Indonesia growth outlook

Solving the Rubik's cube of Indonesian growth

Based on Prospera's support for Indonesia's medium term plan (RPJM) 2020-2024

April 2019

Prospera is supported by the Australian Government and implemented by Cardno

Cardno

Background

Australia has provided extensive support for the preparation of Indonesia's next medium term plan (RPJM) that covers the period of the next administration 2020-2024.

A technocratic draft of the plan is to be prepared by around July 2019. The final version is prepared to reflect the priorities of the incoming President. It is expected to be issued by year end.

Prospera's contribution covers four areas undertaken in collaboration with the Planning Agency (Bappenas). These are:

- Setting the macroeconomic framework and projections
- Undertaking the growth diagnostics to determine the binding constraints on growth
- Determining the scale and areas of focus for infrastructure consistent with the macroeconomic outlook
- Defining a strategy for the financing of investment over the medium term

Introduction – The Rubik's cube

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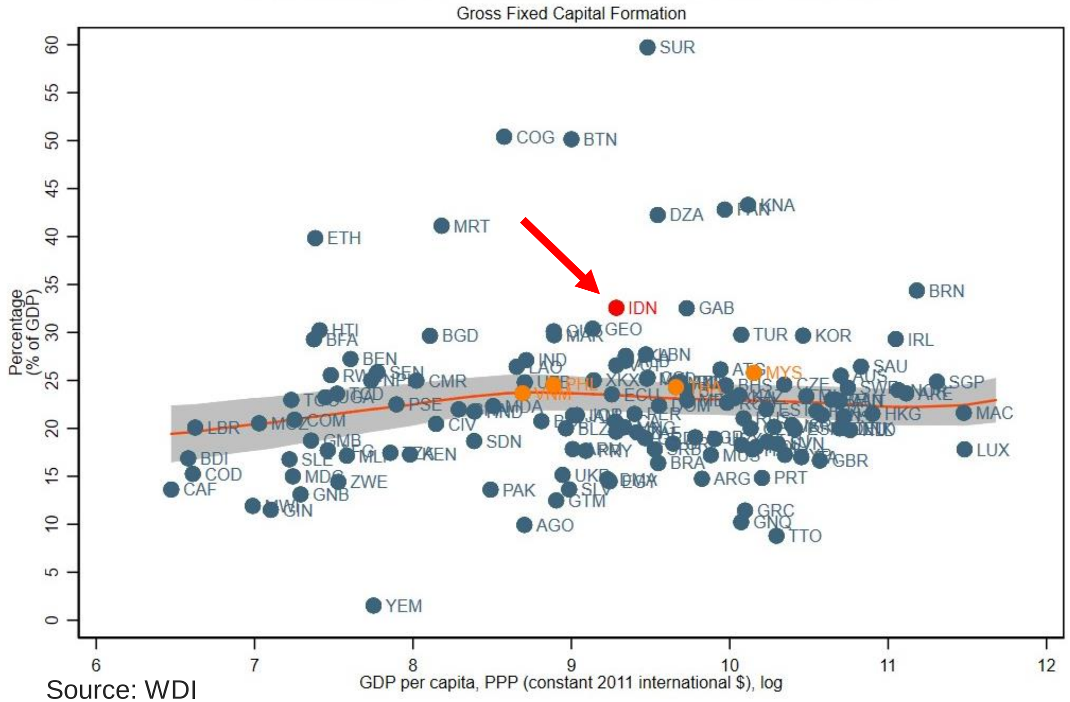
Investment is high in Indonesia … yet

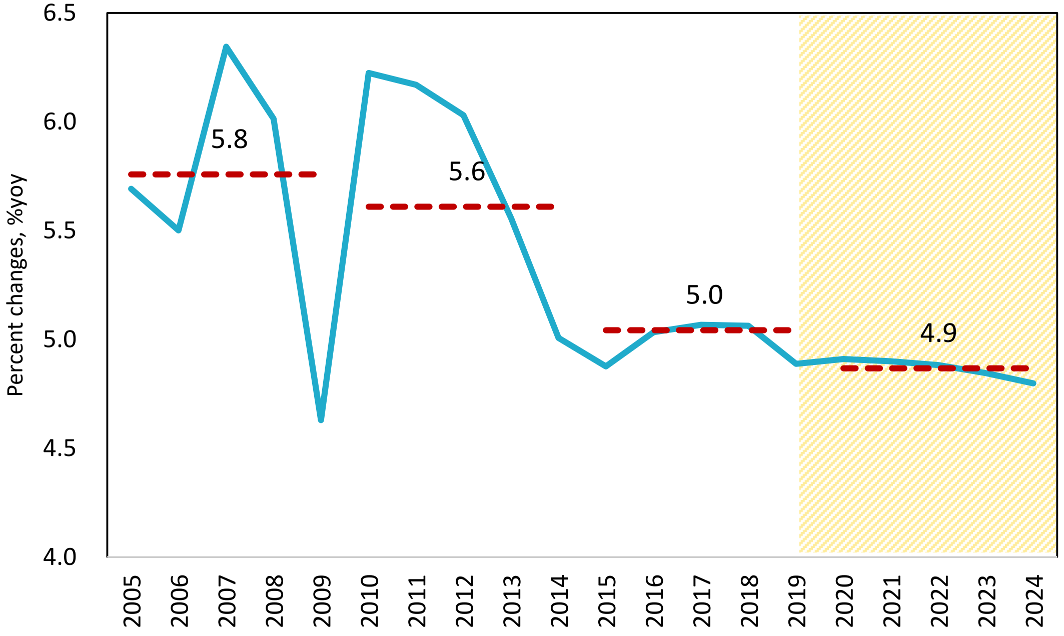
- Growth is edging down
- Infrastructure stock is falling

GFCF as percent of GDP vs. GDP per Capita, 2014



Source: WDI

Economic Growth

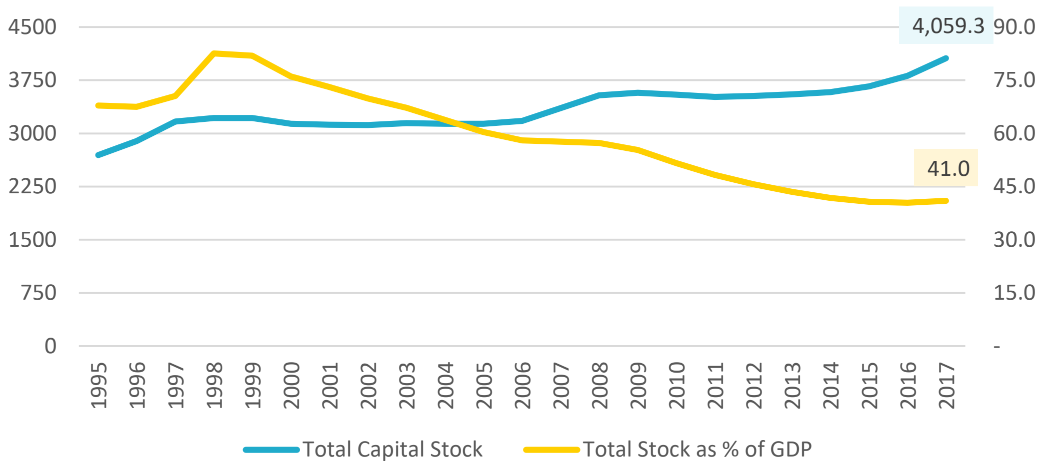


Source: Prospera calculation

Infrastructure stock

Infrastructure Capital Stock,

%GDP (LHS); IDR Tn 2010p (RHS)



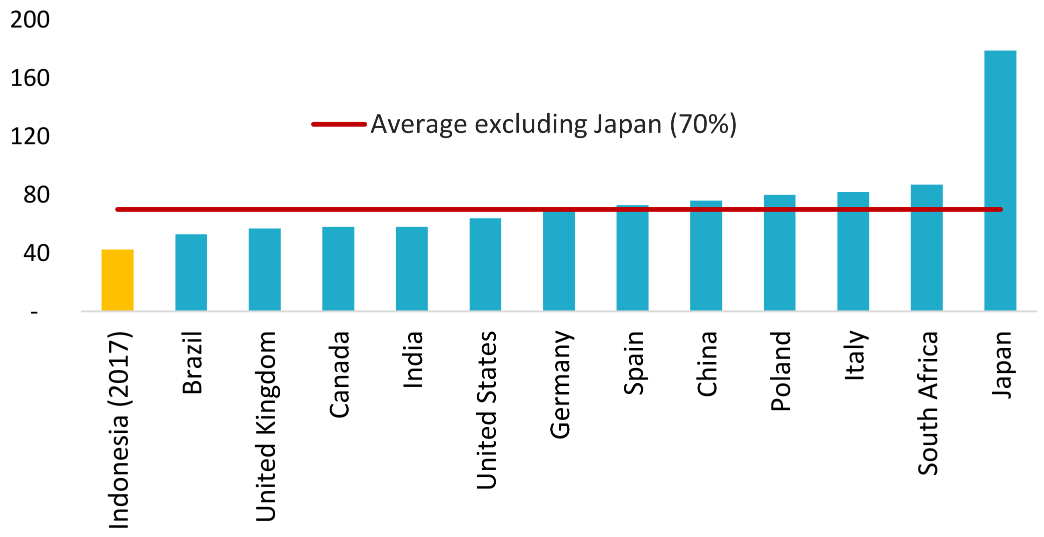
Source: Prospera Infrastructure Database

Note :

- We estimate the infrastructure capital stock level at 1995 using replacement cost of the physical infrastructure.
- We also adjusted the depreciation rate based on each infrastructure sector.
- The level of capital stock at 1995 is a preliminary result subject to on going methodology verification.

