

# A Primer On Market Neutral

## Texas Association of Public Employees Retirement System (TEXPERS) Annual Conference

Invesco Quantitative Equity Strategies  
New York, Boston, Frankfurt, Germany



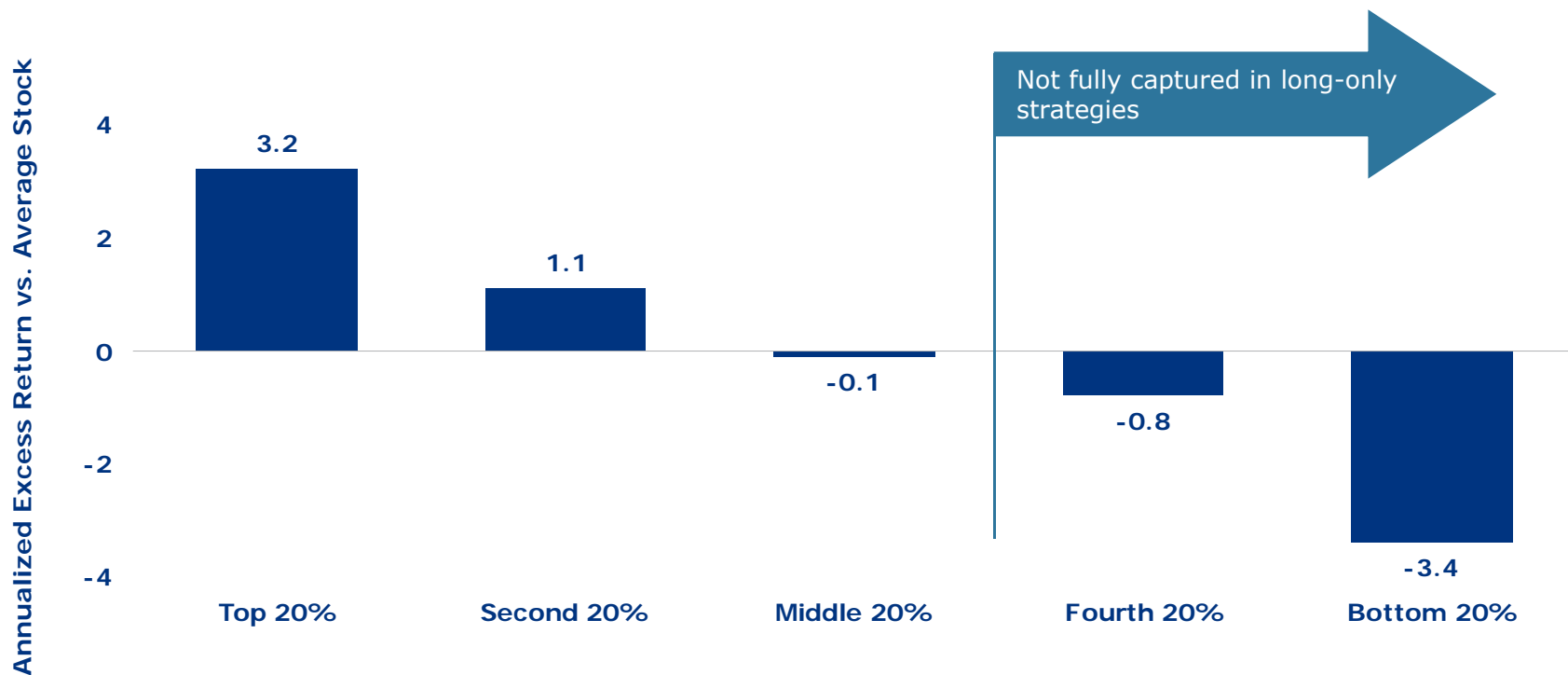
# What Is Market Neutral?

