THE FIXED INCOME CONTRARIAN COMPENDIUM

May 2015

Featured Companies

Cliffs Natural Resources Inc. 8.25% Due 3/31/2020
AK Steel Corp. 7.625% Due 10/1/2021
Pacific Drilling SA 7.25% Due 12/1/2017
SandRidge Energy Inc. 8.125% Due 10/15/2022

PCS RESEARCH SERVICES

Exclusive Marketers of
The Fixed Income Contrarian Report

PCS Research Services
14 Wall Street, 3rd Floor
New York, NY 10005
research@pcsresearchservices.com
(212) 233-0100
www.pcsresearchservices.com

HORIZON KINETICS

Research Team

Murray Stahl **Steven Bregman**

Thérèse Byars Ryan Casey James Davolos Derek Devens

Peter Doyle Rory Ewing Matthew Houk Utako Kojima

Eric Sites Salvator Tiano Fredrik Tjernstrom Steven Tuen Eric Zhou

Murray's Musings

WHAT IS A HIGH YIELD BOND INDEX?

This question seems like an easy one to answer: A high yield index is obviously an index comprised of high yield bonds. We will take the inquiry further and ask: What is a high yield bond, otherwise known as a junk bond? This is also an easy question to answer. High yield bonds are those rated BB or lower by Standard & Poor's, or B or lower by Moody's. Consequently, a high yield bond ETF like the iShares iBoxx $ High Yield Corporate Bond ETF (HYG) is comprised 45.75% of bonds rated BB by S&P and 39.95% of bonds rated B by Moody's.

Is one truly enlightened by the foregoing? What is the formal definition of a B Moody's rating? This can be found on page 8 of Moody's Rating Symbols and Definitions guide. Here's a quotation: "Obligations rated B are considered speculative and are subject to high credit risk. " High credit risk is unmistakably synonymous with default risk.

Let us reflect upon a B credit such as Hilton Worldwide Holdings. It is a profitable company that has, as of the last reckoning, $4.7 billion of shareholders' equity, $10.8 billion of recourse debt, $752 million of non-recourse debt, and $566 million of unrestricted cash. One might not think such a balance sheet deserves the "speculative" designation. The company, however, has nearly 700 separate legally constituted subdivisions. In the event of a bankruptcy, it is far from clear that Hilton bondholders would have access to the assets, equity or even the cash flow of the legally constituted subsidiaries. Perhaps more problematic, Hilton Hotels may be deemed to be an affiliate of Blackstone. It is therefore possible that, in the future, the interests of various Hilton bondholders and the interests of Blackstone may diverge.

In any case, the equity investors in Hilton are untroubled by these circumstances; the company has a stock market capitalization that exceeds $30 billion. In fact, bond investors also appear to be unconcerned. The Hilton Worldwide 5.625% bonds due October 15, 2021 have a yield to maturity of 4.55%. Certainly these investors do not fear default. Hilton clearly has access to equity market funding should it desire funding from that source. Moreover, Hilton has access to funding from the various channels operated by Blackstone. Thus, the question legitimately might be posed as to why Hilton bonds are considered high yield bonds, apart from the question of ratings. Such bonds clearly do not provide a high yield, and seemingly do not offer a high risk of default.

Similarly, Heinz is clearly a company with leverage. According to its balance sheet as of December 31, 2014, Heinz has $15.6 billion in shareholders' equity, $13.6 billion of long-term debt, about $80 million of short-term debt, and $2.3 billion of cash. Its current ratio is

a relatively healthy 1.58. The company earned $657 million after taxes in 2014. Perhaps most important, Heinz is controlled by Berkshire Hathaway and 3G. Thus, if the company were in need of capital, one might presume it would be attainable from those sources.

Similar comments could be made about other holdings in HYG, such as Softbank, Wynn Las Vegas, Dish DBS, Icahn Enterprises, and Sirius XM Satellite, among others. In fact, of HYG's top 10 holdings most are either publicly traded in the form of equity or are a subsidiary of a company that is publicly traded and has copious access to equity capital.

To illustrate, as Table 1 shows, of the top 10 holdings, only two do not have publicly traded equity. At least in the case of the eight firms with access to the equity market, there is obviously no investor concern about default, simply judging from the stock market capitalizations of the companies in question.

Table 1: Top 10 Holdings of HYG

	Market Cap
	($ in billions)
HCA Holdings	$32.8
T Mobile	26.2
Sprint	19.7
Ally Financial	10.0
Dish DBS (Dish Network)	33.2
First Data	N/A
Navient	8.5
CIT Group	8.2
Tenet Healthcare	5.0
Reynolds Group	N/A

Source: Bloomberg

This is also readily apparent from the yield to maturities of the bonds in the index. For example, the top holding in the index is the HCA Holdings 6.5% bond due February 15, 2020, which has a yield to maturity of 3.35%.

Of course, contained within the high yield index is a small component of high yield bonds with double-digit yields. Examples can be seen in Table 2.

