

TEXPERS

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Overlay Strategies Are Used to Meet Various Plan Objectives

■ Cash Equitization

Securitizing excess cash pools (liquidity pools, excess manager cash, margin cash, receivables) according to strategic benchmark

Facilitate regularly scheduled and unexpected cash flows via this balanced portfolio without disrupting manager portfolios

■ Strategic Overlay

Create balanced portfolio of synthetic and/or physical instruments designed to mirror the strategic benchmark

■ Tactical Overlay (GTAA)

Use derivatives to overweight /underweight strategic benchmark based on near term asset class relative value allocation views

■ Portable Alpha

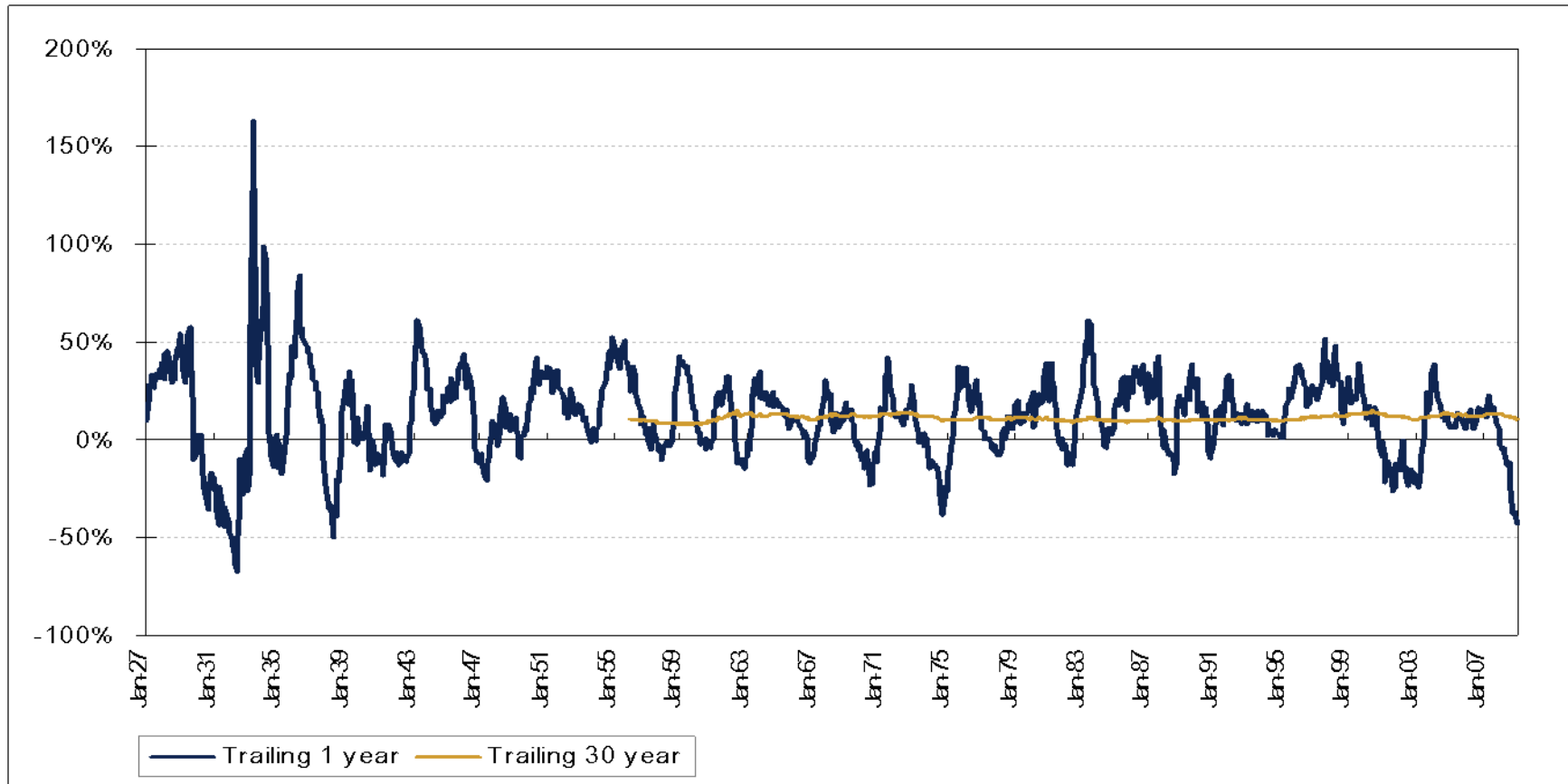
Provide market (beta) exposure within portable alpha program

