

The Real Deal:

Options for implementing real assets in DC plans

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Franklin Real Asset Advisors
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Agenda

Defining Real Assets

Unique Characteristics of Real Assets

Barriers to Real Asset Investing for the DC Market

Other Factors to Consider

Risk and Return

Why Real Assets? Why now?

Real Assets

Commercial Real Estate

Office



Retail



Social Infrastructure



Industrial



Multi-Family

Real Assets

Commercial Real Estate



Office



Industrial



Retail



Multi-Family



Social
Infrastructure

Real Assets

Infrastructure

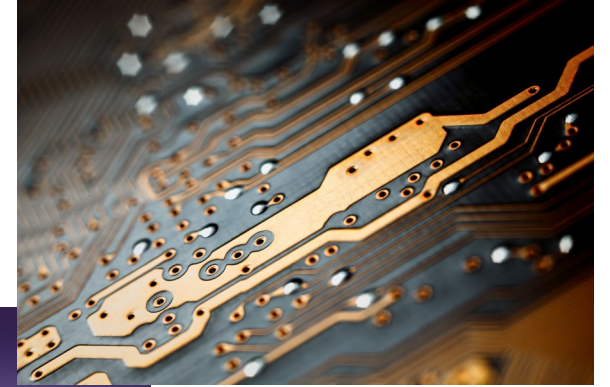
Transport



Energy



Digital Infrastructure



Utilities



Renewables

Real Assets

