number of factors. First, local governments spend mainly on social services and their own administrations. In addition to core expenditures like defence, social security and (until recently) energy subsidies, the centre continues to spend substantial amounts on local functions, particularly in health and education. Given the 3% of GDP deficit rule, low revenues by international comparison (OECD, 2015a), and spending targets for education and health, the spending mix has tended not to favour large-scale infrastructure projects. In addition, some public enterprises that have been transferred to local governments, particularly local water-supply utilities (PDAMs), have become insolvent due to mismanagement. While the focus of the central government is currently on infrastructure projects of national significance, more use should be made of tied Special Allocation Grants (see below) to the regions to fund selected smaller-scale projects.

Second, capital budgets tend to be spent in the second half of the fiscal year, which provides too little time to complete large investment projects. The current central/sub-national budget process entails too many uncertainties and interruptions for rolling out complex multi-year infrastructure projects. This needs to be addressed.

Third, as discussed above, the fragmentation of sub-national jurisdictions and, more generally, the rapid growth in the size of sub-national administrations, particularly in terms the number of public servants, means that too much of their capital spending goes towards relatively unproductive assets such as office buildings.

Finally, while national measures have been taken to streamline the process of land acquisition (see previous *Survey*), one regional aspect is the lack of legal land titling. Indeed, in some regions of Indonesia, particularly in the east, cultural issues differ substantially from the dominant Javanese in so far as the inheritance of land is concerned. For instance, in East Nusa Tenggara (NTT) land is not formally inherited by the next generation but remains the property of all subsequent generations to jointly exploit them. Kristiansen and Sulistiawati (2016) find that rather than resulting in over exploitation, the land is often left under-utilised. Land acquisition laws should be made more flexible so as to encompass regional cultural diversity. Moreover, decentralisation has complicated the process for foreign investors when applying for land titles. Law 32/2004 revoked regional governments' authority to regulate land acquisition, but it has been suggested that some local governments continue to impose additional requirements (Adwani, 2008; World Bank, 2012b).

Imprecise division of responsibilities across levels of government

As argued above, there is broad agreement that many public services should be provided at lower levels of government in order to enhance the efficiency of the public sector and to increase its responsiveness to voters' preferences and demands for collective services. The theory of optimal fiscal federalism posits that the services provided at lower levels should be based on three factors. The first is that local government should provide services that most people benefit from – where the tax-benefit linkage is strong. Roads are an example where everyone benefits, and therefore everyone is willing to pay. The second factor is a lack of externalities. If the local public good has positive spill-overs to other communities, it will be under-provided. In this case higher levels of government have a role in promoting its provision. The third factor that determines the optimal level of decentralisation is economies of scale in production. Goods with large economies of scale, like power generation, are not efficiently provided by multiple competing local jurisdictions. This framework therefore predicts that local spending should focus on broad-based programmes with few externalities and few economies of scale.

A decade and a half after the big bang decentralisation in Indonesia, there still remain unclear lines of responsibility for the delivery of public services across levels of government. While Law 23/2014 goes some way to providing broad guidelines, it relies largely on regulation to articulate functional responsibilities. The central government should be more explicit in setting norms, standards, procedures and criteria for local government service delivery responsibilities and provide guidance and supervision. Likewise minimum service standards should be better monitored and enforced.

A complicated regulatory environment for business

In Indonesia decentralisation has happened so quickly that, even after a decade and a half, in addition to the imprecise division of responsibilities across levels of government, there remain many jurisdictional regulatory overlaps (Pisani, 2014). The decentralisation law of 1999, which has been modified a number of times, still often clashes with existing laws affecting such important sectors as mining and forestry, making administrative responsabilities unclear for businesses and increasing uncertainty for investors. While some improvements were made in demarcation of responsibilities in 2014, significant issues remain.

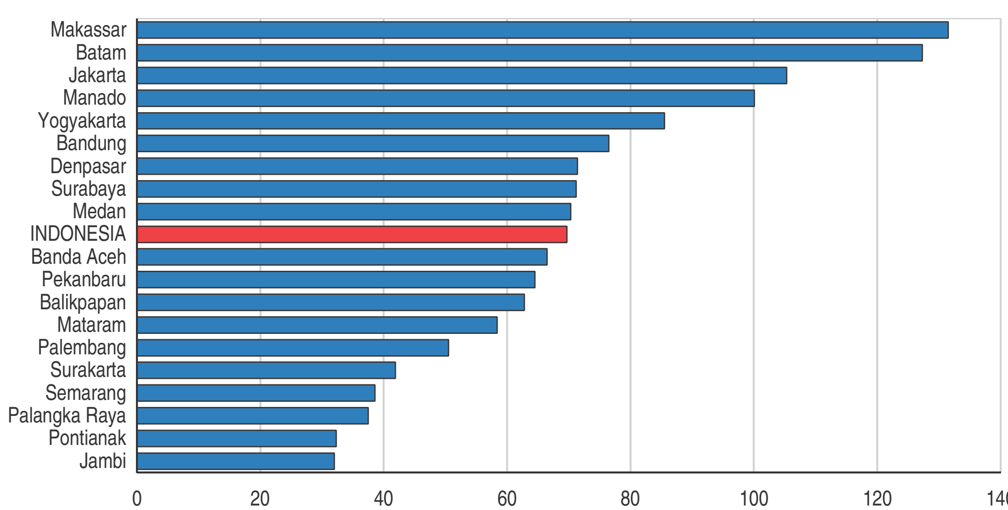
With decentralisation, significant legislative powers have devolved to many hundreds of local legislators and executive officials. Local laws can now be enacted at both the provincial and regency/city level, meaning more than 600 legal jurisdictions. Indeed, Butt (2010) estimates that as of 2010 there were over 1000 law-making bodies or individuals across Indonesia. This proliferation of jurisdictions has made for a much more complicated legal environment for businesses and investors. So while Indonesia continues to improve its ranking in the World Bank's Ease of Doing Business Index, this regional legal heterogeneity is not captured in this or other similar metrics. For instance, that Index covers only the two largest cities, Jakarta and Surabaya.

Having said that, in 2010 and 2012 the World Bank did a sub-national analysis of their index in 14 Indonesian cities (World Bank, 2010 and 2012a) and found that there is considerable variance in business regulation across the cities surveyed. For instance, the cost of a construction permit ranges from around the equivalent of 32% of national average per capita annual income (approximately USD 850) in Jambi (Central Sumatra) and Pontianak (West Kalimantan), to around quadruple that (approximately USD 3 450) in Batam (a free trade zone near Singapore) and Makassar (South Sulawesi) (Figure 1.18). Likewise a construction permit in the city of Bandung takes on average 44 days, while in Jakarta, less than 150 km away, it takes on average 158 days. To start a business in the city of Palangka Raya (in Central Kalimantan), 27 days are needed for the official procedures, while the same steps in Jakarta take 45 days. The large variance in most metrics was attributed in part to the fact that the stringency of enforcement of national regulations varies across cities. Most particularly, starting a business and the high cost of transferring property continue to be challenging for entrepreneurs in most sub-national jurisdictions. These variations indicate that improvements in the regulatory environment can be achieved independently of reforms (or lack thereof) at the national level. Nevertheless, almost all cities surveyed showed progress between 2010 and 2012 in the obstacles to starting and building a business. Even more positively, certain cities within Indonesia ranked much higher in some survey dimensions than many of Indonesia's regional peers, which, in aggregate, tend to outperform Indonesia. This suggests that there is real scope for cities and regions to learn from existing good practices of their Indonesian peers to improve their competitiveness nationally and globally.

Furthermore, as discussed earlier, Law 28/2009 on regional taxes and levies needs to be better enforced so that local governments are prevented from levying user fees and charges that substantially increase the transaction costs of doing business in the regions, both in terms of time and money. Indeed, Law 28/2009 provides the necessary sanctions.

Figure 1.18. **Variation in the cost of a construction permit across major Indonesian cities, 2012**

Cost as a percentage of city income per capita



Source: World Bank (2012a), *Doing Business in Indonesia 2012*, January, Washington, DC.

StatLink http://dx.doi.org/10.1787/888933420981

Lewis (2015) shows that such user fees and charges constitute a substantial impediment to positive regional development outcomes. In mid-2016 government overturned over 3 000 regional regulations that were inconsistent with the law and national priorities. As recommended earlier, the longer-term solution is to give sub-national governments access to a broad-based growth tax, such income taxes, and thereby reduce their dependence on nuisance transaction taxes.

Recommendations to refine decentralisation and boost regional development

Sharpen incentives for regional business development

- Work with the sub-national governments to move the regulation of business to best practice. Review existing tax and other fiscal incentives to business investment in the regions. Consider a broader set of instruments for attracting businesses to the regions, including more flexible labour market policies.
- Experiment with different incentives in special economic zones, including more flexible labour regulation, with a view to extending proven good practices to the whole economy. Put in place the required infrastructure.

Better targeting fiscal transfers and raising more regional revenue

- Expand assistance to help regions to improve budget planning and implementation capacity. In the interim, make greater use of special allocation funds to prioritise sub-national spending.
- Change the mix of central government grants to all sub-national governments so that more is tied to specific programmes. This implies making greater use of the Special Allocation Fund (DAK).
- Do more to encourage sub-national governments to develop their own sources of revenue, such as by offering matching grants. Modify the transfer formula so that it does not penalise jurisdictions that exploit more fully their own fiscal capacity.
- Reform General Allocation Fund (DAU) transfers so they do not cover the full marginal cost of regional civil servants' pay.

Village transfers and governance

- Reform the system of village transfers to account for population size and poverty prevalence for the basic allocation. Make greater use of earmarked grants for village capital needs.
- Make explicit villages' service delivery responsibilities, and develop audit mechanisms that oversee their budgets.

Addressing regional fragmentation

- Freeze the formation of new sub-national jurisdictions (above the village level) until a comprehensive set of guidelines is in place to assess each application. Audit all existing villages to assess their economic viability, and encourage mergers where they are deemed unsustainable.
- Prioritise the task of mapping administrative sub-national jurisdictional boundaries.

Recommendations to refine decentralisation and boost regional development *(cont.)*

Improving regional government service delivery performance

- Develop a comprehensive set of performance indicators that can be used to compare and assess outcomes at all sub-national levels of government and to provide them with more technical assistance.
- Encourage sub-national governments to emulate the best performing jurisdictions in terms of business registration and regulation.

Enhancing education outcomes across all regions

- Assist sub-national governments in meeting education quality targets.
- Reward teachers for performance and not just academic qualifications and seniority.

Sharpening incentives for regional infrastructure investment

- Make greater efforts to align sub-national projects with national strategies (such as MP3EI).
- Improve the central/sub-national budget process to reduce uncertainties and interruptions that are inhibiting complex multi-year infrastructure projects.
- Provide fiscal incentives to sub-national governments to ensure adequate road maintenance. For example, national co-financing of sub-national road investment could be made conditional on such maintenance.
- Make land acquisition laws more flexible so as to encompass regional cultural diversity.

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Chapter 2

Improving the allocation and efficiency of public spending

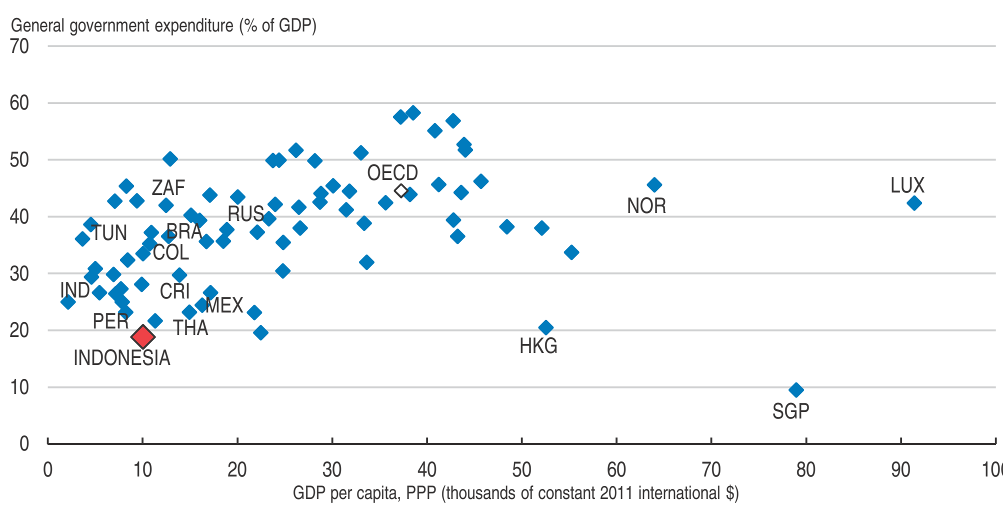
Indonesia's fiscal position is generally sound and policy making prudent. However, the country still faces important challenges in terms of economic and social development. Infrastructure, education, health and social security are all spending areas that the government is trying to improve further, because the nation has yet to converge to the superior outcomes achieved by other countries at a similar level of development. The government's size is small, and raising more revenues will take time, which forces the authorities to get the most out of existing resources and prioritise enhancing the efficiency of public spending. To achieve such an improvement a whole-of-government approach is required, including in the budgeting process and in the establishment of medium-term goals. A key element of Indonesia's recent history lies in the tremendous efforts as from the late 1990s to go from a very centralised system of governance towards one with several nested levels of government. According to some metrics it was a success. Nonetheless, despite the considerable resources already devoted to decentralisation, there is still ample room for improvement in terms of coordination, transparency, accountability and service provision. More broadly, moving away from spending objectives and adopting performance-based incentives would lift outcomes. At the national level, Indonesia would also benefit from scrapping a certain number of inefficient expenditures, such as energy and fertiliser subsidies, and from concentrating on those policies with the highest payoffs, like filling infrastructure gaps and expanding conditional cash transfer schemes. While public employment, especially by some subnational governments, could be streamlined, improving its capacity should be the focus, including for teachers. The fight against corruption should continue by all available means, in particular with a more generalised use of electronic public procurement.

Introduction

By international comparison, government spending as a share of GDP is low in Indonesia, even when taking into account its level of development (Figure 2.1). The size of government depends on country characteristics, but the role of the public sector is crucial in the process of development, particularly in providing a social safety net, health, education and public infrastructure at an optimal cost. A well-functioning public sector is also essential for private-sector economic performance (Knox Lovell, 2002). To some extent, revenues during the commodity super-cycle and relatively high GDP growth mitigated the need for such a focus. In the future, however, budget pressures could become substantial which notably raises the need to address important administration costs that are absorbing a significant share of government revenues.

The quality of public governance, as measured by the World Bank estimate of government effectiveness, puts Indonesia well behind countries like the Philippines, Thailand, Malaysia, Viet Nam and Singapore (Figure 2.2). This suggests that Indonesia still has room to improve the quality of public services, even before addressing the question of raising more revenues. Indeed, it suffers from a certain number of gaps and weaknesses that hinder its development, including in providing such basic public services as sanitation, water, education and health. The extent of those challenges, together with the existence of a demographic dividend (nearly half of its population is below 25), suggests that the government should make the most of fiscal resources. To raise efficiency, there are three key elements: improving the budgetary planning processes and institutional framework; benchmarking measureable outputs; and, finally, raising cost efficiency. Other

Figure 2.1. **General government spending and real GDP, 2014 or nearest year**

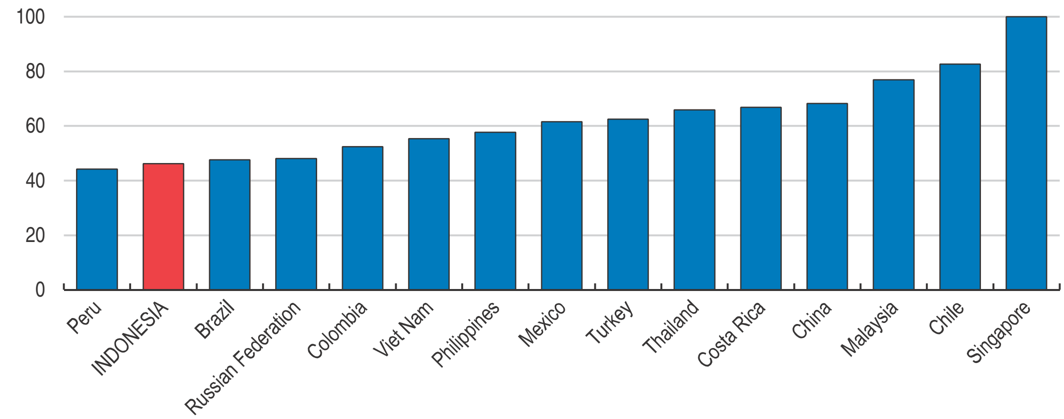


Source: OECD, Government at a Glance; IMF, Government Finance Statistics; World Bank, World Development Indicators.

StatLink http://dx.doi.org/10.1787/888933420994

Figure 2.2. **Government effectiveness in selected countries, 2015**

Percentile rank



Note: Government effectiveness (percentile rank between 0 and 100) measures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.
Source: World Bank Worldwide Governance Indicators.

StatLink http://dx.doi.org/10.1787/888933421003

important and complementary elements are the spending mix and the priorities set by the government.

