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Transport

THE ROAD TO SUSTAINABLE TRANSPORT

Tackling the finance challenge

Transport Global Practice

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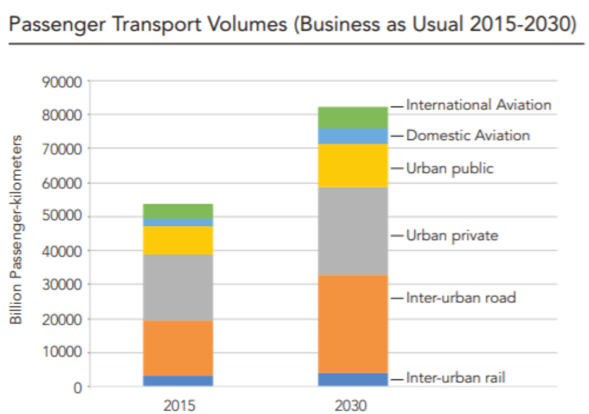
Outline

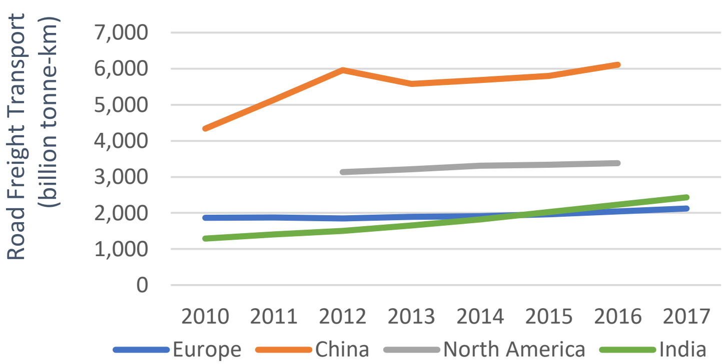
- **Scoping the transport challenge**
- **Financing the transport challenge**
- **Looking for solutions**
  - Quality of public spending
  - Leveraging sector funding
  - Exploring commercial financing opportunities
- **Bringing commercial financing to the next level**
  - Improving corporate performance
  - Asset recycling and innovative solutions

Scoping the Challenge
Demand for mobility solutions has grown rapidly

Roads continue to be the dominant mode of passenger transport[1]

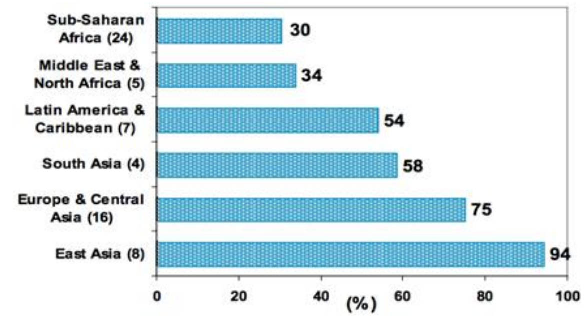


Road freight has increased faster in Asia



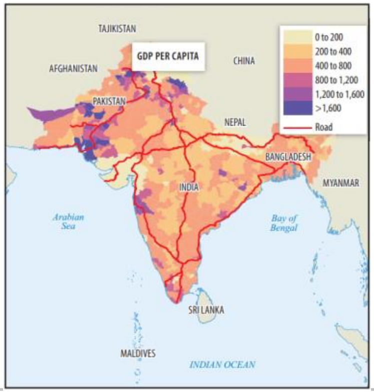
Despite improvements in access to transport, gaps still remain in many regions

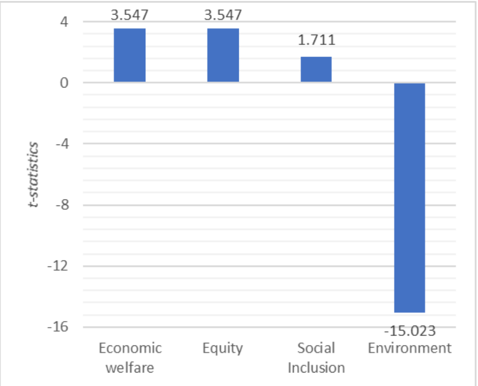
Share of rural population with access to an all season road



Transport corridors: good for growth but with environment concerns

Spatial impacts around major South Asia corridors[2]