Infrastructure Capital Stock as percentage of GDP

Selected economies



Source: Indonesia - Prospera Infradashboard, Others: McKinsey (2013)

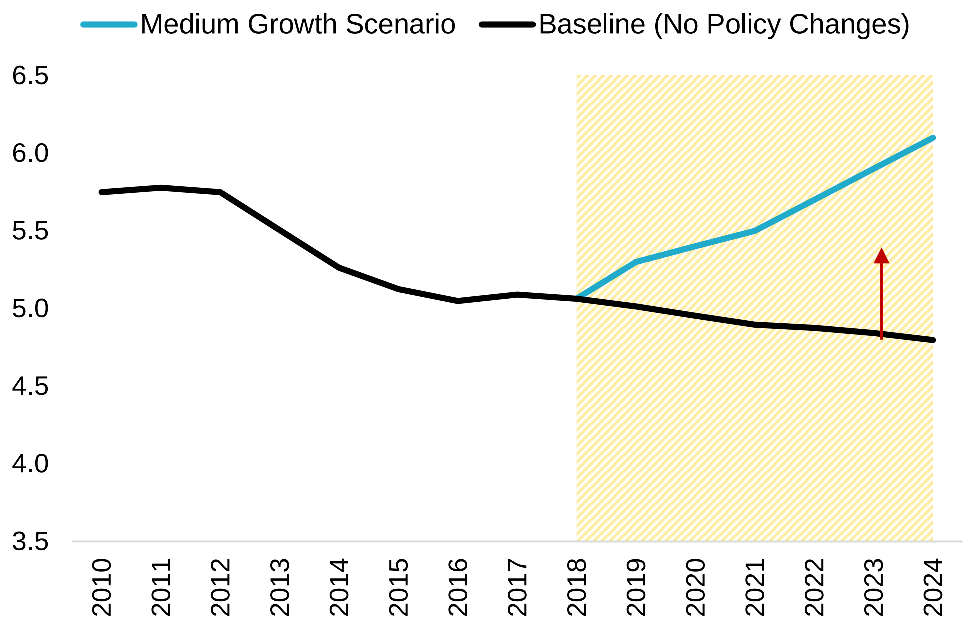
Prospera Infrastructure Database Methodology

Potential growth is declining

1. Baseline – no policy changes – output falls due to slower labor force growth and stagnating capital stock
2. Productivity needs to be increasingly stronger to offset the demographic drag – labour force growth is slowing.

Indonesia Potential GDP Growth

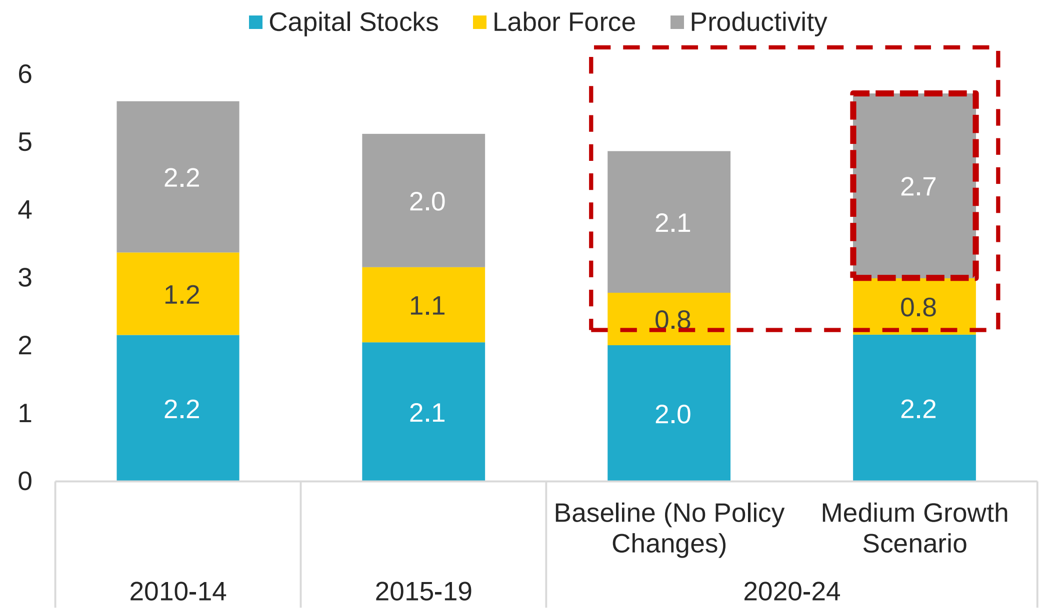
in% YoY



Source: Prospera calculation

Contribution Potential GDP Growth

in% YoY



Source: Prospera calculation

Increasing investment not an option

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Getting 5.7% growth without productivity improvement means investment increases from 32% today to 39% by 2024. (Investment averages 36% of GDP over RPJMN 2020-2024.)

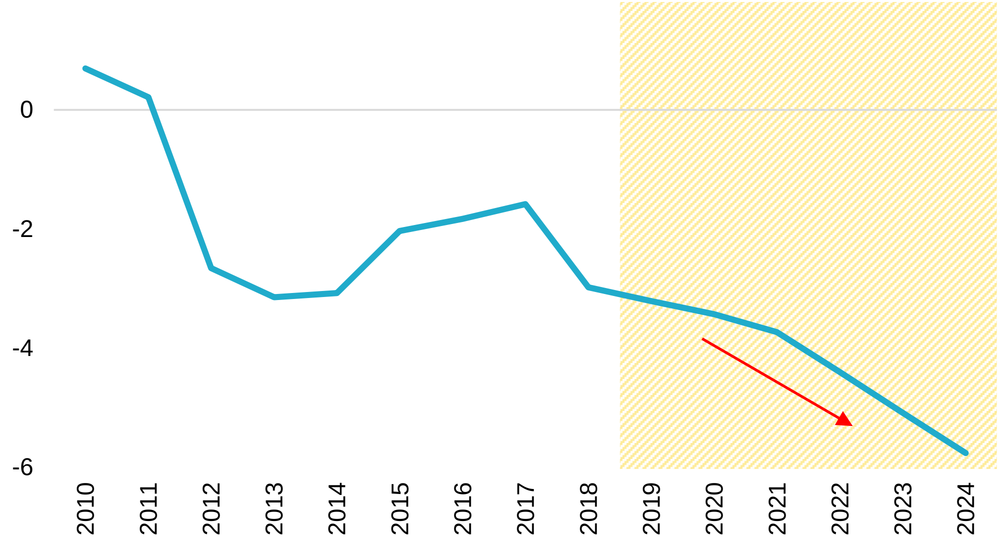
1. Current account deficit widens to unsustainable levels – almost 6% of GDP by period end.

AND/OR

2. Private consumption is cut – household spending falls by 6 points of GDP by period end. “Forced” reduction because incentivizing saving (lower consumption) through interest rates will choke off investment

Current Account Balance

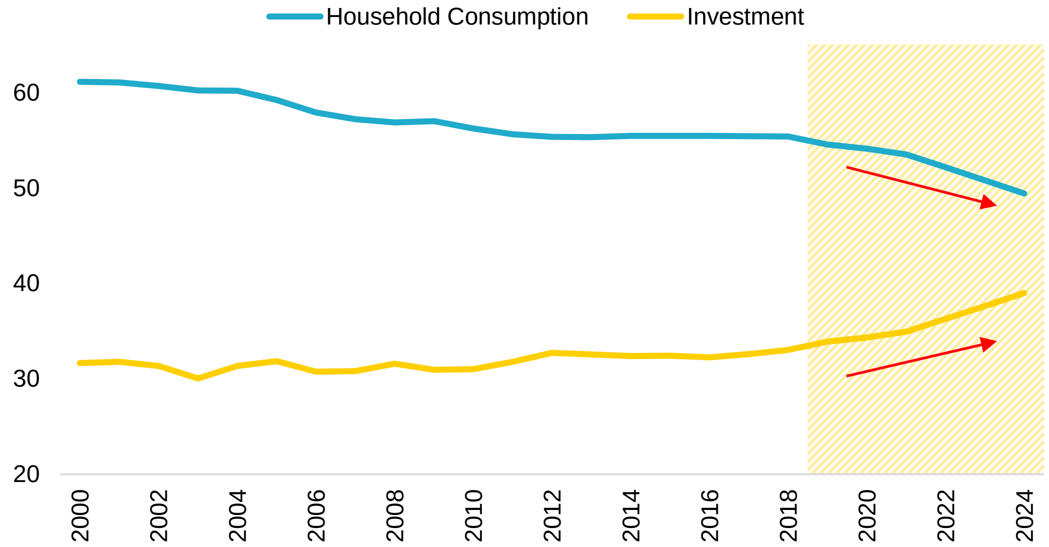
in % of GDP



Source: Prospera calculation

Household consumption and Investment

in % of GDP



Growth could be about 7% today

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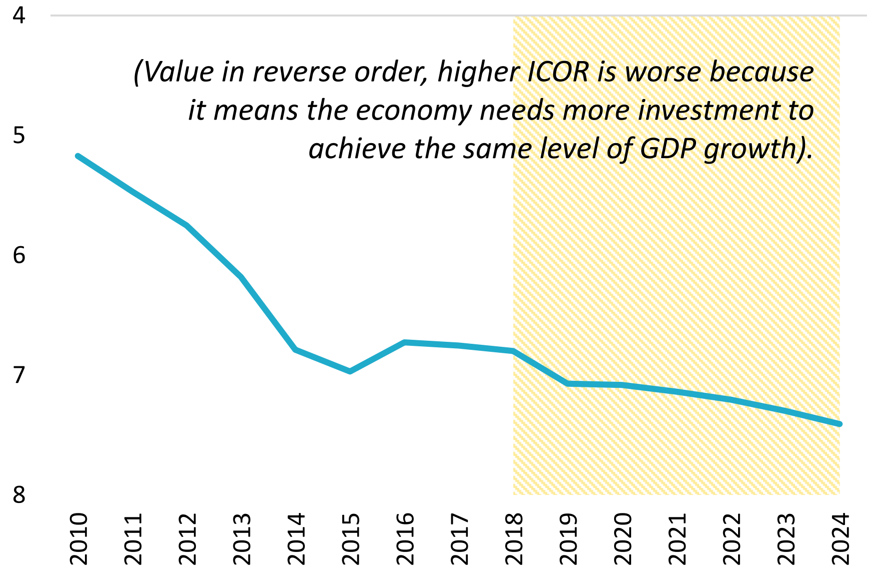
1. Indonesia's investment effectiveness is at an historical low – as shown by high ICOR
2. Indonesia's growth today would have been 6.8% with improved investment efficiency. That is, the current level of investment and an ICOR of 5, well within the regional average.

Indonesia Investment Effectiveness (ICOR)



Source: Prospera calculation

Investment Effectiveness Cross Country Comparison

Country	Average 2015 - 2017		
	Growth	Investment /GDP	ICOR
Philippines	6.5	23.6	3.6
Vietnam	6.6	26.9	4.1
India	7.3	30.6	4.2
Malaysia	5.1	25.5	5.0
Thailand	3.4	22.1	6.5
Indonesia	**5.0**	**33.8**	**6.8**

What does better investment mean?

