

# Solutions for Infrastructure Finance

World Bank

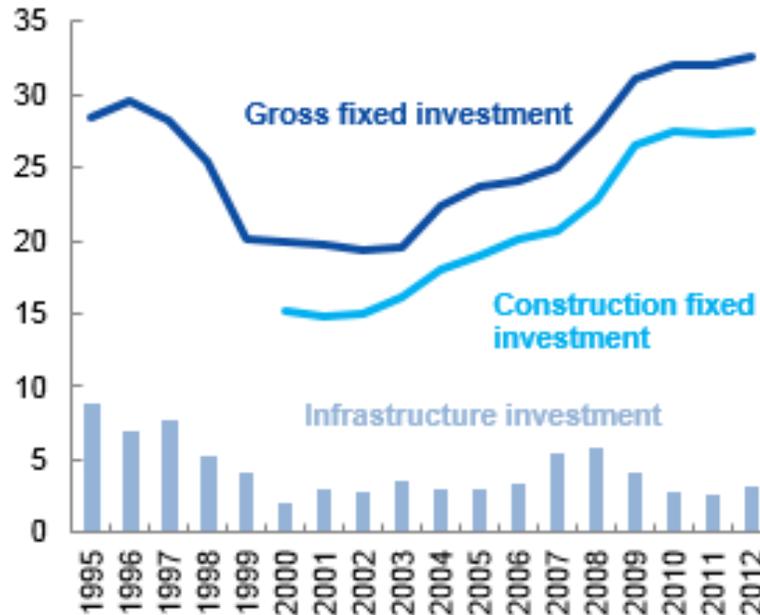
May 16, 2016

# Investment levels are not sufficient for desired growth: how to promote more investment?

- Indonesia grew at 4.8% in 2015, 5.1% projected for 2016 – higher growth needed to overcome the middle-income trap
- Growth was achieved on the back of fiscal stimulus: central government investment grew by 42% in 2015
- Longer-term growth would have to rely on higher investment.
- Productive investment is what matters: infrastructure, manufacturing
- Total infrastructure investment (by the central government, sub-national, SOEs and the private sector) is 3-4% of GDP over the past decade, far below the pre-1998 rates of above 7% in Indonesia, and below China (10%) and India (7.5%).
- Manufacturing has been growing slower than the overall economy over the past years (4.5% in 2000-2010 with GDP growth of 5.2%, 5.4% in 2010-14 when GDP growth was 6% on average).

# Rising investment to GDP; but not where it matters: manufacturing and infrastructure

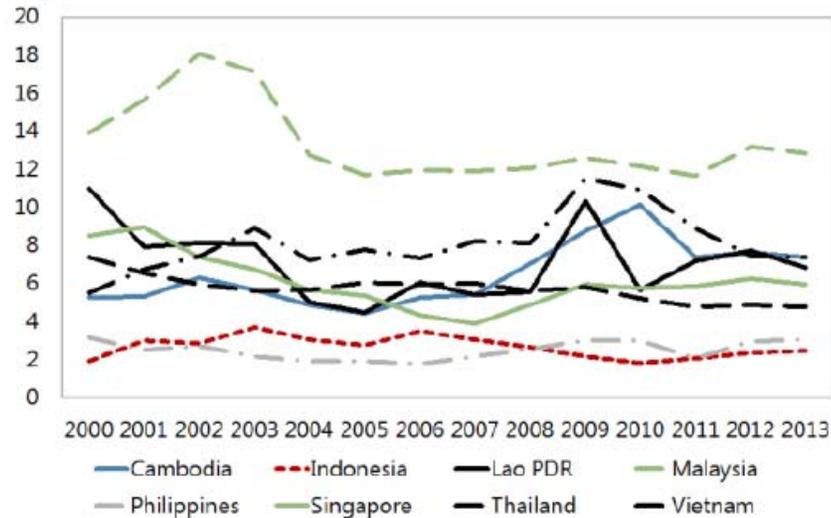
*(nominal investment levels as share of GDP, percent)*



