

KEEPING YOUR EGGS IN DIFFERENT BASKETS: MAKING SENSE OF THE CONCEPT OF DIVERSIFICATION

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MOTIVATION

- THE VARIOUS DIFFERENT WAYS OF THINKING ABOUT DIVERSIFICATION
- TO THE EXTENT POSSIBLE, DISCUSS WHAT RESEARCH FINDS REGARDING THE EFFECTIVENESS OF EACH DIFFERENT WAY OF THINKING ABOUT DIVERSIFICATION

STRUCTURE OF THE PRESENTATION



RECENT INTEREST



AAII ORANGE COUNTY CHAPTER MEETING
Saturday, February 10, 2018

The AAII ORANGE COUNTY Chapter will present:

“ADAPTIVE ASSET ALLOCATION: DYNAMIC GLOBAL PORTFOLIOS TO PROFIT IN GOOD TIMES AND BAD”



Discussed by:
Adam Butler

Co-Founder and Chief Investment Officer, ReSolve Asset Management

Adam Butler will discuss two topics in this double-header event focused on leading edge advances in asset allocation. In the first session he will discuss how to create the most optimal global portfolio without having to

As a member of AAI, you are invited to the ORANGE COUNTY Chapter's upcoming meeting. Please share this email with your family and friends and let them know they are welcome to attend also.

FREE Member Benefit—If you are not already receiving the ORANGE COUNTY Chapter Meeting announcements by postal mail, simply [click here](#) and follow the instructions under the heading Signing-Up for Local Chapter(s).



AAII LOS ANGELES CHAPTER MEETING
Saturday, January 20, 2018

The AAII LOS ANGELES Chapter will present:

Topic 1:

“INVESTING AT THE INTERSECT OF VALUE, MOMENTUM AND QUALITY”



Discussed by:
Charles Rotblut CFA

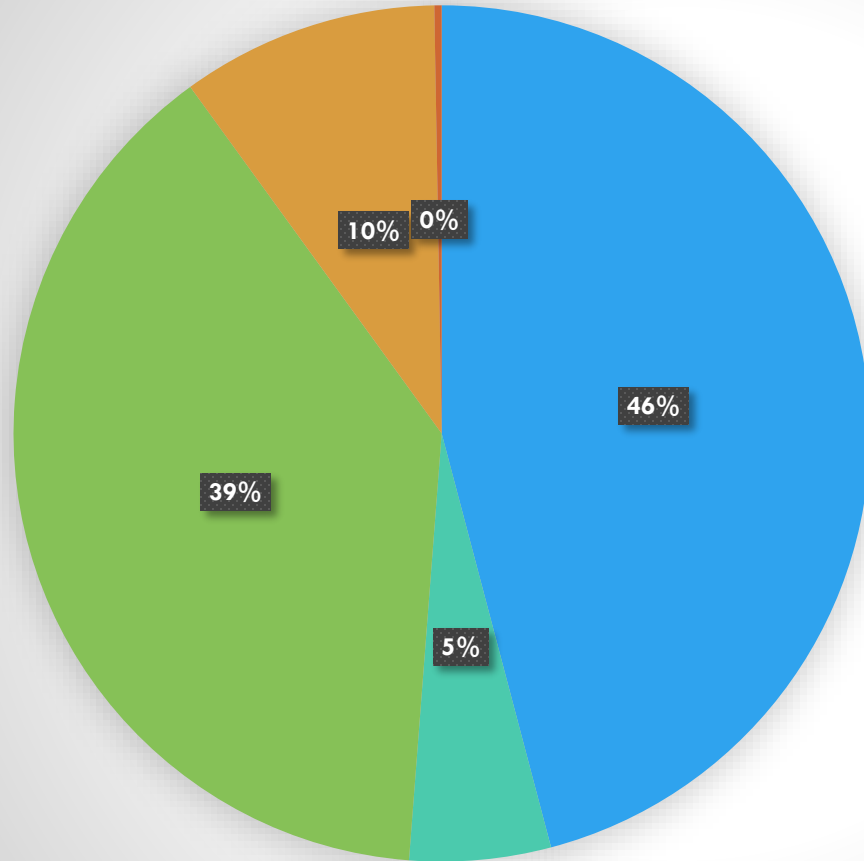
Vice President and Financial Analyst, AAI; Editor, AAI Journal

As investors, we want stocks with more potential upside than downside. AAI Journal editor Charles Rotblut unveils the VMQ Stocks strategy for

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MY PORTFOLIO



- Equity (includes ETFs)
- Bond/fixed income
- Derivatives
- Cash
- Cryptocurrencies

A COLLEAGUE ONCE TOLD ME...

..THAT “DIVERSIFICATION IS GOOD” IS THE
ONE AND ONLY THING WE ALL AGREE
ON IN FINANCE.

"Keep all your eggs in one basket, but watch that basket closely."



"Keep all your eggs in one basket, but watch that basket closely."

"Diversification is protection against ignorance. It makes little sense if you know what you are doing."



<u>Shares*</u>	<u>Company</u>	<u>Percentage of Company Owned</u>	<u>12/31/16</u>	
			<u>Cost**</u>	<u>Market</u>
			<i>(in millions)</i>	
151,610,700	American Express Company.....	16.8	\$ 1,287	\$ 11,231
61,242,652	Apple Inc.	1.1	6,747	7,093
6,789,054	Charter Communications, Inc.....	2.5	1,210	1,955
400,000,000	The Coca-Cola Company	9.3	1,299	16,584
54,934,718	Delta Airlines Inc.	7.5	2,299	2,702
11,390,582	The Goldman Sachs Group, Inc.....	2.9	654	2,727
81,232,303	International Business Machines Corp.	8.5	13,815	13,484
24,669,778	Moody's Corporation	12.9	248	2,326
74,587,892	Phillips 66.....	14.4	5,841	6,445
22,169,930	Sanofi	1.7	1,692	1,791
43,203,775	Southwest Airlines Co.	7.0	1,757	2,153
101,859,335	U.S. Bancorp	6.0	3,239	5,233
26,620,184	United Continental Holdings Inc.....	8.4	1,477	1,940
43,387,980	USG Corp.	29.7	836	1,253
500,000,000	Wells Fargo & Company	10.0	12,730	27,555
	Others		10,697	17,560
	Total Common Stocks Carried at Market		<u>\$ 65,828</u>	<u>\$ 122,032</u>



INTUITION

- REDUCES RISK.
- HEDGES YOUR BETS.
- CONSISTENT WITH BUY AND HOLD PRINCIPLES.
- ENCOURAGES US TO INVESTIGATE A WIDE RANGE OF DIFFERENT INVESTMENTS BEFORE ACTING.

- RESULTS IN WEAK IDEAS BEING INCLUDED WITH STRONG IDEAS.
- RESULTS IN A PORTFOLIO WITH TOO MANY INVESTMENTS WE DON'T KNOW VERY WELL.
- LEADS TO LAZINESS, NOT ENOUGH ANALYSIS CONDUCTED ON OUR INVESTMENTS.



SO ... WHAT DO WE MEAN BY “DIVERSIFICATION”?