Commercial Real Estate



Office



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Social Infrastructure

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Transport



Utilities



Energy



Renewables



Digital Infrastructure

Real Assets

Natural Resources

Timberland



Commodities



Agricultural Land



Intellectual Property

Real Assets

Commercial Real Estate



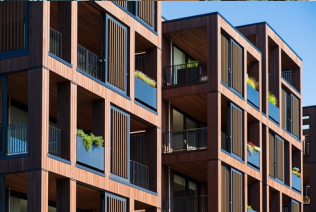
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Multi-Family



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Transport



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Renewables



Digital Infrastructure

Natural Resources



Timberland



Agricultural Land

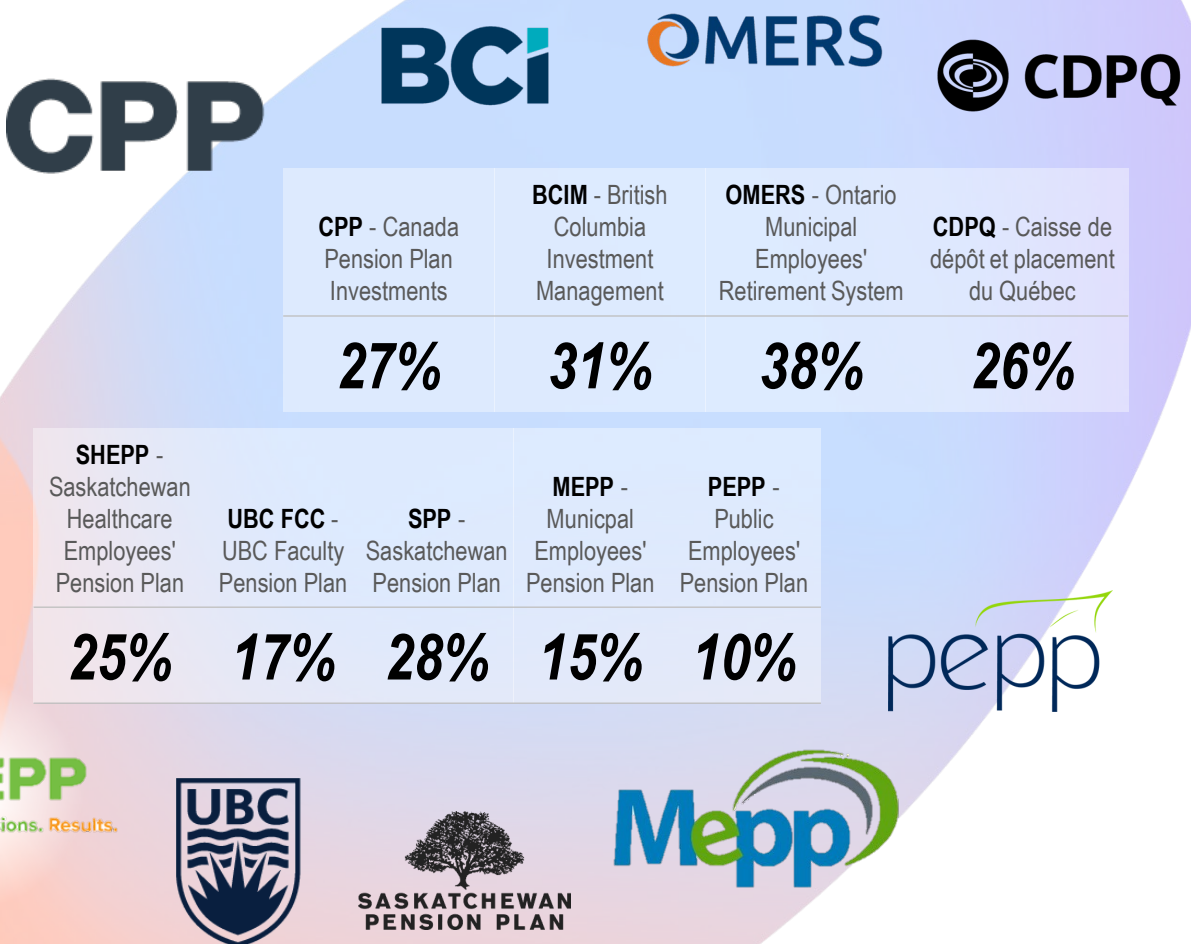
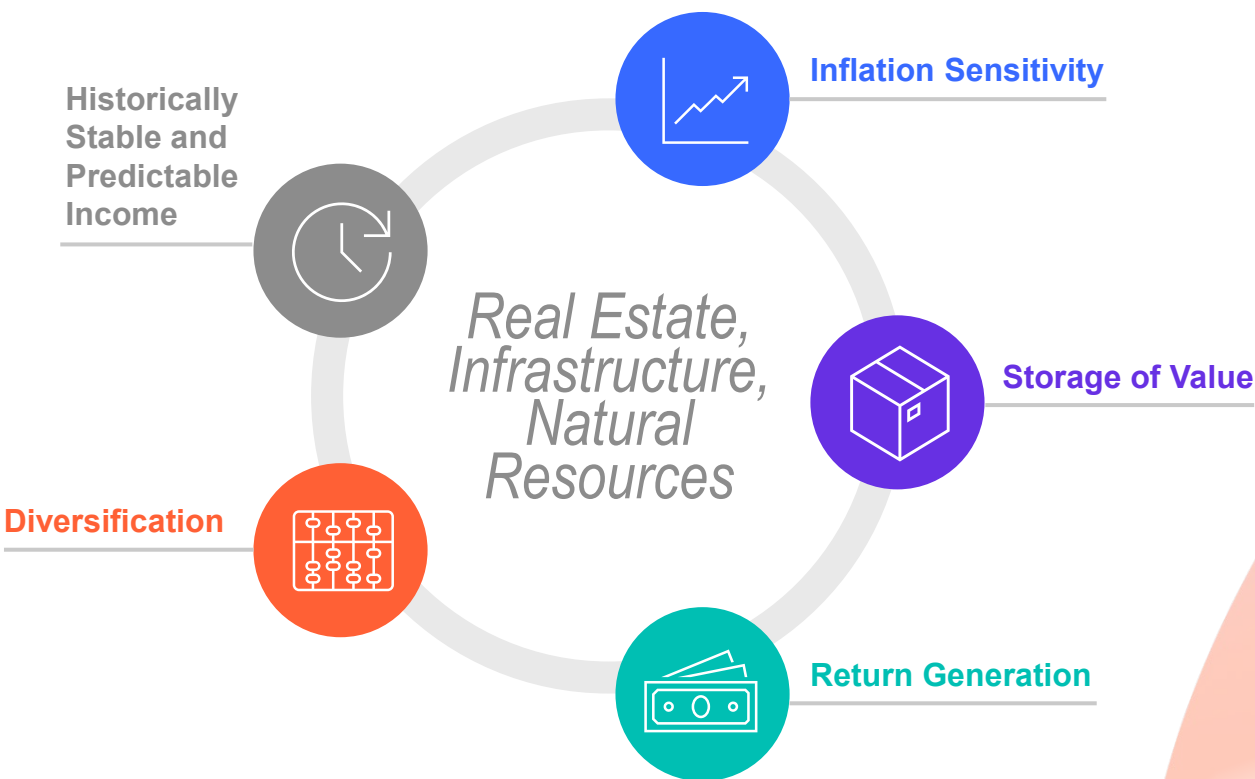


