



Real assets in institutional portfolios

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Table of contents

1.	What are real assets?	3
2.	Why real assets?	9
3.	What might be discouraging investors?	23
4.	Appendix	35



1. What are real assets?

What are real assets?

Definition of Real Assets

- **Physical assets** as opposed to financial assets (traditional assets)
- They have **tangible value**
- Generate relatively **steady cash flows**

Characteristics of Real Assets

- **Storage of value**
- **Inflation protection:** stronger correlation to inflation than traditional investments
- **Low correlation to traditional assets**
- **Cash-flow generating focus:** except commodities they have stable cash-flows due to inelastic demand (necessities)

Source: PRCG Portfolio Clarity. Sep - 2017

Types of real assets

Types of Real Assets		
By Liquidity	By Asset	By Stage of Development
<ul style="list-style-type: none"> • Illiquid (private): <ul style="list-style-type: none"> • Direct Real Estate • Direct Infrastructure • Direct Commodities • Liquid(Public): <ul style="list-style-type: none"> • REITs, • Infrastructure securities • TIPS (real bonds) • Senior Loans • Commodity equity • Commodity futures • MLPs 	<ul style="list-style-type: none"> • Natural Resources: <ul style="list-style-type: none"> • Energy: oil, gas, • Renewables: solar, wind and hydro • Mining and precious metals • Agriculture: crops, vineyards, fruit trees • Timber: hardwood, soft wood, biomass • Real Estate: <ul style="list-style-type: none"> • Commercial • Residential • Infrastructure: <ul style="list-style-type: none"> • Toll roads • Water treatment • Tunnels • Bridges • Stadiums 	<ul style="list-style-type: none"> • Development: <ul style="list-style-type: none"> • Aggressive risk profile • Appreciation focused • Highest leverage • Mature: <ul style="list-style-type: none"> • Moderate risk profile • Income and appreciation focused • Medium leverage • Regulated: <ul style="list-style-type: none"> • More conservative risk profile • Income and inflation sensitive focused • Lower leverage

Source: PRCG Portfolio Clarity. Sep - 2017

Types of real assets

Real Assets by Function in a Portfolio					
Enhance Risk Return	Inflation Hedge	Inflation Shock Hedge	Traditional Assets Diversification	Stable Income	Growth
<ul style="list-style-type: none"> • REITs • Infrastructure equities • MLPs • Direct real assets 	<ul style="list-style-type: none"> • TIPS 	<ul style="list-style-type: none"> • Commodities 	<ul style="list-style-type: none"> • Commodities • Precious metals • Direct real estate • Direct infrastructure 	<ul style="list-style-type: none"> • Income focus real estate, infrastructure and natural resources 	<ul style="list-style-type: none"> • Opportunistic focus real estate, infrastructure and natural resources

Source: PRCG Portfolio Clarity. Sep - 2017

Main risk factors of real assets

Income Real Assets						
-	+	+	+	-	-	-
Economic growth	Inflation hedge	Yield	Duration	Specific/Development	Leverage	Illiquidity
+	-	-	-	+	+	+
Growth Real Assets						

Source: PRCG Portfolio Clarity. Sep - 2017

Risk management skills

Specialized Investment Capabilities	
Illiquid real assets:	Liquid real assets:
<ul style="list-style-type: none">• Due Diligence of specific investments• Project specific risk: Relationships with skilled local partners to manage operational risk• Financial risk: may require large pools of capital• Scale to diversify across major sub-categories and regions• Strategic asset allocation and liability matching should take into account illiquidity• Regulatory constraints	<ul style="list-style-type: none">• Contango management: Future prices above spot prices imply negative roll yield if you are long.• Duration management: Short term affected by duration, longer term higher rates could affect positively as could bring higher income.

Source: PRCG Portfolio Clarity. Sep - 2017



2. Why real assets?

Benefits to portfolio construction

- To **traditional assets**
- To real asset **sub asset classes**
- In **different economic environments**, but not necessarily in the short term (gold for example)
- **Potentially improve risk adjusted returns:** hybrid characteristics, bond like risk with equity return potential (**Efficient frontier builders**)

Diversification

Lower volatility

- **Specially** in the case of **direct real assets**
- **Less** subject to **speculation**
- Softer impact of macro trends on real assets due to the **LT contractual nature** of the underlying revenue streams

Inflation hedge

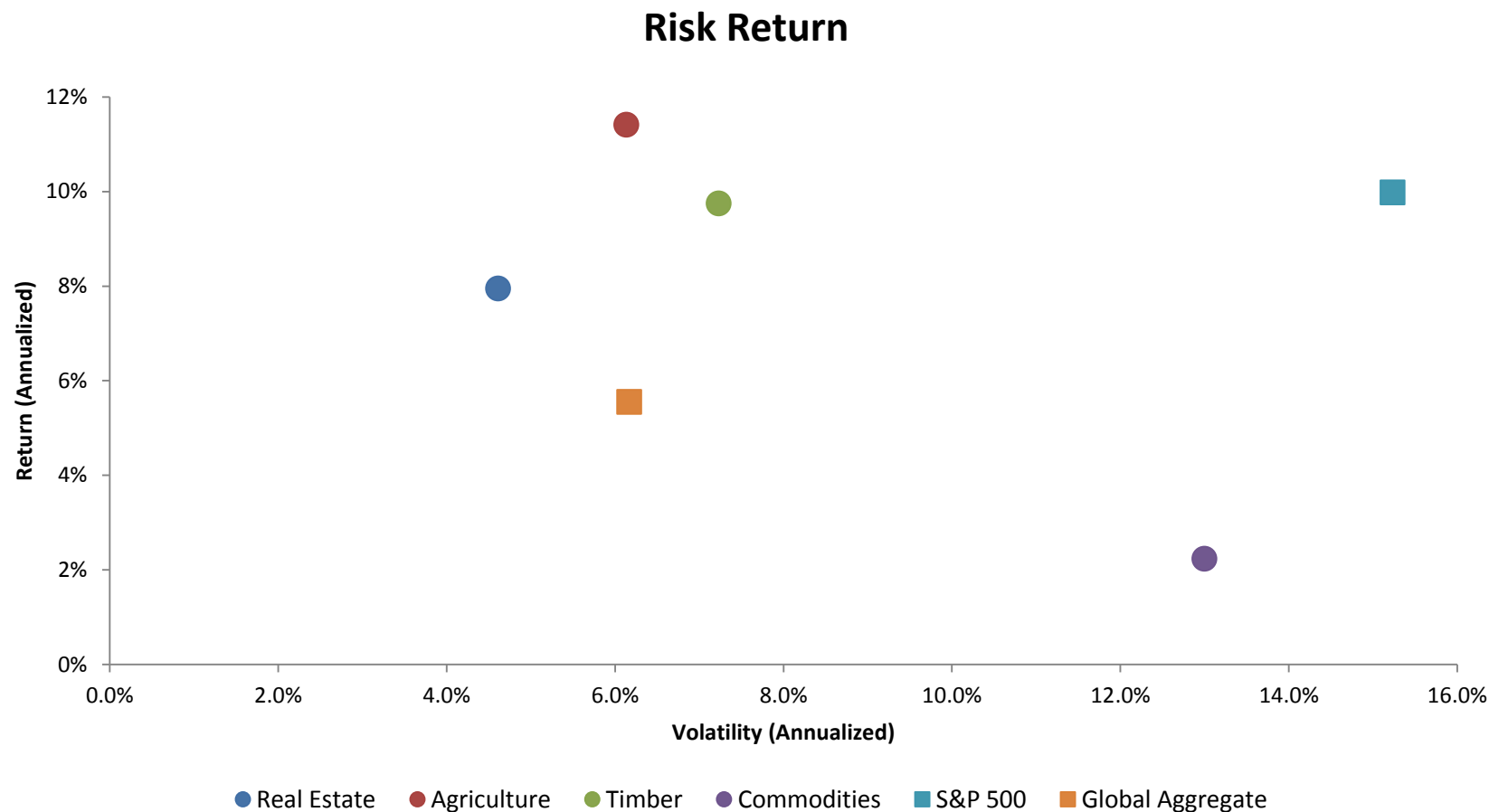
Stable Income

- Important in a **liability-matching**
- Hedge against **inflationary shocks**: Commodities performance is especially good in high inflationary periods
- **Resilient during the late cycle**: Useful over a full market cycle
- Illiquid real assets help **align objectives and strategy**: they focus on the long term objectives (decades rather than quarters)

- Additional source of **stable income**
- Differentiated source of return

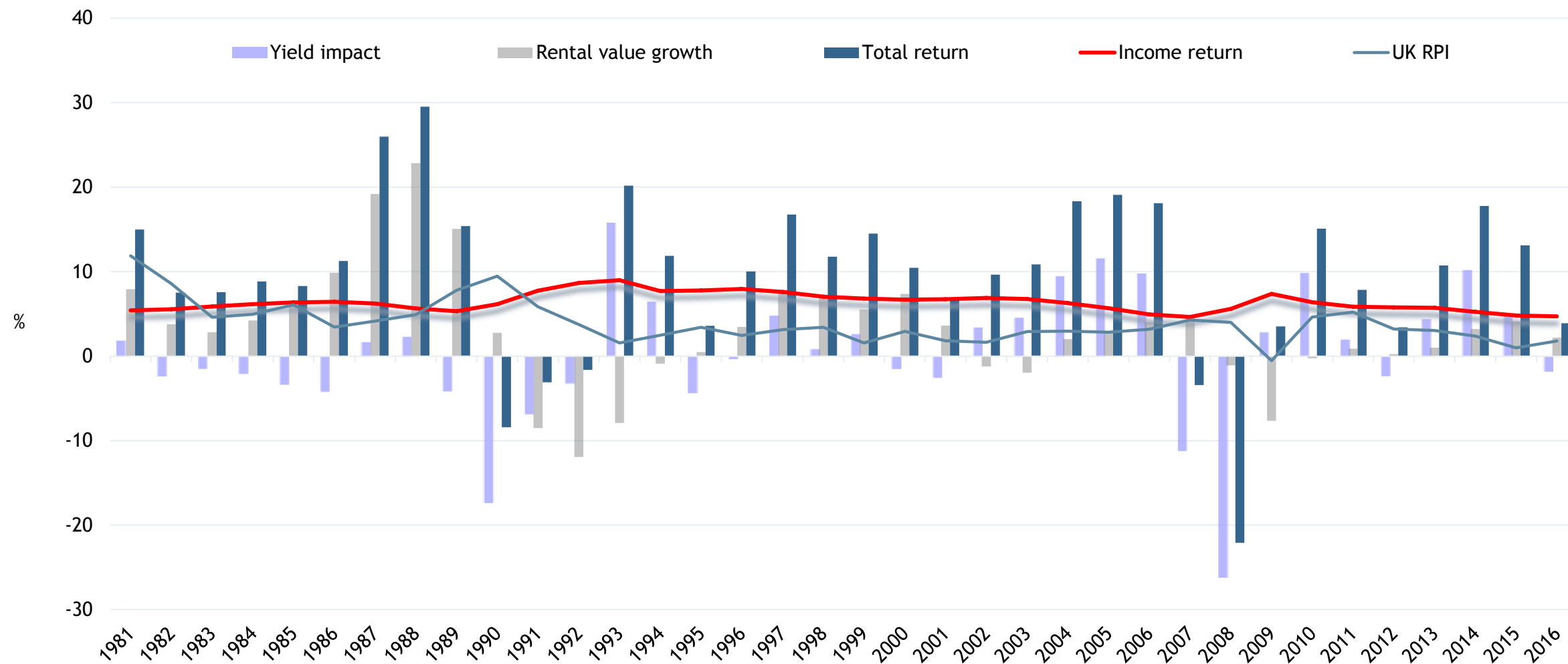
Source: PRCG Portfolio Clarity. Sep - 2017