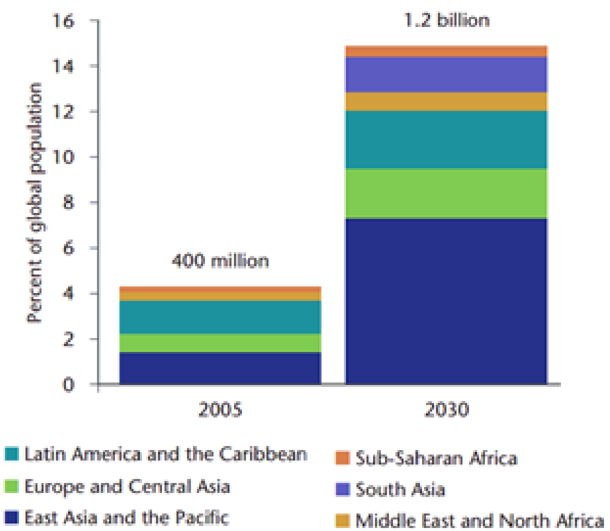
Sources: (1) World Bank, World Development Indicators; World Bank *Rural Access Index*; (2) The Web of Economic Corridors in South Asia

Scoping the Challenge
…and will continue to expand in the future

More people, goods, services and information
An additional 1 billion people projected by 2030, out of which 87% will be in Asia and Africa

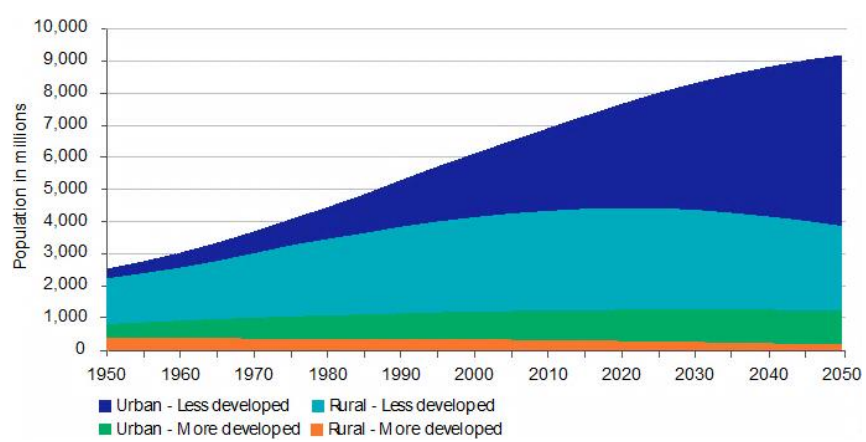
More aspirations for mobility
Rapid growth of middle class population by 2030

Population in LIC/MIC earning US$4000-17000 per capita (PPP)



Rapidly urbanizing cities boost the demand for urban transport solutions

Rural and Urban Population growth projections



Source: World Bank, World Development Indicators; WBCSD "Vision 2050"

Scoping the Challenge
Reducing negative impacts requires investments and policies

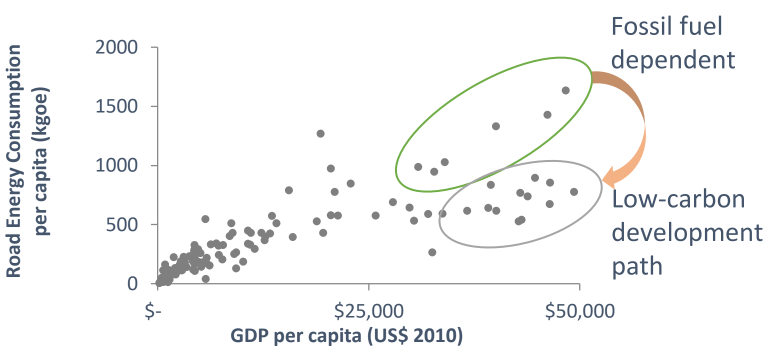
Challenge
Meeting mobility and connectivity aspirations, knowing that today's investments will lock-in countries and cities on either a sustainable or unsustainable development path

Cost of "Business as Usual" / Inaction

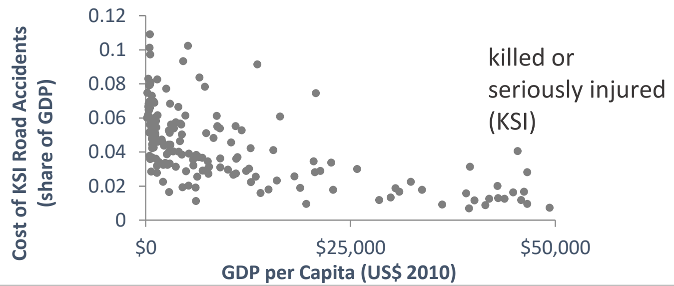
- **GHG emissions from transport**
  from 23% today, to up to 80% by 2050
- **Congestion**
  cost = 8.5% of GDP
- **Local air pollution**
  cost = 0.4% of GDP
- **Accidents**
  cost = 2% of GDP
- **Car Dependency and urban sprawl**
  cost = 3% of GDP