Commodities



Intellectual Property

Who's investing in Real Assets?



Questions to ask?



Risk Tolerances?

- Active or Passive?
- How to benchmark performance?
- How much risk is enough?
- Core, Value-Add, or Opportunistic?
- Broad Exposure, Sector Specific or Thematic?

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- ## How much?
- Adding a stand-alone real asset fund offers plan members choice.
 - Should not be intended to be a plan member's only investment.
 - Place limits on stand-alone.

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Thematic?

Canadian or Global?

- Canadian market is narrow, oligopolistic.
- Regulations and Tax challenges
- Canadian equity market has high exposure to some real asset companies, but excludes important sectors.

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Sustainability?

- Significant opportunities and challenges in climate change mitigation and adaption.
- Private markets imply a higher level of control, and responsibility.
- Data collection is inconsistent.
- “Green Washing” is a problem.

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Removing barriers to investing in real assets



Barriers to Real Asset Investing

Minimum Transaction Size

Time from trade to implantation

Daily Liquidity

NAV Setting

Ability to rebalance

Tax and Jurisdictional Complexity

Hidden Costs

Long-Run Return Expectations

Long-Run Volatility Expectations

Diversification from Equity Markets

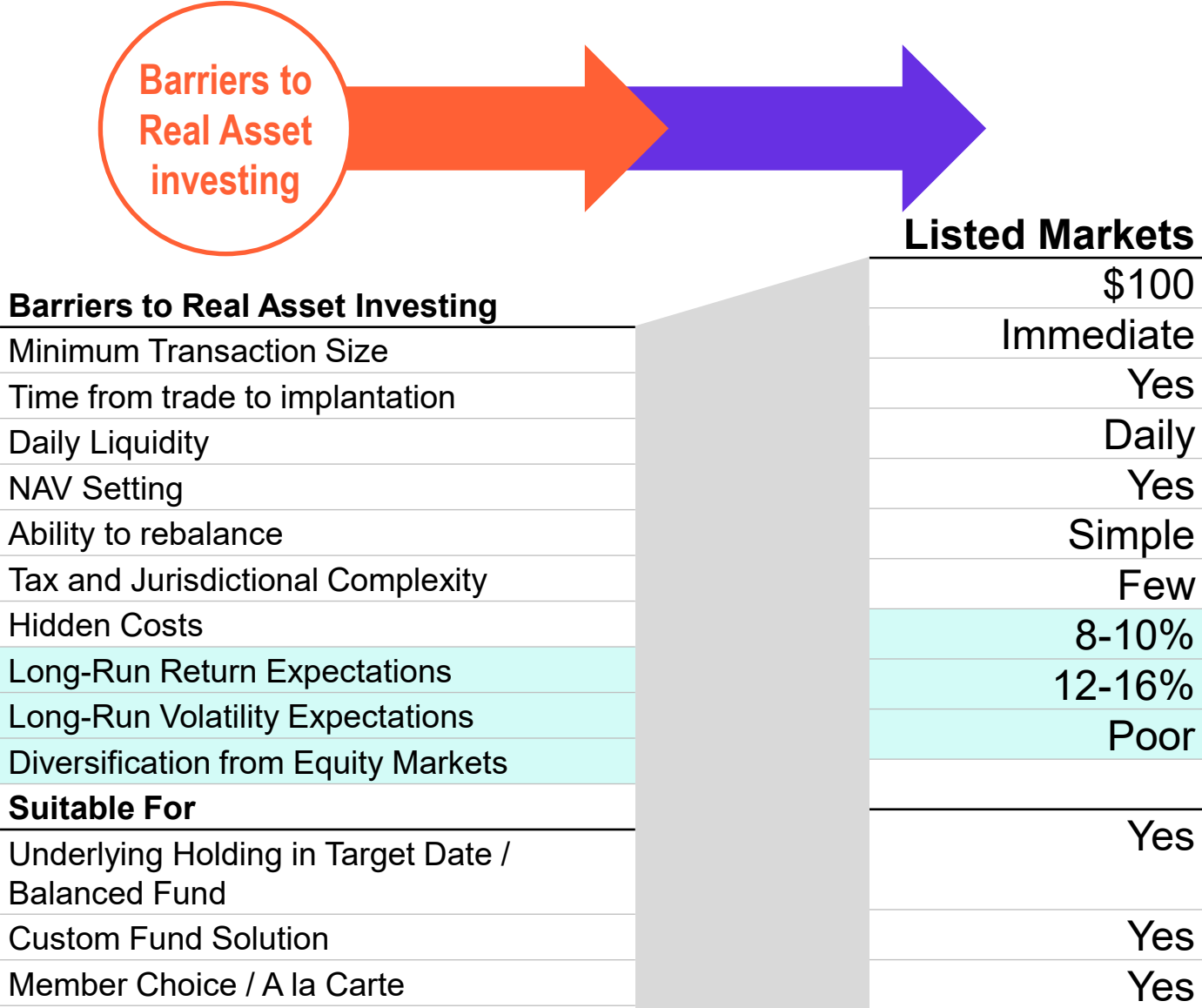
Suitable For

Underlying Holding in Target Date /
Balanced Fund

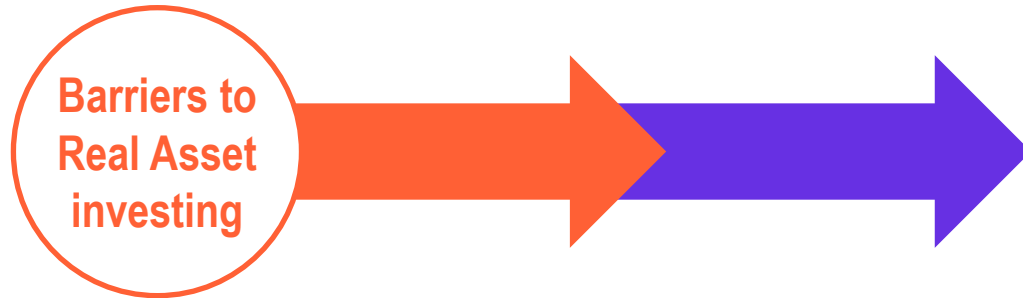
Custom Fund Solution

Member Choice / A la Carte

Removing barriers to investing in real assets

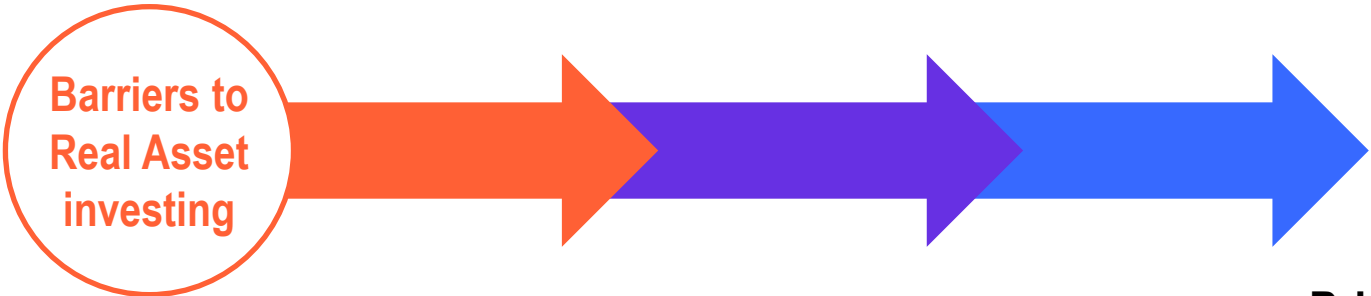


Removing barriers to investing in real assets



Barriers to Real Asset Investing	Listed Markets
Minimum Transaction Size	\$100
Time from trade to implantation	Immediate
Daily Liquidity	Yes
NAV Setting	Daily
Ability to rebalance	Yes
Tax and Jurisdictional Complexity	Simple
Hidden Costs	Few
Long-Run Return Expectations	8-10%
Long-Run Volatility Expectations	12-16%
Diversification from Equity Markets	Poor
Suitable For	
Underlying Holding in Target Date / Balanced Fund	Yes
Custom Fund Solution	Yes
Member Choice / A la Carte	Yes