- DIFFERENT STOCKS WITHIN INDUSTRY?
- DIFFERENT INDUSTRIES IN OUR PORTFOLIO?
- DIFFERENT ACCOUNTS THAT WE HAVE OUR MONEY IN?
- DIFFERENT ASSET CLASSES?
- DIFFERENT COUNTRIES?

- ALL (OR SOME COMBINATION) OF THE ABOVE?
- OR, WHAT ABOUT DIFFERENT *STRATEGIES*?

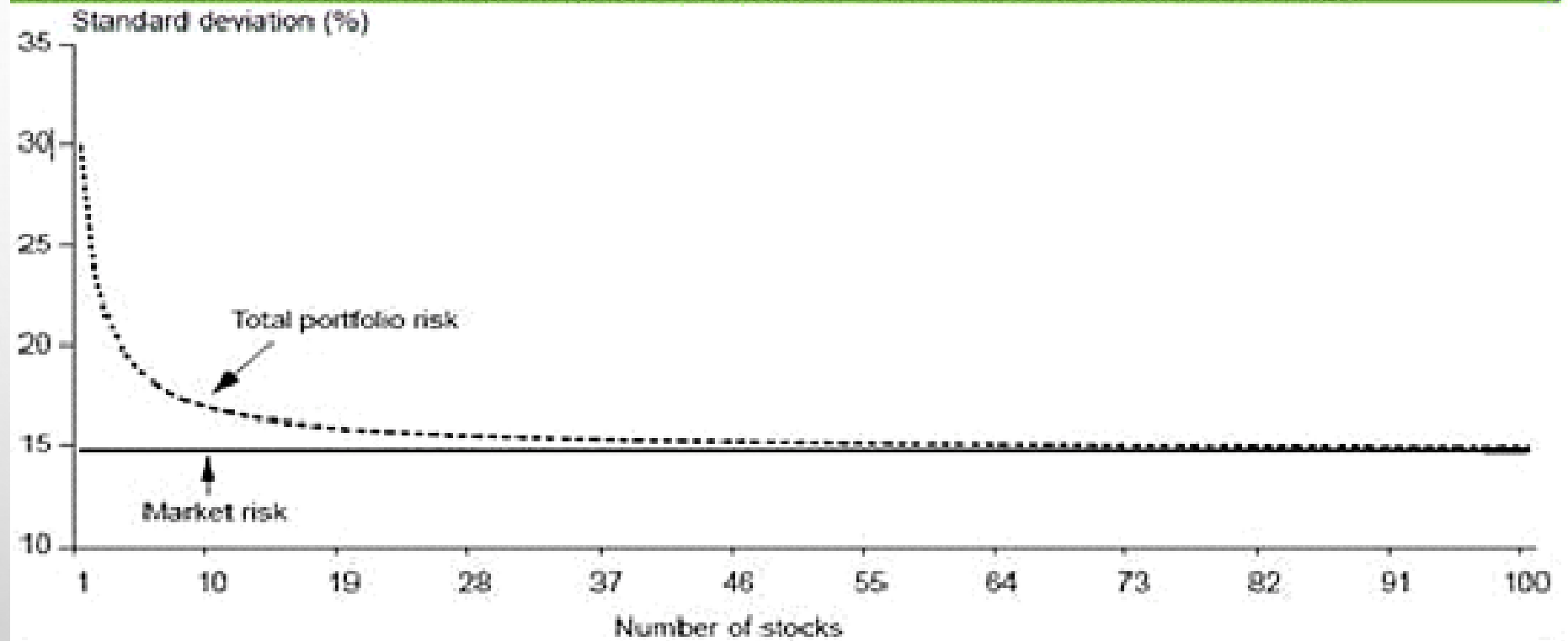
DOCUMENTED WAYS IN WHICH PORTFOLIOS STRAY FROM DIVERSIFICATION

- TOO MUCH INVESTED IN THE COMPANY YOU WORK FOR.
- TOO MUCH INVESTED IN ASSETS THAT HAVE SIMILAR CASH FLOWS TO YOUR “HUMAN CAPITAL”.
- TOO MUCH INVESTED IN THE SAME INDUSTRY.
- TOO MUCH INVESTED IN “LOCAL” COMPANIES.
- GOETZMAN AND KUMAR (2008), YALE AND UNIVERSITY OF TEXAS:
 - LESS THAN 10% OF SAMPLE OF 60,000 INDIVIDUAL INVESTORS HOLD > 10 STOCKS
 - 70% OF INVESTORS HAD 5 OR FEWER STOCKS

THE APPEAL OF DIVERSIFICATION

The ability to lower portfolio volatility without sacrificing on expected return.

Diversification: total portfolio risk as a function of number of stocks held (%)



Source: Dresdner Kleinwort Macro research

THE APPEAL OF DIVERSIFICATION

20 years of the best and worst – a case for diversification



Everyone wants to be in the best-performing asset class every year. The thing is, few people are savvy enough to consistently choose the best. That's why diversification is key. This chart shows annual returns for eight broad-based asset classes, cash, and a diversified portfolio ranked from best to worst. Notice how the "leadership" changes from year to year, and how competitively the diversified portfolio performed over 20 years (see the "average" column).