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Developing investment financing with a productivity goal

Better investment financing can deliver more productive investment

Getting more productive private investment

Prioritizing the binding constraints on stronger private investment

Building more and better infrastructure

More public and private infrastructure investment that is better prioritized

Developing investment financing with a productivity goal

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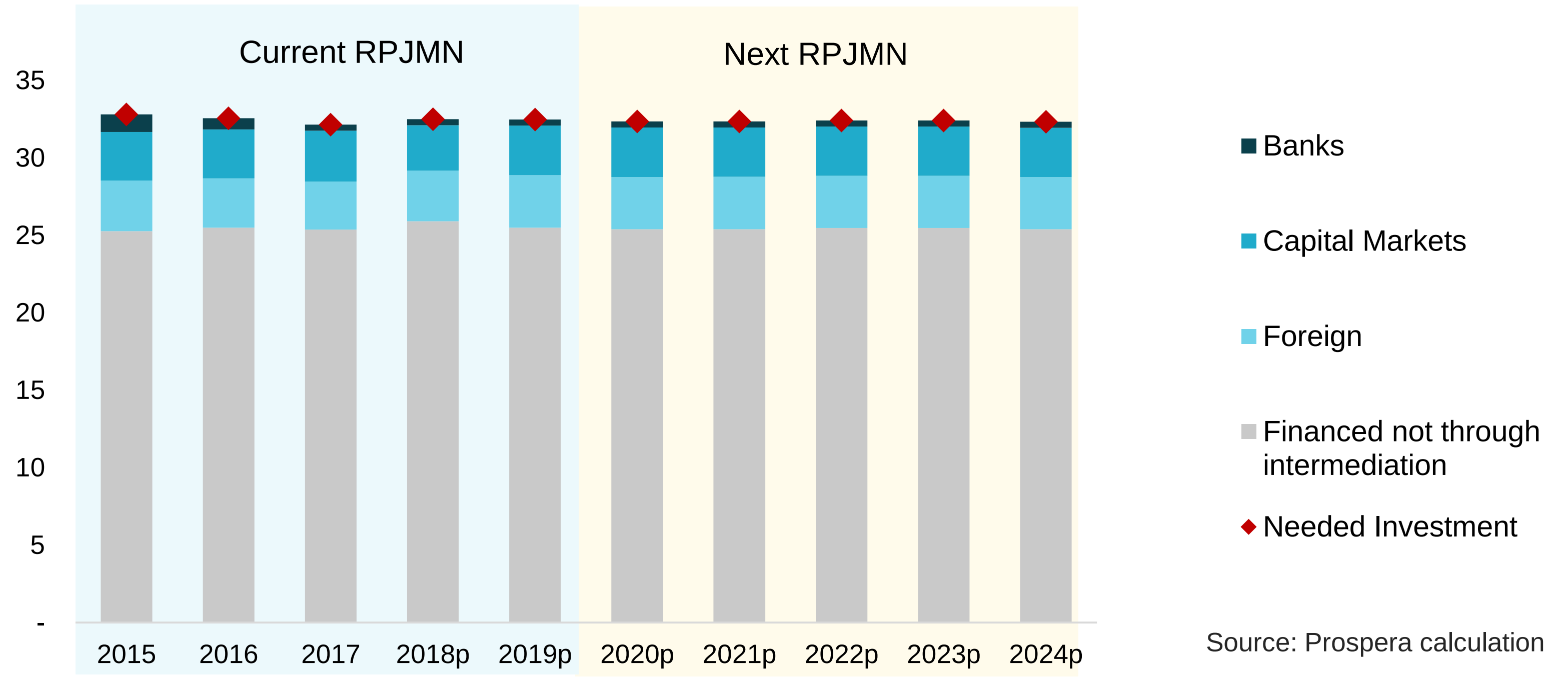
Total investment financing is adequate. Domestic financing is not intermediated resulting in low productivity. Official external financing may evolve to new lenders and needs to switch more to project and innovative sources to enhance and prioritize effective project development and attract private investment. Private investment flows largely portfolio and often short term..

Financial sector failing to intermediate – efficiency suffers

1. Financing is adequate but composition contributes to inefficiency
2. Domestic financing is not intermediated resulting in low productivity. Intermediation needs to increase significantly so that finance is allocated to investments with the highest rates of return.
3. External finance dominated by short term portfolio flows

Investment Financing Sources: Historical and Forecast

As% of GDP



Source: Prospera calculation

Domestic financial system small and limited instruments

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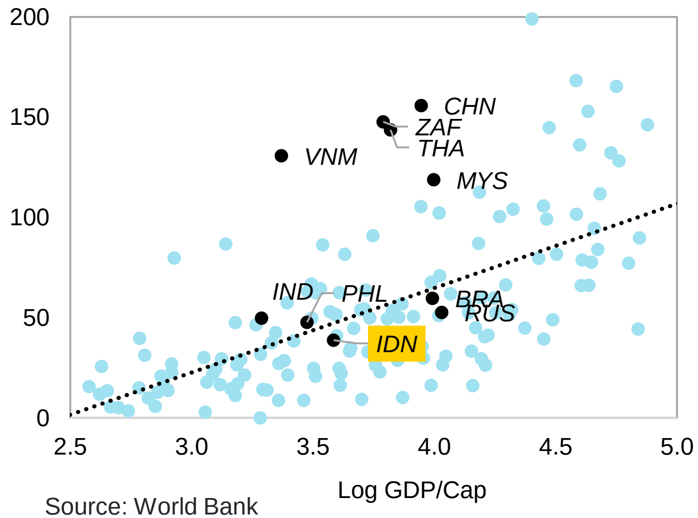
Only 23% of the total investment has been financed through financial intermediaries (latest 5 years average). Mainly because (1) Indonesia's financial intermediary system is small and (2) investors' finance is not being intermediated.

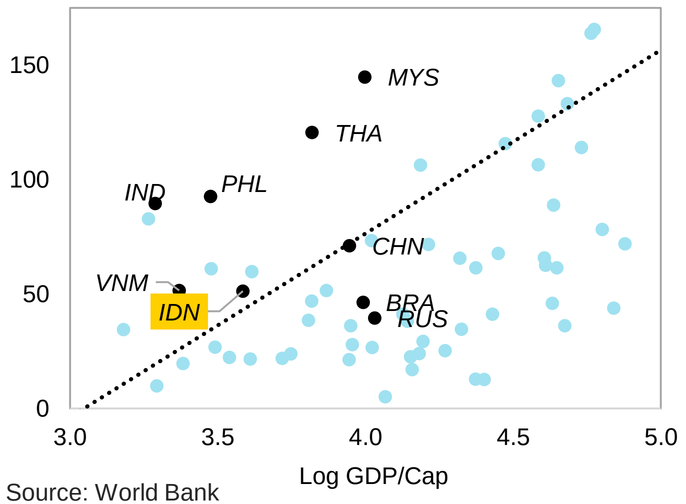
- Banks dominate (75% of total financial intermediation), and high concentration among limited number of banks.
- Capital markets are small and susceptible to global sentiment.
- Non-government bond market is small, undiversified, not active, with short to medium tenors (5-7 years).
- Institutional investors' (pension, social security, and insurance funds) investment portfolios are very small compared to other countries, and include considerable liabilities redeemable upon short notice.

Domestic Credit to Private Sector
as% of GDP



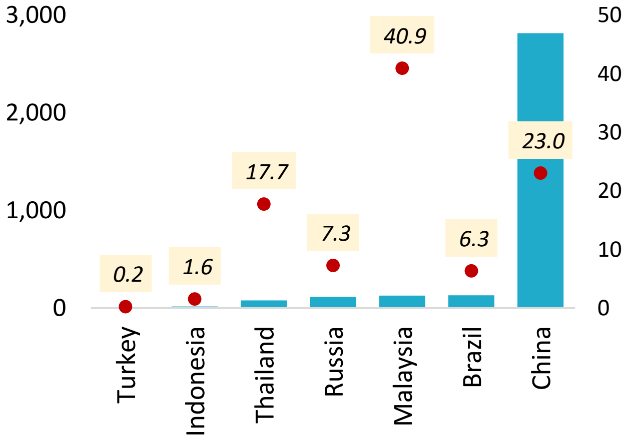
Source: World Bank

Market Cap. of Listed Domestic Firms
as% of GDP



Source: World Bank

Non-Financial Institutions Bonds
In US$ Billion (LHS), % of GDP (RHS)

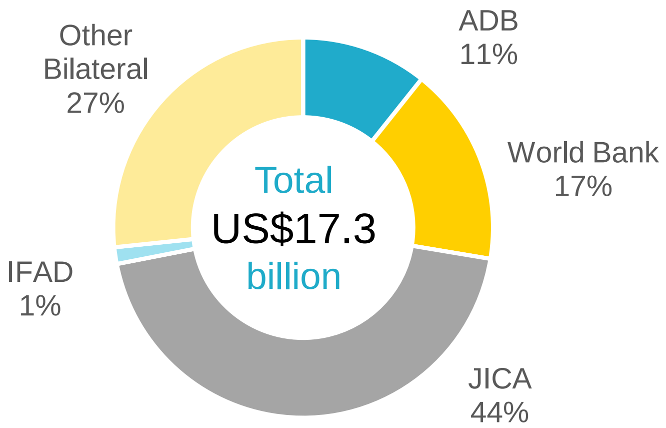


Source: BIS statistics
Note : data is outstanding as of Q4 - 2017

Traditional external financing new directions

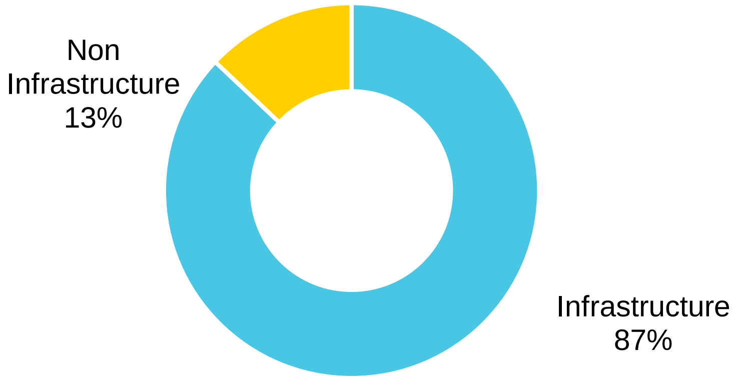
1. Indonesia has space to borrow further, under current country limits of the multilateral development banks (MDBs, such as the World Bank and the ADB) to finance its public investment.
2. However:
   - Indonesia will soon become an upper middle income country, which typically results in less finance from traditional MDBs and bilateral donors.
   - As the MDBs reduce their direct lending to Indonesia, they may shift toward incentivizing private finance rather than directly financing public investment; especially for middle income countries (see G20 Eminent Persons Group recommendations).

