



WORLD BANK GROUP

Spending better and more: delivering on Indonesia's infrastructure

Fiscal Perspective to Accelerate Indonesia's Infrastructure Development Seminar
Jointly organized by the Fiscal Policy Agency (FPA) and the World Bank

Jakarta, May 16, 2016

Outline

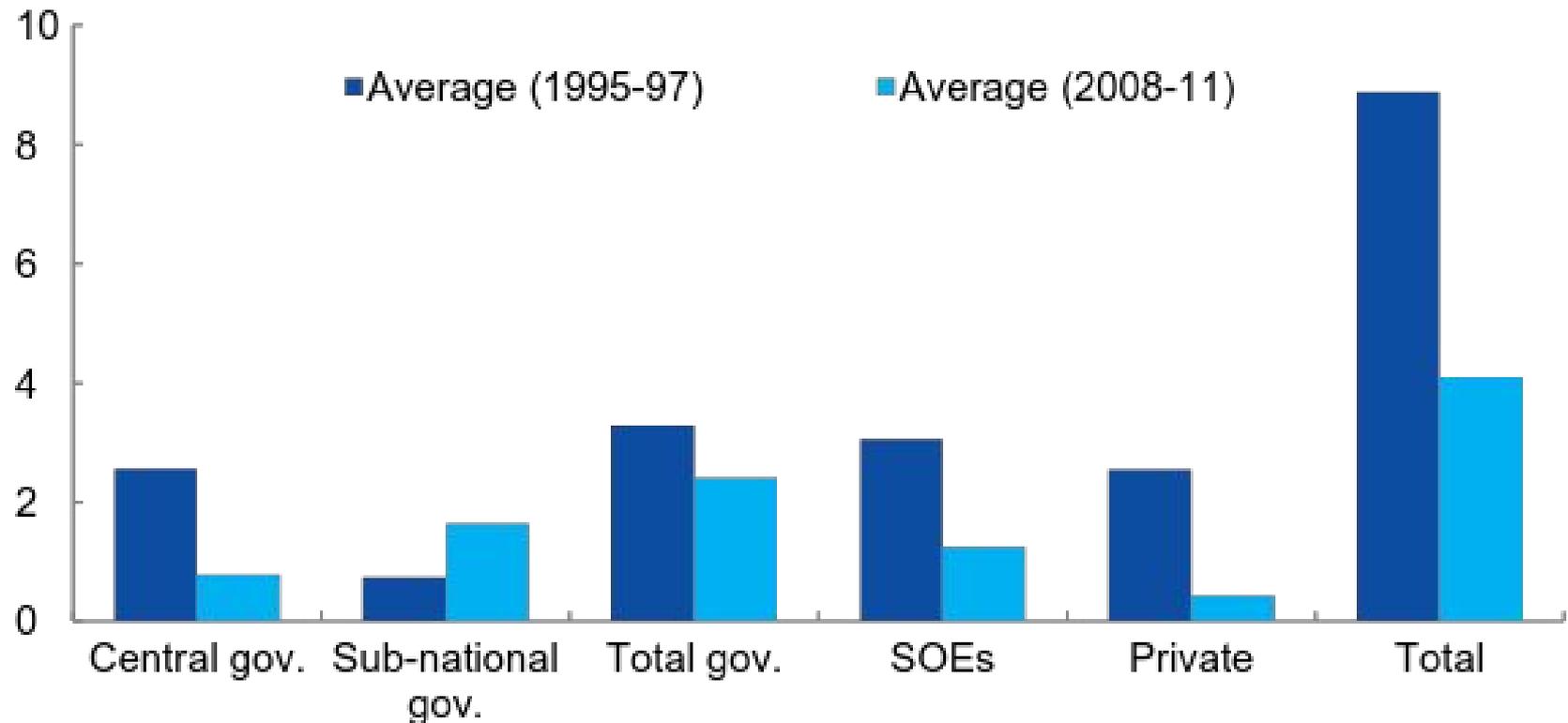
Recent infrastructure investment trends

Improving quality of spending in Infrastructure

- **Case studies: Road Sector and Water and Sanitation Sector (WSS)**

Infrastructure investment fell sharply across sectors, except SNGs

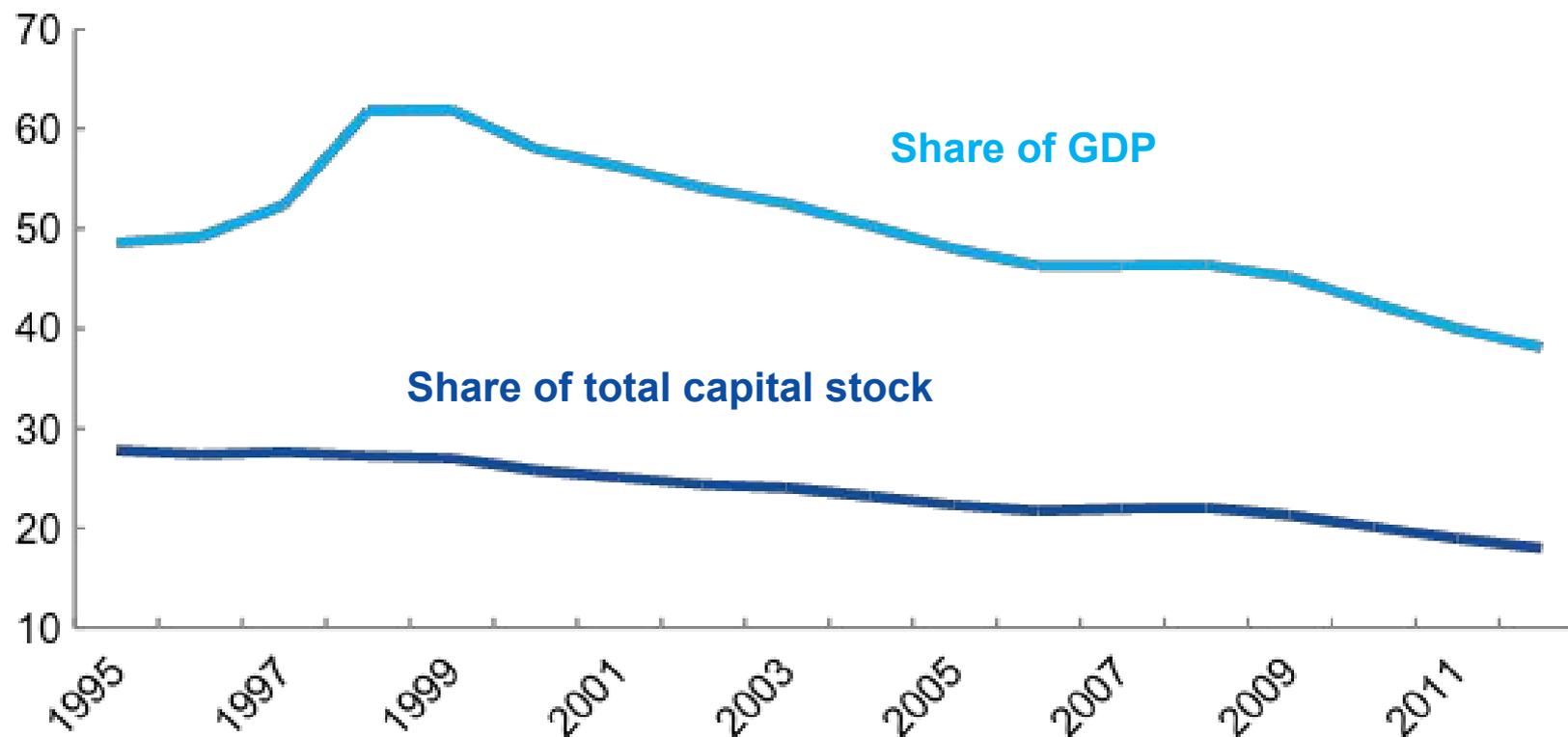
Nominal infrastructure investment levels as a share of GDP, percent



Source: BPS; World Bank staff estimates

... resulting in a decline in infrastructure capital stock relative to the size of the economy