2008 Lessons Learned Drive Investor Trends in 2009

- Behavior of asset class correlations during a crisis
 - Re-evaluate portfolio diversification assumptions
 - Challenging the CAPM return/risk theory
- Fear of prolonged recession and market illiquidity
 - Higher cash balances
 - Greater strategic asset allocation drift
- Innovations in risk management strategies
 - Non traditional approaches to portfolio construction
 - Focus on diversification and downside protection
 - How to mitigate market liquidity issues

Market Volatility Can Be Dampened Over Long Time Horizon

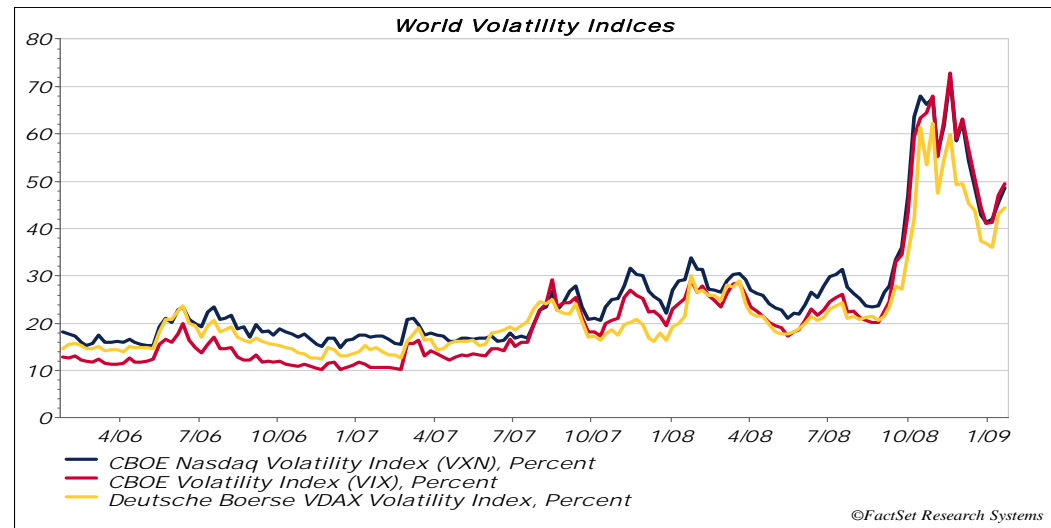
Historical return of the S&P 500[®] since 1926



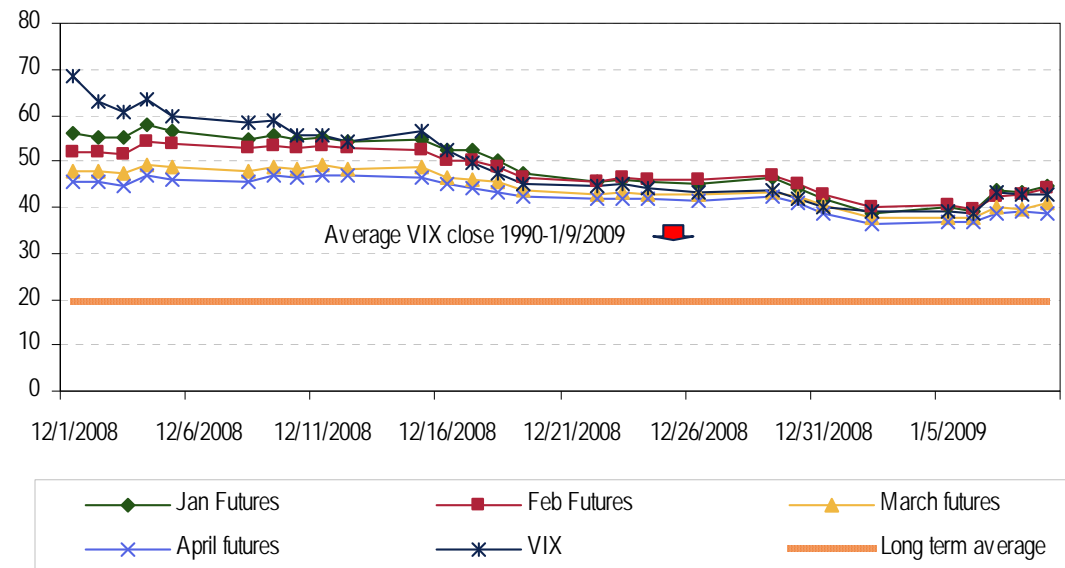
Source: Ibbotson, SSGA, February 2009. Past performance is not a guarantee of future results.