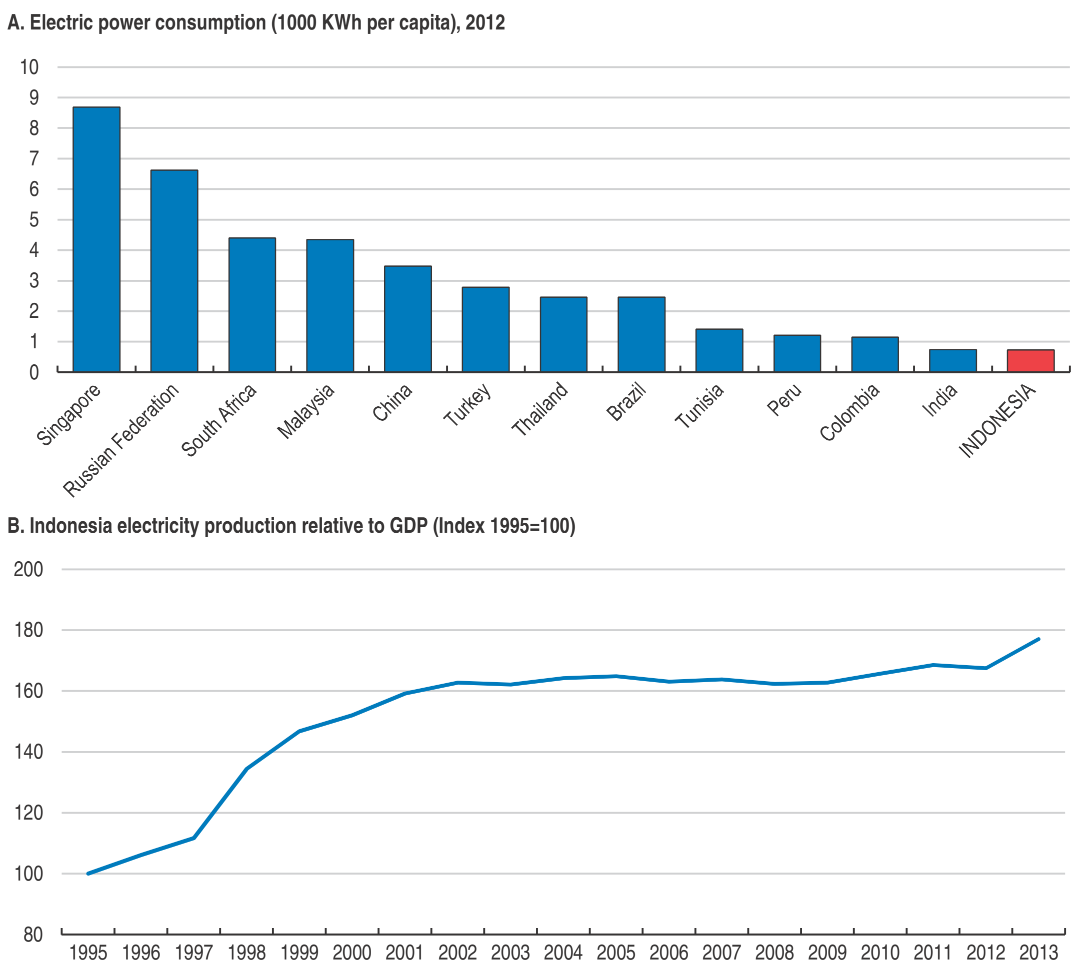
This chapter will review the main components of public expenditure to identify sources of inefficiencies and ways to improve outcomes from government intervention. A first section will highlight challenges ahead, pointing in particular to infrastructure gaps, education quality weaknesses and poor health outcomes. A look at revenue collection will determine the extent to which the government could raise more resources. Next, an examination of budgeting will reveal some aspects that could improve policy formulation and implementation. The chapter will then describe the characteristics of decentralisation, which is an essential part of Indonesia's organisation of public services, and the implications for public spending efficiency. Finally, outlays will be scrutinised by main categories: subsidies, infrastructure investment, education, health and the social safety net.

Government's role in development: huge improvements, but important gaps remain

Indonesia has seen huge improvements over the last 50 years across a wide variety of social and economic measures, including an impressive decline in the mortality rate and achievement of comprehensive access to basic education (more below). It is difficult though to disentangle the effects of public spending and simply the impact of economic growth leading to higher well-being for more people. Fournier and Johansson (2016) stress the importance of a well-functioning government in determining its appropriate size and subsequently the right balance between possibly contrary effects on growth and equity. Additionally, besides the delivery of public services aimed directly at improving the welfare of the population, just getting the fiscal framework and spending mix right may itself engender broad-based growth. And of course conversely, having the wrong framework and mix could seriously impede growth by distorting markets and crowding out a more dynamic and innovative private sector. That said, the role of public investment is much clearer and points to a positive effect on growth from activities where there are market failures and public-goods externalities. For instance, Égert et al. (2009) demonstrate a positive effect of infrastructure spending beyond the effect on the capital stock (on the broader positive role of public investment, see United Nations (2009)). However, its fruitfulness is dependent on the quality of public investment management which, according to World Bank data from 2010 (Actionable Governance Indicators database), suggests that Indonesia (whose index is at 1.5) is performing poorly in comparison with Brazil (3.1), South Africa (3.5) and Thailand (2.9).

Despite improvements, infrastructure weaknesses still hamper economic development in Indonesia. According to the World Economic Forum (2016), Indonesia's competitiveness (ranked 41st out of 140 countries) is dragged down by the poor quality of its infrastructure (60th). Low electric power consumption per inhabitant results from weak demand and poor access but, given its level compared with similar countries, also highlights a lack of generating capacity, which in turn inhibits capital investment, particularly in mining and manufacturing (Figure 2.3, Panel A). Besides, despite the gap, electricity production has not increased much in the past decade (Panel B). As mentioned

Figure 2.3. **Electricity indicators in selected countries**



Source: IEA/OECD, *Electricity Information*, 2015 edition; OECD Economic Outlook database.

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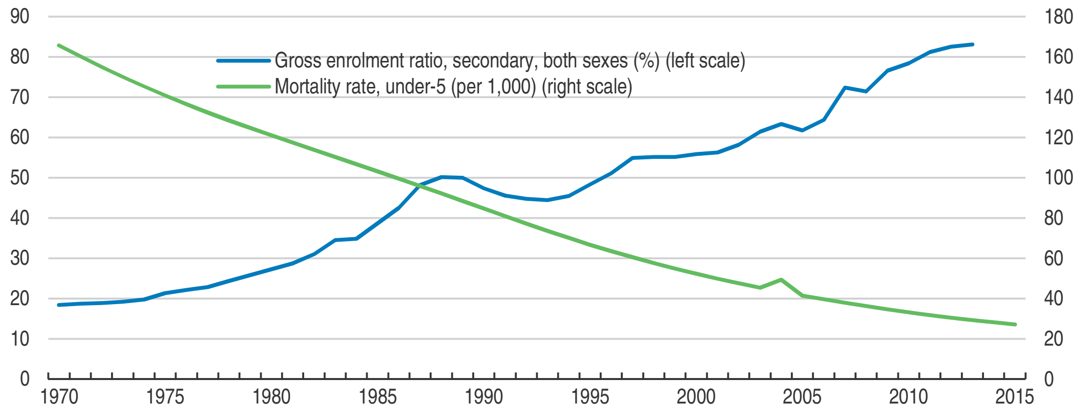
Figure 2.4. **Selected indicators on health and education for Indonesia over a long period**



Source: World Bank World Development Indicators.

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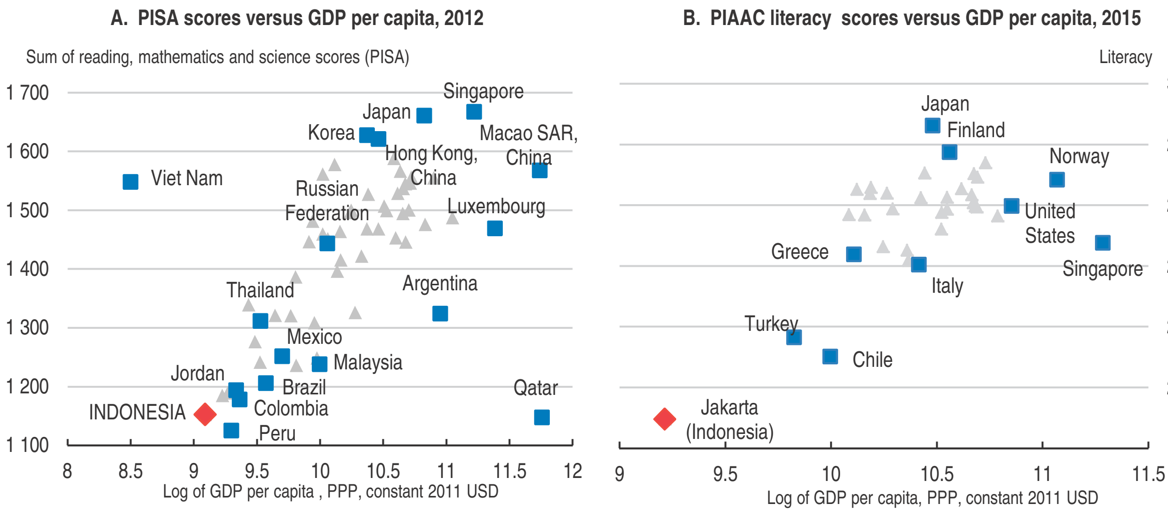
in the 2015 *Survey* (OECD, 2015a), the dearth of efficient transport infrastructure is also a major issue for Indonesia: overburdened road and rail networks, a lack of airports, inefficient seaports and more generally high logistics costs penalise the economy heavily.

The well-being of Indonesians has improved greatly in recent decades. Major successes include primary school, which is now attended by almost all Indonesian children, and enrolment in secondary school that has risen steadily from less than 20% of children in 1970 to over 80% in 2015 (Figure 2.4).

However, the 2012 OECD PISA (Programme for International Student Assessment) survey, which compares the academic performance of 15 year-olds across the globe, found that Indonesia ranked behind Viet Nam, Thailand, Malaysia and Brazil in basic mathematics, science and reading proficiency (Figure 2.5, Panel A); adult skills as measured by OECD (2016b) also appear weak (Panel B). Despite remarkable progress (like the plunging mortality rate for children under five), Indonesia's health outcomes also tend to underperform: for instance, other countries at similar levels of development usually have a lower infant mortality rate (Figure 2.6). Indeed, the authorities recognise that health is an issue and have increased its central government spending share to 5% in the 2016 budget for the first time (more below).

Further improving public services while maintaining a sound fiscal position will help shape a better future for Indonesians. Major challenges ahead include a population increase of about three million people per year and one of the highest rates of urbanisation (urban population growth averaging 3% per year for the last 15 years), both of which are set to continue in the medium term. This demographic dividend represents a good opportunity but will also translate into demand for more basic infrastructure, thereby adding to existing gaps, which have become a major concern for private investors. Promoting the development of poorer regions also requires government intervention – regional divergence is a major issue (see Chapter 1). In addition, the spending mix is not adapted to respond to inequality challenges. Lustig (2015) concludes that among seven middle-income countries, Indonesia's fiscal policy has the smallest redistributive effect. She reports that Indonesia's net indirect taxes are regressive and that total spending on education and on health is not benefiting the poor enough. One of the reasons why

Figure 2.5. **Education outcomes by international comparison**



Source: OECD 2012 PISA database; OECD 2015 Survey of Adult Skills (PIAAC) database; World Bank World Development Indicators.

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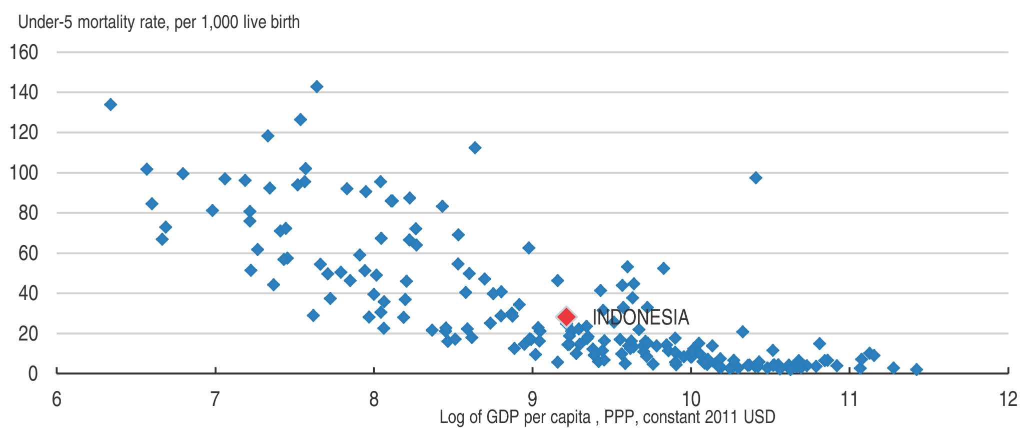
Figure 2.6. **Child mortality rate and GDP per capita, 2013**



Source: World Bank World Development Indicators.

StatLink http://dx.doi.org/10.1787/888933421045

expenditure policy is less effective in reducing poverty is that it allocates less to the most effective programmes, such as conditional cash transfers (World Bank, 2015). Indonesia's current and projected social needs are important, which justifies active measures from the state but requires finding the necessary budgetary resources.

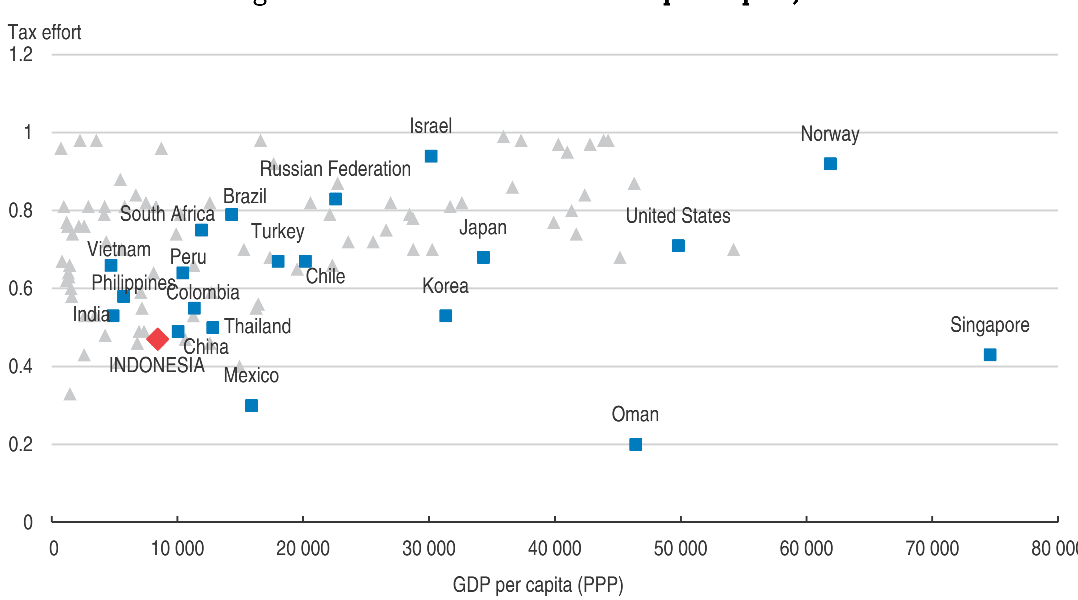
Raising revenues will take time

As described earlier, the share of government expenditures in GDP is low by international standards. Indonesia should consider raising more revenues to fill some of the gaps mentioned above, although addressing spending inefficiencies should come first. Involving the population is crucial: the more people trust in government and in the future, the greater their willingness to contribute. If issues of governance, heavy administrative costs for services provided and lack of coordination among public actors are ignored, there will be no legitimacy for the government to tighten tax compliance. Indeed positive public perception of the government may increase compliance and revenues (OECD, 2013b). According to the Ministry of Finance, 27 million were registered as personal taxpayers in 2015, while the objective for 2016 is about 120 million. Compared with other countries, the share of general government revenues from personal income tax is low (a third in 2014), compensated by higher levies on oil and gas production (13%) and corporate tax (a third). In addition, actual tax revenues are far below their potential in comparison with peer countries (Figure 2.7).

To improve tax collection and compliance, the government is planning to do more cross-checking of information (including a stronger link between cadastre and owners) and is also developing electronic invoicing for the value-added tax. Making social security contributions and disbursements through the income tax system would also encourage participation. Other countries' experience show that formalisation of small business can work to some extent: Brazil (in 2006) and Mexico (in 2014) have implemented programmes with financial incentives (tax reduction and access to financing) and eased procedures (electronic tools, grouping of tax payments, training) that have reduced the size of the informal sector (currently at about 60% of the labour force in Indonesia). However, whatever efforts are made, it will take time for the benefits to materialise.

Indonesia joined the agreement for Automatic Exchange of Information under the Common Reporting Standard (OECD, 2013a) in 2015, and the Indonesian authorities intend to start information exchange in 2018. The ultimate goal is to improve the management of cross-border activities through cooperation of tax administrations in today's globalised economy. Indeed emerging economies like Indonesia suffers from revenues losses due to assets hidden abroad. The implementation of the international agreement should spur Indonesia to abandon the use of tax amnesties as done in 1984, 2008 and 2016. Indeed, the

Figure 2.7. **Tax effort versus GDP per capita, 2011**



Note: Tax effort is the ratio of actual tax revenues to estimated potential tax revenues computed as a stochastic frontier tax revenue using 113 countries.
Source: R. Fenochietto and C. Pessino (2013), "Understanding Countries' Tax Effort", *IMF Working Paper*, WP/13/144; World Bank World Development Indicators.