Infrastructure capital stock share of total capital stock and GDP, percent



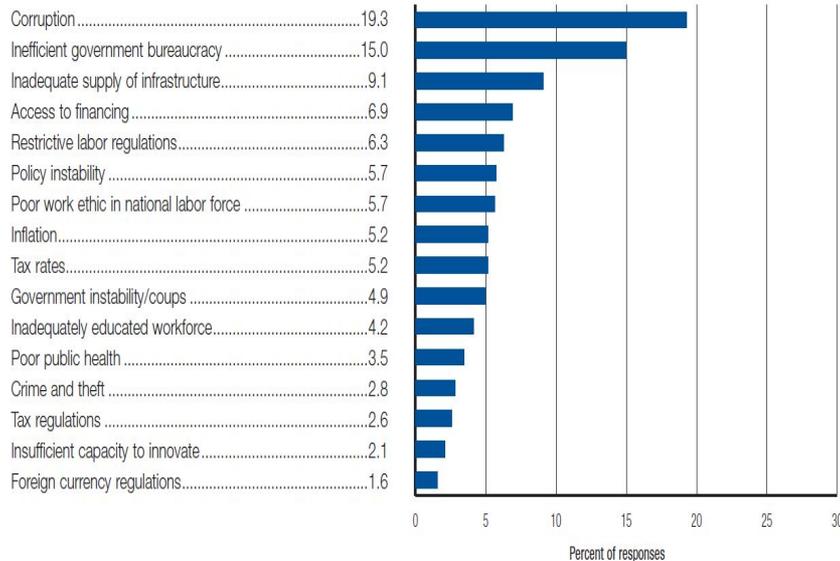
Source: BPS; World Bank staff estimates

The infrastructure gap now severely undermines productivity and growth

- Road length grew only by 35 percent in last decade, while vehicle growth was 300 percent;
- Jakarta's Tanjung Priok port (75 percent of total trade) handles 6 million TEUs/year, compared with 30 million TEUs/year in Singapore;
- 84 percent of Indonesians have access to electricity, compared with close to 100 percent for most of its neighbors;
- Indonesia's power demand is expected to double in 7 years.
- 36 percent of Indonesians have access to improved piped water, compared with 99 percent of Malaysians, and only 1% of urban water properly collected and treated;