2008 Lessons Learned: Market Volatility Can Rise Dramatically

- World volatility indices spiked in the Q3 2008 under weight of the deepening financial crises and fear of a prolonged global recession



- The CBOE VIX has declined since Q4, though remains elevated vs. historical average
- VIX futures remain significantly elevated vs historical average in 2009

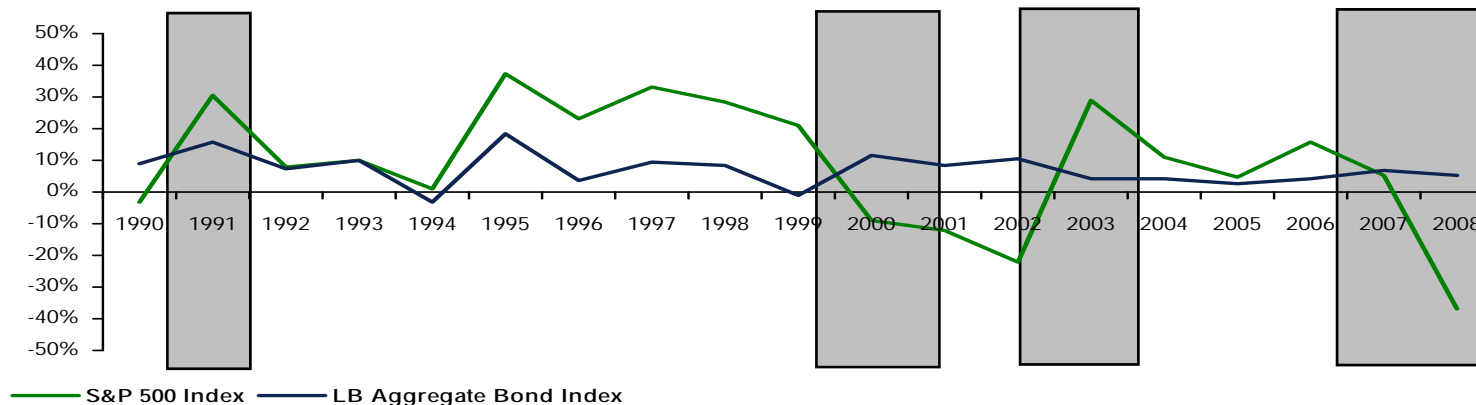


Source: SSGA, FactSet January 27, 2009

2008 Lessons Learned: Re-Balancing Costs Rise

- Widening credit spreads have driven bid/ask spreads to historical wides making it cost prohibitive to re-balance portfolios
 - BarCap Agg Bond Index spreads are approximately 10-20bps (versus 7-12bps historically)
 - BarCap Long Gov/Credit Index spreads are approximately 50-75bps (versus 20-30bps historically)
 - BarCap Long Credit Index spreads are approximately 100-150bps (versus 50-75bps historically)
- Deviations from asset allocation targets may lead to sub-par returns when markets recover

Annual Returns of Stocks and Bonds from 1990 to 2008*



* Source: Ibbotson December 2008

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Several Key Risk Factors Have Emerged

1. Volatility Risk

Ensuring portfolio is positioned to weather most market movements

2. Liquidity Risk

Providing enough portfolio liquidity

3. Downside Risk

Protecting portfolio from capital erosion

4. Funding Risk

Minimizing the asset/liability funding gap

5. Asset Allocation Risk

Maintaining portfolio's target asset mix

Sample Overlay Strategies: Reducing Implementation Costs and Liquidity Concerns

Overlay Strategy Objectives During Volatile Markets

- **Cash equitization:**
 - Increase cash on hand for liquidity management
 - Minimize tracking error to strategic benchmark
- **Strategic overlay:**
 - Reduce cost of strategic rebalancing
- **Tactical overlay:**
 - Actively manage to exploit temporary market dislocations
 - Avoid markets expected to underperform in near term
- **Currency overlay:**
 - Hedge currency exposure