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Average
Large Cap Value 35.18%	Large Cap Growth 38.71%	Large Cap Growth 33.16%	Commodities 31.84%	REITs 15.50%	Commodities 25.91%	Small/Mid Cap 45.51%	REITs 30.41%	Commodities 21.36%	REITs 34.35%	Commodities 16.23%	Global Bonds 12.00%	Large Cap Growth 37.21%	REITs 27.58%	Bonds 7.84%	REITs 20.14%	Small/Mid Cap 36.80%	REITs 27.15%	Large Cap Growth 67%	Small/Mid Cap 17.59%	Small/Mid Cap 9.46%
Large Cap Growth 30.49%	International 20.33%	International 27.30%	REITs 25.89%	Bonds 8.44%	Global Bonds 19.37%	International 39.17%	International 20.70%	International 14.02%	International 26.86%	Large Cap Growth 11.81%	Bonds 5.24%	Small/Mid Cap 34.39%	Small/Mid Cap 26.71%	REITs 7.28%	International 17.90%	Large Cap Growth 33.48%	Large Cap Value 13.45%	REITs 2.29%	Large Cap Value 17.34%	REITs 9.13%
Small/Mid Cap 24.36%	Large Cap Value 15.63%	Commodities 24.35%	Bonds 11.63%	Cash 4.09%	Bonds 10.25%	REITs 38.47%	Small/Mid Cap 18.29%	REITs 8.29%	Large Cap Value 22.25%	International 11.63%	Cash 1.80%	International 32.46%	Commodities 16.83%	Global Bonds 7.22%	Small/Mid Cap 17.88%	Large Cap Value 32.53%	Large Cap Growth 13.05%	Bonds 0.55%	Commodities 11.77%	Large Cap Value 8.33%
REITs 18.86%	Global Bonds 15.31%	Small/Mid Cap 24.14%	Large Cap Value 7.01%	Small/Mid Cap 1.22%	REITs 5.22%	Large Cap Value 30.03%	Large Cap Value 16.49%	Small/Mid Cap 8.11%	Small/Mid Cap 16.17%	Global Bonds 10.81%	Diversified Portfolio -26.72%	REITs 27.45%	Large Cap Growth 16.71%	Large Cap Growth 2.64%	Large Cap Value 17.51%	International 23.29%	Small/Mid Cap 7.07%	Cash 0.03%	REITs 9.28%	Large Cap Growth 6.88%
Diversified Portfolio 14.55%	Bonds 8.69%	Diversified Portfolio 13.07%	Cash 5.96%	Global Bonds -0.79%	Cash 1.70%	Large Cap Growth 29.75%	Diversified Portfolio 14.64%	Diversified Portfolio 7.69%	Diversified Portfolio 15.00%	Bonds 6.97%	Commodities -35.65%	Diversified Portfolio 23.08%	Diversified Portfolio 15.93%	Large Cap Value 0.39%	Large Cap Growth 15.26%	Diversified Portfolio 13.21%	Bonds 5.97%	International -0.39%	Diversified Portfolio 8.71%	Diversified Portfolio 6.84%
Bonds 9.65%	Diversified Portfolio 6.19%	Large Cap Value 7.35%	Diversified Portfolio 5.23%	Diversified Portfolio -4.98%	Diversified Portfolio -2.53%	Diversified Portfolio 28.09%	Global Bonds 10.10%	Large Cap Value 7.05%	Large Cap Growth 9.07%	Diversified Portfolio 4.92%	Small/Mid Cap -36.79%	Large Cap Value 19.69%	Large Cap Value 15.51%	Diversified Portfolio 0.13%	Diversified Portfolio 11.70%	REITs 3.21%	Diversified Portfolio 5.39%	Global Bonds -2.61%	Large Cap Growth 7.08%	Bonds 5.29%
Cash 5.25%	Cash 5.06%	Cash 4.74%	Small/Mid Cap 4.27%	Large Cap Value -5.59%	Large Cap Value -15.52%	Commodities 23.93%	Commodities 9.15%	Large Cap Growth 5.26%	Global Bonds 5.94%	Cash 4.74%	Large Cap Value -36.85%	Commodities 18.91%	International 8.21%	Cash 0.08%	Bonds 4.21%	Cash 0.05%	Global Bonds 0.67%	Small/Mid Cap -2.90%	Bonds 2.65%	International 4.59%
International 2.06%	Small/Mid Cap 0.38%	Bonds -0.82%	Global Bonds 2.34%	Commodities -19.51%	International -15.66%	Global Bonds 14.51%	Large Cap Growth 6.30%	Cash 3.00%	Cash 4.76%	Small/Mid Cap 1.38%	REITs -37.34%	Bonds 5.93%	Bonds 6.54%	Small/Mid Cap -2.51%	Global Bonds 1.30%	Bonds -2.02%	Cash 0.03%	Diversified Portfolio -3.20%	Global Bonds 1.57%	Global Bonds 4.33%
Global Bonds 1.40%	REITs -18.82%	Global Bonds -5.08%	International -13.96%	Large Cap Growth -20.42%	Small/Mid Cap -17.80%	Bonds 4.10%	Bonds 4.34%	Bonds 2.43%	Bonds 4.33%	Large Cap Value -0.17%	Large Cap Growth -38.44%	Global Bonds 1.90%	Global Bonds 6.42%	International -11.73%	Cash 0.07%	Global Bonds -4.50%	International -4.48%	Large Cap Value -3.83%	International 1.51%	Cash 2.19%
Commodities -3.39%	Commodities -27.03%	REITs -6.48%	Large Cap Growth -22.42%	International -21.21%	Large Cap Growth -27.88%	Cash 1.07%	Cash 1.24%	Global Bonds -6.53%	Commodities 2.07%	REITs -17.83%	International -43.06%	Cash 0.16%	Cash 0.13%	Commodities -13.32%	Commodities -1.06%	Commodities -9.52%	Commodities -17.01%	Commodities -24.66%	Cash 0.27%	Commodities 0.50%