Development Financing 2015 - 2018, by partner



Source: Bappenas Green Book 2015 - 2018

Development Financing 2015 - 2018, by sector



Source: Bappenas Green Book 2015 - 2018

Emerging development partners able to fill any gaps

Potential new sources of development finance

Institution	Financing Activity	Financing Activity in Indonesia
Silk Road Fund	Established in 2014 with initial capital of $40 billion and RMB 100 billion. As of June 2017, the fund has signed 16 contracts and committed to invest $6.8 billion	
Asian Infrastructure Investment Bank (AIIB)	Founded in 2015 with $100 billion in subscribed capital and 93 member countries. As of Dec 2018, it has approved over $7.5 billion in investment projects.	US$939.4 million for infrastructure projects including: Dams, irrigation, infrastructure for urban and tourism projects.
New Development Bank (NDB) (BRICS Development Bank)	Founded in July 2014 by the BRICS countries with starting capital of $50 billion to focus on infrastructure investment. As of June 2018, NDB has approved 21 projects with a portfolio exceeding $5.1 billion	The New Development Bank will consider expanding its membership in 2019. If Indonesia were to become a member, it could probably mobilize another US$1 billion or more annually in due course.

- These new development partners clearly focus on infrastructure and typically have less stringent loan requirement (compared to traditional MDBs).
- The new banks do not impose additional, nonfinancial, requirements on the borrowing countries, related to changes in their domestic economic policies, implementation of reforms, etc.
- But, this is solely project finance – no support for project development – and so may not support a lower ICOR relative to traditional financing sources.

(Larionova and Shelepov, 2016)

Use development finance as a catalyst…

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Definition: "Development finance" is lending from multilateral development banks (MDBs) and bilateral development organizations

More project lending

- Encourage MDBs and bilateral development organizations to invest directly in public goods
  - Re-orient development finance to project lending (currently around 50% total lending). This means less program lending and direct budget support
  - Direct the MDBs to develop projects directly with sub-national governments subject to approval (and guarantees)

Replicable project models

- Use development finance and MDB expertise to kick start new, non-traditional projects and establish replicable models
  - (1) Identify strategic cross-cutting initiatives in line with government priorities, (2) request investment proposals from MDBs, (3) authorize pilots with concessional finance, (4) scale up successful projects
  - Get ministry buy-in because this development finance of pilots is *additional* to their existing budget

Looking for sustainable foreign private investment

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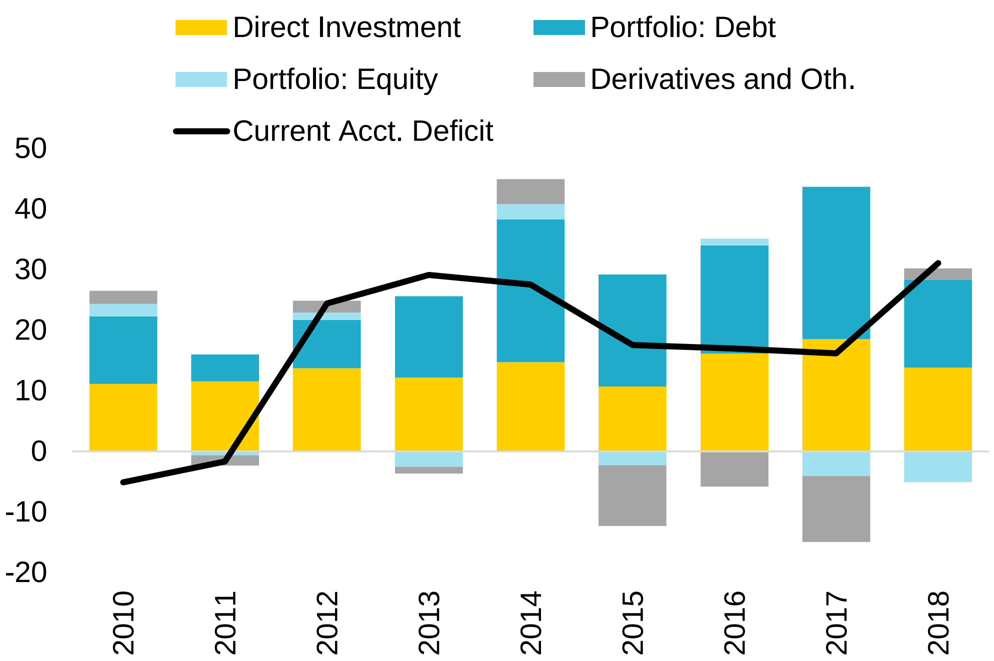
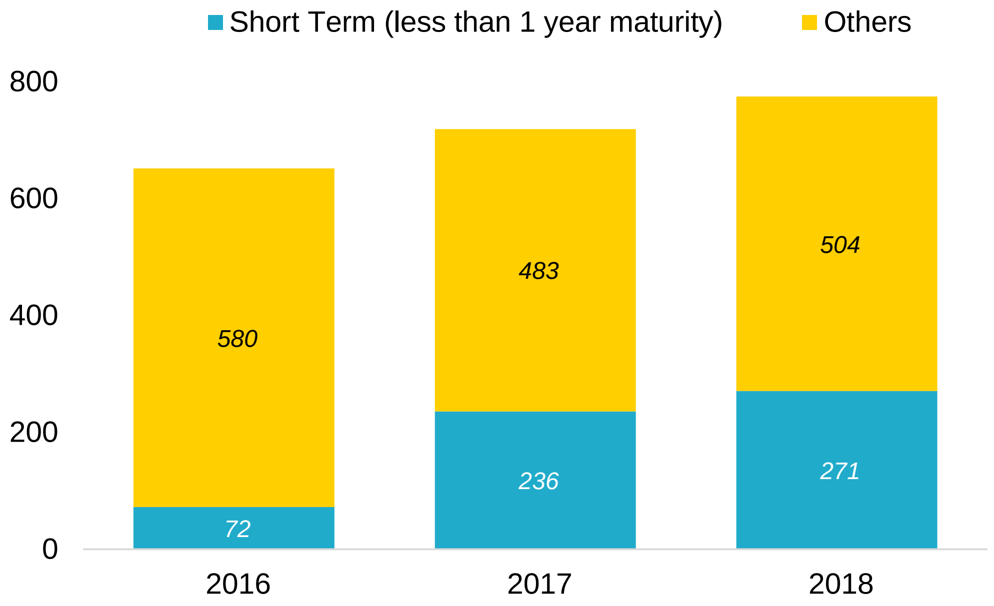
1. Majority of the foreign private investment flow is portfolio that is more susceptible to capital reversal.
2. Portfolio debt flows are also driven by the issuance of short term government paper.
3. The use of development finance to attract private investment could also serve as the catalyst for exports receipt repatriation – a long standing issue for Indonesia.

