HORIZON KINETICS

Indexation: Capitalist Tool

(Delivery agent of The Great Bubble)

October 4, 2016 - Prepared Exclusively For:

GRANT'S

INTEREST RATE OBSERVER®

A Valuation Sobriety Test

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Major holdings in the iShares Emerging Markets High Yield Bond ETF

Question: What price for the extra risk?

Benchmark Yield	YTM	Sobriety Test Yield	YTM
U.S. Treasury 10-Year Note	1.7%	Russian Federation, BB+, 14-year bond	??
IBM Bond, AA-, 10-Year Note	2.5%	Petrobras, BB , 4-year note	??
Wendy's Bond, CCC+, 10-Year Note	6.9%	Lebanese Republic, B-, 5-year note	??
iShares High Yield Corp. Bond ETF	5.6%	iShares Emerging Mkts High Yield Bond ETF	6.3%

Data as of 9/13/2016
Source: Bloomberg

A Sobriety Test: The Answers

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Why Wendy's should reincorporate and refinance in Lebanon

Benchmark Yield	YTM	Sobriety Test Yield	YTM
U.S. Treasury 10-Year Note	1.7%	Russian Federation, BB+, 14-year bond	2.3%
IBM Bond, AA-, 10-Year Note	2.5%	Petrobras, BB , 4-year note	6.4%
Wendy's Bond, CCC+, 10-Year Note	6.9%	Lebanese Republic, B-, 5-year note	6.2%
iShares High Yield Corp. Bond ETF	5.6%	iShares Emerging Mkts High Yield Bond ETF	6.3%

Source: Bloomberg. Data as of 9/13/2016

Would anyone seriously argue that these yields are adequate compensation for the risk assumed? (That is, could you sell a Lebanese Republic bond in the open market at 6.2%?) If not, do the prices result from some other factor, such as artificial supply-and-demand pressures?

In EMHY, new money is allocated based on float. In other words, the more debt a nation issues, the greater the allocation to its bonds because it has a greater capitalization. That is the mathematical model, and that is entirely logical – to a point.

There is, really, no price discovery. And if there's no price discovery, is there really a market? In which case, what is EMHY really worth?

The Yield Famine

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A generation unprepared for rising rates

10-Yr Treasury Rate

In the 35 years leading up to 1981, an entire generation of financial professionals was trained that knew no reality other than rising interest rates and inflation. They were unprepared for the reversal that eventually occurred.

We are now in the opposite circumstance: *the current generation of financial professionals has lived 35 years of, essentially, only falling interest rates. If their first Wall Street job was at 22, they are approaching 60. They, too, have known no other reality, but the consequences of being unprepared are much more grave.*