Table 2: HYG: A High Yield Index's High Yield Bonds

	Coupon	Maturity	YTM
Scientific Games	10.00%	12/1/2022	11.18%
Linn Energy	6.25%	11/1/2019	11.57%
Laureate Education	10.00%	9/1/2019	11.55%
Avaya	10.50%	3/1/2021	14.27%
Peabody Energy	6.00%	11/15/2018	14.18%
Claires Stores	9.00%	3/15/2019	11.75%
Halcon	8.875%	5/15/2021	16.73%
APX	8.75%	12/1/2020	10.29%

Source: iShares

Some of these firms do have publicly traded equity. Their market capitalizations, however, are smaller, as Table 3 shows.

Table 3: HYG's High Yield Holdings' Publicly Traded Equity

	Market Cap
	($ in billions)
Scientific Games	$1.05
Linn Energy	3.91
Laureate Education	N/A
Avaya	N/A
Peabody Energy	1.41
Claires Stores	N/A
Halcon	0.73
APX	N/A

Source: Bloomberg

Hence, access to the equity market is certainly more limited. Of the eight firms shown in Table 3, four have no access. One that does is Halcon Resources, whose 8.876% bond due May 15, 2021 has a 16.7% yield to maturity. Yet, the company has a $729 million equity market capitalization, which in itself is extraordinary, since if the creditors price the bonds as if they do not expect to be made whole, equity investors should not expect much in the way of residual value.

Others shown in the table have equity market access, but by no means is there access upon the terms of the leading companies in the high yield index. It is this group within HYG that

is comparable to high yield, or so-called junk financing, as studied in the original high yield debt paper published by James E. Walter and Michael Milken in 1973, entitled, "Managing the Corporate Financial Structure."

Of course, the bonds that existed at that time were, to say the least, rather illiquid. Moreover, it was even difficult to obtain an accurate quote. In the contemporary era, an index is first a business before it is an investment. In order for an index to be successful, business liquidity is required. HYG has $17.5 billion of assets under management. The universe of high yield managers requires many orders of magnitude of that sum simply to manage the substantial assets under management entrusted to this group.

The problem is investment bankers cannot create and sell bonds if there is serious doubt about their creditworthiness. If there is serious doubt, very few investors will buy the bonds. If there is no serious doubt, a copious supply of bonds can be created. These, however, are not the bonds that truly fit the pattern of what was historically meant by "junk bond". Indeed, one cannot create junk bonds at will.

The category of high yield or junk bond is created by crisis. The category largely disappears with the end of the crisis. Consequently, unless there is a crisis, there is no need for a junk bond allocation, or even a junk bond or high yield bond manager. Unfortunately, neither the indexes nor the managers will leave the scene when the crisis ends. These organizations must and will be paid, and the limitless creativity devoted to the task of maintaining the asset class when, by definition, it does not really exist is simply astonishing.

Industry Thoughts

CONTINGENT HIGH YIELD

What is a high yield manager to do if there simply is no high yield available? If credit spreads genuinely were to widen, this could only be because of the perceived—real or otherwise—danger of default. In this instance, logically, the market capitalization of the listed equity must decline faster than the price of the bond in question. This is because, in most instances of truly recourse bonds, default implies essentially no value for the equity investor.

For example, HCA 6.5% bonds due February 15, 2020 have a 3.35% yield to maturity. An investment of $1 million in this bond would generate $33,500 per year of income. The HCA January 2016 25 put options trade for a mere $0.05, because no one expects a default in HCA. The stock recently traded at close to $78, and the company had a $32.8 billion market capitalization.

If the creditworthiness of this bond were questionable, the bond yield perhaps would rise to the 10% to 12% range. The bond might then trade at $80. It is difficult to believe that the company would retain a market cap of $32.8 billion. A share price of $10 would imply a $4.2 billion market cap for HCA common, which would still be a generous valuation for a company that might default. The put option would have, in this instance, $15 of intrinsic value, not counting any time value that might exist in the option.

Since January 2016 is about three-quarters of a year away as of the date of this writing (week of 4/6/15), the tactic would be to spend 75% of $33,500 of income, or $25,125, to purchase, at $0.05, 5,025 HCA put contracts, January 2016 expiration, strike price $25. If HCA declines as specified in this scenario, each contract would be worth $15. A $15 price times 5,025 contracts times 100 shares per contract equals $7,537,500, which is many orders of magnitude more than the $200,000 that would be lost if the bond went from a value of $1 million to a value of $800,000, or a price of $80.

Suppose, instead, the high yield index, HYG, were to yield 10.6% instead of the current 5.36%. This is a draconian scenario, but the index did drop from a price of approximately $102 in late 2007 to $75 in 2009. Assuming this risk is acceptable, HYG now trades at a price of roughly $91. It is arguable that the creditworthiness of the names is superior to the index as it existed in 2007.