Benefits of Action

- **Keeping GHG emissions in check**



- **Keeping road accidents in check**



Source: World Bank, World Development Indicators; World Bank – *Turning the Right Corner*; IPCC;

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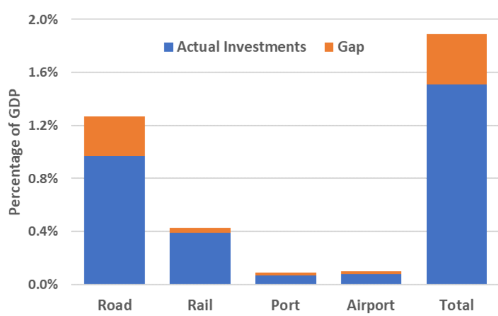
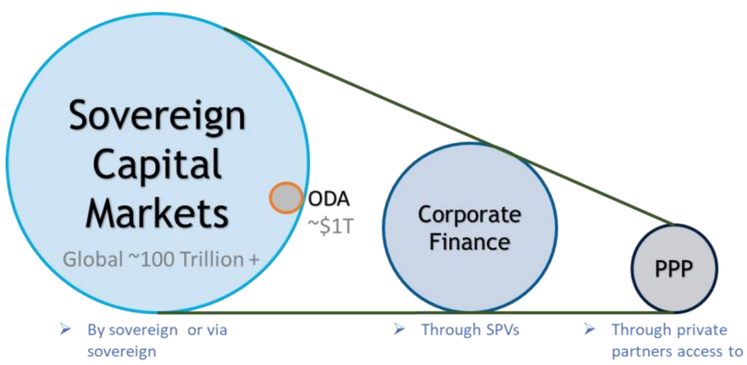
How can we finance the challenge in a sustainable way?

Investment gap: an annual increase of 2 percent of GDP is required on average till 2040 as per the Global Infrastructure Hub (2017)



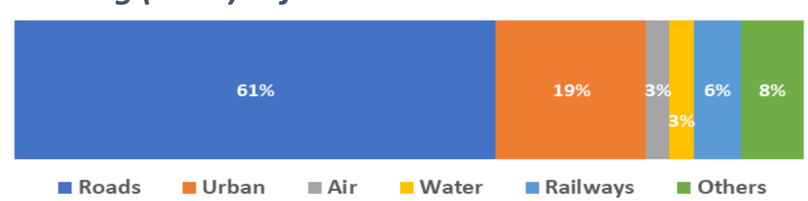
Government can look for ways to increase access to **Non-Sovereign Finance**



Sources of transport financing: any solution to reduce the gap is likely to come from a mix of public, private, Overseas Development Aid (ODA) and climate financing

Public Finance	ODA
Accounts for bulk of investment over $250 billion/ year in low-middle income countries (WB)	MDB to exceed sustainable transport commitments ($175 billion by 2021) made at Rio+20 conference but still limited.
Private Financing	**Climate Financing**
Transport (2018) = $54 billion on PPPs with private/public co-finance in Emerging Markets & Developing Economies	Access of transport to climate finance is limited. A small share of CIF, CDM and GEF is allocated to transport

Multilateral Development Banks' Transport Lending (2014) is focused on roads



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Lack of fiscal space can constrain financing for development

Country indebtedness and strong reliance on fiscal budget for funding and finance set a cap on new and much needed development investments

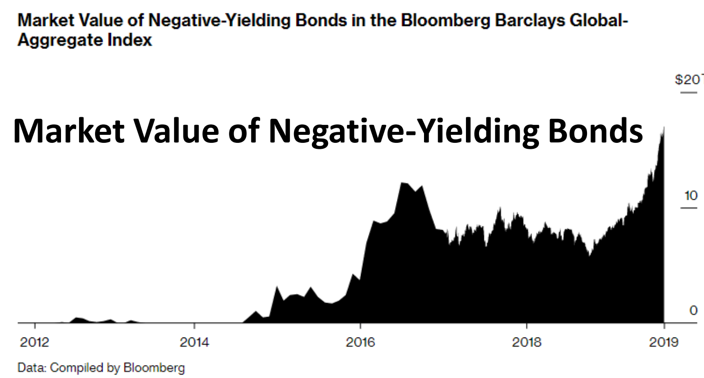
Debt transparency, poor capacity, inefficiencies in public spending (subsidies and priorities)