Source: Federal Reserve Bank of St. Louis

The Forgotten Value of Cash

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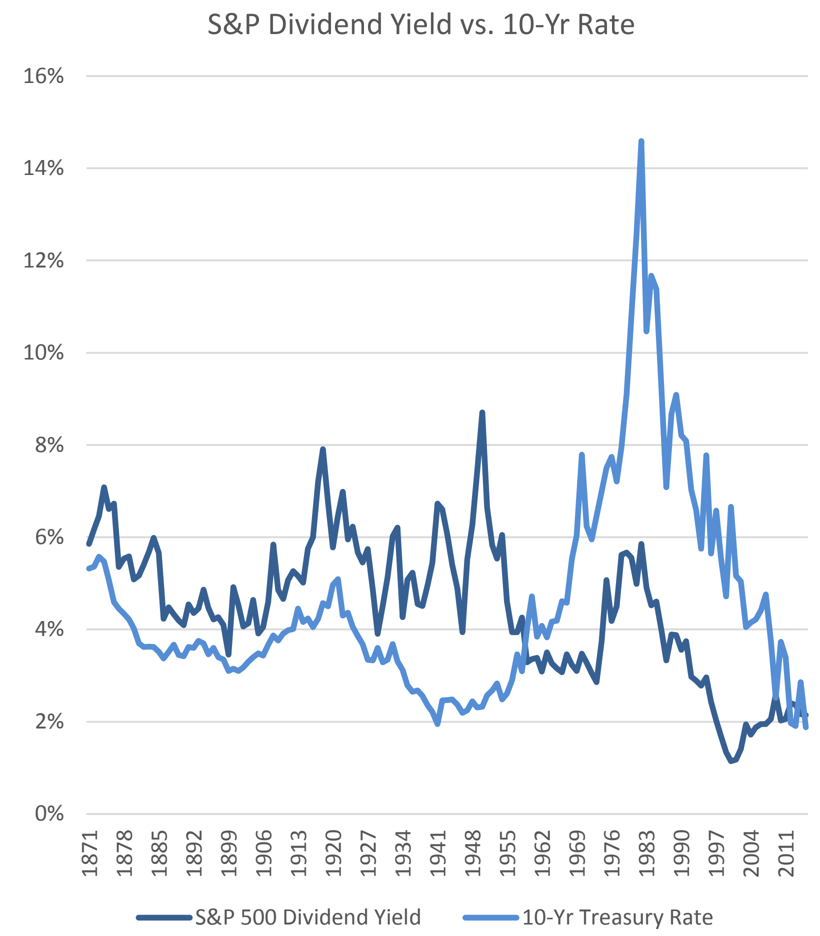
Cash: Asset or Liability?

For the first time since the late 1940s, stocks and bond yields have converged. Once upon a time – say for the prior 80 years – investors demanded higher yields from stocks since the risk was greater. **Could both asset classes be overvalued?** If nothing else, caution is in order, and investors should be very thoughtful, perhaps more than at any other time in their careers, about where capital is being put at risk and why.

In this historically low return environment, meaning in the last 5,000 years, we are most certainly in untested territory. The cash-as-a-liability mentality is very likely creating balance sheet bubbles. Many investors wish for the cash on the balance sheet to be "spent" – through share repurchases, dividends, or acquisitions. **But this is only a productive use of cash if the transactions are done at attractive valuations, and without taking on more leverage than appropriate.**

Those who still believe that cash is a valuable asset and a protector against financial difficulty and a well of investment possibilities when the tide turns could be rewarded in the years to come.



Source: Market Volatility, R. Shiller, MIT Press, 1989, and Irrational Exuberance, Princeton 2015.