High risk adjusted returns



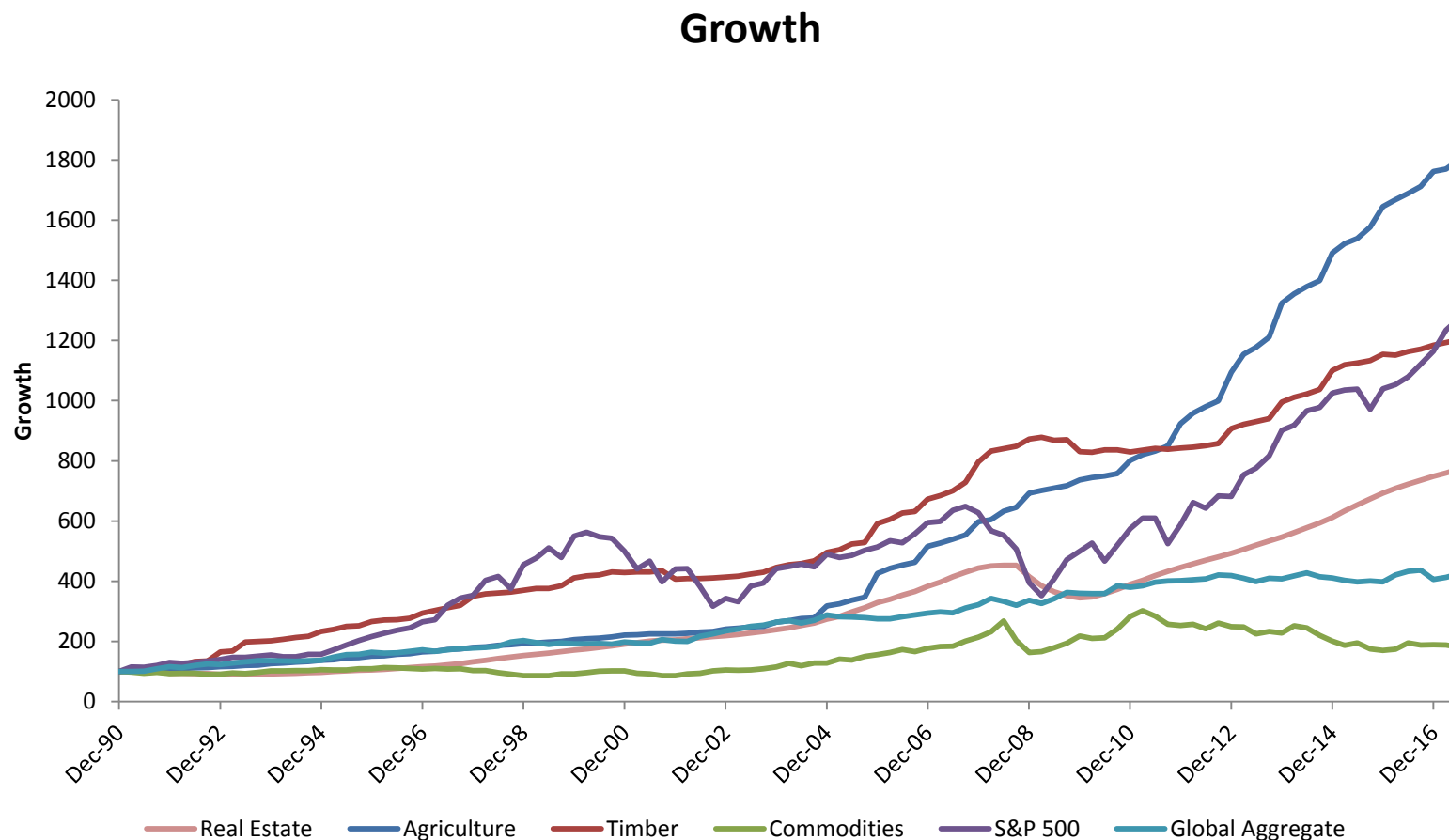
Source: PRCG Portfolio Clarity, MPI. Period: Mar 1991 – June 2017. Real Estate: NCREIF Property Index, Agriculture: NCREIF Farmland Index, Timber: NCREIF Timber Index, Commodities: CCI Index, Global Agg: Barclays Global Aggregate Index.

Stable cash flows ... lets look at real estate



*All Balanced Property Fund Index – AREF/IPD UK Quarterly Property Fund Index – weighted average
Source: AEW, MSCI, AEW 31st December 1981 to 31st December 2016

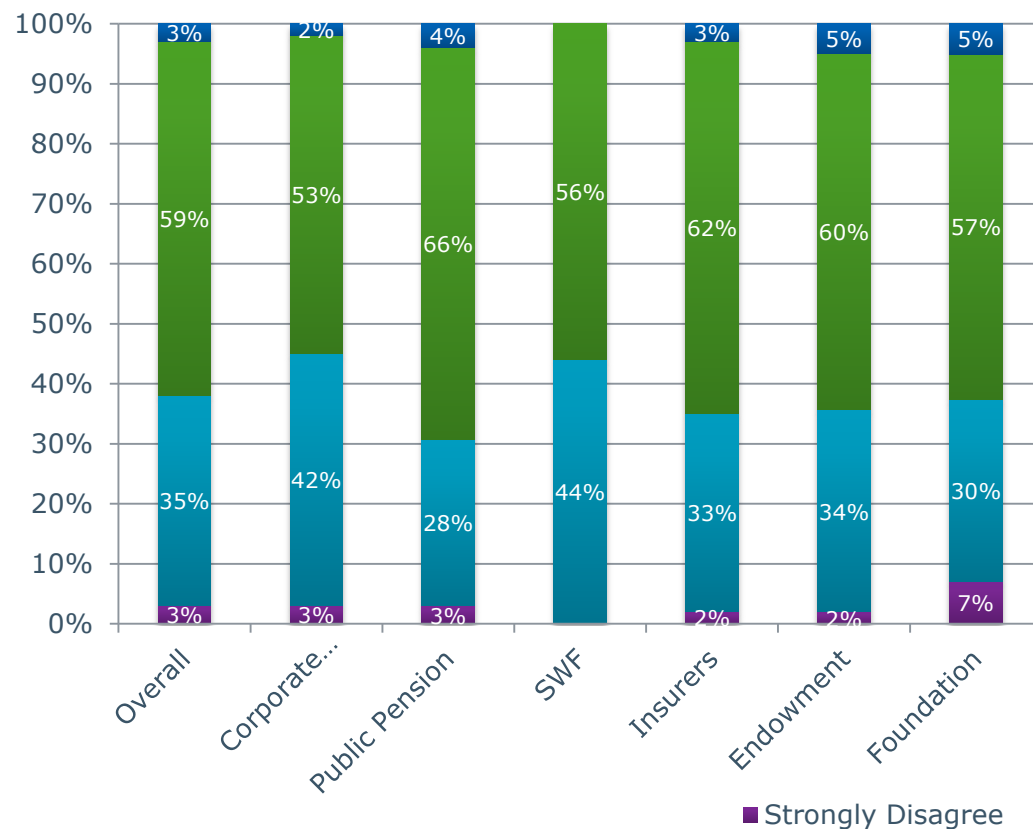
Low correlation to both traditional and real assets



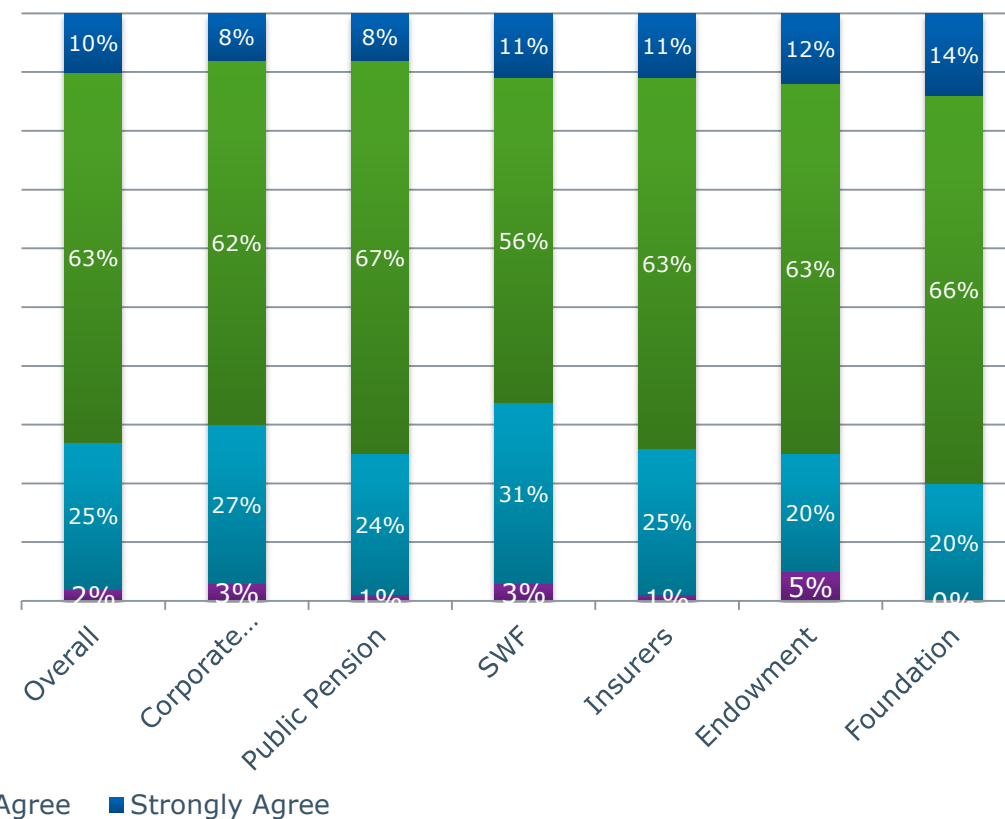
Source: PRCG Portfolio Clarity, MPI. Period: Mar 1991 – June 2017. Real Estate: NCREIF Property Index, Agriculture: NCREIF Farmland Index, Timber: NCREIF Timber Index, Commodities: CCI Index, Global Agg: Barclays Global Aggregate Index.

Private debt markets

"Private debt provides better diversification than traditional fixed-income vehicles."



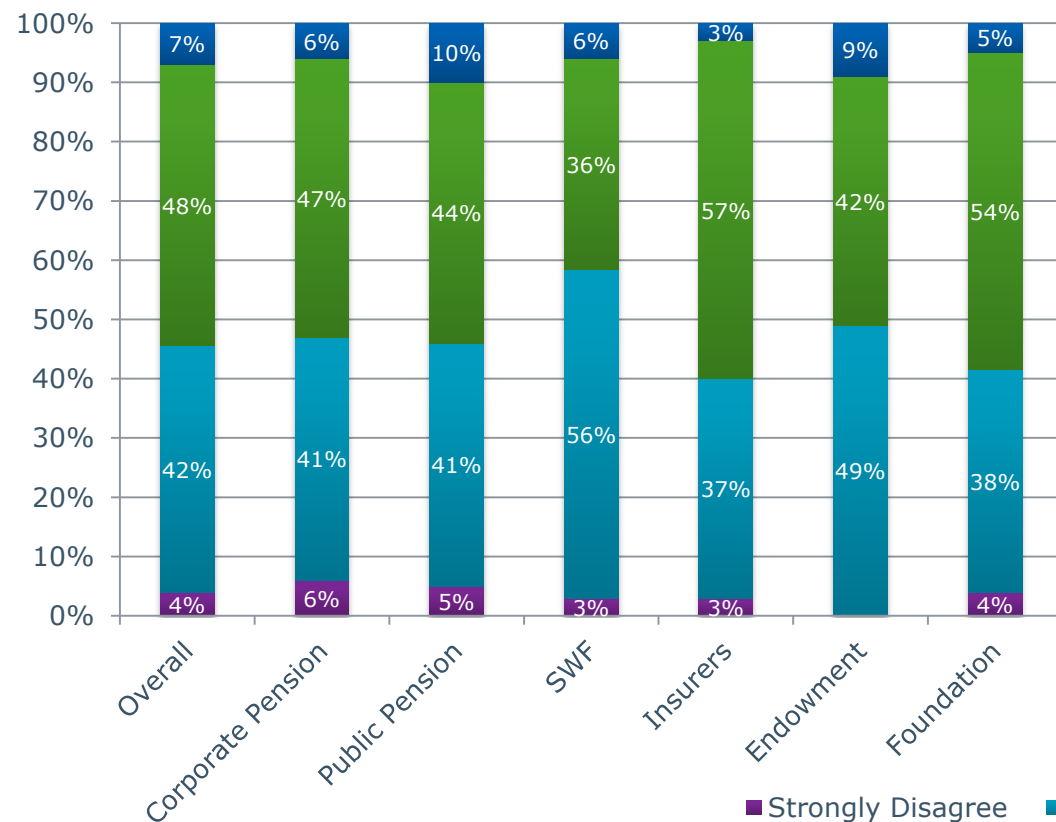
"Private debt provides higher risk-adjusted returns than traditional fixed-income vehicles."