	S&P Ratings	Number of Countries	Examples
Investment Grade	AAA	11	Australia, Canada, Germany, Netherlands, Singapore
	AA+	4	Finland, USA
	AA	7	Belgium, Kuwait, New Zealand, Korea
	AA-	6	Qatar, Estonia, Czech Republic
	A+	8	Chile, China, Japan, Israel
	A	2	Iceland
	A-	7	Botswana, Malaysia, Saudi Arabia
	BBB+	9	Mexico, Poland, Spain, Thailand
	BBB	5	Italy, Panama, Philippines
	BBB-	11	Russia, Portugal, Morocco, Indonesia, India
Non-investment Grade	BB+	3	Azerbaijan, Cyprus
	BB	7	Bolivia, Oman, South Africa, Turkey
	BB-	9	Brazil, Honduras, Georgia, Macedonia
	B+	12	Argentina, Kenya, Senegal, **Tanzania**[1]
	B	14	Cameroon, Ethiopia, Greece, Nigeria, **Rwanda**, Zambia
	B-	10	Angola, Egypt, Ghana, Iraq, Ukraine
	CCC+	4	DRC, Barbados
	SD	2	Mozambique, Venezuela

Source: S&P, long term foreign currency sovereign rating as of February 28, 2018.
(1) Tanzania is not rated by S&P but is rated B1 by Moody's, which is in theory equivalent to a B+ by S&P

Paradoxically, commercial financing remains available provided that projects are commercially and financially sustainable, and bankable

The Unstoppable Surge in Negative Yields Reaches $17 Trillion (Bloomberg Aug 30, 2019)



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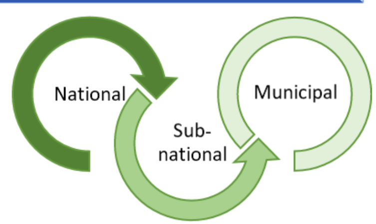
Looking for solutions:
First, by improving the quality of public spending

Focusing on the many dimensions of transport spending:

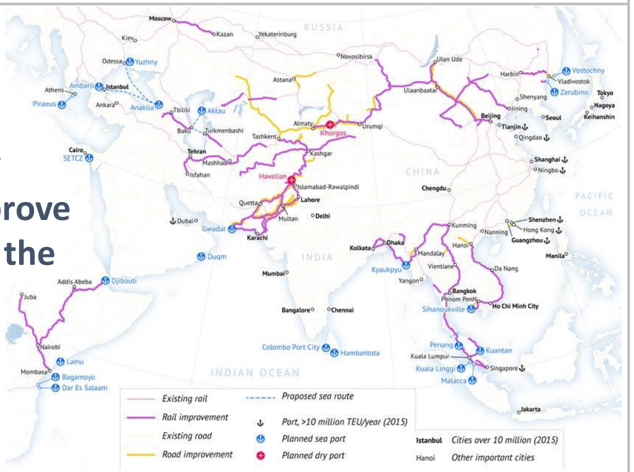
- Institutions and capacity building
- Legal and regulatory framework
- Planning and budgeting
- Project preparation
- Competitive procurement
- Project execution
- Contract management

And at each level of the government:



Looking for the best transport solution, in a competitive procurement process:

Multi-modality solution to improve connectivity at the BRI



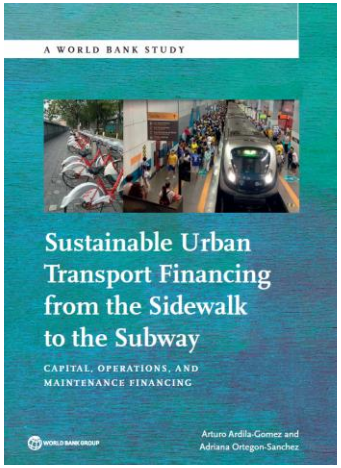
Number of bids in Colombia 4G Road PPP program

First Round	Bids	Second Round	Bids
Girardot-P. Salgar	2	Santana-Mocoa-Neiva	2
Mulaló - Lobo	3	Villavicencio-Yopal	6
Perimetral del Oriente	4	Rumichaca-Pasto	4
Pácifico 1	2	Popayán - S. de Quilichao	2
Pácifico 2	1	Puerta del Hierro - Palmar de V. y C. - Cruz del Viso	4
Pácifico 3	2	Autopista al Mar 1	3
Conexión Norte	2	Autopista al Mar 2	3
Rio Magdalena 2	2	Sisga - El Secreto	7
Cartagena-Barr	3	Barrancabermeja - Bucaramanga	2
Median	2		3