# Indonesian public investment and public capital stock is low relative to peers

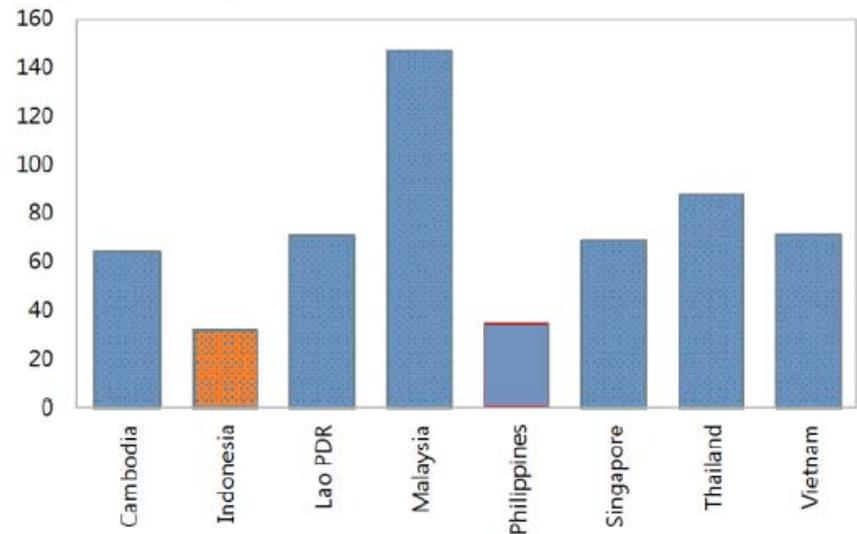
## Public Investment

(In percent of GDP)



## Public Capital Stock, 2013

(In percent of GDP)



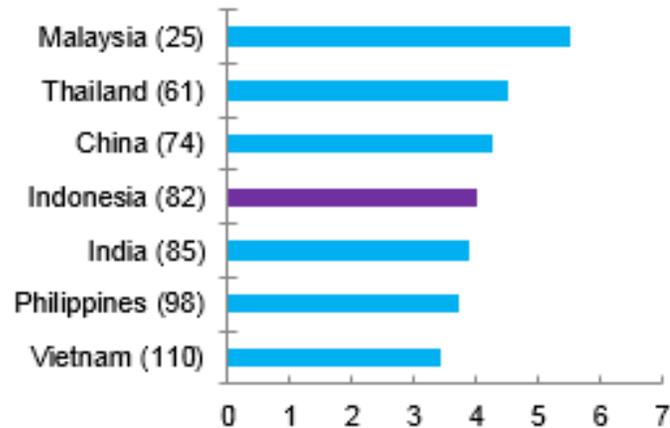
Over a decade, a steady increase in investment leads to several percentage points higher growth. Further improving investment efficiency can double that growth gain.

# Low quality along all types of infrastructure

- 25% of Indonesians with no reliable power
- 16% of urban dwellers have piped water
- Transport congestion ubiquitous
- Logistics costs are at 24% of GDP

**Figure 1: Indonesia ranks relatively low on quality of infrastructure indices...**

*(Overall quality of infrastructure index, 2013-14)*

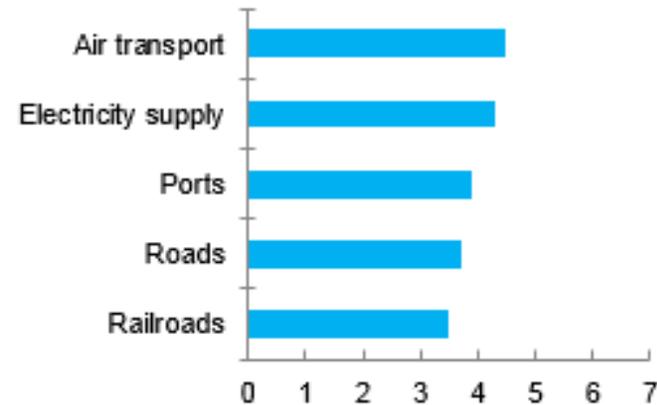


Note: Quality of infrastructure index (scale 1-7 where 7 is the best)