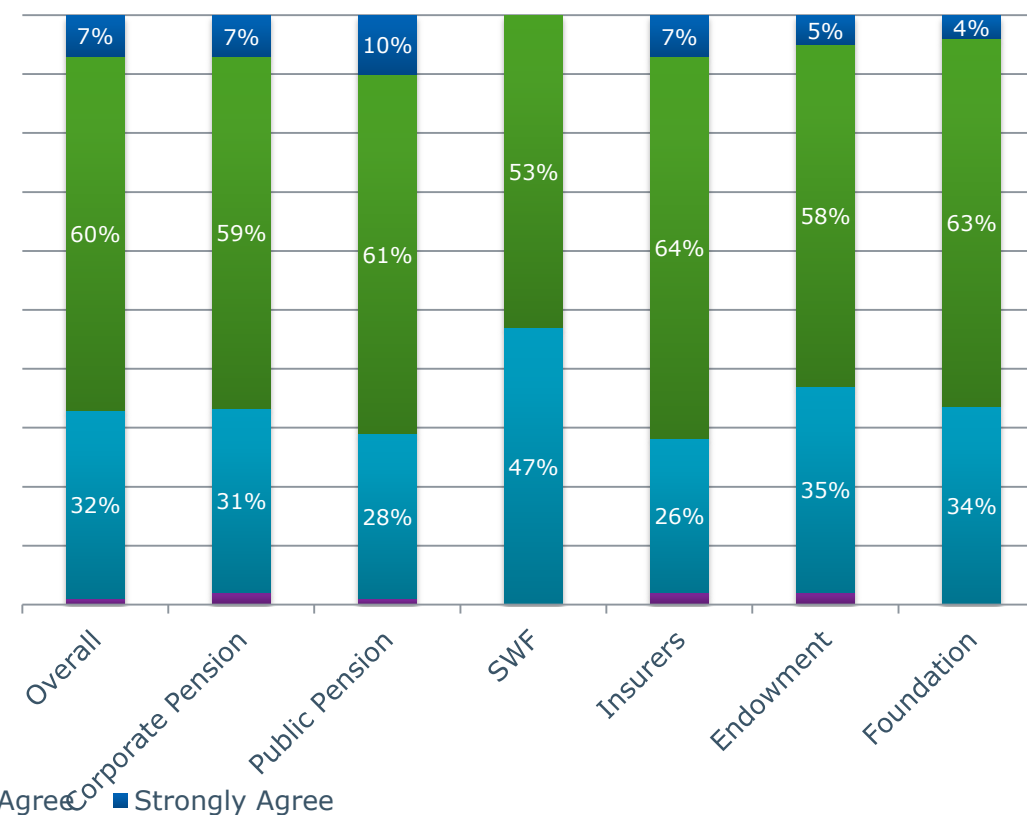
Source: Natixis Global Asset Management, Global Survey of Institutional investors Nov 2016

Private equity markets

"Private equity provides better diversification than traditional asset classes."

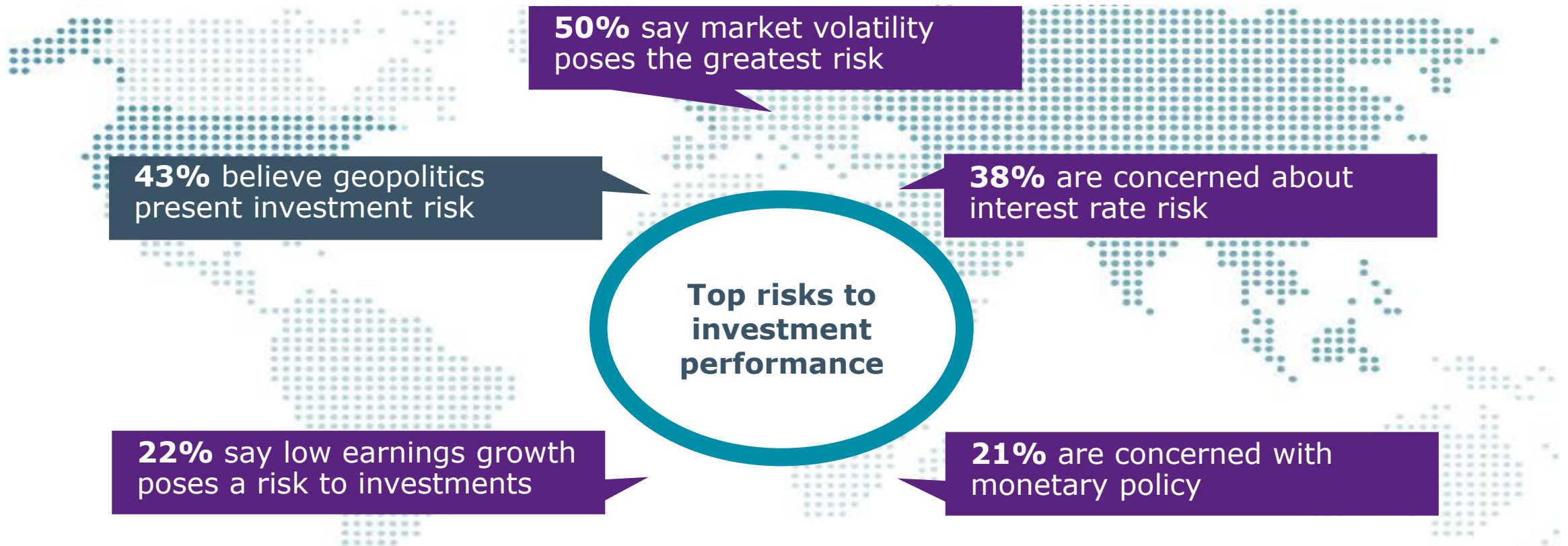


"Private equity provides higher risk-adjusted returns than traditional asset classes."



Source: Natixis Global Asset Management, Global Survey of Institutional investors Nov 2016

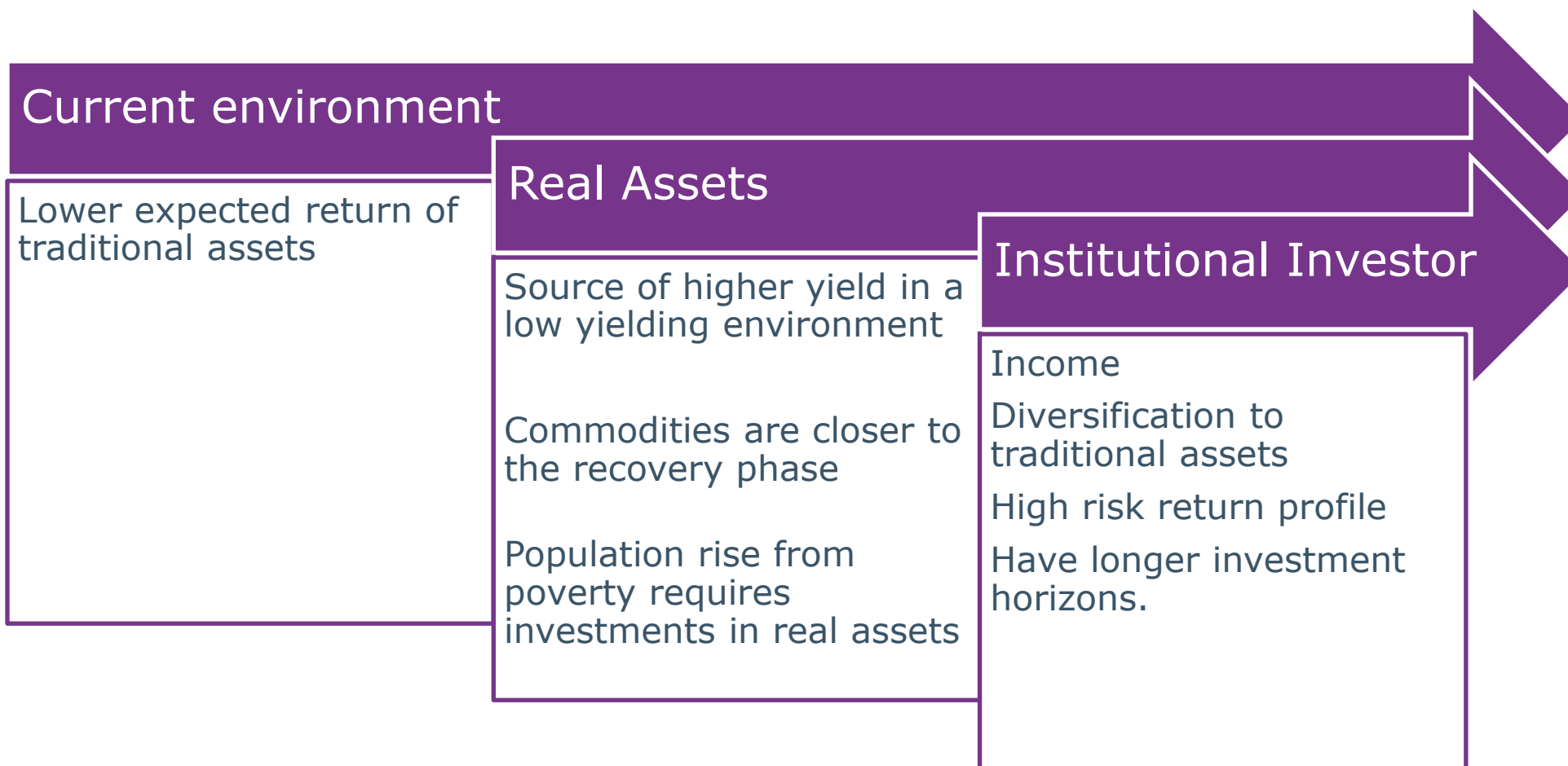
Institutions foresee a world of risk in 2017



Faced with prospects of increased volatility, six in ten institutions believe they are prepared to handle the risks in 2017, but given the economic complexities, coupled with ongoing political upheaval, only 2% offer up strong convictions in their ability to succeed in this critical endeavor.