Inadequate supply of infrastructure is a major constraint for businesses and undermines competitiveness

The most problematic factors for doing business

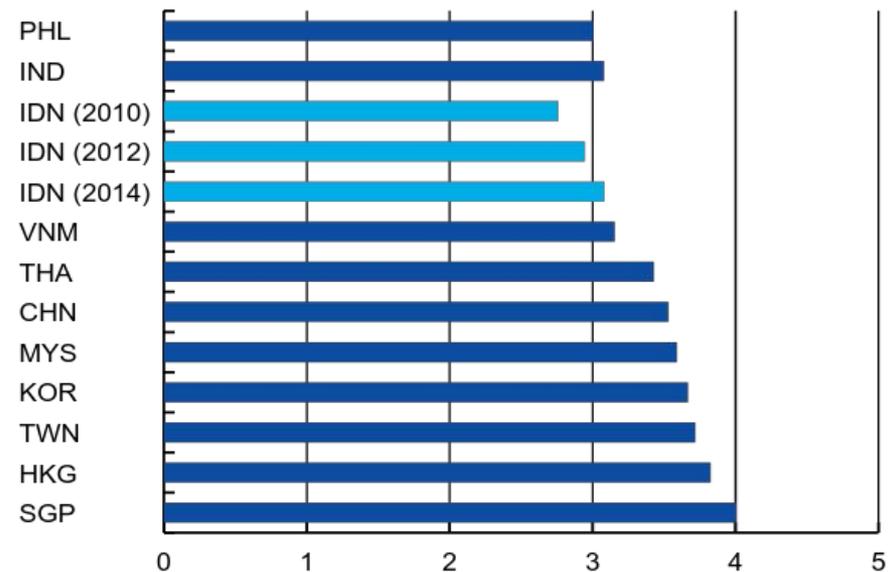


Note: From the list of factors above, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

Note: Data drawn from the 2013 World Economic Forum's Executive Opinion Survey.

Source: World Competitiveness Report 2013-2014

Overall Logistics Performance Index (LPI) score (2014)



The logistics performance (LPI) is the weighted average of the country scores on the six key dimensions:

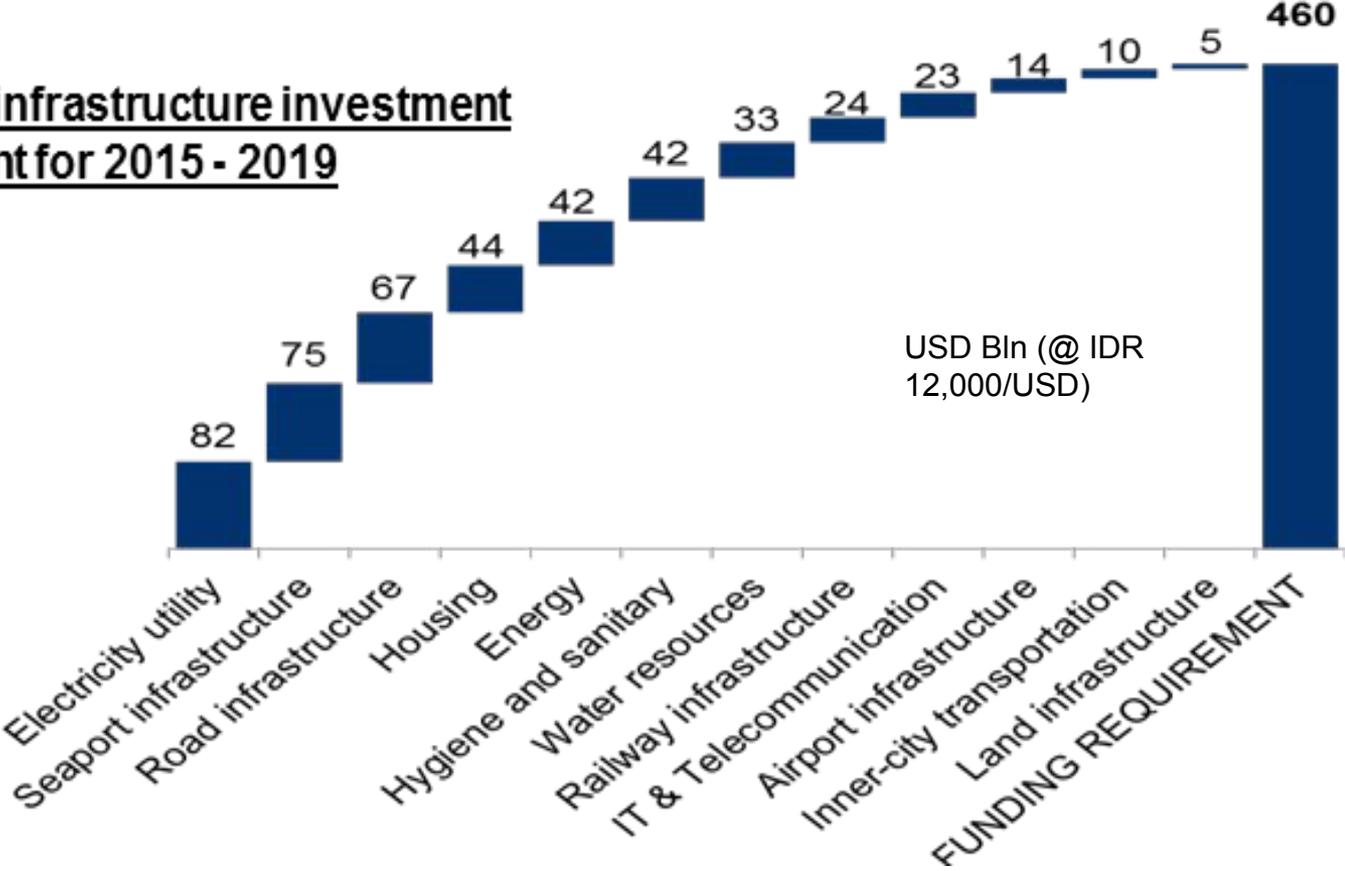
- 1) Efficiency of the clearance process (i.e., speed, simplicity and predictability of formalities) by border control agencies, including customs;
- 2) Quality of trade and transport related infrastructure (e.g., ports, railroads, roads, information technology);
- 3) Ease of arranging competitively priced shipments;
- 4) Competence and quality of logistics services (e.g., transport operators, customs brokers);
- 5) Ability to track and trace consignments;
- 6) Timeliness of shipments in reaching destination within the scheduled or expected delivery time.

