
THE FIXED INCOME CONTRARIAN COMPENDIUM

December 2015

Featured Companies

T-Mobile USA 6.375% Due 5/1/2025
Activision Blizzard 5.625% Due 9/15/2021
Nuveen High Income 2020 Target Term Fund (JHY)
PIMCO Strategic Income Fund (RCS)



*Exclusive Marketers of
The Fixed Income Contrarian Report*

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Murray's Musings

THE UNINTENDED CONSEQUENCES OF BOND INDICES

Imagine a situation in which a nation has several central banks and each bank determines the appropriate interest rate in a given segment of the economy. One such segment might be noninvestment-grade borrowers. Let us assume that, as the economy weakens, that segment's bank elects to raise interest rates by several hundred basis points. Certainly most observers would agree that the interest rate increase would exacerbate an already precarious situation. Of course, no country would establish such a central bank. This scenario, however, is about to play out.

The two largest high yield bond ETFs in the U.S. are the iShares iBoxx High Yield Corporate Bond ETF (HYG) and the SPDR Barclays High Yield Bond ETF (JNK). HYG has about \$14.4 billion in AUM; JNK has \$9.7 billion. Year to date to December 11, 2015, HYG attracted \$1.5 billion in new AUM; JNK has attracted roughly \$1.1 billion in new AUM.

It might astonish some readers to learn that the 2015 year-to-date flows have occurred mainly in the fourth quarter. For the period September 30, 2015, to December 18, 2015, JNK attracted \$1.26 billion and HYG attracted \$2.2 billion, according to ETF.com.

Although high yield bonds as an asset class have been under pressure since the end of April 2015, the bond indices have been substantial net buyers of bonds. There has been no high yield bond index-related liquidity crisis because the indices have been buyers, as opposed to sellers, of bonds.

The outflow from high yield bond ETFs is a very recent phenomenon. In November 2015, JNK had \$1 billion in redemptions while HYG still had a positive inflow of \$172 million. In December 2015 (through December 18), however, JNK had outflow of \$588 million and HYG had an outflow of \$418 million. This is about \$1 billion in 14 business days, or \$71.4 million per business day. JNK owns 791 issues and HYG owns 1,015 issues, and there is obviously much overlap between them. Even if only 700 issues needed to be sold between these two funds on a daily basis, however, this comes to about \$100,000 per day per issue. That is not a very large sum of money, and it is well to remember that the indices generally hold the most liquid bonds.

In theory, the bond market surely could accommodate \$100,000 per day per issue. Unfortunately, these measures, as accurate as these unquestionably are, do not fully measure outflow. Consider that on December 11, 2015, 54,233,298 HYG shares traded. With a closing price for that day of \$79.52, this amounted to \$4.3 billion. JNK traded 34,999,231 shares on December 11, 2015. Using the closing price for that day of \$33.69, this came to

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almost \$1.2 billion of share trading volume. Although the ETFs trade as stocks, the potential buyers nevertheless are being asked to absorb \$5.5 billion of high yield debt in a single day.

The system can function in this manner as long as the redemption requests are not actual outflow from the funds and are merely sales of the ETF. Therefore, it could be argued that, even in the event of illiquidity in the high yield bond market, there should be liquidity in the ETF market for high yield bonds in the form of ETF shares. The prices may be disappointing from the perspective of the seller but there would be liquidity.

Nevertheless, there would not necessarily be liquidity if the index composition is forced to alter by virtue of the rules of its own charter. For instance, it is certainly possible for a given bond to decline sufficiently in price so that its market value renders it too small for inclusion in a bond index. At that point, it might not be possible to sell the bond at a price that reflects genuine market value, since an index fund cannot scale out of a position. If the bond in question is no longer eligible for index inclusion, it must be sold at that point in time when exclusion has been determined. This would be known to the entire bond market trading community, and bond traders would be in a position to exert extraordinary market power.

Another exclusionary circumstance would be declaration of bankruptcy. High yield bond indices are not designed to hold securities in default. It might be a very good investment idea that the index holds bonds in default; however, defaulted bonds are not really part of the high yield asset class. In any case, defaulted bonds pay no interest, and a high yield fund is sold as an income-generating instrumentality. The only buyers of defaulted bonds are bankruptcy workout specialists. The bankruptcies not infrequently take years. The workout funds would be in an excellent trading position vis-à-vis the index, which would be a forced seller at a given point in time.

Consider, for example, the specific rules of the iBoxx U.S. Dollar High Yield Index as delineated in the Markit iBoxx U.S. Dollar Liquid High Yield Index Guide, a working paper of April 2012 (www.markit.com). According to these underlying fund rules, only fixed-rate bonds whose cash flow can be determined in advance are eligible for the index. Obviously, this specifically excludes bonds in default.