Source: Natixis Global Asset Management, Global Survey of Institutional investors Nov 2016

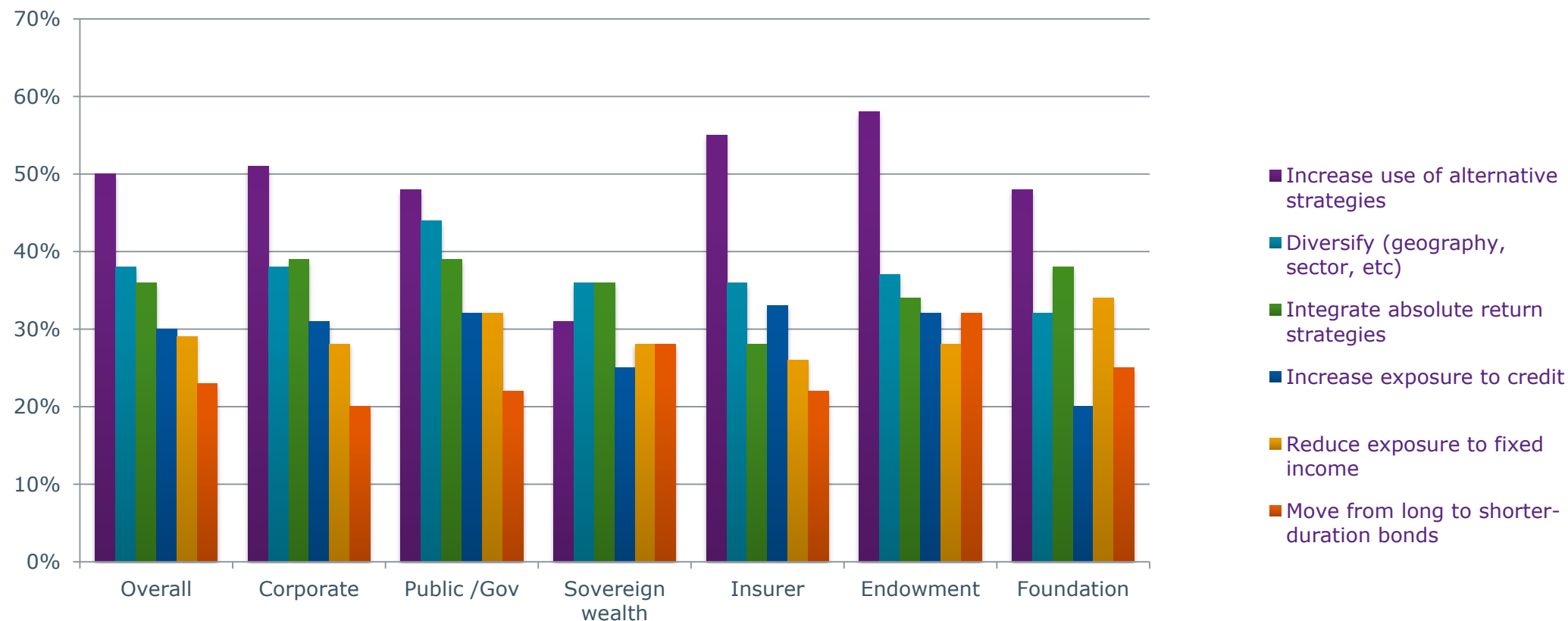
An option to current low yield environment?



Source: PRCG Portfolio Clarity. Sep - 2017

Alternatives critical to addressing low yields

"How are you positioning your portfolio given the low yield environment?"

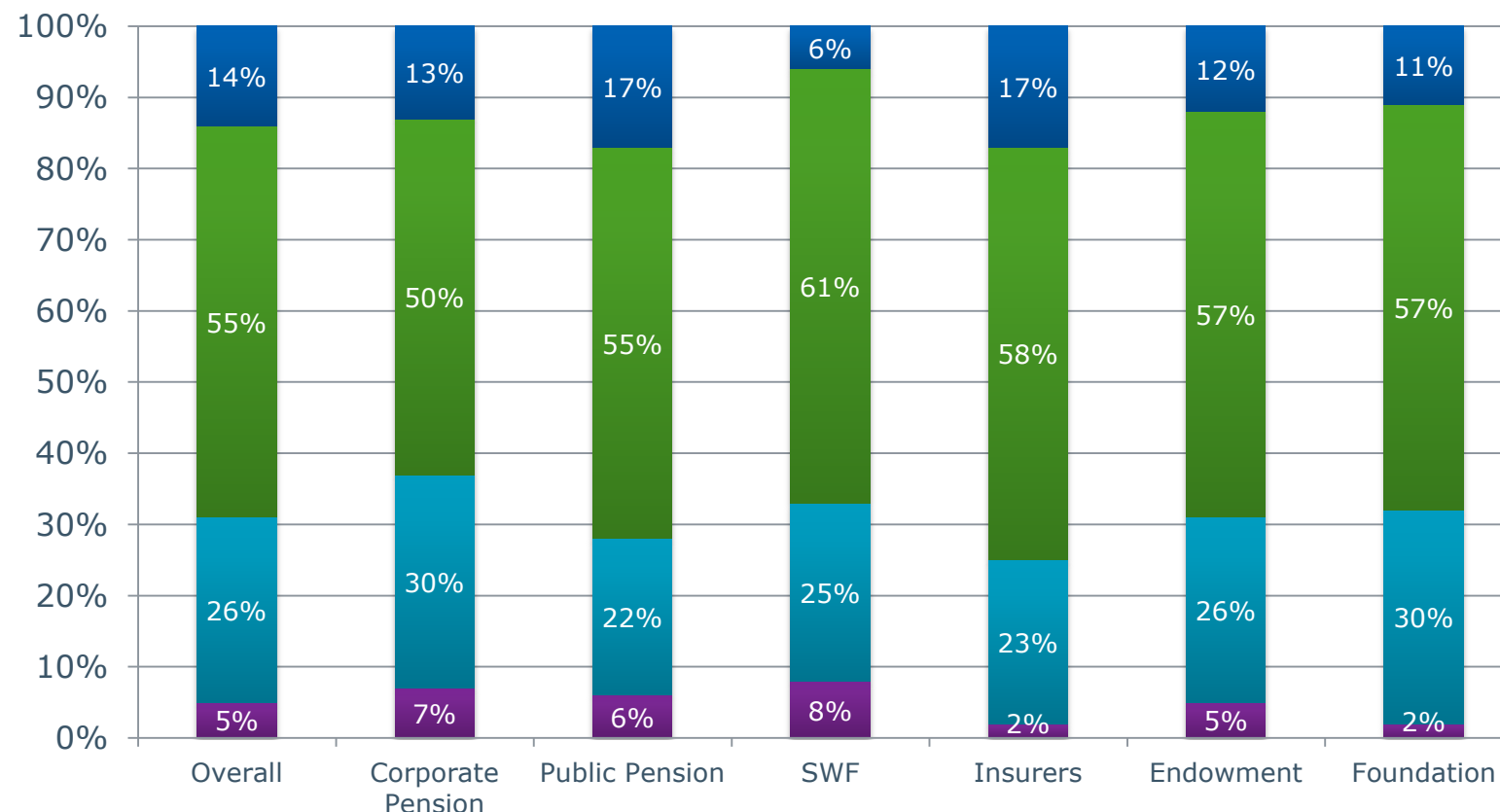


Alternative investments involve unique risks that may be different than those associated with traditional investments, including illiquidity and the potential for amplified losses or gains. Investors should fully understand the risks associated with any investment prior to investing.

Source: Natixis Global Asset Management, Global Survey of Institutional investors Nov 2016

Traditional strategies may no longer be enough

"Institutional investors need to replace traditional diversification and portfolio construction techniques with new approaches to achieve results."



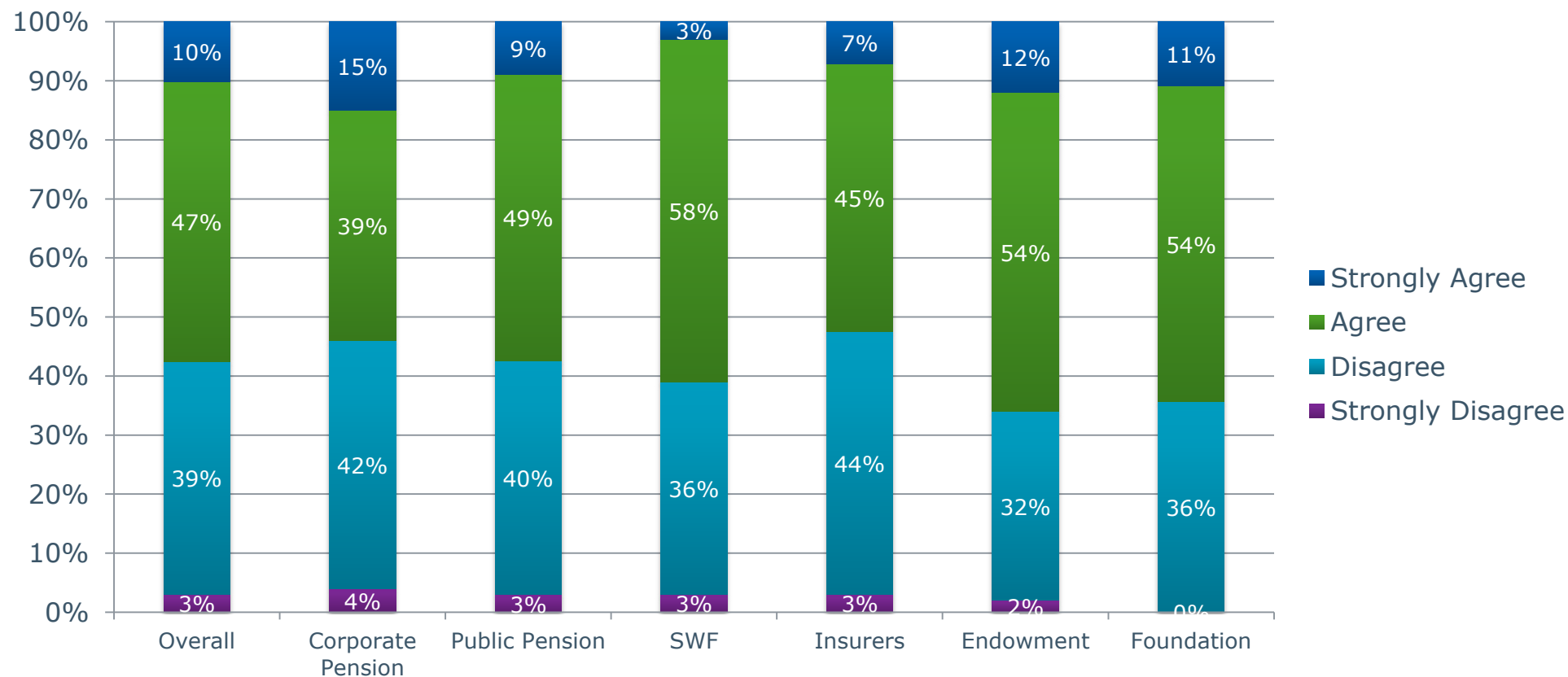
Given the challenges of today's market, the mechanics of managing institutional portfolios goes well beyond traditional asset allocation considerations.

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

Source: Natixis Global Asset Management, Global Survey of Institutional investors Nov 2016

Traditional assets are too highly correlated

"Traditional assets are too highly correlated to provide distinctive sources of return."

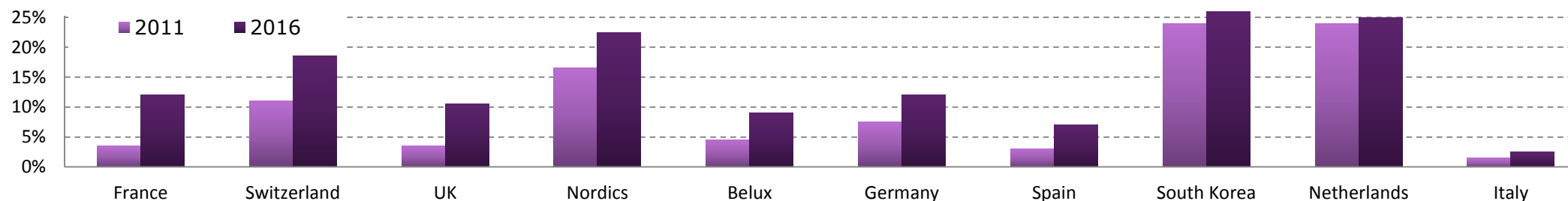


Source: Natixis Global Asset Management, Global Survey of Institutional investors Nov 2016

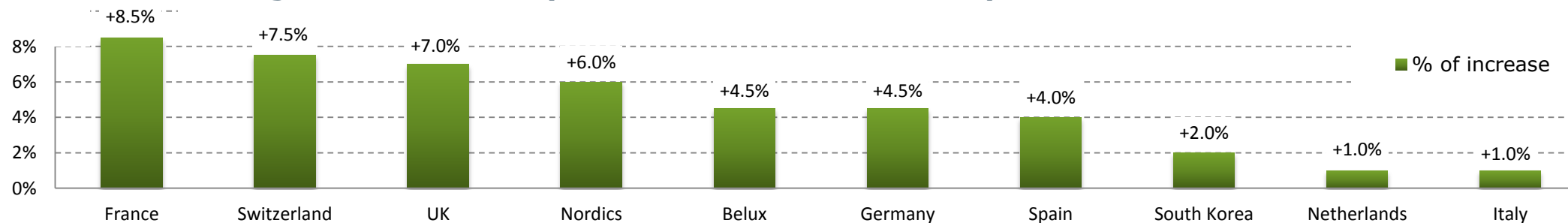
A clear trend to illiquid assets worldwide

Increase of illiquid assets (real estate, loans, PE & infra)

Weight of illiquid assets in life insurance portfolios from 2001 to 2016



Percentage increase of illiquid assets in life insurance portfolios from 2001 to 2016



Source: NGAM (2017). Portfolios of Life Insurers observed in France, Germany, UK, Italy, Nordics, Belux, Switzerland, Spain, Netherlands, South Korea.

