Global Trends in Private Participation in Infrastructure



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Moscow 2018

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PPP Market Overview

Global Trends in Private Participation in Infrastructure

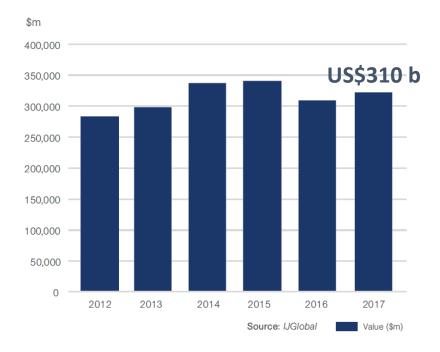
- Since peaking in 2015, PPI has now declined
 - As a percentage of GDP, PPI has also declined
- In EMDE, the reduction in 2016 represents a 37% less compared to 2015 mainly to:
 - Turkey (which saw 1 US\$ 35.6 billion mega project in 2015)
 - South Africa (multiple REIPPP projects in 2015)
 - Peru (Lima metro)
- North America followed by Europe and Asia Pacific are leading in volume the private investments (2017)

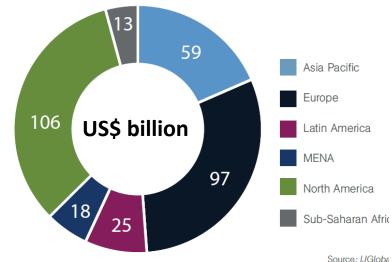
EMDE: Emerging Market and Developing Economies



GLOBAL PROJECT FINANCE - VALUE

FULL YEAR 2017





Regional distribution (2017)

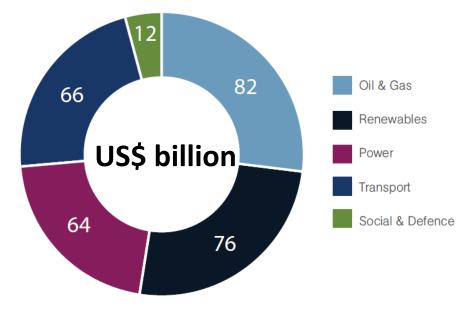
Source: IJGloba

Energy is the lead sector on mobilizing private investments (excluding telecoms)

- Oil & gas, renewables and power represent
 75% of investments in 2017
- Investment in social infrastructure is gaining momentum in EMDEs
 - Experience in other economic infrastructure is one of the drivers

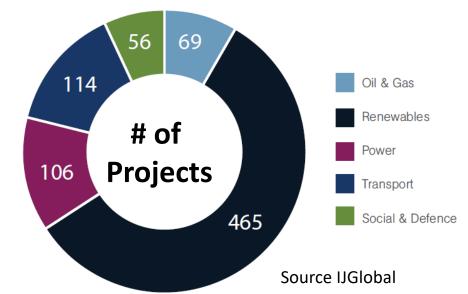
COMPARISON OF ALL SECTOR BY VALUE US\$B

FULL YEAR 2017



COMPARISON OF ALL SECTOR BY VOLUME

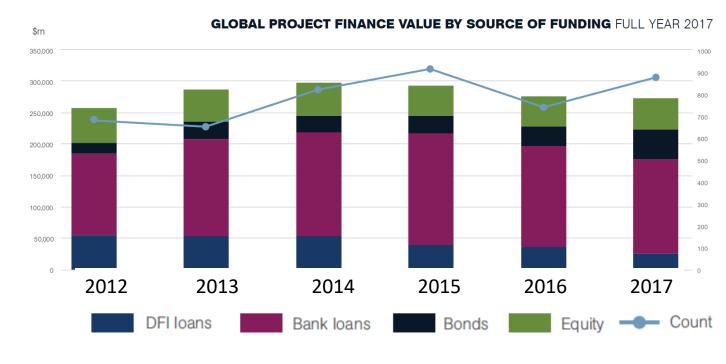
FULL YEAR 2017

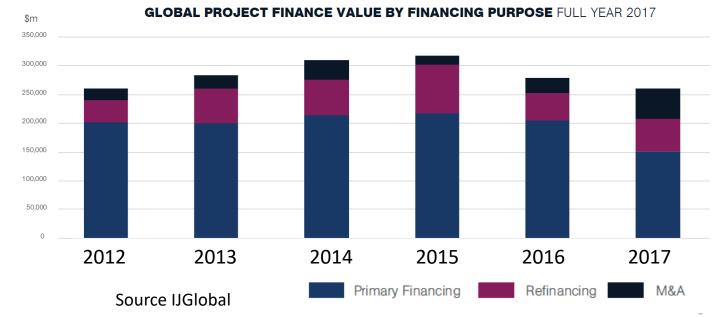




Private financing and capital structure

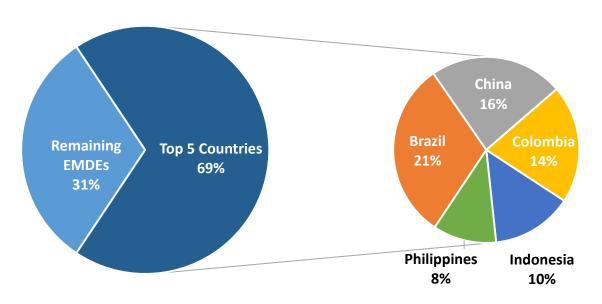
- Return in bond financing in 2017 – Basel III?
- More than 20% of private investments is used for refinancing and M&A
- Decrease in the role of DFIs