Cash Equitization: Effects of Uninvested Cash Exposure

Residual cash balances can cause performance drag and volatility

- Sample Strategic Benchmark Target
 - 40% Large Cap US Equity
 - 5% Small Cap US Equity
 - 10% Developed Market Equity
 - 5% Emerging Markets Equity
 - 40% US Institutional Bonds
- Adding 5%* cash and keeping proportional weights, historical performance
- Average annual tracking error of 49bps versus the benchmark over 10 years

<i>Investment Horizon</i>	<i>60/40 Mix</i>	<i>60/40 with 5% Cash</i>	<i>Diff</i>
Long Term Period (10 Year Annualized Return through 12/06)	8.45%	8.22%	0.28%
Market Inflection Period (3 Year Annualized Return through 12/08)	-2.68	-2.35	-0.33
High Volatility Period (1 year Annualized Return through 12/08)	-23.78	-22.62	-1.16

*Note: Actual cash held varies daily. 5% was chosen for illustrative purposes only.
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Cash Equitization: Closer Benchmark Tracking

- Objective is to invest cash to keep portfolio closer to its strategic benchmark
- Note that if benchmark declines, the program should have a negative return

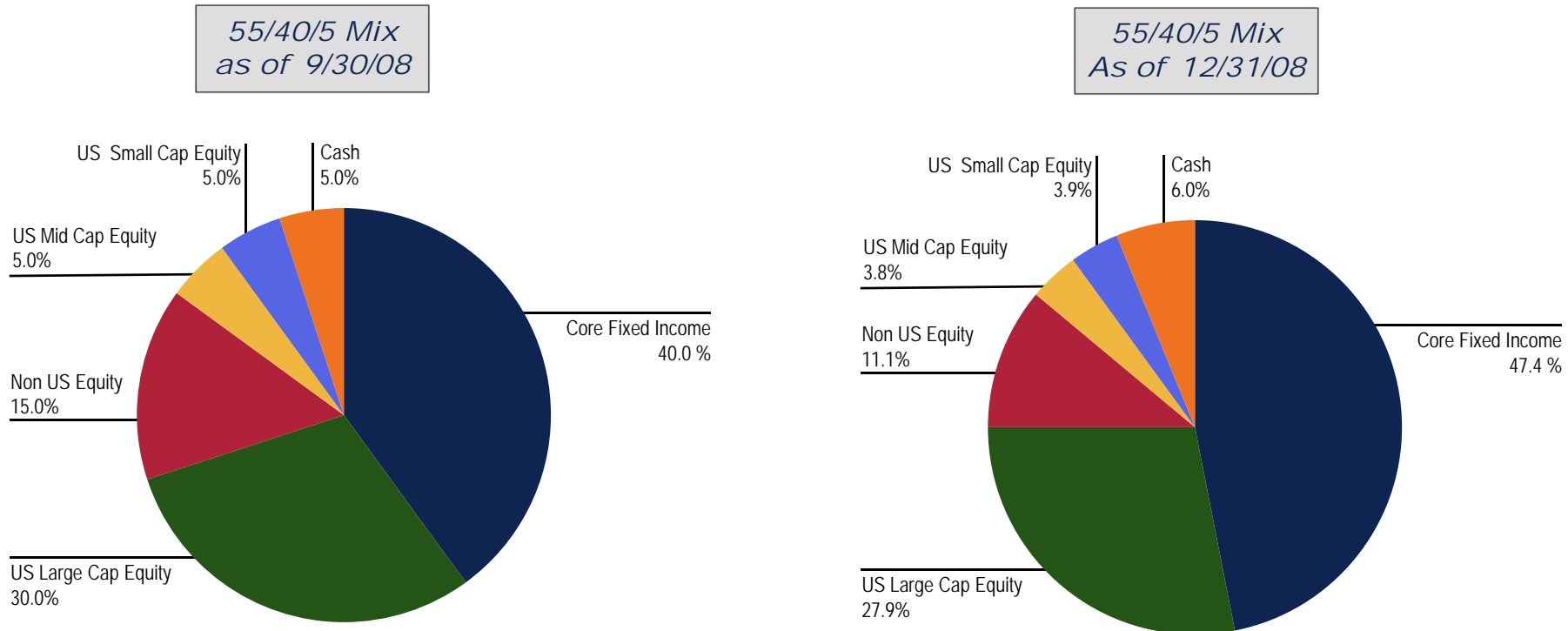
Asset Class Breakdown

Asset Class	Portfolio			Benchmark	Difference
	Physicals	Overlay	Total		
Equity	51.36%	8.64%	59.99%	60.00%	-0.01%
Fixed Income	35.67	4.29	39.96	40.00	-0.04
Cash	12.97	-12.92	0.05	0.00	0.05
Total	100.00%	0.00%	100.00%	100.00%	0.00%