Change in allocation by asset classes

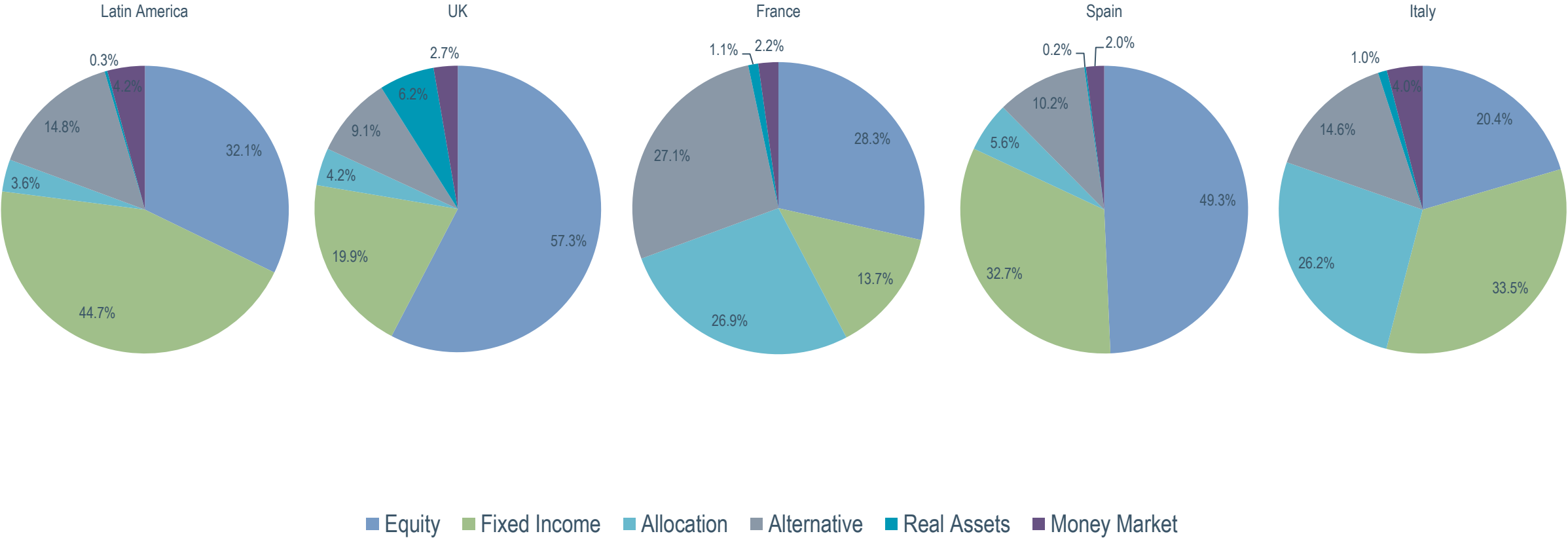
	France		Switz.		Belux		Germ.		UK		Nordics		Spain		Italy		South Korea		Nether.	
FI Direct Lines (Govies & IG Corporates)	-6		-8		-4		-10		-5		-5		-8		-4.5		3		-1	
Equities	0	-10	0	-9.5	-3	-9	3.5	-8	0	-8	-1	-7	2	-5	2	-2.5	-2	-1.5	-1	-1
Liquidities	-4		-1.5		-2		-1.5		-3		-1		1		0		-2.5		1	
Real Estate (Mainly Direct Invest.)	4		5		1		1.5		4		2		1		0		1		-1	
Loans (CRE, Corporates, Infra.)	2.5		1.5		3		2		2		0		2		0.5		-1		2	
Other Equities (Private Equity, Infra.)	2	10	1	9.5	0.5	9	1	8	1	8	4	7	1	5	0.5	2.5	2	1.5	0	1
Other Fixed-Income (HY & EMD funds...)	1.5		1		2.5		2.5		1.5		0		1		1		0.5		0	
Other Alternative (Hedge Funds, Liquid)	0		1		2		1		-0.5		1		0		0.5		-1		0	

Source: NGAM (2017). Portfolios of Life Insurers observed in France, Germany, UK, Italy, Nordics, Belux, Switzerland, Spain, Netherlands, South Korea.



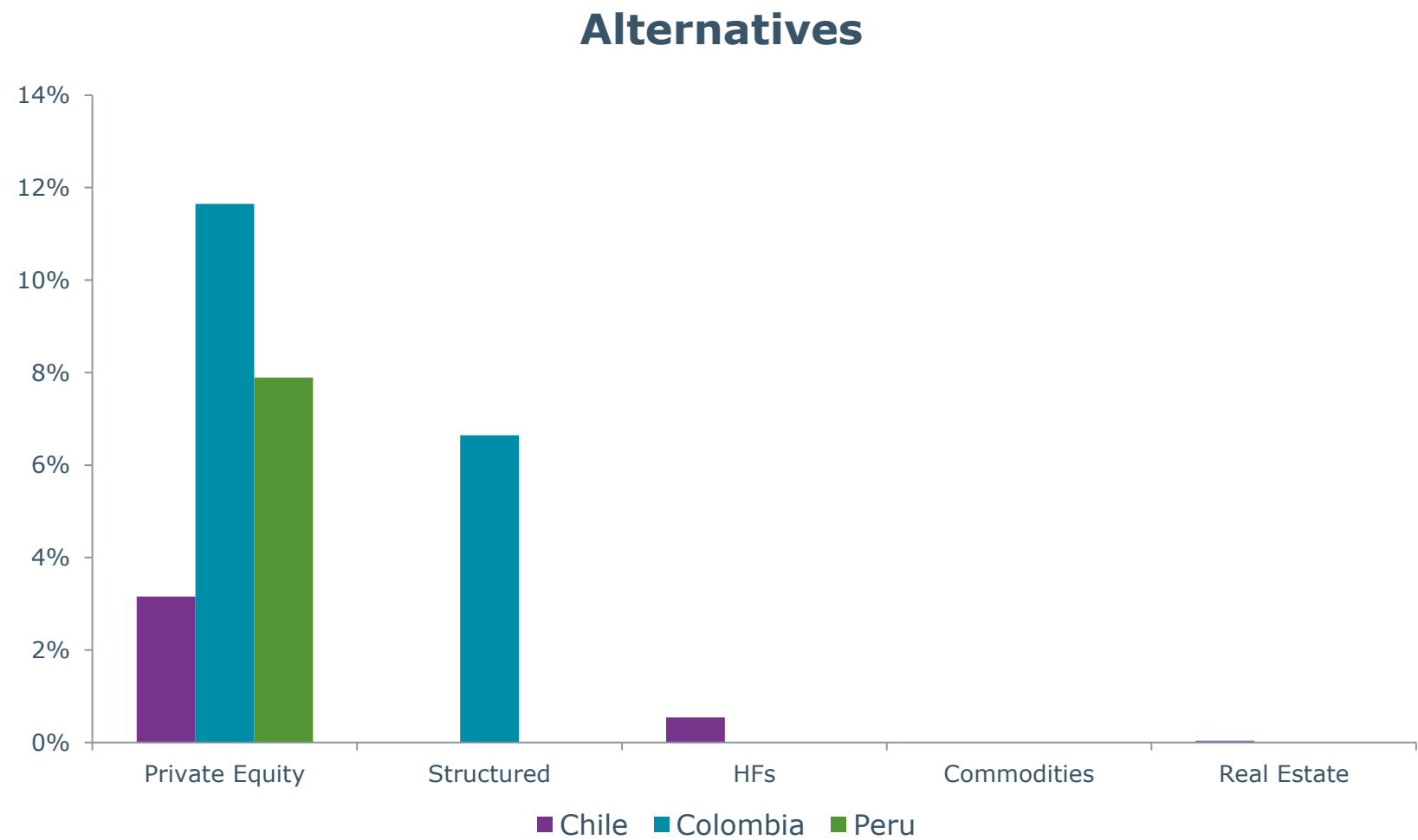
3. What might be discouraging investors?

Exposure to real assets in wholesale portfolios



Data shows the Moderate portfolios received by PRCG over the last 12 months as of 30th June 2017. Spain includes portfolios received in the last 12 months as of 31st Mar 2017. Spain includes 36 Moderate portfolios based on Vdos data, UK includes 253 Moderate portfolios, France includes 119 Moderate portfolios, Italy includes 55 Moderate portfolios and Latin America 19 Moderate portfolios.

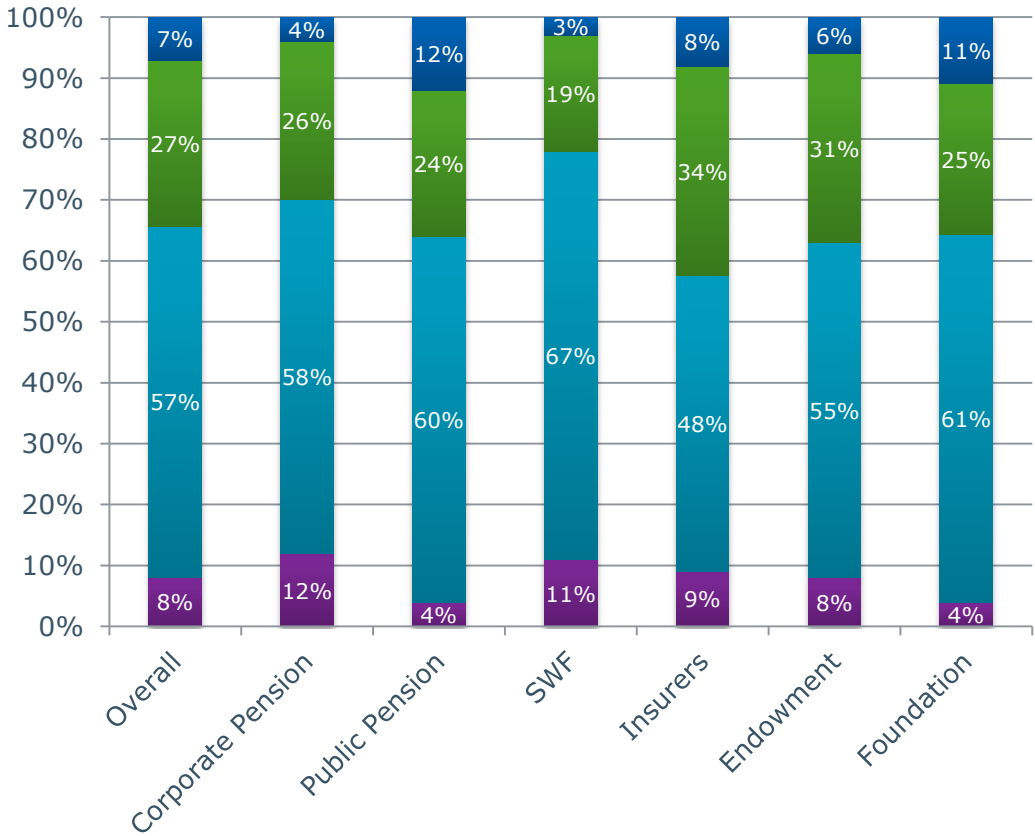
Exposure to international real assets in pension funds



