CONTRARIAN RESEARCH REPORT COMPENDIUM

December 2014

Note: The below selections represent sample research reports as of the listed publication dates. There have been no edits made to these research reports since they were published.

Featured Companies

Affiliated Managers Group (AMG)
HFF Inc. (HF)
CBRE Group, Inc. (CBG)
Jones Lang LaSalle, Inc. (JLL)

Updates on Past Ideas

Live Nation Entertainment, Inc. (LYV)

Exclusive Marketers of
The Contrarian Report

PCS Research Services
125 Maiden Lane, 6th Floor
New York, NY 10038
(212) 233-0100
www.pcsresearchservices.com

Research Team

Murray Stahl **Steven Bregman**

Thérèse Byars, Ryan Casey, James Davolos, Derek Devens
Peter Doyle, Michael Gallant, Matthew Houk, Utako Kojima
Eric Sites, Salvator Tiano, Fredrik Tjernstrom, Steven Tuen

Horizon Kinetics LLC ("Horizon Kinetics") is the parent holding company to several SEC-registered investment advisors including Horizon Asset Management LLC and Kinetics Asset Management LLC. PCS Research Services ("PCS") is the exclusive marketer and an authorized distributor of this and other research reports created by Horizon Kinetics. This report is based on information available to the public; no representation is made with regard to its accuracy or completeness. This document is neither an offer nor a solicitation to buy or sell securities. All expressions of opinion reflect judgment as of the date set forth above and are subject to change. Horizon Kinetics, PCS and each of their respective employees and affiliates may have positions in securities of companies mentioned herein. All views expressed in this research report accurately reflect the research analysts' personal views about any and all of the subject matter, securities or issuers. No part of the research analysts' compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed by the research analysts in the research report. Reproduction of this report is strictly prohibited. © Horizon Kinetics LLC® 2014.

Murray's Musings

Google vs. Dividends 3

Interludium

The Trabant Story 6

Industry Thoughts

Gold and Silver Royalty Trusts 7

Facts & Figures

BlackRock's Fees and Flow 9

Featured Companies

Affiliated Manager Group, Inc. (AMG) 13
HFF Inc. (HF) 15
CBRE Group, Inc. (CBG) 16
Jones Lang LaSalle Inc. (JLL) 17

Post-Musings

The Need for a New Type of Real Estate Index 19

Updates on Past Ideas

Live Nation Entertainment, Inc. (LYV) 21

Appendices

The Wealth Index (RCH) 23
Money Manager Index 24
International Money Manager Index 25

© Horizon Kinetics LLC® 2014

Murray's Musings

GOOGLE VS. DIVIDENDS

Google, a company with a $370 billion market capitalization, is the 28th and 29th largest company in the S&P 500. It occupies two positions because Standard & Poor's has decided to allocate a position to both publicly traded classes of its shares. Had Google not decided to create the two share classes, it would now be the fourth-largest company in the S&P 500, behind Microsoft and just ahead of Johnson & Johnson.

Google trades at 17.7x the consensus analyst earnings forecast for 2015. The company has cash and investments of $87 per share that earn essentially zero. If one calculates the P/E of Google on a net enterprise value basis, which is to say by excluding the cash balance, the price-to-earnings ratio on consensus 2015 estimates is 14.85x. If Google's management so desired, it could produce significantly higher earnings at will, since it spends prodigious amounts of money on projects such as driverless cars, new technologies for delivering health services, diagnostics via the internet, and many more projects. In fact, it still employs almost 3,500 people at Motorola Mobile although that business is being sold to Lenovo.

Consequently, Google is not an expensive stock by any reasonable standard. In 2014 through November 7, the shares declined by 3.35% while the S&P 500 increased in value by well over 11%. Not many years ago, had most observers believed that interest rates would decline dramatically toward zero, they might well have asserted that Google might have a P/E of more than 25x. Some might have even have predicted 60x.

Google, as stated above, does not carry such a price-to-earnings ratio. However, this is not to assert there are no high-P/E shares. The reference is not to other high technology companies but, rather, to companies completely outside the high technology sphere. For example, consider the case of the real estate investment trusts (REITs).

Table 1: P/Es on Estimated 2015 Earnings, Selected REITs

		P/E	YTD ROR	Yield
GGP	General Growth Properties, Inc.	49.1x	27.30%	2.50%
SPG	Simon Property Group Inc.	36.1x	17.93%	2.90%
SLG	SL Green Realty Corp.	66.5x	23.47%	1.75%
PSA	Public Storage	33.0x	23.76%	3.01%
VTR	Ventas, Inc.	34.6x	19.17%	4.25%
PLD	Prologis, Inc.	101.0x	12.07%	3.19%
DLR	Digital Realty Trust Inc.	64.5x	38.0%	4.90%
HCN	Health Care REIT, Inc.	45.2x	31.83%	4.50%
EQR	Equity Residential	49.3x	33.58%	2.89%

As of November 7, 2014

HORIZON KINETICS
© Horizon Kinetics LLC® 2014

Nine of the most popular REITs appear in Table 1. General Growth, which has a year to date return of 27.3% and a 2.5% yield, has a 49.1x P/E. Simon Properties, with a P/E of 36.1x, is up 17.93% this year and yields 2.9%. SL Green, which is up 23.47% and yields 1.75%, has a P/E 66.5x consensus 2015 forward-looking earnings estimates. Public Storage, which owns storage facilities, has a 33x P/E. Ventas' is 34.6x. Prologis, which is just warehouses, has a 101.0x P/E. Digital Realty's is 64.5x. Health Care REIT, which owns facilities such as laboratories and doctors' offices, has a 45.2x P/E, and Equity Residential, which is apartment buildings, has a 49.3x P/E.

Many might be tempted to object that the P/E ratio is an inappropriate standard of valuation to apply to an REIT. The appropriate standard is felt to be funds from operations (FFO). Essentially, this means that depreciation expense is really part of cash flow, not a deduction from it, since management can choose to make use of this cash flow. Indeed, some managements do make use of depreciation expense and use such funds to pay dividends. It is not entirely illogical because a high dividend creates a high stock price and shares can be sold to raise capital to pay for essential or even desired capital expenditures.

My own view is that depreciation is a real expense, since every structure ultimately requires expenditure and those expenses are generally rising. However, rather than debate the point, let us simply concede and recalculate the valuations of the REITs based on FFO. The figures in Table 2 are based on forward-looking FFO for 2015.

Table 2: FFO Multiples on 2015 Estimates for Selected REITs

GGP	General Growth Properties, Inc.	17.2x
SPG	Simon Property Group Inc.	20.0x
SLG	SL Green Realty Corp.	33.0x
PSA	Public Storage	22.0x
VTR	Ventas, Inc.	20.7x
PLD	Prologis, Inc.	52.3x
DLR	Digital Realty Trust Inc.	42.1x
HCN	Health Care REIT, Inc.	18.3x
EQR	Equity Residential	27.2x

As of November 7, 2014

By any standard, the valuations placed upon these firms is very generous. However, this is hardly the point. The salient point is that the valuation disparity can be found in many other sectors as well, and they are all more expensive than Google. For example, PepsiCo has a P/E ratio, based on 2015 estimated earnings, of 19.67x, and Coca-Cola, a company with declining revenue and profits, has a 20.25x P/E. Table 3 presents other prominent examples.

HORIZON KINETICS
© Horizon Kinetics LLC® 2014

Table 3: 2015 Estimated P/Es

PEP	Pepsico, Inc.	19.67x
KO	The Coca-Cola Co.	20.25x
JNJ	Johnson & Johnson	17.45x
PG	The Procter & Gamble Co.	18.80x
PM	Philip Morris International, Inc.	16.94x
MCD	McDonald's Corp.	16.88x
LO	Lorillard, Inc.	16.93x
GIS	General Mills, Inc.	16.30x
HD	The Home Depot, Inc.	18.74x
DIS	The Walt Disney Co.	16.57x
V	Visa, Inc.	20.89x
CL	Colgate-Palmolive Co.	21.60x
PCLN	The Priceline Group Inc.	17.74x

As of November 7, 2014

The reason for choosing the companies in Table 3 as comparisons is not merely because they are huge, visible, and well understood. These are companies that have come to be regarded as possessing the attributes of somewhat predictable earnings. These are also companies that have lower growth possibilities in comparison to Google, or so one might assert. Why would investors knowingly choose to assign relatively high valuations to companies that have generally limited growth prospects, like Philip Morris International, Lorillard or McDonald's? Such an action is not as illogical as it appears.