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recourse to a leniency programme is closely related to government fiscal requirements and taxpayers expectations (Baye et al., 2014). Accordingly, amnesties tend to encourage tax evasion once the grace period is over and boost tax revenues only temporarily. However, the current tax amnesty comes at the right time to offer evaders a way to declare hidden assets before prosecution. Such policy should discourage future attempts to circumvent the tax system through strengthening the tax administration (to manage the flow of data) and a clear statement that this will remain a one-time offer (OECD, 2015f). Other international discussions are underway to facilitate and improve corporate taxation for multinationals under the Base Erosion and Profit Shifting (BEPS) action plan adopted in 2013 by the OECD and G20 countries (OECD, 2015e), which should also benefit Indonesia's tax collection.

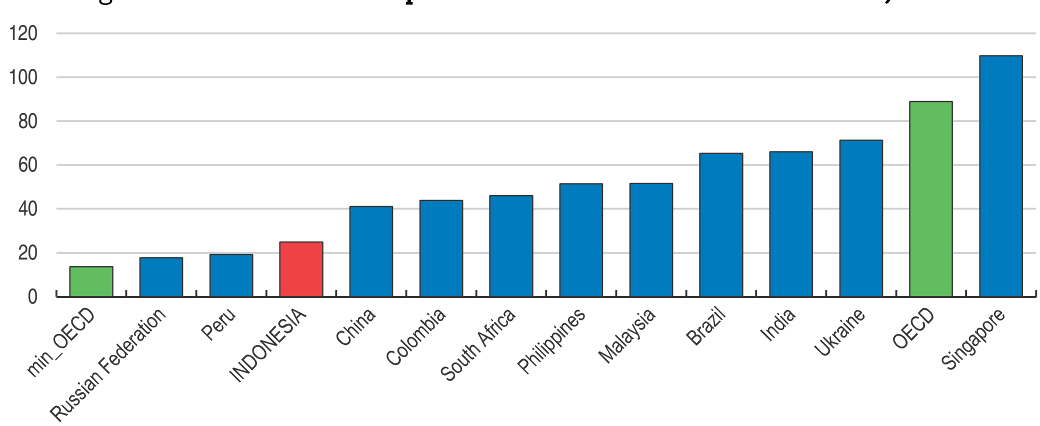
Subnational governments' tax autonomy is very low: only about 10% of their spending is funded by own revenues. To complete the decentralisation process (more below and in Chapter 1), Indonesia should gradually set up a closer alignment between spending and revenues at each level of government. That would reinforce accountability and allow a simple approach for regional tax equalisation.

The cost of raising revenues should also be scrutinised. There is a trade-off between having tailored taxes and the administrative cost of maintaining numerous and complicated levies and tax credits. In particular, taxes that yield only a small amount of money should be eliminated or merged into broader ones. Furthermore, in a decentralised context shared taxes imply that a single tax can be managed by several entities (e.g. building tax). Ultimately, the central government should propose a system to facilitate and optimise tax collection at the subnational level. It should also include a centralised taxpayer database that local government could utilise. Officials responsible for audits incur administrative costs; the authorities must be aware of the cost implications of having more controls and consider implementing incentives for officials' to act with integrity.

Government public finance

Indonesia's fiscal position is sound, but there is not much room for manoeuvre to expand spending without extra revenues. The level of public debt is low compared with other countries (Figure 2.8), which is both a consequence of the commodity super-cycle

Figure 2.8. **Public debt in per cent of GDP in selected countries, 2014**[1]



1. 2012 for Malaysia, Peru, Philippines, Singapore; 2013 for Colombia.

Note: Min OECD represents Estonia and OECD the simple average of OECD countries.

Source: OECD Government at a Glance; World Bank World Development Indicators.

StatLink http://dx.doi.org/10.1787/888933421060

and a relatively tight fiscal stance. During the period 2005-14 and especially at the beginning of this decade, government revenues benefited from high commodity prices accompanied by strong economic growth: public debt declined from 80% of GDP in 2000 to about 27% in 2015. Additionally, the fiscal framework is traditionally conservative: even during the 1997-98 crisis, when real GDP shrank by about 13%, the budget deficit reached a peak of only 1.5% of GDP. However, at that time, despite a fall in public spending, government debt increased significantly to bail out the banking sector. Accentuated by a historical tendency for fiscal prudence, that led to the establishment of fiscal rules in 2003, which cap the public deficit and debt at 3% and 60% of GDP, respectively. The latter is considered high as debt has negative economic effects as from between 30% and 50% of GDP for emerging economies, which are exposed to capital flow reversals (Fall et al., 2015).

Budget formulation and execution

A fiscal framework is a collection of budget, tax and other public finance laws, regulations and administrative procedures that governs the use of public funds. It represents the foundations of fiscal policy, and it should promote fiscal discipline and permit stabilisation policies to function. Switzerland, which is often praised in international rankings for the quality of its institutions, shares some common characteristics with Indonesia: they both have a small government relative to the size of the economy, fiscal policy is usually prudent, decentralisation is important, and regional inequality is a concern. In particular, for the way equalisation is organised (Box 2.1), Indonesia could benefit from adopting the Swiss approach and simplifying the existing complex and ineffective system (see below).

A series of reforms in 2003-04 aimed at improving public spending efficiency but failed to succeed in some areas. They responded to several criticisms:

- lack of discipline in budget implementation: notably with important off-budget activities and the separation between routine spending under the responsibility of the Ministry of Finance and development spending supervised by the planning agency, Bappenas;
- weak fiscal sustainability (the budgeting system targeted a single year);
- inefficiency in budgeting practices;
- opacity (e.g., the budget allocations for individual ministries were not publicly available); and
- a lack of accountability.

The budget is now unified, but the previous separation between routine and development expenditures remains in the form of discretionary versus non-discretionary activities – the latter being particularly inflexible as they are mostly renewals of previous budget lines. This comes on top of other rigidities, such as specifying allocation targets for certain sectors, including 20% of total revenues for education and 5% for health (law 36/2009) or 10% of the total transfers to subnational governments to village funds. As explained in Blöndal et al. (2009), in those circumstances, budgeting then simply consists of allocating a fixed amount for a very large sector but without constraints on how to use it. If the target is not respected, it also appears as a failure, although there is no evident link with outcomes. Additionally, the authorities have also made progress towards efficiency-enhancing, performance-based budgeting (Curristine et al., 2007); however, the focus remains on inputs and mainly ignores what is implied for outputs or outcomes. The government has successfully improved the presentational aspect and available information – for example, to associate spending with economic functions – which helps to

Box 2.1. **Switzerland's fiscal framework**

Switzerland is characterised by a high degree of decentralisation, as is Indonesia. Spending at the federal level is broadly equivalent to the sum of expenditures made by the 2 350 municipalities and 26 cantons. General government outlays represented 32.5% of GDP in 2014, which is low in comparison with other OECD countries and a share that has remained broadly stable over the past decade. The small size of the public sector goes together with fiscal conservatism to explain the low level of (gross) public debt (45.9% of GDP in 2015). All three levels of government can raise taxes and duties and issue debt, explaining their large degree of autonomy and the important taxation differences across regions. Consequently, a financial equalisation mechanism with three components has been established (renewed in 2008) whose main objectives are to offset cantonal differences in financial capacity. A first approach goes through resource equalisation based on tax potential: 16 financially weak cantons receive funds from the 10 richest ones (of about 0.8% of general government expenditures in 2015) and from the central government (1.1%); after equalisation, the canton's financial resources per inhabitant should be at least 85% of the national average. Tax potential is based on the comparison of cantonal resources per capita over the last three years (personal income, corporate and wealth tax) and the Swiss average. Additionally, the contribution from the richest cantons should be between two-thirds and 80% of the one from the central government. A second element of equalisation, cost compensation, which is funded by the central government, takes into account higher costs for the provision of public goods and services for structural reasons in 23 cantons (0.3%): half of it goes to 10 cantons for socio-economic factors (benefiting mostly urban areas), with 17 cantons receiving the other half to compensate for geographic characteristics. Finally, a temporary cohesion fund lasting 28 years was introduced in 2008 to facilitate the transition from the previous system for 7 cantons (0.1%). The system of equalisation is reviewed by the Parliament every four years. The last report in 2014 noted in particular that tax competition across cantons was not adversely affected (Swiss Federal Council, 2014).

In the early 2000s, following an increase of 30 percentage points in public debt as a share of GDP in the preceding decade, Switzerland adopted a *debt brake* at the federal level. The fiscal rule requires expenditure to be linked to receipts when budgeting. Additional spending will be granted only if secured by other cuts or additional receipts; and a tax reduction must as well be compensated elsewhere. In practice, well-defined exceptions provide some leeway to be able to react to exogenous developments. The exemption clause allows a deficit in extraordinary situations like natural disasters and severe recessions. However, this exceptional expenditure must be made up in subsequent years. Since then, public debt has been trending down, even though subnational governments may have a deficit (many cantons have their own debt brakes, however). To have a balanced budget on average, a two-year medium-term plan defines possible future room for manoeuvre or constraints on fiscal policy. A longer-term report is also written every four years. It examines the implication of demographic trends for public finances.

optimise budget allocations. Some local-level measures like P2D2 (*Proyek Pemerintah Daerah dan Desentralisasi*), a programme with incentives given to subnational governments to improve accountability and reporting for infrastructure projects (see below), have fully implemented an output-based approach to improve service delivery. Nevertheless, the overwhelming majority of the Indonesian budget still suffers from a lack of assessment and a resulting disconnect between spending and outcomes. For 2017, the central government is planning to adopt a performance-based budget ("money follows the programme") and to reinforce links with medium-term goals.

A medium-term expenditure framework can anchor annual budgeting in a wider context, allowing multi-year planning to take into account future costs and benefits, with forward-looking priorities and collaborative efforts so as to reach consensus among stakeholders. Bappenas is a public agency in charge of planning strategies at all horizons and synchronising the national and subnational levels. A national long-term development plan for the period 2005-25 is divided into four stages each of five years further split into annual budgets.

With the current government, the third five-year-period (2015-19) has been implemented under the label "Nawacita" including priorities on education, rural development, governance, competitiveness and also specific infrastructure targets for 2019. However, according to World Bank (2013a), Indonesia is positioned in the lowest of three stages in terms of medium-term planning, lacks any reconciliation between spending and resources and still focuses on inputs rather than outputs. The coordination role of Bappenas is shared with four coordinating ministries – for political, legal and security affairs; for the economy; for people's welfare; and for maritime and fisheries – and disputes are settled by the President. While decentralisation may have encouraged innovation and more local control, it also creates a need for substantial cooperation among actors, especially with regards to multi-year investment projects affecting different regions. And typically for some public investment, especially when it involves local governments, there is evidence of a lack of cooperation and harmonisation: Hidayat Putra et al. (2015) take the example of transport in the Jakarta Metropolitan Region (JMR), which suffers from a lack of cooperation amongst local governments, the regional agency, the central government and private companies; similar problems arise for Greater Yogyakarta (Holzhacker et al., 2015). It results partly from excessive fragmentation: for JMR, five ministries, three provinces, three District departments in nine Districts, a business association (Organda) and BKSP (*Badan Koordinasi Sertifikasi Profesi*, a regional development coordinating body) are involved. The latter is supposed to mitigate those issues but in practice has limited authority.

Budget execution should be streamlined and its approval finalised earlier. After the 2003 reform, the role of the parliament has become prominent. Scrutiny and amendments by the parliament are a sign of a vibrant democracy, but because members lack technical expertise, they tend to focus on specific lines of the budget to the detriment of the broad thrust of fiscal policy. In particular, after the annual budget is approved (usually by the end of October), sectoral commissions of the Parliament can block disbursements until their concerns have been addressed. For instance, in 2007 about 45% of total expenditures were delayed (Blöndal et al., 2009). Such delays partly explain struggles to realise the annual target level of expenditures, especially for local governments, which tend to wait for final technical specifications before committing to spending and as a result concentrate their outlays in the latter part of the year. Moreover, these points, as well as a lack of capability by some local governments, leave them little chance to properly plan and implement investment, notably for infrastructure. The budget execution has improved, though, as unspent funds as a share of total revenue declined from 15% in 2008 to 7% in 2013 (Patunru and Rahman, 2014). Spending is also somewhat more front-loaded: it was about 10% higher in January-July 2016 than a year earlier (according to Bank Indonesia), representing about 67% of the revised 2016 budget.

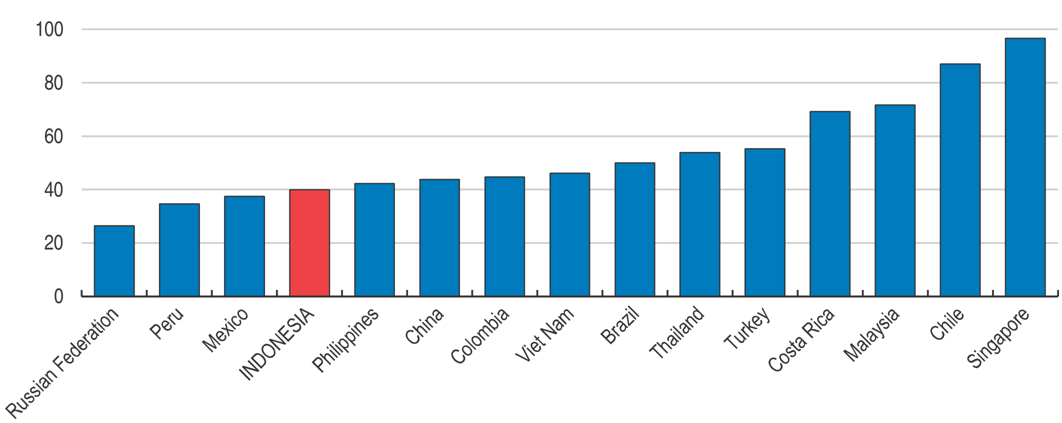
Governance

The quality of governance is crucial, and major efforts should be undertaken to address that issue. Bad management, especially prominent in some areas, clearly reinforces inequalities in terms of access to public services and leads to a waste of money when the quality of spending is poor in terms of planning and implementation; it justifies more control and support from the central government until those regional issues are solved. Indonesia's position with respect to the rule of law signals that while the country's legal framework could be improved, the population perceived that it is not applied consistently (Figure 2.9). The local government performance index (Box 2.2) gives some indication of the poor quality of governance of the mining sector in some provinces and shows that revenue collection could make headway. The absence of recent improvement (*Komisi Pemberantasan Korupsi* (KPK), 2016) and the level of non-compliance raise concerns as to the quality of public management in some local governments. There should be more focus on capacity building, notably through training in regions in need, including those that have difficulties in reporting statistics back to the central government or to spend fully their allocation. For example, in 2013 the share of unspent funds was more than 50% of total revenue in five of East Kalimantan's 14 districts (Patunru and Rahman, 2014).

Governance should also improve with the development of digitalisation, as this hastens the circulation of information, reduces errors and improves transparency. Development of e-government is ongoing in Indonesia, with, for instance, the open access of 2015 education budgets of each province, regency and municipality through a website and a mobile application; e-training could also be worthwhile to overcome some of the local government capacity problem. Electronic procurement is also making progress (more below). Those efforts should be pursued together with extending Internet access to a larger share of the population. Indonesia is also a founding member of the Open Government Partnership, which emphasises transparency of government actions, accessibility of government services and information, and the responsiveness of government to new ideas, demands and needs. The recent review (OECD, 2016a) stresses the role of the central government, which should continue spreading open government values across the public sector.

Figure 2.9. **Rule of law in selected countries, 2015**

Percentile rank



Note: Rule of law captures perceptions of the extent to which agents have confidence in and abide by society's rules, and in particular the quality of contract enforcement, property rights, the police and the courts, as well as the likelihood of crime and violence.

Source: World Bank Worldwide Governance Indicators.

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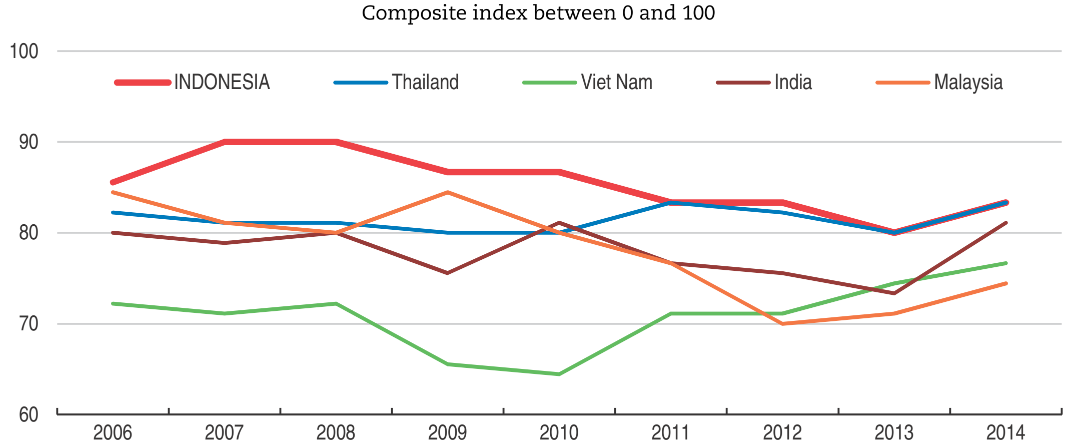
Box 2.2. **The local government performance index**

The local government performance index is a tool that measures the capacity of a region to follow good practices and to comply with regulations; the survey conducted by KPK (2014) covers mining permits in 12 provinces and highlights that West Kalimantan, South Sulawesi and South Kalimantan are performing badly. More broadly, the study notes in particular that only 60% of mining licences have received a CnC (clean and clear) certificate, which certifies the absence of outstanding royalties and other tax debts, the fulfilment of exploration and environmental commitments, a proper delineation of the property and the acquisition of forestry permits. Also, 24% are not tax registered. And 5.7 million ha of protected and conservation forest were occupied without authorisation. Supervision of production, processing and sales is also weak. Moreover, 90% of licence owners did not pay certain obligations like land rents. The report also highlighted the problem of illegal mining. Following its release, 1 087 licences were recommended to be terminated, and the mechanism to grant licences was revised. An integrated spatial database is also being developed to better monitor land use.