Issues rated D by Fitch, S&P, or Moody's are specifically subject to index exclusion on the next index rebalancing date, according to Section 2.2, page 6, of those rules. All bond market participants would know this rule. Interestingly, an investment-grade bond that has been downgraded to junk status cannot enter the index for three months (Section 2.2.1). What happens when these bonds are excluded from the investment-grade indices but not yet included in the high yield indices?

According to Section 2.4.1 of the same working paper, the outstanding face amount of a bond must be greater or equal to \$400 million to be eligible for index inclusion. Thus, if a

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company had sufficient cash flow to repurchase meaningful amounts of debt at a big discount to par value during a financial crisis, this bond would be excluded from the index. The resultant forced selling might easily help the issuer in building equity value on the balance sheet. However, the holder of the index would, by definition, not be able to participate in the likely appreciation of the debt of that issue. This security would be excluded.

According to Appendix 4, Page 10, of the working paper, an issuer must have at least \$1 billion outstanding face amount of bonds to be eligible for inclusion. This requirement refers to all publicly traded debt of this issuer. Thus, in the next crisis, as some issuers improve the balance sheet by selling assets or new shares, and repay debt, these companies' bonds might be excluded from the index as of the next rebalancing date subsequent to the action. Yet, issuers with increasing debt or deteriorating balance sheets would remain in the index until the default event.

If the high yield bond ETFs experience illiquidity events, one realistic scenario is not that the illiquidity is caused by the herd-like mentality of investors desirous of redemptions, although this certainly can happen; rather, one can readily envision that the rules of the index will require the sale of bonds on very short notice over a very brief period of time to a very limited community of potential buyers. This is not a recipe for success of the index during *in extremis* circumstances. Indeed, the rules of the index may very well create these *in extremis* circumstances.

Industry Thoughts

OIL ROYALTY TRUSTS

Oil royalty trusts are yield alternatives. BP Prudhoe Bay Oil Royalty Trust (BPT), for example, is entitled to a 16.4246% working interest in the first 90,000 barrels a day produced in the BP Prudhoe Bay field on the north slope of Alaska.

Company documents state that production will cease in 2028, although new technologies might well extend production. We should further assume that production will decline over this time period, although new production techniques can extend this as well.

The trust is currently priced to repay principal, plus perhaps a 4% to 5% rate of return on the capital sum invested if oil prices remain at current levels. It has a \$489 million market capitalization and, as a royalty trust, is excluded from all the indices. Its most recent quarterly distribution was \$1.4724 per share, but that almost certainly will decline.

This trust amounts to a free call option on oil prices. If oil prices go up, the dividend will be worth more, and the security will be worth more. Oil is now \$34 a barrel.

The following is an example of a trust I would not necessarily recommend for purchase, but describe it to show the risks of these assets. Chesapeake Granite Wash Trust (CHKR) owns royalty interests in the Colony Granite Wash area of Washita County in the Anadarko Basin of western Oklahoma. Half the royalty interest reverts to Chesapeake Energy on June 30, 2031, and the other half will be sold on behalf of the royalty trust holders. Chesapeake has the right of first refusal.

Theoretically, this royalty trust, judging by its most recent third-quarter dividend, is yielding 40%. The dividend, however, certainly will be decreased. This investment carries a certain amount of principal risk in that it has a definite sell date for its assets. That might not correspond to a date of high oil prices.

The following example shows what happens when things go awry in royalty trusts. Dominion Resources Black Warrior Trust (DOM), with no dividend, and a \$3 million market capitalization, will not receive payment from Walter Energy since the latter is in bankruptcy. As a consequence, the trust will be liquidated, and its market capitalization of \$3 million is not far removed from what shareholders are likely to get.

Another interesting trust, because it is a perpetual trust, is Pacific Coast Royalty Trust (ROYT). At the moment, it is more or less break-even in cash flow. The dividends, such as they are, will need to be drastically decreased, and maybe even eliminated. It, however, does

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have reserves that are economic at higher energy prices, although the market is very unimpressed with that. That might be a possibility, but it might not yield anything for a long period of time, although at the moment its yield is 5.16%. The trust has a \$53.2 million market capitalization, and trades at one-quarter of book value.

The Permian Basin Royalty Trust, with a \$238 million market capitalization, is unique because it has no end date and it is responsible for its own capital expenditures. At the moment, it yields 7.3%. There might be considerable value at higher oil prices. The yield might be a bit deceptive, because the dividend might be reduced from the current already reduced level.

The Sabine Royalty Trust has a \$396 million market capitalization and 215,000 net acres in Florida, Mississippi, New Mexico, Texas, and Oklahoma. It is very interesting because it is a perpetual trust, with no fixed end date, and some of its properties are undeveloped. In principle, the undeveloped acreage could be developed and produce oil, in which case there would be a higher dividend. At the moment, this instrumentality yields 11.92% but it is likely the dividend will decline. In any case, there are no natural buyers for these units.