In terms of the capital asset pricing model, historically the S&P 500 has exhibited a 10% compound annual rate of return and roughly a 10% standard deviation. The acceptance of a 20% standard deviation might be reasonable in exchange for a 20% annual rate of return. However, the problem is that the return is not assured; it is only the possibility of a 20% rate of return. Generally, the higher the standard deviation, the higher the uncertainty connected with that rate of return.

Consequently, if one wished to attain a 20% rate of return, and one could accept a higher standard deviation than that of the S&P 500, a more reasonable approach would be to find a low standard deviation asset with a low potential return. For example, one could find a potential 6% rate of return with a 5% annual standard deviation and leverage the asset four times. One could create a multi-asset fund by combining Treasury bonds, high yield bonds, consistent dividend payers, mortgage REITs, foreign consistent dividend payers, conventional REITs, and perhaps emerging market debt in one fund.

Some of these assets actually are volatile. However, all have the attribute that they pay dividends or interest greater than the cost of carry. Moreover, the volatility aspects of some offset the volatility aspects of others. Hence one can, in part, purchase a 10% Treasury yielding only 2.25% and still have a reasonable belief that one will earn a high rate of return. It is all a question of leverage and cost of carry.

HORIZON KINETICS
© Horizon Kinetics LLC® 2014

REITs, consumer stocks, and other assets have simply become raw material to be used in index-based products. The valuations are irrelevant, since it is assumed that the efficient market fairly values all assets. It is viewed as unlikely, therefore, that one will purchase overvalued assets, and consequently, one need not be concerned with valuation. However, the product creators are effectively creating these elevated valuations by their own demand for this raw material. Low-return assets should not trade for higher valuations than Google.

Ultimately, when demand for the multi-asset product, whatever it happens to be, is satiated, as will occur eventually, the valuations of the raw material will revert to a more reasonable level. Ergo, the practitioners of the new investment science should not be surprised when it happens. Surprise is the operative word. What is ultimately going to happen is a reversion to the mean in valuation and it will clearly affect the returns. It should not be a surprise.

The practitioners of this new investment science, in accordance with the capital asset pricing model dogma, might do well to remember the five basic principles of behavior under the auspices of Soviet-era dogma. Number one: don't think. Number two: if you do think, don't speak. Number three: if you think and speak, then don't write. Number four: if you think, speak, and write, then don't sign. Number five: if you think, speak, write, and sign, then don't be surprised.

Interludium

THE TRABANT STORY

The communist nations, because they lasted so long, had the best jokes. I have a collection of jokes from the DDR, East Germany. President Ronald Reagan made a hobby of collecting Communist jokes, and when he would tell them, listeners found them funny and laughed. I heard him use a few in a speech and I thought they were pretty good, too, so I had to collect them. This is one of the jokes Reagan told.

There is this guy in East Germany, who goes in to buy a Trabant. Trabant, which the East Germans called a "Trabi," was an East German car and the most common kind in the country. It was not a good car. However, there is a club in Boston, the Trabi Club, and, if you go there, you can actually see what they looked like. From an engineering point of view, they are really brilliant, because one of the goals in building them was to save gas. The car is built completely out of fiberglass so it is a very light vehicle. An extremely strong person could actually lift it. It is an amazing car in certain respects, although it did not run very well and didn't have a lot of horsepower.

If you wanted to buy a Trabi, you had to walk in to the dealer, which was really the government, and pay for the entire cost of the car up front. They did not believe in loans.

HORIZON KINETICS
© Horizon Kinetics LLC® 2014

After paying the entire cost of the car, the buyer could then wait perhaps 10 years for the car to be ready.

Let's say the guy in our story purchases a car for all cash on November 10, 2014.

The dealer says to him, "Okay, come back on November 10, 2024, and you can pick up your car."

And our customer asks, "But will that be in the morning or will it be in the afternoon?"

The dealer says, "What difference does it make? It's 10 years from now."

"Well," the customer says. "The plumber is coming in the morning."

Industry Thoughts

GOLD AND SILVER ROYALTY TRUSTS

We begin with a few points. First, from 1998, when the gold price averaged less than $300 an ounce, to 2014, when the gold price traded at $1200 an ounce, investors did not make any money by buying gold stocks, which is incredible. Over the course of 16 years, the gold price essentially quadrupled, yet one did not make money by buying gold stocks individually and one did not make money by buying gold stocks generally, meaning in a gold stock index. This is incredible but true. The research has been presented in other reports; it will not be repeated here.

Second, the consequence of that failure of expectations is that equity capital is very difficult to obtain for the precious metals companies.

The next point is that debt capital is almost impossible to obtain. Just to give one a sense of what has happened, even in the last five years, Barrick Gold, which is the largest of the gold companies, is down 71% and Newmont is down 60%. The Market Vectors Gold Miners ETF (GDX) is down 60%.

However, during the same five-year period, the gold and silver royalty companies actually increased in value. For example, Silver Wheaton is up 34%, Royal Gold appreciated 29%, and Franco Nevada rose 105%. The idea is that royalty investing in precious metals is actually a better way than the equity approach. but there are only these three choices.

There are two kinds of royalty, each with different characteristics. Both are interesting. One is the standard type of royalty, whereby gold is delivered over an extended period, say

HORIZON KINETICS
© Horizon Kinetics LLC® 2014

30 years, for a fixed, upfront payment, and the other is the streaming royalty. In the streaming royalty, the royalty company makes a smaller upfront payment and then buys the precious metal over the life of the agreement at a fixed price, usually at 33% or 25% of the market price on the day the deal was closed. For example, if someone were making a deal today and gold is roughly $1200 an ounce, one would lock in a price of maybe $300 an ounce. The reason it is done that way is because inflation can erode the value of the future payments in a streaming deal, whereas in a conventional royalty deal, where all the money is paid up front, the money is gone and inflation has no impact on the outlay for the royalty. In either case, there is enormous operating leverage with no fixed capital cost and no environmental liability. It is a superior method of investing in precious metals.

Not surprisingly, new royalty companies are being formed. They have de minimis market capitalizations, so de minimis that they cannot make it into the precious metals ETFs. Examples of such companies are displayed in Table 4. Among these, Anglo Pacific is interesting in that it does not confine itself to gold and silver but has ventured into royalties on coal, uranium, and platinum, among other products.

Table 4: New Royalty Companies

		Exchange	Mkt. Cap. *(USD in millions)*
VGQ	Virginia Mines Inc.	Toronto	$328
RMC	Reservoir Minerals Inc.	TSX Venture Exchange	166
RZZ	Abitibi Royalties Inc.	TSX Venture Exchange	29
SLR	Solitario Exploration & Royalty Corp.	Toronto	48
ALS	Altius Minerals Corp.	Toronto	336
CAA	Callinan Royalties Corp.	TSX Venture Exchange	86
APF	Anglo Pacific Group plc	London	158
SAND	Sandstorm Gold Ltd.	NASDAQ	317

As of November 7, 2014

By the way, the royalty idea is not original to precious metals. It originates from an approach that occurred in the world of petroleum or hydrocarbon deals. The royalties were called "volumetric payments." First, one would make a fixed payment, and then one would get paid back for the fixed payment in volume of oil and gas—volumetric payments. It is a superior way of investing in it, bypassing the expense variability risks at the operating level, capital expenditures, and related challenges of such ventures.

The new royalty companies are all very small. They are too small to affect the gold market. Collectively, they have several hundred million dollars in cash. Were they to invest all their money instantaneously, it could not provide for more than a fraction of the capital needs of the precious metals producers. There is not even much competition between those small firms, or even from the larger firms because these companies actually cooperate on deals with the larger companies. This cooperation allows the larger firms to diversify into

HORIZON KINETICS
© Horizon Kinetics LLC® 2014

more deals by allowing the smaller firms to purchase small parts of financings and not have 100% of a deal.

One day, this will be a very significant industry involved in all aspects of resource production, because resource production is not going to stop just because this capital markets fate has befallen the resource extraction companies. This is a real growth area and it should be explored. Now is the time to do it because this is at its inception. Who would believe that the world of precious metals could actually have a growth aspect to it? But it is going to happen.