Source: Source: World Economic Forum Global Competitiveness Report 2013-2014

**Figure 2: ... with weak performance across most types of infrastructure**

*(Quality of infrastructure indices, 2013-14)*



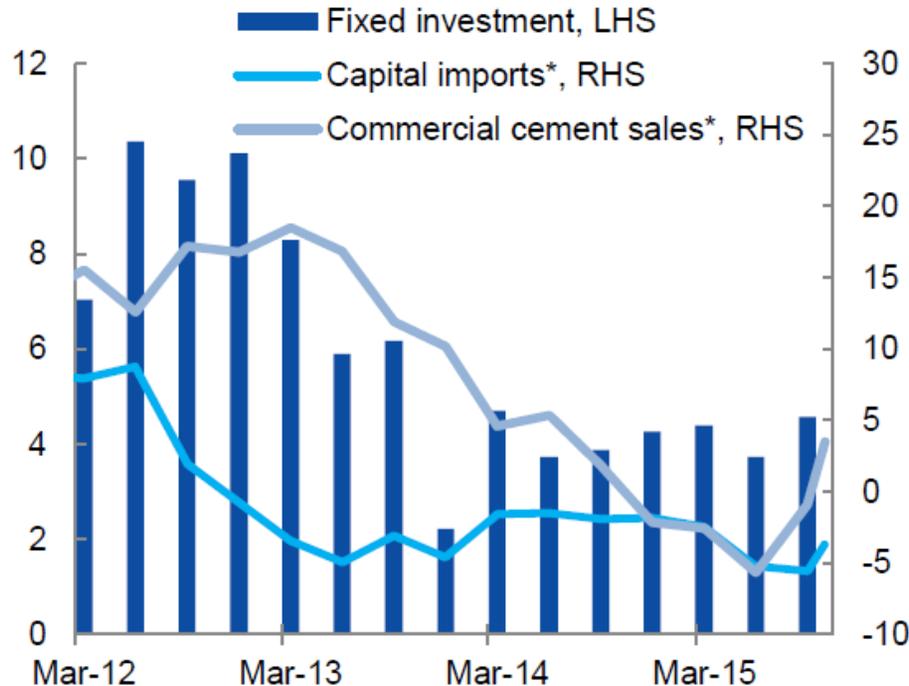
Note: Quality of infrastructure index (scale 1-7 where 7 is the best)

Source: Source: World Economic Forum Global Competitiveness Report 2013-2014

# Private investment is slowing but FDI was the third largest in 2015 in absolute terms (after China, India)

## Investment growth (Mar 2012-Oct 2015)

*(four-quarter moving average of growth qoq-saar, percent)*



Capital investment into Indonesia climbed 130 per cent to \$38.5bn as a result of multiple large projects in the metals, chemicals and energy sectors

Country	Capex, \$bn
India	63
China	56.6
<b>Indonesia</b>	<b>38.5</b>
Mexico	24.3
Brazil	17.3
Russia	11.6
Turkey	5.8
Egypt	14.5
Saudi Arabia	9.8

# Who will get involved in private investment?

- **Infrastructure needs are considerable** – in East Asia and in Indonesia there are considerable existing infrastructure gaps.
- **Institutional investors internationally are slow** to come to frontier markets – OECD pension funds, insurance, sovereign wealth funds with \$79 trillion in assets under management have less than 1% in infrastructure, and virtually none in frontier markets, and in greenfield investments.
- **Local investors and sovereign wealth funds** within emerging markets with about \$5 trillion and \$4 trillion respectively, have also not lined up:
  - Some pension funds in Latin America, less in Africa / Asia.
  - Insurance – South African insurers invest in the Pan African Development Fund, South African Infrastructure Fund
  - Sovereign wealth funds – China in Africa

# Focus on infrastructure: how to close the gap?

- Decades of underinvestment at 2%-4% of GDP resulted in declines of infrastructure capital stock (from 49% to 38% of GDP in 1995-2012).
- Infrastructure gap estimates at \$400-500bn.
- The quality of that investment is an important policy challenge:
  - a six-fold increase in roads spending resulted in only 20% more kms.
- Infrastructure constraints have cost Indonesia more than 1 percentage point of annual GDP growth over the past decade

Central & local Government (~1/3<sup>rd</sup>)

SOEs (~1/6<sup>th</sup>)

Private domestic

Private foreign

} (\$175-225bn  
needed)

