INFRASTRUCTURE AS AN ASSET CLASS

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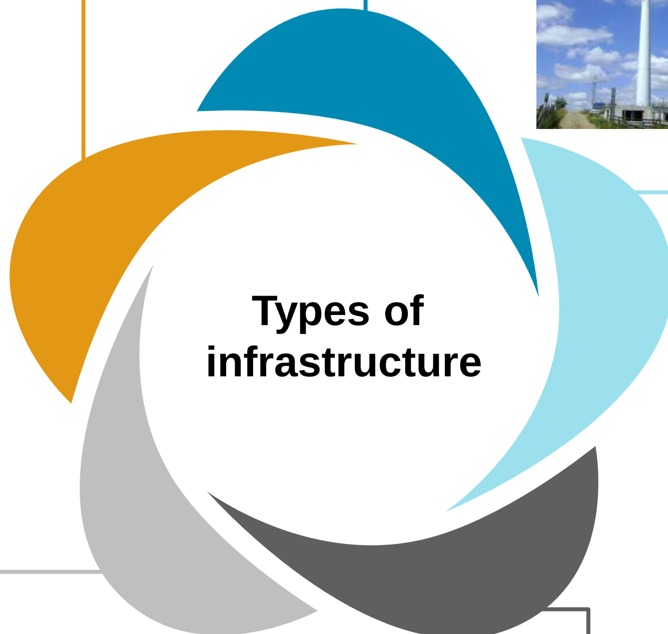
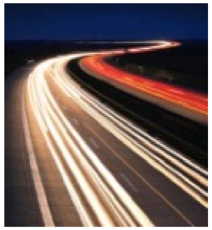
Joshua Zwick, Partner

What is infrastructure?

Permanent facilities and structures that a society requires to facilitate the orderly operation of its economy



Transportation



- Airports
- Ports/terminals
- Roads
- Bridges/tunnels
- Rail

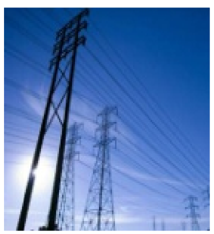
Power generation

- Renewables (e.g. solar, wind)
- Fossil fuels (e.g. coal, natural gas)
- Nuclear

Communications

- Telecommunications
- Broadcasting
- Wireless
- Satellites

Utilities



- Distribution and transport/ transmission
  - Electricity
  - Water
  - Natural gas

Social infrastructure

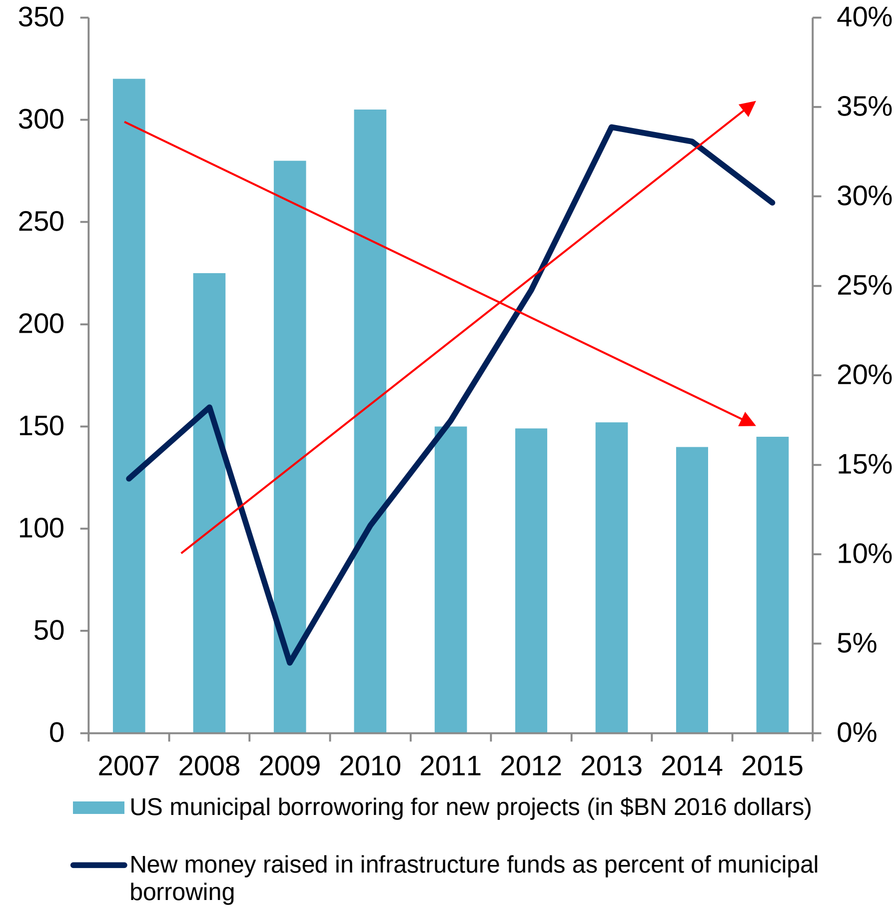
- Healthcare facilities
- Education
- Waste management

Funding infrastructure investment

In the U.S., most infrastructure has been funded with municipal bonds– but that is changing

- While extremely successful in US, muni market is insufficient to fund maintenance of existing and building of required new infrastructure in the US
  - **Fiscal tightening:** Muni bonds adds directly to government debt and increasing fiscal pressures make increased issuance challenging[1]
  - **Revenue constraints:** Lack of support for increases in user fees or taxes to support issuance
  - **Concentrated holders:** “Cross over buyers”, who cannot benefit from tax exemptions (including life insurance companies) are essentially excluded from market
- Combination of funding needs with inability of traditional muni market to fund all of it has led to rapid rise in alternative forms of financing
  - Public private partnerships (PPP)
  - Transportation Infrastructure Finance and Innovation Act (TIFIA)
  - Railroad Rehabilitation and Improvement Financing Program (RRIF)
  - Direct pay bonds (e.g., Build America Bonds)
  - Private activity bonds (PABs)