Top Countries (EMDE) with Private Participation in Infrastructure in 2016-2017



Source: PPI Database World Bank

Brazil:

- Brazil showed signs of recovery as investment increased by 67% from 2015 levels
- 93% of total 2016 investment was in Energy

China:

- Recent government efforts to promote PPPs resulted in a 75% increase from five-year average of US\$6.52 billion.
- Transport sector was responsible for 62% of total investment, attracting US\$7.1 billion.

Colombia:

- 16 transactions: 14 in Transport and 2 in Energy.
- 2016 investment increased by 40%, topping US\$10.1 billion compared to the previous year total of US\$7.3 billion

Indonesia:

- Investment of US\$6.9 billion— country's highest ever recorded PPI investment in 10 years.
- 93% of PPI accounted for by Energy (2 mega projects)

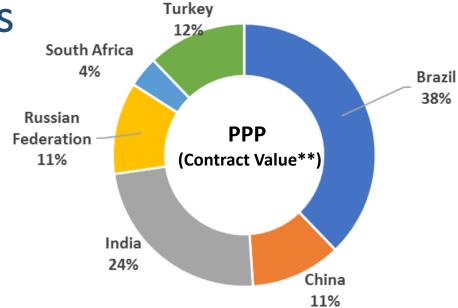
Philippines:

7 projects totaling US\$5.4 billion worth of investments



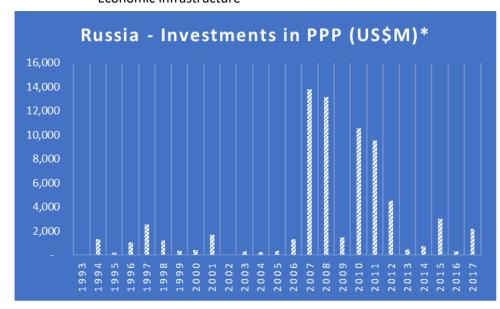
PPP volume in BRICS +Turkey countries (1990-2016)*

- Brazil remains the main leader with 38%
- Russia PPPs account for 11% of the volume BRICS+T countries - energy, transport, water, and telecoms
 - In line with other countries when compared with GDP
 - But quite below the historic peak in 2007-2008



* source: WDI WB and PPI Database WB

** Economic infrastructure

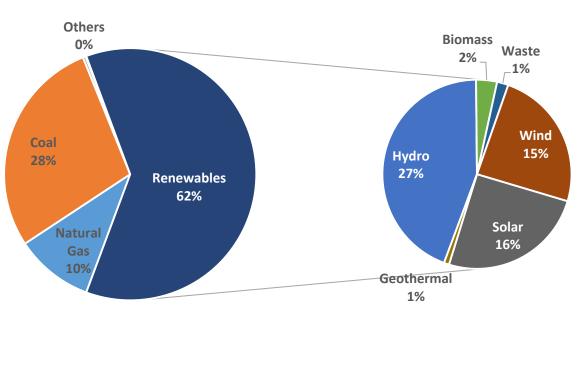




Renewable energy continues to be strongly favored by private investors

- In 2017, of the 80 % electricity generation projects relied on renewable technologies
 - Or 61.4 percent of the total investment in electricity generation projects.
 - Predominant technologies were: solar (53 projects) onshore wind (36 projects) and hydropower (21 projects)
- Coal projects experienced a downward trend for a sixth straight year, accounting for only 5 projects in 2016 – a decline from 5-year average of 14 and peak of 35

TOTAL INVESTMENT IN ENERGY BY SOURCE, 2016





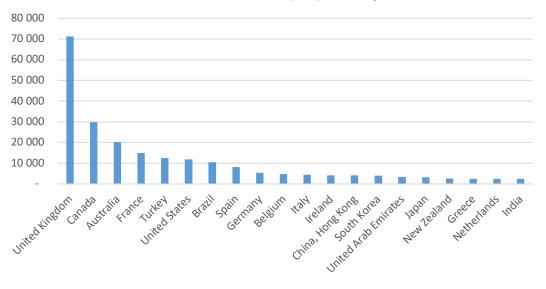
Source: PPI Database, World Bank, as of June 2017.