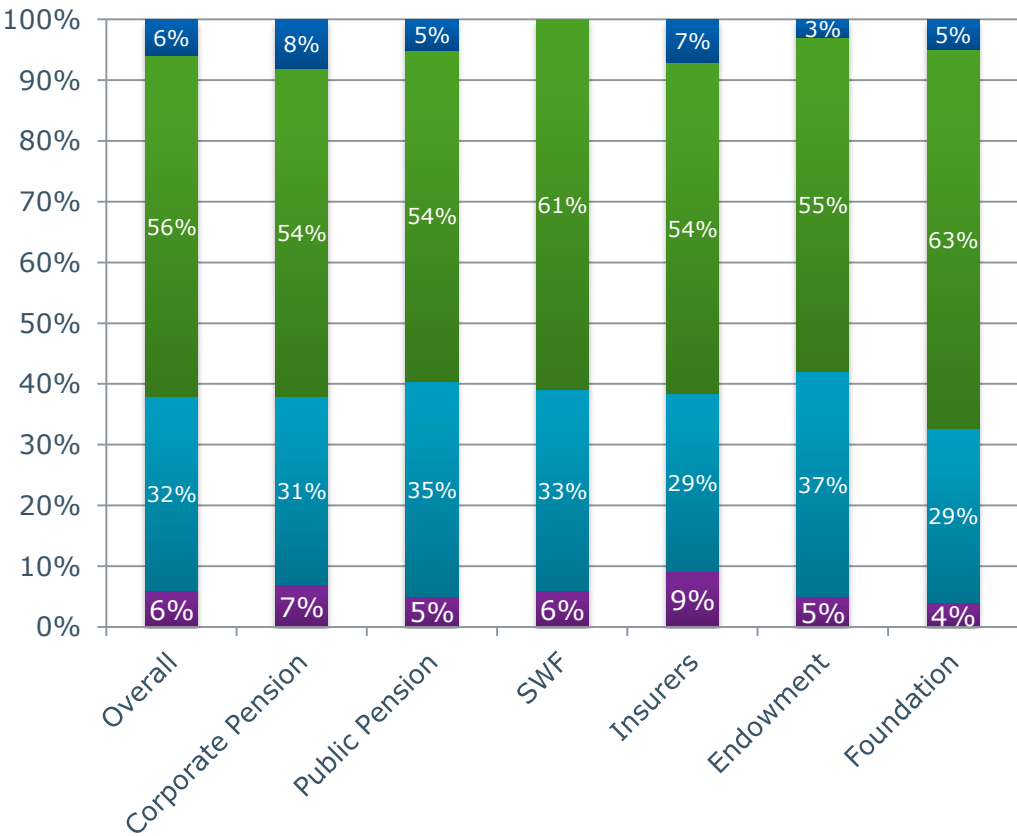
Source: FundPro, Mar2017.

Liquidity is a barrier to investing in real assets

"I am looking to increase allocation to real assets (real estate, infrastructure, aircraft financing) over the next 12 months."



"Illiquidity is a barrier to investing in real assets."



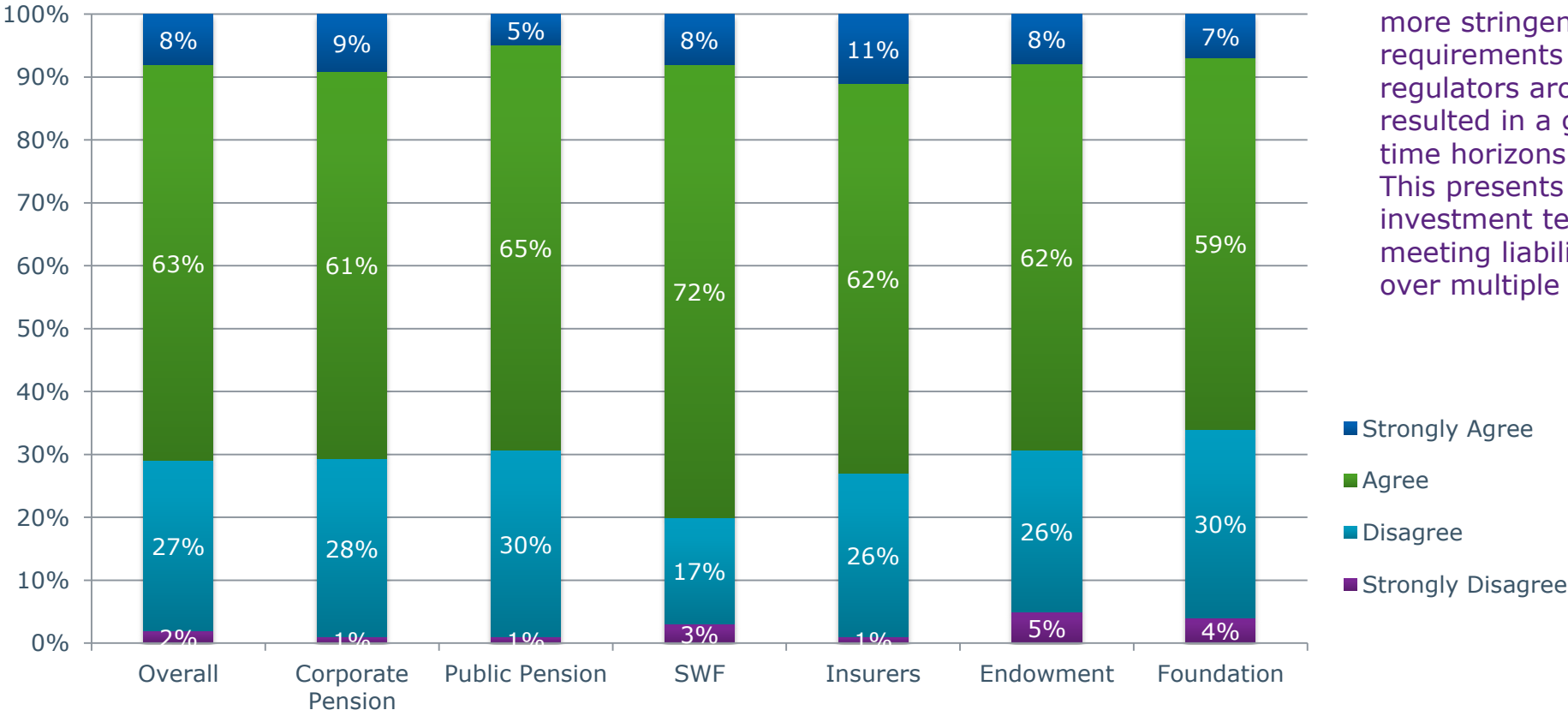
Strongly Disagree Disagree Agree Strongly Agree

Source: Natixis Global Asset Management, Global Survey of Institutional investors Nov 2016

More liquidity required by regulations

"Solvency/liquidity requirements creates too much bias for shorter time horizons and highly liquid assets"

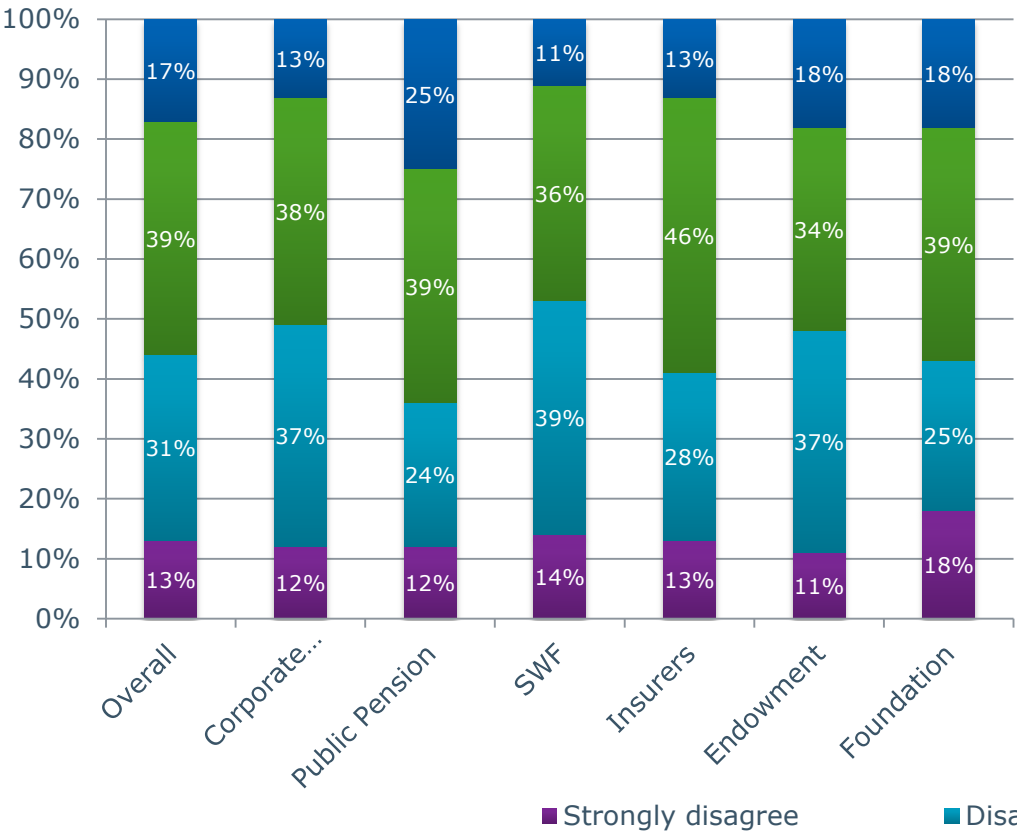
Institutional decision makers believe more stringent solvency and liquidity requirements established by regulators around the world have resulted in a greater bias for shorter time horizons and more liquid assets. This presents challenges for investment teams that must prioritize meeting liabilities that stretch out over multiple decades.



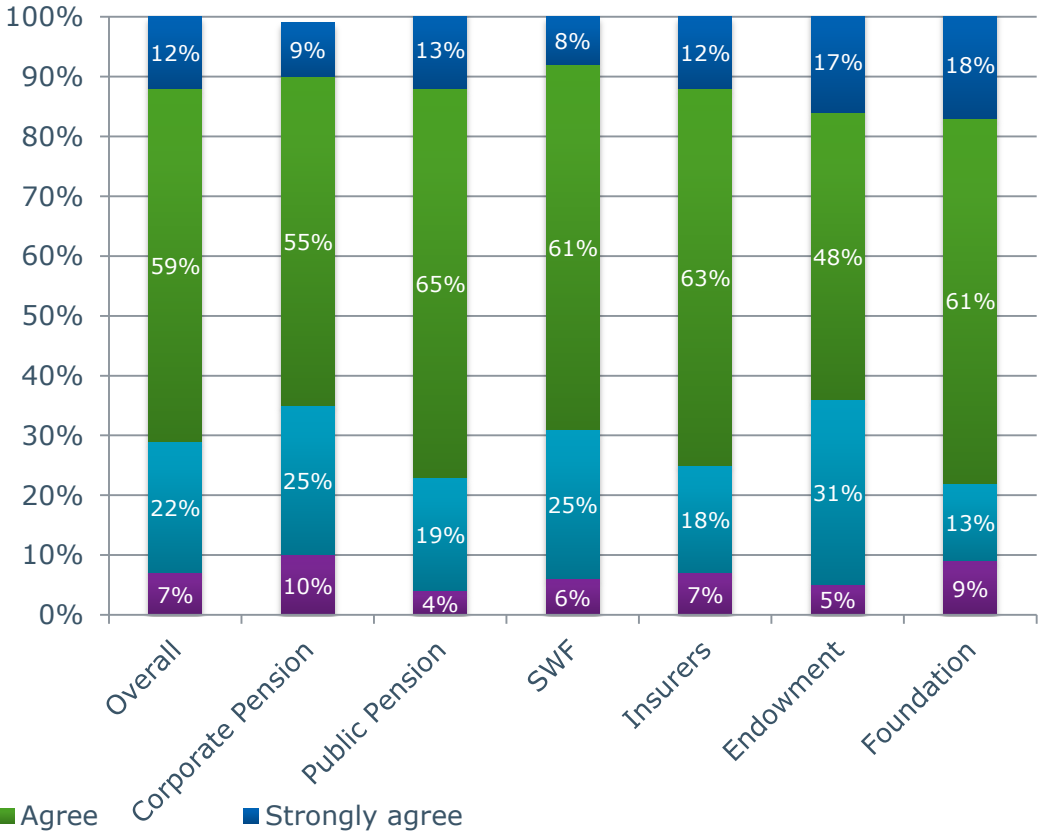
Source: Natixis Global Asset Management, Global Survey of Institutional investors Nov 2016

But liquidity is becoming less of a barrier

"My organization is embracing illiquid assets more than three years ago."