Looking for solutions:
Second, by leveraging funding options

A sustained increase in transport funding is necessary to meet the challenge

- While many of the available instruments remain unfeasible or are not a significative revenue sources in EMDEs, new ways to maximize funding opportunities from users and taxpayers are crucial
    - Without creating equity concerns
- Technology solutions are reducing the transaction cost



Ring-fencing revenues

- Creating a vehicle for public transport funding (transport funding law)
- Diversifying and ringfencing road funds. *(Road funds study in Africa, WB 2019)*:
    - Road maintenance funding continues to increase but still insufficient to cover routine and periodic maintenance needs
    - Fuel levies are the largest funding source
    - Unused funds rolled over in full, partially or not at all
    - A substantial percentage of the road user charges collected annually is not used
    - Government contribution generally unreliable (time/size)

Looking for solutions:
Third, by exploring Commercial Financing Options

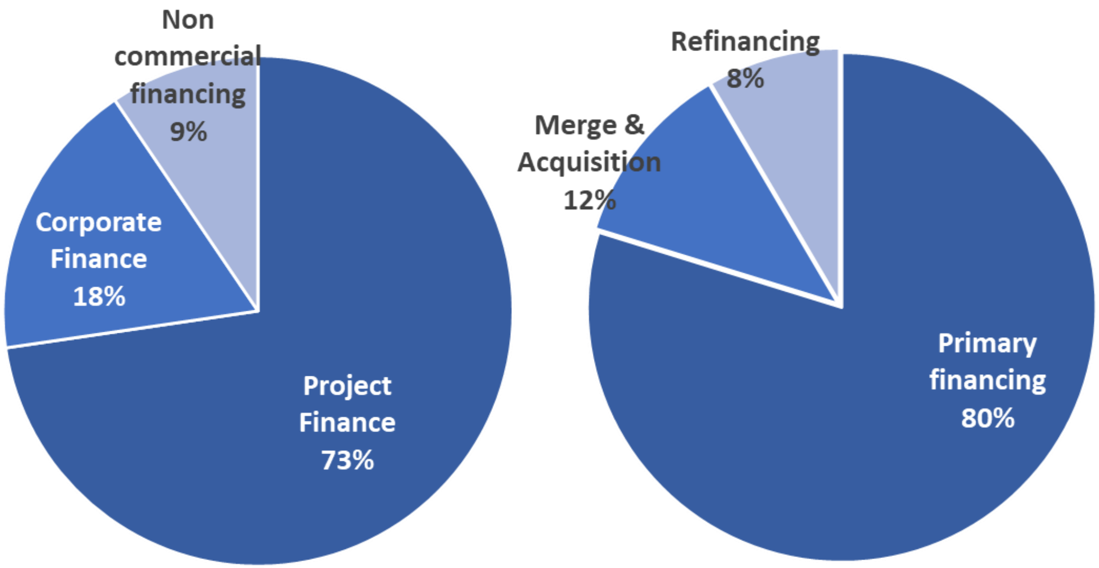
Revamping corporate finance of SOEs & cashing on brownfield assets

	Sovereign Finance	Corporate Finance for SOEs	Project Finance for Project SPVs (no/limited recourse)	Corporate Finance for private corporates
Borrower	▪ Government or SOE	▪ SOE	▪ Project Company (SPV) ▪ Public or private ownership	▪ Privately-owned enterprise
Credit risk & collateral	▪ **Full faith and credit of the sovereign** ▪ Unsecured	▪ **Creditworthiness of SOE** ▪ Unsecured or secured ▪ Recourse for default to SOE's assets only or to Gov't (if guarantor)	▪ **SPV with robust contractual and security structures** ▪ Recourse for default to SPV's assets (ring-fenced from Project sponsor)	▪ Creditworthiness of company ▪ Unsecured or secured ▪ Recourse for default to assets of the company
Pros	▪ **Sovereign pricing** (cheapest option relative to others) ▪ Sovereign loan and debt capital markets (**high liquidity**)	▪ **Near Sovereign pricing** ▪ Sovereign/corporate loan and debt capital markets (high liquidity)	▪ Limited recourse to Sponsor ▪ Project finance debt market (high liquidity) ▪ Multilateral/Bilateral IFIs, DFIs and/or ECAs involved ▪ **Contingent impact on public debt (if properly structured)**	▪ Corporate pricing ▪ Corporate loan and debt capital markets (high liquidity)
Cons	▪ Direct impact on public debt. Potential limitations if high debt/GDP	▪ Direct impact on public debt if SOE is loss making or if debt is guaranteed by Gov't ▪ SOE rating may not be possible	▪ Requires quality preparation, risk assessment & allocation, negotiations (long process, time consuming)	▪ Relatively limited borrowing capacity and adaptability to finance infrastructure assets

