

## Harley Bassman: Volatility Does Not Equal Risk September 26<sup>th</sup> 2019

*Erik*: Joining me now is <u>Harley Bassman</u>, operator of <u>Convexity Maven</u>, a macroeconomic website. And of course Harley is very widely credited as the inventor of the MOVE Index, which is essentially the volatility index, or VIX, for the bond market.

Harley, I want to start with that point, actually, not just to credit you as the inventor. But I interviewed Danielle DiMartino Booth earlier this week and her comment was so many people are like, oh my gosh, is the economy about to fall over into recession? Let's keep an eye on the stock market and watch for signals.

Her comment was, forget the stock market. Watch the MOVE Index. She thinks that what's about to happen, if something is about to happen, it's going to happen in the bond market.

Now, since you are the guy who invented the MOVE index, how useful is it as far as a leading indicator or a predictive signal that might tell us that something is wrong?

*Harley*: I think that she's spot-on right. The bond market is going to be where all the action is and that will be where to keep your eyes focused because central bank intervention is the key driver right now.

But looking at the MOVE *per se* as an indicator, it's more of a coincident indicator than forward-looking. So it will basically confirm movements in the bond market. Because there's a whole group of hedge funds out there that operate as ball sellers to go reap profits. So they kind of keep the MOVE in line with realized volatility. So as realized volatility, realized activity, realized risk expands, the MOVE will go with it.

*Erik*: Okay, so we can use the MOVE Index – I think the way Danielle was describing it – as a confirmation indicator. If it feels like shit's hitting the fan, and the MOVE is going crazy, it's a good indication that it really is hitting the fan. But probably not a predictor.

Is that a good summary?

Harley: Oh, yeah. That sounds great.

*Erik*: So let's back this conversation up to the much bigger picture of the bond market.

For a while, we had everybody and their brother (except you) saying, okay, look, as soon as we get past 3.12% (or whatever the magic technical number was on the 10-year yield), that's it,

baby. It's all over. The bond bull market, it's history. It's going to be the end is nigh for the bond market.

You were quite outspoken last time we had you on the show. You said, look, this is mostly about demographics. We're not going past (I think you said) 3.50% on the 10-year. It's just not going to happen.

Needless to say, you got that one right.

But what I don't remember from that interview, I don't think that you had anticipated this reversal in yields all the way back down to almost that 2016 low.

Is this consistent with what you expected? And what do you see coming next?

*Harley*: I would love to say that I was brilliant and predicted the market to rally this much. But, no, that wasn't in my playbook.

But when rates were 3-and-change, did I think we could go higher? No. I haven't changed my mind in a few years now. We're not going to go above 3-1/2% until 2023 at the earliest.

And it's purely a demographic concept. The boomers are retiring. And as they retire they are selling stocks and buying bonds. You can see this on almost any large firm's flow of funds. Retail people have been sellers of stocks for a decade now – the only buyers of stocks have been corporate buybacks.

And they're moving their money into bonds because they need fixed income. They need retirement income. And they know social security ain't going to cover it for them. So you have this massive flow of money out of stocks into bonds from real boomers.

And the other side of the coin is the millennials forming households. They get married, they have their first child much later than the prior generation. So it's taking a little time for these people to enter the workforce, become productive, and demand goods and services – cars, baby strollers, houses, whatever it might be.

That mismatch is going to basically flip over in 2023, more or less. '23–'25. And that's going to go and drive rates higher the same way in the '70s and the '80s the boomers drove rates higher.

*Erik*: Now let's touch on the stock market, since you mentioned it.

I agree with you that boomers are selling stocks and buying bonds. Now, before this happened, a lot of people predicted this is going to happen. Boomers are going to sell stocks and buy bonds. Therefore the stock market is going straight down.

Well, oddly, we've seen the confirmation. In fact, boomers are selling stocks and buying bonds. But those corporate buybacks have been a big part of it. And it seems like there is also a lot of international flows. Even though global stock markets are definitely rolling over around the world, the S&P is right on the verge of all-time highs as we're speaking.

What the heck is going on? You mentioned corporate buybacks, but that's not enough by itself is it, to keep us at these crazy elevated levels?

*Harley*: I think so. The numbers have been huge for corporate buybacks. And with rates down here, it's all the more reasonable. I mean, if you're a corporation and you're trying to work on your balance sheet, there is a tradeoff between debt and equity. This is MBA 101.

And with rates down here, issuing debt and buying back stock is not nutty. As a matter of fact, you can borrow money at less than the dividends that are being paid by the S&P.

Now, it does have a negative corollary as you're levering the company up and you're making it less able to ride out a storm, as we saw in '07–'08–'09. Investment banks levered 20 to 1. And when things got rough, down they went.

So it's not all fun and games. But, realistically, buying back stock at these prices is not nutty, relative to bonds.