The scorecards demonstrate comparative performance—the dimensions show on a scale (lowest score to highest score) from 1 to 5 relevant to the possible comparison groups—of all countries (world), region and income groups.

Source: World Bank

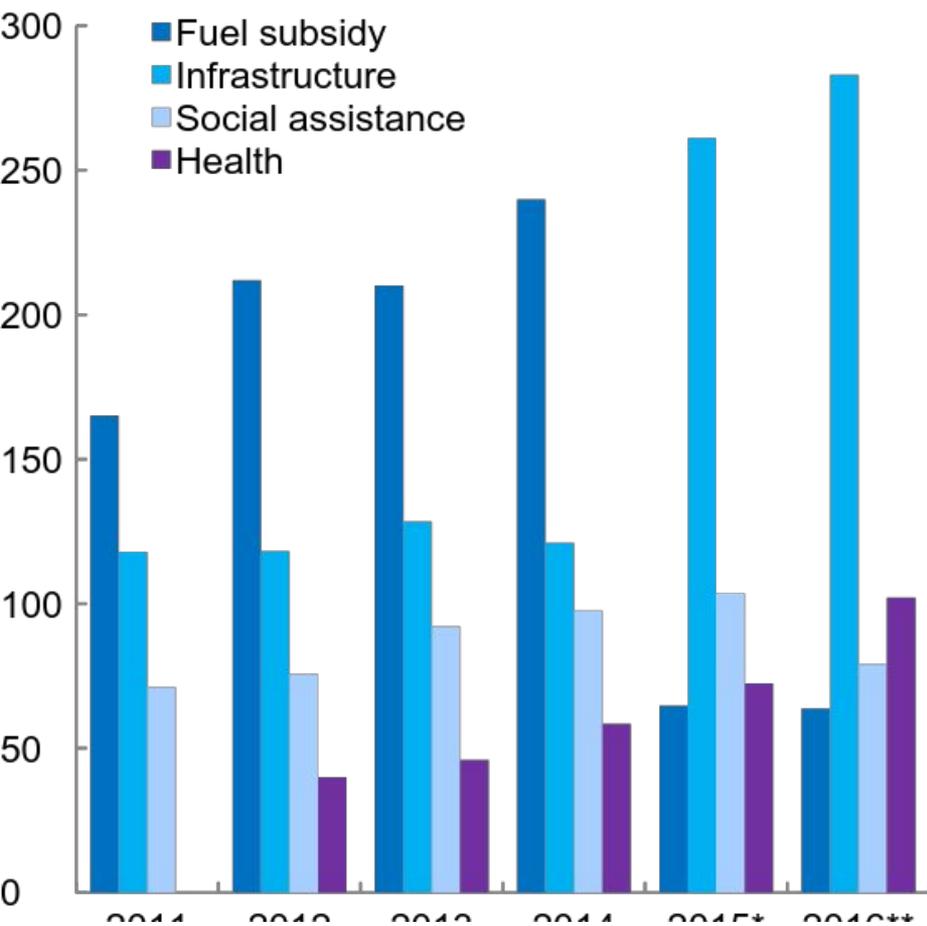
The government is committed to accelerate infrastructure development, and has identified ambitious targets