Tracing commercial financing in transport projects: Mostly through Special-Purpose Vehicles & Corporatization

Commercial finance by type and use, 2015-2017, developed economies and EMDEs

Source: IJGlobal



- Investors and lenders have different risk appetitive
- Almost a quarter is used to consolidate efficiencies (refinancing and M&A).
- Commercial financing is used also through corporate approach but the numbers of Project Finance also capture lending to SOE through a SPV
- Non-commercial financing includes MDBs, export credit agencies among others

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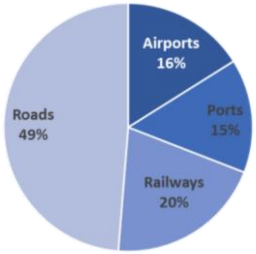
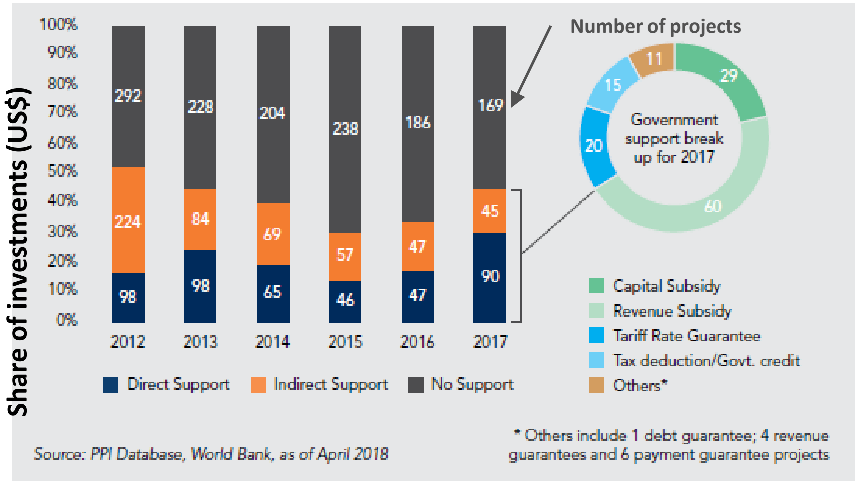
Transport PPP projects in EMDEs:
No clear trend in volume and deals

Ups and downs and more recently, less deals and larger projects (Istanbul airport, China HSR)	And viability gap financing (capital subsidies and credit enhancements) could be up to a half of the CAPEX

Road projects capture a half of Transport PPP (1994-2018)

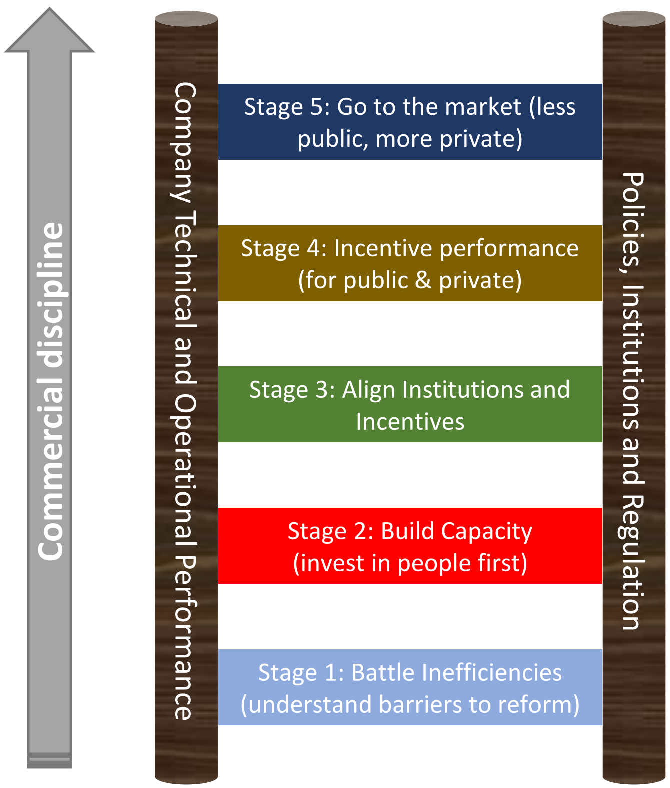


Project finance and government support in EMDEs, all infrastructure (2012-2017)