San Juan Royalty Trust (SJT), with a \$190 million market capitalization and a yield of 7.46%, consists of 96% natural gas.

Table 1 shows other oil royalty trusts.

Table 1: Other Oil Royalty Trusts

		<u>Market Cap</u>	<u>Yield</u>
		<i>(\$ in millions)</i>	
CRT	Cross Timbers Royalty Trust	\$77.6	10.75%
ECT	ECA Marcellus Trust	26.8	18.82%
NDRO	Enduro Royalty Trust	77.2	14.97%
HGT	Hugoton Royalty Trust	67.2	5.09%
MARPS	Marine Petroleum Trust	8.2	6.47%
MTR	Mesa Royalty Trust	14.1	10.34%
MVO	MV Oil Trust	59.2	16.28%
SJT	San Juan Basin Royalty Trust	203.0	7.46%
SDT	SandRidge Mississippian I	66.7	51.18%
PER	SandRidge Permian Trust	134.4	39.06%
VOC	VOC Energy Trust	44.9	15.15%
WHZ	Whiting USA II	13.1	5.63%

Source: Bloomberg

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The market capitalizations of the oil royalty trusts have fallen so low that the industry essentially has lost all coverage and sponsorship. No distinction is being made between trusts with liquidating dates that are dispensing assets at very low oil prices and those that are perpetual, like the Permian Basin Trust or the Sabine Royalty Trust. No distinction is made between an operator with long-term staying power, like BP, and lesser-quality operators with stressed balance sheets. In any event, some of them are interesting, and essentially are yield vehicles that include an option on oil for free.

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Facts & Figures

CRYPTOCURRENCIES: AN EMERGING ASSET CLASS

There are at least 600 cryptocurrencies in existence today, the biggest being Bitcoin, followed by Ripple and Litecoin.

One would think that the cryptocurrency with the best technology would be dominant but that is not the case. The competition between cryptocurrencies has perhaps surprisingly little, if anything, to do with technology. The whole idea of a cryptocurrency is that all the source code is open. Everyone can see everything. So, if a given currency were introduced with an intriguing feature, bigger cryptocurrencies whose users value that feature could incorporate it into their preferred cryptocurrency. Better technology does not change the balance.

At the moment, the aggregate market capitalization of the 20 leading cryptocurrencies that I was able to count is roughly \$7.4 billion. As Table 2 shows, Bitcoin has \$6.8 billion in market cap. The next leading currency, Ripple, has a market cap of \$210 million.

Table 2: Market Capitalizations of Leading Cryptocurrencies

Bitcoin	\$6,821,087,036
Ripple	210,427,648
Litecoin	159,919,640
Ethereum	69,319,607
Dash	15,529,603
Dogecoin	14,799,916
Peercoin	10,015,263
BitShares	9,151,969
Stellar	8,778,061
MaidSafe Coin	6,520,511
Namecoin	6,233,958
Nxt	6,197,772
Bytecoin	5,625,369
NuShares	5,073,980
Monero	5,041,813
GridCoin	3,379,506
Factom	2,630,911
Rubycoin	2,554,005
Clams	2,525,980
EmerCoin	2,402,984

Source: <http://coinmarketcap.com/>

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One common theme in cryptocurrencies is that, in theory, there is no inflation, at least in the sense that the currency can't be debased by inflating the supply of it, as is the habit of central banks. In practice, with fractional banking, there might be a small amount but, because there is a fixed amount of each cryptocurrency, its issuance cannot increase above a certain level.

The existence of more than 600 cryptocurrencies reflects a great demand among many people to strip central banks of the power to create currency and control its value. It was never really possible to do so before: The central bank of a given nation had to have control of its money supply, and there was no alternative except for gold, and that had its own problems. Currencies were fixed in terms of their value in gold. Not cryptocurrencies. The supply of gold can increase or decrease but supplies of cryptocurrencies are fixed.

It will be very interesting to see how this concept develops. Within the next couple of years, cryptocurrency will probably become a legitimate asset class for investment, unless it fails in some way. With a market capitalization of roughly \$7 billion, cryptocurrency is not yet big enough to function as an asset class investable by institutions. Importantly, though, it is not correlated to anything and, in a year or two, it might be a viable asset class. It will be very hard to stop this movement, and it will not be easy for governments to suppress it.

Bitcoin is the largest cryptocurrency. There are 14.9 million Bitcoins outstanding and there can only be 21 million by 2140. At the current rate, 3,600 are created each day, with this creation rate to be cut in half by July 2016 and then cut in half again every four years after that. The reason Bitcoin is successful is that its distribution allows for it to be used as a store of value. It was designed to appreciate in value and to become harder to produce. Therefore, its intrinsic value is supposed to rise. One Bitcoin now is worth roughly \$430.