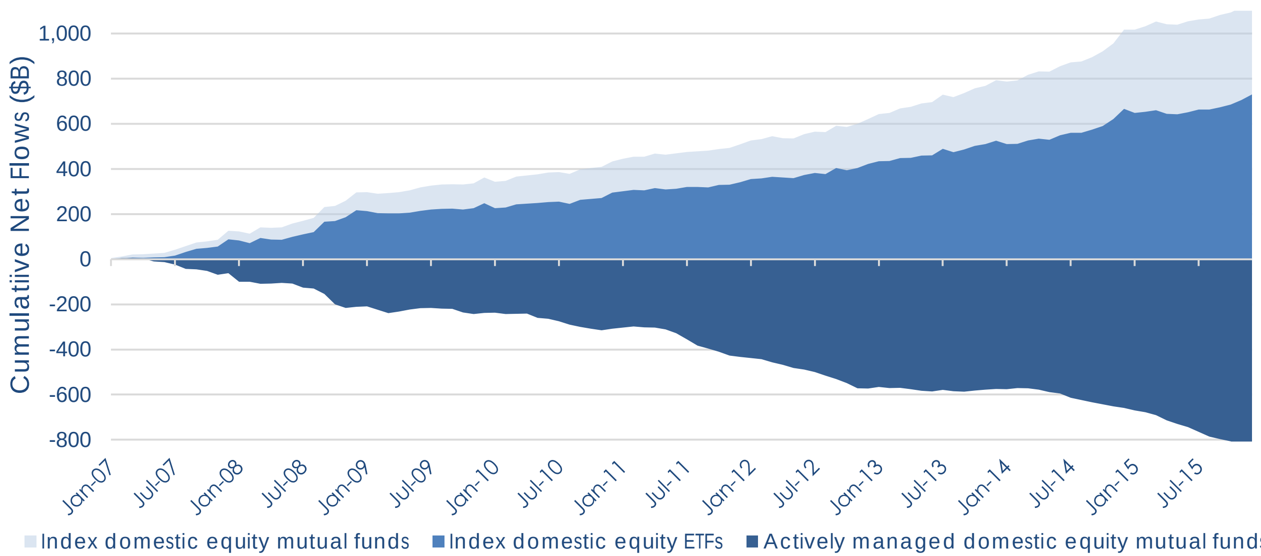
The Long Road to the Great Mismatch

And its unintended distortions

The Exodus: $1.1 trillion+ into indexed equities, $0.8 trillion+ out of active management.

In 2005 there were 204 ETFs in the U.S.; in 2015, 1,594 – even as the number of listed stocks declined.

Annual Fund Flows and Volatility Phobia ($mill)			
Year	Index domestic equity mutual funds	Index domestic equity ETFs	Actively Managed Equity Mutual Funds
2007	38	88	-62
2008	41	129	-149
2009	35	31	-27
2010	24	47	-70
2011	30	46	-125
2012	31	81	-140
2013	69	103	-2
2014	83	141	-84
2015	74	64	-176
Cumulative	**$425**	**$730**	**($835)**



Source: Investment Company Institute

Why All This 'Passive' Buying and Selling?

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How liquid is your liquid ETF?

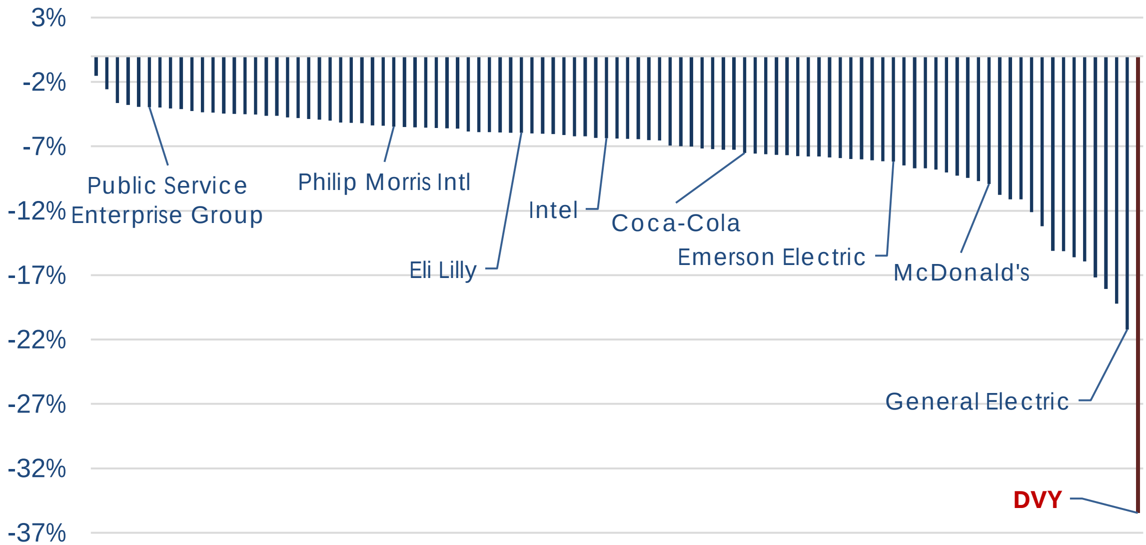
Turnover rates for two of the most popular ETFs are higher than 3500%(!), an average holding period of about a week. That is dozens of times greater than the trading liquidity of even its most liquid constituents.