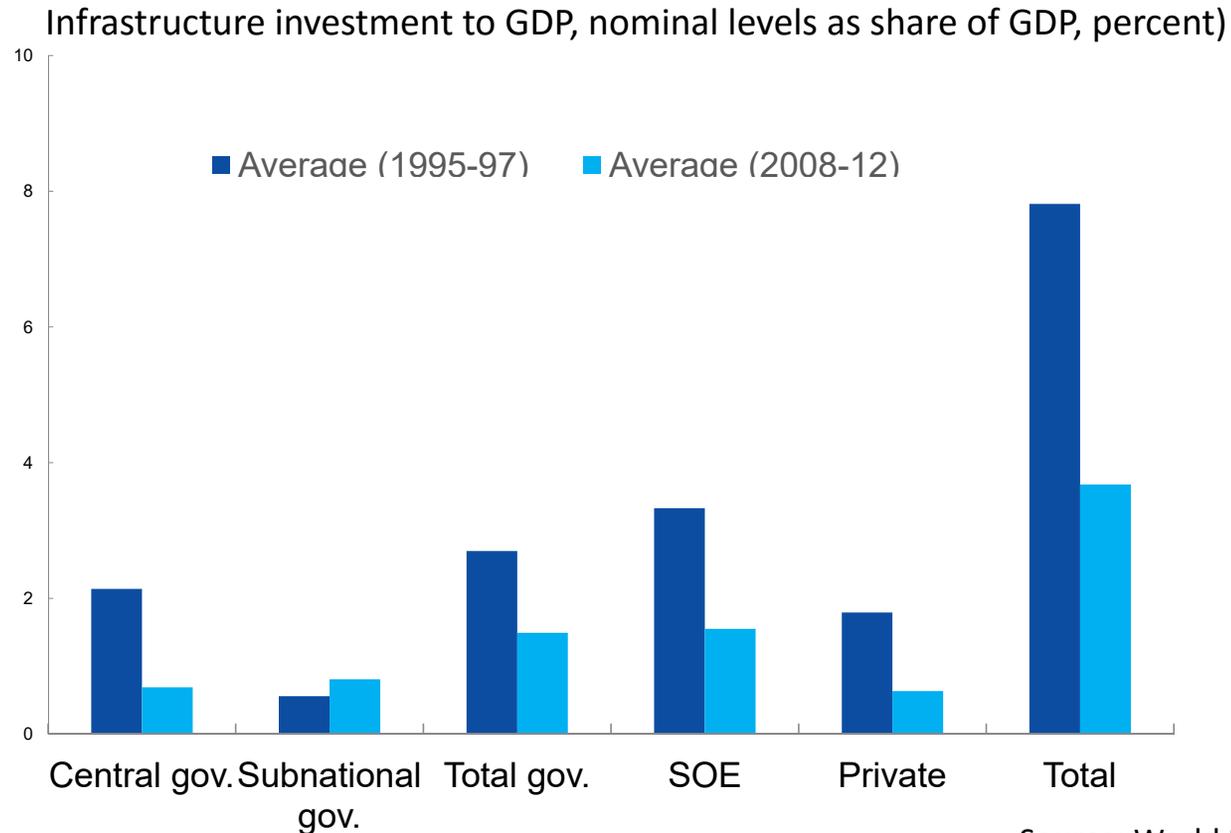


INVESTMENT

Infrastructure (gap \$400-500bn)

Manufacturing

# Private infrastructure investment is falling as a share of GDP, as is central government and SOE investment



Source: World Bank staff calculations

# Binding constraint - Gov coordination in the short term, finance over the long term

- **Constraints to public investment:** deficit limit, tax collections, sub-national and SOE capacity; multi-year procurement clearances
- **Regulatory:** the single biggest constraint is land management (now under reform)
- **Ownership restrictions and constraining permits** will limit private sector investment
- **Financial markets constraints:** long-term instruments and long-term investors (insurance, pension, mutual funds) are underdeveloped; risk management markets are thin (hedging), and project finance is non-existent (e.g. project bonds).