It is worth noting that there is no Bitcoin company. There is merely a protocol that is agreed upon by all who use Bitcoin. There is a not-for-profit Bitcoin foundation. One might compare it to Wikipedia: It is people getting together and using technology for a common good.

With Bitcoin's protocol, the so-called "miners," people who create the currency, get to vote on the rules. They call a rule change a "fork," and there's a hard fork and a soft fork. A hard fork means that, if you make a change and other miners do not accept it, they will not be able to participate in Bitcoin. They would not be able to validate the transactions on the general ledger. In a soft fork, which only requires 50% approval, it is possible for some people to not accept that change and the system can still function. Those are the basic rules of Bitcoin. Anybody who becomes a miner could, in theory, have a voice. There is no company that decides, "That's the way it is."

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Ripple, whose currency is called XRP, was designed as a secure, peer-to-peer payment system; its use as a currency came second. Ripple is backed by Google, among other entities, and by banks. It was designed as a payment-system technology because banks are very threatened by the idea of peer-to-peer payments. If people can transact on a peer-to-peer system and do so with a sense of security—after all, there is a big ledger that, essentially, is universally distributed, everybody knows what it is, and the transaction can be verified—that poses a threat to the banking system.

Furthermore, the Ripple XRP system is not limited to its own currency or even fiat currencies; all can be used, as well as other cryptocurrencies, like Bitcoin or Litecoin. People can trade a Bitcoin versus an XRP if they wanted to, or Bitcoin versus the euro, or Bitcoin versus the U.S. dollar. Ripple was designed as a frictionless market maker between currencies. It could also be a frictionless market maker for stocks, commodities, options, etc.

The most interesting distinguishing feature between Ripple and Bitcoin is the structure under which the Ripple XRP cryptocurrency is distributed. Ripple creators sought a way to distribute the currency so people have an incentive to use it. Ripple created 100 billion XRP at inception in 2012, with the idea that 80% would be distributed free of charge. Ripple's creators kept 20%, which is interesting, because if the currency proves to have value, 20% of a very big number is a lot of money. And 80% was supposed to be given to charities. Of the 80%, however, 67% is still with the original owners, so that as a medium of exchange, it has not been exchanged much so far; clearly, the issue of how to distribute the sum without destroying the value is not a trivial problem. One XRP is worth less than a penny; \$.006242, to be exact.

Some cryptocurrencies were designed for specific purposes, but basically they are intended as alternative currencies. Everyone realizes the ability of the central bank to destroy the value of somebody's bank account. Central banks say as much, that they intend to inflate, and interest rates are lower than the inflation rate. Keeping money in a bank is a guarantee of losing value over time, but there was no alternative for people not in a position to take risk with their money. That circumstance generated demand for an alternative. The current period, with interest rates just about at zero, is without precedent and was bound to bring forth a reaction. The creation of cryptocurrencies was the reaction.

Historically, technology did not allow for the possibility of an alternative currency, although in the United States, in the 19th century, most banks had the right to circulate their bank notes as money. You might think of those bank notes as the cryptocurrency of the era, so cryptocurrencies are not without precedent.

In theory, a cryptocurrency will hold its value against the fiat currencies. If that were to happen, however, that could mean big trouble for the central banking system. It could also be big trouble for the regular banking system. Banks exist on their ability to charge a fee for

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facilitating people's transactions with one another. The bank is the counterparty, the clearinghouse. You get a check from someone, and accept it as worth its equivalent because the bank guarantees payment. In the world of cryptocurrency, all the transactions are peer-to-peer, with no bank intermediary. Banks no longer acting as intermediaries would more or less signify the end of banking profitability as we know it today.

If that is the case, consider how many banks are in the indices and how many technology companies sell their products to banks so they can perform their functions. This cryptocurrency scenario could create a radically different stock market. This issue should not be ignored.

Many unknowns remain, and we do not really have a good precedent for this. The best precedent is the rise of the Rothschilds in the early 19th century. During the Napoleonic Wars and the attendant difficulty of transporting gold, the Rothschilds took the risk of delivering gold, functioning as an intermediary. They would deposit the gold in vaults in London and give people tradeable gold receipts. The Rothschilds became trusted intermediaries who could always deliver your gold, or gold equivalent, when you made it to safety. Many aristocrats became émigrés during the French Revolution and the Napoleonic Wars, and needed access to their funds. London was an émigré center. You might say that the Rothschilds radically changed the payment system in the world, and something similar could happen again.

The whole idea behind cryptocurrencies is to bypass the banking system—cryptocurrency developers do not want the banking system making the rules—and to bypass the governments, because they do not want governments making the rules.