It has been estimated that ETF providers collect about $6 billion per year from management fees. But roughly $9 billion is collected from market-making spread.

Annual Share Turnover	
ExxonMobil	90%
IBM Corp	128%
Vanguard 500 Index Mutual Fund (VFINX)	42%
SPDR S&P 500 ETF (ticker SPY)	3,507%
iShares Russell 2000 Index (IWM)	3,624%

*Source: Morningstar, iShares, Bloomberg, based on last annual report for each fund. For calendar 2015

Largest Intra-Day Drop in DVY Constituent Prices: 8/24/15



When the music stops, is there enough underlying liquidity?

Aug 24, 2015 Dress Rehearsal: Prices of the iShares Select Dividend ETF (DVY) , temporarily dropped 35% while the NAV declined by a mere 2.5%.

*Source: Morningstar, iShares, Bloomberg

Indexation's Top-Heaviness Problem

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Self-defeating paradox: the formulaic pursuit of diversification creates a new form of idiosyncratic risk

Do investors in the iShares U.S. Energy ETF, who presume to be buying a diversified portfolio – who were fleeing idiosyncratic risk – know that 50% of the fund is held in 4 holdings, that they are actually buying idiosyncratic risk?

IShares US. Energy ETF (IYE)	
Exxon Mobil Corp	25.0%
Chevron Corp	13.1%
Schlumberger Ltd	7.6%
Occidental Petroleum Corp	4.1%
Total Weight of Largest 4 Holdings	**49.8%**

The same top-heaviness problem exists in the iShares MSCI Spain Index ETF (EWP). The top 10 companies are a 64% weight.

IShares MSCI Spain Index ETF (EWP)	
Banco Santander SA	13.1%
Telefonica SA	9.0%
Banco Bilbao Vizcaya Argentaria	7.6%
Iberdrola SA	7.1%
Industria De Diseno Textil Inditex	6.8%
Amadeus IT Holding SA	4.9%
Repsol SA	4.8%
Red Electrica Corporacion SA	3.8%
Aena SA	3.6%
Ferrovial SA	3.5%
Weight of Largest 10 Holdings	**64.3%**

*As of 6/30/2016. Source: Morningstar, iShares, Bloomberg

The Semantic Mis-Investing Problem in Indexation

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How to NOT Invest in the Dynamism of Foreign Markets: Through Your Foreign Markets ETF

Does an asset allocation program or robo-advisor tool seeking foreign market exposure know that 6 of the top 10 holdings of the iShares MSCI Spain Index get 70% or more of their revenues from outside of Spain? That a purchase of the ETF is, essentially, investing outside Spain? The same holds true for emerging markets ETFs.

There is also valuation as a consideration. These relatively few companies of sufficient stock market value and trading volume are in great demand, simply as raw material for inclusion in the index funds. Might these mega-cap global stocks have outperformed truly local, stocks in Spain due to their automatic bid? Might global multi-nationals pose their own particular systemic risk?

So what does manager relative performance measure? What does country allocation measure?

IShares MSCI Spain Index ETF (EWP) % of Revenue NOT in Spain	
Banco Santander SA	88.0%
Telefonica SA	73.7%
Banco Bilbao Vizcaya Argentaria	71.6%
Iberdrola SA	55.0%
Industria De Diseno Textil Inditex	82.3%
Amadeus IT Holding SA	96.2%
Repsol SA	47.6%
Red Electrica Corporacion SA	2.1%
Aena SA	5.9%
Ferrovial SA	72.2%

Source: Companies' 2015 annual reports, Bloomberg

A Security Exercise in Levitation

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The Exxon Conundrum – *Or, The Problem of the Automatic Bid*

As early as 2005, Standard & Poor's moved to a market cap **float-adjusted** weighting methodology (so that Wal-Mart and Microsoft's weightings, among others', would be reduced by their roughly 40% insider ownership). It improved SPY's scalability for additional AUM. Did they adjust the historical S&P 500 returns to be comparable to the post-2005 index returns? If not, did the asset allocation modelers adjust their historical return 'facts'?