Removing barriers to investing in real assets

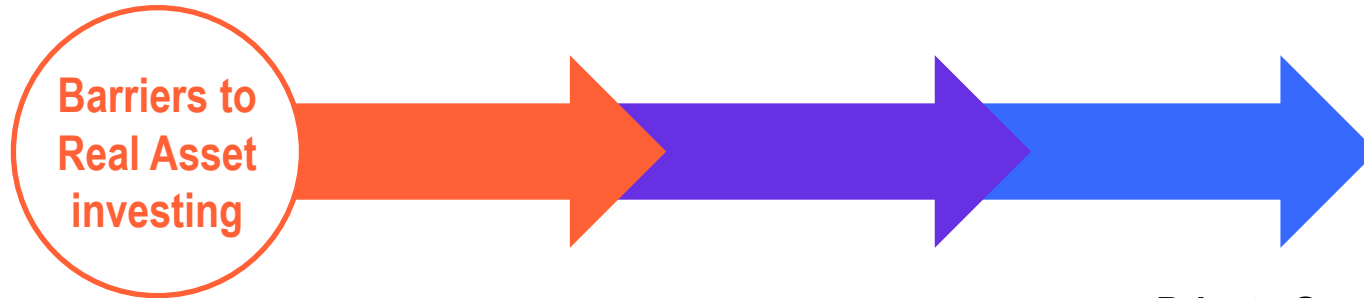


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Private Open End Funds

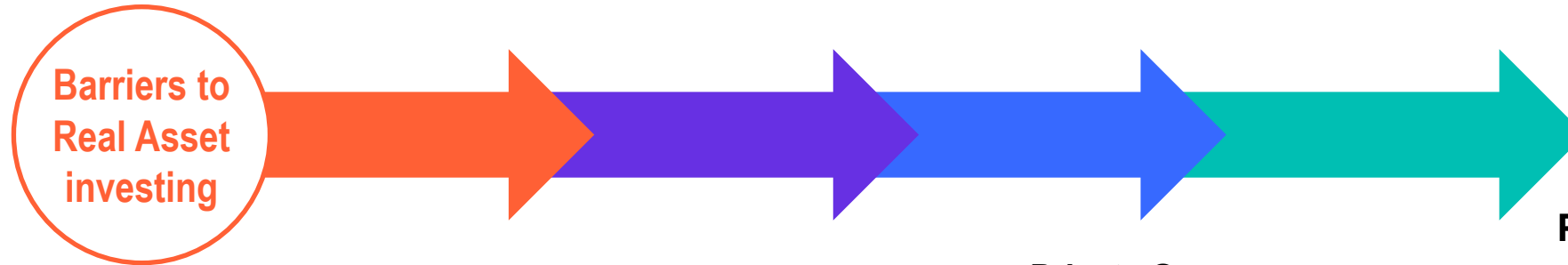
\$1,000,000
3 + Months
No
Monthly or Quarterly
Delayed
Complex
Moderate
8-10%
4-6%
Strong
Yes
No
No

Removing barriers to investing in real assets



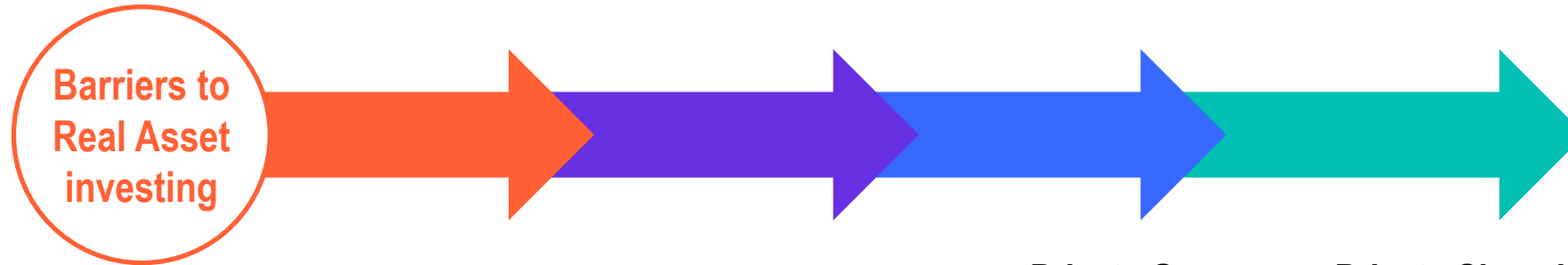
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Removing barriers to investing in real assets



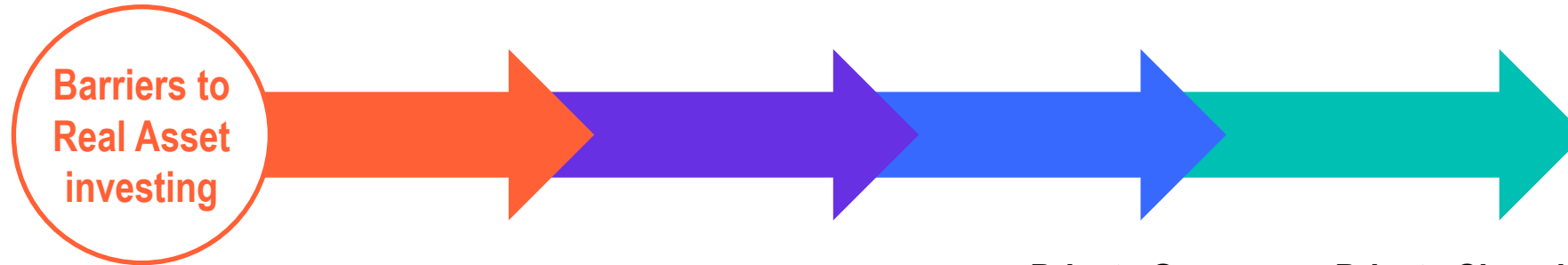
Barriers to Real Asset Investing	Listed Markets	Private Open End Funds	Private Closed-End Funds
Minimum Transaction Size	\$100	\$1,000,000	\$5,000,000
Time from trade to implantation	Immediate	3 + Months	1-3 years
Daily Liquidity	Yes	No	No
NAV Setting	Daily	Monthly or Quarterly	Quarterly
Ability to rebalance	Yes	Delayed	Impossible
Tax and Jurisdictional Complexity	Simple	Complex	Very Complex
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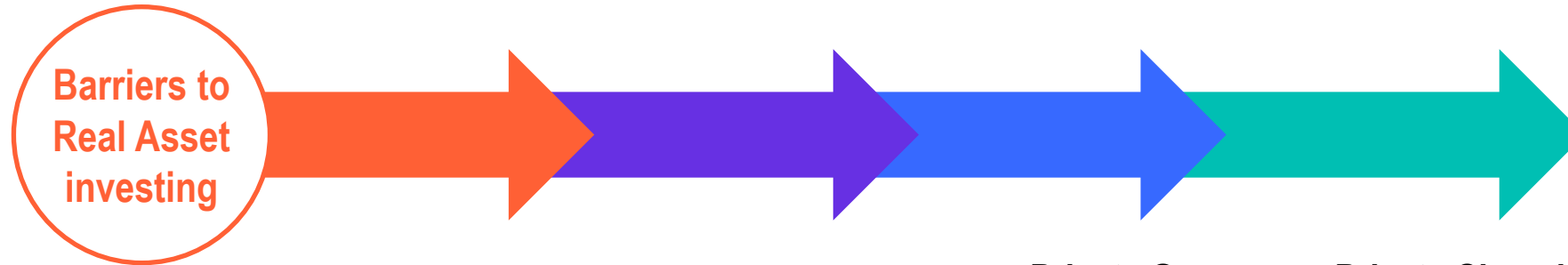
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Removing barriers to investing in real assets