Facts & Figures

BLACKROCK'S FEES AND FLOWS

BlackRock is an important company to look at because it has so much in the way of assets under management (AUM) and it is gathering so much more that its activities are a good sample of what the whole investment world is doing. BlackRock has $4.2 trillion of AUM and it collects approximately $360 million of new assets under management every single business day, which is an incredible figure.

Examining BlackRock's AUM, 34% is active. Most of that is in fixed income, but it is actively managed nevertheless. Twenty-three percent is comprised of iShares ETFs or iShares indexes, and 43% is in indexes. Accordingly, sixty-six percent of the $4.2 trillion is indexed money.

Table 5: BlackRock Assets Under Management

Active	34%
iShares ETFs	23%
Index	43%

Source: BlackRock 3Q14 Earnings Supplement

Of BlackRock's fee income, 55% comes from active management and, even though 43% of the AUM are non-ETF index assets, only 10% of the fee income is from non-ETF index funds.

Table 6: BlackRock Fees

Active	55%
iShares ETFs	35%
Index	10%

Source: BlackRock 3Q14 Earnings Supplement

HORIZON KINETICS
© Horizon Kinetics LLC® 2014

That proportion tells us that the rewarding aspect of being an index fund provider is the capacity to raise a tremendous amount of assets. The negative side of index funds is that this business is undergoing fee compression. Even at BlackRock, 55% of the fee income comes from the active business, and the active business is in decline everywhere in relation to the index business. Action will be taken to address that situation.

Regarding AUM flows, BlackRock raised $28.69 billion in the third quarter. Of that, $4.8 billion was from retail investors, predominantly via mutual funds and other retail-oriented products. iShares ETFs accounted for $18.2 billion. That is well over 50% of the company's new flows. Active institutional activity, which is bonds and stocks, raised only $135 million. That latter figure is actually a lot of money, yet in the context of $4.2 trillion it really is not. Active index activity, which is an interesting category, accounted for $5.49 billion.

Table 7: BlackRock 3Q AUM Net Flows

	($ in billions)
Retail	$4.860
iShare ETFs	18.209
Active Institutional	.135
Active Index	5.485
TOTAL	$28.689

Source: BlackRock 3Q14 Earnings Release

That is the new wave of the future: to invest in an index yet invest actively, which really means not to make individual stock decisions. Rather, it means to tilt the index in some way. This has important implications, because right now the indexes are all based on float-adjusted position weightings.

It is important to keep track of how the indexes are going to be tilted because that has two sets of implications. First, it has implications for the businesses of the index orchestrators, but second, it has implications for the entire marketplace. Whichever way a given sector gets tilted, either positively or negatively, the amount of money involved is so huge that it is going to be either the best-performing sector or the worst-performing sector.

If the $28 billion of fund flows are grouped by type, as opposed to by ultimate end user, $10.2 billion is still equity, $11.1 billion is fixed income, and $7.4 billion is in the multi-asset class.

Table 8: BlackRock Fund Flows by Type

	($ in billions)
Equity	$10.234
Fixed Income	11.111
Multi-Asset Class	7.424
Alternative	(.080)

Source: BlackRock 3Q14 Earnings Release

HORIZON KINETICS
© Horizon Kinetics LLC® 2014

It seems that the indexes will be tilted the multi-asset class way, which will include bonds, stocks, and commodities. It will include everything. The alternative class had $80 million of outflow and is almost not even worthy of consideration. The classical alternative has finally reached the limits of tolerance by investors because it has not done what it is supposed to do, which is to provide a truly unique and differentiated rate of return profile. It has not done that, and it is believed that the multi-asset class will provide it.

To look at the retail business in isolation for BlackRock's third quarter flows, note that the retail business is a bit different than the institutional business. Retail business really informs the observer about consumer sentiment. As noted previously, BlackRock's retail unit or division raised $4.86 billion in new AUM, but within retail, equities outflows were $3.4 billion. The fixed income category, despite how low rates are, received almost $5.4 billion, and the multi-asset class had $2.5 billion going in. Even the alternatives sector got $342 million: the institutions are pulling out of alternatives; the retail investors are going into alternatives.

Table 9: Blackrock 3Q Retail Fund Flow

	($ in billions)
Equity	$(3.412)
Fixed Income	5.396
Multi-Asset Class	2.534
Alternative	.342
TOTAL	$4.860

Source: BlackRock 3Q14 Earnings Release

Consider the breakdown for just the active part of the institutional marketplace, presented below in Table 10.

Table 10: Blackrock 3 Q AUM Institutional Active Flows

	($ in billions)
Equity	$(0.646)
Fixed Income	(3.497)
Multi-Asset Class	5.232
Alternatives	(0.954)

Source: BlackRock 3Q14 Earnings Release

The equities segment is negative $646 million, fixed income is negative almost $3.5 billion. The alternatives segment is negative $954 million, or almost negative $1 billion, while the multi-asset class is positive $5.23 billion. This is all about the search for a lower standard deviation. It is believed that one just cannot do it by international diversification alone, one cannot do it in equities by market capitalizations, nor can one do it by adding different types of bonds, because all the central banks of the world have generally agreed to have low interest rates. There is only one asset class left: commodities.

HORIZON KINETICS
© Horizon Kinetics LLC® 2014

To the give the reader an idea of what is going on in the world of institutional indexation, the following data is only for institutional index investing at BlackRock.

Table 11: BlackRock AUM Institutional Index Flows

	($ in billions)
Equity	$0.452
Fixed Income	5.465
Multi-Asset	(0.435)
Alternatives	.003

Source: BlackRock 3Q14 Earnings Release

Equities received $452 million, fixed income $5.465 billion, and multi-asset class actually lost $435 million. That is because it may well be that the marketplace has come to agree that if one is going to invest in the commodity group, it requires some form of management or, if not management, at least some type of decision rule that is not completely passive, if only because of the extreme volatility of various commodity indexes and the various individual commodities. As a function of that level of volatility, it will eventually happen that some commodity position, if not otherwise constrained by some type of decision rule, will come to be too large a weight in a portfolio. That rule might not be permanent; it might change from time to time.

The cash management assets of BlackRock are $281 billion. The quarterly inflow was $16.8 billion. Therefore, it is growing. The institutional index assets alone, excluding ETFs, are $1.76 trillion. It is an extraordinary sum, when ones ponders it. Attention should be paid to that sort of figure, because I believe that the passive management flows are so large that they affect valuations. Wherever they go, in or out, they are going to affect valuations.

HORIZON KINETICS
© Horizon Kinetics LLC® 2014

Featured Companies

AFFILIATED MANAGERS GROUP, INC. (AMG)

Affiliated Managers Group, Inc. (AMG) is a diversified money management conglomerate with a long history of acquiring investment advisory firms. It has a market capitalization of $10.9 billion and it trades at a 14.8x earnings, based on the consensus earnings estimates for 2015. It is important to note that this is the cash earnings estimate, which means that the cash flow multiple is lower than the actual earnings multiple. The reason is that there are the fairly large non-cash accounting charges for the amortization of intangibles that arise when one buys money management firms. One really has to amortize them because, according to the generally accepted accounting principles, when one buys institutional accounts, they have an average life of six years. That may or may not be true, but that is the operative assumption. When one buys a money management firm, one is actually buying the accounts or, more precisely, the fee income from the accounts. One must depreciate them as if they were physical assets because however much the money manager may try, they do not last very long.

Affiliated Managers Group, however, has a very interesting approach. If one buys enough managers with enough strategies, clients might leave one strategy but move their assets into another. As long as they stay within the complex, it really does not matter. It appears to be a workable strategy.

The other challenge in buying money management companies is that once the insiders of the acquired company sell their interests and have their money, they cease to care very much about the outcome. The degree of diligence and the amount of effort they put into the enterprise wanes—they transition from being principals to being part of the agency problem. This was a problem at United Asset Management, a predecessor firm unrelated to this company, which tried to do the very same thing.

Affiliated Managers Group handles this situation somewhat differently. It only buys 60% of a money manager. The insiders, who sometimes are the next generation, own the remaining 40%. The company actually allows the management to pursue a completely independent strategy with very little interference from corporate headquarters. That is by design because the company wants to be truly diversified. It wants to have a multiplicity of strategies in a multiplicity of asset classes, and it wants its investee firms to compete with each other for business. And they do.