Ever since, the business demand of ETF organizers for liquid stocks has only increased, with the influx of funds directed into the same limited population of liquid stocks.

ExxonMobil is one of the most liquid. Ergo, it will be found almost anywhere one can imagine that it can be placed.

It's Growth, It's Value, Its' a Bird, It's a Plane…

It's Exxon, a Stock for Every Strategy:

QUAL	iShares USA Quality Factor ETF
DGRO	iShares Core **Dividend Growth** ETF
HDV	iShares Core High Dividend ETF
IWD	iShares Russell 1000 Value ETF
EXT	WisdomTree Total Earnings ETF
PBP	PowerShares S&P 500 **BuyWrite** ETF
TILT	FlexShares Morningstar US Market Factors Tilt ETF
QUS	SPDR MSCI USA Quality Mix ETF
GSLC	Goldman Sachs **ActiveBeta** US Large Cap Equity ETF
JHML	John Hancock Multifactor Large Cap ETF
TOK	iShares MSCI Kokusai ETF
ACWI	iShares MSCI ACWI ETF
MMTM	SPDR S&P 1500 **Momentum** Tilt ETF
DVP	**Deep Value** ETF
USWD	WisdomTree **Weak Dollar** US Equity ETF

ExxonMobil: An Exercise in Levitation

$ in bill., except per share data	Q2 2013	Q2 2016	Change
Revenue	$106.47	$57.69	-46%
EPS	$1.55	$0.41	-74%
Payout Ratio	41%	183%	350%
BV/Share	$37.63	$41.14	9.3%
(Net Expenditures on Stock buybacks/share)		$5.52	14.7%
Total Debt	$19.40	$44.50	129%
Share price	$90.35	$93.74	4%

*As of 6/30/2016. Source: Morningstar, iShares, Bloomberg

Have a Hunch, Buy a Bunch!

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Self-defeating paradox: The failed search for diversification in ETFs

The popular side of the ETF Divide, witnessed in the ExxonMobil phenomenon, can be seen in almost any large S&P 500 constituent. Money has been structurally channeled into the most liquid securities.

It alters correlation statistics, risk statistics.

The correlation of the largest members of the S&P 500 with the index has about doubled from 20 years ago.

Even Mexico and Japan are now more correlated with the S&P 500 than the top S&P 500 companies were 20 years ago!

The same holds true for Procter & Gamble, Coca Cola and most of the rest. ***Where's the price discovery?***

Correlation with S&P 500*

Security	**1995**	**2015**	**Change**
Apple Inc	0.160	0.662	*313.75%*
Chevron	0.291	0.686	*135.74%*
General Electric	0.522	0.692	*32.57%*
Johnson & Johnson	0.311	0.790	*154.02%*
Microsoft	0.465	0.684	*47.10%*
Pfizer	0.191	0.717	*275.39%*
Procter & Gamble	0.368	0.735	*99.73%*
AT&T	0.428	0.711	*66.12%*
Verizon	0.439	0.721	*64.24%*
ExxonMobil	0.350	0.732	*109.14%*

Correlation with S&P 500* (12/31/07-06/30/16)

IYW	iShares US Technology	0.903
BJK	Market Vectors Gaming	0.807
IYH	iShares US Health Care	0.815
IYE	iShares US Energy	0.755
ITB	iShares US Home Construction	0.681
IYT	iShares Transportation Avg	0.858
EWW	**iShares Mexico Capped ETF**	**0.826**
EWJ	**iShares MSCI Japan ETF**	**0.739**

Source: Bloomberg, monthly returns, Horizon Kinetics Research

*Selected non-fin'l S&P 500 constituents that have existed for 20 years Using Bloomberg correlation matrix (12 months daily return)