In any case, if there were a panic comparable to that of 2007, it would surely be difficult for companies such as CIT Group and Ally Financial, members of this index, to secure funding. In fact, in 2007, these companies found it impossible to secure funding. CIT

Group has January 2016 options with a strike price of $23. The options trade for about $0.20 per contract, since it is considered more or less inconceivable that CIT could lose funding. This is probably a correct judgment. Nevertheless, if the company were to lose access to funding, the stock might trade at $2 a share.

Therefore, suppose one purchased $1 million worth of HYG at its current price of $91. The investment would produce $53,600 of income per year. This would purchase 2,680 CIT January 2016 put options, with a year's worth of income. But, as of this writing, only three-quarters of the year is left to option expiration. Using 75% of the HYG income, one could purchase about 2,000 CIT January 2016 $23 put contracts. If CIT were actually to decline to a price of $2, the intrinsic value of these options would be $21 per contract times 2,000 contracts times 100 shares per contract, for a total value of $4.2 million. In contradistinction, a purchase of $1 million of HYG at $91 that suffers a decline to $75 would be a loss of 17.6%, or $176,000.

One could attempt the same trade with Ally Financial. The shares currently trade at $20.75. The January 2016 $13 strike put options trade at $0.20. If one could imagine Ally Financial shares trading at $2, this would provide $13 of intrinsic value per contract. One could still purchase 2,000 contracts with the income from an HYG investment for three-quarters of a year. The result would be a profit of $13 per contract times 2,000 contracts times 100 shares per contract, for $2.6 million versus a roughly $176,000 loss on the HYG investment. Another way of looking at this problem is that the stock market views Ally Financial as a better credit than CIT. Ally Financial has a market capitalization of $10 billion, while CIT has a market capitalization of $8.2 billion.

In any event, the most important point is that, unlike when Michael Milken constructed his famous study of junk bonds, the risk of the high yield market is actually contained in the equity market. If an investor were concerned with the high yield market's creditworthiness, the hedge is to be constructed in the equity market. Historically, companies with high yield bonds had no access to equity market funding. That is why the corporations paid the high yields. A company with copious equity market funding need not pay high interest rates. In fact, insofar as the high yield index is concerned, most of the members do have access to equity funding. Consequently, these do not pay high interest charges. Ergo, the high yield index does not produce a high yield, and it is not at all comparable to what historically has been considered to be the high yield bond asset class.

Facts & Figures

WHERE ARE THE HIGH YIELD BONDS?

Despite what was stated about high yield bonds in the *Industry* section above, there are true high yield bonds to be found in the high yield index. Not surprisingly, these high yield credits have much less access to funding than better credits that might have B ratings. The latter simply comprise the better part of the index viewed by market capitalization.

The poor credits have equities with small market capitalizations. Consequently, any high yield index based on the market value of debt can never really be a true high yield index except in periods of crisis; companies that can access the debt markets on a large scale could never really be high yield. It is a paradox. The better credits always issue more paper than the lesser credits because they can.

Consequently, in order to find the high yield credits of today, simply turn the high yield index upside-down and commence with the smallest positions. That's how you find them. HYG has 1,034 positions. The greatest density of true high yield credit is to be found between positions 789 and 1,034.

As you can see in Table 4, the Walter Energy 8.5% due April 15, 2021 has a yield to maturity of 210.5%. Its weight in the index is 0.000003%.

Table 4: Finding the High Yield Credits in the High Yield Index

Position		Coupon	Maturity	YTM	Weight
1034	Walter Energy	8.50%	4/15/2021	210.50%	.000003%
1032	Walter Energy	9.875%	12/11/2020	185.30%	.000003%
1023	Comstock Res	7.75%	4/1/2019	35.18%	.0001%
1014	Forest Oil	7.25%	6/15/2019	63.21%	.001%
1010	CGG	7.75%	5/15/2017	10.45%	.001%
1003	Hercules Offshore	8.75%	7/15/2021	38.87%	.001%
1000	Arch Coal	7.250%	10/1/2020	33.49%	.001%
995	Alpha Nat Res	6.00%	6/1/2019	49.66%	.001%
993	Alpha Nat Res	6.25%	6/1/2021	39.15%	.001%
989	Alpha Nat Res	9.75%	4/15/2018	48.98%	.001%
987	Arch Coal	7.25%	6/15/2021	45.52%	.002%
986	Alpha Nat Res	7.50%	8/1/2020	30.66%	.002%
985	Claire's Stores	8.875%	3/15/2019	28.66%	.002%

Source: Fund reports

Ignore the few credits that have such low weights and start with those that have a weight of a tenth of a basis point, like Forest Oil. This is an oil company that might default. Its 7.25% bonds due June 15, 2019, with a weight that is a tenth of a basis point, have a yield to maturity of 63.21%.

Here is one that's less egregious: CGG, formerly Companie Generale Geophysique. This is a French company, but whose administrative offices and data center in Houston is several times the size of its offices in France. It serves the American oil companies and is treated as an American company. The CGG 7.75% due May 15, 2017—that is a short maturity—has a tenth of a basis point weight and a 10.45% yield to maturity. That is a little more reasonable.