Regional Breakdown

Asset Class	Portfolio			Benchmark	Difference
	Physicals	Overlay	Total		
Equity					
US Large Cap	31.29%	3.70%	35.00%	35.00%	0.00%
US Small Cap	6.73	3.25	9.99	10.00	-0.01
International Developed	8.23	1.68	9.91	10.00	-0.09
Emerging Markets	5.10	0.00	5.10	5.00	0.10
Fixed Income					
Domestic Fixed Income	35.67	4.29	39.96	40.00	-0.04
Cash	12.97	-12.92	0.05	0.00	0.05
Total	100.00%	0.00%	100.00%	100.00%	0.00%

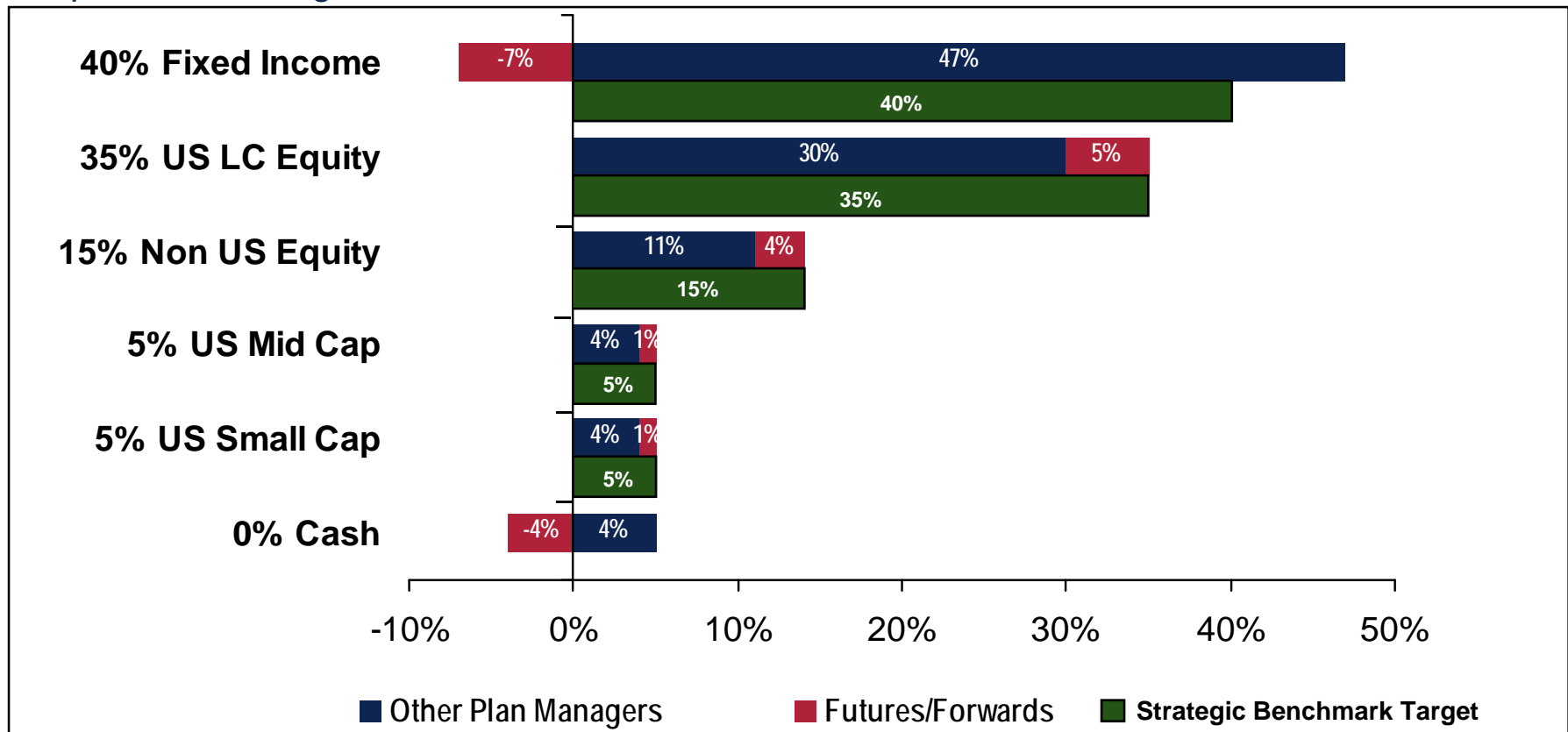
Strategic Overlay: Sample Portfolio Drift during Q4 2008