*A long/short strategy that is neutral with respect to the main underlying exposure – implies no market risk*

- Typical Underlying Investments
  - Long and short positions in equities
  - All active weights
- Achieve neutrality by constructing a portfolio that is:
  - Beta Neutral: Long portfolio beta  $\approx$  Short portfolio beta
  - Dollar Neutral: Dollars invested long  $\approx$  Dollars invested short
- Manage risk by offsetting long and short positions
  - Constrain industry/sector and style (growth/value/ size) exposures



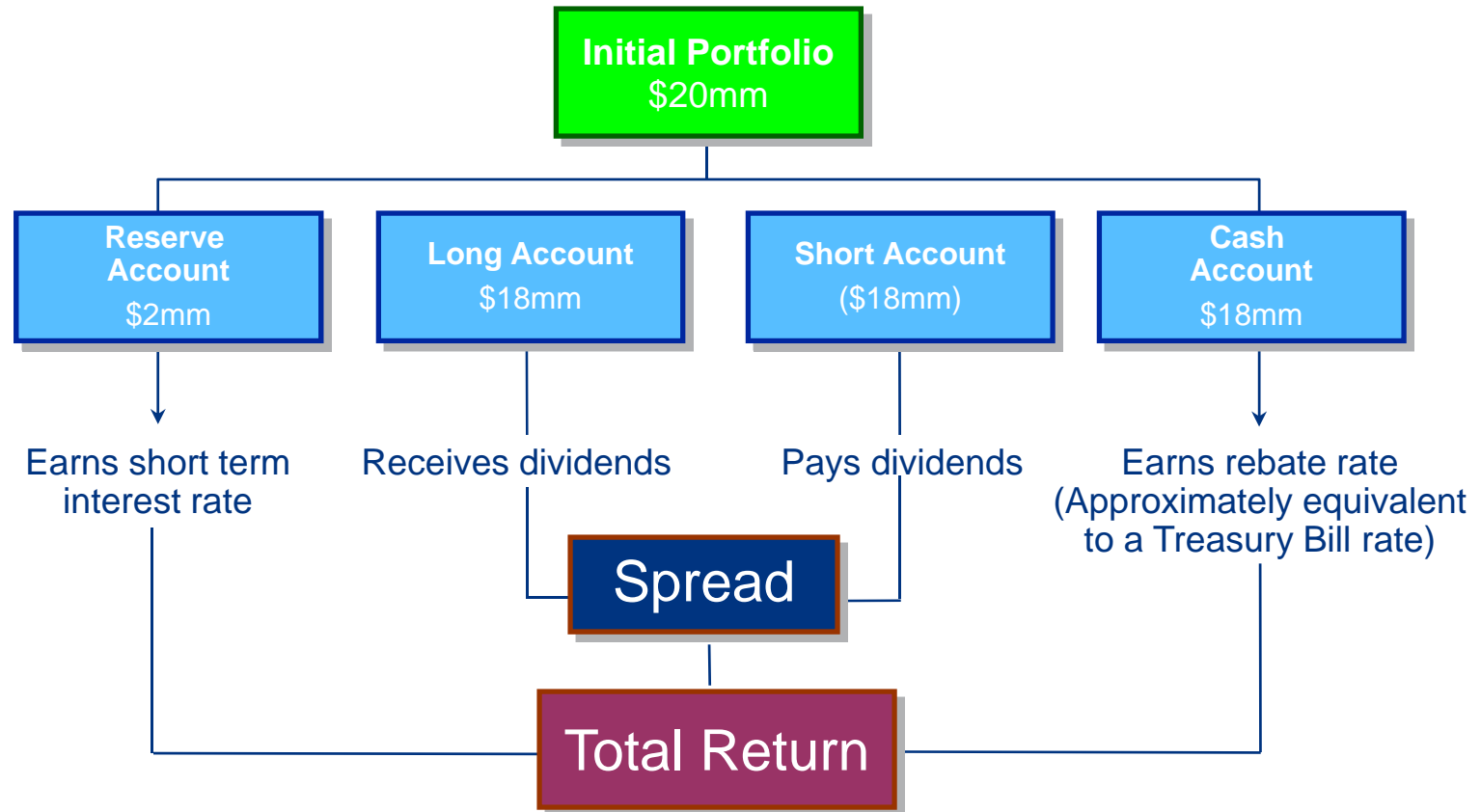
# Allows Managers To Fully Exploit Their Investment Insights Without Benchmark Constraints