Source: PPIAF, World Bank

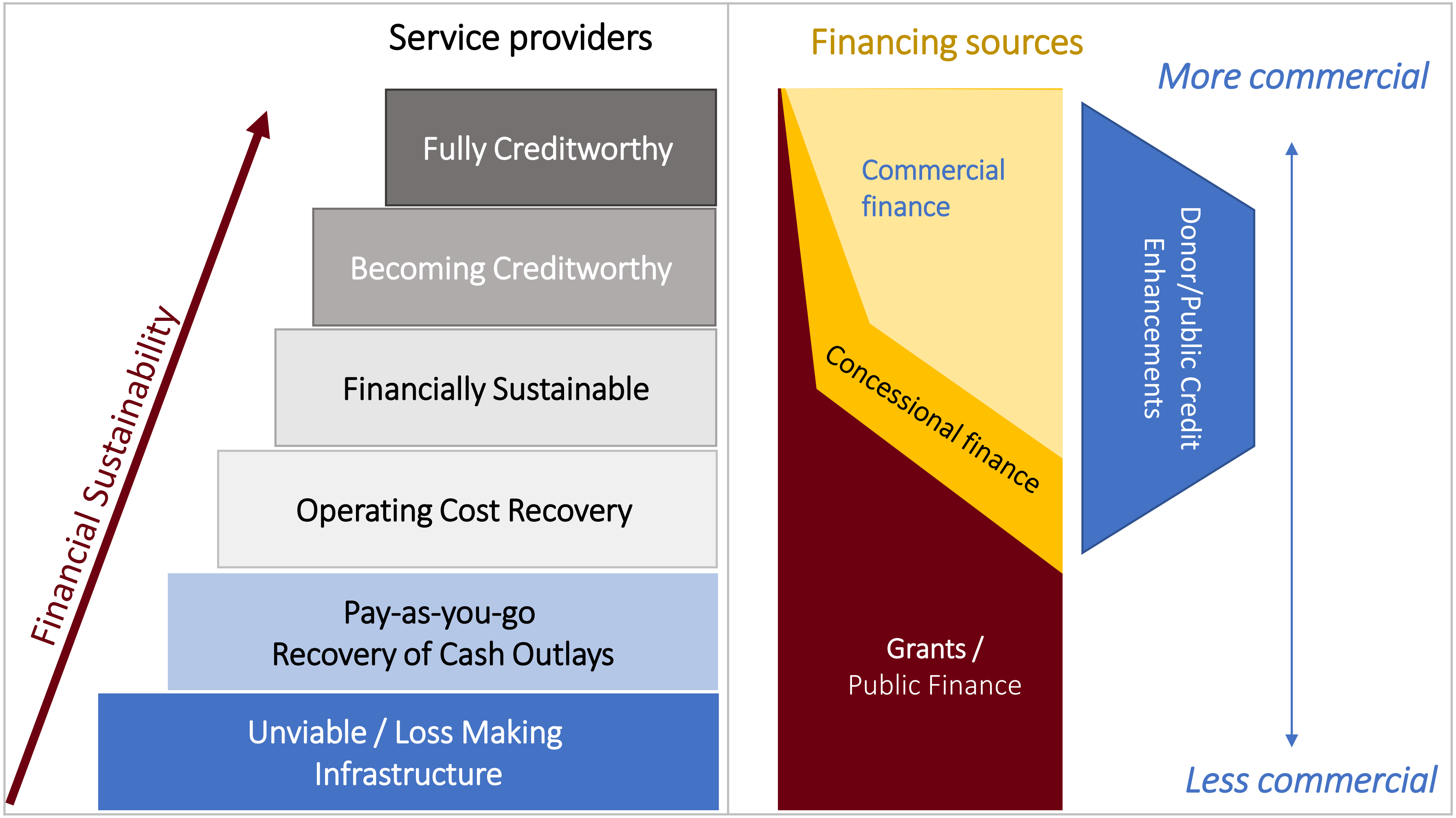
Bringing commercial financing to the next level:
Climbing the maturity ladder for SOEs



Different Subsector of Transport are at different landings – One size does not fit all

- Introduce blended finance options
- Consider more sophisticated delivery models (corporatization, PPP)
- Develop shadow credit rating system
- Achieve sector financial sustainability
- Monitor and benchmark performance
- Conduct strategic action planning
- Engage the private sector as a potential technical or financial partner
- Redirect subsidies to reach the poor
- Use performance-based contracts
- Adjust tariffs
- Leverage results-based financing
- Embed policies in the legal framework
- Abandon perverse subsidies
- Engage customers early and often
- Ring-fence utilities
- Back sector goals with consistent and transparent subsidies
- Clarify policy direction and targets
- Achieve financial viability (OCCR > 1.2)
- Reduce NRW
- Create an information base
- Build regulatory enforcement capacity
- Fully resource sector institutions
- Hire based on merit and skill
- Identify strong sector leaders and champions
- Improve metering
- Cut energy and labor costs
- Increase billing and collections
- Conduct a political economy analysis

