

Financing of Sustainable Transport Infrastructures and PPP

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(EST) in Asia**

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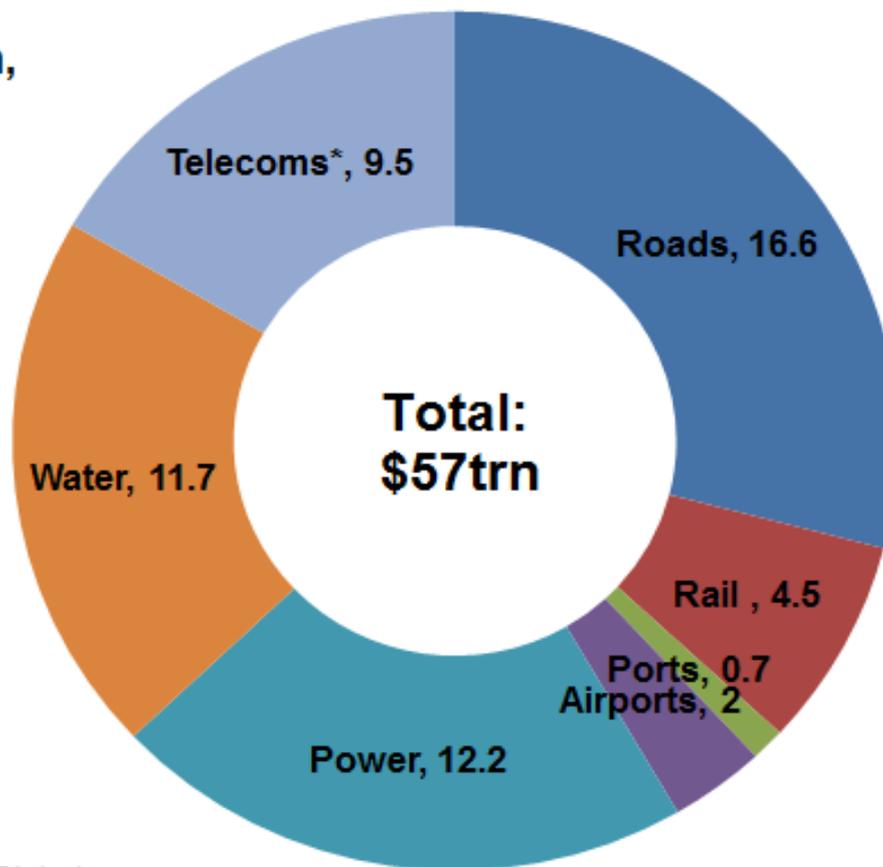
Outline

- I. **Global and Asian capital needs**
- II. **Trends in PPPs in Developing Asia**
- III. **Trends in Project Finance and Institutional Investors**
- IV. **When Do PPPs Work?**
- V. **Conclusion**