The ETF Divide: More of The Popular Sorts

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Endless examples of the automatic bid in basket-based investing

12-Mo Change in Revenue 30 Largest S&P 500 Companies

Apple Inc.	-2.05%	Pfizer	9.72%
Microsoft	-8.83	Chevron	-32.71
Exxon Mobil	-30.70	Merck	-2.00
Johnson & Johnson	1.15	Intel	2.47
Amazon.com	25.91	Coca-Cola	-5.38
Facebook	51.38	Bank of America	-4.55
General Electric	2.19	Home Depot	7.70
Berkshire Hathaway	4.83	Comcast	6.83
AT&T	16.64	Cisco Systems	0.17
JPMorgan Chase	-3.22	Visa Inc.	6.31
Procter & Gamble	-7.70	Philip Morris Int'l.	-8.68
Alphabet Inc. Cl. A	17.45	PepsiCo	-4.80
Alphabet Inc. Cl. C	17.45	Citigroup Inc.	-6.49
Wells Fargo	3.02	Walt Disney	9.08
Verizon	0.88	I.B.M.	-7.65
		Average change:	**1.93%**
		Excluding Amazon, Facebook, Google:	**-2.20%**

Source: Company Research, Bloomberg, through 6/16
*Selected S&P 500 constituents that have existed for 20 years

Which Coca-Cola is More Expensive?

1970s

	P/E	EPS Growth
1969	36.0x	--
1970	30.5x	16.98%
1971	36.7x	13.71%
1972	41.1x	13.48%
1973	36.9x	12.50%
1974	26.3x	-8.89%
1975	18.3x	21.95%
1976	17.7X	19.00%
1977	14.3X	12.18%
1978	13.6X	13.48%

Present

	P/E	EPS Growth	Rev. Growth
2013	21.23x	-3.00%	-2.42%
2014	20.63x	-1.92%	-1.96%
2015	20.98x	-1.96%	-3.81%
2016E	22.20x	-4.50%	-6.04%

McDonald's, Another Case of Automatic Daily Bid

($ in billions)	2008	2015	Change
Revenue	$23.52	$25.41	8.0%
Net Income	$4.31	$4.53	5.0%
Long Term Debt	$10.19	$24.12	136.8%
Equity	$13.38	$7.09	-47.0%
Weighted Avg. Shares	1.146	0.939	-18.1%
Share price, end of yr.	$ 62.19	$ 118.14	90.0%
P/E ratio, yr-end px	16.9x	24.6x	45.3%

Source: Historical data from Moody's Handbook of Common Stocks; 2014-2016 data from Bloomberg

The Most Crowded Trade?

As the saying goes, once everyone's in, there's only one place to go.

One would do well to remember that this state of affairs is not a new phenomenon. In prior eras, it was known as go-go investing, or trend following.

Now it takes the guise of index-based asset allocation. All such phenomena have ended unpleasantly.

The index universe has become, simply, a big momentum trade (or, perhaps, an interest rate momentum trade). It is the most crowded trade in the history of investing.

And crowded trades eventually attract short sellers.

Year 2015 **Top 10 Contributors to S&P Return**	**Total Return**
Amazon.com Inc	117.8%
Microsoft Corp	22.7
Alphabet Inc Class A	46.6
Alphabet Inc Class C	44.6
General Electric Co	27.5
Facebook Inc Class A	34.1
Home Depot Inc	28.5
Starbucks Corp	48.2
Netflix Inc	134.4
McDonald's Corp	30.4
Weighted average return:	44%
Contribution to S&P return:	245%
S&P 500 Index return:	**1.4%**
S&P return without Top 10:	**-2.7%**
Revenue growth (simple avg.)	9.9%

Source: Factset, using iShares Core S&P 500 ETF as a proxy for the S&P 500 Index

The Pursuit of Low Beta

The misuse & abuse of historical statistics in the ETF creation process

A rhetorical question: Would an active manager of a low-risk strategy be permitted the risk of a near-50% weighting in financials?