Corruption should be attacked by all available means, as it penalises Indonesians both because of stolen money and misallocation of funds. For many years now Indonesia has ranked badly in international comparison for bribery, though there has been some recent progress (OECD, 2015a). Decentralisation seems to have aggravated the situation (Silitonga et al., 2015); as mentioned in Suryadarma (2012), additional (education) spending in a highly corrupt region has a negligible impact on public services, while it is positive and large for less corrupt regions. The role of KPK (the Indonesian Corruption Eradication Commission) should be strengthened, and concerns regarding its head should not be allowed to paralyse the institution, as happened during 2015; in addition the agency should intervene more at the subnational level. Amounts of fines and penalties should also be raised, as there is a large gap between them and losses for the government budget (Pradiptyo, 2016). Development of statistics should continue as well, because they limit bribery and more broadly facilitate budget allocation. Yet, Indonesia's overall statistical capacity has declined in recent years (Figure 2.10).

Figure 2.10. **Statistical capacity in selected countries**

Composite index between 0 and 100



Note: The indicator assesses the capacity of a country's statistical system based on the following areas: methodology; data sources; and periodicity and timeliness.
Source: World Bank World Development Indicators.

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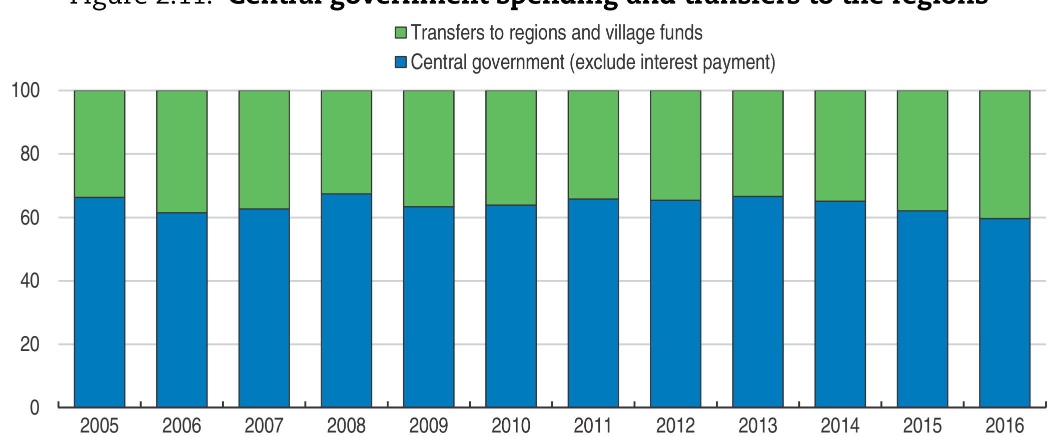
Given the critical role of government in economic development and social security, Indonesia's small government makes it all the more important that public expenditure is well targeted and efficient. There is indeed not much room to increase spending in the short term because of the fiscal rule and of the less robust economic situation than hoped for, which forces the government to optimise the current level of expenditures and get the most out of them. It is therefore doubly important to better assess and evaluate all programmes – to check the size of the impact compared to the cost and who mostly benefits – not only when they are envisaged but following implementation as well. That should also include the way local governments spend the funds central government provides and the quality of the overall decentralised governance structure (see Chapter 1 for more details).

Enhancing the decentralisation approach

An important characteristic of Indonesia's government is the prominent role of the subnational level, which was on average over the last decade responsible for about a third of total public expenditures (Figure 2.11). For 2016, an even bigger share for regional spending (about 40%) is foreseen, with a growing importance of "village funds" (see Chapter 1). While subnational governments enjoy a great deal of discretion in terms of their expenditure mix, their revenues come mostly from central government transfers (about 90%) organised through four main pillars (Table 2.1):

- DAU (*Dana Alokasi Umum*, general purpose grant fund) represents the main source of financing (about 60% in 2014) and is a general and untied block grant. Local governments favour it, as it leaves them with a large degree of freedom in spending. But it is computed using a rather complex formula taking into account the wage bill and a fiscal gap. The latter is based on a difference between needs and capacity and a set of weights that depends on the level of government and on variables of interest, including natural resources, population, surface area and regional socio-economic inequality.
- The specific allocation fund (DAK, *Dana Alokasi Khusus*) – which became a specific-purpose grant in the 2016 budget – is a targeted grant financing capital expenditures prioritised by central government (including education, health and infrastructure) and mainly depends on local government submissions.

Figure 2.11. **Central government spending and transfers to the regions**



Note: Data refer to the revised budget for 2016.
Source: Ministry of Finance.

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Table 2.1. **Breakdown of central government transfers to subnational governments by type**

	2014	2015	2016
% of total transfers to regions and rural funds:			
Revenue Sharing Fund (DBH)	18.1	16.6	13.8
General Allocation Fund (DAU)	59.5	53.1	50.0
Special Allocation Fund (DAK)	5.6	8.9	27.1
Autonomy and other funds	16.8	21.5	9.1
% of general government spending, excluding interest:			
Transfers to regions	34.9	36.3	40.3
TP/Dekon	1.1	0.9	1.6

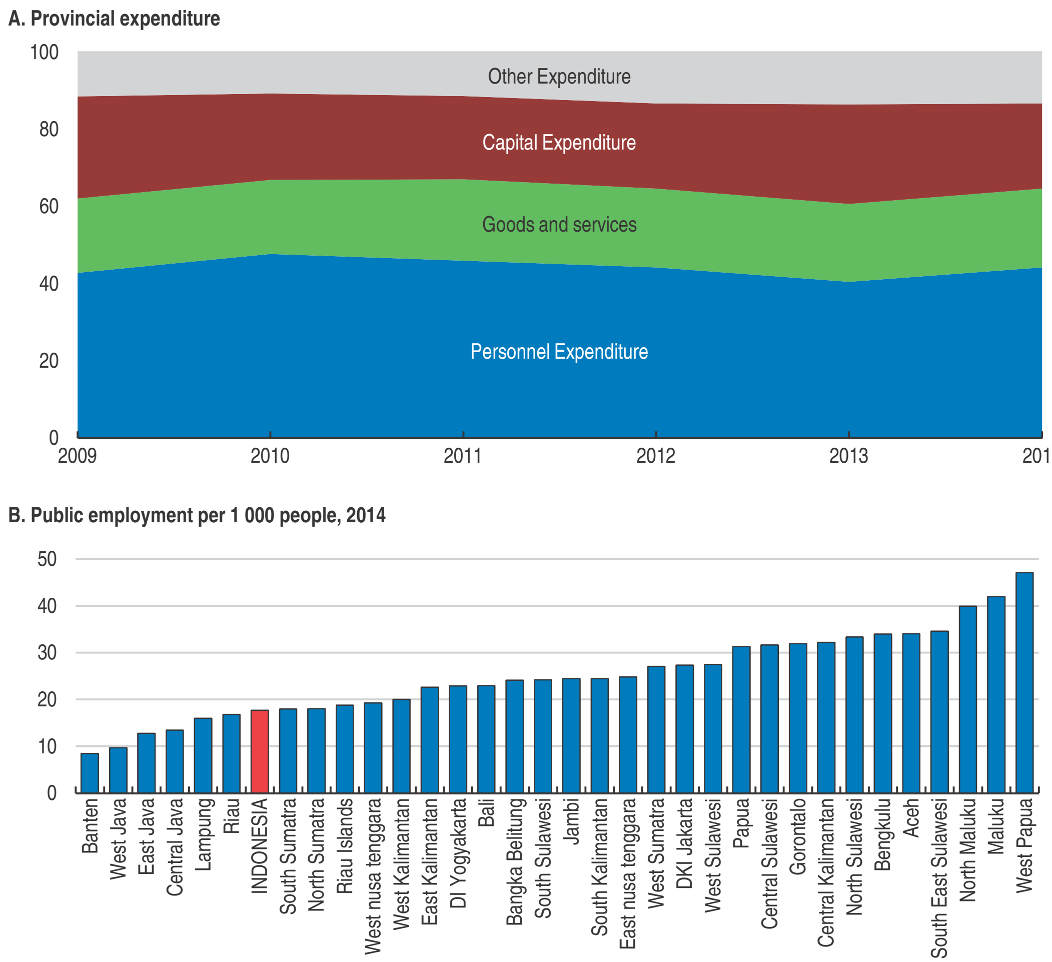
Note: The data are based on actual data for 2014, on the revised budget for 2015 and on the preliminary budget for 2016. DAK transfers in 2016 include School Operational Assistance (BOS) and additional teachers' allowance fund, previously classified elsewhere. TP/Dekon refers to a deconcentration fund used by line ministries for regional development.
Source: Ministry of Finance.

- Revenue sharing (DBH, *Dana Bagi Hasil*) is based on a system of percentages (depending on the recipient and the revenue) from tax and non-tax incomes collected by the central government. The amount depends on various internal and external factors: for example, the decline in 2015 is explained mainly by low commodity prices and the domestic economic slowdown.
- The item "Autonomy and other funds" is mainly devoted to Aceh, Papua and West Papua for rural development.

The mix of subnational government expenditures is distorted by the way central government transfers are determined. In particular, basic services should gain more priority. To that end, a revision of DAU would free some resources by limiting personnel expenditure, which accounts for 40-50% of regional spending (Figure 2.12, Panel A). The close link between the wage bill and the amount of the DAU encourages regions to have large numbers of civil servants. In 2014 the share of personnel expenditures in regional spending grew by nearly half to the detriment of capital expenditures. The number of civil servants per capita varies substantially across provinces. For instance, the ratio is much lower in Java even if most central government officials are located there (Panel B). However, dissimilarities with respect to the surface area and the distribution of the population can justify more public employment in some places like West Papua. In 2013 the share of personnel and administration in total expenditures varied between 41% in Kalimantan and 57% in Java-Bali, and this share increased from 2008 to 2013 in all island groups (by from 2 percentage points for Java-Bali to 10 percentage points in Eastern Indonesia) (Patunru and Rahman, 2014).

The central government tries to control personnel spending by limiting local recruitment, but this reduces accountability and the quality of governance at the local level (Shah et al., 2012). The World Bank (2012a) estimates that in 2011 general administration represented about 25% of subnational spending – while the international standard is about 5% – and that the increases in education and health-care spending in the previous decade were at the expense of infrastructure. From almost 2 civil servants per 100 residents in 1999, the first years of decentralisation saw a drop to 1.6 in 2004, before increasing again and reaching 1.8 in 2014. The wage bill, driven by local spending, accounted for about 28% of total general government outlays in 2014, higher than the OECD average (23%). It is

Figure 2.12. **Provincial spending breakdown and public employment density**



Source: Ministry of Finance; CEIC database.

StatLink http://dx.doi.org/10.1787/888933421106

crucial that the capacity of subnational government improves in order to reap the full benefits of decentralisation.

Continued fragmentation could also limit public spending efficiency. According to Shah et al. (2012), DAU's current design induces the creation of new entities to receive more transfers per head. During the period 2010-14, six provinces, 17 districts, 325 sub-districts and 4079 villages were created. Proliferation is an issue that should be tackled, even if this is politically sensitive, because it tends to increase general administration outlays as each local government needs representatives from most ministries and public agencies. That should be balanced against a possible improvement in local public services as proximity to the population helps take into account population needs. In addition, Fadliya and McLeod (2010) report that fiscal transfers do not target equalisation sufficiently, leading to differing capacities of local government to provide public services. Differences across governments in size and demographic characteristics can be large, making it inappropriate to treat them all the same way (World Bank, 2012a). Population in the 500-odd regencies and cities varies from 20 000 to nearly 4 million people, with about a quarter having fewer than 150 000 and 15% more than 1 million; moreover, some areas are rural, while others are urbanised. This can justify the creation but also the merging of entities when it corresponds to more homogeneity across the same level of government. However, the recent focus on villages – and the fact that it adds a fifth level of administration – is also questionable, as their size is sometimes too small: about a third have a population below 1 000. A key to obtaining better outcomes is to find the right balance between the role and size of subnational governments. A stable set of regional governments would also be desirable because new entities tend to underperform (due to a lack of experience), and new coordination efforts with the rest of the country have to be implemented. Besides, the quality of governance is already very heterogeneous at subnational level. The Ministry of State Apparatus and Bureaucratic Reform has produced a report (*Laporan Akuntabilitas Kinerja Instansi Pemerintah*, LAKIP) with a grade for each administration for 2015: two provinces (out of 34) have a top ranking (A) while four have one of the worst two grades (C and D); a 2012 report had already identified about 17% of regencies with a D grade.

Compared to DAU, DAK is to some extent better managed, because it is validated by both local and central governments and also allows grants to be fixed within a medium-term framework while taking into account priorities of different public authorities. Its share has recently increased and needs to continue to do so, especially with regard to the prevalence of infrastructure spending, until the capacity of subnational governments is satisfactory. However, the strengthening should be conditioned on a number of improvements: transparency should be increased and grants tied to defined outputs and agreed unit costs; performance risk should be shifted to local governments for more accountability; provision of incentives should depend on the delivery of sustainable services; evaluations should provide a cost-benefit analysis; and monitoring needs to be enhanced. At the beginning of the current decade the World Bank initiated two programmes: P2D2, which is part of DAK, and WISMP-2 (Water Resources and Irrigation Sector Management Project – Phase II) – promoting investments in water utilities for the poor. Under those projects funding depends on verified and pre-agreed physical outputs. According to Lewis (2014b), targets were achieved in 90% and 97% of cases in the first years of execution, respectively; more importantly, outcomes were positively affected compared with a control group, suggesting that Indonesia should further develop such mechanisms, notably for the whole DAK, whose outcomes are more easily verifiable.

Another avenue to explore is the role that incentives and performance should have in shaping local spending, which means properly assessing and evaluating policies. A recurrent criticism of decentralisation in Indonesia is that the sudden huge transfer to local governments did not deliver good value for money (World Bank, 2012a; Lewis, 2014a). This may explain why it lags behind some peers in several aspects (including infrastructure and quality of education). Decentralisation implies greater subsidiarity, which allows local officials to better discern people's needs; it also gives the population more leverage when demanding better services (Martinez-Vazquez and Vaillancourt, 2011). However, a lack of accountability and capability of local institutions may generate weak outcomes; it justifies the use of intergovernmental incentives to encourage improved performance. In Indonesia, the Ministry of Finance has gradually improved its monitoring of service delivery, focusing mostly on infrastructure, education and health care, but so far without a system of rewards/punishment (Lewis et al., 2015), aggravated by a lack of law enforcement in some cases. Units from the central government or from the provincial level should also provide technical assistance to subnational authorities that lack capacity; those units could gather different competencies and professionals to help answer concerns raised at the local level.

More improvements are needed to avoid fragmentation of transfers and risks of duplication. Fourteen different types of allocations to subnational governments exist in the 2016 budget, of which 10 are part of DAK. On top of transfers to regional authorities, the central government directly intervenes in regions via a programme labelled TP/Dekon, which represented 2.4% of total expenditures in 2012 before declining to about 1½ per cent in 2016. This "deconcentration" fund seems to perform better than local intervention, but there are coordination issues with local entities. More broadly, as stressed in Holzhacker et al. (2015), risks of overlapping competencies should be further tackled. To some extent, the numerous transfers together with low own-source revenues (only about 10%) limit the autonomy of subnational governments, tend to make them fiscally lax and reduce spending efficiency and accountability. In sum, decentralisation, while broadly a success, remains a challenge; part of the problem results from the central government not fully trusting local authorities, which indeed have more room for improved performance.

Improving public procurement

Improving the public procurement system will limit bribery and corruption, but promoting the principles of fairness, efficiency, effectiveness, accountability, transparency and non-discrimination will also have positive effects on the quality and right-sizing of government projects. The rapid early-2000s decentralisation caused the emergence of different legislation across Indonesia, a divergence which was gradually stopped after Presidential Regulation 80/2003. The later Regulation 54/2010, which followed recommendations by the OECD (OECD, 2007), was a milestone and was amended several times (in Regulations 35/2011, 70/2012, 72/2014 and 04/2015), reflecting the government's will to continue improving it.