And beyond economic Infrastructure: PPPs in social sectors

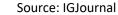
- Social Infrastructure: defense; social housing, education, municipal, transit, fire & rescue, waste-to-energy, healthcare, waste, justice, leisure, others
- UK concentrates more than a quarter of the transactions in the last five years. Together with Canada, Australia, France & Turkey, their investment reach almost 60 percent.
- On EMDEs, Turkey's PPP is one of the most active countries in the last years (health and education)

Social Infrastructure PPP - Lead Countries PPP Transaction Value (\$m) - last 5 years



Health PPP projects (IJGlobal)

Year	Project name	USD million
2015	Ankara Bilkent Integrated Health Campus PPP	1,248
2015	Ankara Etlik Integrated Health Campus PPP	1,204
2014	Adana Integrated Health Campus PPP	667
2015	Kayseri Integrated Health Campus PPP	482
2014	Mersin Integrated Health Campus PPP	445
2016	Konya Karatay Integrated Health Campus PPP	400
2015	Isparta City Hospital PPP	285
2015	Yozgat Education and Research Hospital PPP	150





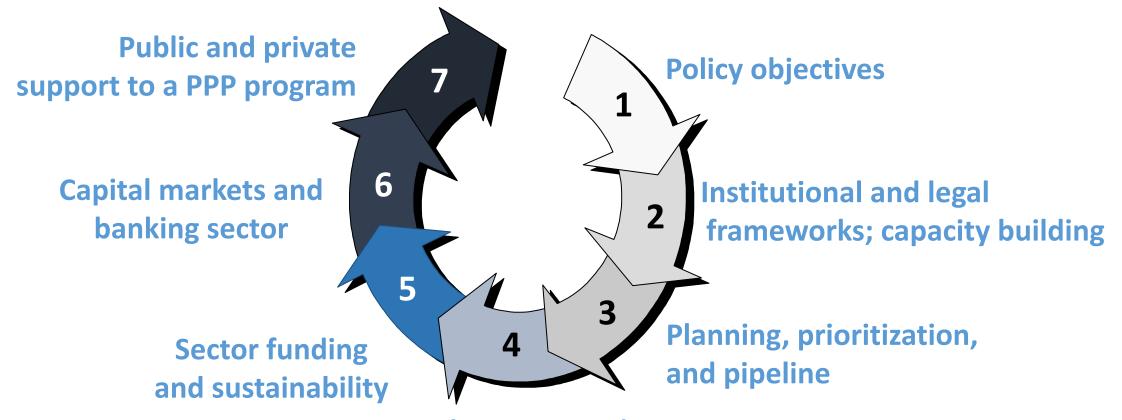
A few selected cases

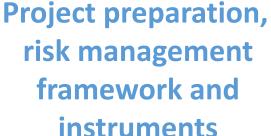
- Turkey: debt assumption guarantee as one of the key drivers
- Brazil: BNDES as the largest debt provider in Brazilian PPP but new projects have international investors and equity funds
- Argentina: certificate (IOU) model
- India: Toll-Operate-Transfer program (size and replicability)
- Indonesia: asset recycling (transport)



Attracting private investment in infrastructure

Key elements in a PPP Framework







Looking for foreign investors: a simple checklist

- Project fundamental
- Easy of doing business
- ☐ Currency risk, expropriation/termination clauses, repatriation funds/funds
- ☐ Targeting the right market for (specialized) sponsors and lenders
- ☐ Standard practices in project preparation and procurement (bidding documents in English)
- E&S framework
- ☐ Transaction Advisor



Current critical bottlenecks: many of them on subnational governments

- Fragmented regulatory framework at central and local levels
- Lack of quality and standardized project preparation + weak contractual and enabling environments
- Lack of institutional capacity and skill set required to support PPPs (upstream & downstream)
- Insufficient long-term financing:
 - Solvency III restrictions; risk aversion to infrastructure-specific uncertainty (e.g., ramp-up in greenfield, currency devaluation, regulatory and political, capital repatriation, public payments)
 - Eg China: 'self-support' loans cannot exceed 10 years with max 3 year extension. Most PPP projects require 15-20 year funding.



Optimizing Public Finance for PPP

- Role of public sector in Infra and Project Finance continues to be high:
 - Juncker Plan
 - EIB support mechanism as backstop to Availability Payment regime and MRGs
 - Allowance of multi-year budgeting (ie public payments beyond budget cycle)
 - Use of SWF and fuel funds as collateral for bond financing
- Different public instruments are emerging:
 - Capital grants to off-set initial high expenditure (e.g. metro and LRTs)
 - Value capture (e.g. Brazil Sao Paolo, Dublin metro extension)
 - Traditional tax exemptions (less favored as benefits difficult to quantify)
 - Certificate model (Argentina, Colombia, Peru)



Thank you