# Can we leverage PPPs?

**Many PPP lists since 2009, 11 PPPs in process, less than 5 implemented since the PPP reform**

- **The existing PPP framework** remains underdeveloped and has not produced a steady stream of PPP deals ready for bidding – need a clear, stable, market-oriented legal framework
- **Weak inter-agency coordination:** The KPPIP has not met since its inception, to collect projects from GCAs and declare which ones are fit for PPPs. Cross-ministerial coordination is essential, with KPIs and a real-time dashboard for PPP progress reported to the highest GoI level.
- **Limited GoI capacity:** GCAs could conduct high-quality feasibility studies for projects (using professional experts), standardize them to improve transparency, thus alleviating Bappenas decision-making on project selection and enhancing the PPP pipeline.
- **No GCA incentives for PPPs:** the new MOF instruments for project preparation, funding, guarantees, VGF, and AP are not widely used.

# How do we bring institutional investors to infrastructure finance in bigger numbers?

- **Barriers:** political / governance risks, poor business climate, lack of an effective infrastructure pipeline, shortage of data and transparency in the infrastructure sector, lack of know-how by asset managers, problem of scale in pension funds, short-term vision, investment restrictions, social value of projects higher than market return.
- **Market Gap:** mismatch between risky greenfield investment needs and institutional preference for steady, inflation-adjusted returns.
- **Solution** - Adjust risk and income stream profile via both government financing / risk management mechanisms and market products.
  - Traditional investment limits or other regulatory constraints may work against longer-term investment in (illiquid) infrastructure assets.
  - Leave institutional investors to choose assets on risk/return basis, according to their liquidity needs and to their preference for income streams of projects at the operational / cash-flow generating stage.
  - Commercial banks and other players (e.g. private equity) have a strong role, and all players should be facilitated in partnering.
  - Capital markets reform should accompany pension / insurance reforms.
- This is even more important since the decline of monolines.

# Financing instruments - taxonomy

	Direct investment	Indirect investment (Examples of funds)
Listed equity	Infrastructure stocks	Infrastructure stock fund
Unlisted equity	Infrastructure project / SPE	Private equity / mutual fund
Capital markets debt	Government Infrastructure bonds corporate bonds, project bonds	Municipal bond fund Infrastructure bond fund PPP fund
Private debt	Loans to Infrastructure companies project loans	Infrastructure debt fund Infrastructure loan funds

- Unlisted investments (as opposed to established utility companies listed on the stock exchange and offering a steady cash flow) are key to plugging the infrastructure funding gap, and they have the benefits of low correlation to other asset classes, and carry a low-liquidity premium with long-term payoff appropriate for institutional investors.
- Direct private equity holdings – rare (Canada), direct project finance loans also (Malaysia for greenfield, South Africa for toll roads).
- These instruments are wider than the actual menu available in emerging markets, due to less developed capital markets, weak regulatory standards, governance, limited investor capacity /knowledge.

# Optimizing infrastructure finance instruments

Financial market: - Investment grade? - Bank assets / GDP - Private credit / GDP	Pensions market: - Number of pension funds - Assets /GDP	Insurance market: - Insurance penetration to GDP	Stock market: - stock market capitalization / GDP	Business climate & Infra investment conditions (e.g. per Doing Business and per e.g. EC Harris Harris Global Infra Investment Index or Nabarro Infra Index)	Sovereign wealth fund / development fund or bank	Optimal infra finance tool
<ul style="list-style-type: none"> <li>✓ At /close to inv gr</li> <li>✓ Medium</li> <li>✓ Medium</li> </ul>	<ul style="list-style-type: none"> <li>✓ &gt;10</li> <li>✓ &gt; 10%</li> </ul>	High	High	Good Good	Yes Yes	Infra bonds?
<ul style="list-style-type: none"> <li>✓ Below inv. grade</li> <li>✓ Low</li> <li>✓ Low</li> </ul>	<ul style="list-style-type: none"> <li>✓ A few major ones</li> <li>✓ 1-5%</li> </ul>	Medium	Medium	Good Good	Yes No	Lead investor? Regional fund? (small country)
<ul style="list-style-type: none"> <li>✓ No rating</li> <li>✓ Fledgling</li> <li>✓ Fledgling</li> </ul>	<ul style="list-style-type: none"> <li>✓ Dominant soc. sec. fund</li> <li>✓ Minimal</li> </ul>	Minimal	Low	Difficult Poor	No Yes	MDB?