The 2010 regulation introduced several novelties. Its scope was extended to include donations and foreign loans. Then, the previously large role of the commitment-making officer was shared into three positions: one with the principal responsibility, the second one overseeing the procurement process and the last one determining the winner of the tender. In addition, the revision applied disclosure requirements to the estimated price. Finally, as of the 2010 regulation electronic procurement for certain goods and services became mandatory, which is a step forward as it improves transparency, competitiveness and efficiency. The adoption of electronic procurement for infrastructure projects should also lead to enhanced quality and facilitate entry from higher-quality contractors (Lewis-Faupel et al., 2016). However, enforcement needs to be stepped up, as only a minority of central and local government procurement budgets follow the 2010 law (Patunru and Rahman, 2014; Nurmandi, 2013); there should be a credible plan to have all central and local government entities use electronic procurement. Additionally, while transparency has improved in terms of online data availability, Trimurni et al. (2015) report in a case study that it is not yet satisfactory. It is crucial that each step of the procedure be transparent.

The quality of procurement depends on civil servants' integrity and training. Having more officials involved as enacted in the 2010 regulation (see above) is welcome, as it brings cross-checking and more human resources; however, individuals need enough expertise to follow the procedure and not allow any circumvention. Data from three Indonesian cities show that the quality of manpower is essential to satisfactory procurement outcomes (Nurmandi and Kim, 2015). In 2007 a national public procurement agency (*Lembaga Kebijakan Pengadaan Barang/Jasa Pemerintah*, LKKP) was established to develop human resource capacity, devise regulations, and monitor and evaluate the system, but it suffers from a lack of authority. LKKP should also participate in improving awareness of the rules by participants and the general population, including the difference between transparency and disclosure of all information. That should go along with a simplification of the system – complexity is sometimes used to hide information – which would limit delay due to a failed process followed by a new round. Finally, procurement is a relatively cost-efficient way to implement certain government priorities: for example, it is reasonably easy to add targets related to sustainable development in tenders (for example, a minimum level of energy efficiency and the construction of a waste disposal). Procurement is also used in several OECD countries as a way to promote innovation (Appelt and Galindo-Rueda, 2016).

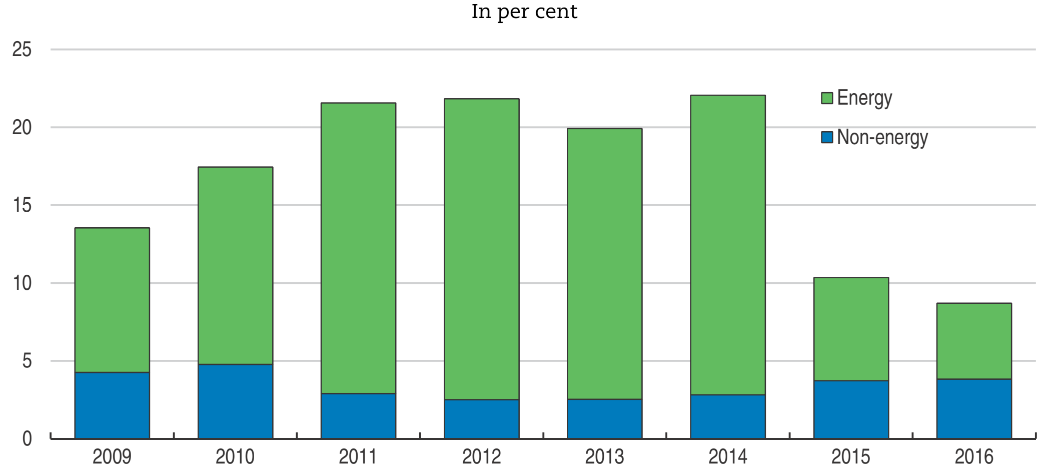
Streamlining subsidies

Energy

As recommended by the OECD in the last *Survey* (OECD, 2015a), fuel subsidies were progressively reduced in 2013-14 before they were largely scrapped at the beginning of 2015 (Figure 2.13; Figure 2.14, Panel A). The cut responded to several imperatives: first, to refocus public expenditures on infrastructure; second, to stop subsidising CO_2 emissions; and finally to discredit a measure not well-targeted to fight poverty and inequality (40% of its benefits went to the richest 10% of the population; see also Coady et al., 2015). Subsidies are usually introduced as a temporary fix to repair a market failure or an injustice; fuel subsidies originated from the 1980s when Indonesia was a net oil exporter. However, they tend to be very difficult to remove in practice. Since the recent reform, a new price mechanism, which allows quarterly changes, was put in place to limit volatility and to equalise the price across the country. The fuel price is then determined by a base market price (based on MOPS, an average of Singapore oil price assessments, and including an allowance for reasonable profit pegged at between 5 and 10% of the base market price) plus VAT (10%) and a motor fuel tax (5%). For areas outside Java-Madura-Bali, a premium (2%) is allowed to take into account higher distribution costs. In 2015 fuel subsidies declined to about 3¼ per cent of public expenditures from around 13½ per cent in 2014. If world oil

Figure 2.13. **Share of government subsidies in total expenditures**

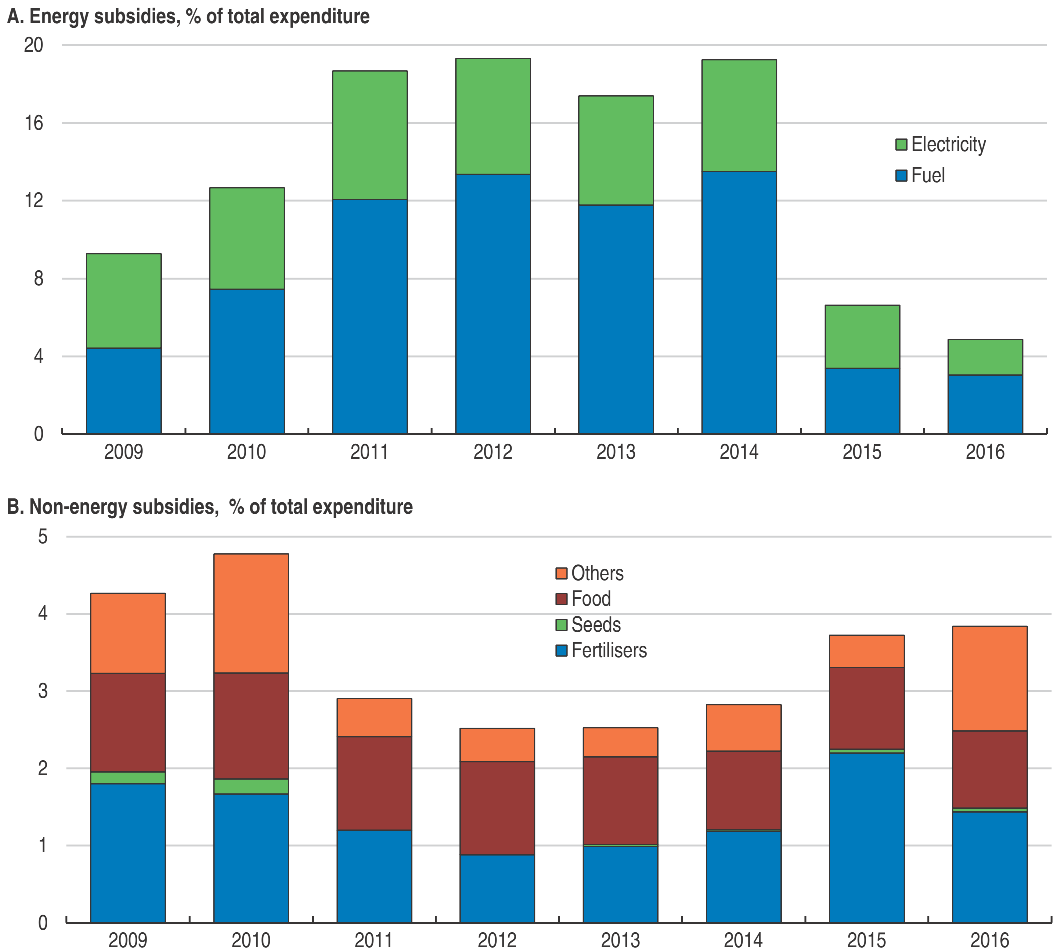
In per cent



Note: Data refer to the revised budget for 2016.
Source: Ministry of Finance.

StatLink http://dx.doi.org/10.1787/888933421119

Figure 2.14. **Breakdown of government subsidies**



Note: Data refer to the revised budget for 2016.
Source: Ministry of Finance.

StatLink http://dx.doi.org/10.1787/888933421129

prices rebound, the government should allow them to pass through into retail prices, as permitted by the mechanism, and avoid restoring subsidies to shield consumers. Recent experience shows that the managed floating price has been cut quickly when needed, but the upward revision of April 2015 was smaller than expected (Jakarta Post, 2015), leading to retail fuel prices below market prices on average in 2015, according to Pertamina, the state-owned energy firm.

Other subsidies still exist for petroleum products. Along with the removal of fuel subsidies, specific fuels (diesel) continue to receive a fixed amount of IDR 1 000 per litre (Beaton et al., 2015). In mid-2016, the government halved this to IDR 500 per litre; the gradual removal should continue. In addition, LPG (liquefied petroleum gas) has been promoted since the "Zero Kero Program" launched in 2007. That has pushed the share of LPG in household consumption from 1.5% in 2005 to 13.5% in 2013 to the detriment of kerosene, and consequently increased these subsidies from 1.4% of central government spending in 2010 to 2.8% in 2014 (Toft et al., 2016). As for fuel, LPG subsidies tend to be highly regressive: on average among seven countries including Indonesia, only 4.5% of them reached the lowest income quintile a few years ago (Granado et al., 2010). Indonesia should scrap them and use part of the savings to provide the poorest with cash grants to alleviate the extra burden.

Another welcome change is the reform of electricity subsidies (postponed from January to mid-year 2016), which aims to reduce their share in total expenditures from about 3¾ per cent in 2015 to a budgeted (i.e. before the postponement) 1¾ per cent in 2016. The reform attempts to better target the needy population, as previously some households used multiple connections to limit consumption per unit to become eligible for subsidies. According to data from PT PLN (the state-owned electricity distribution monopoly), in 2015 about 48 million households received those subsidies, while the 2016 budget target is to limit them to the 25 million poorest households. Coordination with TNP2K (*Tim Nasional Percepatan Penanggulangan Kemiskinan*) and its "unified database" (more details below) alleviates the burden for PT PLN and allows an improved selection of beneficiaries.

Non-energy

Food security/resilience is a very strong government commitment. It cost nearly 7% of expenditures in 2015 and more than 6% of the 2016 preliminary budget (more than health care). The main objectives include efforts to improve the affordability of staple goods for the poor, while maintaining price stability, and to increase domestic production and productivity, thereby moving towards self-sufficiency. The objective of self-sufficiency should be carefully designed and not be achieved at all cost: Dawe (2013) claims that rice production per capita is more dependent on the proportion of well-suited land than yield per hectare. Encouraging production by restricting imports actually discourages consumption via higher domestic prices and should be abandoned. The focus on supply is also sometimes justified by the importance of agriculture for households in rural areas; however, as shown by McCulloch (2008), only a small number of farmers (those with larger farms) benefit from such high prices as the rest of the population consumes more than they produce.

One component of the food resilience policy is agricultural subsidies, which represent at least 3% of 2015 public expenditures (excluding loan support) and are shared between fertilisers (two-thirds in 2015), food prices (30%) and seeds (Figure 2.14, Panel B). Targeting issues are a common risk in this area, especially in a country with weak institutions. In the case of fertilisers, a government report affirms that 30% of subsidies were misallocated in 2015, with a positive bias for large plantations (Reuters, 2016). Moreover, as mentioned in Armas et al. (2012), in Indonesia such subsidies had a negative effect on farm output while overall public spending on agriculture had a positive impact. Gradually phasing out fertiliser subsidies would free up resources to devote to more cost-efficient programmes, such as irrigation systems, rural infrastructure or research. The promotion of fertilisers also potentially leads to overuse, which could result in soil depletion, weighing on productivity, and in water/land pollution. The government is in the process of developing a database of farmers to address targeting issues of the subsidies.

The second set of food subsidies concerns RASKIN, initially an emergency food security programme implemented during the Asian crisis, which entitles about 15 million households to purchase rice at a cheaper price. The programme faces several challenges: poor quality, missing quantities, the existence of a premium for beneficiaries and insufficient targeting (more details below). Hence, the food security programme is unable to entirely fulfil its objectives and BULOG (a State-Owned Enterprise in charge of food security) should refocus its actions towards managing emergency reserves.

Filling infrastructure gaps in a tight budgetary context

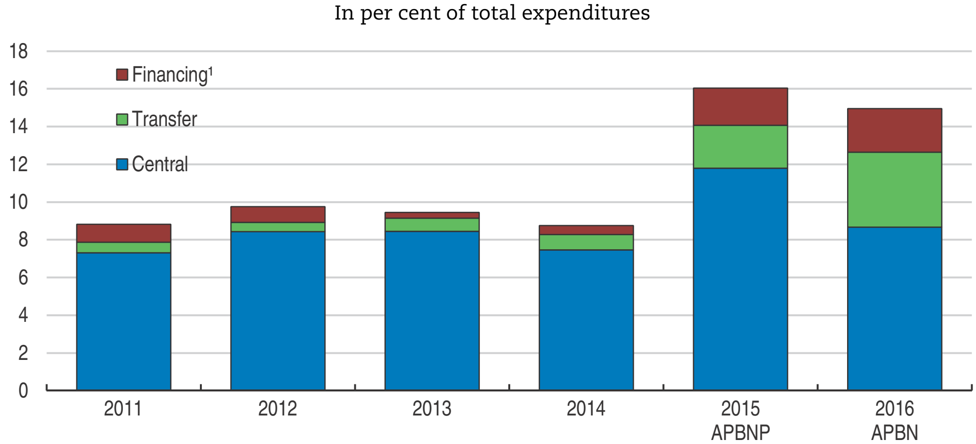
Infrastructure can promote inclusive productivity-driven growth. It creates jobs, reduces production costs (notably through improvements in transport and connectivity) and expands overall production capacity. This justifies an ambitious programme to fill gaps in its provision. The infrastructure gap for Indonesia has been estimated at over USD 450 billion over 2010-20 (Bhattacharyay et al., 2012), corresponding to approximately 6% of GDP every year. But budget constraints force choices to be made.

Inefficiencies in public spending (as noted above) do not justify a low rate of investment because in case of a low public capital stock, investment yields higher social returns, including through positive externalities and fiscal multipliers (Berg et al., 2015). In 2015, as recommended by the OECD (OECD, 2015a), the government announced its focus on infrastructure investment, facilitated by the fiscal space created by cutting fuel subsidies. Consequently, infrastructure spending increased from about 9% of total expenditures in 2014 to 16% in 2015. This boost was shared between central and local governments along with more recourse to SOEs (Figure 2.15). The focus on infrastructure is timely and very welcome. However, the public sector will not be able to bear the whole cost alone; its aim should be to both facilitate private investment and to be complementary when possible. Moreover, as argued by Ganelli and Tervala (2015), a positive welfare multiplier – the consumption-equivalent change in welfare for a one dollar change in government spending – of public infrastructure investment depends strongly on project selection. International Monetary Fund (IMF) (2015) highlights that, for emerging markets, 27% of the potential benefits of public investment are lost due to inefficiencies, including weaknesses in management institutions, national and sectoral planning, central-local coordination and multi-year budgeting.

The success of the public sector in providing infrastructure has been disappointing. The authorities have tried to get the private sector on board via Public Private Partnerships (PPP), but with little to show for it, including in comparison with peer countries (Figure 2.16). Greater private-sector participation would bring additional funds and lessen

Figure 2.15. **Infrastructure spending**

In per cent of total expenditures



Note: Data are based on the revised budget for 2016. Transfer refers to government transfers to regions that are spent for infrastructure. Central represents the direct infrastructure expenditures of the central government.

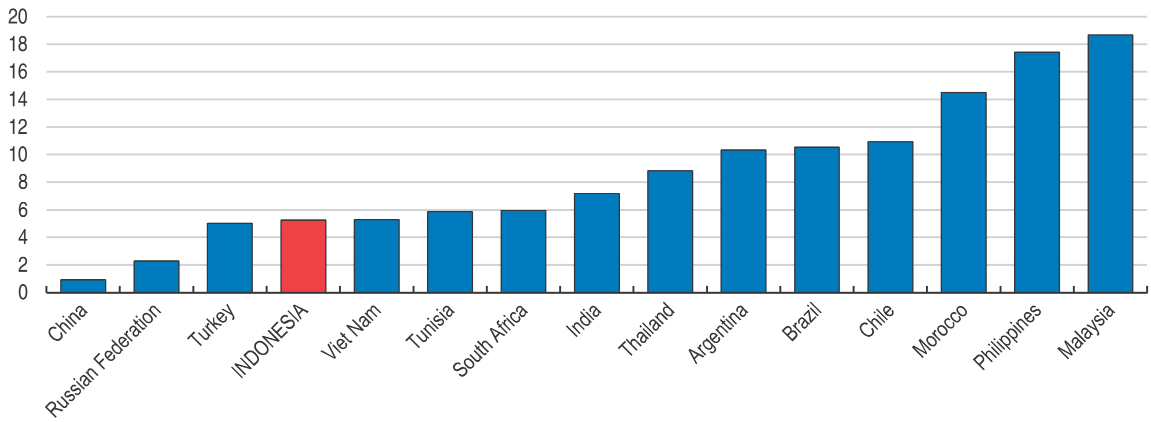
1. Mainly state capital injections into SOEs.