Data calculated by Invesco on a quarterly basis using real time factor scores and weights applied on an industry neutral basis. Excess returns are calculated by comparing the Model's industry neutral forecast at quarter end with the actual industry neutral returns for the following quarter and then weighting all of the returns in each quintile by the square root of market cap. Results employ the Model and the large cap universe defined during applicable time periods; the Model and the stocks change over time. Model calculations are gross and do not deduct management fees, transaction costs or other expenses which will reduce the performance of actual portfolios. Model results are not the only factor considered by IQS in constructing portfolios. Past performance is not indicative of future results. Results as of January 1, 1984 through December 31, 2008.



# How Does Market Neutral Work Operationally?



Total Return = Reserve Account Interest + Cash Account Interest + Long/Short Spread

For Illustrative Purposes Only.



# Market Neutral – One Alpha – Two Sources

Dollar  
Matched

Market  
Rises

Market  
Declines

Long

Make  
Money

Lose  
Money

Short

Lose  
Money

Make  
Money

*Alpha*

*Alpha*

For Illustrative Purposes Only.



# What Can An Allocation To Market Neutral Achieve?

- Improved Diversification
- Reduced Volatility
- Higher Risk-Adjusted Returns
- Lower Market Exposure
- Maximize Manager Skill



# Diversification – Negative Correlation With Stocks; Low Correlation With Bonds and Cash

## 15-Years

	(1)	(2)	(3)	(4)
1) Market Neutral	1.00			
2) Bonds	0.26	1.00		
3) Stocks	-0.02	-0.22	1.00	
4) Cash	0.32	0.21	0.23	1.00