Financial Acct. Bal. and Current Acct. Bal.
in USD bn

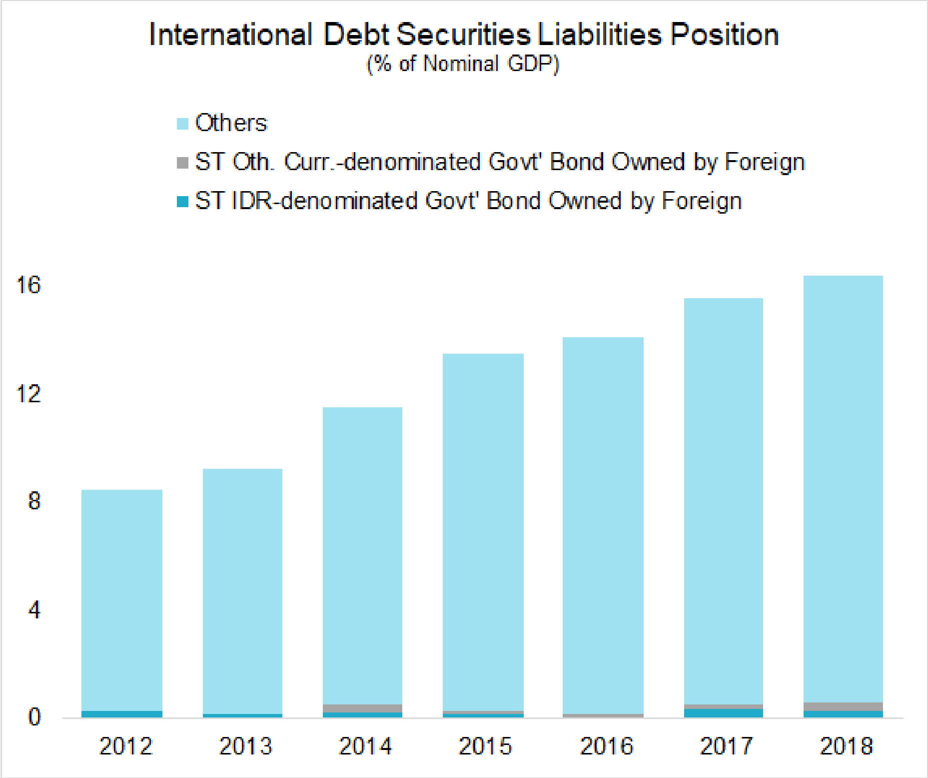


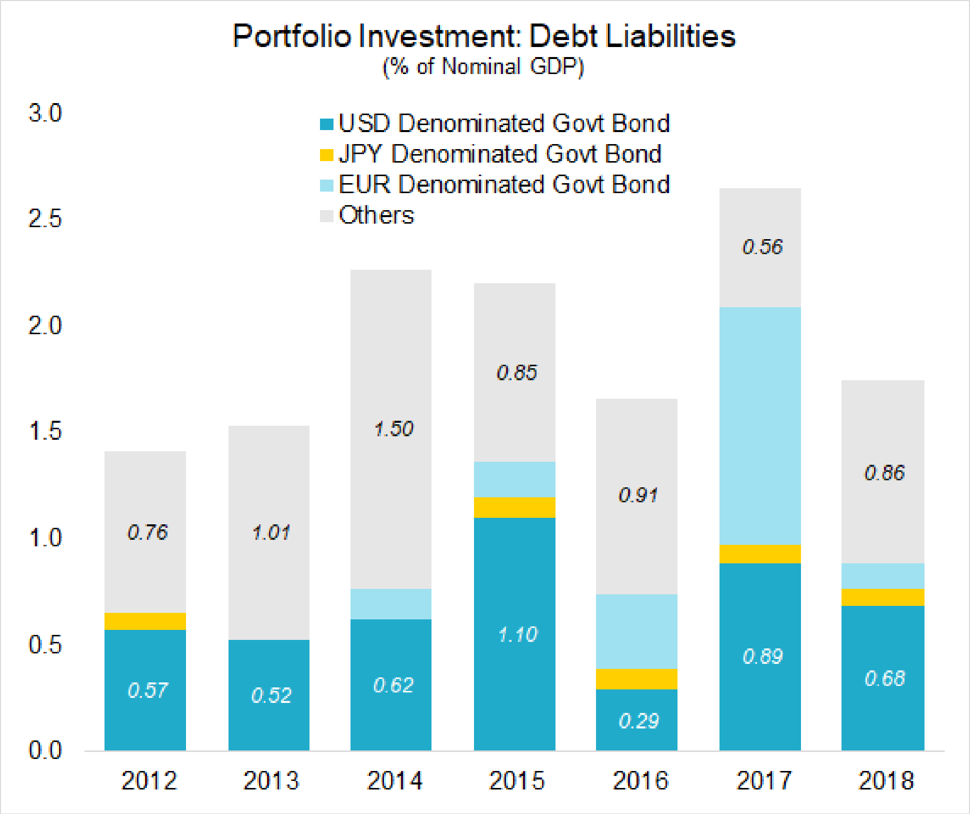
Government Bond Issuance
in IDR tn



Short term portfolio flows dominate

1. Figure 1 shows outstanding of the short-term paper owned by non-residents (less than one year maturity) over total debt liabilities to non-residents - from International Investment Position.
2. Figure 2 shows global bond issuance over portfolio debt flow from BoP





Getting more productive private investment

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Private investment is high by most benchmarks. However, the capital stock remains modest reflecting investment's often short term focus and misallocation resulting in higher investment in low return activities i.e. "to many shopping malls and and not enough roads." A growth diagnostic shows that binding constraints on investment are policy coordination and regulation among other factors.

Private investment dominates but where is it invested

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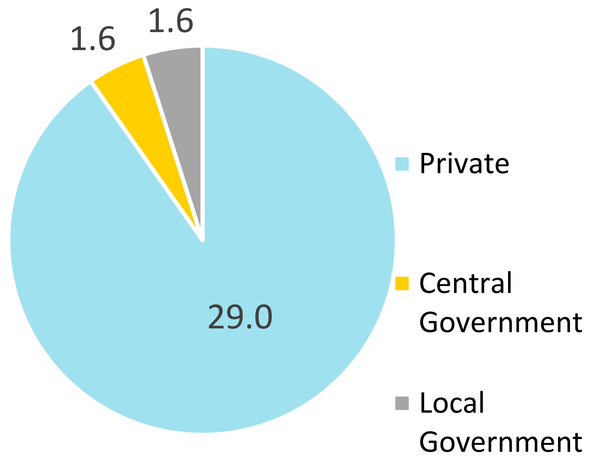
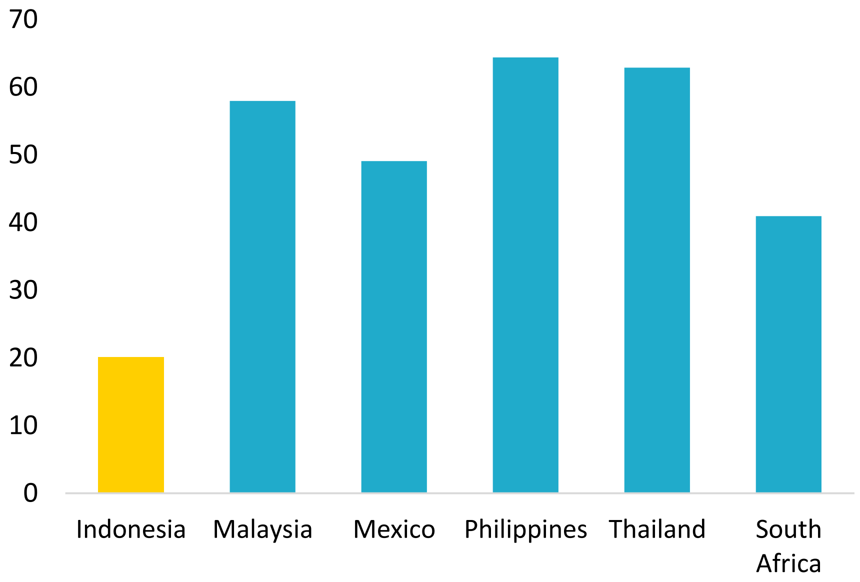
1. Private sector dominates large portion of the investment, hence supportive environment for private sector to invest is essential.
2. In particular, support for private sector to take on investment that could deliver higher productivity – this includes investment in public goods.

Gross Fixed Capital Formation
as % of GDP, average 2010 -2017



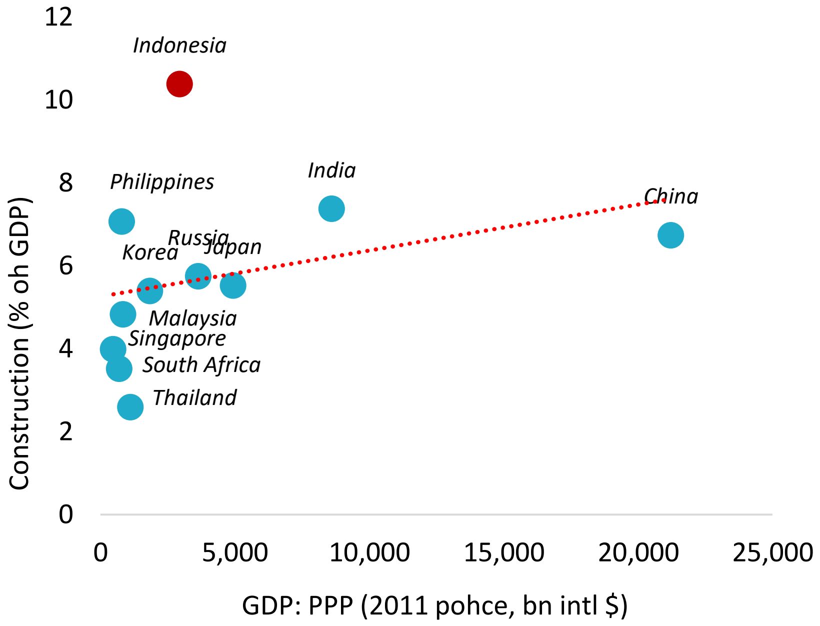
Source: Prospera calculation

Accumulation of Fixed Capital Investment of Machinery and Equipment, 2007 - 2016 *as % GDP*



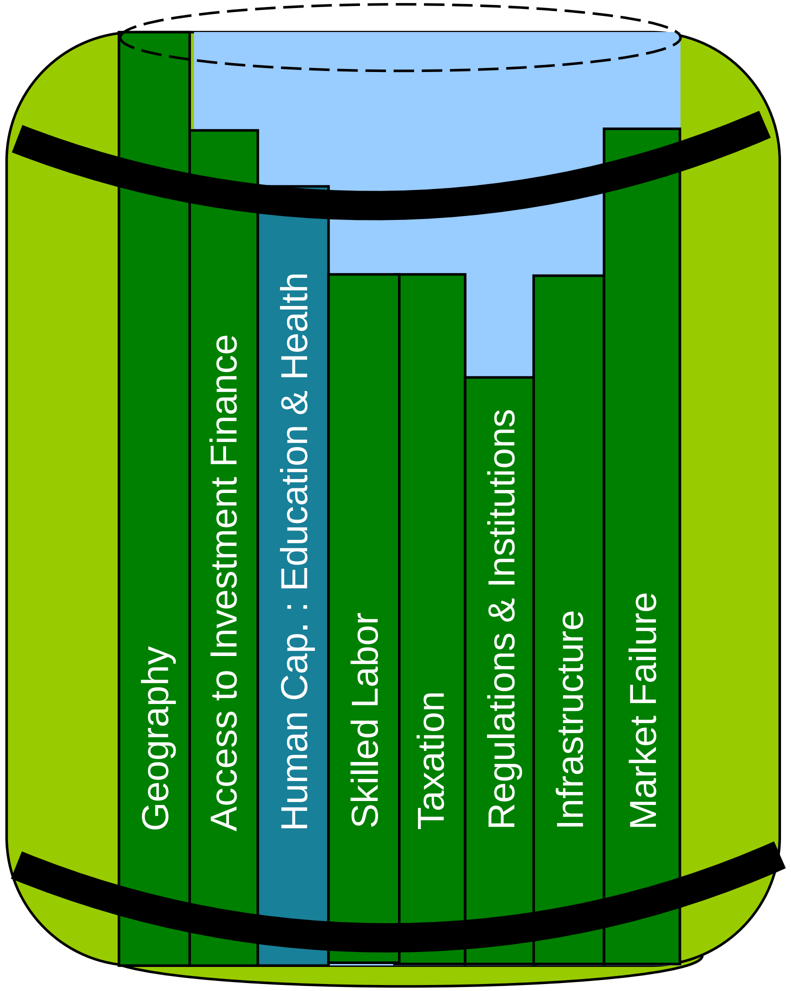
Source: Prospera calculation

Share of Construction Sector,
as of % GDP, 2017



Source: Prospera calculation

Policy priorities to make private investment more effective – focus on the most binding constraint

