

Infrastructure

City of Allentown

Presented by

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Infrastructure Overview

The “backbone” of an economy

The physical assets and networks necessary to operate a society – a prerequisite for sustainable economic, industrial, and social growth & development

Common attributes of infrastructure assets:

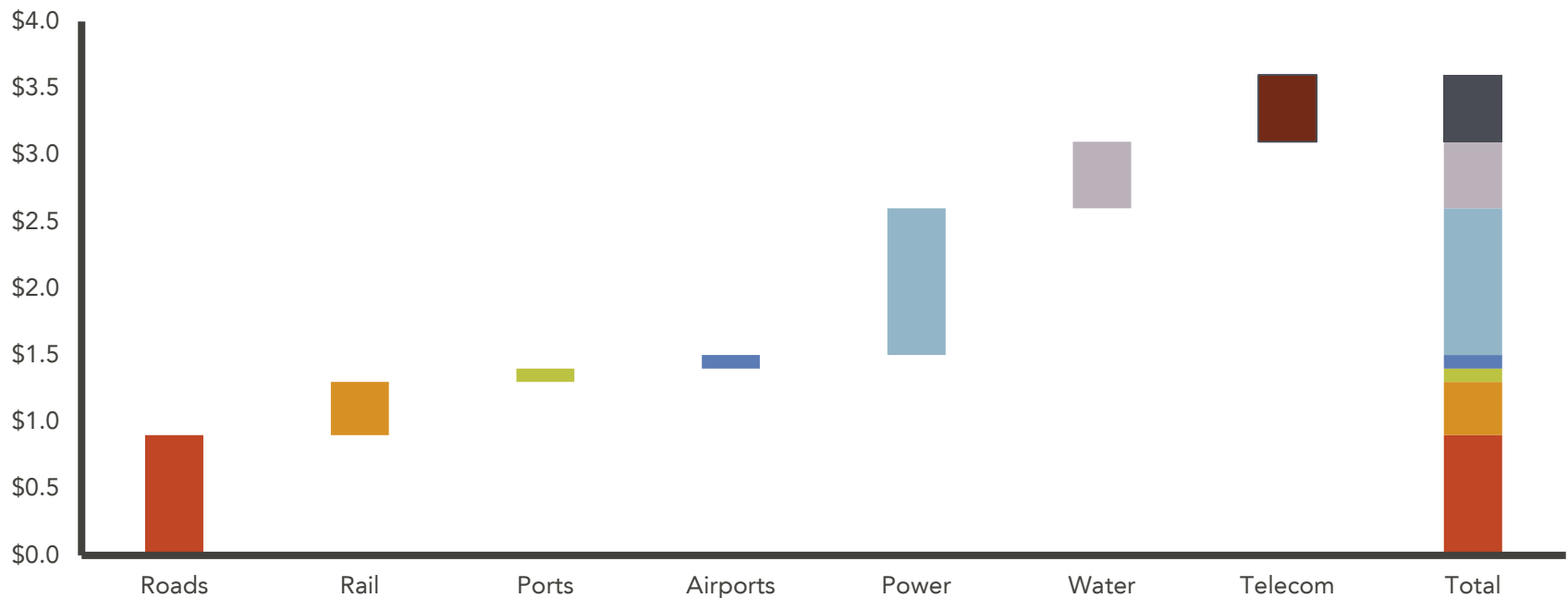
- Essential service to society
- Monopoly/quasi-monopoly
- Regulatory oversight
- Stable and predictable cash flows



Need for infrastructure investments

The long term need for infrastructure investments globally continues to drive demand





▣ Average Annual Infrastructure Need (\$ Trillions)



Source: McKinsey Global Institute. Data is based on available information as of February 29, 2020.