## *Correlation with Market Neutral Manager Composite*

### 10 Years

- 0.31 with Bonds
- (0.36) with Stocks
- 0.23 with Cash

### 5 Years

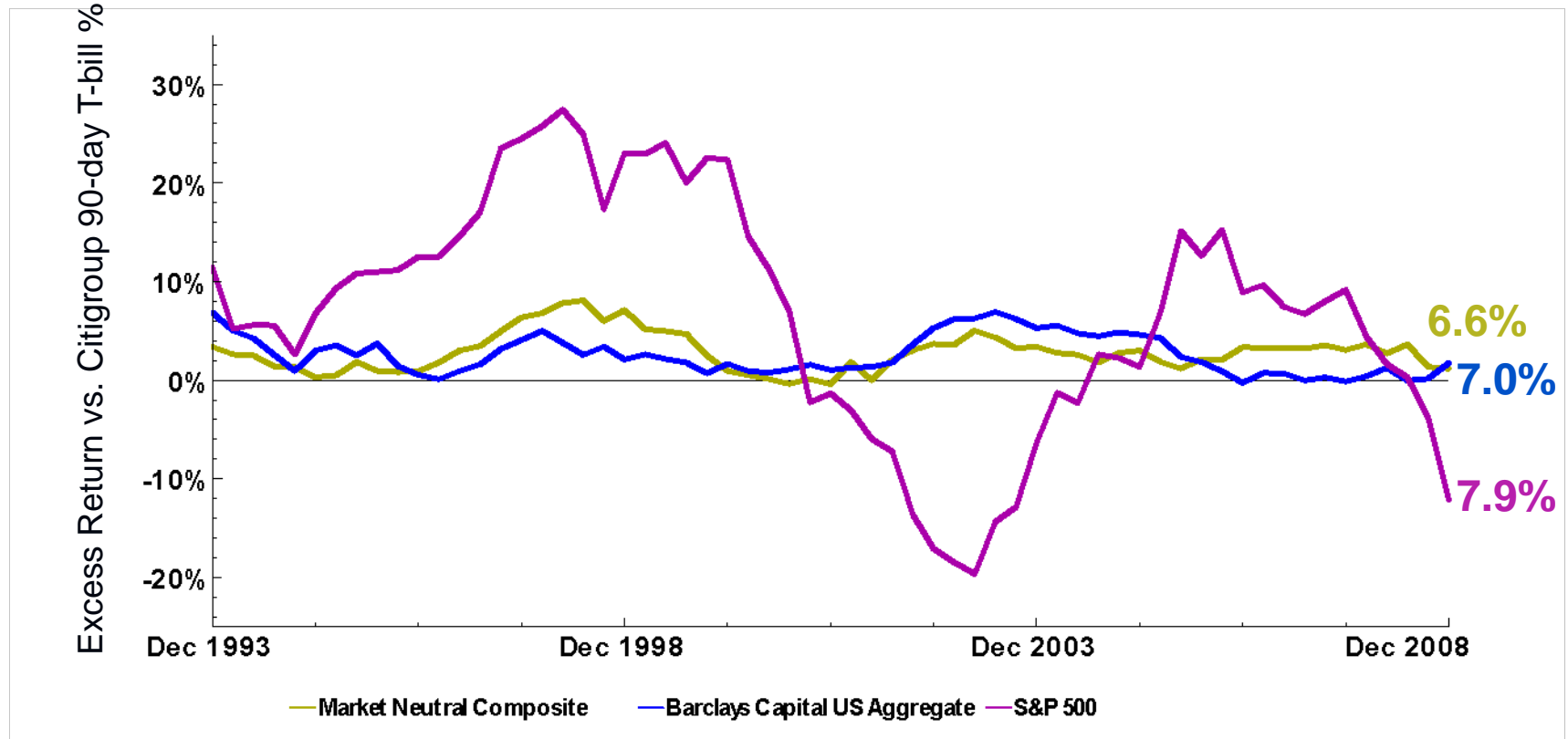
- 0.02 with Bonds
- 0.30 with Stocks
- 0.32 with Cash

Source: Customized Market Neutral Manager Composite from eVestment Alliance database; Bonds = Barclays Capital U.S. Aggregate Index; Stocks = S&P 500 Index. Cash = Citigroup 90-day T-bills. Returns from Zephyr Style Advisor. Past performance is not a guarantee of future results.