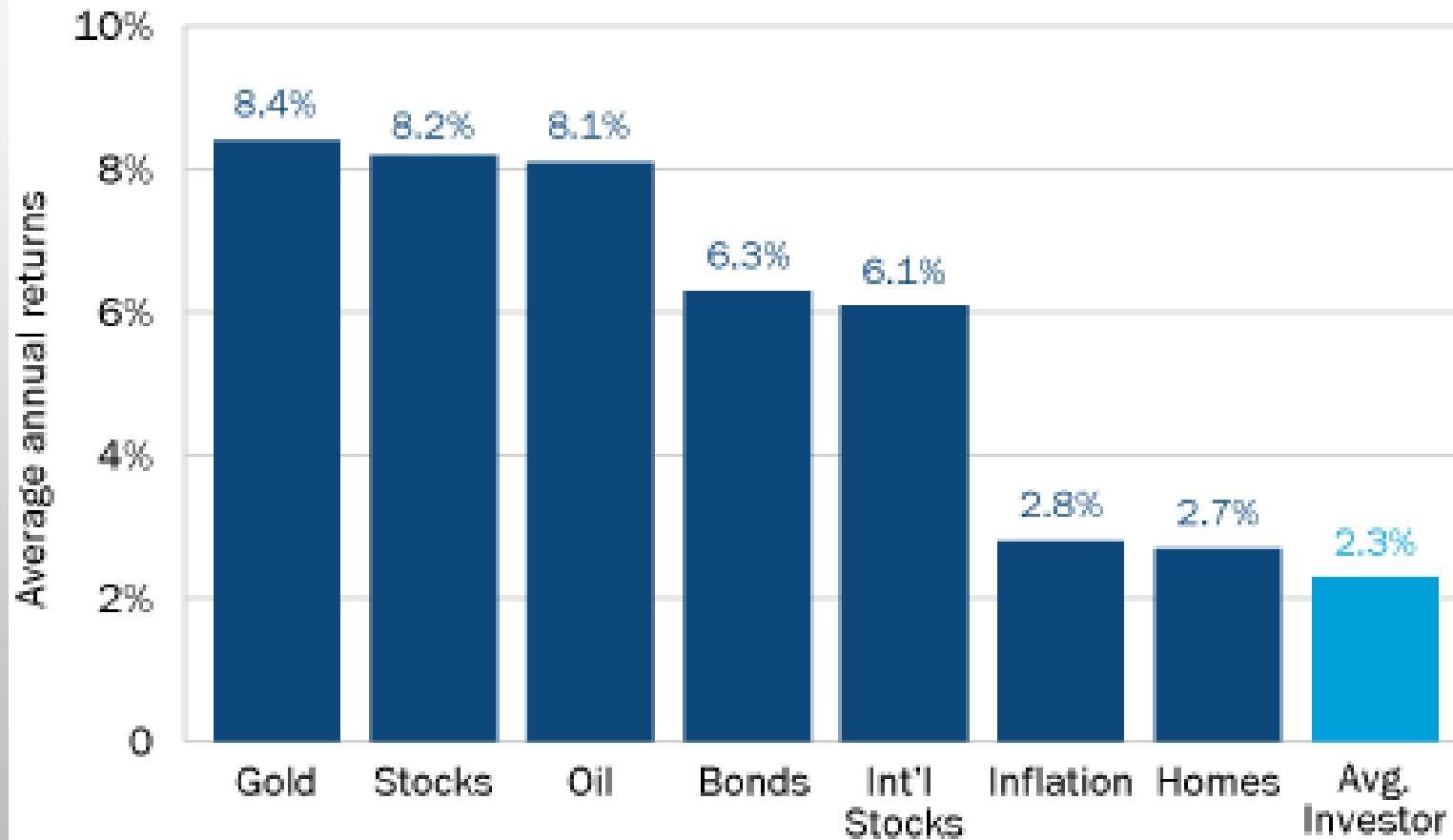
BEST
↓
WORST

THE APPEAL OF DIVERSIFICATION

■ Cash	Citigroup 3-month T-bill Index ¹	0.62
■ Bonds	Bloomberg Barclays U.S. Aggregate Bond Index ²	3.44
■ Global Bonds	JPMorgan Global Government Bond Index (Unhedged) ³	6.61
■ Diversified portfolio	Equal allocations of all segments disclosed herein, excluding cash	10.70
■ Large Cap Value stocks	Russell 1000 [®] Value Index ⁴	15.22
■ Commodities	Bloomberg Commodity Index ⁵	16.36
■ International stocks	MSCI EAFE Index ⁶	16.93
■ Large Cap Growth stocks	Russell 1000 [®] Growth Index ⁷	17.50
■ Small/Mid Cap stocks	Russell 2500 Index ⁸	18.63
■ REITs	FTSE NAREIT All REITs Total Return Index ⁹	19.62

CAN TIMING HELP? BAD NEWS FROM BLACKROCK

AVERAGE ANNUAL RETURNS 1993 - 2012



TRADITIONAL THINKING ON DIVERSIFICATION

- RISK CAN BE BROADLY SPLIT INTO TWO CATEGORIES:
 - SYSTEMATIC RISK: BROAD, AFFECTS MOST/ALL INVESTMENTS TO SOME DEGREE OR ANOTHER.
 - UNIQUE RISK: NARROW, AFFECTS ONLY ONE COMPANY, MAY BE A FEW.
- TRADITIONAL THINKING:
 - UNIQUE RISK CAN BE DIVERSIFIED AWAY, SYSTEMATIC RISK CANNOT.
 - FOCUS ON ASSET ALLOCATION, CONSTRUCT PORTFOLIO THAT MATCHES THE LEVEL OF RISK YOU CAN TOLERATE.

ALTERNATIVE THINKING ON DIVERSIFICATION

- RISK CAN BE BROADLY SPLIT INTO TWO CATEGORIES:
 - SYSTEMATIC RISK: BROAD, AFFECTS MOST/ALL INVESTMENTS TO SOME DEGREE OR ANOTHER.
 - UNIQUE RISK: NARROW, AFFECTS ONLY ONE COMPANY, MAY BE A FEW.
- ALTERNATIVE THINKING:
 - SYSTEMATIC RISK CAN BE HEDGED, CONSTRUCT MARKET NEUTRAL PORTFOLIO.
 - FOCUS ON SECURITY SELECTION, LIVE OR DIE BY WHETHER YOU CAN PICK THE BEST/WORST COMPANIES IN DIFFERENT SECTORS.

Across industry versus within industry

Cremers and Petajisto,
Yale School of Management, 2009,
The Review of Financial Studies