It will be hard for governments to stop this activity. One government could make a law to suppress a cryptocurrency, but, as long as only one country makes it legal, that action could easily demonetize that country's whole economy, because the money would flow to the country where it is legal. For the sake of argument, what if Cuba decided to allow Bitcoin, and every other country in the world barred it, but nevertheless people thought Bitcoin was really a store of value. The money would get to Cuba somehow, and there would be very little that the governments of the world could do, other than invade Cuba, which would be drastic. This subject is one that investors must pay attention to.

Cryptocurrencies are not just currency. They enable the exchange of anything. Something might be priced in terms of Bitcoins or in XRPs or in dollars. It would be a frictionless exchange worldwide. That could happen, and that would mean all the intermediaries would be essentially out of business.

It can also be thought of this way: You buy something at a store and pay using a Visa card. The store pays a 3% fee. Let us say the store is a Walmart and has a 3% profit margin. If it

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did not have to pay this Visa transaction fee, it would make a 6% profit margin not 3%. Walmart theoretically is sacrificing half its profits to allow people to use a credit card. Clearly, it is in Walmart's interest to have peer-to-peer transactions as it is in the interest of a great many companies.

This is a real threat to the established order. This is not a joke. It is serious business. When the stock market realizes what is going on, it will like this development, as a generalization; the possibilities for value-added uses and the scale on which these can take place can hardly be fully imagined yet. This is moving unbelievably rapidly, and there are now 100,000 merchants worldwide that accept Bitcoin, and more every day.

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MUTUAL FUNDS: HISTORICALLY GOOD PERFORMERS THAT UNDERPERFORM

There are mutual funds—of stocks and bonds alike—that historically have a very good record but that now have record underperformance. There is no precedent in history for this kind of underperformance.

Table 3 shows six of these funds, with their underperformance relative to the S&P 500, as of December 17, 2015. There is almost no overlap among these six, other than the fact that they all have good long-term records. Note that in 2010 Fairholme Fund's manager was named Manager of the Decade, and the Yachtman Focus Fund has nothing in common with the other funds because its focus is on large-capitalization, consumer-oriented companies.

Table 3: Underperformance of Mutual Funds Relative to S&P 500

	<i>(YTD through 12/17/2015)</i>
Long Leaf Partners	2023 bp
Gabelli Value 25	1006 bp
Fairholme Fund	1220 bp
Third Avenue Value	853 bp
Wintergreen Fund	841 bp
Yachtman Focused Fund	459 bp

Source: Fund

Only 19 companies outperformed the S&P 500 this year. They include Amazon, Facebook, and Netflix, and if they are not bought, there is very little chance of outperforming the S&P 500.

This is also happening in the bond world. Bill Gross has underperformed the iShares Core U.S. Aggregate Bond Index by 272 basis points in his new Janus Unconstrained Bond Fund. I do not believe that such underperformance has ever happened in his career.

So, what is the probability that all this can happen to such a degree, all in one year? And is it really the fault of the managers? Or is there some other force at work?

For example, even though Amazon recently was up 120% year to date and it is roughly 1.4% of the S&P 500, if you extract the leading performers from the S&P 500, it is clearly negative for the year. It has been very difficult, and I attribute most of the problem to indexation.

Featured Companies

The following recommendations for bonds are all shorts. You can put these all together and view bonds as cheap put options.

T-MOBILE USA 6.375% DUE 5/1/2025

This recommendation is to sell short T-Mobile USA. Although there are many T-Mobile credits, this recommendation covers the 6.375% due on May 1, 2025, which has a yield-to-worst of 6.52%.

T-Mobile was originally VoiceStream Wireless, until control was acquired by Deutsche Telecom. In 2011, AT&T attempted to acquire T-Mobile but ultimately was forced to withdraw its bid after antitrust questions were raised by the U.S. government. In 2012, T-Mobile merged with Metro PCS. Sprint tried to acquire T-Mobile in the 2013-2014 period, but this attempt was also abandoned after opposition from the U.S. government.

One might ask why a company offering cellphone service that is basically a necessity would be in the high yield category, let alone be recommended for a short? Well, its balance sheet qualifies. It has \$22 billion of debt, \$2.6 billion of cash, and \$16.3 billion of equity. That is not a terrible balance sheet in and of itself, although the equity is all intangible. That alone does not make it bad. The intangibles represent spectrum and spectrum licenses actually have great value and are what generated the takeover attempts.

The problem is that the company operates on a very slender profit margin which, at the moment, is about 1.8% net of tax. That means slight declines in pricing, or even more intelligent customer selection of plans, conceivably could place the company in a loss position. Even a little more intensive competition could place the company in a loss position.

As is the case with all wireless companies, the purchase of property and equipment has been more or less equal to depreciation, so there is very little cash flow beyond net income. Also, the company needs, as most of these seller/providers do, to purchase more spectrum than it already has to service existing customers. Since all smartphones are subsidized by the phone companies, the companies lose money on equipment sales, and it is not entirely clear when, if ever, that will change.