Source: Ministry of Finance.

StatLink http://dx.doi.org/10.1787/888933421137

Figure 2.16. **Public-private partnership capital stock in selected countries, 2013**

In percentage of GDP



Source: IMF Investment and Capital Stock Dataset, October 2015 version.

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the burden on public finances but also permit efficiency gains. As mentioned in Indonesia's medium-term framework, Bappenas estimates that less than half of total strategic infrastructure investment needs over 2015-19 can be covered by national and regional budgets. While private firms should be interested in investing because of Indonesia's market potential, this participation needs to be encouraged by a good business climate. This has recently improved but remains unfavourable (Indonesia is ranked 106th in 2016 World Bank Doing Business report). Involving the private sector can extend the number of profitable but unaffordable projects. It can also provide new skills and technologies (especially in the case of foreign direct investment), reduced total costs (for construction and management) and enhanced cost efficiency. Indeed, OECD (2015b) notes that, based on water and energy utilities in 71 countries, a greater degree of private participation is associated with stronger gains in productivity and service quality. A certain number of good practices are necessary though to make sure that PPP projects become successful and avoids potential risks during selection/implementation: establish a strong institutional framework, ground the selection in value for money, and put in place transparency in budgetary and procurement processes (OECD, 2012a); including more specifically for Indonesia a stronger PPP unit, a shortlist of PPP projects and a prominent role for the Ministry of Finance (OECD, 2012b). A mechanism to offer a minimum revenue guarantee would also help increasing the number of PPP projects.

In so far as infrastructure provision is concerned, SOEs are a double-edged sword. While they represent an effective means to increase infrastructure investment, they also potentially lead to inefficient use of public funds when they are poorly managed. For the 2015 and 2016 budgets, not only did the government increase its own direct infrastructure investment, but it also encouraged SOEs to do the same, notably by directly injecting capital of 40-50 trillion rupiah (about 2.3% of government outlays, up from only 0.5% in 2014) (Figure 2.15). For Indonesia, the importance of SOEs is sizeable, with 121 enterprises (of which 18 are listed on the Jakarta Stock Exchange) and assets representing more than 40% of GDP in 2014, almost seven percentage points more than in 2010, but far less than in China (180%) and Viet Nam (80%). In terms of capital expenditure, in 2011 Indonesian SOEs spent about 3% of GDP and consequently about twice as much as the government (according to the Ministry of State-Owned Enterprises). A large and growing number of smaller enterprises are also owned by local authorities: in 2014, 777 (up from 723 in 2011) regionally owned firms' assets were equivalent to about 6% of GDP. Given their importance, the public money they receive and the potential public guarantee they enjoy, state and regionally owned enterprises should comply with best practices.

The OECD has made several recommendations for sound corporate governance of SOEs (OECD, 2015c), including efficient audits, equitable treatment of shareholders and transparency. Indonesia's Ministry of SOEs releases an annual report with certain key indicators (including net profit, assets by type and dividends paid), but some are not always audited, and the associated feedback report is not available publicly, which makes performance evaluation opaque. Contingent liabilities underlying the participation of the state in those public firms should be fully taken into account, and incentives from the government to have them actively participating in new infrastructure programmes should let them act freely as standard corporate entities. Competence and autonomy of SOE boards of directors should be guaranteed to ensure corporate efficiency and professionalism, and to avoid political interference. The authorities should also be particularly attentive in the particular case of SOEs bidding for PPP projects because of the risk of a conflict of interest.

Financing Indonesia's infrastructure gaps will be a major challenge for the next decade. Public funding has already increased, but there is now limited room for further rises, given the expected slowdown in per capita GDP growth and weakness in other revenue sources, including commodity rents. Apart from enhanced efficiency of government expenditures, expanding tax collection is also possible, but it will take time (see above). Indonesia should also consider further relaxing restrictions to FDI – a negative investment list prevents foreign participation in a number of sectors – which is beneficial to development (OECD, 2002). A recent regulation (82/2015) grants SOEs working on qualified infrastructure projects a government guarantee on loans provided by international financial institutions. This is particularly welcome, as it allows them to have cheaper financing for projects that have been validated by the authorities. International development banks can indeed contribute to ease funding programmes: the AIIB (Asian Infrastructure Investment Bank) and NDB (New Development Bank) have recently been created and join the World Bank, ADB (Asian Development Bank), IDB (Islamic Development Bank) and CDB (China Development Bank) in assisting development in Indonesia, with a particular interest in infrastructure. However, the authorities plan to use IIGF (PT Indonesia Infrastructure Guarantee Fund, a SOE partly funded by the State) to provide loan guarantees, which will not be as effective in lowering interest rates as a State guarantee.

Construction costs are high, and maintenance is often neglected. The increase in road spending early this decade, justified by traffic congestion, was partly absorbed by increasing road costs per km, which are comparatively high by international standards, while permanent staff of 11.2 per 100 km was more than six times higher than foreign norms (World Bank, 2012b). Roads were mostly in good condition at the national level in 2012, but about 25% of provincial and 40% of district roads were in bad condition because of a focus of subnational authorities on new development to the detriment of maintenance. Maintenance of existing facilities can pay for itself by reducing future repair costs. To that end, part of road-related user charges, a significant portion of provincial revenues, should be earmarked for maintenance and not considered as general revenues.

Ultimately, planning and realising infrastructure programmes must take into account the whole-of-project cost and should be carefully prepared to avoid delays or cancellation.

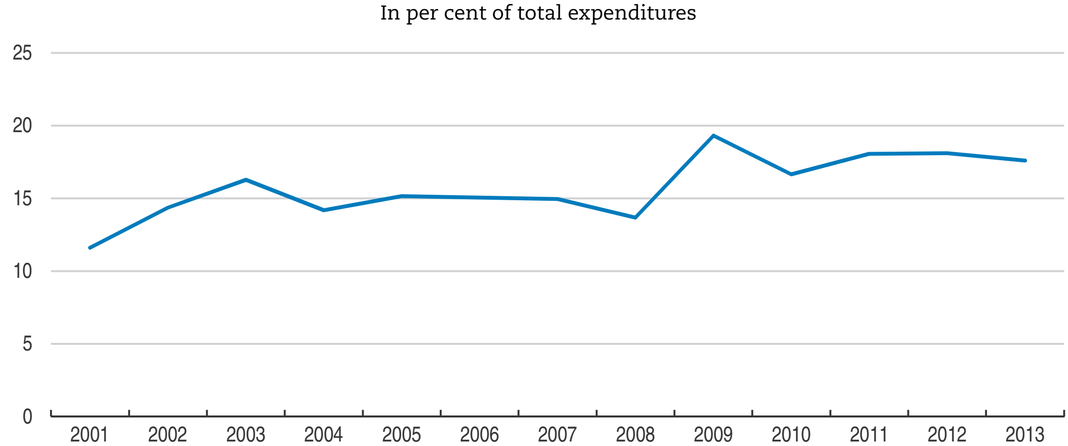
The government has organised bodies to select, plan and supervise such projects. The inter-ministerial Committee for the Acceleration of Prioritized Infrastructure Provision (KPPIP, *Komite Percepatan Penyediaan Infrastruktur Prioritas*) is in charge of monitoring a list of 30 priority projects from start to completion and to help find the financing. To that end, it is crucial that all costs are included in the feasibility study, including a proper evaluation of construction expenses and the future maintenance burden, and also of potential environmental damage and risks. For example, the choice to ramp up coal-powered electricity generation in order to meet access targets should take into account COP21 climate change commitments. The financing choice between the public and the private sectors (or a mix of them) should be carefully assessed. There is a usual political preference for mega projects, but, as shown by Flyvbjerg et al. (2003), they tend to be overly complicated and perform poorly.

Strengthening the education system

Investing in education brings future returns, as it enhances the human capital of the population. It is especially important for Indonesia, where more than 45% of the population is under 25. Progress in extending education has been tremendous over the last five decades, but important challenges remain, including raising pupils' academic performance, given that, for example, more than 60% of Indonesian firms have difficulties in finding suitable employees for professional and managerial positions (World Bank, 2015). Likewise, even in Jakarta, adult skills are weak, as demonstrated by low levels of proficiency in literacy and numeracy (OECD, 2016b). Public education spending is largely determined by a target of 20% of the total according to a 2002 law, but that share has been budgeted only since 2009 and has never actually been achieved in practise (Figure 2.17). While Indonesia's public spending on education as a share of the total is in line with international standards, it is low in terms of its share of GDP (Figure 2.18). Indonesia must now capitalise on its investment and increase efficiency, even if the future decline of the youth cohort should also free up some resources. The problem with such a target is not its level, which highlights the political will for improving education, but that it provides no guidance on how and where to spend it. That justifies putting in place incentives to reach well-defined performance targets including for a better redistribution. In addition, the

Figure 2.17. **Education spending over time**

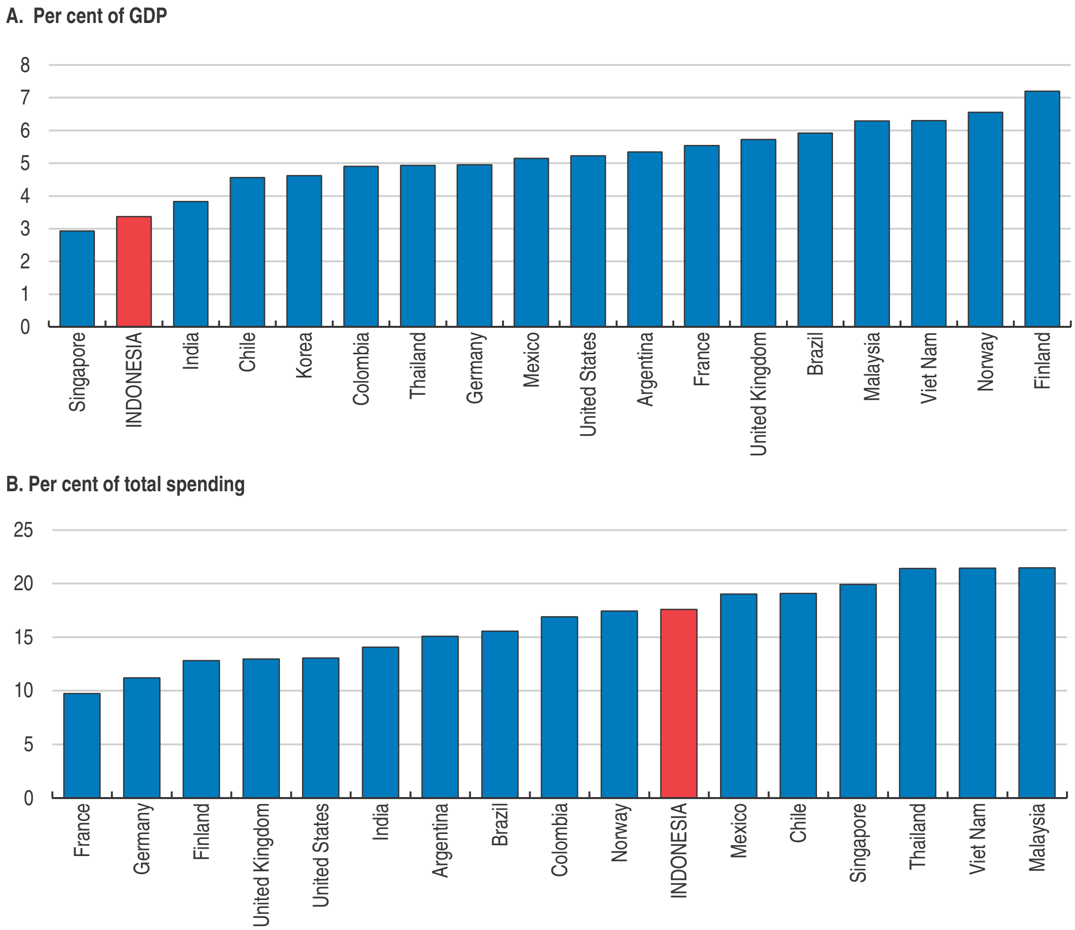
In per cent of total expenditures



Source: UNESCO Education database.

StatLink http://dx.doi.org/10.1787/888933421151

Figure 2.18. **Education expenditures in selected countries, 2013 or nearest year**



Source: World Bank World Development Indicators.

StatLink http://dx.doi.org/10.1787/888933421163

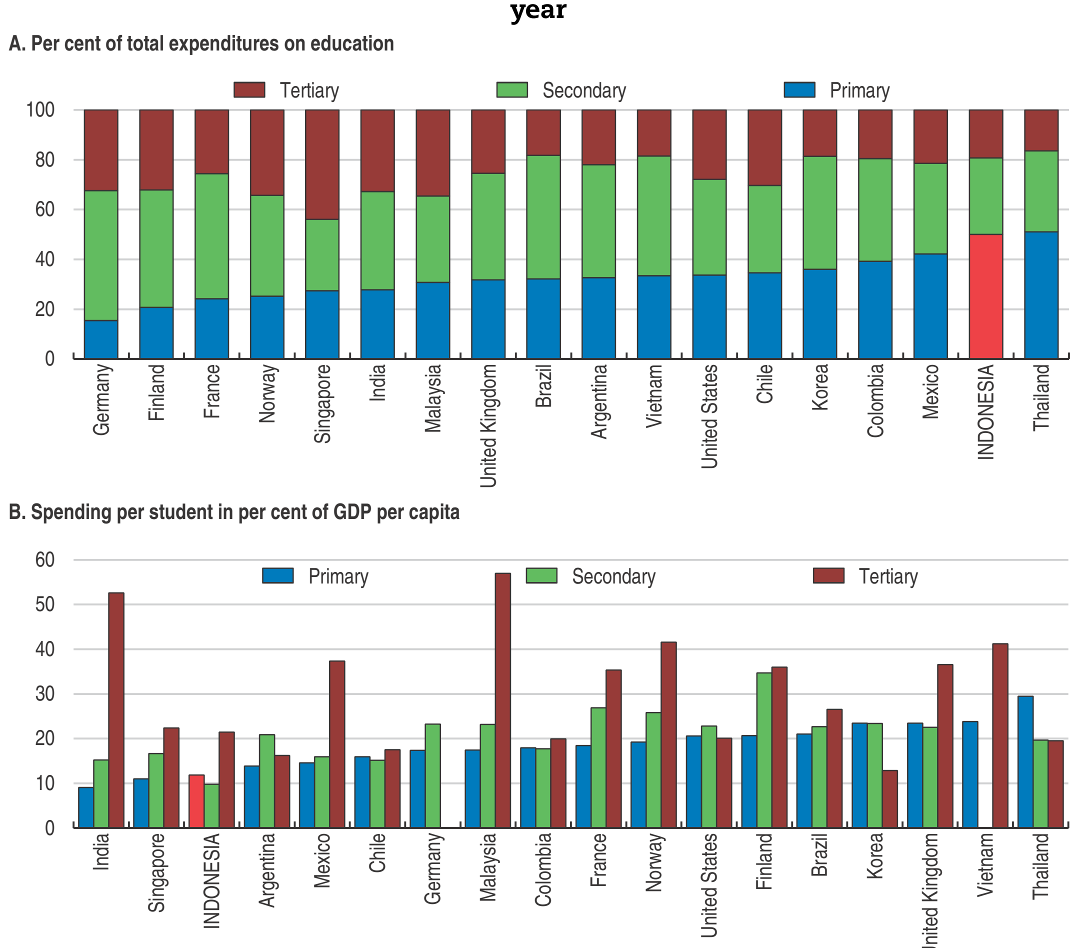
budget rule is applied jointly to all levels of government, whatever their role, and to any budget revisions, thereby limiting flexibility and predictability. In the end, by removing inefficiencies, schools might be able to generate improved outcomes and simultaneously decrease total spending by up to 12.5% (Lewis and Pattinasarany, 2011).

Shifting spending from primary to secondary school

Indonesia has long emphasised primary education, and the adult literacy rate has jumped from 67% in 1980 to nearly 94% in 2012. The country is now close to achieving universal basic education after a relatively large increase in investment. In 2005 the government launched a massive school grant programme, the *bantuan operasional sekolah* (BOS; School Operational Assistance Grant), as a way of injecting funds directly into schools in order to keep children enrolled and give schools some flexibility in managing their own funds. Further assistance is provided by two other cash transfer programmes, *Kartu Indonesia Pintar* (KIP; Smart Indonesia Card) and *program keluarga harapan* (PKH; Family Hope Programme). However, despite the apparent success in boosting primary school attendance, there is still significant regional variation in outcomes, and the system could be refined. For example, an evaluation of PKH found that it did not draw more children into the education system nor keep them in primary school, attributing the lack of impact to cash transfers that were too limited and delivered too late to help with parental costs (World Bank, 2012c). Moreover, PKH has been shown to exclude a large proportion of eligible families (Garcia-Jaramillo and Maranti, 2015). These schemes need to be better administered and more accurately targeted so as to ensure better student attendance and performance, particularly in rural areas. In addition, the separation between state schools (under the management of the Ministry of Education and Culture) and *madrasah* (Ministry of Religious Affairs) could be made more effective. Indeed, while *madrasah* are responsible for a significant part of education services, district governments tend to provide insufficient funding to let them generate high-quality outcomes (ACDP, 2013); that should be corrected to avoid inequalities.