Indonesia infrastructure investment requirement for 2015 - 2019

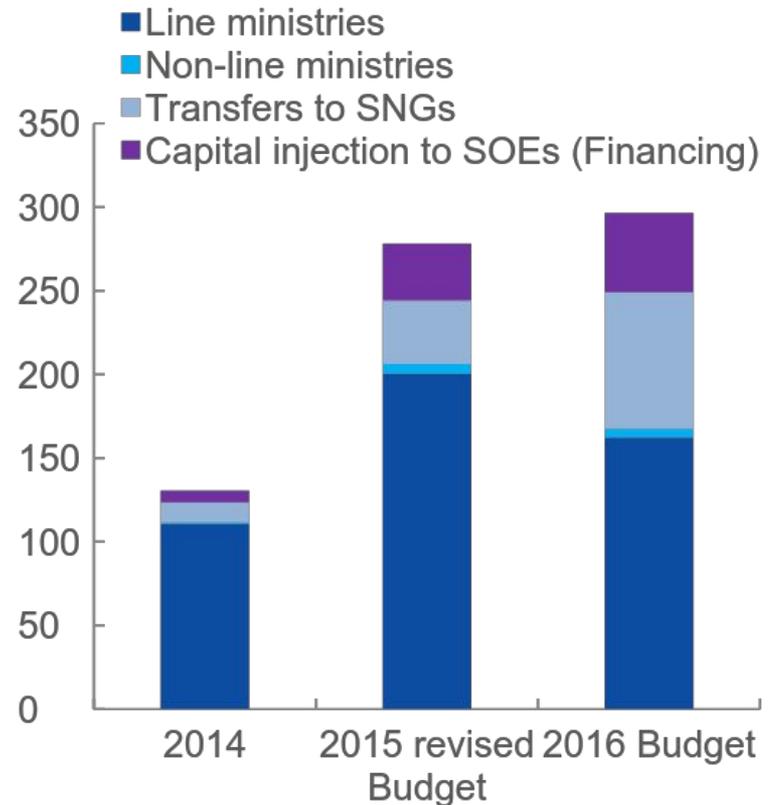


Source: Medium-Term Development Plan (RPJMN) 2015-2019; World bank staff calculations