A reality: A new ETF cannot be launched without a low Beta.

A result: These largest-in-class ETFs can legitimately be characterized as low volatility, since of late the financial sector has not been volatile. And the high weighting enables the ETF to attain its advertised low Beta.

Another rhetorical question: Is low volatility an inherent attribute of companies in the financial sector? Or is it perhaps simply that the central banks of the world have maintained an artificially low-rate environment for a very long time?

Would anyone legitimately assert that these ETFs will remain non-volatile if rates rise? The ETFs can't trade out of a low-Beta security; but they can once the Beta rises.

Sample 10 Low Volatility ETFs

		Beta	What is This Column?
USMV	iShares MSCI USA Minimum Volatility ETF	0.72	9.8%
SPLV	PowerShares S&P Low Volatility ETF	0.72	18.7%
EFAV	iShares MSCI EAFE Minimum Volatility ETF	0.75	11.8%
EEMV	iShares MSCI Emerging Markets Min Vol ETF	0.90	24.3%
ACWV	iShares MSCI All Country World Min Vol ETF	0.68	16.7%
ONEV	SPDR Russell 1000 Low Volatility ETF	0.78	22.4%
XMLV	PowerShares S&P MidCap Low Volatility ETF	0.76	48.6%
XSLV	PowerShares S&P SmallCap Low Volatility ETF	0.80	49.2%
IDLV	PowerShares S&P Intl. Developed Low Vol ETF	0.75	35.8%
EELV	PowerShares S&P Emerging Mkts Low Vol ETF	0.86	30.9%

Source: Various ETF Factsheets, Bloomberg.
Beta from inception of each ETF through August 31, 2016

The Alpha Producers

Are Active Managers the Anomaly, or is the Market?

Were these active managers the anomaly for underperforming? And is it reasonable to believe that they all lost their touch at the same time?

Or was it the S&P 500 that was the anomaly for outperforming? That always sounds nonsensical until after the fact.

All one can say is that if a school consistently gave exams that 98% of the students would fail, at least some attention would be paid to the teachers.

Fund or Holding Company	2015 Underperformance in % Points (net)	2014 Underperformance in % Points (net)
Fairholme	-12.90%	-16.40%
Gabelli Value	-10.89%	-12.10%
Wintergreen	-8.32%	-15.40%
Longleaf Partners	-20.18%	-8.80%
Berkshire Hathaway [1]	-13.90%	14.00%
Pershing Square Hldgs[2]	-21.90%	27.40%
Icahn Enterprises[2]	-16.80%	-27.35%
Greenlight Reinsurance[2]	-21.60%	-4.30%
Royce Micro-Cap	-13.10%	-9.50%

[1] Share price return; book value per share return +8.3% for 2014, +6.4% for 2015
[2] NAV per share change
Source: Company Reports, Horizon Kinetics Research

Central Banks, Equities and, Of Course, Indexation

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Still believe in price discovery?

How can a free enterprise system function as such if price discovery is to be influenced by agencies of government with infinite supplies of money?

An equity portfolio manager is no longer competing in the market auction process with other buyers with limited capital, however vast that sum of capital might be. The government is not motivated by ordinary considerations of fair value. One is entitled to presume, in the absence of evidence to the contrary, that the aim of the Central Bank is to elevate prices. If this is the case, what can be the meaning of the benchmark?

Without price discovery unimpeded by intervention, there can be no rational allocation of capital. Furthermore, without rational allocation of capital, it is impossible to properly evaluate the skill of the managers.

Q: Which Index Fund Would Be the 4th Largest ETF in the U.S.?