While primary school attendance has risen, currently less than one-third of the population has completed secondary education (OECD/Asian Development Bank, 2015). So, the policy focus should now shift towards secondary education (including with developing foundational skills in primary schools), which is a key element for providing the labour market with needed competencies for a middle-income country. Resources are still mainly devoted to primary education, much more so than in other countries (Figure 2.19, Panel A). As for spending per student as a per cent of GDP per capita, secondary is even less

Figure 2.19. **Spending by level of education in selected countries, 2013 or nearest year**



Source: World Bank World Development Indicators.

StatLink http://dx.doi.org/10.1787/888933421176

well-funded than primary education, which is unusual by international standards (Panel B). In particular, access to upper secondary education remains low for the poor. Indeed, enrolment rates for the population in the lowest quintile have improved remarkably for pupils below age 15 but still drop significantly after that (World Bank, 2013b). Efforts to boost participation in tertiary education among disadvantaged groups and regions are warranted, because tertiary education is now mainly dominated by the affluent, who enjoy good schooling and will gain more private benefits following graduation.

The quality of education

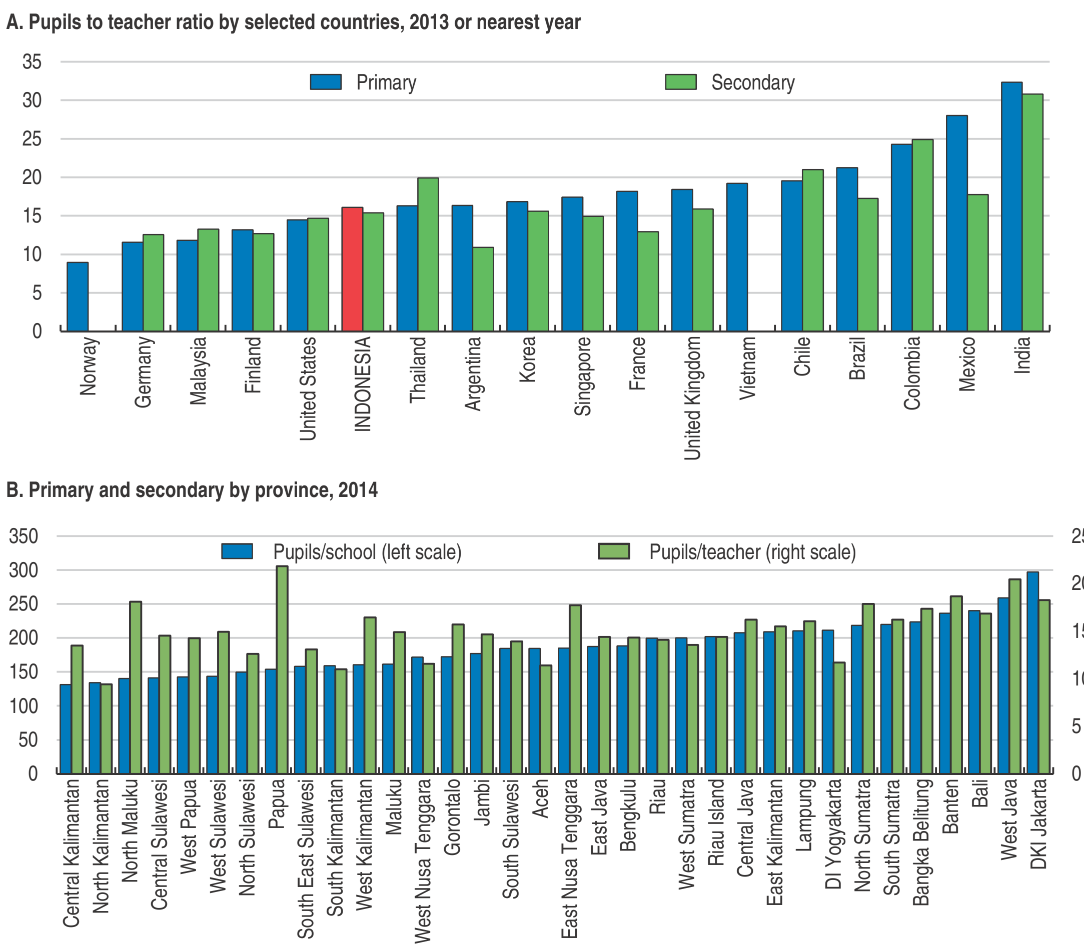
Teaching quality appears low, especially in primary schools (de Ree, 2016). Even though it has improved, teacher absenteeism remains high (10% in 2013-14), especially in rural areas where physical facilities are poor and supervision sporadic. That leads to higher student absenteeism, classroom hours sometimes below minimum requirements and lower achievement in mathematics (ACDP, 2014). There should be tighter control and better understanding over teachers' activities, in particular to clarify their non-teaching roles: 26% of absenteeism is justified by official duties, such as attending meetings or training, and teachers take extra jobs to compensate for their low wages (Lewis and Pattinasarany, 2011). While their salaries have improved since then, monitoring recourse to additional extra activities should continue. School management needs to improve as well. It is also important to recognise potential virtuous circles. Thus, increased readiness through early childhood education will reduce dropout and repetition rates in primary school, which will subsequently improve secondary and tertiary participation rates. In this regard, the allocation to early childhood education of about 1.2% of the total schooling budget is far below international averages of 4-5% (OECD/Asian Development Bank, 2015).

Boosting teacher skills through lifelong training should be considered a priority, including through classroom appraisal and peer learning. The teacher certification programme, set by the 2005 Teacher Law, aims to ensure a minimum level of qualifications by 2015 to be assured either by a diploma or a training course. Teachers who obtain certification then receive a professional allowance that doubles their salaries. The share of certified teachers increased to 63% in 2013, compared with 23% in 2005. In addition, teachers' educational qualifications improved, and the share with a second job declined steadily (Chang et al., 2014). However, students taught by certified teachers have no better learning outcomes than those with non-certified teachers, demonstrating that certification alone, and the doubling of income that went with it, had not generally improved teacher quality. It increased the wage bill though, potentially crowding out other interventions to improve quality: in 2013, nearly 13% of the education budget went to the professional allowance (OECD, 2015a; World Bank, 2013b). Teacher pay should be based to a greater extent on skills as described in the Competency Standards for Teachers (Ministerial Decree 35, 2010), which uses 14 measures to assess teaching performance.

Personnel spending

Most of the increase to reach the 20% spending target has been concentrated in staff compensation. Over the past decade the number of teachers in all except *madrasah* schools rose by 51% (Suharti, 2013). As explained above and given that education is managed mainly by districts, there is a tendency to allocate more to personnel expenditures so as to receive more central government transfers. Recruiting new teachers is easy to do as long as the required level of teacher qualification is low. According to World Bank (2013b), two-thirds of the additional resources used to respect the budget rule went for teacher salaries and certification; moreover, the increased number of teachers, especially at the primary level, was due mainly to additional contract teachers, and a trend to convert them into civil servants could put further pressure on the wage bill. The pupil-teacher ratio is already quite low (16.1 in primary and 15.4 in secondary schools for 2013) and shows some significant regional heterogeneity (Figure 2.20). Eventually, with the help of better data availability, recruitment could be made more efficient to hire teachers only when there is an evident need.

Figure 2.20. **Pupil-teacher ratios in selected countries**



Source: World Bank World Development Indicators; Statistics Indonesia.

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Schools

The education system in Indonesia is characterised by the existence of a multitude of small schools to ensure universal access across the far reaches of the archipelago but also because some grants are provided for each individual school: even aggregating to the province level, average school size ranges from 130 to 300 pupils (Panel B). Teachers are attracted to remote locations by virtue of allowances that can triple their salaries. So, while rural schools are not generally understaffed, staffing classes of ten pupils or fewer with a qualified teacher per class is inefficient (OECD/Asian Development Bank, 2015). When small schools cannot be merged, a more efficient use of teachers should be promoted to restrain pressures on staff compensation, including with multi-grade teaching. Those techniques can encourage more flexible learning, the use of groups and less hierarchy (Blum and Diwan, 2007). They are used in many developed nations (World Bank, 2010). The use of incentives for schools should also be promoted to develop good practices and improve performance. Distance learning (including massive open online courses) is another option that should be considered. It can be much cheaper than traditional teaching, as a course can be taught to students in different locations at the same time including for remote areas. However, it also requires broader access to the Internet and to IT equipment as well as specific teacher skills.

Private sector

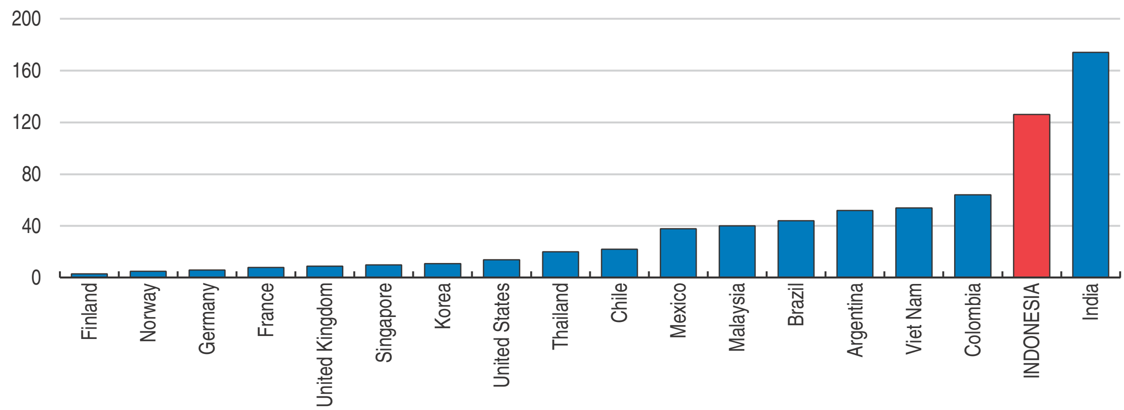
The private sector plays an active role, especially in secondary and tertiary education. While only 7% of primary schools are private, the share increases to 56% and 67% for lower and upper secondary schools, respectively (OECD/Asian Development Bank, 2015). The government has committed to achieving universal participation in upper secondary education, extending the period of compulsory education from 9 to 12 years. Achieving that legitimate goal will imply considerable budgetary outlays, justifying diversified funding sources but may also necessitate careful trade-offs and concrete efforts towards more efficiency in education spending. Regarding early childhood education, the bulk of recent growth has been for the for-profit sector accessed by parents who can afford to pay, while approximately 15 million children younger than six were not attending any early child development programme in 2012 (OECD/Asian Development Bank, 2015). Private-sector development should be accompanied by substantial aid for those in need. Likewise, for tertiary education, the current system is inequitable, as most poorer students have to pay to attend private institutions, while those from more affluent backgrounds attend superior establishments at lower cost.

Expanding health care

Health outcomes have improved enormously over recent decades from low levels, notably in terms of increased life expectancy and reduced infant and under-5 mortality rates. Other indicators draw a less sanguine picture, with for instance the comparatively high maternal mortality ratio at 126 per 100 000 live births (Figure 2.21). Indonesia targets to decrease it to 70 by 2030 under the UN Sustainable Development Goals. Similarly, the infant mortality rate (at 22.8 per 1 000 live birth) is high, with the poorest quintile having a three times higher rate than the richest. Health spending remains low by international standards both in terms of total public outlays and as a share of GDP (Figure 2.22); it has also remained relatively stable since 2010. However, McGuire (2006) shows that, in a cross section of developing countries, public health expenditures are not correlated with decreased infant mortality, but better access to health care is. That suggests that just spending more is not enough to tackle health issues. In the same vein, eliminating inefficiencies in OECD countries' health-care systems could raise life expectancy by an average of about two years (Joumard et al., 2010). Indonesia – with a small health-care budget – is moderately efficient by international comparison but could possibly gain nearly three years of health-adjusted life expectancy by improving the use of current per capita health expenditures (OECD, 2015d).

Figure 2.21. **Maternal mortality ratio in selected countries, 2015**

Per 100 000 live births



Source: World Bank World Development Indicators.

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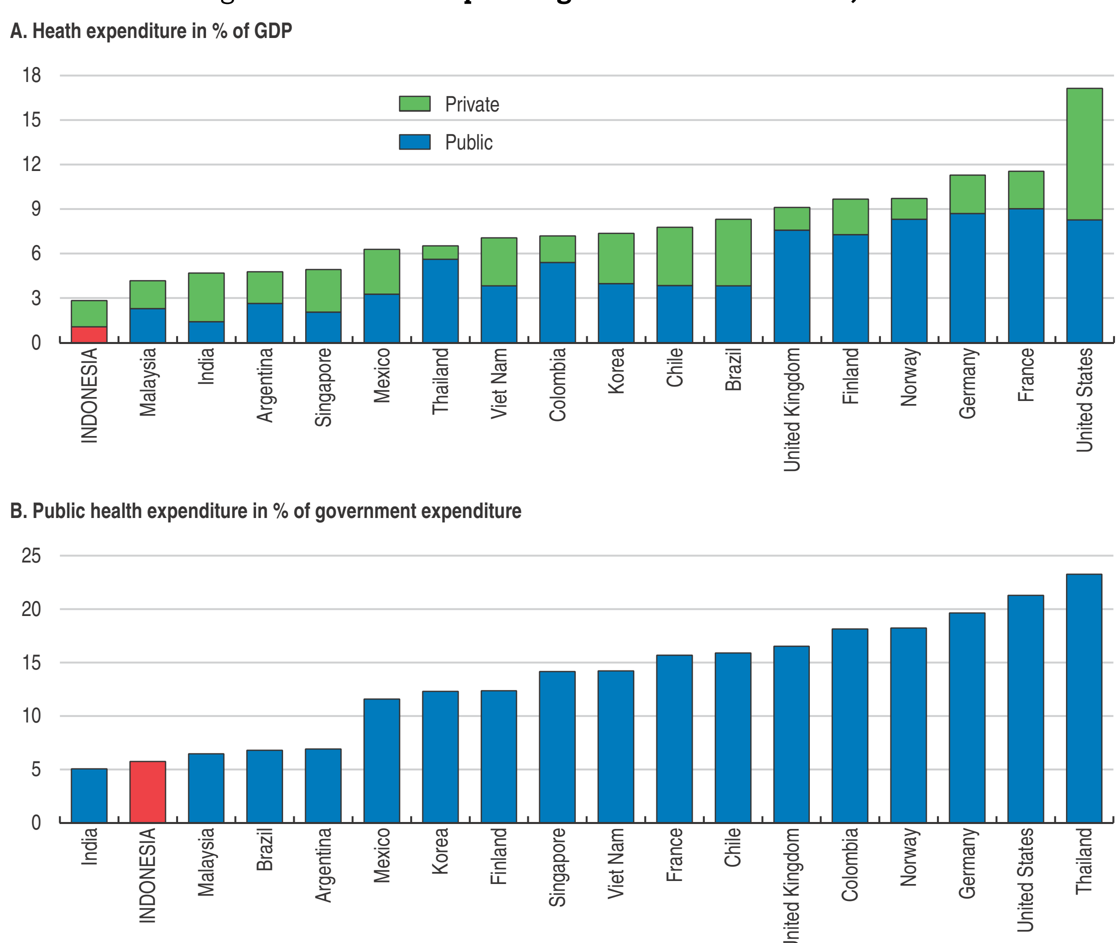
Figure 2.22. **Health spending in selected countries, 2014**



Source: World Bank World Development Indicators.