Infrastructure sectors

Infrastructure assets are commonly defined by their physical characteristics and grouped into two main categories: economic and social infrastructure

Economic Infrastructure			Social Infrastructure
Transportation	Energy & Utility	Communications	
Airports Bridges Rail Roads Seaports Tunnels	Electricity Gas Oil Pipelines Water/wastewater Solar/wind	Broadcast towers Cable networks Mobile towers Satellite networks	Municipalities Universities Schools Hospitals
			

Infrastructure characteristics

Economic Infrastructure Assets

Throughput assets

- Derive income per usage
- Prices determined by operator/owner

Ex: roads, airports, rail



Regulated assets

- Derive income per usage
- Prices determined by regulatory body
- Asset owner typically has some pricing power protection

Ex: utilities, water, gas



Contracted assets

- Operated by a contract between operator and entity
- Contract determines pricing system and identifiable revenues

Ex: schools, satellite networks, broadcast towers



Infrastructure Maturity States

Greenfield

New construction or development

Brownfield

Existing, established asset

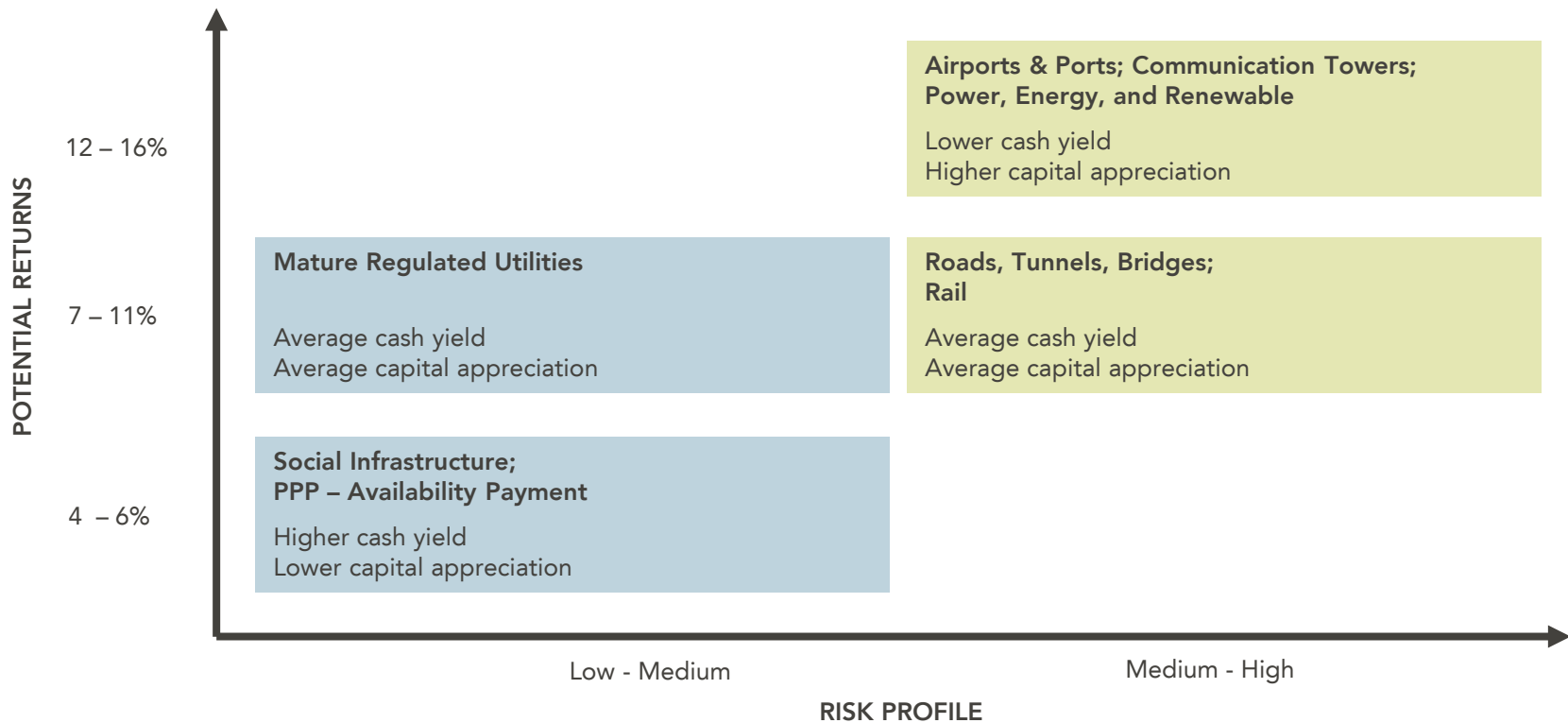
Rehabilitated Brownfield

Redevelopment



Performance expectations

Illustrative unlisted infrastructure return profiles

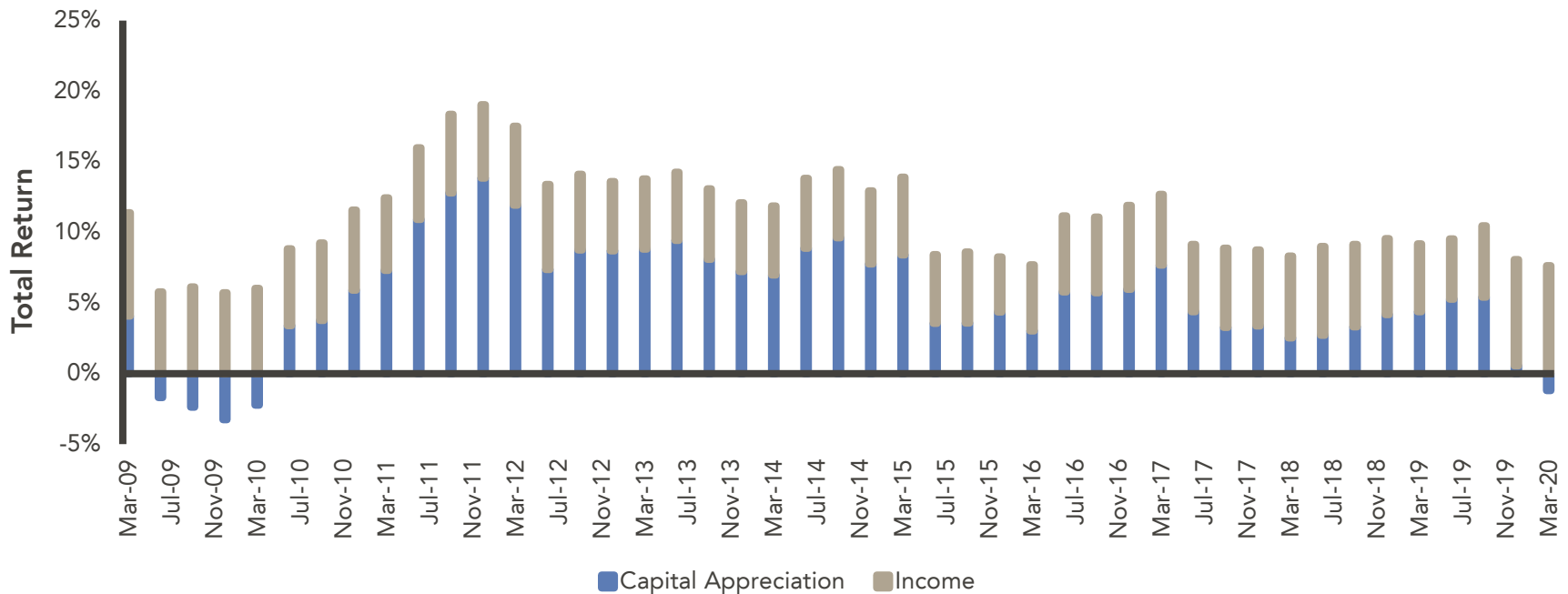


Source: RBC Global Asset Management, "The Global Infrastructure Investment Opportunity"

Sources of global infrastructure returns

Return from income is expected to remain high in 2020, similar to the trend seen in the past decade.

▣ Rolling 4-quarter returns from income and capital appreciation (1Q 2009 – 1Q 2020)



Source: MSCI. Infrastructure returns represented by the “low risk” category of the MSCI Global Quarterly Infrastructure Asset Index. Data show rolling 1-year returns from income and capital appreciation. The chart shows the full index history, beginning in the first quarter of 2009.