	Q2 2015	Q2 2016
Market value of holdings	**$38.6 B**	**$61.8 B**
Number of positions	2,581	2,581
Top 10% by weight, # of positions	258	258
Largest 10% as share of portfolio	74%	76%
Average market cap of largest 10% *(billions)*	$60.4	$62.7

Some Unexpected Holdings

Name	Headqtrs	Name	Headqtrs
B Communications Ltd	Ramat Gan	Kornit Digital Ltd	Rosh Ha'ayin
Caesarstone Ltd	Haifa	Mellanox Tech Ltd	Yokneam
Cellcom Israel Ltd	Netanya	Neuroderm Ltd	Rehovot
Check Point Software Tech	Tel Aviv-Yafo	Orbotech Ltd	Yavne
Cyberark Software Ltd	Petah Tikva	Radware Ltd	Tel Aviv-Yafo
Elbit Sys Ltd	Haifa	Taro Pharma Inds	Haifa
Gazit Globe Ltd	Tel Aviv-Yafo	Tower Semicond.	Migdal Ha'emek
Israel Chemicals Ltd	Tel Aviv-Yafo	Wix Com Ltd	Tel Aviv-Yafo
Ituran Location & Control	Azour		

Source: sec.gov 13F Filings

* From the Swiss National Bank: "The SNB does not engage in equity selection; it only invests passively. It first decides in which markets it wants to invest, and then replicates appropriate broad equity indices. If the equity portfolio were managed actively, this could send undesirable signals to the market, and might also lead to the politicization of investment decisions."

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Does the Swiss National Bank have a special affinity for Israel? Or a subtle asset allocation sub-strategy? Why does it hold 17 Israeli stocks in its U.S. equity portfolio?

Like any analysis, information is revealed by thoughtful examination of facts and relationships.

The Bank's 2,581 different stocks are not chosen by actual analysts. They're chosen by machine.

The machine must be programmed.

Do the programmers in Zurich know that a CUSIP that begins with a letter, as opposed to a number, signifies a foreign company? Why would they?

So, the Swiss National Bank affects the clearing prices of Israeli as well as U.S. stocks.

And they don't even seem to know it.

What else don't the machines know?

Largest 5 Holdings (Cusip)	Largest 5 Israeli Holdings (Cusip)
Apple Inc (037833100)	Check Point Software Tech LT (M22465104)
Exxon Mobil Corp (30231G102)	Taro Pharmaceutical Inds Ltd (M8737E108)
Microsoft Corp (594918104)	Israel Chemicals Ltd (M5920A109)
Johnson & Johnson (478160104)	Elbit Sys Ltd (M3760D101)
AT&T Inc (00206R102)	Mellanox Technologies Ltd (M51363113)

Source: sec.gov 13F Filings, Factset

* From the Swiss National Bank: "The SNB does not engage in equity selection; it only invests passively. It first decides in which markets it wants to invest, and then replicates appropriate broad equity indices. If the equity portfolio were managed actively, this could send undesirable signals to the market, and might also lead to the politicization of investment decisions."

The New Division

Between Liquid (Index Filler) and Less Liquid

Real Estate / Land			
	Simon Property Group	Howard Hughes Corp.	Dream Unlimited
Market Cap ($ bill.)	$65.46	$4.54	$0.44
Inside Ownership*	7.09%	13.80%	35.65%
30 Day Avg Vol. (000)	1,279	142	6
Price/Book Value	14.3x	1.8x	1.0x

For Howard Hughes, management warrants would add 6.7% to insider holdings

Source: Company reports, Bloomberg. Data as of 9/12/16.

Shipping				
	AP Moller-Maersk	Subsea 7	Stolt-Nielsen	Siem Industries
Market Cap ($ bill.)	$29.17	$3.25	$0.85	$1.06
Inside Ownership	70.3%*	21.3%	58.2%*	79.2%
3-mo Avg Vol. (000)	93.056	27.432	1.257	0.895
Price/Book Value	0.87x	0.59x	0.53x	0.37x

**Voting rights*

Source: Company reports, Bloomberg. Data as of 9/27/16 or most recent company report.

Disclosures & Definitions

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