# Stable Return Pattern Vs. Stock and Bonds

January 1991 – December 2008

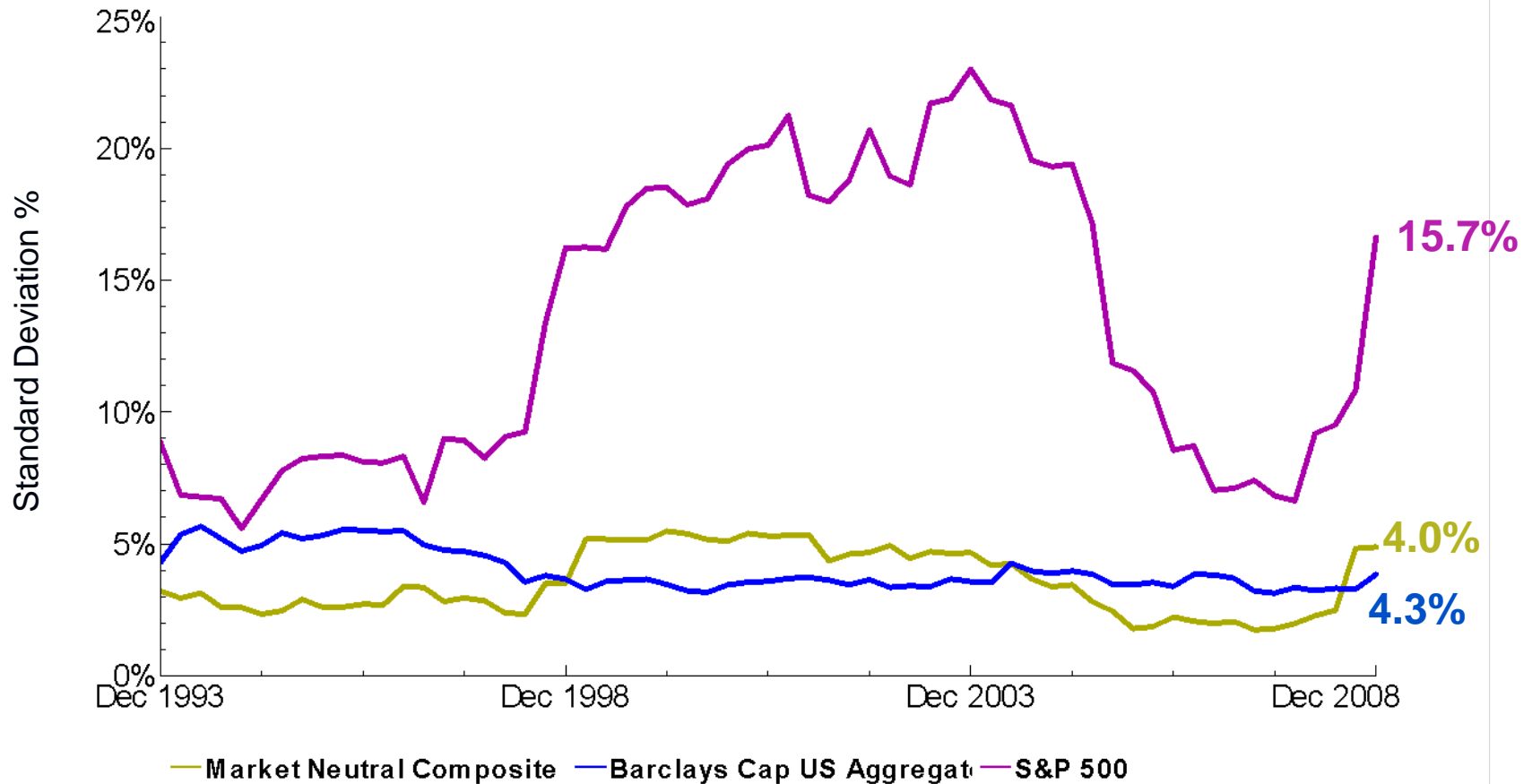


Source: Invesco. Rolling 3-yr excess returns vs. Citigroup 90-day T-bills for the period ended December 31, 2008. Customized Market Neutral Peer Composite from eVestment Alliance database - Gross of Fees; Index Returns from Zephyr Style Advisor. Past performance is not a guarantee of future results.