Infrastructure benefits vs. risks

Infrastructure Benefits

- Growing opportunity set
- Stable predictable cash flows
- Potential hedge against inflation
- Strong and consistent performance
- Low correlation to other asset classes
- Low correlation to other asset classes

Infrastructure Risks

Fund Level:

- Concentration
- Currency
- Liquidity

System Level:

- Demand
- Political
- Regulatory

Unsystematic

- Disaster
- Environmental
- Obsolescence

Public vs. Private Infrastructure

How to Invest in Infrastructure

Institutional investors can access infrastructure through a variety of investment options

Private Vehicles/Unlisted Funds

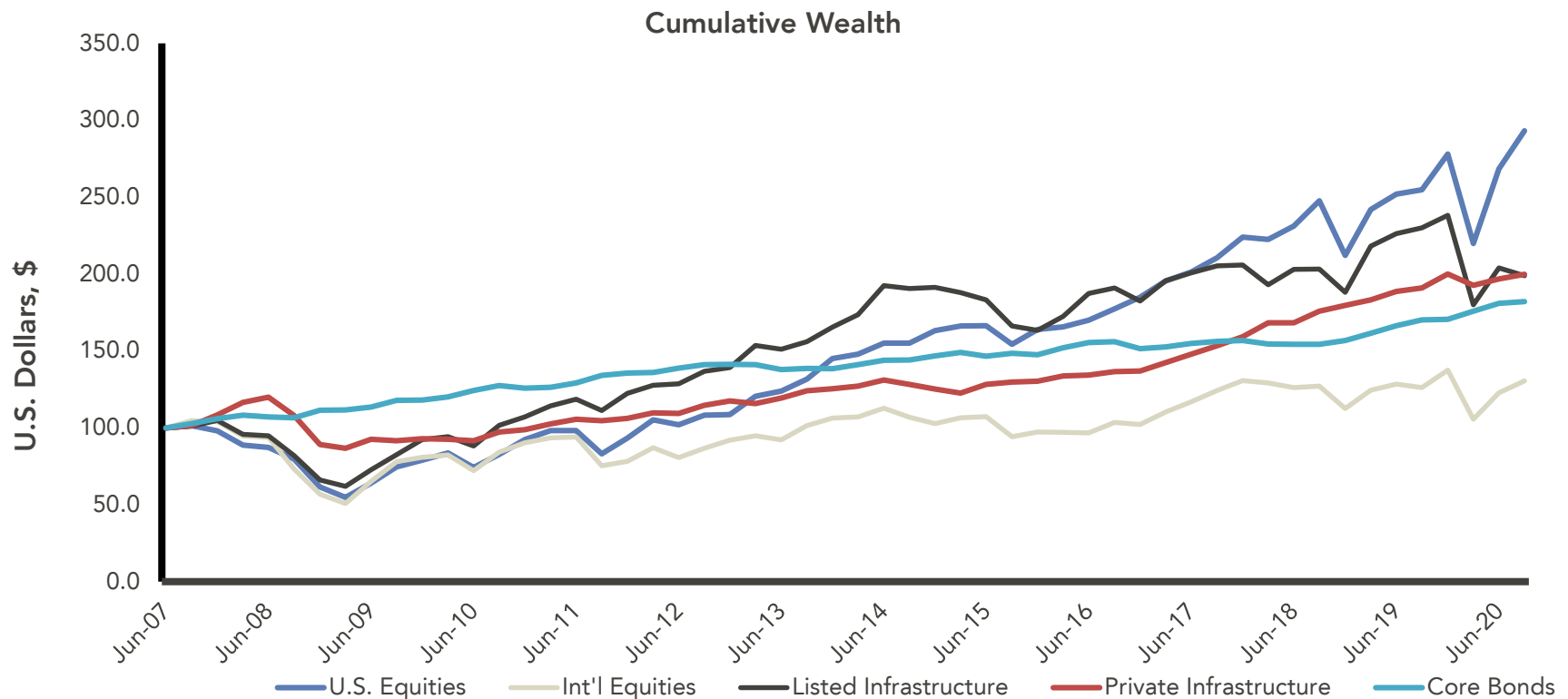