Affiliated Managers Group is not run it as if it were an integrated shop, which is a very important point. Most companies do not like competition within the various aspects of their businesses, whatever the businesses may be. In this company, competition is actually encouraged. As noted above, this is because basically the typical account, especially the

HORIZON KINETICS
© Horizon Kinetics LLC® 2014

institutional account, does not last very long. Affiliated Managers Group came to the conclusion that it does not help very much to eliminate the internal competition and that it is a lot better off keeping the competition in place, that this might result in retaining the assets longer.

Table 11 provides selected balance sheet data. The company's $300 million in convertible trust preferreds—referred to as "convertible securities" in the company's financial statements—is technically equity.

Table 11: AMG Balance Sheet,

	($ in millions)
Cash	$560
Straight Debt	1,000
Convertible Trust Preferreds	300

Source: Company reports

The next table shows the market segment profile of the business. Of all the Affiliated Managers money managers, 57.6% of the collective AUM are from institutional clients, 29.9% are mutual funds, and high-net-worth individuals comprise 12.5%.

Table 12: AMG Business Profile,

Institutional	57.6%
Mutual Funds	29.9%
High Net Worth	12.5%

Source: Company reports

The company has been buying active managers, even this year. Viewing these acquisitions, one can see how Affiliated Managers Group is trying to be as diversified as possible. Recently it purchased a company called Veritas, which is an Asian equity manager. Before that, it purchased River Road Asset Management, which applies an absolute value approach, and before that, in March 2014, it bought Southern Sun Asset Management, which is old-fashioned and research-intensive, but very concentrated.

Affiliated Managers has not stayed within the realm of publicly traded securities, which is interesting. It even ventured into private equity because that is a legitimate asset class. It bought EIG Global Energy Partners, which is involved in private equity energy deals and private equity energy infrastructure deals.

By taking this approach, 37% of the business is now global equity. Examples of that exposure are Tweedy Browne and Artemis. The company even owns 5% of Value Partners, a Hong-Kong based value-oriented firm with a focus on the greater China and Asia-Pacific region. Twenty-five percent of the revenues come from U.S. equities, examples of which would be Third Avenue Management and the Yachtman funds. Thirty-

HORIZON KINETICS
© Horizon Kinetics LLC® 2014

six percent of revenues come from alternatives: Affiliated Managers Group owns a piece of AQR, which has been a very successful firm, and it owns First Quadrant. Maybe it is a commentary on the world in which we live: by design, a mere 2% of the revenues come from fixed income products. Clearly, the firm could have bought fixed income asset managers. It has chosen to stay away from that group for reasons that really should be obvious.

It is noteworthy that in terms of earnings growth, Affiliated Managers Group has been much more successful than most of the publicly traded money managers that have cohesion and a unifying strategy in all their products. This company employs exactly the opposite approach and it has worked very well. The shares trade at a reasonable valuation and are worthy of note.

HFF INC. (HF)

HFF Inc. (HF) is a real estate investment bank with a $1.2 billion market capitalization. It trades at 16.6x consensus estimated 2015 earnings.

In the real estate industry there are the asset-heavy companies, which are the real estate investment trusts, and the asset-light companies. The asset-light companies, historically, were the real estate brokers. They proved to be much more cyclical than the asset-heavy companies, which is bizarre because that is not the normal relationship in industries. Normally, the asset-heavy companies are cyclical and the asset-light companies are less cyclical. However, in the real estate business, that did not happen.

To reduce this cyclicality, the real estate brokers have been gradually but consistently diversifying into all aspects of serving real estate, not targeting merely transaction volume. For example, HFF is called a real estate investment bank, but it will help one secure loans. It will place debt securities. It will actually be a loan servicer in the case of mortgages. It will place equity. Of course it engages in conventional property sales and purchases, which it always did. It will sell loans. It will market real estate funds—in other words, it will raise money for real estate advisors. It will do virtually anything that pertains to real estate.

This company came public in 2007. It ended up prospering. Now, it is the number one real estate debt placement agent in the United States. It is the number three top broker and the number two shopping mall broker. It has 23 offices, with only 682 employees, across the United States and it has a growing market share. The simple reason is that it can be present in all aspects of a deal. If somebody wants to buy a property, HFF can help obtain the financing and take care of all aspects of the transaction.

To relate how large the company is, even with a small market capitalization, it is now larger than Cushman & Wakefield and larger than Jones Lang LaSalle. In debt origination, it has an 8% market share. The loan-servicing portfolio, which is a source of recurring

HORIZON KINETICS
© Horizon Kinetics LLC® 2014

revenue no matter what the real estate cycle does, is up to $35 billion in assets and growing very rapidly.

HFF has chosen to grow the expenses faster than revenue, even though revenue is growing very rapidly. It has chosen to do this because it wants to expand throughout the United States. It wants to expand into all these different service functions, and it wants to hire the people to do it.

The company has an excellent balance sheet with $133 million of cash and no debt. It does not need to build up cash. In 2012 to 2014, it paid special dividends. This is not a capital-intensive business model. Capital expenditures normally equal approximately 5% of operating cash flow. Normal quarterly transactional deal volume for HFF is $14 billion; a normal quarterly equity fund placement volume is $2.5 billion.

This is the diversified asset-light real estate model. It is a different type of real estate company. Just as the business of precious metals is evolving, as reviewed in the Industry section, real estate is developing an asset-light version as well because investors desire to reduce cyclicality.

CBRE GROUP, INC. (CBG)

CBRE Group, Inc. has a $10.5 billion market capitalization and it trades at 16.4x estimated 2015 earnings. It is another example of a company transforming itself into an asset-light business model. Historically, this was just about the largest real estate broker in the United States. It grew that way via acquisition, and it continues to acquire other companies.

At the moment, it is the number one U.S. leasing company, the number one U.S. property sales company, and the number one outsourcing company, which means management of the properties, as opposed to buying and selling. It is the number one appraisal and valuation company and the number one commercial real estate asset manager, meaning it buys properties for clients and manages the real estate as an investment, as opposed to simply managing the property.

CBRE Group has 440 offices in 60 countries. It does business with 85% of the Fortune 100 companies and manages, or operates, 3.5 billion square feet of space. It manages $92.8 billion of real estate assets under management, in the buy-and-sell sense of the word "manage." At a typical asset manager valuation multiple, 3% of AUM, the stand-alone real estate management business by itself might be worth $3 billion.

In the last 18 months, CBRE made 19 acquisitions, or a little more than one per month, to fill gaps in service offerings. Most of these are geographical and property-based management firms. The company wants to be positioned to manage the properties in which

HORIZON KINETICS
© Horizon Kinetics LLC® 2014

its clients trade and it is currently very successful at it. The idea is to gather as much contractual—which is to say recurring—revenue as is possible.

Building management revenue, or contractually recurring revenue, is now 50% of total revenue. Viewed more comprehensively, recurring revenue is an even higher proportion of the business value, because the company's asset management business, being real estate based, is basically locked-up capital; those revenues will also have persistence.

During the past 10 years, the revenue has expanded at an 18% compound annual rate. The diversification of pension funds into the multi-asset model, which includes real estate, is a source of the growth, because if the pension funds and foundations are going to buy properties, they are certainly not, as financial rather than strategic buyers, going to manage the buildings. They need a third party to manage the buildings and they specifically need someone to manage large buildings. CBRE has made itself available to do that.

Among its building management contracts, CBRE Group has 300 of the "trophy assets" of the world. When a pension fund buys a trophy asset, this company not infrequently gets the contract. The trophy assets themselves are 450 million square feet. Once a pension fund diversifies into the multi-asset class or alternatives asset class and buys a building, there is a much-increased need for valuation and appraisal services, so the valuation and appraisal business is growing rapidly.

CBRE has a more levered balance sheet than HFF Inc., with $1.8 billion of debt and $2.1 billion of equity. Nevertheless, it is still in the asset-light model. It is a completely different real estate model and, like HFF, has a much lower valuation by any possible criterion than the asset-heavy companies.

JONES LANG LASALLE INC. (JLL)

Jones Lang LaSalle Inc. (JLL) has a $6.3 billion market capitalization and it trades at 15.9x estimated 2015 earnings. This company was once known as a mere broker and now it is a diversified real estate services firm. It serves as the outsourced property management for 3 billion square feet of space. It has 200 offices around the world in 75 countries. Like CBRE, Jones Lang LaSalle will manage real estate assets. It manages $53 billion of real estate assets, meaning it makes investments on behalf of others, acting as an asset manager. In addition, it engages in project development to help repurpose buildings and deal with construction and all the other aspects of development. It also provides, of course, advisory and consulting, and valuation and appraisal services.