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Minimum Transaction Size	\$100	\$1,000,000	\$5,000,000	\$100
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NAV Setting	Daily	Monthly or Quarterly	Quarterly	Daily
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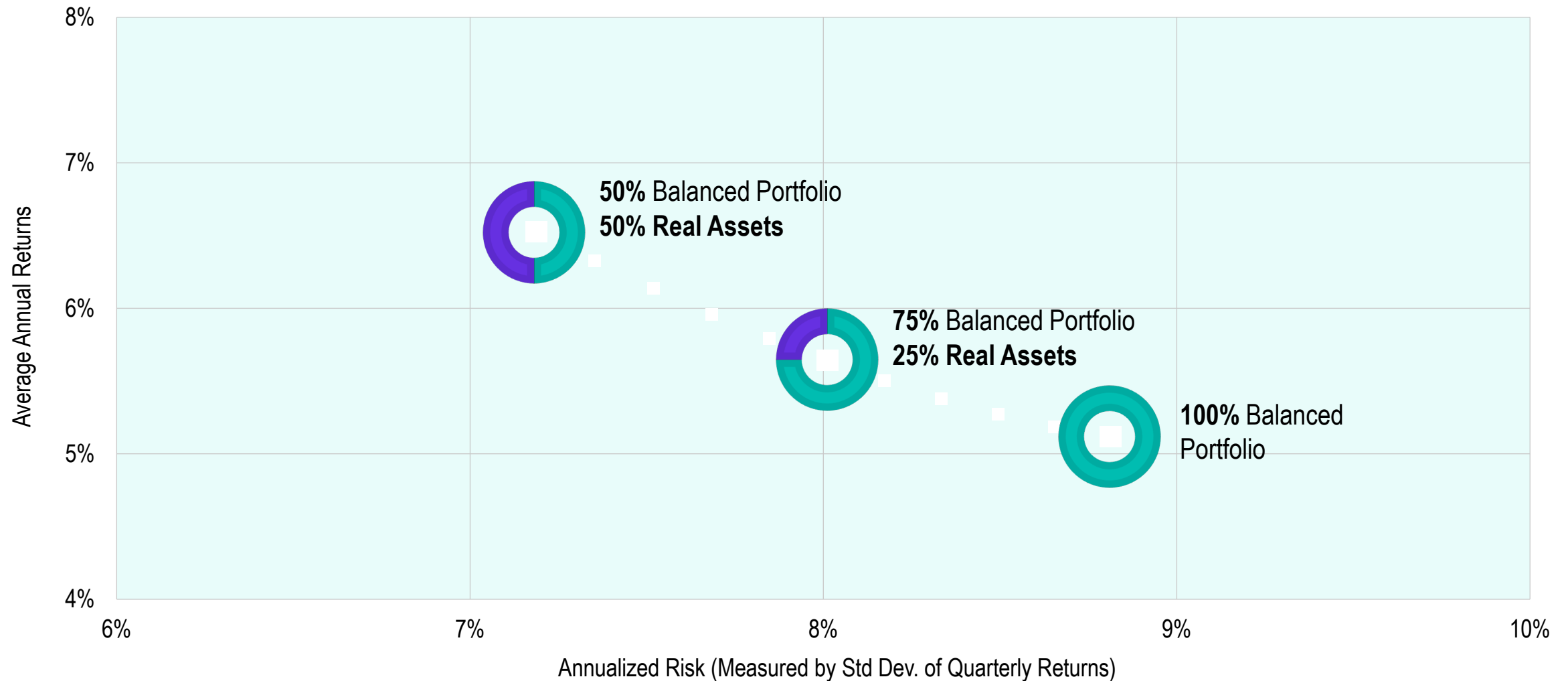
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Why Real Assets? Why now?

Risk reduction through additional portfolio diversification



Source: Franklin Templeton and Morningstar. See www.franklintempletondatasources.com for additional data provider information. For illustrative and discussion purposes only.

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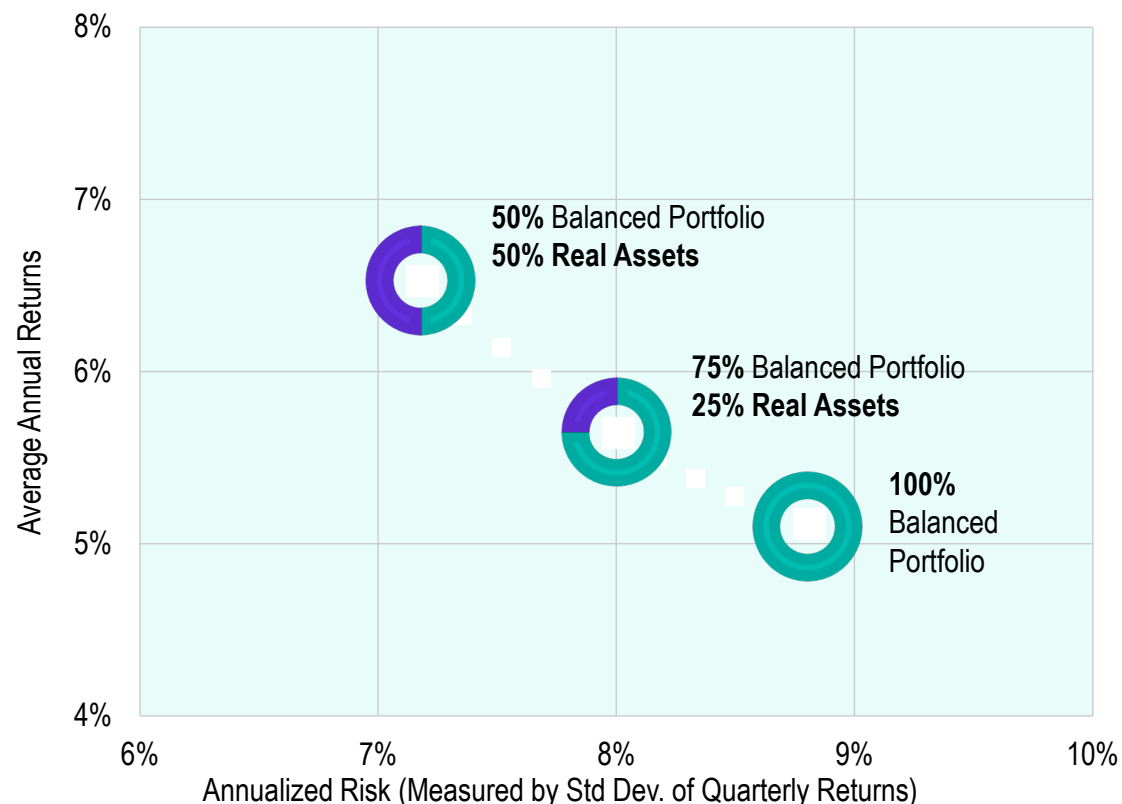
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Why Real Assets? Why now?