Trends in muni borrowing and fundraising in unlisted infrastructure funds[2]



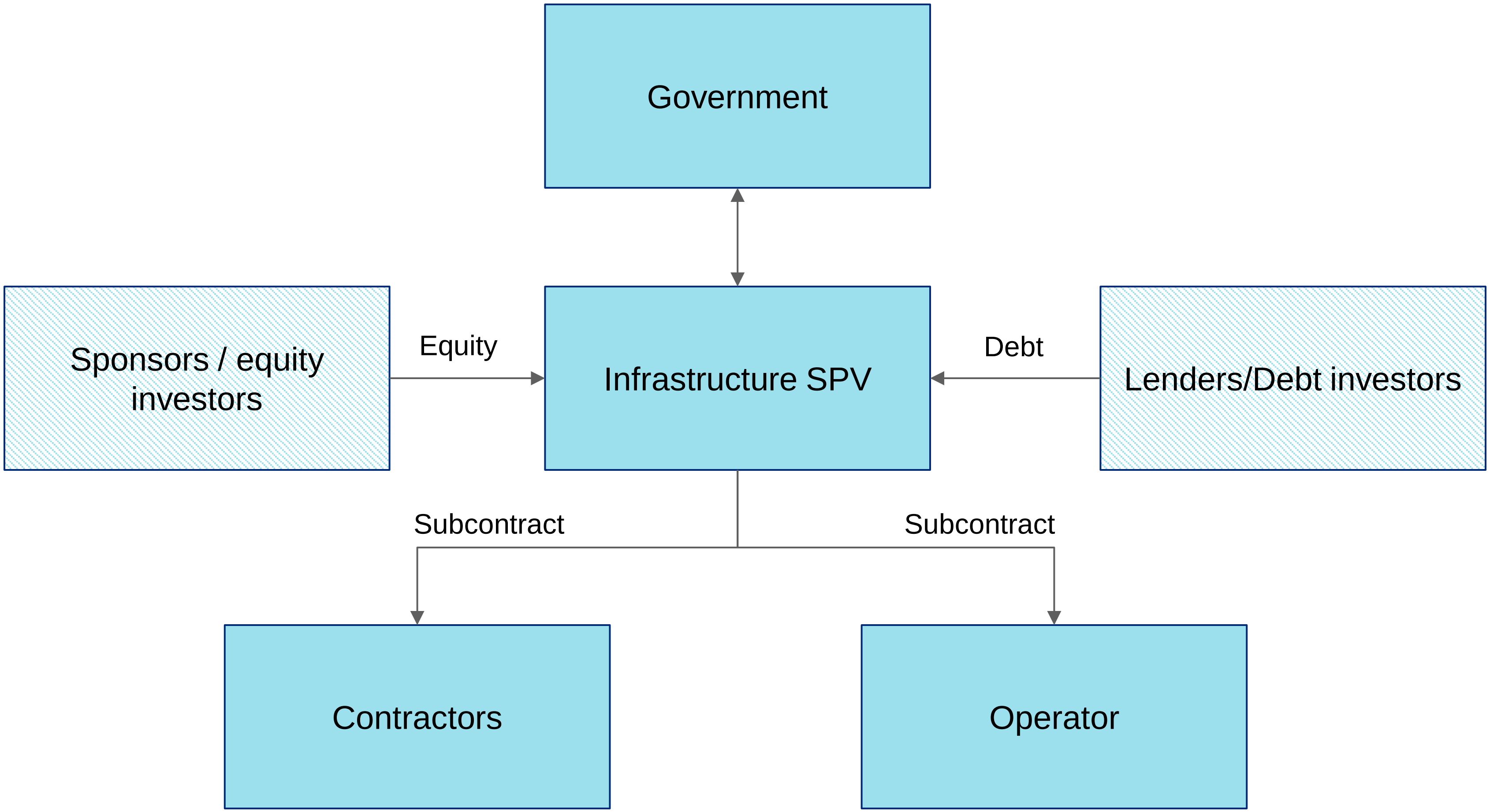
1. Wall Street Journal, August 8, 2016
2. Sources: Thomson Reuters (based on available data on July, 2016), Preqin, Oliver Wyman analysis

While the ultimate use of the funds may be similar, investing in privately financed infrastructure is a distinct type of investment

Muni financed		Privately financed
Risk driven more by fiscal health of government, less by performance of specific assets	⟷	Risk driven more by performance of specific assets/projects or strength of established infrastructure companies
Most attractive to investors that benefit from tax break	⟷	Attractive to investors that cannot benefit from muni tax break
Most AA-rated	⟷	When rated, most A-/BBB
Diverse market, but not idiosyncratic	⟷	Idiosyncratic market, but not as diverse
Institutional access to market through direct holdings	⟷	Institutional access to market through many different channels

Typical infrastructure project involves many parties

Insurers can be debt or equity investors depending on their particular risk, return and liability management objectives



Recap: Why infrastructure investment for insurers?

- **Long-duration** make them an excellent ALM match for insurers' long-dated liabilities
- **Relatively illiquid** investments which insurers are naturally well-suited to hold given stable funding sources
- **Stable and secure cashflows** due to regulatory protections as well as monopolistic or quasi-monopolistic market positioning
- **Diversifying** investments driven by distinct risk drivers producing low observed correlations with other asset classes
- **Attractive risk-adjusted returns** compared to public corporates and equity investments

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