HORIZON KINETICS
© Horizon Kinetics LLC® 2014

This balance sheet is a bit more conservative, as can be seen in Table 13.

Table 13: Jones Lang LaSalle Balance Sheet

	($ in millions)
Cash	$163
Short Term Debt	43
Bank Credit Facility	250
Long Term Senior Notes	275

Source: Company reports

It has $163 million of cash, $43 million of short-term debt, a $250 million bank credit facility, and $275 million of long-term senior notes. There is $517 million of net debt and $2.3 billion of equity. Most of the equity is goodwill, but it is equity, nevertheless.

Very much in the spirit of CBRE, Jones Lang LaSalle is also growing by acquisitions. It is very difficult to be a small firm and service the enormous pension funds and fiduciaries in the world of real estate, so the smaller firms are combining to be able to service the large firms.

The company's revenue profile is listed in Table 14.

Table 14: Jones Lang LaSalle Revenue Profile

Leasing	31.6%
Capital Markets	16.4%
Property Management	22.1%
Project Development	9.5%
Advisory & Consulting	8.9%
Asset Management	15.5%

Source: Company reports

Leasing itself is 31.6% of revenues, which is to say the company acts as a lease agent or a broker. The capital markets division, which entails raising money for clients, accounts for 16.4%. Property management, which is the most recurring source of revenue, is 22.1%. Project development, which is more cyclical, is 9.5%. Advisory and consulting, which is really evaluation and appraisal, is 8.9%, and asset management is 15.5%. Again, this is an example of an asset-light model that encompasses a worldwide footprint with no significant geographic concentration.

Another interesting point is that it is not well recognized that real estate asset management businesses have the ability to earn performance fees. We have not hit the part of the cycle where the assets are being liquidated but when that happens, because of the valuations of the properties, it is highly likely that these companies will collect the performance fees.

HORIZON KINETICS
© Horizon Kinetics LLC® 2014

Jones Lang LaSalle has transformed its business into a much less volatile concern than it was previously. Capital expenditures are 50% of normal net income, or 153% of depreciation expense. There is positive cash flow that can be used to continue making acquisitions. Probably for a very long time it can continue to expand in the way it is now. Therefore, this company is worthy of examination.

Post-Musings

THE NEED FOR A NEW TYPE OF REAL ESTATE INDEX

Real estate is a very important asset class. There are two ways of investing in real estate. One is to invest in the shares of real estate companies, which is usually done via an index. The second is to invest in the actual buildings as an alternative, because the buildings might be a little more idiosyncratic in their return profiles than the index. Of course, that approach is less diversified and poses certain liquidity issues. Both methods have the common feature that they are asset-intensive and that has problems.

One challenge is that the current valuations are extended, to say the least, as discussed in the *Musings* section. The next problem is interest rate vulnerability. The prices of the buildings, or the prices of the REITs, are so high that one really cannot make money by buying the buildings directly. The only way it makes sense to buy the buildings is to leverage them. Whether that is done by the REIT and the REIT leverages them, or whether the pension fund buys a building and borrows money for that purpose, enormous leverage is employed.

For an idea of how dangerous that is, the nine REITs listed in the *Musings* section is reprised below for a look at what would happen to operating income, all else held constant, if interest rates were to increase by 300 basis points so that the companies were forced to refinance their debt 300 basis points higher than their current cost of debt.

Table: 14 % Reduction in Operating Income With a 300 BP Rise in Interest Rates

GGP	General Growth Properties, Inc.	54.3%
SPG	Simon Property Group Inc.	27.6%
SLG	SL Green Realty Corp.	12.9%
PSA	Public Storage	0.0%
VTR	Ventas, Inc.	66.5%
PLD	Prologis, Inc.	69.2%
DLR	Digital Realty Trust Inc.	40.0%
HCN	Health Care REIT, Inc.	87.6%
EQR	Equity Residential	36.7%

Source: Company Reports and Horizon Kinetics Research.

HORIZON KINETICS
© Horizon Kinetics LLC® 2014

It is worthwhile noting that in terms of the valuations of these companies, the P/E or FFO multiples actually take account of this risk: the companies that are less vulnerable to rising interest rates have higher valuations, whether against earnings or funds from operations.

General Growth Properties'reduction in operating income would be 54.3%, Simon Properties' reduction would be 27.6% and SL Green's would be 12.9%. Public Storage, technically speaking, has no vulnerability to increased interest rates, because it does not have any debt to speak of. It does have a lot of preferreds, which have been excluded for this purpose. Ventas would suffer a 66.5% reduction, Prologis 69.2%, Digital Realty 40%, Health Care REIT 87.6%, and Equity Residential would lose 36.7% of its operating income. This is a very conservative way of looking at this scenario because, of course, as interest rates rise, business activity usually declines. One should also expect a higher vacancy rate; that usually happens.

Another point is that the public market values are being affected by the pension funds' private deals, because they are paying very high multiples for the cash flow of real estate businesses. Because this phenomenon has become generally known, the REITs are valued on a theoretical liquidation model that they could sell all their buildings, which they clearly are not going to do.

The demand from so-called multi-asset class or alternative asset buyers is affecting prices globally, because it is not easy to accommodate in short periods of time the transactional needs of multi-billion-dollar—collectively multi-trillion-dollar—institutions in the world of assets that are not very liquid. There is a need for a better index.

HORIZON KINETICS
© Horizon Kinetics LLC® 2014

Updates on Past Ideas

LIVE NATION ENTERTAINMENT, INC. (LYV)

Original Recommendation: 5/21/13 at $13.78
Current Price: $25.97
Market Cap: $5.2 billion

Live Nation Entertainment was recommended for purchase in May 2013 at a price of $13.78. Since then, the shares have returned 88.5% (50.2% annualized), versus 29.9% for the S&P 500 (18.6% annualized). In 2012, Live Nation recorded a net loss of $161.9 million; therefore, on a GAAP net earnings basis, the company was unprofitable. However, with depreciation and amortization charges of $429.6 million and maintenance capital expenditures of only $63.0 million, Live Nation was actually quite profitable on an economic earnings basis, trading at a price-to-free cash flow multiple of 13.1x. Stated alternatively, the free cash flow yield was 7.6%.

Beyond the free cash flow yield, Live Nation was enticing because of a series of initiatives management put forth in late 2012 to increase earnings in each of its four business segments: Concerts, Ticketing (i.e., Ticketmaster), Artist Nation, and Sponsorship & Advertising. To briefly summarize, these initiatives included: 1) increasing attendance at its concerts by 5 million people within three years, from roughly 50 million to 55 million; 2) revamping its 28-year-old Ticketmaster computer platform, an initiative projected to reduce the cost of producing a ticket by 35 cents (which, multiplied by over 150 million tickets sold annually, would result in roughly $50 million of cost savings); and 3) increasing participation in the secondary market for ticket sales (to compete with StubHub).

Now two years into this three-year plan, Live Nation has met or exceeded each of these goals. Attendance at its concerts for 2014 is expected to exceed 60 million, already far exceeding the target of 55 million for 2015. The Ticketmaster computer platform is in the process of being upgraded, and the cost of producing a ticket has thus far been reduced by 15 cents per ticket. Finally, the company launched its competitor to StubHub, Ticketmaster+, in September 2013, and it has been activated for roughly 13,000 events worldwide, capturing over $1 billion in gross transaction value thus far. Although the Live Nation share price has increased 88.5%, because of the increase in cash flow resulting from these initiatives, the aforementioned price-to-free cash flow multiple has increased only 33%, to 16.1x (on a trailing four quarters basis). In its most recently reported quarter, the

HORIZON KINETICS
© Horizon Kinetics LLC® 2014

company's free cash flow totaled $198.0 million—up 19% from the 3rd quarter of 2013 and 31% from the 3rd quarter of 2012.[1]

A price-to-free cash flow multiple of 16.1x (a free cash flow yield of 6.2%) suggests Live Nation is now fully valued.[2] Yet, this is not to say the shares should now be sold. To begin with, although the company is on pace to meet (or far exceed) the targets for its growth initiatives, these projects are still only in their early stages. Management believes further substantial gains in concert attendance can be made in the coming years through the continued promotion of its events on social media platforms and the through continued expansion of its outdoor festivals. The company continues to upgrade its Ticketmaster computer platform, which should result in further cost savings. It has only begun to compete with StubHub, which remains the industry leader in the secondary ticketing market.