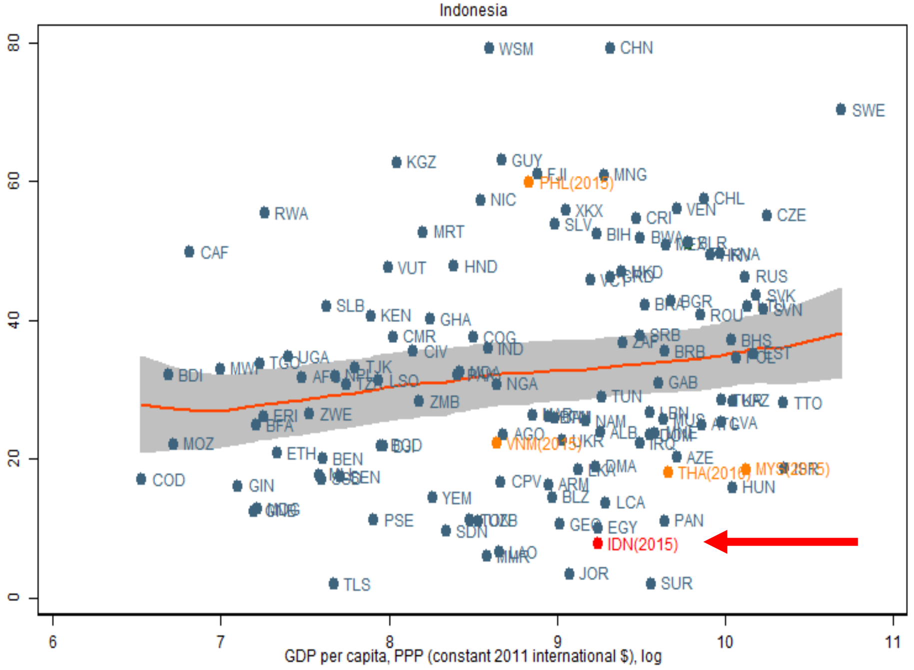


1. **Improvements to regulations** particularly the ones that hamper business development and productivity growth.
2. **Institutional improvement,** mainly on the clarity of roles and authority, including the role as the policy conductor and development regulator.
3. **Tax reform** that is used for spending that can enhance long-run growth potential – infrastructure, education, and health.
4. **Continue the infrastructure development** especially connectivity to support economic expansion and more inclusive growth.
5. **Improving the supply of skilled labor** by relaxing the restriction, incentivizing training and R&D, transforming TVET (technical vocational education and training.
6. **Improving the quality of health and education** - this is a future binding constraint that need to be anticipated to compete in the digital era and transition to high value added sectors. In particular by reforming basic education and teaching, opening up investment in tertiary education, incentivizing diaspora engagement and focus on children’s nutrition.

Evidence of restrictive and harmful regulations

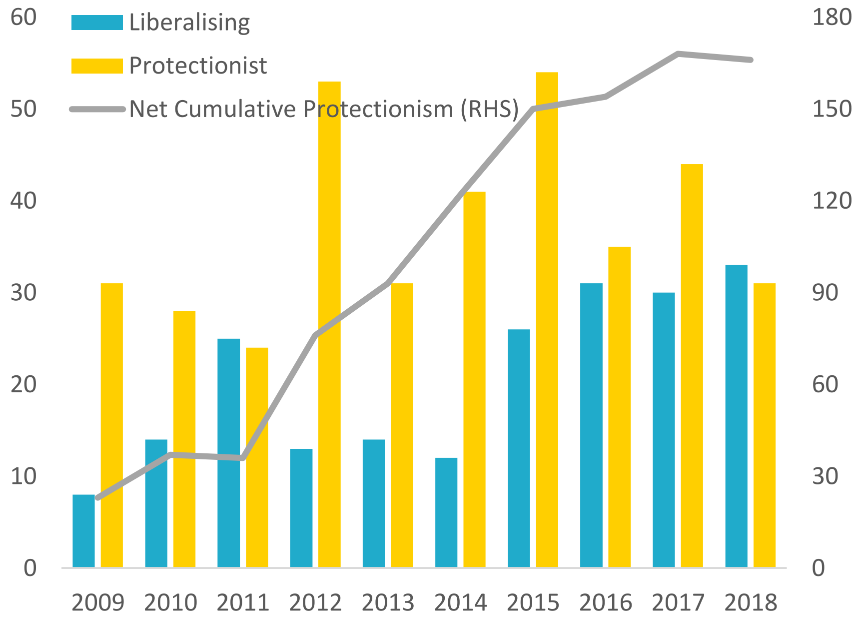
1. Relatively high hiring and firing costs in Indonesia's labor market leads to massive outsourcing and little formal training offered by the private sector
2. Protectionist regulation, particularly in form of non-tariff barriers, lead to higher cost of living
3. Indonesian regulations on foreign workers are complex and expensive, resulting in a low number of foreign workers compared to other economies

Percent of firms offering formal training



Source: WB Enterprise Survey

Number of trade interventions



Source: Global Trade Alert

International migrants (% of total population)

1 in 2 in Singapore

1 in 3 in Hong Kong

1 in 4 in Australia

1 in 12 in Malaysia

1 in 17 in Thailand

1 in 2880 in Indonesia

Evidence of poor institutions

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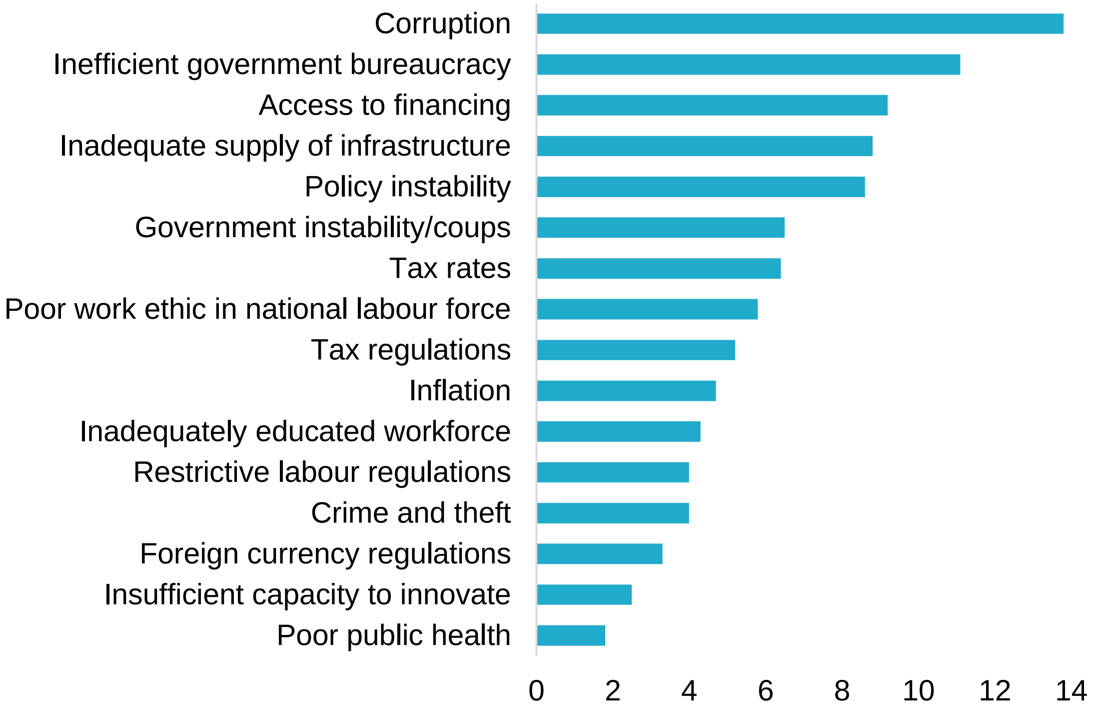
1. Corruption, bureaucracy quality and policy instability are deemed the most problematic factors for doing business in Indonesia
2. This policy instability is caused by unclear authorities and poor coordination

Most Problematic Factors for Doing Business in Indonesia



Suure: WEF *Executive Opinion Survey* 2017

1. Poor coordination at central level (among ministries):

- The planning process, budgeting, policy implementation, and monitoring & evaluation are carried out by different institutions
- Some ministries make the same program.
  - Example: Interventions for SMEs are carried out by more than one ministry. As a result, the same SME can get three similar training.
- Different data produced by various institutions impact policymaking.
  - Example: Food data is different among ministries

2. Poor central-regional government coordination

- There has been an improvement in the investment climate at the central level, but in many regions, regulations are still a constraint
- Low quality of roads in the regions due to the different authority of road construction (central, provincial, district/city)

Building more and better infrastructure

Stronger public investment delivery can boost investment effectiveness. This requires: improved PFM, reallocation of government spending, more systematic infrastructure project prioritization and preparation, and strategic use of development finance and MDB expertise. Incentivizing private investors to finance public goods can boost investment effectiveness.

Stronger public investment delivery critical to investment effectiveness

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1. Public sector investment efficiency through:
   - Improved public financial management
   - Public spending reallocation.
2. Better efficiency through prioritizing types of infrastructure.
3. Better investment planning, prioritization and preparation for public infrastructure
4. Incentivize private investors to finance infrastructure

Private sector investment efficiency will be gained through greater financial sector intermediation that results in investments competing for finance and other strategic policy action.

Better PFM will improve investment effectiveness…

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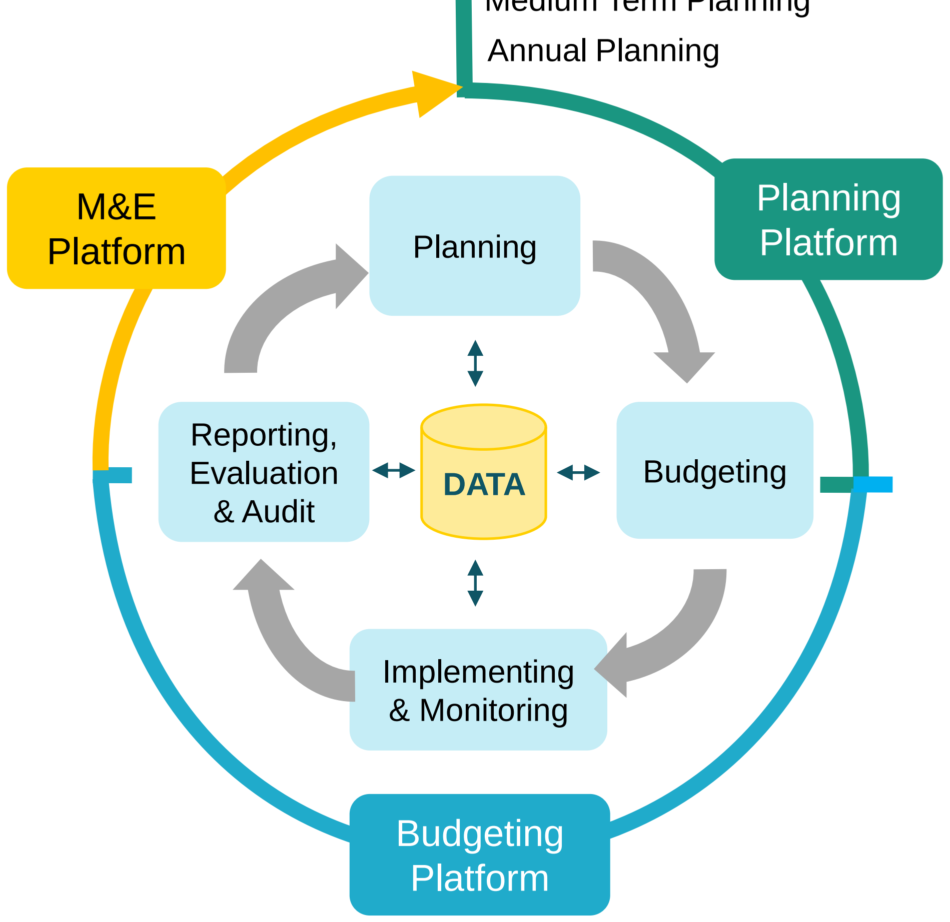
Current Conditions