- Open-end fund
- Closed-end fund

Public Vehicles/Listed Funds

- Open-end fund
- Listed closed-end fund

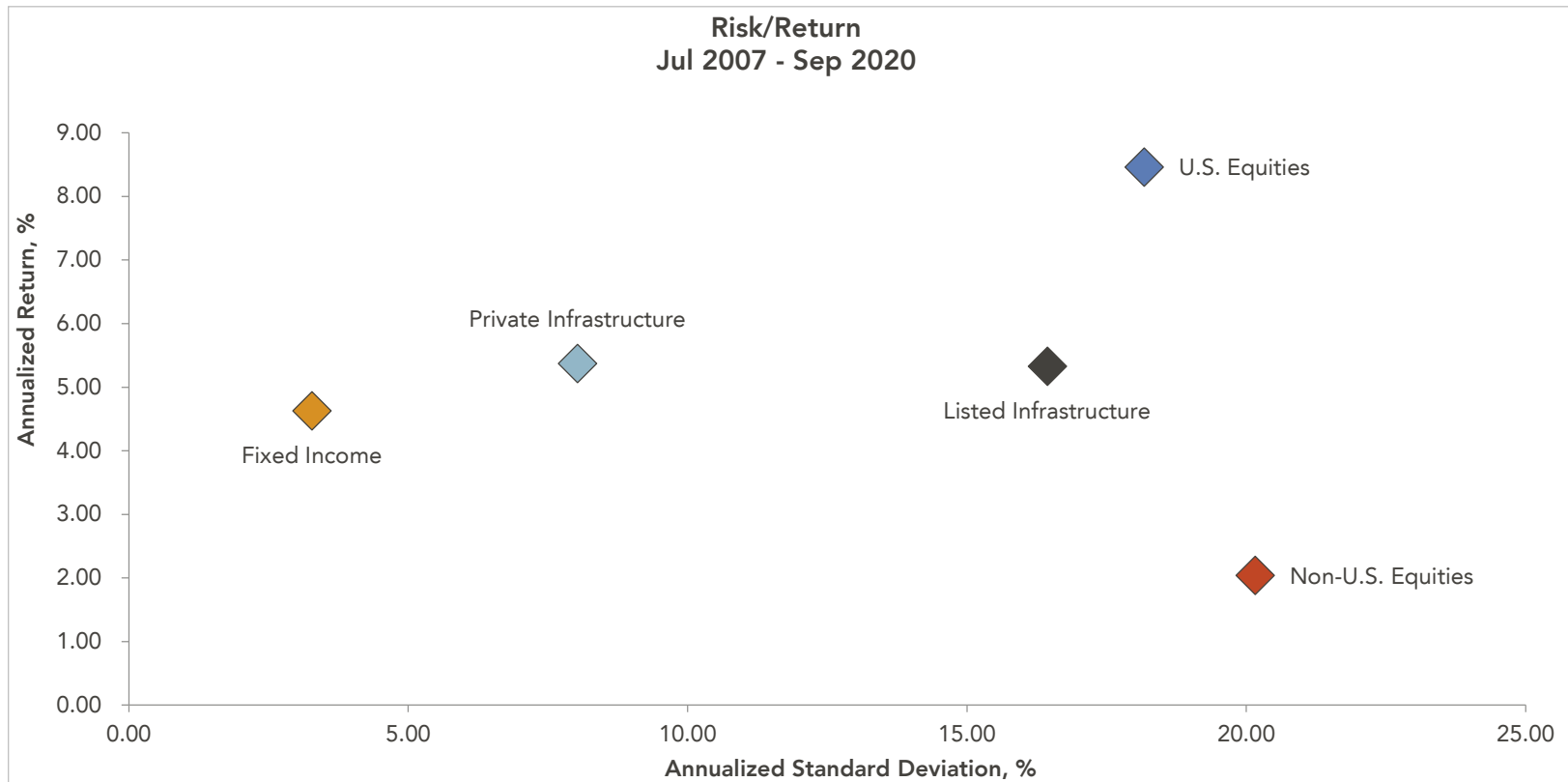
Returns

Cumulative wealth, common period July 2007 – September 2020



Source: Markov Processes International. Listed Infrastructure represented by Dow Jones Brookfield Global Infrastructure Index; U.S. Equities represented by Russell 3000 Index; Int'l Equities represented by MSCI ACWI ex-U.S.; Core Bonds represented by Barclays Aggregate; Private Infrastructure represented by the equal-weighted returns of the two largest open-ended core infrastructure funds since the first inception date of the two (July 2007).