Furthermore, there remains an intriguing element of Live Nation's growth potential, which is the monetization of its library of recorded concerts. The company recently joined with Yahoo! to create a live concert network called the *Live Nation Channel*. In addition to streaming a live concert every day, the online network gives fans access to behind the scenes footage, interviews with performing artists, and an on-demand concert library. Not only is this network an opportunity to generate additional sponsorship and advertising revenue, it provides a platform to monetize its vast library.

In summary, although the Live Nation shares have almost doubled in price since the original purchase recommendation 19 months ago, the company remains reasonably priced at a price-to-free cash flow multiple of 16.1x. Given further growth potential in each of its business segments, in addition to the substantial (although not readily quantifiable) earnings potential that could result from the development of the *Live Nation Channel*, it is recommended that owners of Live Nation continue to hold their shares.

[1] Note that because July and August are Live Nation's busiest months for concerts and outdoor music festivals, the 3rd quarter is expected to account for approximately 61% of 2014 free cash flow.
[2] Incidentally, net income for the trailing four quarters totals $13.6 million, giving Live Nation a trailing P/E of 385x; the company therefore continues to elude analysts screening for low P/E stocks.

HORIZON KINETICS
© Horizon Kinetics LLC® 2014

WEALTH INDEX (Ticker: RCH Index)

As of September 30, 2014

Annualized Total Return	1 Year	3 Years	5 Years	7 Years	10 Years	15 Years	20 Years	Since Incep. 1991 - Sep '14
Wealth Index	12.37%	22.49%	18.90%	11.03%	12.63%	9.24%	12.77%	13.43%
S&P 500	19.73%	22.99%	15.70%	6.02%	8.11%	4.87%	9.59%	10.07%
S&P 500 Eq. Wgt.	18.53%	24.80%	17.51%	8.46%	10.23%	9.17%	11.44%	12.42%
Russell 3000	17.76%	23.08%	15.78%	6.24%	8.44%	5.51%	9.65%	10.33%
Russell 2000	3.93%	21.26%	14.29%	6.04%	8.19%	7.93%	9.03%	10.86%
Excess Return vs. S&P 500	-7.37%	-0.50%	3.20%	5.01%	4.52%	4.37%	3.19%	3.36%
Excess Return vs. S&P 500 Eq. Wgt.	-6.17%	-2.31%	1.39%	2.58%	2.39%	0.07%	1.34%	1.01%
Excess Return vs. Russell 3000	-5.39%	-0.59%	3.12%	4.79%	4.19%	3.73%	3.12%	3.11%
Excess Return vs. Russell 2000	8.43%	1.23%	4.61%	4.99%	4.44%	1.31%	3.75%	2.57%

**Note: Calculated Using Total Returns*

Risk Adjusted Return	1 Year	3 Years	5 Years	7 Years	10 Years	15 Years	20 Years	Since Incep. 1991 - Sep '14
Wealth Index	0.98	1.60	1.15	0.48	0.62	0.40	0.58	0.65
S&P 500	2.23	2.18	1.19	0.36	0.55	0.32	0.63	0.69
S&P 500 Eq. Wgt.	1.89	2.06	1.18	0.42	0.58	0.52	0.68	0.77
Russell 3000	1.91	2.09	1.14	0.36	0.55	0.35	0.62	0.70
Russell 2000	0.27	1.40	0.77	0.27	0.41	0.39	0.46	0.57

**Note: Calculated As Annualized Total Return Divided By Annualized Total Return Volatility (Uses Monthly Total Returns)*

Information Ratio	1 Year	3 Years	5 Years	7 Years	10 Years	15 Years	20 Years	Since Incep. 1991 - Sep '14
Wealth Index vs. S&P 500	(1.31)	(0.09)	0.53	0.53	0.51	0.39	0.30	0.33
Wealth Index vs. S&P 500 Eq. Wgt.	(1.53)	(0.62)	0.32	0.45	0.42	0.01	0.14	0.11
Wealth Index vs. Russell 3000	(1.20)	(0.12)	0.60	0.56	0.53	0.36	0.32	0.33
Wealth Index vs. Russell 2000	1.66	0.26	0.77	0.63	0.60	0.11	0.34	0.24

**Note: Calculated As Annualized Excess Total Return Divided By Annualized Excess Total Return Volatility (Uses Monthly Excess Total Returns)*

Wealth Index Batting Average	Roll. 1 Year	Roll. 3 Year	Roll. 5 Year
vs. S&P 500	61.31%	68.80%	71.24%
vs. S&P 500 Eq. Wgt.	58.39%	63.20%	60.18%
vs. Russell 3000	63.87%	69.20%	76.99%
vs. Russell 2000	61.31%	67.20%	74.34%

**Note: Calculated Using Total Returns*

Annualized Volatility	1 Year	3 Years	5 Years	7 Years	10 Years	15 Years	20 Years	Since Incep. 1991 - Sep '14
Wealth Index	12.65%	14.08%	16.47%	22.99%	20.25%	23.12%	21.86%	20.82%
S&P 500	8.87%	10.57%	13.20%	16.90%	14.71%	15.38%	15.17%	14.55%
S&P 500 Eq. Wgt.	9.81%	12.01%	14.87%	20.24%	17.61%	17.71%	16.91%	16.20%
Russell 3000	9.31%	11.04%	13.79%	17.55%	15.30%	15.80%	15.47%	14.82%
Russell 2000	14.64%	15.22%	18.44%	22.10%	19.83%	20.59%	19.80%	19.02%

**Note: Calculated Using Total Returns*

Annualized Tracking Error	1 Year	3 Years	5 Years	7 Years	10 Years	15 Years	20 Years	Since Incep. 1991 - Sep '14
vs. S&P 500	5.62%	5.70%	6.09%	9.54%	8.83%	11.24%	10.56%	10.23%
vs. S&P 500 Eq. Wgt.	4.03%	3.73%	4.35%	5.78%	5.65%	10.54%	9.79%	9.35%
vs. Russell 3000	4.51%	4.74%	5.20%	8.62%	7.96%	10.45%	9.70%	9.41%
vs. Russell 2000	5.09%	4.75%	5.98%	7.90%	7.35%	11.94%	11.02%	10.53%

**Note: Calculated Using Total Returns*

Wealth Index Beta	1 Year	3 Years	5 Years	7 Years	10 Years	15 Years	20 Years	Since Incep. 1991 - Sep '14
vs. S&P 500	1.32	1.24	1.17	1.27	1.27	1.36	1.30	1.28
vs. S&P 500 Eq. Wgt.	1.25	1.14	1.07	1.10	1.11	1.18	1.17	1.16
vs. Russell 3000	1.31	1.22	1.14	1.24	1.24	1.35	1.30	1.29
vs. Russell 2000	0.81	0.88	0.85	0.98	0.95	0.96	0.95	0.95