- Tight fiscal capacity
- Complicated & disjointed business process
- Policy, planning, budgeting not linked
- Policy analysis not supported by adequate data

Poor spending quality
- High operational costs
- Not directed to priorities
- Inefficient
- Volatile

Recommendation

Core PFM Cycle



Better Budget Systems
- Simplified & Interlinked Business Process
- System Interoperability

Better Financial Information
- Single Data Utilization
- Consolidated Financial Data & Reporting (National-Regional)

Better Spending Policy
- Improved Spending Review Analysis
- Improved Resource Envelope Forecast
- Improved Spending Allocation (Allocative Efficiency)

Better Quality of Spending

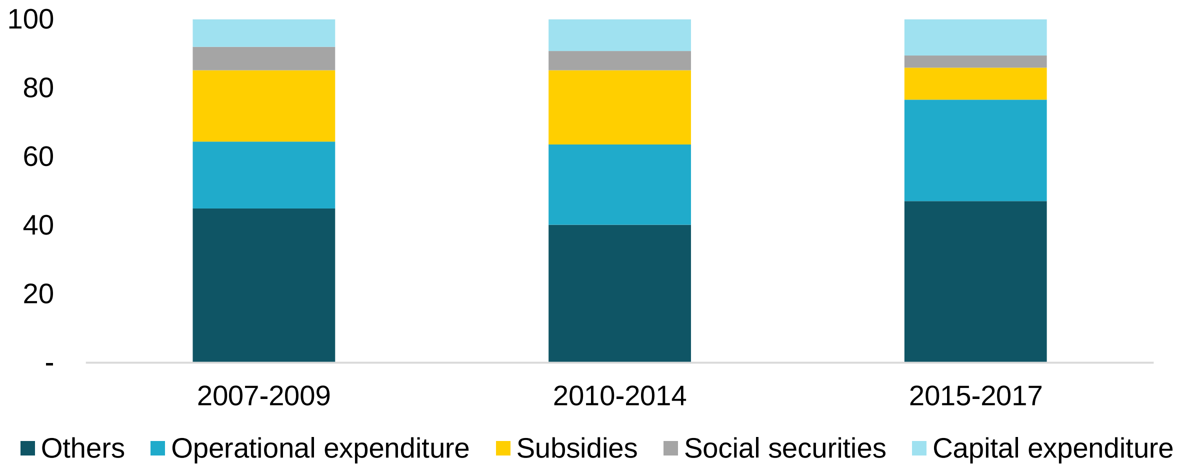
Spending reallocation

Reallocating investment towards public goods like infrastructure will increase its effectiveness (lower ICOR). Infrastructure investment can come from both government and the private sector.

Government budget for infrastructure
Some budget reallocation towards infrastructure (away from subsidies and operational) is possible, but significantly higher government infrastructure investment is constrained because of the budget rule, and because increased domestic public borrowing risks crowding out the private sector.

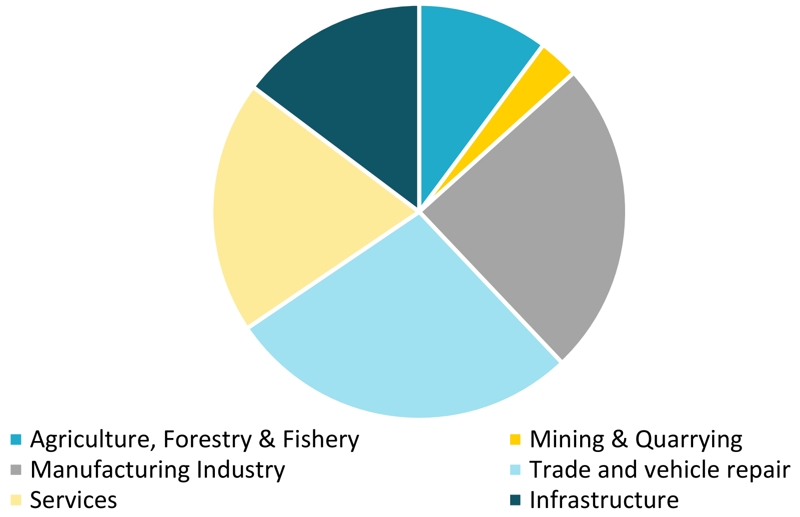
Private investment for infrastructure
Currently only around 14% of outstanding bank loans, 13% of corporate bonds, 10% issued equity, and 14% FDI are allocated to infrastructure.

Central Government Spending
In % of total



Source: LKPP, Ministry of Finance

Outstanding bank loans
Share of total



Source: Bank Indonesia, Indonesia Financial Statistics

The government can increase their infrastructure investment efficiency by prioritising road infrastructure

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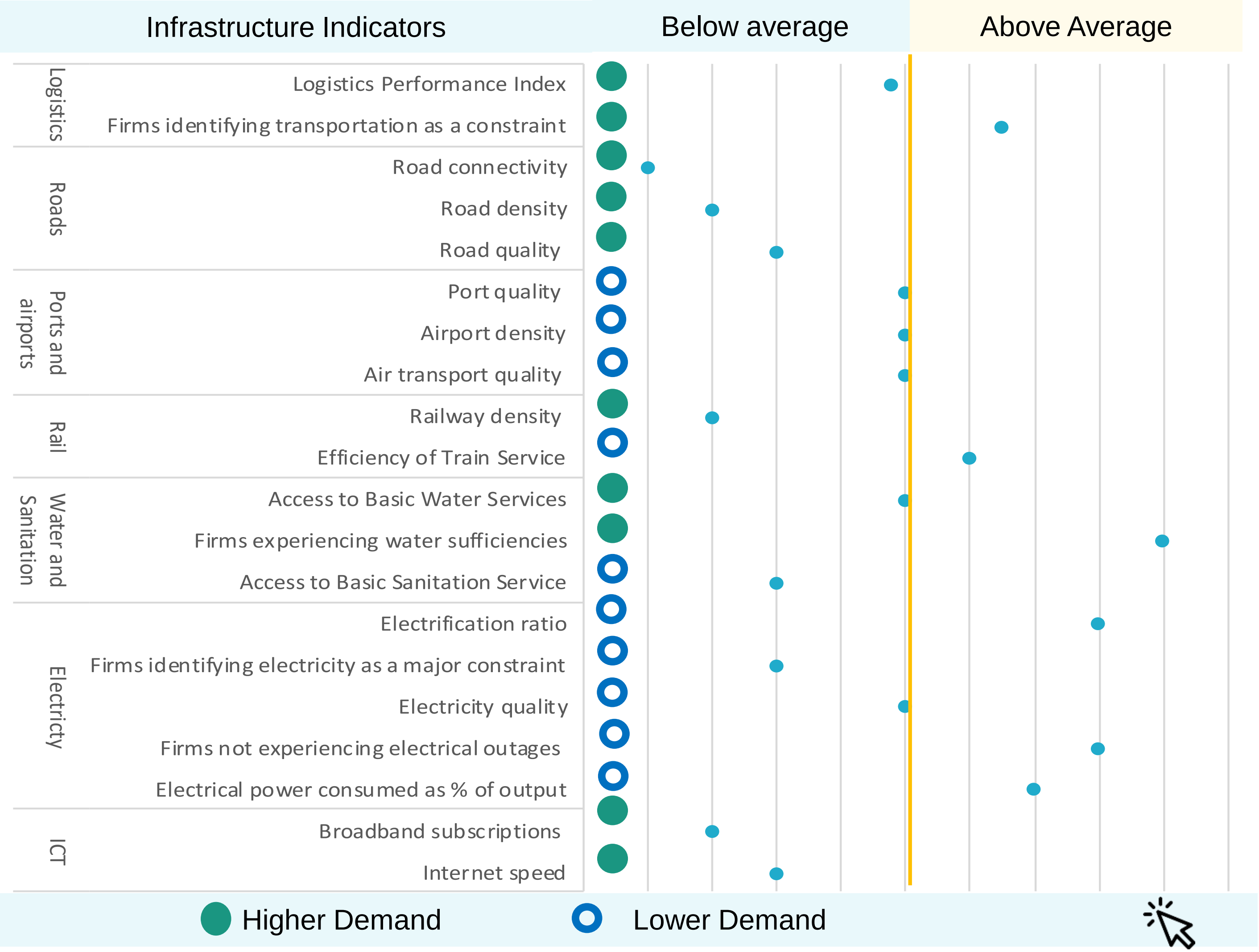
- Investment in transport infrastructure is required to reduce logistics costs.
  - By far, the largest need for new infrastructure investment is in the roads sector.
  - In the ports sector the government can improve infrastructure services without expensive investment, by simplifying regulations and encouraging competition
  - Airport investment should not be a national priority, but targeted to supporting tourism in specific locations
- Poor electricity infrastructure is not a major constraint to business.
- ICT infrastructure is poor, but the required investment is already on track through the Palapa Ring Project



The government can increase their infrastructure investment efficiency by prioritising road infrastructure