Consider Table 5, the index positions numbered 789 through 886:

Table 5: HYG Smaller Positions

Position		Coupon	Maturity	YTM	YTM
886	Cliffs Natural Resources	5.950%	1/15/2018	20.41%	.005%
885	Pacific Drilling	7.250%	12/1/2017	11.51%	.005%
860	American Energy Permian Basin	7.375%	11/1/2021	12.43%	.005%
828	AK Steel	7.625%	5/15/2020	12.04%	.006%
811	CGG	6.500%	1/1/2021	10.74%	.006%
805	Offshore Group	7.125%	4/1/2023	17.45%	.006%
803	SandRidge Energy	8.125%	10/15/2022	16.39%	.006%
800	EXCO Resources	7.500%	9/15/2018	22.86%	.006%
789	Murray Energy	11.25%	4/15/2021	11.95%	.006%

Source: Fund reports

Cliffs Natural Resources, one of the featured companies in this report, is in position #886. This is an iron ore company, and its 5.95% bonds are due January 15, 2018. This bond is a half of one basis point weight in HYG. Its yield to maturity is 20.41%.

Another interesting bond is the AK Steel 7.625% due May 15, 2020, with a yield to maturity of 12.04%, which occupies a six-tenths of a basis point position in HYG. (AK Steel is also a featured company in this report.)

You see the problem: These are companies that, at the moment, are suffering various degrees of financial stress. They either have no access to the capital markets or, if they do, from their point of view, they have it on very bad terms. One of the problems with bad terms is that the access you do have is limited at best.

The whole idea of making a liquid index of high yield bonds is an oxymoron. It can never really happen. You could have a financial crisis in which companies that previously issued copious amounts of bonds, and which bonds were therefore highly liquid, now fall into distress and don't trade. The companies that are in distress, however, basically have no access to the market. How can you have an index of distressed securities that is also liquid? You can have an index of distressed securities that are illiquid; illiquidity of these securities is a symptom of their financial distress. If they have liquid access to the capital markets, that indicates absence of distress. It is preposterous to call this index a high yield index.

Positions numbered 789 to 886 much more closely resemble what were traditionally considered junk bonds. A junk bond is not simply a credit with a Moody's rating of B or lower. It is a bond with real existential risk. If the bond doesn't have existential risk, it is not really a junk or high yield bond.

Table 6 provides the market capitalizations of some these companies.

Table 6: Positions with Publicly Traded Equity

	Stock Market Capitalization
	($ in millions)
Cliffs Natural Resources	$ 746
Pacific Drilling	932
AK Steel	817
CGG	1,100
SandRidge Energy	929
EXCO Resources	548

Source: Fund reports

One is Cliffs Natural Resources with an equity market capitalization of $746 million, which in itself is worthy of comment, more of which later. Just think about it, though: Cliffs Natural Resources has bonds that yield 20.41% with a January 15, 2018 maturity. It is less than three-year paper that yields over 20% to maturity.

Why would a company like this have an equity market capitalization of $746 million, which is a lot of money? If $746 million is even approximately a fair value, or even if $546 million were approximately a fair value, it would be ridiculous for the bonds to yield over 20%, which yield-to-maturity is a function of their being priced at about 70% of face value. Equity investors should have nothing if the bonds default. The fact that it yields 20.4% means it is in serious risk of default, which it is. Yet, the equity has this market capitalization, which it should not have. So, you see the inconsistency.

Featured Companies

CLIFFS NATURAL RESOURCES INC. 8.25% DUE 3/31/2020

This Cliffs Natural Resources bond is different from the one cited in the *Facts &* Figures section. This is an 8.25% bond due March 31, 2020 and currently yielding 10.28% to maturity. I chose this bond instead of the others, because it was recently issued and is much more liquid. It was issued in March 2015 and is senior to existing debt. This is a Rule 144A issue. There are $540 million outstanding and they senior to, for example, the 4.875% senior notes due 2021, a $700 million issue, currently trading at roughly 60; or the 4.8% senior notes due 2020, a $500 million issue that is currently trading at 60; or the 5.9% senior notes due 2020, a $400 million issue, recently trading at 62.

The newly issued liquid bond is the bond of choice for the index for obvious reasons. The older debt in these types of circumstances is being gradually accumulated by bankruptcy workout specialists, and is difficult to purchase in size for an index. This is one of the many reasons that modern float-weighted bond index systems in high yield may not reflect the actual characteristics of the asset class as it has existed historically.

As mentioned earlier, Cliffs Natural Resources is an iron ore mining company. Its difficulties are related to the current low price of iron ore and its leveraged balance sheet. It will be difficult, albeit not impossible, for this company to avoid bankruptcy. Historically, the company had iron ore mines in the U.S., Canada, Western Australia, and even Brazil. The Brazil property was sold to Anglo American in 2013 for virtually nothing. In late 2014, it was decided to close operations in Bloom Lake, Canada, as these were not viable at current iron ore prices. There still remains the Australian complex, and there still remains a North American thermal coal operation.