Risk/return characteristics



Source: Markov Processes International. Listed Infrastructure represented by Dow Jones Brookfield Global Infrastructure Index; U.S. Equities represented by Russell 3000 Index; Int'l Equities represented by MSCI ACWI ex-U.S.; Core Bonds represented by Barclays Aggregate; Private Infrastructure represented by the equal-weighted returns of the two largest open-ended core infrastructure funds since the first inception date of the two (July 2007).

Correlations

The asset class also provides key diversification relative to traditional asset classes

(common period 3Q07-2Q20)

	Private Infrastructure*	Public Infrastructure	U.S. Equities	Non-U.S. Equities	Fixed Income	Core Real Estate
Private Infrastructure*	1.00					
Public Infrastructure	0.51	1.00				
U.S. Equities	0.47	0.85	1.00			
Non-U.S. Equities	0.60	0.85	0.91	1.00		
Fixed Income	-0.15	0.04	-0.21	-0.05	1.00	
Core Real Estate	0.45	0.13	0.16	0.06	-0.22	1.00

Exhibit uses quarterly data. *Private Infrastructure represents the equal-weighted returns of the two largest open-ended core infrastructure funds since the first inception date of the two (July 2007).

Infrastructure Unlisted vs. Listed

Unlisted (Private) Infrastructure

Advantages

- Direct investing
- Control of asset more likely
- Diversification

Disadvantages

- Limited liquidity
- Potential concentration
- High leverage

Listed (Public) Infrastructure

Advantages

- Transparent
- Daily Liquid

Disadvantages

- Indirect exposure
- Market volatility
- Less diversification

Direct vs. Indirect Investing

➤ Q. Why is private considered direct investing and public is indirect? Is it strictly how assets are held or is it the type of assets?

- ✓ Private infrastructure funds are direct investments in infrastructure assets.
The capital is pooled to acquire the assets and the revenue generated from the assets is returned to the investors.
- ✓ Public infrastructure mutual funds, separate accounts, and ETFs invest in the stocks of public companies directly related to infrastructure assets (e.g., telecommunications, energy, renewables, etc.)

Leverage

➤ Q. How much leverage is there in private funds? Public?

- ✓ Private funds: leverage depends on the investment style (core, core plus, opportunistic) and fund type (closed vs. open end). Some Open-End core strategies, have anywhere from 30 – 60% operating leverage.
- ✓ Public funds: generally, the funds do not use leverage. However, each company in the portfolio may use leverage.

Liquidity

➤ Q. Does public offer daily liquidity? Private?

- ✓ Private does not have daily liquidity, because you're investing directly in the non-liquid assets. When redemptions are requested, they are typically reviewed and executed quarterly, depending on the current capital queue, current level of dry power, and the current opportunity set.
- ✓ Public offers daily liquidity

Key Differences

➤ Q. Are there any other key differences between public and private?

- ✓ Private are often more sensitive to regulatory risk, e.g., a new carbon related regulation implemented by a state would likely have a greater impact on the value of an asset vs. an entire company.
- ✓ With public infrastructure investing there is the possibility of overlap with existing equity portfolios.
- ✓ Private infrastructure reporting often lags.
- ✓ The entry queue for private core infrastructure assets is about 6-12 months and likely to increase as demand for these assets increases.
- ✓ The yield on private infrastructure is very high right now, and currently above that of the BofA High Yield index.

Preferences

- Q. Why does Marquette prefer private for the funds large enough to invest in private?
 - ✓ Diversification. The DJB, listed infrastructure index, is an investment in public equities, and thus highly correlated to the performance of broader equity markets (S&P 500, Global MSCI). An investment in unlisted products is expected to have lower correlation to equity markets.
 - ✓ One of the primary reasons for investing in private infrastructure is that these investments enhance the overall risk-adjusted return profile of an investment portfolio. Many of the services provided by infrastructure assets are essential, e.g., transportation, utilities, data, and are less sensitive to swings in economic activity. When allocating to public infrastructure, this benefit is partially lost.

Disclosures

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