Risk reduction through additional portfolio diversification

Real assets may enhance a balanced portfolio of equity and fixed income investments

For the 10-Year Period Ended December 31, 2021



Calculation methodology:

Balanced Portfolio risk and return characteristics are approximated using Morningstar Canada: Global Neutral Balanced Category averages.

In the absence of an appropriate global real asset benchmark in Canada, **Real Assets** risk and return characteristics are approximated by the following blend of indices:

INREV GREFI Asia Pacific Open-end	20.0%
INREV GREFI Europe Open-end	20.0%
INREV GREFI US Open End	20.0%
FTSE Epra/ Nareit Developed Index	17.5%
S&P Global Infrastructure - GRTR Index	17.5%
FTSE Canada 91 Day TBill Index	5.0%







All calculations are based on quarterly returns in Canadian dollars and assume distributions are reinvested. Rebalanced quarterly.

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Characteristics of Real Assets

Real Estate	Infrastructure			Real Resources	
Commercial	Transportation	Energy	Water	Agriculture	Timber
					

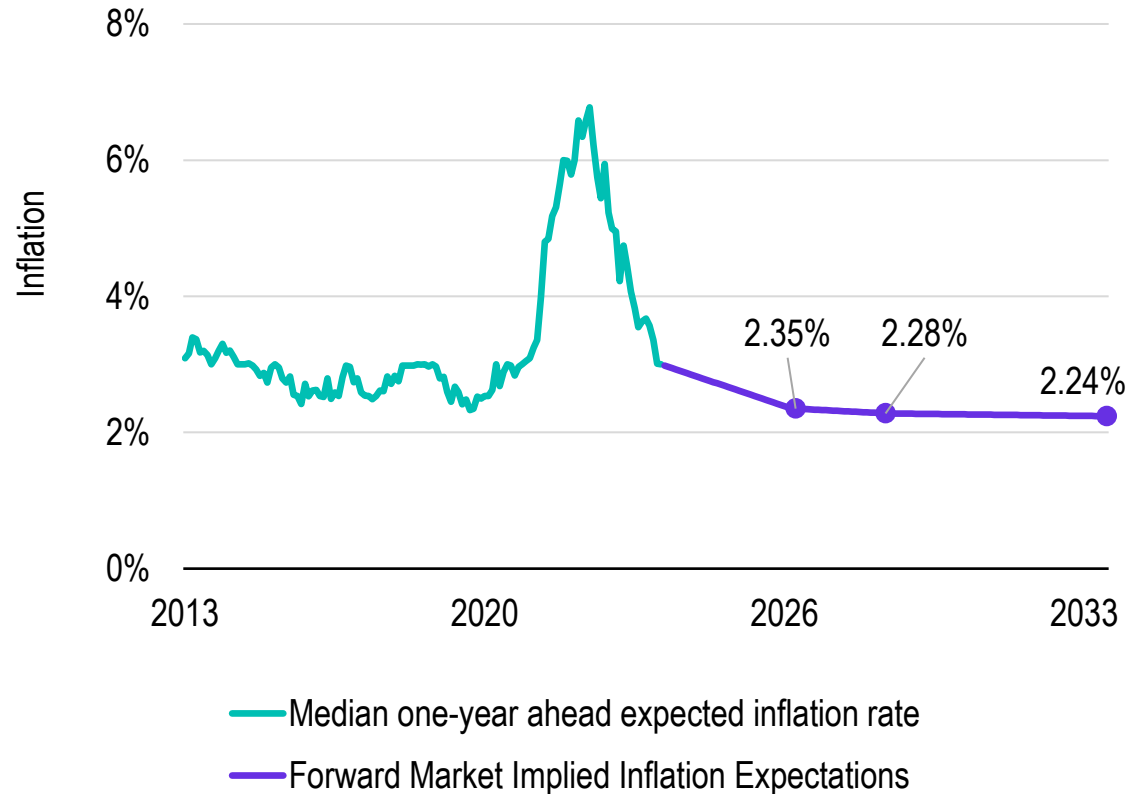
Asset Class	Income	Volatility	Liquidity	Inflation Hedge
Private Real Estate	Medium	Low	Medium	Medium
Private Infrastructure	Medium	Low	Low	Medium
Public Real Estate	Medium	Medium	High	Low
Public Infrastructure	Medium	Medium	High	Low
Private Timberland	Medium	Low	Low	High
Private Agriculture	Medium	Low	Low	High

Source: Mercer.

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Why Real Assets? Why now?