# Bond-Like Volatility

January 1991 – December 2008

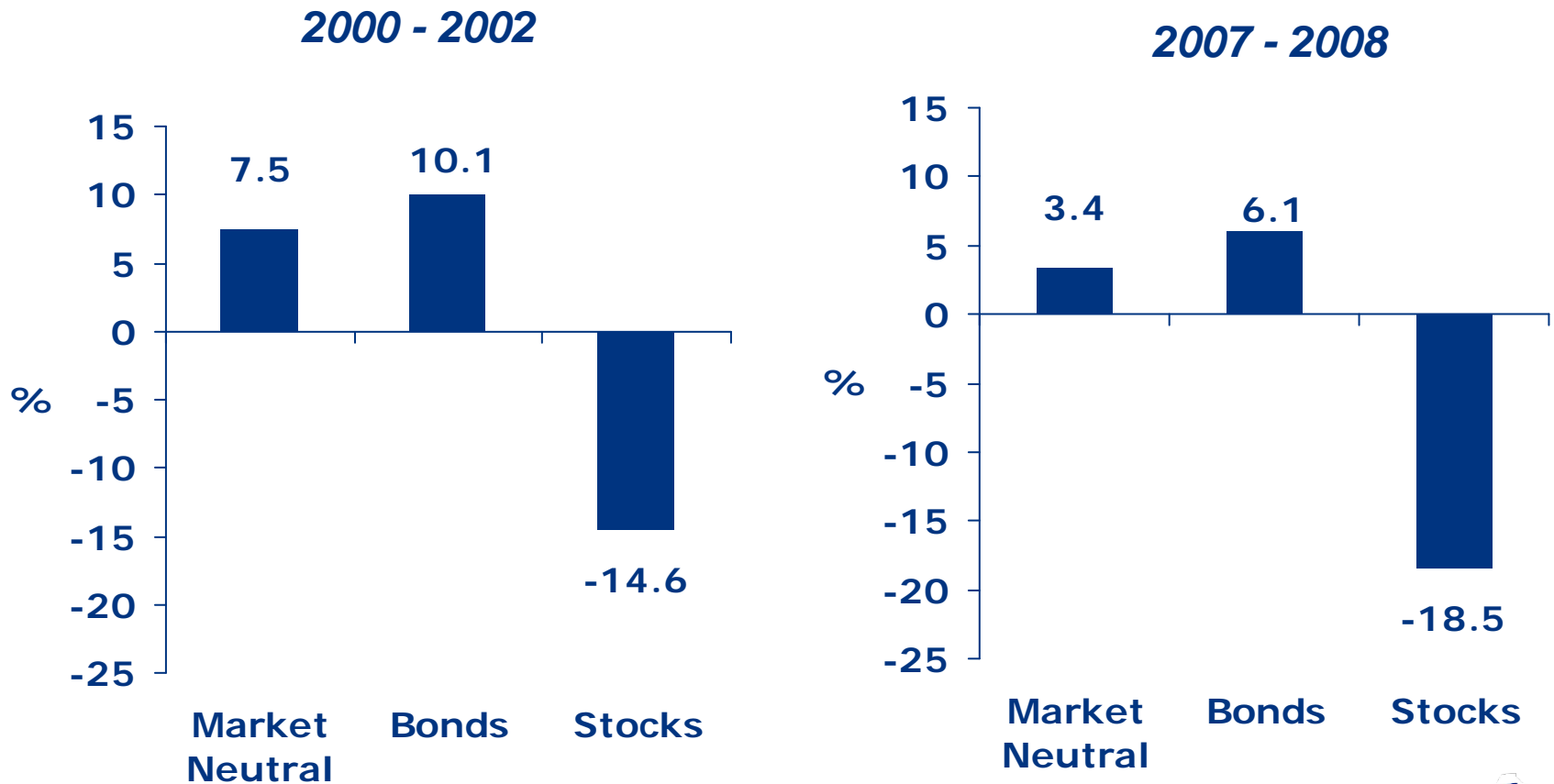


Source: Invesco Rolling 3-yr excess returns vs. Citigroup 90-day T-bills for the period ended December 31, 2008. Customized Market Neutral Peer Composite from eVestment Alliance database; Index Returns from Zephyr Style Advisor. Past performance is not a guarantee of future results.



# When Does Market Neutral Perform Best?

## *Bear Market Cycles*



Source: Customized Market Neutral Manager Composite from eVestment Alliance database; Bonds = Barclays Capital U.S. Aggregate Index; Stocks = S&P 500 Index. Returns from Zephyr Style Advisor. Past performance is not a guarantee of future results.



# What Are The Associated Risks?

- Short Selling
- Leverage
- Counterparty Risk
- Underperformance



# Where Does It Fit?

*A complement or substitute within:*

- Alternatives
  - Substantially less leverage and volatility than other hedge fund investments
- Fixed Income
  - Bond-like returns with bond-like risk
- Equities
  - Equity-like returns with bond-like risk
- Portable alpha
  - “Porting” the alpha to fixed income or equities



# How Do I Select Managers?

- Proven process for identifying long and short positions
- Experience with shorting
- Portfolio construction skills
- Strong risk management skills
- Automated performance reporting including performance attribution
- Capacity constraints
- Fee Structured



# Disclosure

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