"The potential returns of illiquid alternatives make them worth the risk."

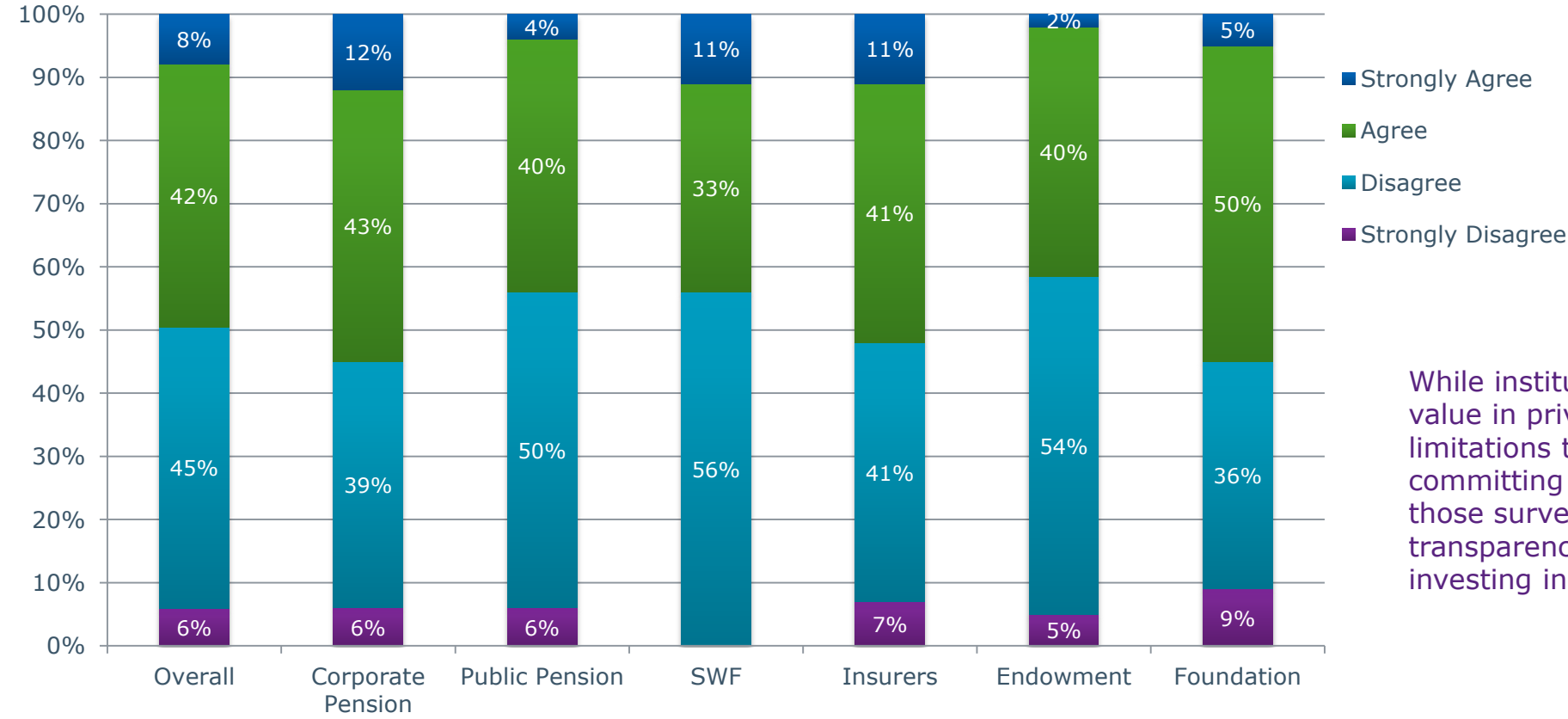


Alternative investments involve unique risks that may be different than those associated with traditional investments, including illiquidity and the potential for amplified losses or gains. Investors should fully understand the risks associated with any investment prior to investing.

Source: Natixis Global Asset Management, Global Survey of Institutional investors Nov 2016

Transparency is an important factor

"The lack of transparency discourages me from making investments in private equity."

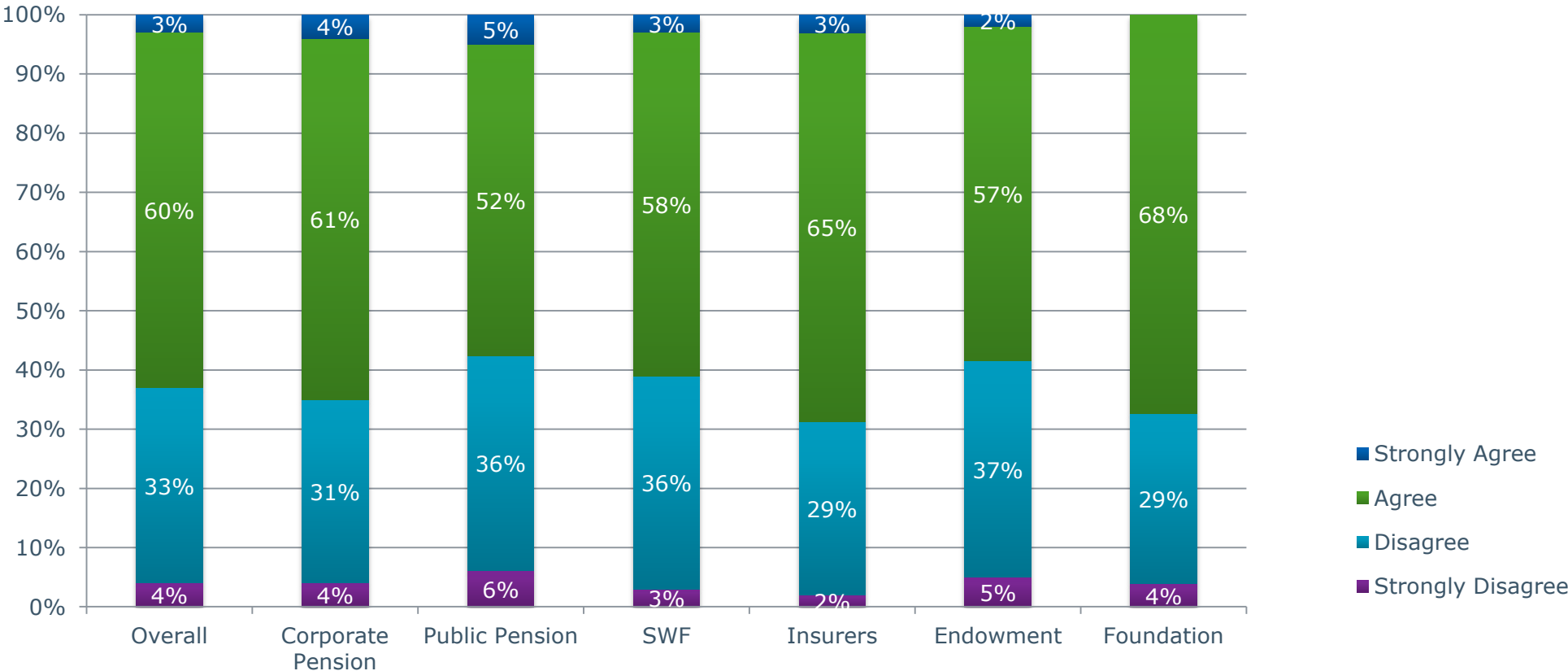


While institutions see significant value in private markets, there are limitations that may keep them from committing more assets. Half of those surveyed say a lack of transparency keeps them from investing in private equity.

Source: Natixis Global Asset Management, Global Survey of Institutional investors Nov 2016

Earning higher returns the main motivation?

"My primary motivation for investing in real assets is earning higher returns."

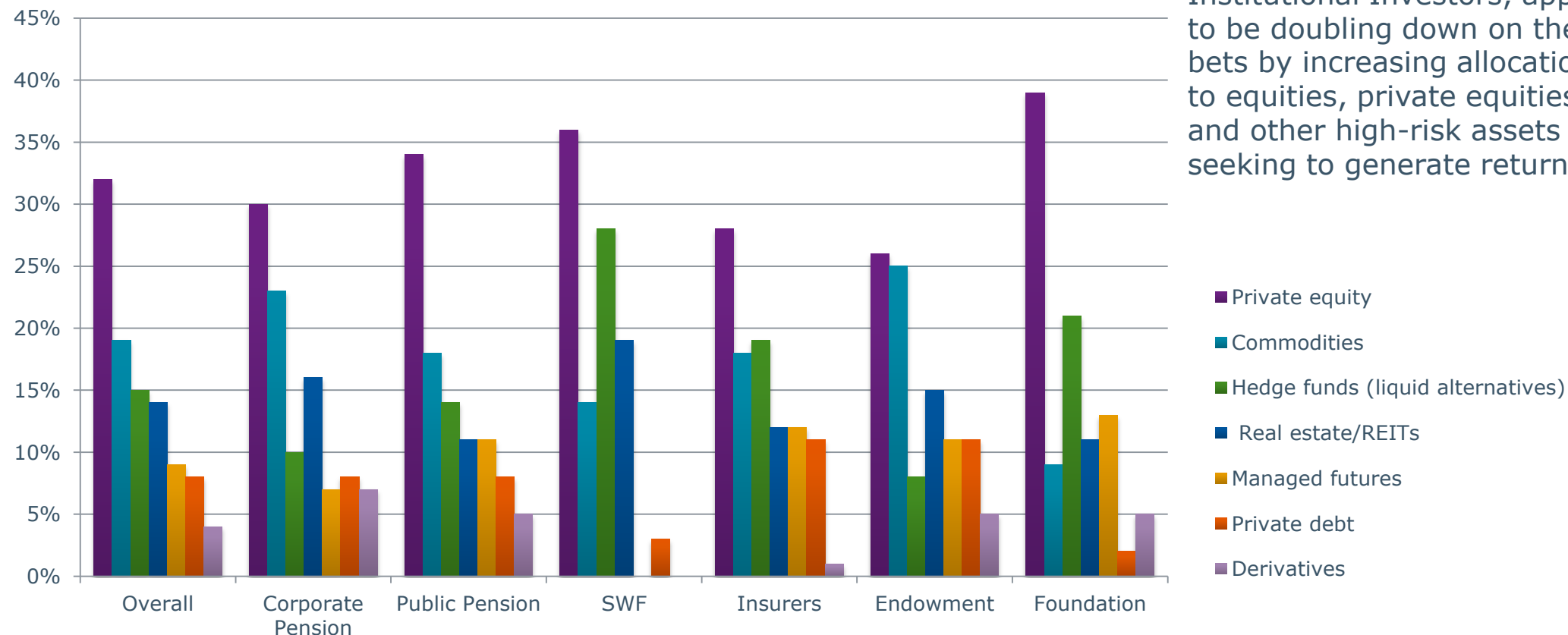


Investing involves risk, including the risk of loss. Investment risk exists with real assets. There is no assurance that any investment will meet its performance objectives or that losses will be avoided.