The information outlined above is intended for illustrative purposes only. The information is not intended to be investment advice.

Strategic Overlay: Rebalancing with Index Futures

- Transaction costs related to bond sale with futures basket are currently .10bp versus .20bp for cash funds
- Rebalancing with futures requires only margin cash commitment enabling higher cash positions during volatile markets



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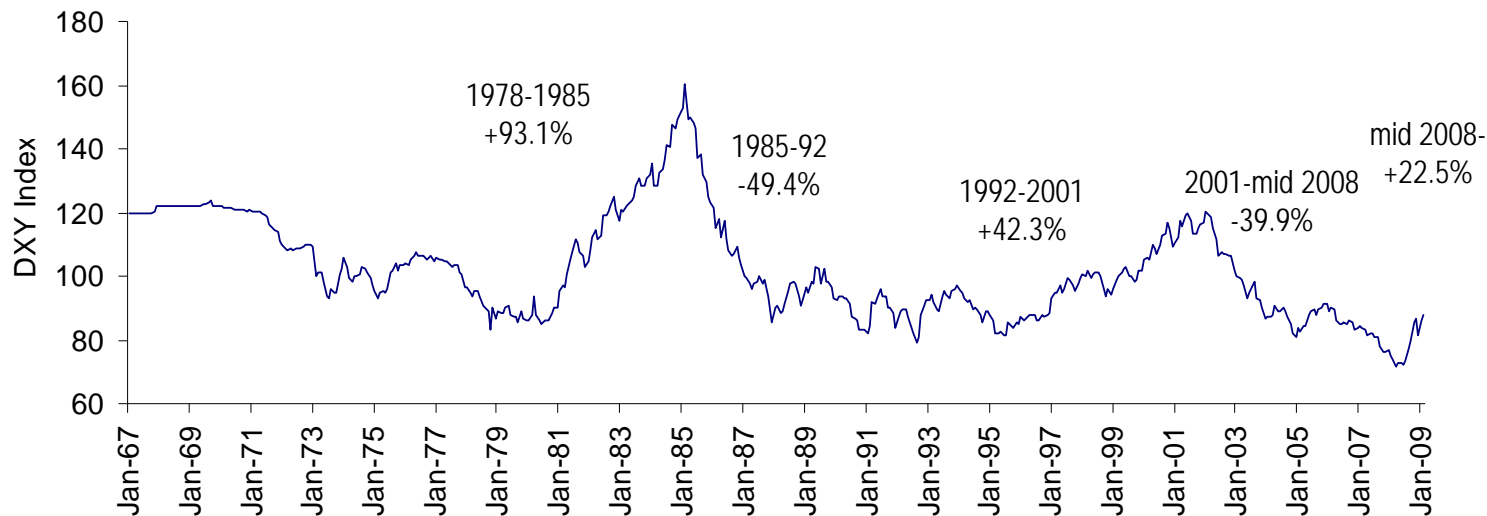
Unmanaged Currency = Uncompensated Risk

- Currency exposures introduce uncompensated risk
 - Currency is a residual of a decision to invest abroad
- Risky assets generally offer positive risk premiums over long horizons
 - Not true for currency
- Currency mandates can be unfunded
- Maximize risk-adjusted returns = sensible to manage currency risks
 - Risk can be allocated to assets that pay a risk premium

US Dollar Index (DXY): January 1968 to January 2009

The US dollar index (DXY) has been volatile in various periods over the past 40 years

**Dollar Index Return
January 1967 - February 2009**



- DXY is comprised of the following currencies by weight (as of December 31, 2007): Euro (57.6%), Japanese Yen (13.6%), British Pound (11.9%), Canadian dollar (9.1%), Swedish Krona (4.2%), Swiss Franc (3.6%)

Source: Bloomberg

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Thank You!

Disclosure

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