Future global capital needs

Global Infrastructure Investment Required

2013-2030, \$trn,
2010 prices



Source: McKinsey Global
Institute

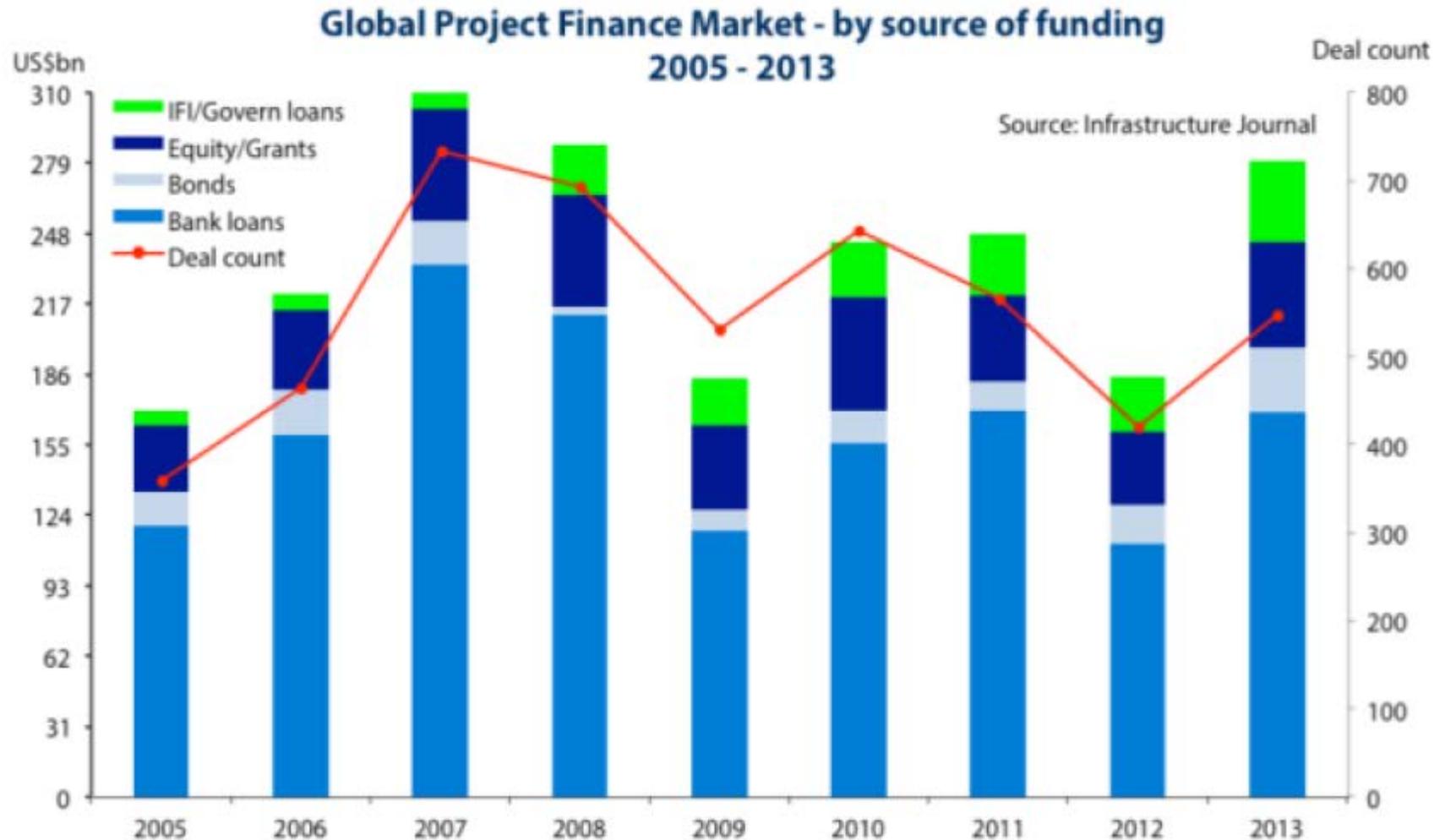
* Brazil, PRC, India and OECD countries only

Asian infrastructure investment needs estimated at \$8.3 trillion (2010-2020)