How Active Is Your Fund Manager? A New Measure That Predicts Performance

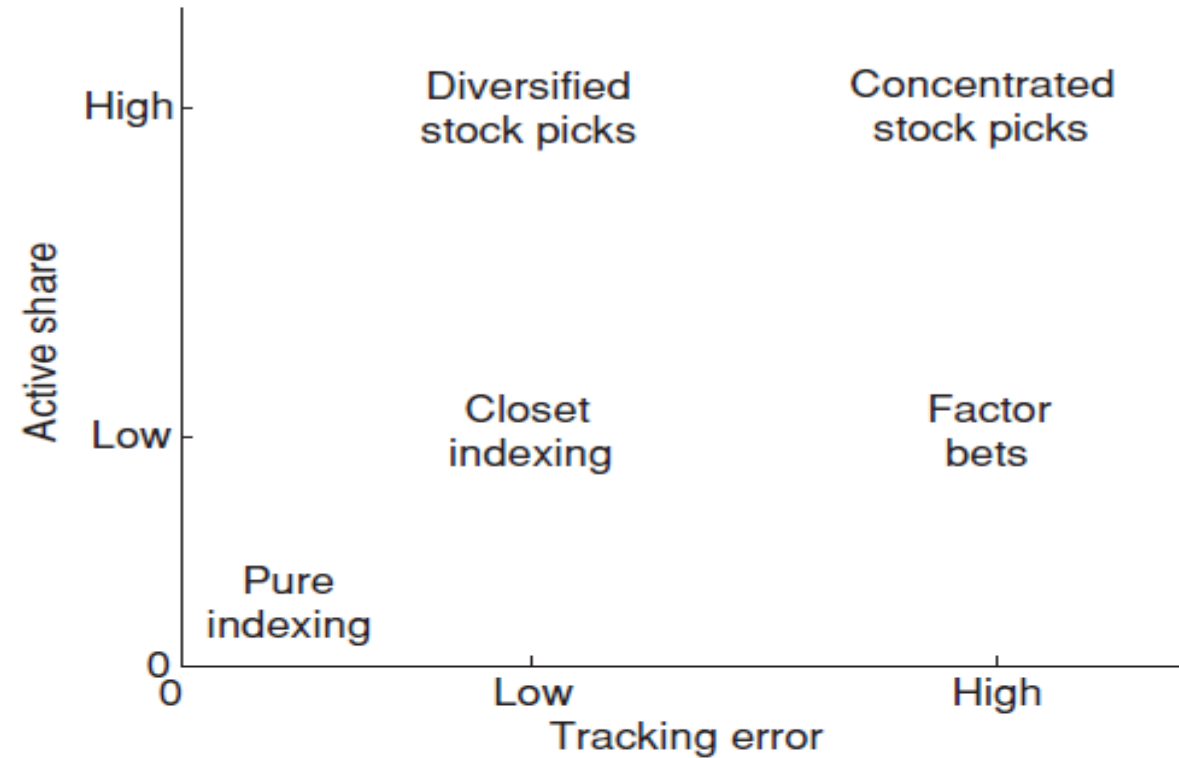


Figure 1
Different types of active and passive management

How Active Is Your Fund Manager? A New Measure That Predicts Performance

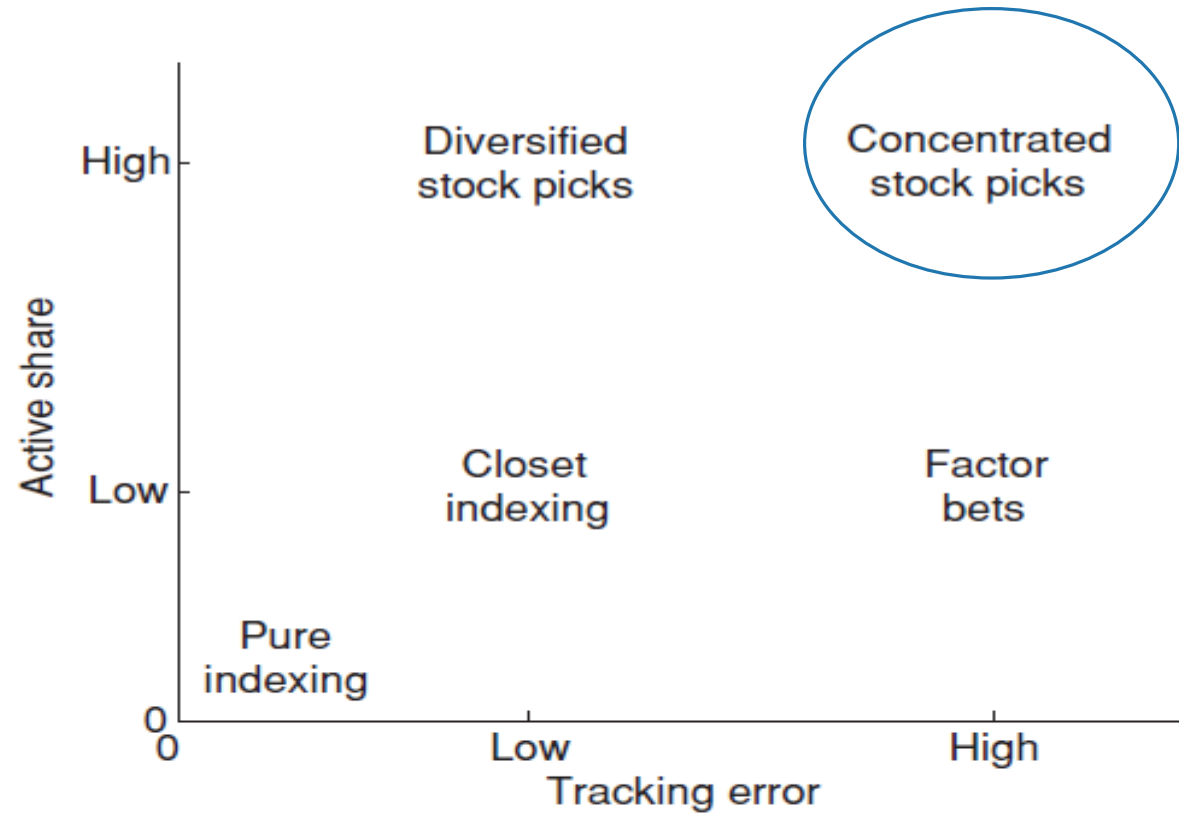


Figure 1
Different types of active and passive management



DIVERSIFYING ACROSS DIFFERENT ACCOUNTS

- GOOD PROTECTION AGAINST FRAUD
- SOMETIMES UNAVOIDABLE IF YOU FIRST AIM TO MAX OUT YOUR TAX ACCOUNT AND THEN CONTINUE INVESTING
- BEWARE OF “MENTAL ACCOUNTING” PROBLEM HIGHLIGHTED BY BEHAVIORAL FINANCE
- MAKE SURE YOU CONSIDER WHAT’S ALREADY IN YOUR OTHER ACCOUNTS BEFORE ADDING ANY INVESTMENT



DIVERSIFYING ACROSS DIFFERENT COUNTRIES

- TAKE ADVANTAGE OF LOW CORRELATIONS AMONGST DIFFERENT COUNTRIES
- EVIDENCE IS THAT CORRELATIONS HAVE BEEN INCREASING OVER TIME
- ADMINISTRATIVE ISSUES INVOLVED IN INVESTING INTERNATIONALLY
- I HAVE SOME MONEY IN INTERNATIONAL FUNDS



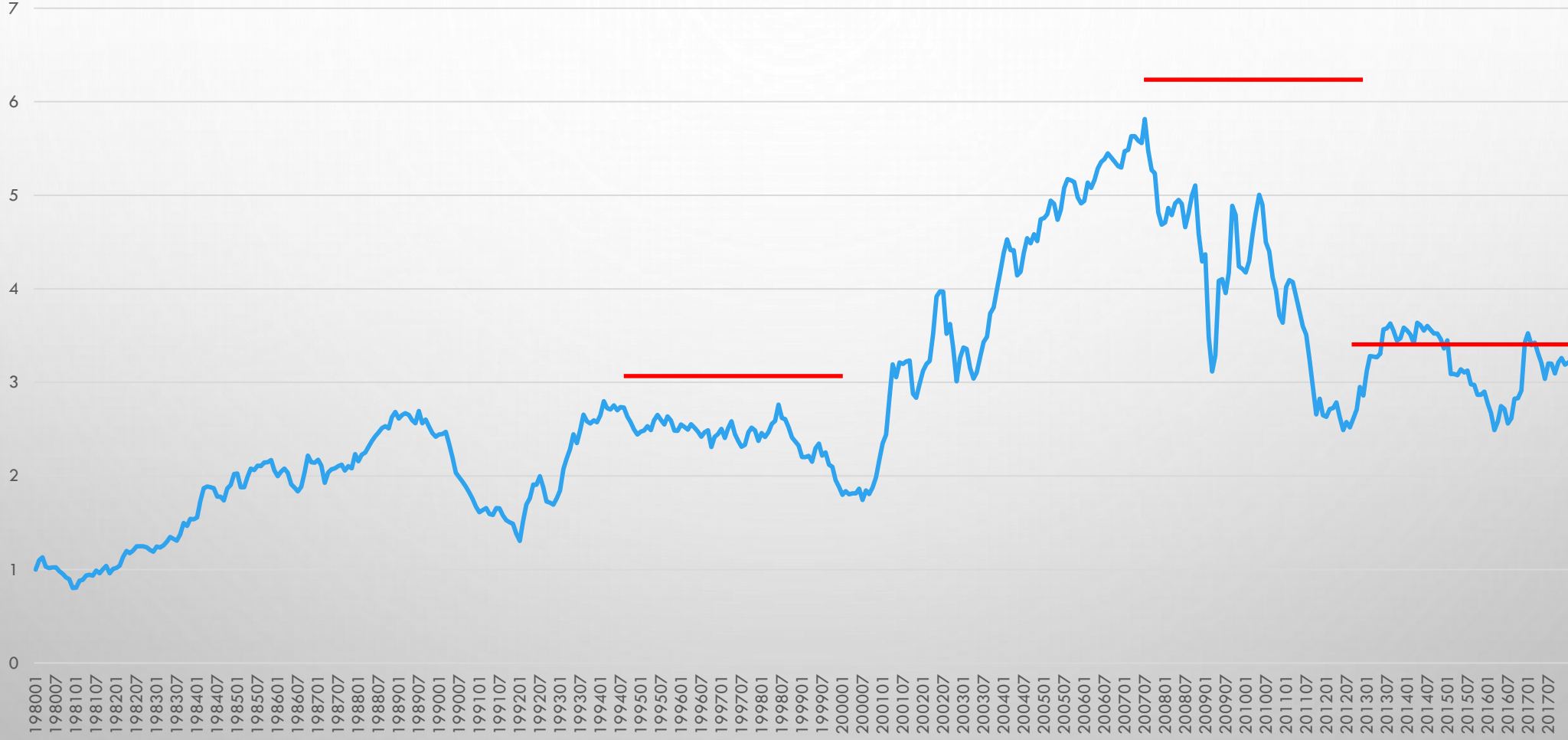
WHAT ABOUT ...?