The Government has allocated significant budget increase for infrastructure

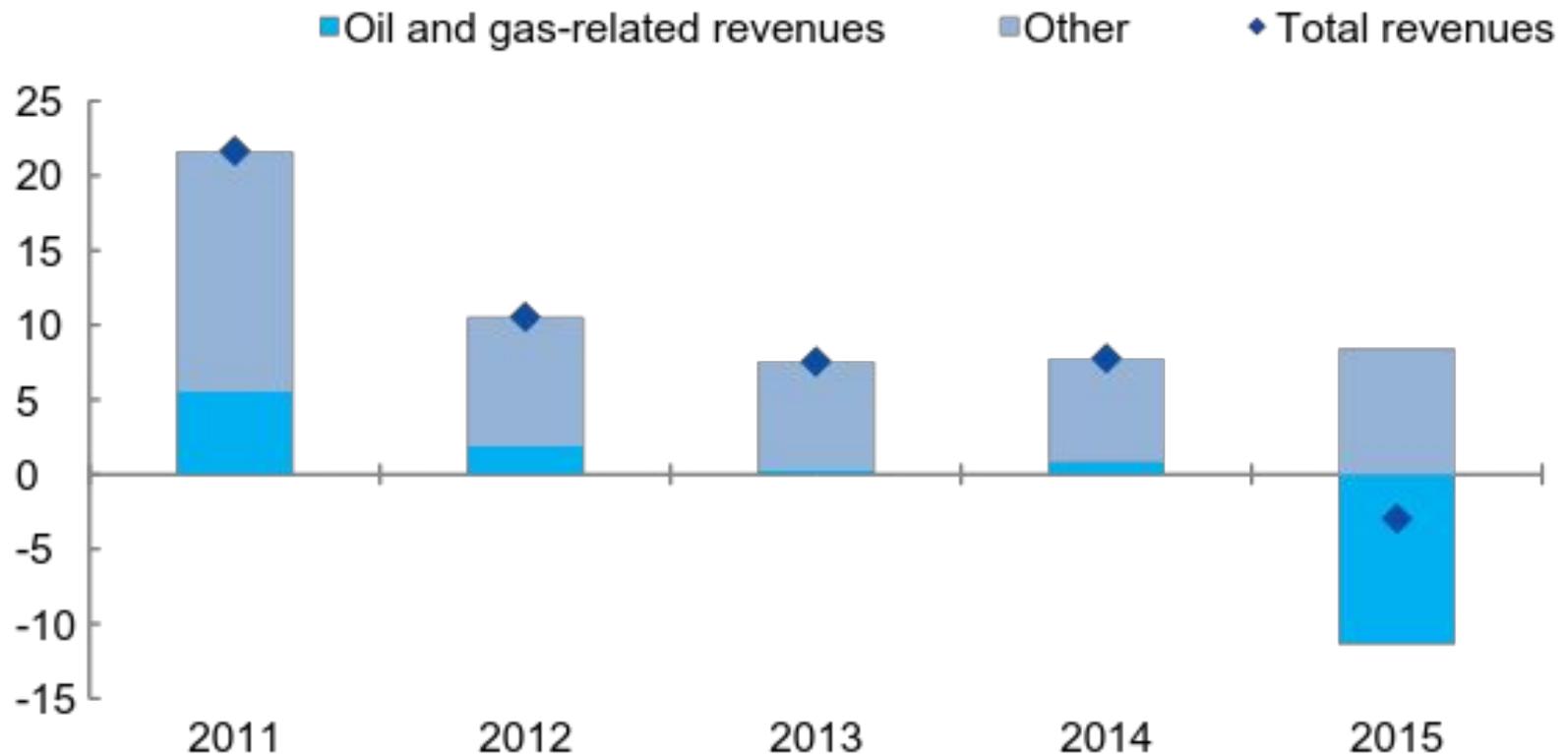


Budget allocation for infrastructure increases, driven by transfers to SNGs and SOEs (IDR trillion)



However, public resources are limited and weak revenues may constrain public infrastructure investment

Contribution to yoy nominal growth, percent



Source: Ministry of Finance; World Bank staff calculations

Outline

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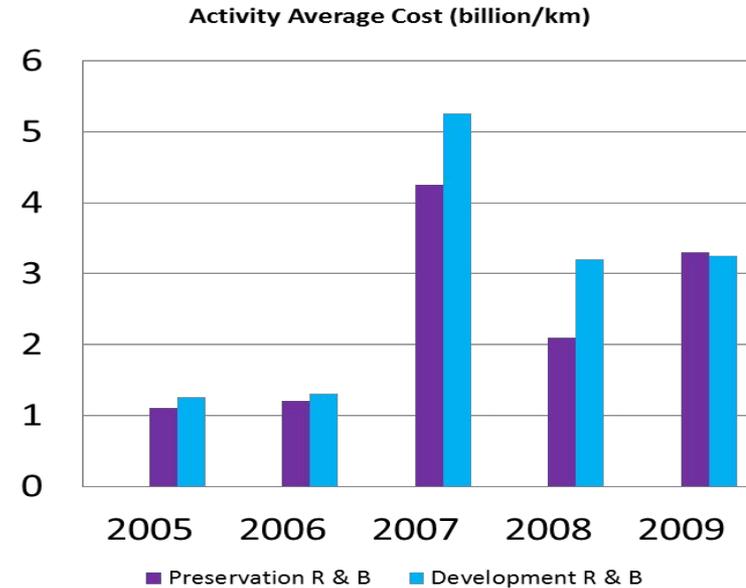
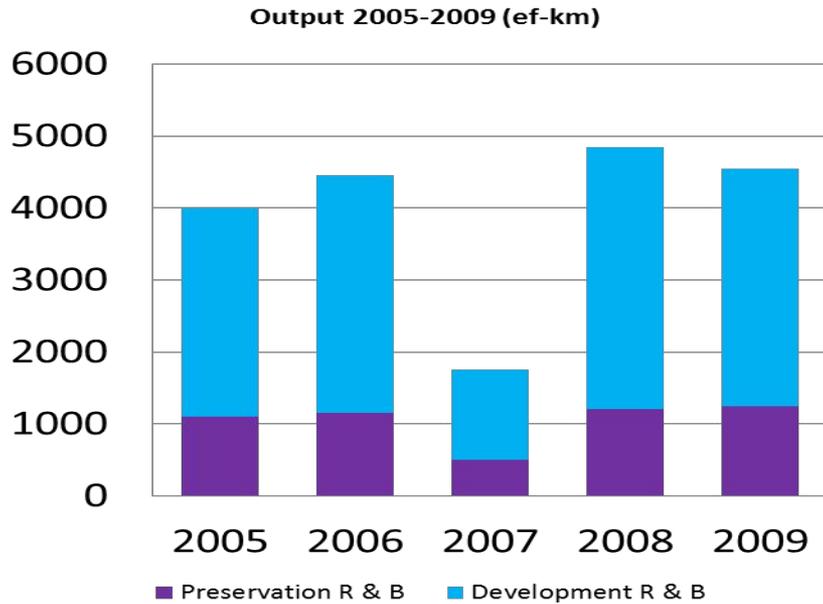
Improving quality of spending in Infrastructure

- **Case studies from WB PER: Road Sector and Water and Sanitation Sector (WSS)**

Key challenges in improving efficiency in the road sector (1/4)

- Road work quality is suboptimal and actual life and performance of roads appear relatively short
- National road preservation practices are ineffective and inefficient
 - Fragmentation of road maintenance contracts
 - Use of force-account (in-house) approach for road maintenance
 - Lack of enforcement of overloading regulations;
- Lack of use of independent technical audit to ensure quality of civil works
- Sub-national road: maintenance backlog and around a half of the sub-national road network needs rehabilitation.
 - Only a small portion (<10%) of roads is being maintained each year and periodic maintenance is hardly undertaken