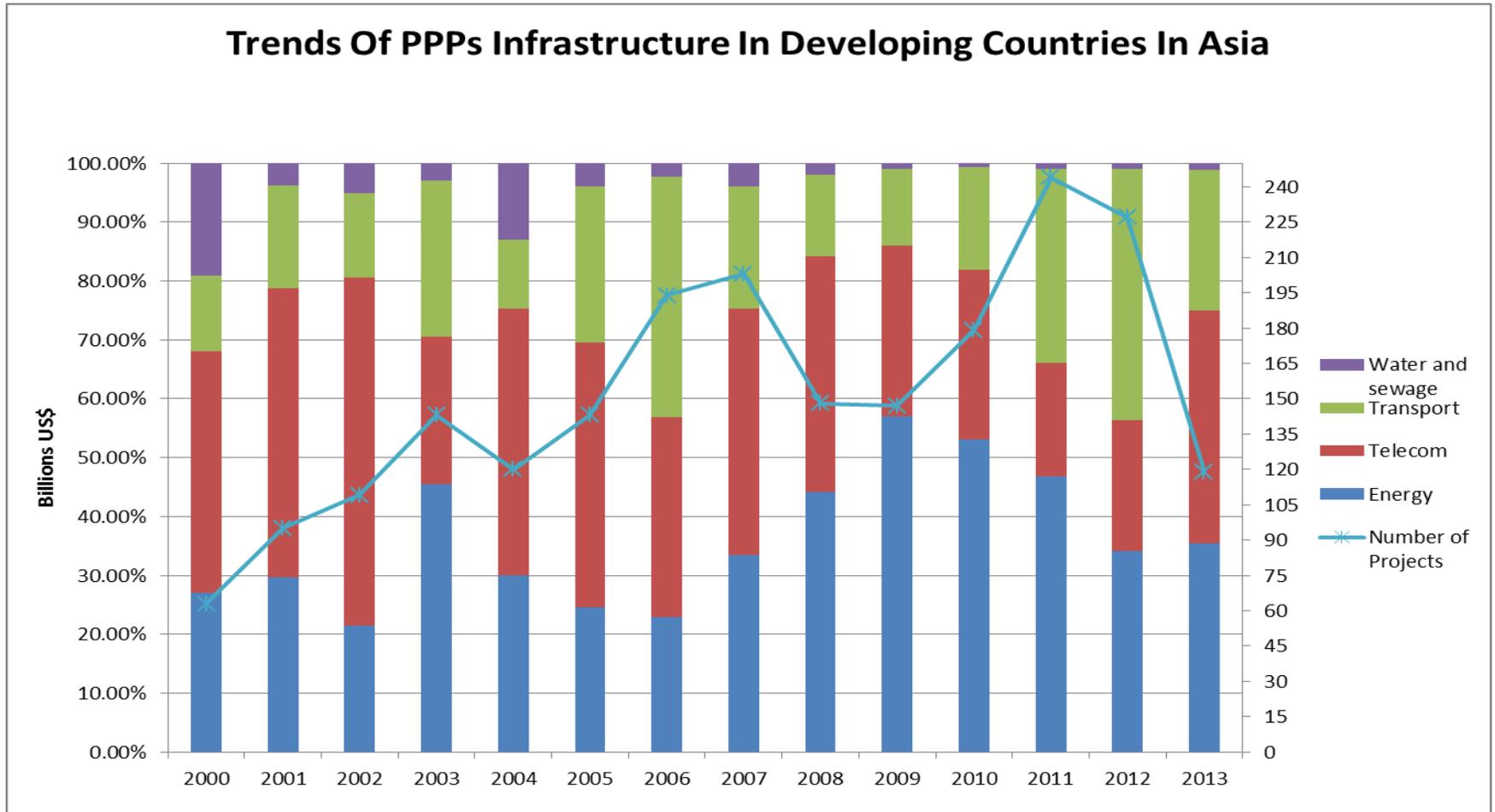
Sector/Subsector	National Infrastructure			Crossborder Infrastructure	Total
	New Capacity	Replacement	Sum		
Energy (Electricity)	3,176.4	912.2	4,088.6	82.4	4,171.0
Telecommunications	325.4	730.3	1,055.7	--	1,055.7
Transport	1,761.7	704.5	2,466.1	204.6	2,670.8
Airports	6.5	4.7	11.3		
Ports	50.3	25.4	75.7		
Railways	2.7	35.9	38.6		
Roads	1,702.2	638.4	2,340.5		
Water & Sanitation	155.5	225.8	381.3	--	381.3
Water	47.6	106.2	153.8		
Sanitation	107.9	119.6	227.5		
Total	5,418.9	2,572.8	7,991.7	287.0	8,278.7

Source: ADB and ADBI, Infrastructure for a Seamless Asia (2009)