- DIFFERENT STRATEGIES
 - BROAD ENOUGH GOAL TO ENCOMPASS OTHER ELEMENTS (DIFFERENT SECTORS ETC.)
 - EMBRACES THE FACT THAT THERE IS MORE THAN ONE STRATEGY THAT “WORKS”, BUT THAT NO STRATEGY WORKS ALL THE TIME.
 - KEY IS CORRELATION!



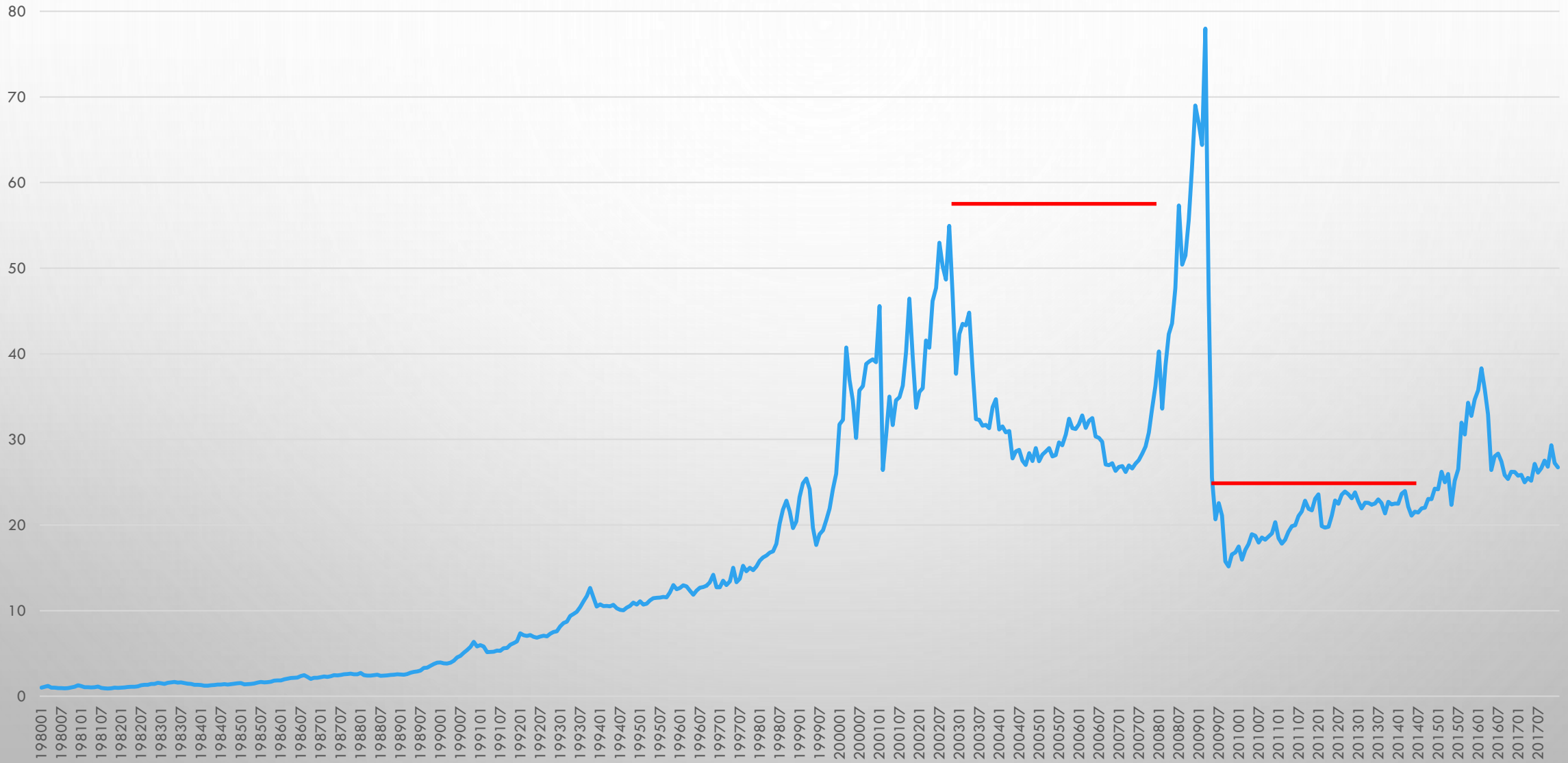
B/M premium
4.50% annual rate

5-year bars: - - - - -



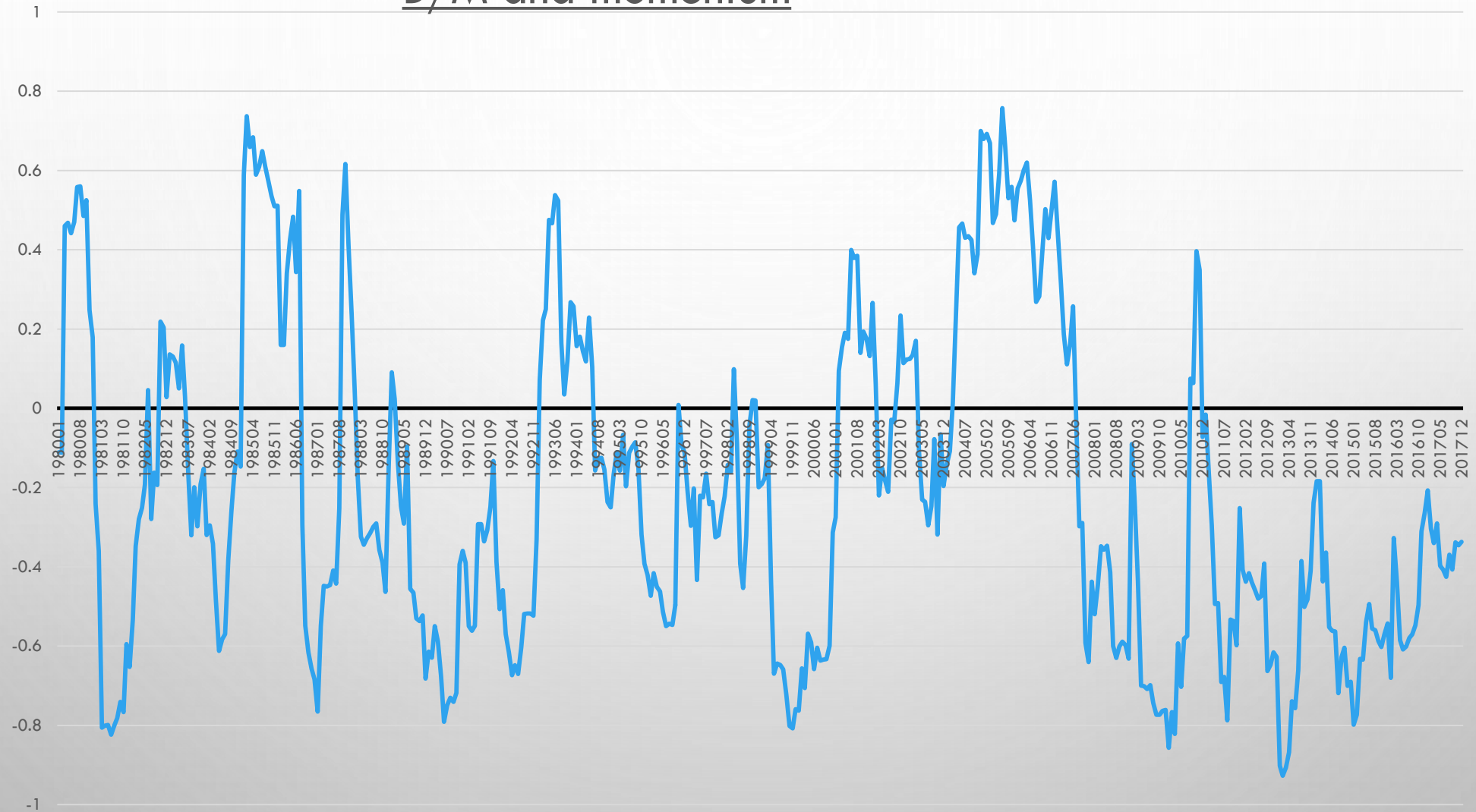
Momentum effect 1980-present
13.08% annual rate!