The company now plans to concentrate its iron ore production in its U.S. mines. This is logical for a number of reasons. One, its U.S. facilities represent 58.4 million annual tons of capacity, which is an important factor in U.S. capacity. More important, these mines are located close to the Great Lakes, so that transport of iron ore to customers is relatively cheap and easy.

Nevertheless, the balance sheet is very problematic. It has $290 million of cash, $2.96 billion—nearly $3 billion—of debt, another $256 million of mine closure obligations. Those are real obligations coming due now because, for environmental reasons, the mines have to be closed in accordance with the existing laws. There is also shareholders' equity of negative $1.7 billion. The company still has a profitable gross margin but with the administrative expenses as well as interest expense, break-even is a possibility only if iron ore prices do not fall further.

The Cliffs Natural Resources bonds, priced at $0.60 on the dollar, clearly discount a bankruptcy, yet the company has a stock market value of $746 million. The January 2016 $3 put options trade at $0.40. So, let us say one bought one of the less liquid bonds, $1 million face of one of the bond issues that trades at $0.60 on the dollar. Using the 4.80% issue, it would generate $48,000 of annual interest income, and three-quarters of that amount, which is timed to the expiration of the options, is about $36,000, enough to buy 900 January 2016 $3 put option contracts.

If the company goes bankrupt, the options are worth the following: 900 contracts times $3 times 100 shares per contract is $270,000. That protects you down to $0.33 on the dollar for the bonds. You should not be able to get protection like that, but you can. Alternatively, if the company does not go bankrupt, the options are clearly worthless, but the bonds should trade up at least to 80, a 33% profit. Such a trade has asymmetrical risk/reward possibilities.

Why does such a company have a $746 million market capitalization? It is because indexes and exchange-traded funds that buy the shares are completely indifferent to the current situation. Cliffs Natural Resources is simply a raw material that needs to be included in an index.

For example, the iShares North American Natural Resources ETF (IGE) owns Cliffs Natural Resources equity shares. It has $2.25 billion assets under management. I counted at least 42 ETFs that own Cliffs Natural Resources, and who knows how many other indexes, algorithmic traders, or other managers might own it? They are completely indifferent to the fundamentals.

AK STEEL HOLDING CORP. 7.625% DUE 10/1/2021

The AK Steel Holding Corp. 7.625% due October 1, 2021 trades around 80 and has a 12.11% yield to maturity.

AK Steel is a loss-making steel manufacturer. It has not turned a profit in the last five years. Steel prices between $1,000 and $1,100 a ton are simply too low for this company to make money. In September 2014, AK Steel acquired Dearborn Steel in a transaction worth $690 million. Dearborn has a very modern facility. According to the company, the purchase not only increases capacity but also should create synergies of about $100 million.

On an operating basis, which means prior to interest expense, AK Steel was actually profitable. Inclusive of interest expense, it was roughly break-even in 2014. The balance

sheet is problematic, however. Should the anticipated synergies not materialize or should steel prices decline further, there is absolutely no room for error. The company has $2.4 billion of debt, $1.2 billion of pension liability, negative $77 million of equity, and $70 million of cash. The pension fund is underfunded by $681 million.

Nevertheless, with a stock market capitalization over $800 million, AK Steel has put options. These are the January 2016 $0.50 options that trade for $0.03. Assume that you bought $1 million face of AK Steel 7.625% due October 1, 2021which, in this case is really $800,000 of market value. It produces $76,250 of interest income per annum. Taking 75% of that sum—which is $57,187—you could buy 19,062 contracts. If AK Steel goes bankrupt, which it well might, the intrinsic value of the option is $0.50 a contract. In that circumstance, the value would be $0.50 a contract times 19,062 contracts times 100 shares per contract, or $953,000. So that is protection beyond the current total value of the bond. Even if the bond were worthless, you would make money, and the bond surely would not be worthless.

It turns out there are 29 ETFs that hold AK Steel, including the iShares Core S&P Small-Cap ETF (IJR), with $16.4 billion AUM.

PACIFIC DRILLING SA 7.25% DUE 12/1/2017

This Pacific Drilling bond trades at an 11.51% yield to maturity of not many more than 2 ½ years. This company is relatively new, formed in 2011 as a Luxembourg entity. It has a relatively leveraged balance sheet, although there are drillers with more leverage.

A number of Pacific's drill ships are on contract for a number of years to big companies. For example, its drill ship Pacific Bora is on contract to Chevron until August 2016. Its Pacific Scirocco is on contract to Total until January 2017. The Pacific Santa Anna is on contract to Chevron until 2017. The Pacific Sharav, on contract to Chevron until August 2019, is also in good shape.