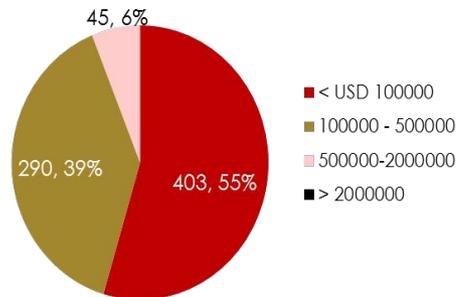
Key challenges in improving efficiency in the road sector (2/4)



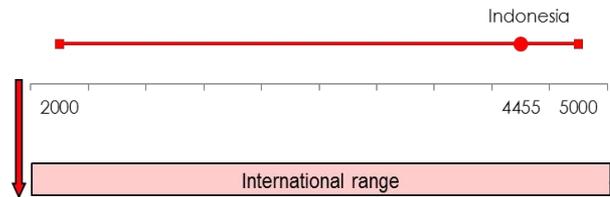
Productivity and efficiency of national road management remains sub-optimal: spending increased by three fold in real terms between 2005 and 2011 but only led to a 20% output increase (km of road preserved and developed).

Key challenges in improving efficiency in the road sector (3/4)

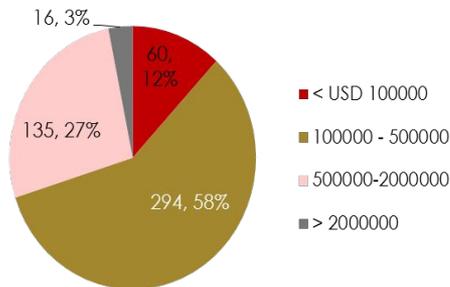
Routine Maintenance (# of projects/contracts by size of contract)



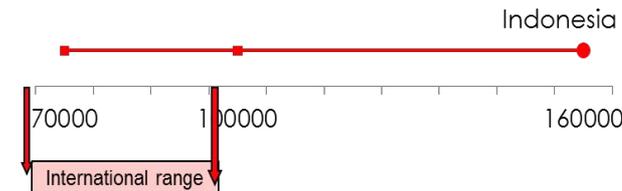
Unit cost of routine maintenance (USD/Km)



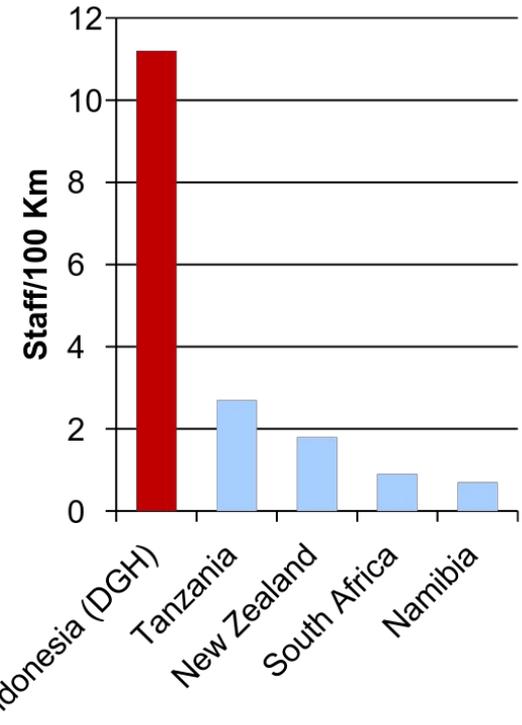
Periodic Maintenance (# of projects/contracts by size of contract)



Unit cost of periodic maintenance (USD/Km)



Source: DGH



Contract fragmentation and force-account approach to road maintenance contributing to higher unit cost (an analysis of the DGH's data from 1,243 national road maintenance contracts)

The ratio of staff to km of road network of DGH is higher than selected comparator countries

Key challenges in improving efficiency in the road sector (4/4)

- Independent technical audits are not expensive, and can enhance civil work
- Independent Technical Audits for the Western Indonesian Road Improvement Project (WINRIP) cost only 0.2% of the civil works cost.



Before: Potholes due to lack of pavement maintenance



After: Repaired potholes



Before: Bad-quality stone masonry and inadequately sized weep holes



After: Good-quality stone masonry and adequate weep holes

Better spending in road sector

- Implement contractual instruments to avoid cost increases in road construction works such as design and built contract, or Performance-based contracts (PBC)
 - Widely implemented in Latin America countries and shown better results: 24% more cost-effective than traditional contracts in Argentina, and around 25-35% in Brazil
- Increase the size of road maintenance contracts - Larger procurement package size improves cost and quality;
- Implement Independent Technical Audits for civil works to ensure quality;
- Encourage SNGs to allocate more budget for road maintenance than new road construction, for example through Provincial Road Fund.