I know the CAPE says that stocks are crazy hot, and there's lots of other analysts out there that think stocks are rich. And Shiller says that there is no correlation of rates to the CAPE. I just disagree. That just sounds crazy to me.

If you have money in your pocket and you want to invest it, you're going to make a decision based on all of your available opportunities, which is stocks, bonds, commodities, art, housing, whatever it might be. And if rates are 1%, 1-1/2%, stocks that yield 2% and have a P/E of 18, 19, that's not bad.

Stocks are not cheap. Let's be clear. Stocks aren't cheap. But they're not crazy rich. I call them on the higher side of fair.

*Erik*: Okay, Harley. So if the argument is that basically what's going on here is retail really is not buying stocks. It's not the usual retail craziness that is pushing stocks to higher and higher prices. But it's all about corporate buybacks.

And, clearly, we've got low rates and a lot of people think lower rates still to come. There aren't too many headwinds that are going to get in the way of this.

Are there other factors? I mean, obviously the corporations can't buy back all of their stock with money that they get from selling bonds. Otherwise there wouldn't be any stock market at the end.

Is there a point at which you reach an absorption level where this corporate buyback trend stops providing a bid to the market overall? Or is this something that could go on for years and years to come?

*Harley*: I don't think it goes on forever. And there is a limit, clearly, to how much stocks you can buy back and be a prudent manager of your corporation.

But I think you were right before with the point you mentioned about international buyers. To quote an old boss of mine, *we are the cleanest dirty shirt*. We have growth, we have a solid economy, dividend is nice. It's not that bad.

And if we have lower rates, QE going on in Europe and Japan, moving money to the US is also not crazy. In fact it's quite reasonable. So I think, as much as the Fed might want to go and not be lowering rates, QE in Europe and Japan is positive. It's fungible money going into the system seeking out diversified assets that are kind of safe.

So I think there is money coming there.

The question is: Europe and Japan cutting rates and doing QE, is that good for the global economy? As a public policy concept, is this good? Or are they just basically jumping ahead of us in a currency war? That's a different question.

*Erik*: Harley, let's continue on the bond market direction. Here we are now, seeing at least a temporary backing up of rates. We got below 1.50% on the 10-year.

Is there a potential that this is a trend reversal? Or was this just a little hiccup and we're still headed lower in yield?

*Harley*: Rates are still dramatically lower than they were six months ago. Could rates back up 50 from here? Sure, why not? We're at a big range. And could we go lower in rates? I suppose so.

But I think that, at these interest rate levels, bonds become somewhat unappealing just because it's basically a zero real yield at this point. To the extent you want to buy low-rated bonds over here, you buy them because you have an actuarial problem. You are an insurance company or a pension and you have to buy them by regulation.

But going up the curve at this prices, I'm not a buyer. I'd rather invest in 2-years and have powder to burn.

*Erik*: Harley, the big debate that's been going on in finance between a lot of people is, is the US going to follow Europe into negative rates? What's your take on it?

And if it were to happen, what's the significance? What would it mean? What would the consequences and knock-on effects be?

*Harley*: Well, my stated opinion for quite a while is we will not have negative rates in the US. I haven't changed my mind on that. I think we have a different society, different politics than Europe and Japan. And I also think that if we were to get negative rates that the politicians would be assaulted by the populace. I just don't see it happening.

I don't think it would be effective at all.

But negative rates in the financial capital of the world, you're talking about pulling up the foundation of the banking situation. Which was kind of the idea of QE1 to begin with, was to go and solidify that.

So I don't think it happens here. I think they'll find other measures. And as I've written about recently, it's going to be fiscal policy. That's where you go next.

**Erik**: Speaking of fiscal policy, normally we think of the political cycle affecting fiscal but not monetary policy. First of all, we've got an election coming up. Obviously President Trump has been a contentions president. Whether you're a supporter or not, you can't deny that he's been a very outspoken leader and has a style which delights some people and infuriates others.

What do you think is going to be on the political agenda in this election year in terms of fiscal policy?

My view is I think monetary policy is going to become a big campaign issue, particularly modern monetary theory MMT. Although MMT itself is not necessarily suggesting that we ought to borrow and spend out of control, I think a lot of politicians who want an excuse to borrow and spend out of control are citing MMT as their academic evidence to make it okay to want to do that.

How do you think that the political cycle in election year is going to factor in to both fiscal and monetary policy?

Harley: Notwithstanding the name, MMT is not a monetary policy. It's a fiscal policy.

Monetary policy is basically rate setting and money supply, buying and selling bonds in the market. That's done. We've get a cutback through, so there's nothing else to do there. The Fed might do it, but it's not going to be effective. We've seen that thing play out.

So fiscal policy is next. MMT will be the sheep's clothing for fiscal spending. And whether we do it quietly via infrastructure spending or we do universal basic income to go and give people money, helicopter money, that's what's going to happen next.