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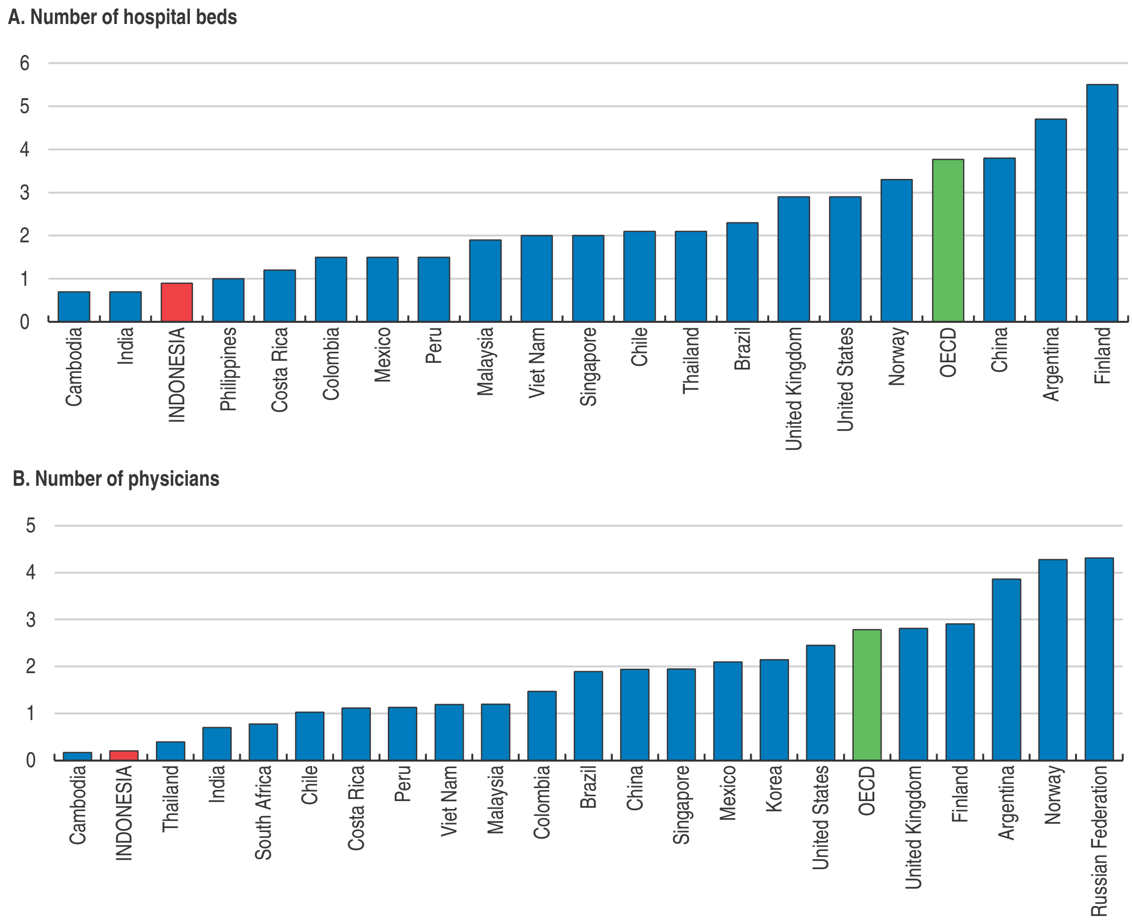
One of the principal recent initiatives regarding health care is the on-going implementation of universal health-care coverage (UHC), for which Indonesia was ranked poorly in 2009 (Wagstaff et al., 2015). The initial law providing UHC was voted in 2004, but the actual rollout started only in 2014 and is targeted to be finalised by 2019. In January 2014 various public insurance schemes were unified in a single agency (BPJS Kesehatan) tasked with the implementation of the National Health Insurance Program (JKN) aiming at providing health coverage for all. Initially, the programme covered about 120 million existing users of previous schemes – about half of the population – of which some 86 million ex-members of Jamkesmas (a government programme targeted at the poor); the rest consists mainly of civil servants. Having a single actor was an important step toward comprehensive coverage. Nevertheless, the financing of such an ambitious package is still unclear, which raises concerns as to UHC's sustainability (Economist Intelligence Unit, 2015; Hidayat, 2015). The additional amount required could be 2% of GDP by 2020 (Guerard et al., 2011), but on top of UHC, government expenditures will also increase with economic development. This will trigger higher demand and supply for health services and lower out-of-pocket private disbursements. In 2015, the deficit of BPJS Kesehatan was IDR 4 trillion (around USD 300 million) for 162 million users and is forecast to reach nearly IDR 10 trillion in 2016, while the covered population could reach 186 million (Indonesia Investments, 2016).

To have a sustainable UHC system, the government needs to adjust premiums to reflect costs and make sure that coverage increases equally across population layers. Health-care financing is ensured by premiums paid by the government for the poorest, while the rest of the population is divided into three classes according to their income. To limit the rising deficit, Presidential Regulation 19/2016 recently implemented a 20% rise in premiums for second-class and state-supported participants, and more than 30% for those in the first class (the richest), while the third-class was untouched. However, while mandatory coverage seems low for workers in the formal sector, because they typically postpone their shift to the new system until the end of the transition period. Additionally, the fixed amount informal workers pay to register with JKN seems too low: the ratio of claims to contributions exceeded 600% in 2014, whereas it is about 80% in the formal sector (Ministry of Finance, 2015). Moreover, only about 9 million informal employees were listed with JKN in 2014, while they represent about 60% of the work force, which suggests that the more they participate, the less sustainable the current framework is likely to prove. On the other hand, offering health coverage to informal workers is vital to avoid health inequality. Fraud is also an issue. It is reported at 24% for health insurance claims (Global Business Guide, 2013). Another avenue to explore is cutting unit costs (for which Indonesian data are difficult to get). which are estimated to be relatively high (Rokx et al., 2009).

The current and expected increase in health-care services (notably due to UHC implementation) will have to be concurrent with investment in infrastructure and training greater numbers of medical staff. As discussed above, Indonesia suffers from infrastructure gaps, including in the health-care sector. For example, the number of beds per capita is extremely low by international standards, while population growth is still buoyant (Figure 2.23, Panel A). As UHC is being implemented, demand will increase, putting rising pressure on existing facilities. In Jakarta and East Java hospital bed occupancy rates are already above 100% (Economist Intelligence Unit, 2015). This justifies devoting a significant portion of infrastructure investment to health, especially in Java where most of the population lives. The expected gap for the country though is huge: even

Figure 2.23. **Health service indicators in selected countries, 2012 or nearest year**

Per 1 000 people



Source: World Bank World Development Indicators.

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if 15 000 hospital beds will be added by 2017 (EY, 2015), there is a need for 500 000. The paucity of physicians per head (Panel B), even more severe in rural areas, should also be targeted, not only to confront the expected increase in health-care demand but to also partly catch up with peers. Foreign doctors are prevented from practicing, which is also damaging, given the existing shortage; the opening of the ASEAN Economic Community at the end of 2015 lifted the barriers inside the zone, but entry is still restricted by the need to pass a test. Ultimately, the finalisation of UHC and associated increased facilities is potentially a major risk for future public expenditure sustainability.

The tradition for the private sector to provide health-care services should be reinvigorated to help fill the gap in the context of public governance of health care. The share of private spending went up to 71% in 2005 before gradually falling to 62% in 2014. As usually observed in developing countries, the importance of the private sector is mostly driven by out-of-pocket disbursements, which represent about 75% of private spending. However, 62% of the 2 200 hospitals are private, and 60% of outpatient visits occur at private facilities (Marzoeki et al., 2014). While full UHC will increase the public share, there are prospects for the private sector to expand, given the growing middle class and relatively high profit margins (EY, 2015). However, it is important to prevent the public sector providing only reduced services for the poor and near-poor in a two-tier system. To that end, private hospitals should be encouraged to subscribe to JKN. Yet, in 2013 a pilot system led to financial losses for several private hospitals, which, despite an increase in reimbursement rates in 2014, remain reluctant to participate (Economist Intelligence Unit, 2015).

Investment to combat specific weaknesses in health outcomes (including infant malnutrition) could have important second-round benefits. In Indonesia, nearly 30% of children under five are stunted according to the national measure; even if that share has declined from 37.2% in 2013, it remains a concern and is higher than the global average of 28.5% (Shrimpton and Rokx, 2013). Damage done by malnutrition is seen throughout one's life course in reduced productivity and an increased risk of developing diseases when older. Future economic losses can be potentially large: indeed, Hoddinott et al. (2013) estimate that amongst 17 particularly affected countries the benefit-cost ratio associated with implementing nutritional policies supporting the poor is the highest in Indonesia: a dollar invested in reducing stunting is estimated to generate USD 48 in economic returns. That also highlights the importance of assisting people in need and limiting inequality for more than humanitarian reasons.

Managing risks underlying the pension system

Coverage of the Indonesian pension system is currently relatively low. In 2014, less than 15% of the labour force subscribed to the newly-formed BPJS Ketenagakerjaan. This is a public agency formed in 2014 to consolidate the previously fragmented system into a single national scheme to cover the private and public sectors, as well as self-employed and informal-sector workers. The system offers inflation-adjusted defined-benefit pensions based on contributions. The level of contributions is currently low but is planned to reach 8% of worker salaries. The retirement age will also increase from 56 to 65 over the next three decades. The set of reforms is welcome, but there are financial risks for the government if the system is not fully funded as intended, which justifies close supervision. With a rapid demographic transition in Indonesia, ageing should also be anticipated as population above 65, currently at about 6% of total population, is expected to rise to 24% by 2040. Eventually, the system would benefit from coordination between the health and employment insurance schemes to remove the necessity for employers to liaise with two agencies for social security contributions.

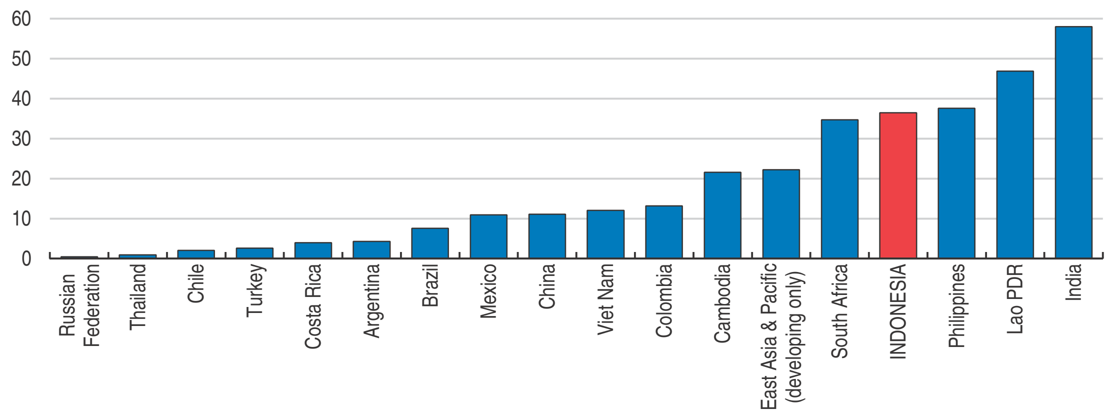
Optimising the social safety net

As described in the last *Survey* (OECD, 2015a), Indonesia's poverty rate has fallen sharply, yet is still too high (Figure 2.24). The national poverty rate, defined as the population share below the poverty line (about USD 25 per month), stood at slightly above 11% in 2015 – over the official target range of 9-10%. The government has to put in place policies that encourage private-sector participation in the economy and to provide basic public goods, such as water, sanitation, health and education, to enhance the well-being of the poor.

Current levels of public social assistance are low. With less than 1% of GDP allocated to social assistance, Indonesia spends only a fraction of what other large, middle-income countries spend (Figure 2.25). The authorities must not neglect any part of the population. While UHC should be an active

Figure 2.24. **Poverty rate in selected countries, 2014 or nearest year**

Poverty headcount ratio at $3.10 a day (2011 PPP), in per cent of the population



Source: World Bank World Development Indicators.

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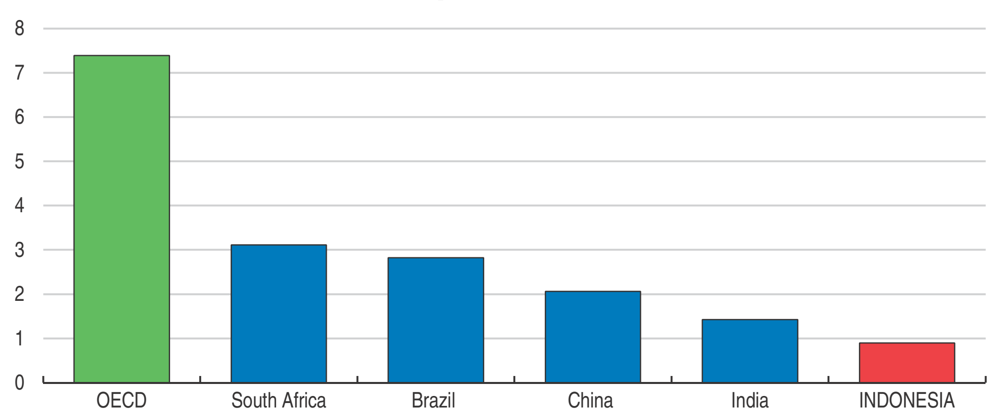
element of redistribution together with in-kind education support, the government should be ready to allocate additional resources to poverty-reducing social assistance, including by better use of existing programmes.

To compensate for high retail rice prices (highest amongst Asian emerging economies) and to help the poorest, RASKIN – the largest Indonesian social assistance programme, with a budget over USD 1.5 billion – theoretically provides 15kg per month to the poorest 30% of the population at one-fifth of the market price. The National Logistics Agency (BULOG) is responsible for purchasing rice from producers and managing quantities through import restrictions and then provides that rice to local governments who take charge of its distribution. But in practice eligible households receive only about one-third of the intended subsidy because they receive smaller quantities at a higher price (Banerjee et al., 2015). Rice distribution is problematic because of local monopolies and a lack of transparency; pilot programmes testing contracting out the last step in the chain

Figure 2.25. **Public expenditures on social assistance in selected countries, 2012 or nearest year**

In per cent of GDP



Note: Public social expenditure excluding health and old-age spending.
Source: OECD Social Expenditure database.

StatLink http://dx.doi.org/10.1787/888933421239

are intended to reduce prices and enhance quality. The introduction of social protection cards in 2013 (KPS), subsequently replaced by KKS (family welfare cards), to verify RASKIN eligibility is a positive step. The government also envisages transforming the programme into food assistance through 2017-2019.

A unified database (UDB) of social, economic and demographic information for poor and near-poor households used for several social assistance programmes will help optimise social spending. A 2009 survey showed that only 30% of the poor received benefits from the government (TNP2K, 2015). In 2012, the National Team for the Acceleration of Poverty Reduction (TNP2K) started the UDB and is currently managing a database (PPLS14) of around 25 million households (96 million people) corresponding to the four lowest income deciles of the population. It is used to provide social assistance through major programmes including RASKIN, BOS (non-personnel funding to elementary and secondary education), KUR (credit for business), PKH (Family Hope Program, given to the 8% poorest families) and electricity subsidies. Besides, further streamlining of concurrent registries should be envisaged through a single ID number system (as in India), which would notably ease UDB management and updates. Efforts should be concentrated on better identification together with regular evaluation to continue improving programmes as for example done in Mexico with the distribution of food vouchers (CONEVAL, 2015).

Even if small in relation to total expenditures, social assistance programmes are fragmented. In 2014 and 2015, the government launched three different cards based on UDB: KKS (cash ad hoc transfers), KIP (targeting twelve years of universal education) and KIS (to pay JKN premiums). A welcome improvement is that grants through KKS can either be directly transferred to deposit accounts or withdrawn at a cash machine with a SIM card. The use of a single card with different capabilities, apart from simplifying use for beneficiaries, would further limit management costs. Even though expanding conditional grants is recommended as they improve efficiency, in 2014 BSM (a scholarship for poor students; see OECD, 2015a for more details) began to be replaced by KIP. This was a step backward, since this financial support is granted to all families with children below 12 including when they have dropped out of school, thereby wasting an opportunity to nudge families in the right direction. Indonesia should promote conditional cash transfers, as they are effective in reducing poverty as in Brazil or in South Africa, where about 69% of all cash transfers go to the four poorest deciles (World Bank, 2014). In that regards, the extension in 2016 of PKH to disabled and old-age people under certain conditions is welcome.

Recommendations to improve the efficiency and allocation of public spending

Reforming budget formulation and execution

- Move the budget process towards an output-based approach by improving evaluation of future and existing programmes and reinforcing links with medium-term objectives. Add more flexibility in spending, and abandon budget targeting at too broad a level. Streamline the role of sectoral parliamentary commissions to have the final budget entirely approved at the end of the previous year.
- Continue the fight against corruption by all means. Improve reporting and statistics to enhance transparency and accountability. Increase the use of electronic procurement and the transparency of public tenders.

Recommendations to improve the efficiency and allocation of public spending *(cont.)*

Making decentralisation work better

- Improve coordination between central and local governments but also among regional authorities. Clarify the role of each level of government taking into account the trade-off between proximity, cost and efficiency. Take those considerations into account for the creation of new entities. Weed out overlapping competencies, where possible.
- Revise the system of transfers from central to subnational governments to remove the link with payroll. Further decrease the share of the general block grant in favour of the specific allocation fund.
- Bolster incentives by linking the amount of central government transfers to outcomes realised by subnational authorities. Central government units should provide technical assistance to their local counterparts with capacity issues.
- Avoid fragmentation of transfers, and increase the share of own-source revenues at subnational levels to improve accountability and enhance incentives to grow the local economy.

Improving the allocation and efficiency of expenditures

- Eliminate diesel and LPG subsidies to ensure better environmental performance. Phase out fertiliser subsidies in favour of the development of irrigation systems, rural infrastructure and research, and direct cash support for the poorest farmers.
- Replace RASKIN with food vouchers for the poorest. Liberalise imports to reduce food prices.
- Continue prioritising infrastructure investment, and reinforce cooperation with the private sector by promoting further PPPs.
- Earmark road user fees for maintenance when possible.
- Allow different levels of government to have different education spending shares. Gradually shift more funding towards secondary schools now that universal basic education has effectively been achieved.
- Focus on improving education quality with more controls on teachers' activities and on school management. Provide teachers with lifelong training, and review the certification programme.
- Take measures to restrain staff compensation as a share of education expenditures. Limit the number of small schools, develop multi-grade teaching, and use massive open online courses when appropriate.
- Improve health infrastructure, especially in Java. Encourage private-sector participation, but avoid creating a two-tier health system by requiring private hospitals to treat patients from the public scheme.
- Focus on those specific weaknesses in Indonesians' health outcomes that have high economic costs, like the fight against child malnutrition and stunting.
- Streamline social assistance and integrate social security payments with the income tax system. Boost funding for the most efficient measures, such as conditional cash transfers. Continue efforts to create a unified database of beneficiaries. Envisage a unique ID system to facilitate its management and updates.

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