# Financing for infrastructure – practical examples

## DIRECT INVESTMENT:

- Infrastructure bonds are more common, as are project finance and PPPs (e.g. project bonds in Brazil).
- Corporate bonds (Korea transport, water, power, telecommunications)
- Government bonds earmarked for infra investment – not clear whether label leads to actual investment
- Sub-sovereign bonds (Russian regional bonds, municipal bonds in South Africa).
- Innovations/improvements, e.g. WBG proposal for standardized infrastructure bonds in Brazil

## INDIRECT INVESTMENT:

- Commercial funds (e.g. private equity funds, mutual funds, infrastructure trusts). Over \$50 billion investment in emerging markets via unlisted infrastructure funds.
- Supra-national (regional) funds which invest in bond markets regionally (South Africa Infrastructure Fund, Larrain-Vial Energia Latinoamericano). Global market infrastructure funds (global infra funds / ETFs, infra indices).
- Fund jointly owned by several pension funds (South Africa PAIDF). Mexico engaged pension funds in infrastructure through dedicated trust funds and structured products.
- National funds (India, Indonesia). Development institution funds - EAIF (Europe), ASEAN Fund (ADB), ALAC Fund (WBG).

RISK MANAGEMENT/CREDIT ENHANCEMENTS: Korea Infrastructure Credit Guarantee Fund, Brazil, Indonesia.

# ANNEX

## World Bank Infrastructure Finance Instruments

# Role of MDBs

- **Financing:** leverage private funding on top of MDB own funding / syndications / co-financing. Permits loans with longer tenor / grace periods, equity investments, and risk guarantees (e.g. MIGA offers political risk, PRG for government non-payment, PCG, forex risk).
- **Design:** MDBs can contribute technical expertise to ensure projects adhere to best practice standards (e.g. IFC safeguards on E&S sustainability, governance, integrity, due diligence and funding terms)
- **Policy:** advice on improving the policy and regulatory environment including capital markets development
- **Demonstration:** show feasibility by backing projects in untested markets
- **Selection:** support project selection and preparation to prioritize relevant government goals such as growth / development, climate, etc.
- **Convening:** promote cross-border investments

# WBG available instruments

## **IBRD/IDA**

- Initial project development
- IBRD Infrastructure funding – direct lending to the infrastructure outfit with government guarantee or loan to the government which on-lends to the infrastructure outfit.
- IBRD guarantees (partial risk; partial credit)
- IBRD financing in IDA-only countries for enclave projects
- IDA credit to government which on-lends to the infra outfit
- Equity financing: IDA or IBRD lending to the government which can invest into equity of the infrastructure outfit.
- IBRD/IDA lending to fund guarantees issued by or at the behest of the government.
- Funding for financial intermediaries, investment funds, and facilities.

## **IFC**

- PPP structuring and procurement
- IFC's loans, loan syndication, equity, and quasi equity
- Local currency bonds
- AMC

**MIGA** provides political risk insurance under contracts of guarantee for foreign equity and related debt investments. It can issue coverage for expropriation, transfer restrictions, breach of contract, war and civil disturbances, and non-honoring of sovereign financial obligations. It can also cover breach of contract where the claimant is denied appropriate judicial or arbitral relief. MIGA provides insurance with no host country counter-guarantee.

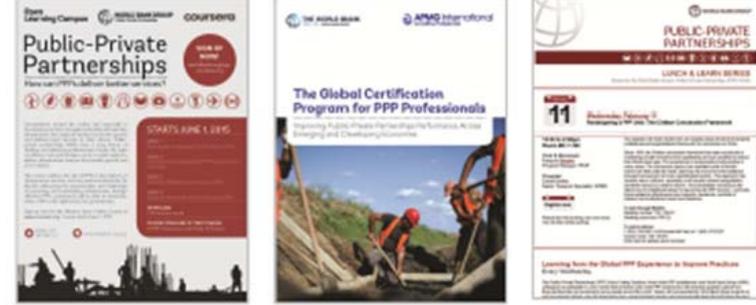
**GIF** - is a global open platform that facilitates the preparation and structuring of complex infrastructure PPPs to enable mobilization of private sector and institutional investor capital, helping coordination between governments, MDBs, and private sector.