5-year bars: 



12-month rolling correlation
B/M and momentum

Correlation: -0.27



MOMENTUM FUND - MTUM

103.97 +2.03 (+1.99%)

At close: 4:00PM EST

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VOLATILITY AS AN ASSET CLASS

VelocityShares Daily Inverse VIX ST ETN (XIV)

NasdaqGM - NasdaqGM Real Time Price. Currency in USD

[★ Add to watchlist](#)

5.50 +0.40 (+7.84%)

As of 2:48PM EST. Market open.

Summary

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Previous Close	5.10	Net Assets	1.86B
Open	5.54	NAV	123.93
Bid	5.55 x 700	PE Ratio (TTM)	N/A
Ask	5.56 x 100	Yield	0.00%
Day's Range	5.18 - 5.70	YTD Return	-6.61%
52 Week Range	5.10 - 146.44	Beta (3y)	-0.93
Volume	5,461,155	Expense Ratio (net)	0.00%
Avg. Volume	7,264,127	Inception Date	2010-11-29



VOLATILITY AS AN ASSET CLASS

iPath S&P 500 VIX ST Futures ETN (VXX)

NYSEArca - Nasdaq Real Time Price. Currency in USD

[★ Add to watchlist](#)

51.63 -3.61 (-6.54%)

As of 2:51PM EST. Market open.

Summary

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[Historical Data](#)

[Performance](#)

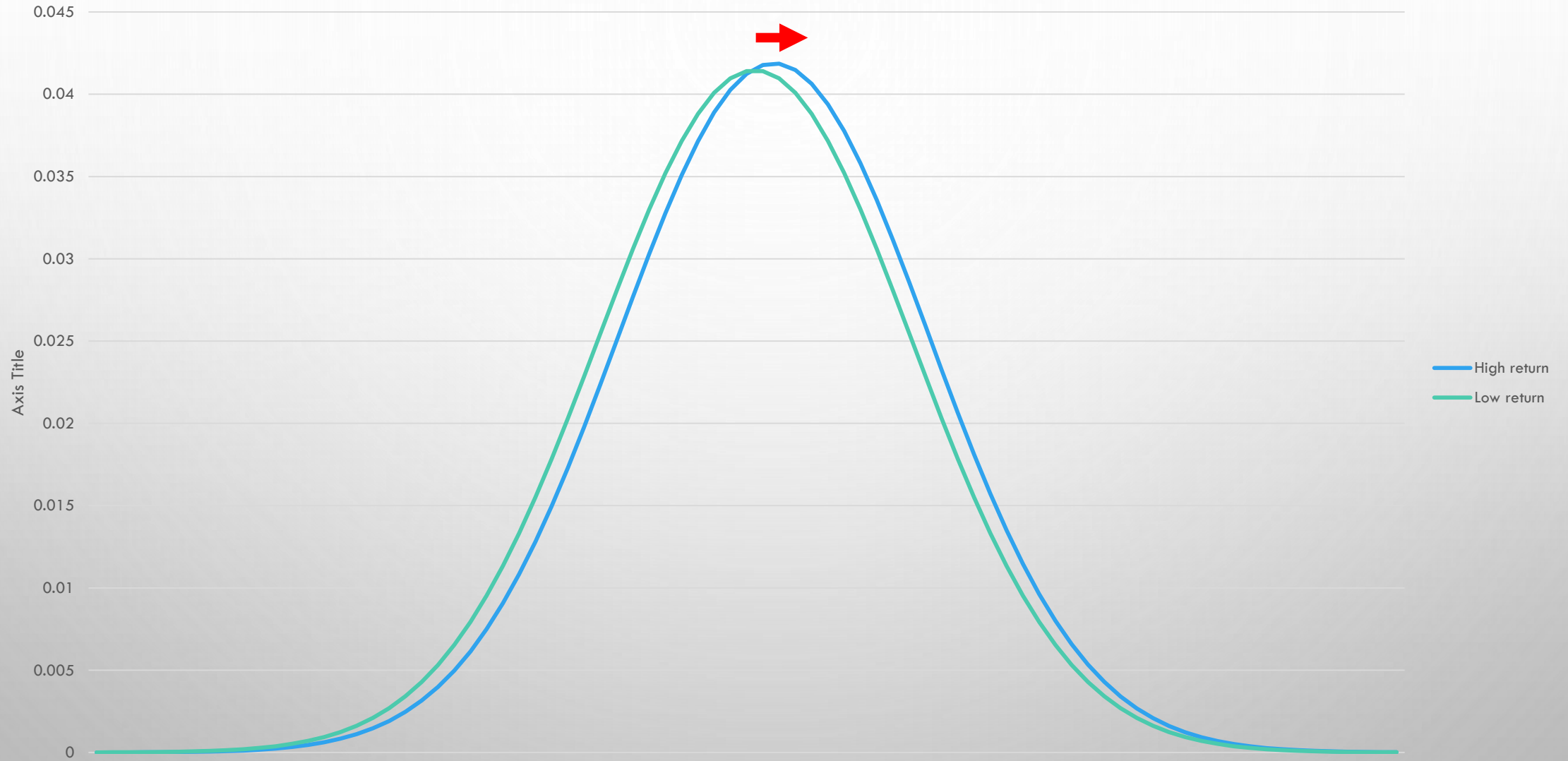
[Risk](#)

Previous Close	55.24	Net Assets	1.02B
Open	50.55	NAV	29.77
Bid	50.26 x 600	PE Ratio (TTM)	N/A
Ask	50.27 x 200	Yield	0.00%
Day's Range	49.66 - 56.49	YTD Return	7.31%
52 Week Range	25.59 - 76.24	Beta (3y)	1.00
Volume	59,554,301	Expense Ratio (net)	0.89%
Avg. Volume	46,479,219	Inception Date	2009-01-29