Furthermore, the spectrum requirements of the smartphones keep rising. Even if equipment losses were eliminated, a lot of money must be spent on spectrum. Clearly, the business is very competitive, and it is very hard to get an economy of scale without a business combination. The government, however, will not allow a business combination.

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One of T-Mobile's competitors, Sprint, is now in a precarious financial position and potentially could default on its bonds. That probably will not happen next year, but within the 2016-2019 period there is a lot of Sprint debt coming due that might not be able to be refinanced. Sprint is a very big part of the high yield bond index, and if its debt cannot be refinanced it is conceivable that Sprint's assets could fall into the hands of a competitor and create, via the bankruptcy process, a low-cost competitive threat, which would be very serious.

If all this proves to be false, and it might, selling the bonds short could generate a loss of about 6% because the yield is about 6% a year. If this thesis is correct, this bond will be a stressed security, so the risk/reward is clearly in favor of shorting the bond. The price of the bond now is roughly par.

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ACTIVISION BLIZZARD 5.625% DUE 9/15/2021

This bond has a yield to worst of 4.49%, and it recently traded at 105. Activision Blizzard is a videogame company, with games like Call of Duty, Guitar Hero, Skylanders, and with its acquisition of King Digital Entertainment, Candy Crush. To show how big this company is, Candy Crush alone has 474 million monthly active users, Guitar Hero has 40 million players, and Call of Duty has 100 million players, according to the company.

Activision Blizzard has calculated that the 7-plus billion people who are on this planet collectively spend 14 billion hours per year on videogames, which is an interesting statistic in and of itself. The company also projects that there will be a 15% annual growth rate in the number of hours spent on videogames by this subset of humanity.

Activision is buying King, another videogame company, for \$5.9 billion, and it is spending all of its \$4.3 billion of cash. It currently has \$4.1 billion of debt. It still will have \$12 billion of equity, all of it intangible. The bonds yield less than 5%.

Any change in the competitive landscape, or any difficulty in integrating the King transaction, or any reduction in the P/E ratio of the equity, will serve to impact the bond market's perception of the company's access to equity capital. The bonds are priced for perfect execution. If the bonds were to yield 6.6% between now and maturity, that would produce a very good rate of return for the shortseller, because the bonds currently yield 4.5%. So, it does not even need to become stressed; all it needs is to develop one problem.

This is a good example of how precarious the high yield market really is in certain places, and the easy capital that has become available to many companies. With increases in interest rates, it is very likely that capital is not going to be available at those prices for very long. So, from a risk/reward perspective, this is a highly asymmetrical short.

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NUVEEN HIGH INCOME 2020 TARGET TERM FUND (JHY)

This is a recommendation to sell short the Nuveen 2020 High Income Target Term Fund, a closed-end bond fund. It has \$107 million common assets, is 44% leveraged, and trades at a 15.7% premium to NAV. Because it is designed to be at its unit value of 10 in 2020, it has no bonds that mature past 2020, and it is perceived to have very low risk.

Although it might not have any maturity risk, it does have credit risk. Table 4 lists some of the bonds in its portfolio, many of which any objective observer would consider to be stressed, judging from their yields to maturity.

Table 4: JHY Holdings

<u>Company</u>	<u>Coupon</u>	<u>Maturity</u>	<u>YTM</u>
Popular	7.00%	7/1/2019	7.409%
Bombardier	4.75%	4/15/2019	10.989%
Avaya	7.00%	4/1/2019	19.899%
Frontier Communications	8.50%	4/15/2020	8.319%
Precision Drilling	6.63%	11/15/2020	12.246%/11.903%
Scientific Group	6.25%	9/1/2020	23.066%
NRG Yield	3.25%	6/1/2020	7.554%
CCO Holdings	5.25%	3/15/2021	4.408%
First Quantum Minerals	6.75%	2/15/2020	20.622%/20.428%

Source: cefconnect.com

If there are no credit losses, the fund yields 6.3%. There is, however, the matter of the 15.7% premium. By 2020, it must lose the 15.7% premium because the fund must be liquidated. That 15.7% premium is not that much less than the cumulative fund yield. If there are credit losses, then the fund by definition can never achieve its target unit value of 2020, in which case it is highly likely the fund trade at a discount to NAV between now and its target date, which means this is more or less a free put option on the high yield market and it should be sold sort.

THE FIXED INCOME CONTRARIAN COMPENDIUM

PIMCO STRATEGIC INCOME FUND (RCS)

This fund, with \$335 million of common assets, technically, is leveraged 36.6%. Actually, however, its leverage is closer to 257.7%, mainly because of its 132.9% exposure to Fannie Mae, Freddie Mac, and Ginnie Mae bonds. It trades at a 13.47% premium to NAV and because of its extraordinary leverage, it yields 10.52%. Buyers are attracted to the high yield, unaware that the yield is really a function of extreme leverage.