**Global Partnership on Output-based Aid** - partnership of donors led by the WBG working together to support output-based aid, to fund, design, demonstrate, and document OBA approaches to improve the delivery of basic services to the poor in developing countries in six sectors (energy, water & sanitation, health, solid waste management, education, and ICT).

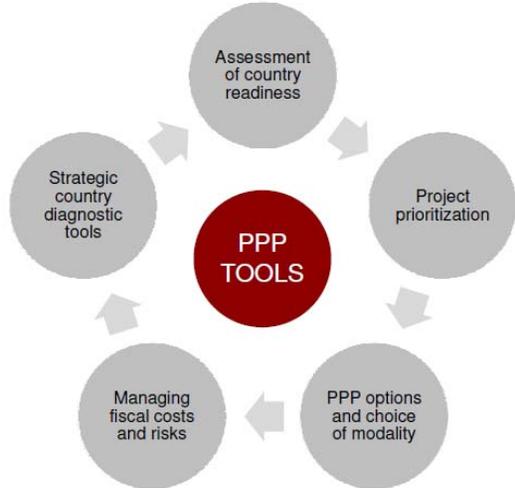
**PPIAF** - WBG global partnership for technical assistance to country governments and strengthening the enabling environment for PPPs.

# Knowledge & Convening

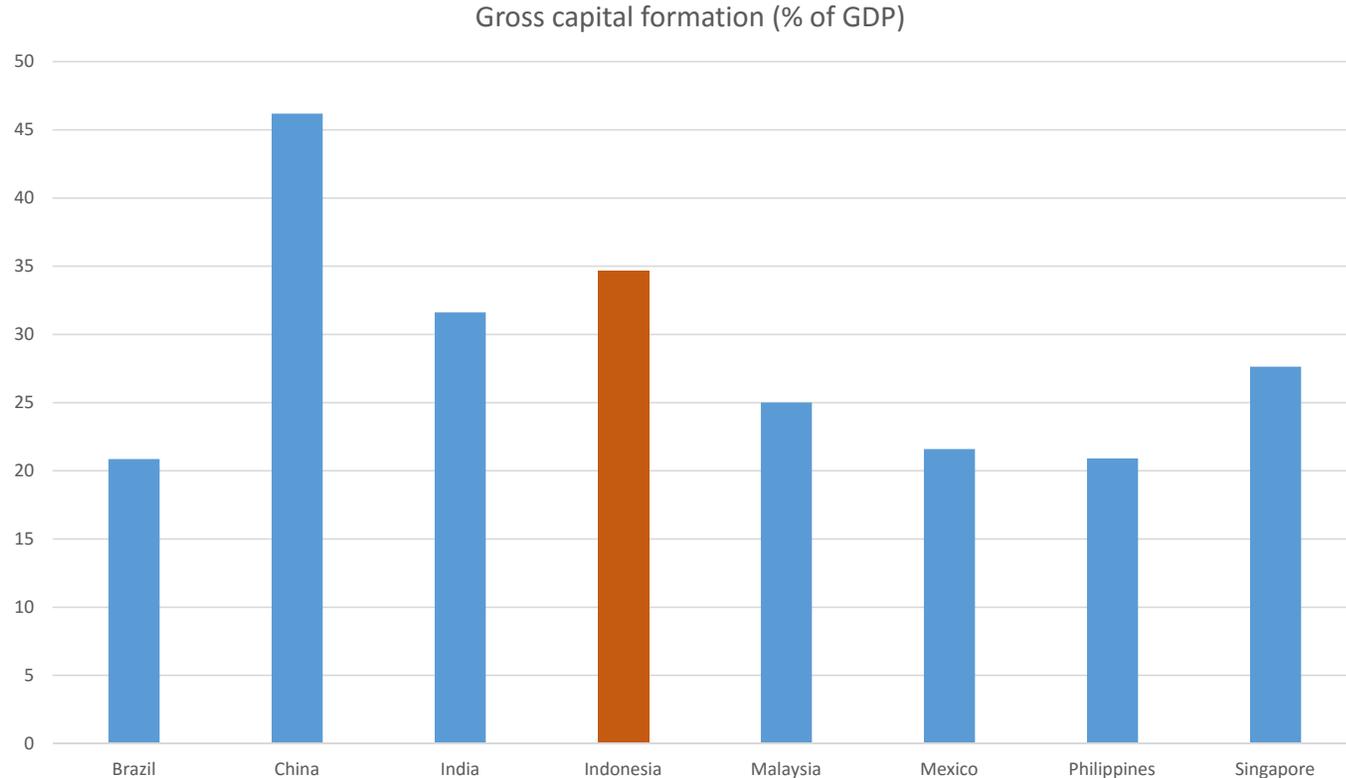
- Global leadership and convening - PPP Days (EBRD 2015); G20 infrastructure agenda; Singapore Infrastructure Finance Summit
- PPP external online knowledge hub
- PPP sector communities of practice (water, transport)
- Knowledge-sharing events (internal / external)
- Publications – WBG PPP Briefs, Partnerships IQ (technical series), Handshake (quarterly journal).