There are more operational issues, however. The Pacific Khamsin, on contract to Chevron until December 2015, is problematic because there is a good probability the contract will not be renewed unless oil prices rise a lot. Another problem is the Pacific Mistral, which just went off contract. The Pacific Melten, delivered November 2014—which means this is a new drill ship—has no contract, which is problematic. The Pacific Zonda, to be delivered in the third quarter of 2015, will cost the company money but it has no contract.

Although Pacific Drilling was profitable in 2014, the day rate is falling at the current oil prices. The company is going to lose revenue from the Pacific Khamsin, which is about one-sixth of its revenue, and it has already lost revenue from the Pacific Mistral, which

accounts for another one-sixth of the revenue. There will also be the expenses from newly delivered rigs and drill ships.

The balance sheet is not all that bad, but write-offs could be required. There is $167 million of cash, $369 million of short-term debt, $2.78 billion of long-term debt, and $2.578 billion in equity. Unless oil prices rise significantly, it is likely that the financial position will deteriorate further, hence the yield on the bonds.

Pacific Drilling has a market capitalization of $932 million, which is not illogical given equity of over $2.5 billion—but it is illogical in relation to the bond yield. There are October 2015 $2.50 put options that sell for $0.10 a contract. Therefore, purchase $1 million of face amount of Pacific Drilling 7.25% due December 1, 2017. It costs a lot less than $1 million. It produces annual income of $72,500. It is about a half a year until October 2015. Half of that sum is about $36,125. At $0.10 a contract, this will purchase 3,612 contracts.

Just keep repeating the process when the options expire, because eventually if oil prices don't improve, the bonds will become distressed to the point of insolvency, and if that were to happen, the stock would have zero equity value. For example, the $2.50 options would have $2.50 intrinsic value per contract times 3,612 contracts times 100 shares per contract, or $903,000, more than the current market value of the bond. That strategy is actually providing insurance to insolvency. If the company stays profitable, the price of the bonds will probably trade up for a 6%+ yield to maturity and provide about a 40% profit.

Only two ETFs hold Pacific Drilling. One of them, however, is PowerShares FTSE RAFI U.S. 1500 Small-Mid Portfolio (PRFZ). It only has $1.2 billion of assets under management but a lot of managers who are interested in indexes and modern portfolio theory use the RAFI system. This figure represents only ETFs, and does not count all the indexes and algorithmic traders.

SANDRIDGE ENERGY INC. 8.125% DUE 10/15/2022

The SandRidge Energy 8.125% due October 15, 2022, is priced to yield 16.39% to maturity. SandRidge is an oil exploration company that has suffered from the decline in oil prices. It has been forced to reduce its rig count by 80%. It has been compelled to cut capital expenditures by 56%. It has no bond maturities until 2020, which is when the $445 million 8.75% Senior Notes come due. Given the cost cuts, the company should be EBITDA profitable in 2015. It can also produce hydrocarbons at a cost of about $19 per barrel of oil equivalent, so it has some staying power. SandRidge repurchased stock in 2014. It also has some potential problems with alleged antitrust violations regarding land purchases, the result of which is imponderable. Its balance sheet is not terrible: $181

million of cash, $3.2 billion of debt, $3.2 billion of equity. Of the $3.2 billion of equity, $1.2 billion is non-controlling interest.

The reason SandRidge is currently profitable is that the company hedged much of 2014 production at $92 a barrel, and it also hedged about half of 2015 production. In 2016, however, the hedged production falls off, and it is enormously expensive to hedge now, plus that would lock in low oil prices. Furthermore, in the region in which SandRidge operates, which is known as the Mississippi Lime Region, deposits require serious capital expenditures to maintain production over the long run, and the company does not have the resources for this. So, SandRidge really needs higher oil prices in 2016. At the moment, however, the company does have a $929 million market cap.

The January 2016 $0.50 put options—that is the strike price—cost $0.10. The strategy is to purchase $1 million face amount of SandRidge to produce $60,937 of interest for three-quarters of a year. With that you can buy 6,093 January 2016 $0.50 put options. If SandRidge stock becomes valueless and insolvent, the value of the option is $0.50 times 6,093 contracts times 100 shares per contract, or $304,650—basically enough to hedge a decline from the current 70 level of the bonds because the bonds will clearly be worth something. If that doesn't happen, the bonds will probably trade to par.

It turns out there are 30 ETFs that own SandRidge Energy, including the SPDR S&P Oil and Gas Exploration & Production ETF (XOP), with $1.9 billion of assets under management.

Post-Musings

INDEX COMPARTMENTALIZATION

In cases where high yield debt is generally distressed, yet the companies trade with access to the equity market, the high yield debt might become heavily discounted and then gradually pushed out of the high yield index because it becomes illiquid. In contrast, the common stock of those companies becomes very liquid. It has a certain optionality and, because it is very liquid and the equity index is based on float, if the insiders might have sold some stock, which increases the float, that actually gives it a reasonable weight given its market capitalization. The optionality is due to the possibility of a rebound from the danger of insolvency. The equity is present in the small-cap indexes. It is present in the smart beta indexes. It is present in the sectoral indexes. But its debt gets pushed out of the high yield bond indices.