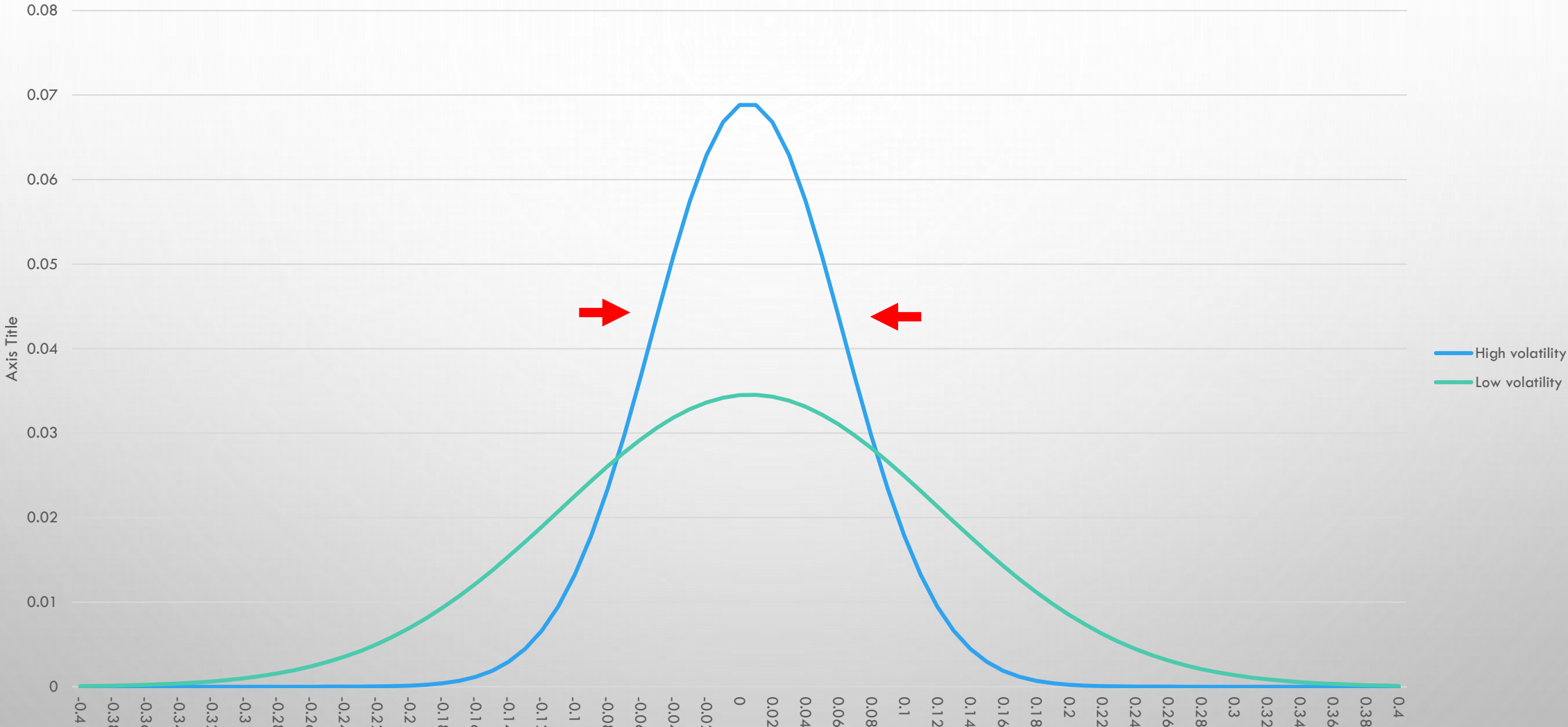
1D 5D 1M 6M YTD **1Y** 5Y Max  [Full screen](#)



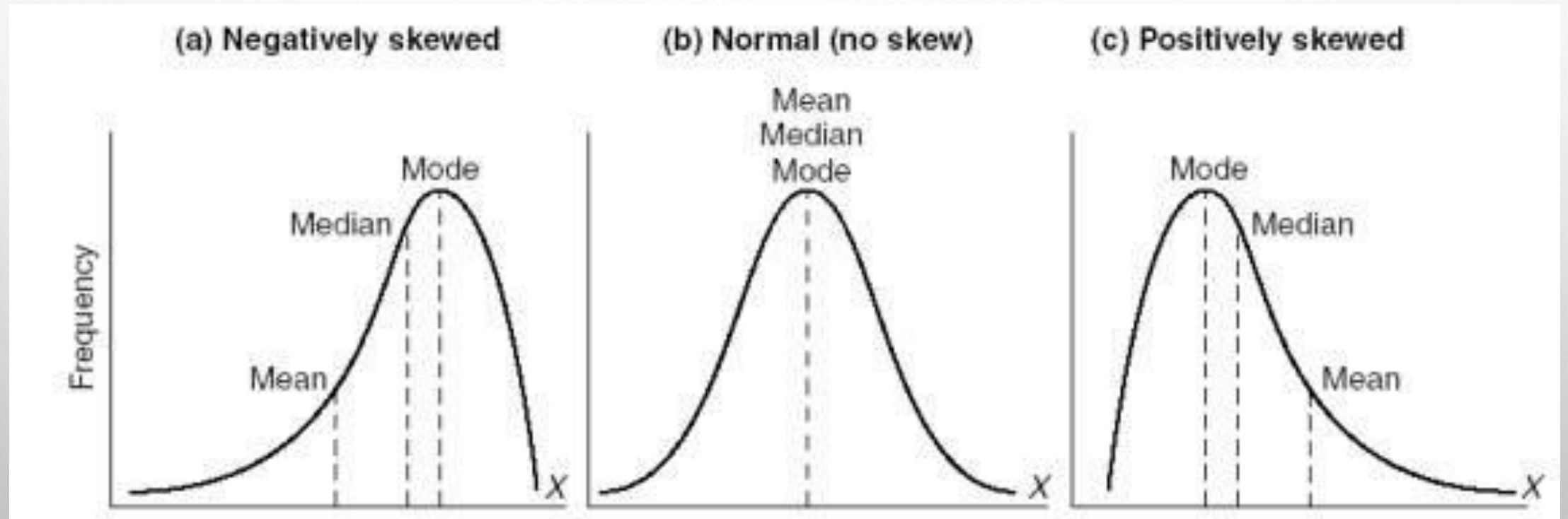
INCREASE POTENTIAL RETURNS



DECREASE VOLATILITY



INCREASE UPSIDE



MAIN POINTS

- YOU DON'T HAVE A TO HAVE A LOT OF INVESTMENTS IN YOUR PORTFOLIO TO BE WELL DIVERSIFIED
- DIVERSIFICATION ACROSS SECTOR IS BETTER FOR RETURNS THAN DIVERSIFYING WITHIN SECTOR. THE LATTER IS MORE LIKELY TO CONFORM TO THE FEAR THAT WE'RE SIMPLY ENSURING MEDIOCRITY WITH DIVERSIFICATION. **FOCUS ON ASSET ALLOCATION! I LOVE ETF'S!**
- CONSIDER DIVERSIFICATION ACROSS STRATEGY: THERE'S MORE THAN ONE WAY TO SUCCEED AND OFTEN **DIFFERENT STRATEGIES** SUCCEED AT DIFFERENT TIMES.
- AVOID ANALYZING AN INVESTMENT IN ISOLATION. CONSIDER HOW IT COMPLEMENTS YOUR EXISTING PORTFOLIO: RAISES EXPECTED RETURN? LOWERS VOLATILITY? INCREASES UPSIDE?
- HAVE AT LEAST ONE POSITION IN YOUR PORTFOLIO THAT BENEFITS FROM INCREASED VOLATILITY AND/OR A MARKET DOWNTURN.