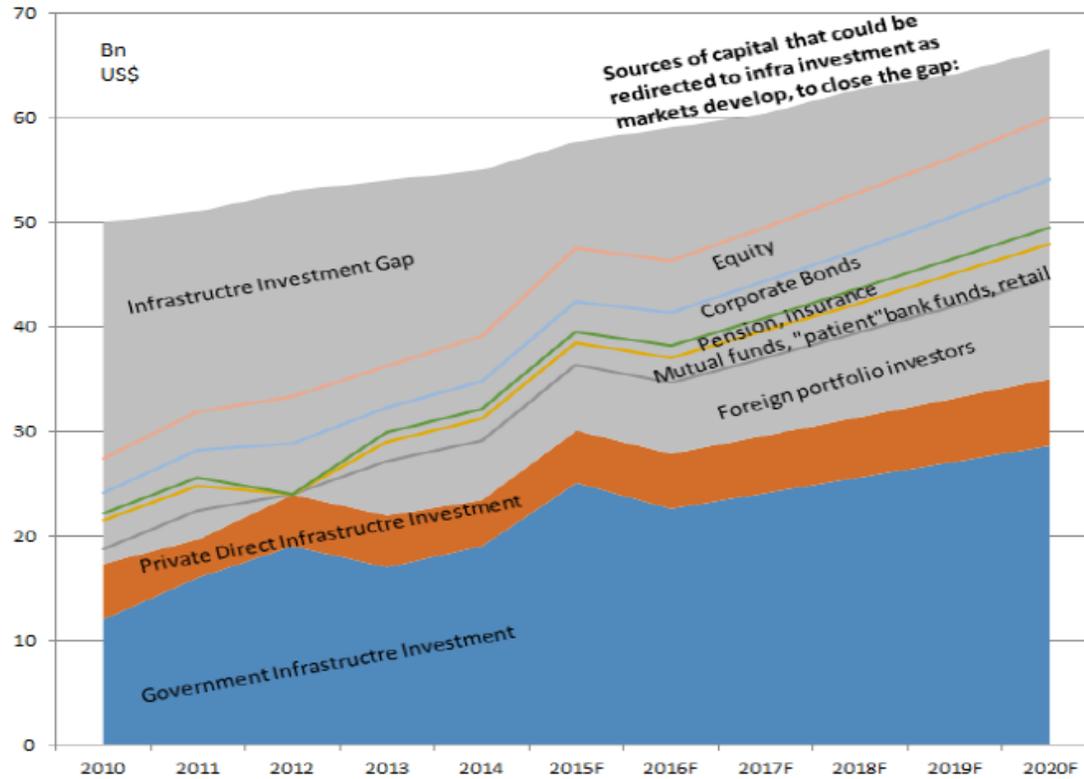
## Country Engagement



# High investment, low productive investment (e.g. infrastructure and manufacturing)



**Figure 4.2: Funding sources to fill in the existing infrastructure investment gap**



Source: Bank Indonesia 2014, WDI 2014, DJPU 2014, MOF 2014, OJK 2014.