An example might be AK Steel, which has an almost de minimis weight in the high yield bond indexes, but it issued stock to fund an acquisition. Its equity float actually increased, and it is accorded more weight in the small-cap stock index.

It is not that the small-capitalization oil companies like SandRidge are improperly valued. It is just that the value, such as it is, hinges upon future oil prices, and those are really unknowable—an imponderable. Because that is unknowable, however, there is simply no mechanism to equilibrate the comparative valuations of small-cap companies and the associated bonds when the former are absorbed by all sorts of indexes because of their liquidity, and the latter—which are the high yield bonds— are gradually forced out of the indexes due to their relative lack of liquidity. The valuation difference between the two simply represents the price of liquidity and not a fundamental judgment.

Q: *So you're applying all of the coupon income on the debt to the purchase of the put options?*

A: I'm taking the entire yield, not the coupon but the yield on the debt, and buying as many options as I can. I do not have to buy that many options. It is not equivalent. I am buying as many put options as I possibly can.

Q: *So you're not hoping to make any interest income?*

A: The way I look at it is that there is no point in changing the weightings to get yourself a percent of two. You can, of course, do that. You can get a few percent of interest income, but to what end? There is basically a binary outcome. The bond will either be creditworthy, in which case it is going to par (that is your return in the good case) or it is not

creditworthy, in which case the equity is worthless and the option pays off. In other words, you might as well invest everything in those two scenarios because what is the utility of getting a few percent of interest income when the cost of that is that you're going to make less money in the negative scenario.

Historically, you could never do this. Years ago, we put out a research publication called The Capital Structure Arbitrage Report. We would struggle to find one trade a month. We'd sit there for days looking for one, and once in a while we found one, and if you could just buy the option at the right price, and buy the bond at exactly the right price, we had a trade that could work.

We stopped writing it because, eventually, it was almost impossible to find anything. The world has changed, so that now it is all like I've just described. All you have to do is take the high yield index, turn it upside-down, and there are literally hundreds of securities mispriced for the same reason.

WEALTH INDEX (Ticker: RCH Index)

As of March 31, 2015

Annualized Total Return	**1 Year**	**3 Years**	**5 Years**	**7 Years**	**10 Years**	**15 Years**	**20 Years**	**Since Incep. 1991 - Mar '15**
Wealth Index	8.68%	16.17%	17.08%	14.84%	12.47%	7.69%	12.79%	13.47%
S&P 500	12.73%	16.11%	14.47%	8.95%	8.01%	4.15%	9.39%	10.12%
S&P 500 Eq. Wgt.	13.22%	18.36%	16.04%	11.88%	10.05%	9.25%	11.44%	12.51%
Russell 3000	12.37%	16.43%	14.71%	9.37%	8.38%	4.63%	9.58%	10.42%
Russell 2000	8.21%	16.27%	14.57%	10.47%	8.82%	7.19%	9.62%	11.24%
Excess Return vs. S&P 500	-4.05%	0.06%	2.61%	5.89%	4.46%	3.54%	3.40%	3.35%
Excess Return vs. S&P 500 Eq. Wgt.	-4.54%	-2.19%	1.04%	2.95%	2.42%	-1.57%	1.35%	0.96%
Excess Return vs. Russell 3000	-3.69%	-0.26%	2.37%	5.47%	4.09%	3.06%	3.21%	3.05%
Excess Return vs. Russell 2000	0.47%	-0.10%	2.51%	4.37%	3.65%	0.50%	3.17%	2.23%

**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 - Mar '15**
Wealth Index	0.72	1.32	1.09	0.65	0.62	0.34	0.59	0.65
S&P 500	1.41	1.68	1.12	0.53	0.54	0.28	0.62	0.70
S&P 500 Eq. Wgt.	1.35	1.78	1.11	0.59	0.57	0.53	0.68	0.78
Russell 3000	1.32	1.68	1.09	0.54	0.55	0.30	0.62	0.71
Russell 2000	0.51	1.21	0.82	0.48	0.45	0.36	0.48	0.59

**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 - Mar '15**
Wealth Index vs. S&P 500	(0.84)	0.01	0.48	0.62	0.51	0.32	0.32	0.33
Wealth Index vs. S&P 500 Eq. Wgt.	(1.41)	(0.60)	0.25	0.52	0.44	(0.16)	0.14	0.10
Wealth Index vs. Russell 3000	(1.03)	(0.06)	0.51	0.64	0.52	0.30	0.33	0.33
Wealth Index vs. Russell 2000	0.06	(0.02)	0.39	0.53	0.49	0.05	0.29	0.21

**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	60.00%	67.58%	71.98%
vs. S&P 500 Eq. Wgt.	57.14%	61.72%	61.21%
vs. Russell 3000	62.50%	67.58%	77.59%
vs. Russell 2000	62.14%	67.58%	75.00%