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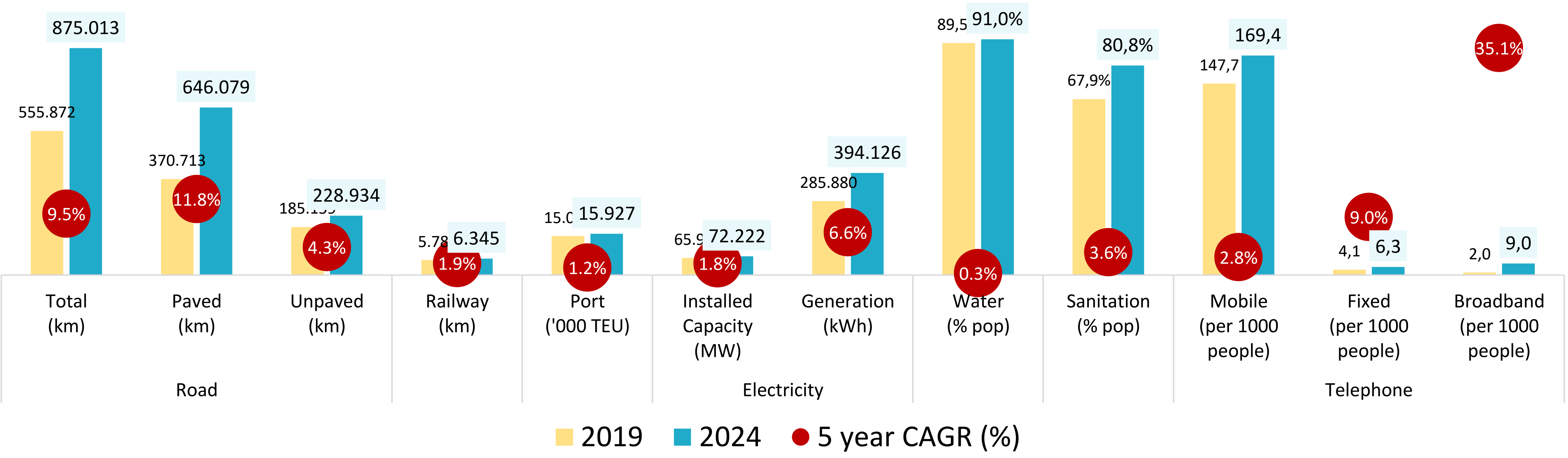
- We estimated the demand for infrastructure, and the largest demand is for roads investment given the large backlog in this sector.
- While the demand for energy investment is lower given the already high electrification rate ~97%.

Infrastructure Demand by Sector



Sources: Prospera calculation

Incentivize private investors to finance infrastructure

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Incentivizing private investors to invest in infrastructure in Indonesia requires:

1. Reforming the pension, social security, and insurance industries to increase the asset-base of these institutional investors and ensure that such assets are increasingly directed to finance infrastructure.
2. Improving infrastructure project identification, prioritization, preparation, and coordination, especially for PPP projects, to improve investor perceptions that infrastructure is a risky investment.
3. Using "innovative" financial instruments—such as subordinate debt, currency derivatives, and guarantees—to mobilise more private finance by allowing investors to manage risk, or transfer risk (to the government, development banks, or organisations such as PT SMI).
4. Refining SOEs' role by encouraging efficiency and turning appropriate projects over to the private sector (for example, through limited concession schemes, brownfield PPPs, or securitisation).
5. Reforming tariffs to ensure that infrastructure projects provide sufficient and sustainable revenues.
6. Reforming the legal and regulatory environment for infrastructure, finance, and investment, to provide investors with more certainty over their long term returns.

Annex

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Top – down Infrastructure Target RPJMN 2020 – 2024

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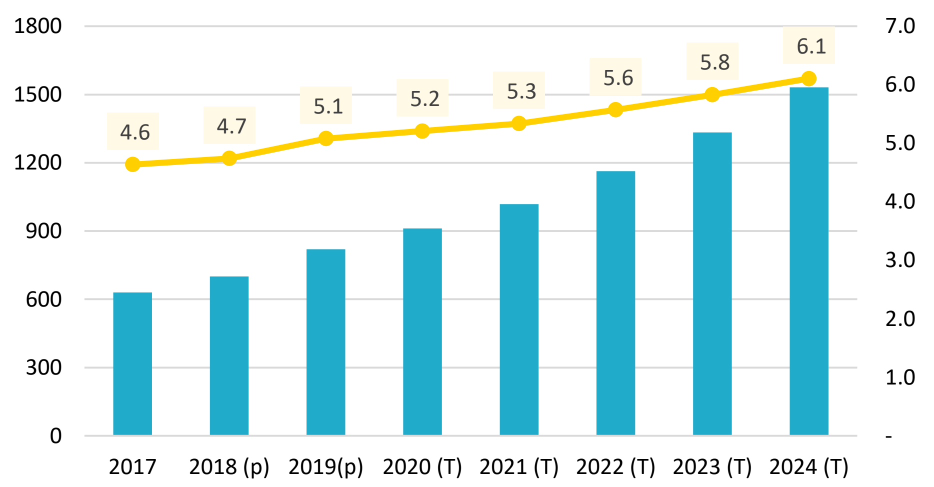
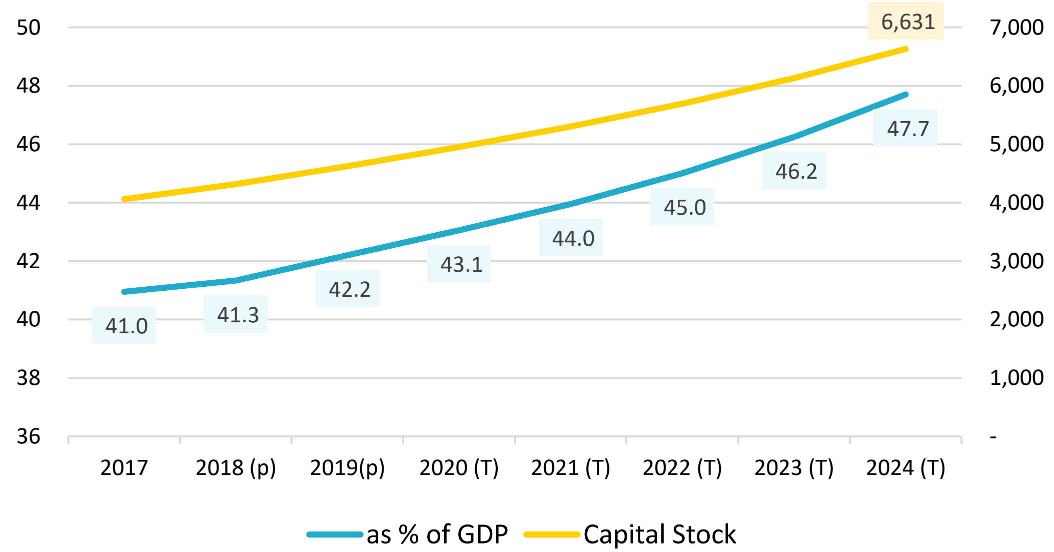
We estimate the target for infrastructure investment during as follow:

Annual Infrastructure Investment Spending Target,
IDR trillion (LHS); as %GDP (RHS)



Infrastructure Capital Stock,
As % of GDP (LHS); IDR Tn 2010p (RHS)



Source: Prospera calculation

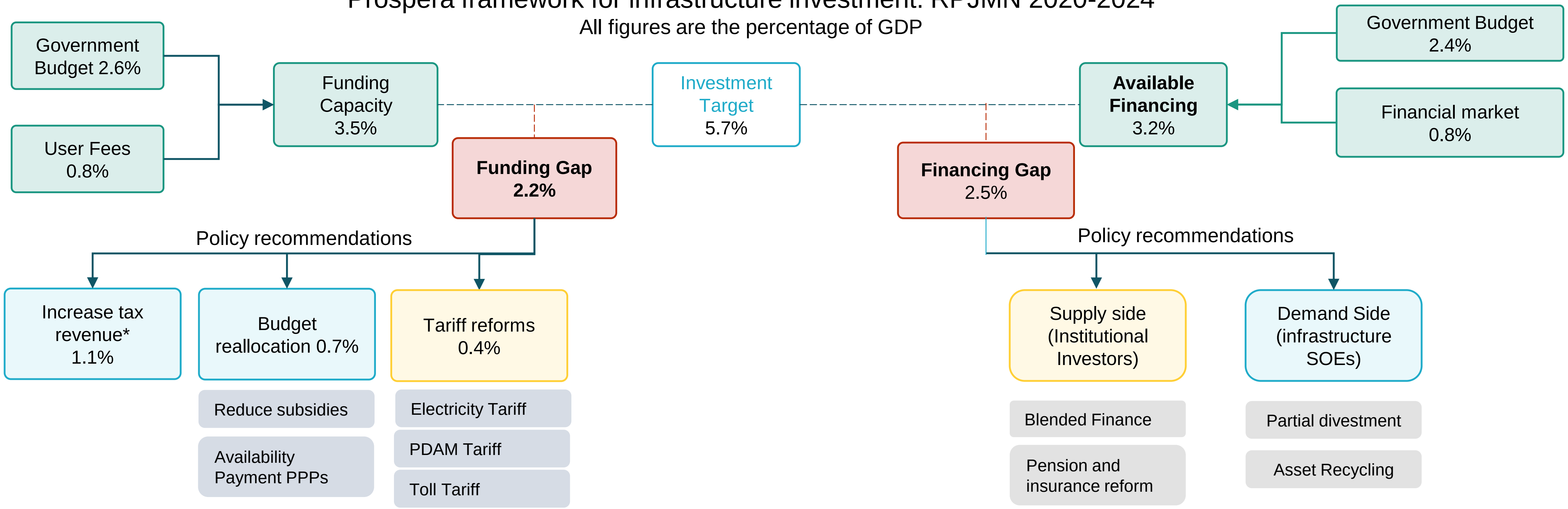
- The total Infrastructure spending target during the RPJMN period is 5.7% of GDP.
- The target is challenging, but also feasible; given the current infrastructure investment is 4.7% of GDP.

Infrastructure target unaffordable without reform

1. Indonesia's infrastructure investment target of 5.7% GDP per year requires both funding and finance
2. However, in a "no-reform" scenario, projected funding and finance are insufficient
3. Fiscal reforms and tariff reforms can help generate more infrastructure funding. While pension and insurance sector reforms, and recycling of SOE infrastructure assets, can improve the intermediation of infrastructure finance

Prospera framework for infrastructure investment: RPJMN 2020-2024

All figures are the percentage of GDP



* Calculated as the residual