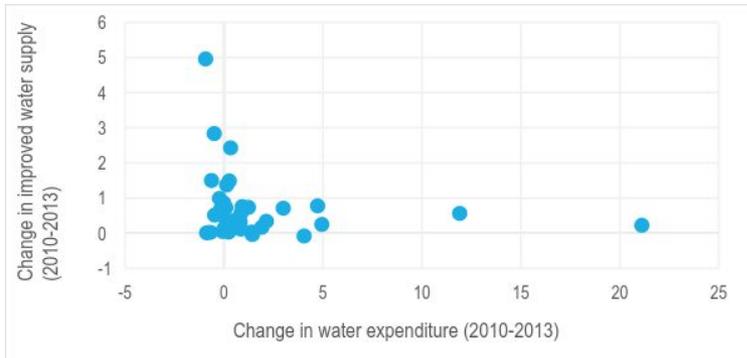
Key challenges in improving efficiency in Water Supply and Sanitation (WSS) sector

- Total public spending in WSS is relatively low as share of total spending or share of GDP (<1% of total exp or 0.2% of GDP)
- Efficiency of spending remains sub-optimal - more than half of WSS SNG spending is allocated for administration and office enhancement
- Weak intergovernmental coordination for investment in WSS
 - Investment by central govt was not linked by LG/PDAM for distribution network, resulting in idle capacity and stagnated usage and # of connection
- PDAM faced significant constraints in making new investment
 - More than half PDAMs (out of 348) were loss-making in 2012, driven by tariff that is below cost recovery level; high level of non-revenue water (NRW) (>35% vs 20% standard level); capital injection are used to cover operational than new investment
- Lack of incentive for households to use piped water for drinking
 - concerns over reliability and quality of piped water; perceived low cost and lack of regulation and enforcement for ground water

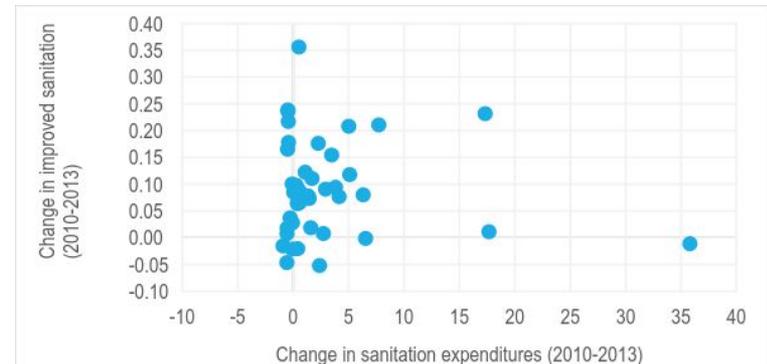
Efficiency of WSS spending remains sub-optimal

Local government spending shows a negative relationship with access to improved water supply and sanitation

Districts spending on water supply vs. household access to improved water supply

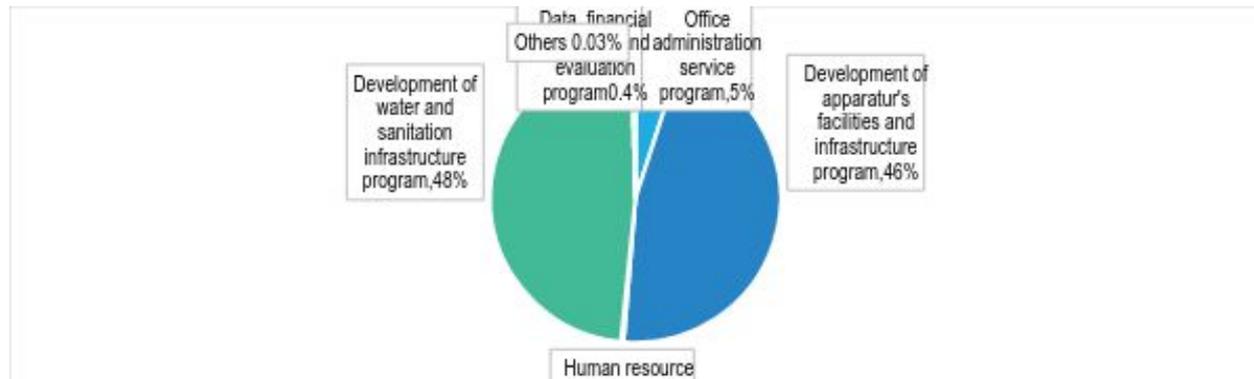


Districts spending on sanitation vs. household access to improved sanitation



About 51 percent of sub-national government spending on WSS went toward administration and the enhancement of office facilities (2010)

Sub-national spending by program from selected provinces and districts, 2010



Better spending in WSS sector

- Improve the co-ordination and channeling of funds between different layers of government
 - apply integrative approach for new investment e.g., CG investment should be followed by tertiary pipes and connections to households;
 - LG has to shift away from administration and apparatus facilities towards service delivery investment/spending;
 - change funding arrangement for local government/PDAM to more performance based approach such as DAK or Water Hibah
- Reform the regulatory environment of PDAMs to enhance their financial sustainability, and enforcement of the regulations
 - revise MOHA reg to allow LG/PDAM to adjust tariff to cost recovery level;
 - discourage PDAM's proliferation and encourage PDAM's merger to increase economy of scale and financial viability;
 - streamline PDAM debt restructuring to allow PDAM to borrow (for those that have credible business plan)
 - further clarity and enforcement of the new law on LG Administration (Law 23/2014) which provides an opportunity for PDAMs to retain profits for re-investment through new government regulations.

Thank You