**Note: Calculated Using Total Returns*

Annualized Volatility	**1 Year**	**3 Years**	**5 Years**	**7 Years**	**10 Years**	**15 Years**	**20 Years**	**Since Incep. 1991 - Mar '15**
Wealth Index	12.02%	12.27%	15.73%	22.68%	20.21%	22.74%	21.86%	20.67%
S&P 500	9.05%	9.59%	12.97%	16.74%	14.76%	15.09%	15.19%	14.47%
S&P 500 Eq. Wgt.	9.76%	10.32%	14.43%	20.08%	17.59%	17.47%	16.92%	16.10%
Russell 3000	9.37%	9.77%	13.46%	17.36%	15.32%	15.59%	15.49%	14.73%
Russell 2000	16.02%	13.41%	17.76%	21.87%	19.76%	19.99%	19.84%	18.90%

**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 - Mar '15**
vs. S&P 500	4.85%	5.10%	5.39%	9.43%	8.73%	11.07%	10.52%	10.13%
vs. S&P 500 Eq. Wgt.	3.22%	3.67%	4.15%	5.66%	5.56%	10.10%	9.76%	9.26%
vs. Russell 3000	3.57%	4.25%	4.66%	8.52%	7.87%	10.30%	9.66%	9.32%
vs. Russell 2000	7.97%	5.66%	6.44%	8.18%	7.43%	10.32%	11.08%	10.50%

**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 - Mar '15**
vs. S&P 500	1.24	1.18	1.15	1.26	1.26	1.37	1.30	1.27
vs. S&P 500 Eq. Wgt.	1.20	1.14	1.05	1.10	1.11	1.18	1.17	1.16
vs. Russell 3000	1.25	1.19	1.12	1.23	1.24	1.34	1.30	1.28
vs. Russell 2000	0.66	0.83	0.83	0.97	0.95	1.01	0.95	0.94

**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	7.06%	13.69%	14.49%	12.56%	4.89%	-6.63%	-7.43%	-5.50%	2.17%
2015 YTD	3.12%	0.95%	1.81%	1.80%	4.32%	2.17%	1.31%	1.32%	-1.19%

**Note: Calculated Using Total Returns*

Source: Horizon Kinetics LLC, International Securities Exchange, Bloomberg

See important disclosures for additional information.

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 Mar 2015

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	215.25	2014	215.25	3.3%	18.6%
2015	203.96	217.70	215.97										2015	215.97	0.3%	18.5%

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	$295,711
2	BLK US Equity	BlackRock	$23,205	1,658	9/30/1999	$609,998
3	WDR US Equity	Waddell & Reed	$27,513	1,587	3/31/1998	$78,634
4	EV US Equity	Eaton Vance	$2,641	3,998	1/31/1986	$166,493
5	TROW US Equity	T. Rowe Price	$2,423	2,014	4/30/1986	$164,129
6	BEN US Equity	Franklin resources	$908	1,263	4/30/1985	$195,040
7	LM US Equity	Legg Mason	$1,000	462	8/31/1983	$25,587
8	FII US Equity	Federated Inv	$26,381	2,206	5/31/1998	$74,764
9	FIG US Equity	Fortress Investment Group	$102,249	3,389	2/28/2007	$27,621
10	PZN US Equity	Pzena Investment Management	$122,426	6,317	10/31/2007	$57,928

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 March 2015

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	54.31	2014	54.31	(7.8)%	15.24%
2015	52.77	58.87	58.99										2015	58.99	8.6%	15.43%

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	$2,640
2	IVZ US Equity	Invesco Plc (Previously Amvescap)	$1,357	1,153	1/31/1991	$22,872
3	SDR LN Equity	Schroders Plc	$1,208	505	3/31/1991	$24,431
4	RAT LN Equity	Rathbone Brothers Plc	$1,208	736	3/31/1991	$22,646
5	ADN LN Equity	Aberdeen Asset Mgmt Plc	$1,208	1,827	3/31/1991	$12,466
6	CIX CN Equity	CI Financial Corp.	$2,585	3,224	6/30/1994	$90,310
7	EMG LN Equity	Man Group Plc	$2,862	6,344	10/31/1994	$14,588
8	AGF/B CN Equity	AGF Management Ltd-Cl B	$3,343	1,346	1/31/1996	$8,853
9	8739 JP Equity	Sparx Group Co Ltd	$11,762	108	12/31/2001	$19,915
10	HGG LN Equity	Henderson Group Plc	$14,447	8,666	12/31/2003	$28,937
11	AZM IM Equity	Azimut Holding Spa	$21,908	4,977	7/31/2004	$141,872
12	CCAP LN Equity	Charlemagne Capital Ltd	$36,848	22,300	3/31/2006	$4,208
13	PGHN SW Equity	Partners Group-Reg	$36,848	578	3/31/2006	$172,697
14	ASHM LN Equity	Ashmore Group Plc.	$36,688	9,873	10/31/2006	$42,451