For most of 2015, through December 18, this fund traded at a premium to NAV, but in the August–September crisis, the fund went to a discount. Since May, the NAV has declined from 8.6 to 8.02, as one would expect, given the bond market environment and the interest rate environment. However, the fund price, from a September level of roughly \$8, has risen to a recent level of \$9.02.

Even slight increases in interest rates are enough to cause serious damage to the unit value of this fund, and it merits being shorted.

Post-Musings

HIGH YIELD BOND CATEGORIES

The whole idea of categorizing high yield bonds by rating is illusory. There are bonds that have no material risk of default but do not meet the formal cash flow or structural requirements of the rating agencies for being investment grade.

Hilton Hotels, for example, is classified as high yield, but it is very unlikely to default on its debt and one can see that in its yield. Theoretically, it is not really a high yield bond, but its operating structure is such that it will never qualify for investment grade unless that operating structure would change. Many of the hotels are owned in partnership form within the company and they are bankruptcy-remote. Bondholders would not necessarily have access to the cash flow of the company.

A much better way to categorize high yield bonds would be by their refinancing requirements. A company with a lot of debt that has no refinancing requirements in the next five years is unlikely to default, unless the cash flow becomes incredibly negative. A company that might be less stressed but has a lot of refinancing requirements, as many do, between now and 2020 might be much more vulnerable to a default. Looking at the index, however, there is no way to distinguish the various categories.

Having a refinancing vulnerability category and a non-refinancing vulnerability category would provide a much more intelligent way of classifying indices. Alas, however, that change is unlikely to be adopted because only a certain amount of liquidity is available to make the indices what they are.

THE FIXED INCOME CONTRARIAN COMPENDIUM

WEALTH INDEX (Ticker: RCH Index)

As of September 30, 2015

Annualized Total Return	1 Year	3 Years	5 Years	7 Years	10 Years	15 Years	20 Years	Since Incep. 1991 - Sep '15
Wealth Index	-5.77%	11.94%	12.74%	14.08%	10.31%	7.49%	11.13%	12.59%
S&P 500	-0.61%	12.40%	13.34%	9.75%	6.80%	3.96%	8.14%	9.62%
S&P 500 Eq. Wgt.	-1.21%	14.27%	13.82%	12.17%	8.26%	8.19%	10.14%	11.83%
Russell 3000	-0.49%	12.53%	13.28%	9.91%	6.92%	4.31%	8.22%	9.87%
Russell 2000	1.25%	11.02%	11.73%	8.68%	6.55%	6.51%	7.95%	10.46%
Excess Return vs. S&P 500	-5.16%	-0.46%	-0.60%	4.33%	3.51%	3.53%	3.00%	2.97%
Excess Return vs. S&P 500 Eq. Wgt.	-4.56%	-2.33%	-1.09%	1.91%	2.05%	-0.70%	0.99%	0.75%
Excess Return vs. Russell 3000	-5.28%	-0.59%	-0.54%	4.18%	3.39%	3.18%	2.91%	2.72%
Excess Return vs. Russell 2000	-7.02%	0.92%	1.01%	5.45%	3.76%	0.98%	3.18%	2.13%

*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 '15
Wealth Index	(0.47)	0.97	0.89	0.63	0.51	0.33	0.51	0.61
S&P 500	(0.06)	1.27	1.16	0.60	0.46	0.26	0.53	0.67
S&P 500 Eq. Wgt.	(0.11)	1.39	1.07	0.63	0.47	0.47	0.60	0.74
Russell 3000	(0.05)	1.24	1.11	0.59	0.45	0.28	0.53	0.67
Russell 2000	0.09	0.81	0.74	0.40	0.33	0.33	0.40	0.56

*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 '15
Wealth Index vs. S&P 500	(1.03)	(0.09)	(0.11)	0.46	0.40	0.32	0.28	0.29
Wealth Index vs. S&P 500 Eq. Wgt.	(1.14)	(0.59)	(0.25)	0.34	0.37	(0.07)	0.10	0.08
Wealth Index vs. Russell 3000	(1.27)	(0.13)	(0.11)	0.49	0.43	0.31	0.30	0.29
Wealth Index vs. Russell 2000	(1.04)	0.16	0.16	0.69	0.51	0.10	0.29	0.20

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

Wealth Index Rolling Average	Roll. 1 Year	Roll. 3 Year	Roll. 5 Year
vs. S&P 500	58.74%	67.94%	72.27%
vs. S&P 500 Eq. Wgt.	55.94%	60.31%	61.34%
vs. Russell 3000	61.19%	67.94%	77.73%
vs. Russell 2000	61.19%	68.32%	75.62%