**Note: Calculated Using Total Returns*

Calendar Year Total Returns	Wealth Index	S&P 500	S&P 500 Eq. Wgt.	Russell 3000	Russell 2000	ER v. SP500	ER v. SP500 EW	ER v. R3000	ER v. R2000
1991	44.25%	30.47%	35.51%	33.68%	46.04%	13.78%	8.73%	10.57%	-1.80%
1992	20.20%	7.62%	15.63%	9.59%	18.41%	12.58%	4.56%	10.61%	1.79%
1993	3.38%	10.08%	15.12%	10.88%	18.88%	-6.70%	-11.75%	-7.50%	-15.50%
1994	0.33%	1.32%	0.95%	0.19%	-1.82%	-0.99%	-0.62%	0.14%	2.15%
1995	31.31%	37.58%	32.03%	36.80%	28.45%	-6.27%	-0.72%	-5.49%	2.86%
1996	23.09%	22.96%	19.02%	21.82%	16.49%	0.13%	4.06%	1.27%	6.59%
1997	27.31%	33.36%	29.05%	31.78%	22.36%	-6.06%	-1.74%	-4.48%	4.94%
1998	24.95%	28.58%	12.19%	24.14%	-2.55%	-3.63%	12.76%	0.81%	27.49%
1999	44.68%	21.04%	12.03%	20.90%	21.26%	23.64%	32.66%	23.78%	23.43%
2000	-19.16%	-9.10%	9.64%	-7.46%	-3.02%	-10.06%	-28.80%	-11.70%	-16.14%
2001	-10.80%	-11.89%	-0.39%	-11.46%	2.49%	1.08%	-10.41%	0.65%	-13.29%
2002	-15.49%	-22.10%	-18.18%	-21.54%	-20.48%	6.61%	2.69%	6.05%	4.99%
2003	45.41%	28.68%	40.97%	31.06%	47.25%	16.72%	4.44%	14.35%	-1.85%
2004	17.97%	10.88%	16.95%	11.95%	18.33%	7.09%	1.02%	6.02%	-0.36%
2005	3.30%	4.91%	8.06%	6.12%	4.55%	-1.61%	-4.76%	-2.82%	-1.25%
2006	22.61%	15.79%	15.80%	15.71%	18.37%	6.81%	6.81%	6.89%	4.24%
2007	1.73%	5.49%	1.53%	5.14%	-1.57%	-3.76%	0.20%	-3.41%	3.30%
2008	-43.67%	-37.00%	-39.72%	-37.31%	-33.79%	-6.68%	-3.95%	-6.37%	-9.89%
2009	72.80%	26.46%	46.31%	28.34%	27.17%	46.33%	26.49%	44.46%	45.62%
2010	31.51%	15.06%	21.91%	16.93%	26.85%	16.45%	9.60%	14.58%	4.65%
2011	5.11%	2.11%	-0.11%	1.03%	-4.18%	3.00%	5.22%	4.09%	9.29%
2012	13.53%	16.00%	17.65%	16.42%	16.35%	-2.48%	-4.13%	-2.89%	-2.82%
2013	41.08%	32.39%	36.16%	33.55%	38.82%	8.69%	4.92%	7.53%	2.25%
2014 YTD	2.85%	8.34%	7.90%	6.95%	-4.41%	-5.50%	-5.06%	-4.11%	7.25%

**Note: Calculated Using Total Returns*

Source: Horizon Kinetics LLC, International Securities Exchange, Bloomberg

See important disclosures for additional information.

© Horizon Kinetics LLC® 2014

Index Constituent Changes: 1. Nuveen Investments Inc (JNC US) was delisted from the US Security Exchange effective 11/14/2007 and has been removed from the index. 2. Alliance Financial Corp (ALNC US) was delisted from US Security Exchange effective 03/11/2013 and has been removed from the index. The divisor has been adjusted accordingly for each of these changes.

Money Manager Index

From Aug 1983 to Nov 2014

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Yr. End	Index	Yearly return	Annualized return (since inception)
1983								1.00	0.81	0.76	0.87	0.75	1983	0.75	(60.5)%	(50.2)%
1984	0.75	0.71	0.70	0.66	0.67	0.67	0.61	0.83	0.79	0.76	0.67	0.65	1984	0.65	(13.5)%	(26.5)%
1985	0.92	0.93	0.99	0.95	1.20	1.30	1.32	1.38	1.28	1.50	1.86	2.02	1985	2.02	211.8%	33.7%
1986	2.46	2.78	2.47	2.31	2.36	2.33	2.03	2.23	1.98	2.37	2.34	2.34	1986	2.34	15.9%	28.2%
1987	3.21	3.27	3.16	2.55	2.37	2.30	2.39	2.47	2.22	1.56	1.44	1.52	1987	1.52	(35.0)%	9.9%
1988	1.80	1.87	1.78	1.79	1.69	1.94	1.92	1.96	2.01	1.97	1.95	2.07	1988	2.07	36.0%	14.3%
1989	2.42	2.37	2.54	2.63	2.64	2.64	2.93	3.12	3.07	3.05	3.23	3.26	1989	3.26	57.8%	20.2%
1990	3.12	3.15	3.53	3.06	3.47	3.45	3.30	2.70	2.68	2.40	2.52	3.02	1990	3.02	(7.3)%	16.1%
1991	3.08	3.49	3.70	3.68	3.71	3.61	3.86	4.05	4.07	4.69	4.47	5.72	1991	5.72	89.4%	23.0%
1992	5.76	5.61	5.30	5.12	4.98	4.99	5.93	6.06	6.19	6.56	7.25	7.36	1992	7.36	28.6%	23.6%
1993	8.06	8.04	8.20	7.94	8.15	8.57	9.05	10.00	9.99	9.31	8.97	8.90	1993	8.90	21.0%	23.4%
1994	9.52	8.73	8.05	7.85	7.81	7.53	7.66	8.31	8.15	8.52	7.88	7.95	1994	7.95	(10.6)%	19.9%
1995	7.74	8.38	8.72	8.77	9.20	9.35	9.93	10.78	11.22	10.53	10.89	10.40	1995	10.40	30.8%	20.8%
1996	11.12	11.50	11.33	11.62	11.86	12.53	11.91	12.36	13.32	14.03	14.42	15.02	1996	15.02	44.4%	22.4%
1997	16.04	16.81	15.32	17.27	18.42	20.29	22.28	21.39	25.31	24.95	24.95	25.50	1997	25.50	69.8%	25.2%
1998	25.67	29.00	29.89	30.60	28.90	30.44	27.67	21.33	21.74	25.16	27.27	25.41	1998	25.41	(0.4)%	23.3%
1999	26.00	23.71	23.92	26.77	28.94	29.74	28.78	26.74	25.89	27.73	28.54	30.55	1999	30.55	20.2%	23.2%
2000	31.07	31.19	36.01	35.60	35.20	40.32	43.58	45.75	45.62	48.69	44.05	49.84	2000	49.84	63.1%	25.2%
2001	50.23	46.41	44.27	46.96	48.90	49.98	50.67	49.70	46.47	44.81	48.04	51.91	2001	51.91	4.2%	23.9%
2002	53.62	53.74	55.11	52.52	52.83	50.48	42.58	44.92	41.54	42.66	45.78	43.17	2002	43.17	(16.8)%	21.4%
2003	42.72	41.18	42.36	45.98	49.02	50.71	53.47	53.97	53.46	56.12	55.83	58.49	2003	58.49	35.5%	22.1%
2004	64.38	65.08	64.63	61.68	60.86	62.30	58.71	64.08	65.73	68.86	73.53	78.16	2004	78.16	33.6%	22.6%
2005	76.46	77.94	74.06	72.83	77.02	80.25	83.59	83.07	86.03	89.19	96.58	97.35	2005	97.35	24.6%	22.7%
2006	107.62	111.44	110.75	111.88	101.89	100.61	100.62	104.98	114.61	116.64	113.78	118.05	2006	118.05	21.3%	22.6%
2007	125.73	123.77	122.62	127.58	133.57	134.68	126.61	124.07	133.57	148.09	135.13	135.56	2007	135.56	14.8%	22.3%
2008	127.53	115.76	115.94	121.58	130.51	115.68	119.94	120.55	109.69	72.70	62.95	67.91	2008	67.91	(49.9)%	18.1%
2009	57.51	51.76	65.63	79.49	85.67	90.79	99.97	101.69	107.32	107.36	110.94	115.01	2009	115.01	69.4%	19.7%
2010	106.84	110.32	118.13	114.91	100.18	88.17	97.65	89.64	103.59	108.29	108.64	119.58	2010	119.58	4.0%	19.1%
2011	122.80	128.28	127.94	127.97	126.06	121.03	115.49	104.25	91.32	102.44	103.79	103.98	2011	103.98	(13.1)%	17.8%
2012	109.46	120.12	125.37	121.64	108.44	114.12	113.56	118.33	123.18	127.91	131.76	135.00	2012	135.00	29.8%	18.1%
2013	151.20	155.13	165.52	166.55	174.89	164.20	179.01	168.47	176.12	192.14	197.16	208.44	2013	208.44	54.4%	19.2%
2014	194.17	196.87	203.88	196.24	195.40	206.41	194.00	207.06	201.07	205.28	212.28		2014	212.28	1.8%	18.6%