Global Project Finance Market

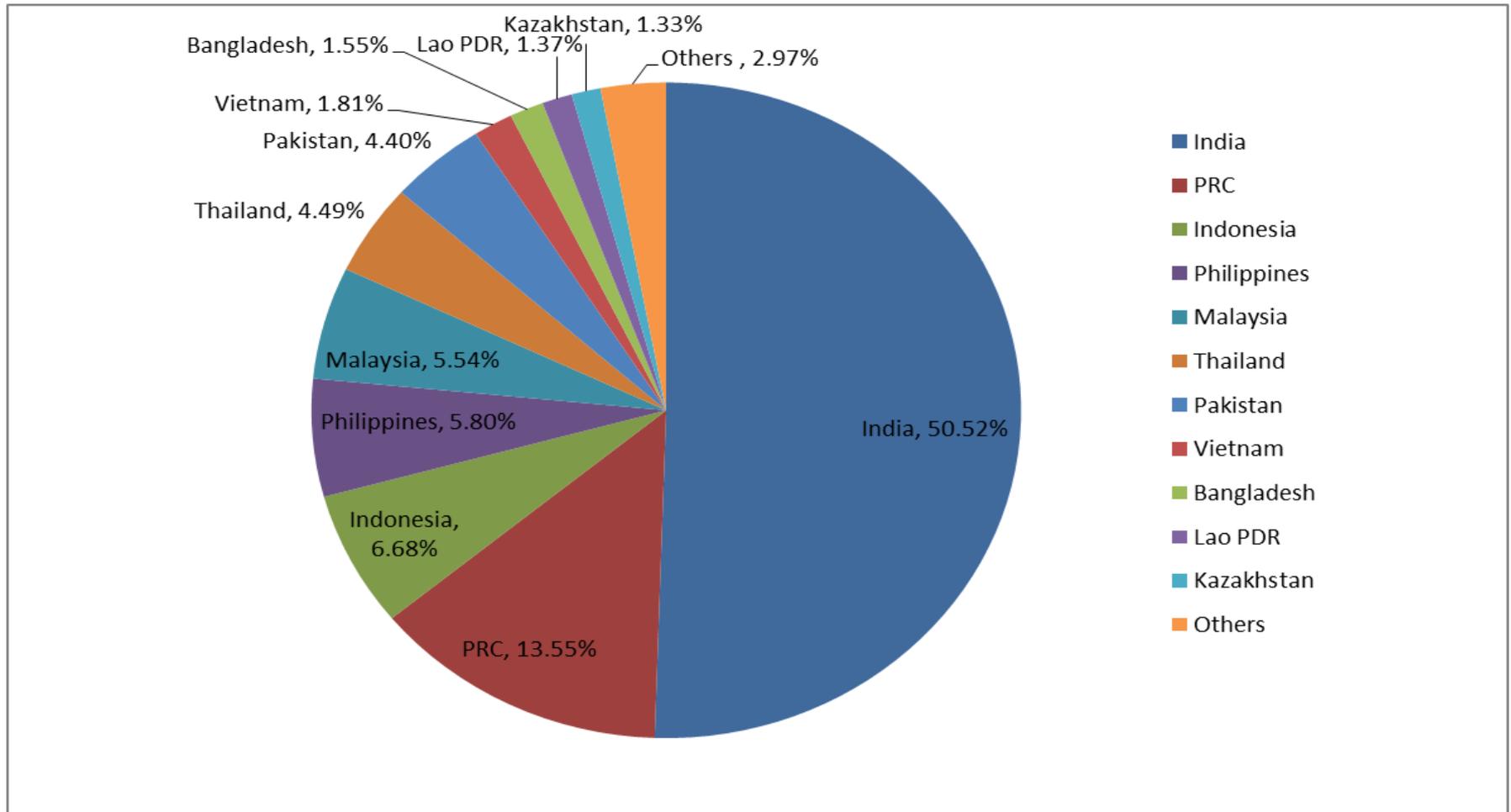


PPP has grown steadily in developing economies of Asia



Source: PPIAF and World Bank.

Concentration of PPP infrastructure projects in developing economies of Asia



Source: PPIAF and World Bank.