*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 '15
Wealth Index	12.30%	12.27%	14.28%	22.26%	20.25%	22.48%	21.94%	20.57%
S&P 500	11.01%	9.74%	11.51%	16.16%	14.90%	15.01%	15.24%	14.42%
S&P 500 Eq. Wgt.	10.66%	10.23%	12.86%	19.36%	17.63%	17.48%	16.99%	16.02%
Russell 3000	10.87%	9.93%	11.94%	16.76%	15.43%	15.48%	15.54%	14.68%
Russell 2000	13.90%	13.59%	15.96%	21.58%	19.70%	19.76%	19.91%	18.83%

*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 '15
vs. S&P 500	5.02%	5.39%	5.52%	9.48%	8.74%	10.93%	10.56%	10.08%
vs. S&P 500 Eq. Wgt.	4.02%	3.99%	4.31%	5.63%	5.60%	9.43%	9.78%	9.20%
vs. Russell 3000	4.15%	4.47%	4.76%	8.57%	7.87%	10.18%	9.70%	9.26%
vs. Russell 2000	6.78%	5.57%	6.25%	7.89%	7.41%	10.15%	11.07%	10.41%

*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 '15
vs. S&P 500	1.02	1.14	1.16	1.28	1.25	1.36	1.30	1.27
vs. S&P 500 Eq. Wgt.	1.09	1.14	1.06	1.12	1.11	1.18	1.17	1.16
vs. Russell 3000	1.07	1.16	1.14	1.25	1.23	1.34	1.30	1.28
vs. Russell 2000	0.77	0.82	0.82	0.97	0.96	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%	0.93%	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%	-1.65%
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%	26.46%	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	7.04%	13.69%	14.49%	12.56%	4.89%	-6.63%	-7.43%	-5.50%	2.17%
2015 YTD	-9.48%	-5.29%	-6.90%	-5.45%	-7.73%	-4.20%	-2.59%	-4.04%	-1.75%

*Note: Calculated Using Total Returns

Source: Horizon Kinetics LLC, International Securities Exchange, Bloomberg

See important disclosures for additional information.

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THE FIXED INCOME CONTRARIAN COMPENDIUM

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 November 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	218.17	217.01	211.12	203.85	184.77	175.53	195.50	198.54		2015	198.54	(7.8)%	17.8%

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	\$244,012
2	BLK US Equity	BlackRock	\$23,205	1,658	9/30/1999	\$602,871
3	WDR US Equity	Waddell & Reed	\$27,513	1,587	3/31/1998	\$59,365
4	EV US Equity	Eaton Vance	\$2,641	3,998	1/31/1986	\$143,622
5	TROW US Equity	T. Rowe Price	\$2,423	2,014	4/30/1986	\$153,354
6	BEN US Equity	Franklin resources	\$908	1,263	4/30/1985	\$158,852
7	LM US Equity	Legg Mason	\$1,000	462	8/31/1983	\$20,512
8	FII US Equity	Federated Inv	\$26,381	2,206	5/31/1998	\$69,646
9	FIG US Equity	Fortress Investment Group	\$102,249	3,389	2/28/2007	\$18,776
10	PZN US Equity	Pzena Investment Management	\$122,426	6,317	10/31/2007	\$61,466

THE FIXED INCOME CONTRARIAN COMPENDIUM

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 November 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	8.93	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	62.11	62.25	60.43	60.71	56.91	55.46	60.65	60.93		2015	60.93	12.2%	15.18%

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	\$2,094
2	IVZ US Equity	Invesco Plc (Previously Amvescap)	\$1,357	1,153	1/31/1991	\$19,570
3	SDR LN Equity	Schroders Plc	\$1,208	505	3/31/1991	\$22,744
4	RAT LN Equity	Rathbone Brothers Plc	\$1,208	736	3/31/1991	\$24,477
5	ADN LN Equity	Aberdeen Asset Mgmt Plc	\$1,208	1,827	3/31/1991	\$8,776
6	CIX CN Equity	CI Financial Corp.	\$2,585	3,224	6/30/1994	\$76,896
7	EMG LN Equity	Man Group Plc	\$2,862	6,344	10/31/1994	\$11,833
8	AGF/B CN Equity	AGF Management Ltd-CI B	\$3,343	1,346	1/31/1996	\$5,140
9	8739 JP Equity	Sparx Group Co Ltd	\$11,762	108	12/31/2001	\$29,819
10	HGG LN Equity	Henderson Group Plc	\$14,447	8,666	12/31/2003	\$32,188
11	AZM IM Equity	Azimut Holding Spa	\$21,908	4,977	7/31/2004	\$127,036
12	CCAP LN Equity	Charlemagne Capital Ltd	\$36,848	22,300	3/31/2006	\$3,185
13	PGHN SW Equity	Partners Group-Reg	\$36,848	578	3/31/2006	\$209,093
14	ASHM LN Equity	Ashmore Group Plc.	\$36,688	9,873	10/31/2006	\$39,297