S.No.	Ticker	Name	Amount Invested	Shares Purchased	Date of Investment	Current Index Value
1	AMG US Equity	Affiliated Manager	$22,947	1,377	11/30/1997	$280,304
2	BLK US Equity	BlackRock	$23,205	1,658	9/30/1999	$591,981
3	WDR US Equity	Waddell & Reed	$27,513	1,587	3/31/1998	$76,317
4	EV US Equity	Eaton Vance	$2,641	3,998	1/31/1986	$167,093
5	TROW US Equity	T. Rowe Price	$2,423	2,014	4/30/1986	$168,096
6	BEN US Equity	Franklin resources	$908	1,263	4/30/1985	$215,465
7	LM US Equity	Legg Mason	$1,000	462	8/31/1983	$26,229
8	FII US Equity	Federated Inv	$26,381	2,206	5/31/1998	$69,911
9	FIG US Equity	Fortress Investment Group	$102,249	3,389	2/28/2007	$26,469
10	PZN US Equity	Pzena Investment Management	$122,426	6,317	10/31/2007	$54,959

HORIZON KINETICS
© Horizon Kinetics LLC® 2014

Index Constituent Changes: 1.New Star Asset Management (NSAM LN) was delisted from the London Security Exchange effective 03/10/2009 and has been removed from the index. 2. Australia Wealth Management (AUW AU) was delisted from Australian Security Exchange effective 05/18/2009 and has been removed from the index. 3. Bluebay Asset Management/UNI (BBAY LN) was delisted from the London Security Exchange effective 12/20/2010 and has been removed from the index. 4.Everest Financial Group Limited (EFG AU) was delisted from the Australian Security Exchange effective 7/19/2011 and has been removed from the index. 5. RAB Capital Plc (RAB LN) was delisted from the London Security Exchange effective 9/2/2011 and has been removed from the index. 6. Invista Real Estate (INRE LN) was delisted effective 8/13/2012 and has been removed from the index. 7. F&C Asset Management Plc (FCAM LN) was delisted effective 5/8/2014 and has been removed from the index.The divisor has been adjusted accordingly for each of these changes.

International Money Manager Index

From Nov 1986 to Nov 2014

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Yr. End	Index	Yearly return	Annualized return (since inception)
1986											1.00	1.02	1986	1.02	10.0%	10.0%
1987	1.25	1.37	1.48	1.48	1.37	1.33	1.39	1.40	1.33	0.81	0.76	0.73	1987	0.73	(27.7)%	(23.3)%
1988	0.75	0.92	1.02	0.95	0.80	0.89	0.88	0.82	0.86	0.88	0.89	0.93	1988	0.93	26.4%	(3.4)%
1989	1.03	1.02	1.06	1.17	1.19	1.18	1.25	1.16	1.17	1.20	1.21	1.28	1989	1.28	37.8%	8.1%
1990	1.24	1.24	1.18	1.19	1.22	1.24	1.26	1.26	1.23	1.24	1.25	1.33	1990	1.33	3.7%	7.0%
1991	1.34	1.52	1.56	1.58	1.57	1.47	1.52	1.64	1.81	1.89	1.94	1.92	1991	1.92	44.8%	13.5%
1992	2.01	1.93	1.88	2.14	2.19	2.13	2.08	1.99	1.95	1.77	1.76	1.96	1992	1.96	1.9%	11.5%
1993	1.98	2.03	2.20	2.39	2.42	2.45	2.54	3.05	3.01	3.07	3.01	3.30	1993	3.30	68.7%	18.1%
1994	3.72	3.39	3.17	3.04	2.99	2.89	3.01	3.14	3.13	3.19	3.15	3.15	1994	3.15	(4.7)%	15.1%
1995	3.07	3.12	3.28	3.41	3.56	3.59	3.87	3.76	3.76	3.77	3.70	3.73	1995	3.73	18.6%	15.4%
1996	3.76	3.85	3.70	3.79	3.96	3.90	3.75	3.96	4.16	4.47	4.90	4.86	1996	4.86	30.3%	16.8%
1997	5.11	5.37	4.99	4.96	5.43	5.94	6.57	6.32	7.45	7.24	6.80	7.19	1997	7.19	47.9%	19.3%
1998	7.12	8.05	8.78	9.25	8.95	8.74	8.91	6.67	6.08	7.01	7.51	7.71	1998	7.71	7.3%	18.3%
1999	7.99	8.21	8.68	9.07	8.71	8.61	8.63	8.43	8.47	8.79	9.80	10.79	1999	10.79	39.9%	19.8%
2000	11.23	12.27	13.95	13.50	13.73	15.39	15.85	16.82	17.07	16.31	14.43	16.76	2000	14.43	33.8%	20.7%
2001	17.42	15.88	13.46	15.14	15.84	15.15	14.21	13.61	10.77	11.43	13.90	14.12	2001	14.12	(2.2)%	19.1%
2002	14.74	13.78	15.09	15.11	16.38	14.14	12.92	12.10	11.23	11.06	11.33	10.50	2002	10.50	(25.6)%	15.7%
2003	10.18	9.52	9.69	10.62	12.17	13.04	13.98	15.38	16.67	17.88	18.16	18.07	2003	18.07	72.1%	18.4%
2004	20.00	22.41	29.98	35.46	26.68	30.80	25.37	25.20	23.67	23.34	27.56	31.48	2004	31.48	74.2%	20.9%
2005	32.19	32.57	31.88	27.79	27.36	29.05	30.38	31.49	33.39	32.24	32.95	37.18	2005	37.18	18.1%	20.8%
2006	41.01	40.97	43.69	46.45	42.39	41.58	40.60	43.32	43.55	43.70	44.58	49.38	2006	49.38	32.8%	21.3%
2007	50.95	51.18	53.59	56.09	58.16	56.37	53.90	48.65	50.96	57.03	48.21	45.75	2007	45.75	(7.3)%	19.8%
2008	38.71	39.71	38.59	40.18	39.25	35.10	34.59	33.33	26.09	18.72	14.50	15.79	2008	15.79	(65.5)%	13.3%
2009	14.62	13.24	14.96	19.63	22.82	23.73	26.14	27.05	28.41	28.53	28.69	29.83	2009	29.83	89.0%	15.8%
2010	28.50	27.58	29.90	29.58	25.53	24.72	27.82	26.74	30.36	33.68	31.85	34.52	2010	34.52	15.7%	15.8%
2011	34.91	36.17	36.51	39.63	37.86	35.31	35.83	32.76	29.28	32.04	31.23	30.59	2011	30.59	(11.4)%	14.56%
2012	32.12	34.36	35.67	35.08	31.03	32.92	32.66	34.17	36.33	37.28	38.11	40.73	2012	40.73	33.1%	15.22%
2013	43.61	42.58	44.42	49.29	50.40	47.75	50.58	49.32	52.49	55.65	55.41	58.88	2013	58.88	44.6%	16.19%
2014	55.35	58.98	61.86	59.92	59.05	59.89	57.84	58.64	55.47	54.37	55.77		2014	55.77	(5.3)%	15.40%

S.No.	Ticker	Name	Initial Amount Invested	Shares Purchased	Date of Investment	Current Index Value
1	IGM CN Equity	IGM Financial Inc	$1,000	73	31/11/1986	$3,051
2	IVZ US Equity	Invesco Plc (Previously Amvescap)	$1,357	1,153	1/31/1991	$23,402
3	SDR LN Equity	Schroders Plc	$1,208	505	3/31/1991	$21,259
4	RAT LN Equity	Rathbone Brothers Plc	$1,208	736	3/31/1991	$22,135
5	ADN LN Equity	Aberdeen Asset Mgmt Plc	$1,208	1,827	3/31/1991	$12,845
6	CIX CN Equity	CI Financial Corp.	$2,585	3,224	6/30/1994	$95,763
7	EMG LN Equity	Man Group Plc	$2,862	6,344	10/31/1994	$10,781
8	AGF/B CN Equity	AGF Management Ltd-Cl B	$3,343	1,346	1/31/1996	$11,719
9	8739 JP Equity	Sparx Group Co Ltd	$11,762	108	12/31/2001	$20,441
10	HGG LN Equity	Henderson Group Plc	$14,447	8,666	12/31/2003	$24,121
11	AZM IM Equity	Azimut Holding Spa	$21,908	4,977	7/31/2004	$114,500
12	CCAP LN Equity	Charlemagne Capital Ltd	$36,848	22,300	3/31/2006	$4,311
13	PGHN SW Equity	Partners Group-Reg	$36,848	578	3/31/2006	$166,095
14	ASHM LN Equity	Ashmore Group Plc.	$36,688	9,873	10/31/2006	$49,545

HORIZON KINETICS
© Horizon Kinetics LLC® 2014