Commercial Bank Project-Finance Loan Commitments, 2000-2012

(\$ millions)	2000	2007	2008	2009	2010	2011	2012
Australia	3,806	13,088	21,170	12,284	14,592	24,814	43,042
Canada	2,526	3,799	4,747	1,540	4,318	5,134	4,135
Chile	1,618	810	2,814	1,619	120	1,118	2,861
PRC	n/a	8,381	865	88	154	240	1,935
Indonesia	303	913	2,727	1,652	2,405	1,886	1,838
Japan	131	589	2,737	1,226	682	1,524	2,366
Republic of Korea	718	3,041	5,412	1,322	2,715	4,612	6,015
Mexico	2,153	5,078	2,345	839	1,710	1,351	7,167
Philippines	1,510	1,538	819	377	1,174	538	420
Russia	2,077	2,114	8,877	3,001	2,754	11,302	5,096
Singapore	1,857	3,041	5,412	1,322	2,715	6,479	7,666
Thailand	1,718	665	1,423	875	2,818	2,736	2,593
United States	33,573	25,887	21,602	9,335	13,424	18,489	18,427
Source: Yescombe (2014).							

Top 20 Lead Arrangers of Bank Project-Finance Loans, 2000

Lead Arranger	Economy	Amount (\$ millions)	Number of Loans
Citigroup	US	11,927	51
Société Générale	France	9,616	30
Bank of America	US	9,370	33
ABN AMRO	Netherlands	7,875	31
JP Morgan	US	7,472	24
Credit Suisse First Boston	US	6,719	10
Westdeutsche Landesbank	Germany	6,716	37
Deutsche Bank	Germany	6,487	22
BNP Paribas	France	3,712	24
Barclays Capital	Britain	3,423	23
Dresdner Kleinwort Wasserstein	Britain	3,155	24
Merrill Lynch & Co Inc	US	2,631	4
Bank of Nova Scotia	Canada	2,165	6
Mizuho	Japan	1,976	14
Goldman Sachs	US	1,832	3
HSBC Bank	Britain	1,464	1
Crédit Lyonnais	France	1,339	9
Bank of Tokyo-Mitsubishi	Japan	1,272	7
Abbey National	Britain	1,200	7
Bank of Montreal	Canada	1,040	5

Source: Yescombe (2014).

Commercial bank based in an APEC member economy is in boldface.

Top 20 Lead Arrangers of Bank Project-Finance Loans, 2012

Lead Arranger	Economy	Amount (\$ millions)	Number of Loans
Bank of Tokyo-Mitsubishi	Japan	11,618	96
State Bank of India	India	10,948	32
Sumitomo Mitsui Banking Corp.	Japan	7,576	68
Mizuho Financial	Japan	6,234	51
Korea Development Bank	Korea	5,411	27
HSBC	Britain	4,394	34
Crédit Agricole	France	4,159	36
Société Générale	France	4,084	35
BNP Paribas	France	3,793	35
Banco Bilbao Viscaya Argentaria	Spain	3,521	45
Lloyds TSB	Britain	3,251	25
Commonwealth Bank of Australia	Australia	3,158	21
Standard Chartered	Britain	3,035	19
ING	Netherlands	2,946	29
National Australia Bank	Australia	2,920	20
ICICI	India	2,796	13
UniCredit	Italy	2,789	29
IDFC	India	2,679	22
Axis Bank	India	2,645	9
ANZ	Australia	2,457	19

Source: Yescombe (2014).

Commercial bank based in an APEC member economy is in boldface.

Conclusions

- Developing economies have made major progress in infrastructure development. However, progress is quite uneven.
- Level of success in promoting private finance in developing economies in Asia has varied. Highlights the challenges faced by economies in attracting private investment in infrastructure.
- PPPs are not a panacea. However, when designed and executed properly, PPPS can matter to areas where they are most needed, especially in the transport sector of developing economies in Asia.

Thank you for your attention

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Appendix: Some references

- *Asian Development Bank (2009), Infrastructure for a Seamless Asia.*
- *ESCAP (2013), Review of Developments in Transport in Asia and the Pacific 2013: Transport as a Key to Sustainable Development and Regional Integration.*
- *McKinsey Global Institute (2013), Infrastructure productivity: How to save \$1 trillion a year.*
- *Yescombe, E.R. (2014), Principles of Project Finance, second edition. Academic Press.*