Median expected inflation rate



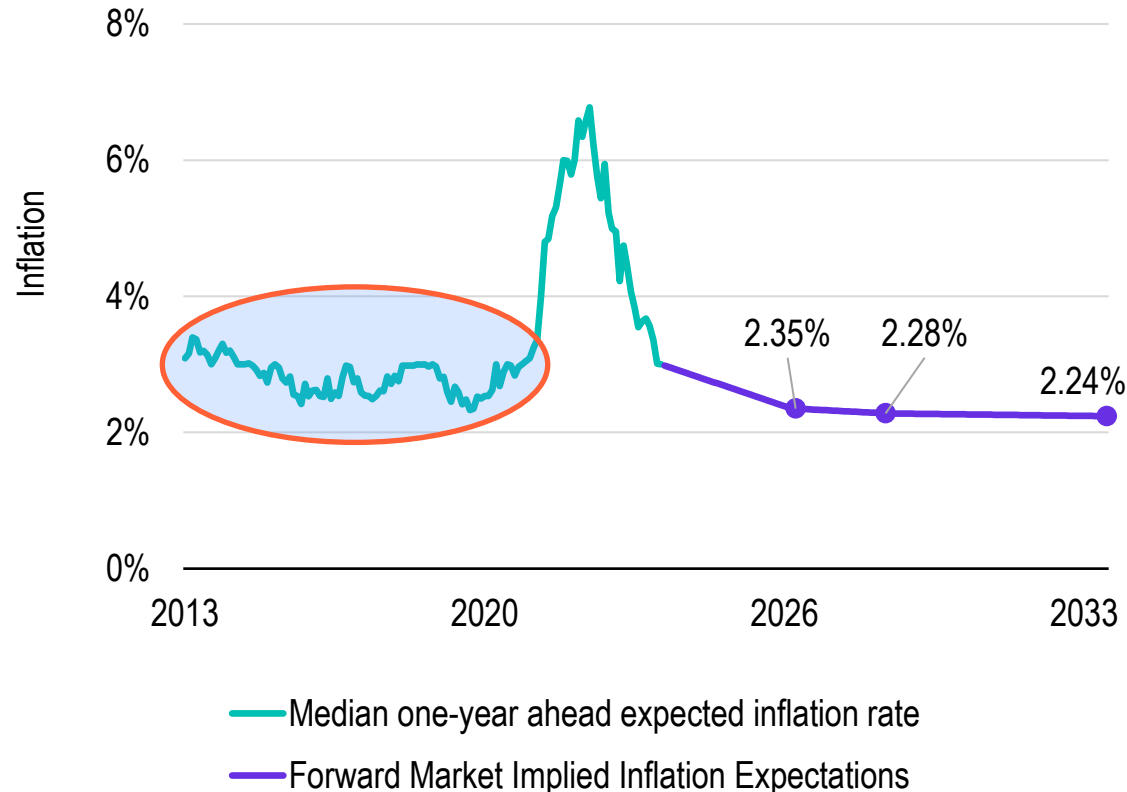
Current Vintage Real Assets

Market long-term expectations:

- Inflation and interest rates will decline;
- Revert to low inflation and low interest rates.

Why Real Assets? Why now?

Median expected inflation rate



Current Vintage Real Assets

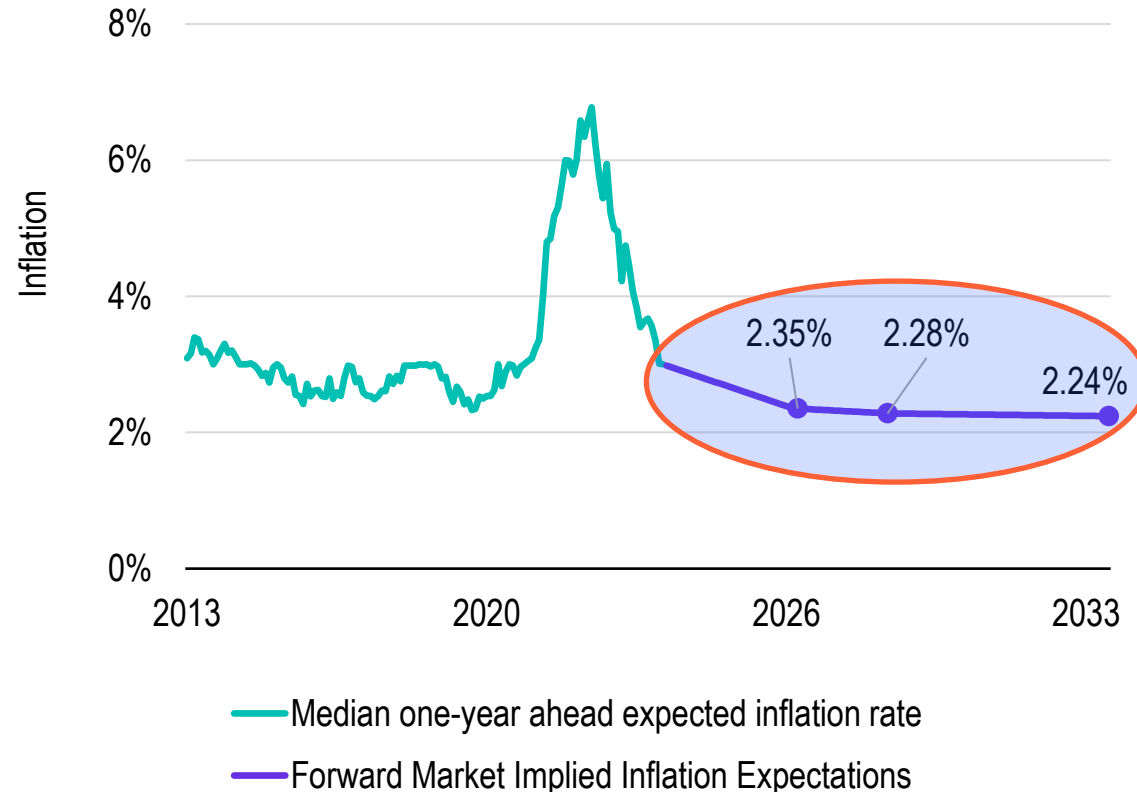
Market long-term expectations:

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Market evidence suggests that during periods of low inflation and low interest rates, core real assets pricing averages around 6-8% discount rate.