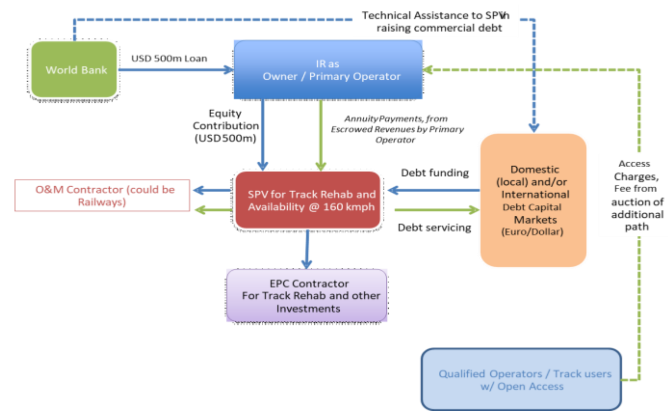
Bringing commercial financing to the next level:
Moving from vicious to virtuous, step by step



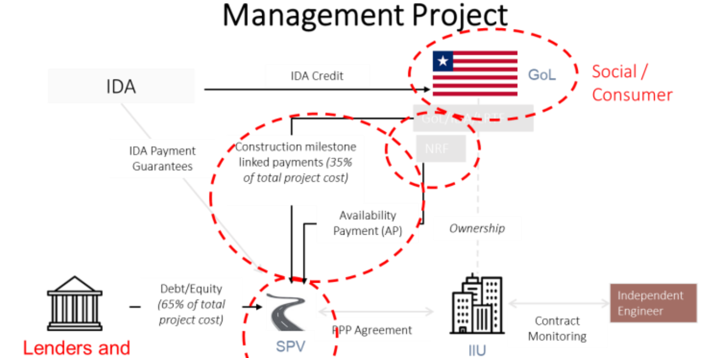
Bringing commercial financing to the next level:
Asset recycling, corporatization, and innovative financing

- The recent experience with Asset Recycling / securitization program in Australia and India shows that commercial financing options under public delivery is an attractive solution
- The World Bank is exploring these opportunities in different countries (e.g. India rails; Mexico Fonadin)
- Using credit enhancements and concessional loans/grants in difficult country contexts (Liberia PPP project)

India: Raising Commercial Debt for Public Projects



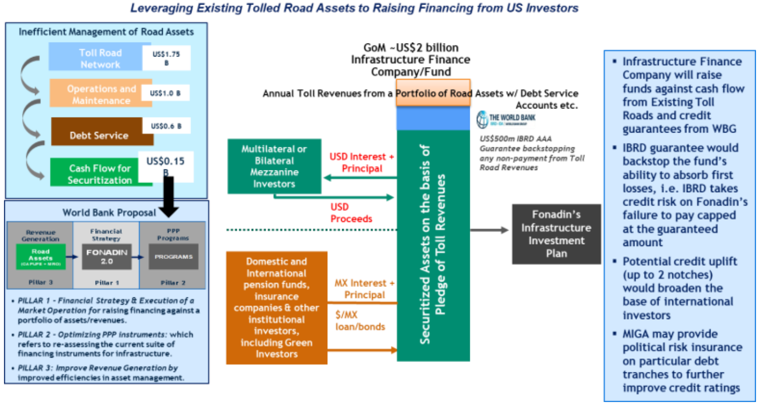
Liberia Southeastern Corridor Road Asset Management Project



* Procurement will facilitate Bidders to reach out to IFC and MIGA for potential lending and insurance products

Fonadin, a vehicle to boost infrastructure Finance in Mexico

Leveraging Existing Tolled Road Assets to Raising Financing from US Investors



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Conclusion

- Demand for transport solutions has grown rapidly and will continue to expand in the future. Rural and urban connectivity will drive the investment agenda of sustainable transport.

- This requires sustainable approaches. Decisions today can lock-in countries and cities on a sustainable or unsustainable development path.

- Financing this challenge calls for innovative solutions that combine limited ODA capacity with commercial financing. This is critical when fiscal space constrains development financing.

- Enhancing the quality of public spending, leveraging sector funding, and exploring commercial financing opportunities should be the pillars of any sustainable transport financing strategy.

- If the pillars are solid, the strategy will contribute to reduce the investment gap by bringing commercial financing to a the next level