Source: Natixis Global Asset Management, Global Survey of Institutional investors Nov 2016

The risk-on risk-off trade driving allocations?

"For each of the following alternatives, please indicate which you expect will deliver the biggest gains in 2017."

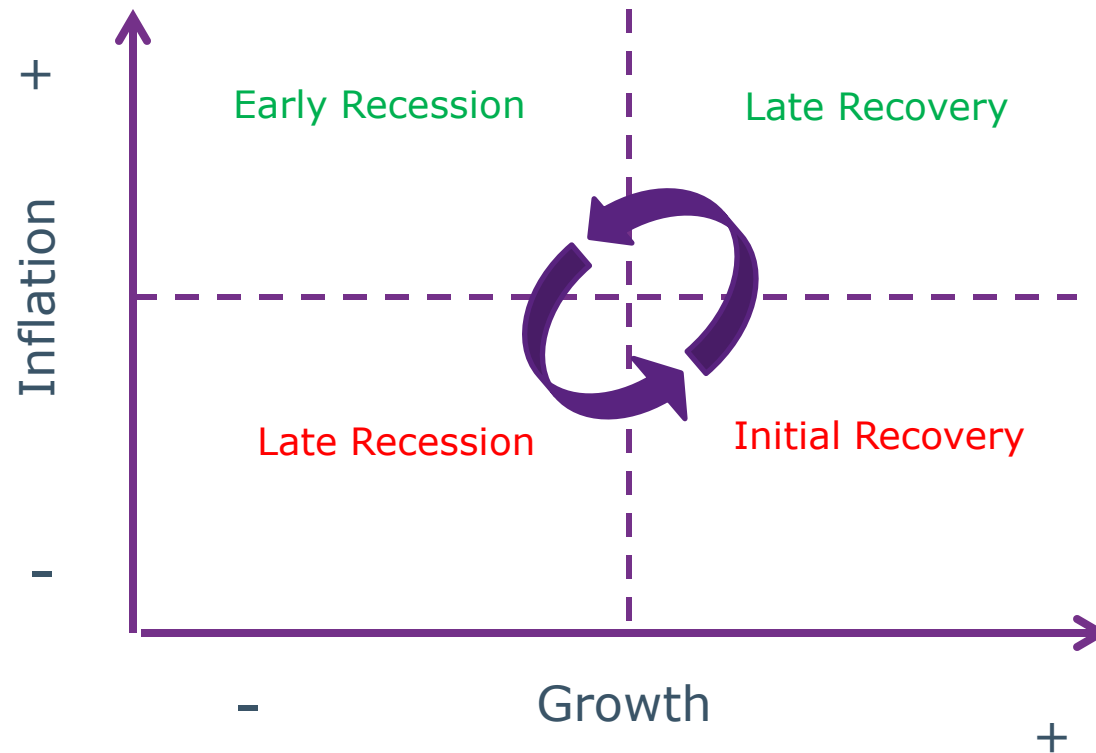


Institutional Investors, appear to be doubling down on their bets by increasing allocations to equities, private equities, and other high-risk assets seeking to generate returns.

Alternative investments involve unique risks that may be different than those associated with traditional investments, including illiquidity and the potential for amplified losses or gains. Investors should fully understand the risks associated with any investment prior to investing.

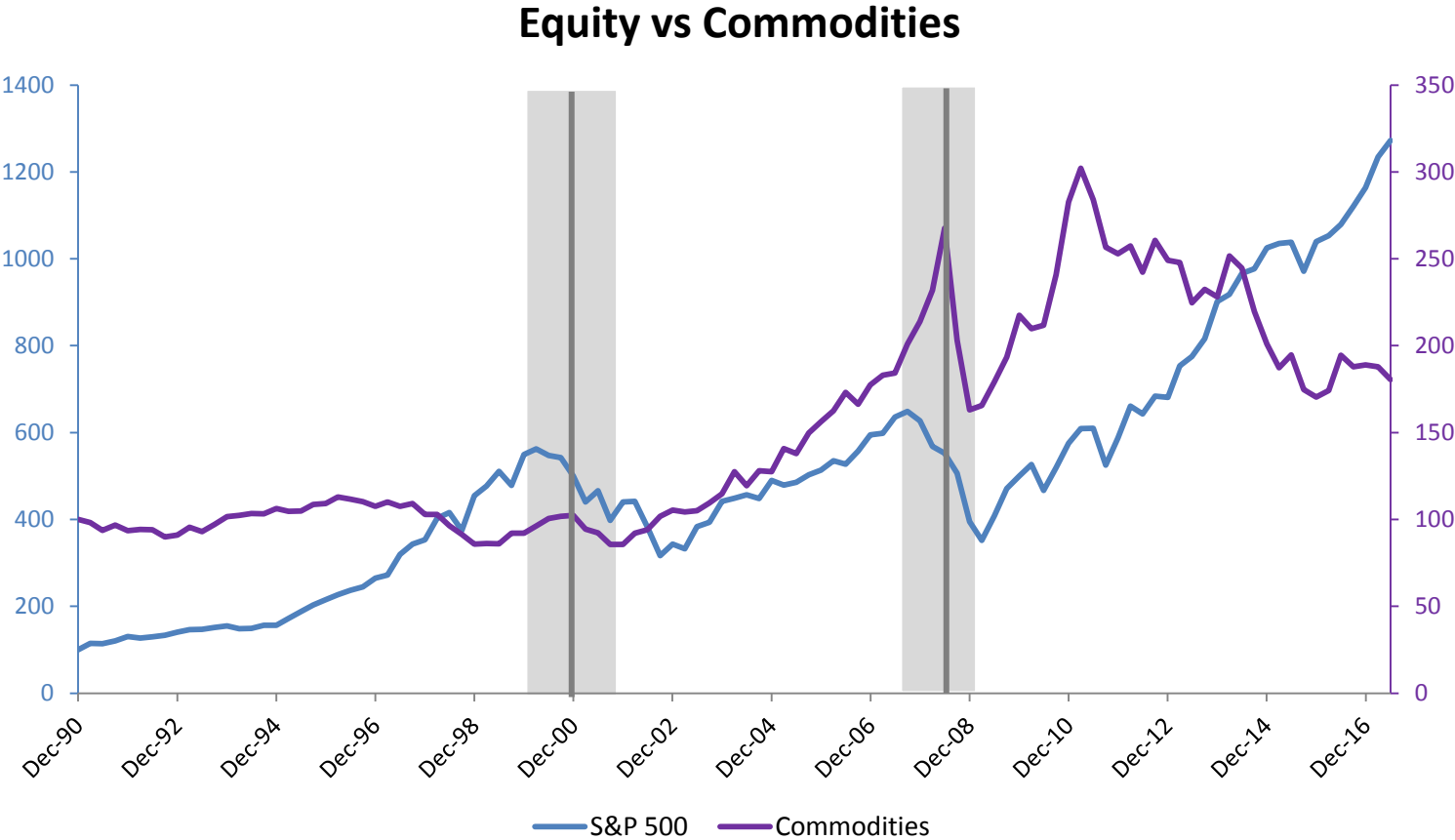
Source: Natixis Global Asset Management, Global Survey of Institutional investors Nov 2016

But performance may depend on the economic cycle



Outperformance of commodities vs equities will depend on the economic cycle. Optimization of portfolios are dynamic.

But performance may depend on the economic cycle



Source: PRCG Portfolio Clarity, MPI. Period: Mar 1991 – June 2017. Commodities: CCI Index.

Other discouraging factors

- **2008 crisis:**
 - Most investors invested in real estate before the credit crunch
 - Need for maximum **transparency** after 2008
- **Rates falling** since 1981: why investing in more complicated asset class?
- **Inflation hedge is not perfect** in the short term
- Diversification benefits can be achieved with **small allocations**
- They are **off-benchmark bets** in some cases
- **Specialized investment capabilities**

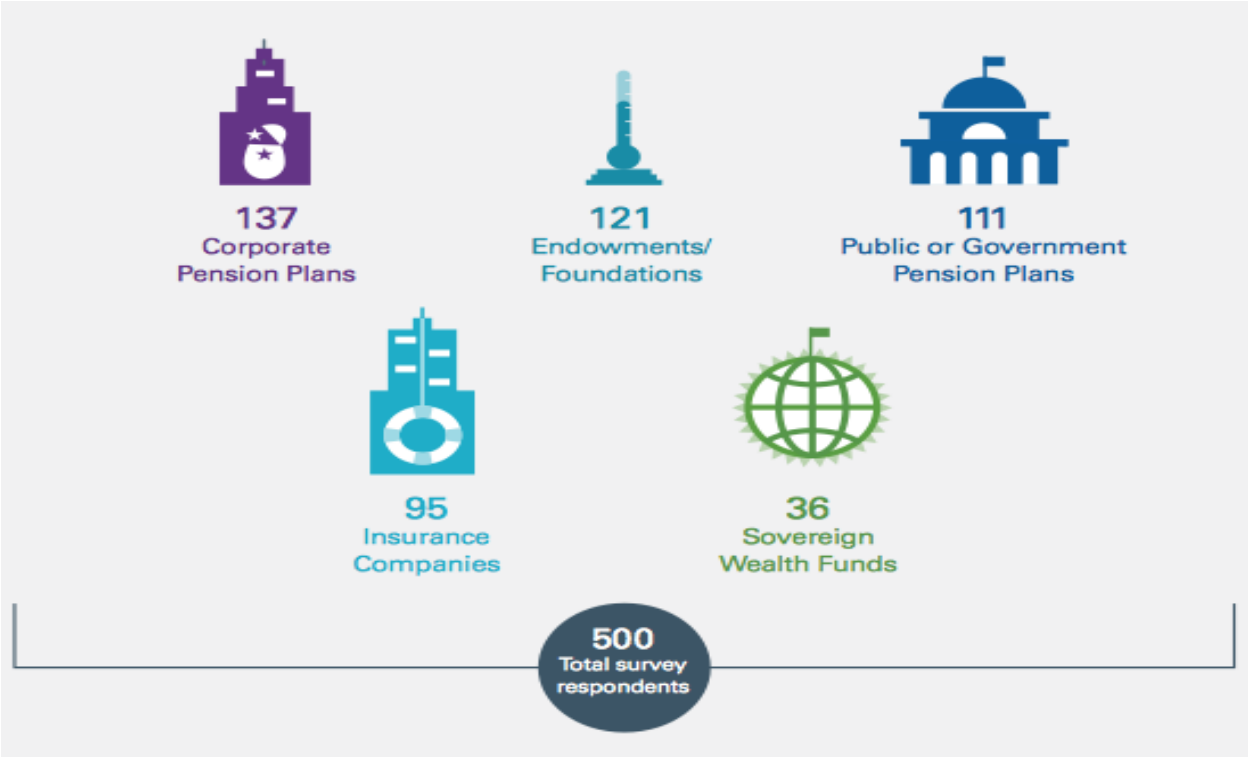
4. Appendix

The Durable Portfolio Construction® Research Center

- **Launched in 2010 to examine investor attitudes and behaviors related to risk**
- **Surveys of Individual Investors, Financial Advisors, and Institutional Investors, Retirement Plan Participants, Insurance CFOs and the Global Retirement Index**
 - 50,000+ survey respondents over seven years
 - 31 countries: Asia, Europe, MENA, North America, South America, Australia
 - 22 primary research studies, three index reports
- **Massachusetts Institute of Technology partnership integrating big data and behavioral finance**
 - *What is an Index?*, Dr. Andrew Lo
 - Journal of Portfolio Management 2016 Paper of the Year

The data behind the discussion

Global Survey of Institutional Investors



Natixis Global Asset Management, Global Survey of Institutional investors compiled by CoreData Research, October–November 2016. Survey included 500 institutional decision-makers in 31 countries.

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