Why Real Assets? Why now?

Base Case Scenario



Current Vintage Real Assets

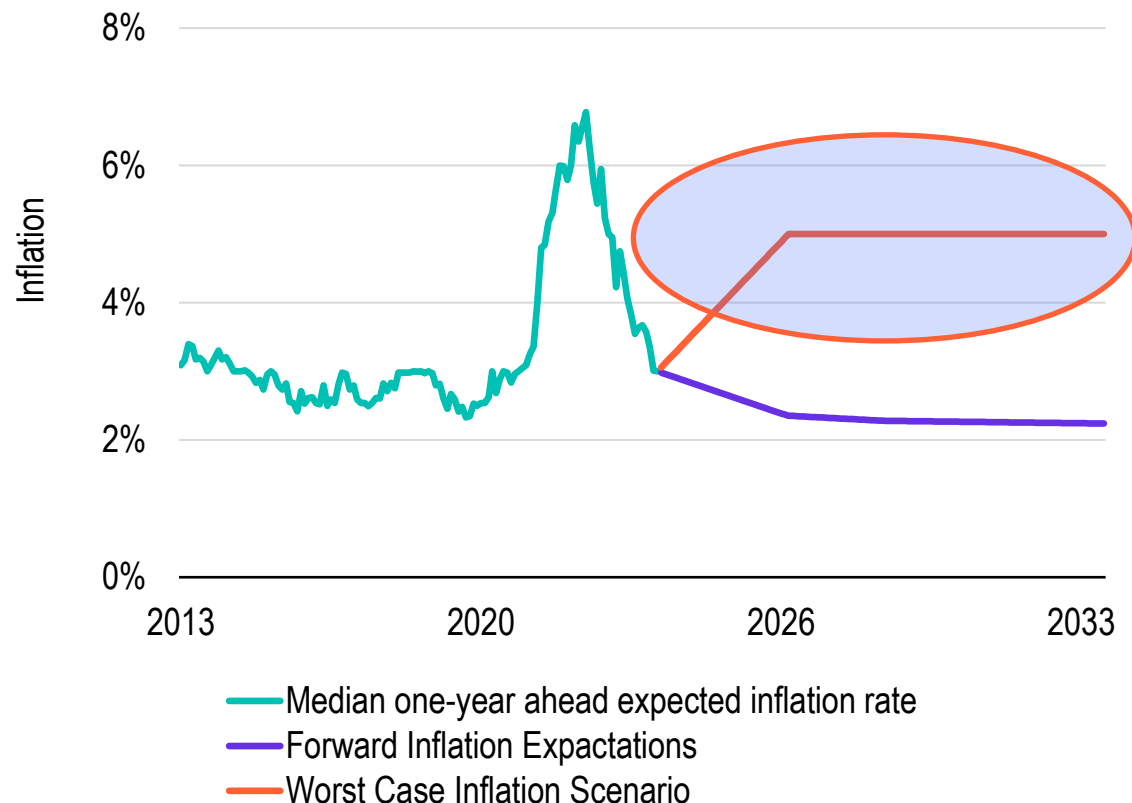
Market long-term expectations:

- Inflation and interest rates will decline;
- Revert to low inflation and low interest rates.

Stronger return potential, real assets benefit from material NAV growth due to discount rate compression.

Why Real Assets? Why now?

Worst Case Scenario



Current Vintage Real Assets

Market long-term expectations:

- Inflation and interest rates will decline;
- Revert to low inflation and low interest rates.

If inflation and interest rates remain high, real assets benefit from inflation-linked cashflows and can potentially generate excess returns.

Why Real Assets? Why now?

Capitalize on secular themes that are overlooked by the public markets



Digitization

AI, 5G, and the spread of edge computing systems;
Structural transformation of economy.

- Data Centres
- Fiber Optics
- Life Sciences
- “New” Work Place



Decarbonization

Reduction or elimination of carbon dioxide emissions from an economic process

- Energy Supply
- Transmission Upgrades
- EV Charging
- Storage



Deglobalization

Return of “Great Power Rivalry” means the end of the “Peace Dividend”

- Energy Independence
- Farmland
- Urban Logistics
- Water Infrastructure

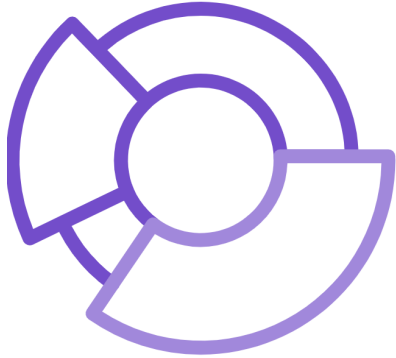


Demographics

- Rapidly aging populations;
- Urbanization;
- Migration
- Affordable Living
- Timberland
- Airports
- Mass Transit
- Healthcare

Real Assets
are uniquely
well
positioned to
capitalize on
the major
trends
impacting our
society

Why Real Assets? Why now?



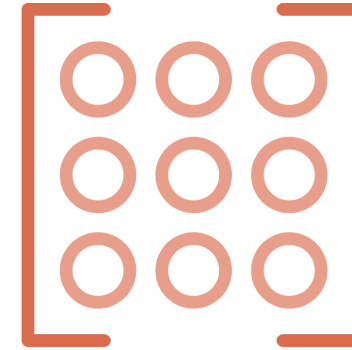
Seeking additional portfolio diversification

Real assets have historically low correlations to traditional asset classes



Search for better income generation

Historically steady income streams from long-term leases and contracts of underlying assets



Reduced portfolio volatility

Real assets can help reduce overall portfolio volatility

Source: FRAA.

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“

A good portfolio is more than a long list of good stocks and bonds.

It is a balanced whole, providing the investor with protections and opportunities...”

— *attributed to Harry Markowitz, Nobel Laureate in Economics*

Important Disclosures



Source: Franklin Templeton. Important data provider notices and terms available at: www.franklintempletondatasources.com.

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