And both sides of the aisle will be in favor of this because it solves everyone's problem. And the problem, as I pointed out at the beginning is, how do you deal with the baby-boom demographic who is retiring?

They did not save enough money, and social security is not a big enough number to support their lifestyle. So we're going to have to go and solve that problem somehow, someway.

You've seen a number of charts and graphs from various people. The amount of the government that's absorbed by mandatory spending grows enormously in the next 10 years. That is the public policy problem A#1 that has to be resolved and dealt with. And I think MMT will be the way you start going after it.

Do I believe in it? Do I like it? No. Not at all. But that doesn't mean it's not going to happen. So that's my view.

If the Democrats win, it will happen in 2021. If the Republicans will it will happen in 2029. That's the window of when the boomers all jump into retirement. Next year we'll hit mid-way in retirement. And 2029 all the boomers will be 65 and over.

*Erik*: Harley, earlier you agreed with Danielle DiMartino that, if there is going to be a crisis, the bond market is more likely than the stock market to be the place where it's going to start.

What kind of bond market crisis are you envisioning as a possibility?

*Harley*: I don't see it happening soon. But what I do see is that, come three–four–five years from now, as the boomers retire and the millennials come into the fore, there will be demand side on the economy. And that will be what pushes up rates and what creates real inflation. And then, how do you deal with that? becomes more interesting.

I don't foresee a giant crisis coming up unless there is some sort of political foolishness going into the election. Is that possible? Yeah. Likely? Unclear.

The Fed is doing a reasonably good job of trying to go and stay down the middle. Despite being an arm of the government, they are trying to remain independent and not be drawn into this battle.

So I'm not terribly concerned. Maybe I should be. But I'm not.

I just think that there is still such demand out there for debt instruments from pensions and insurance and everyone else. That will kind of keep a lid on things until we get real inflation and all of sudden you have significant negative real rates.

*Erik*: I agree with you. It's when we get runaway inflation that things really come unglued. And it seems to me that we're nowhere close to that yet. If there is anyone I have confidence in

to get us there, it's the MMT-ers though. So we'll see what happens.

*Harley*: I want to add one more thing in there. Away from monetary policy and fiscal policy, trade policy is interesting. And I'm sure there are experts out there who could opine upon how impactful it is right now.

But what I think is more important is actually immigration policy. What drives these rates, as I've been talking about demographics, ultimately is the labor force growth rate – how fast the labor pool expands. Because, at the end of the day, GDP is number of people X hours worked X productivity.

The US has been very open to immigration and therefore we've had nice labor force growth rate going on post World War II. You have not seen that in Japan and Europe. Japan, actually, is the ultimate poster child of what happens when you have a negative birthrate.

To the extent that immigration policy chokes off another source of labor, that will be a big problem. It doesn't hit the market right away. But to the extent that we choke off the supply of immigrant labor and don't have an offsetting massive growth of the birth rate – which, by the way, takes about 20 years to cook – I think that's going to be a real problem. And that's my biggest concern about the economy away from demographics.

*Erik*: Harley, a lot of notable people who were never gold bugs before, particularly Ray Dalio, have recently said, hey, if you look at what's coming, the interest rates are going to continue to go low. The Fed is going to have to continue to effectively monetize. There's going to be more QE. You know it's coming. And the fundamentals for gold have never looked better.

Do you agree with that view? And what do you make of the recent breakout? Are we overextended here? Or is actually time to buy.

*Harley*: I will not call myself a gold bug, but I like gold. Warren Buffett is incorrect. Gold is not some dead asset that doesn't have a yield. Gold is an alternate currency, the same way euros or yen are. It's accepted, it's fungible.

I wrote a great piece about this a few years ago called "Rumpelstiltskin at the Fed," one of my favorites.

And if you think of it as a currency like dollar bills – because there is no interest to be earned by holding a dollar bill in your hand, right? – gold is a currency. If you believe that we're going to have MMT and QE and money printing of fiat currency, then gold is a very interesting way to have a different currency that can't be printed.

I think every diversified portfolio should have some allocation to gold. And it's a longer-term trade, it's almost an insurance policy.

And, as I wrote about, gold has a negative yield also. Right now, it yields about negative 3-1/2%, which [there] is nothing wrong with that when you consider the cost of insuring it and everything else.

So I like gold.

And it's not a market-level trade. I like it here. I liked it when it was at \$1,100. I liked it when it was \$1,700. It's an alternate currency that you own as diversification in case things really go haywire.

*Erik*: I want to move on now to an article that you just published on your website called "The Opposite of Bad is Worse." Listeners, you'll find the download link for that article in your Research Roundup email.

[If you are not registered, just go to MacroVoices home page and click the "Looking for the Download?" button.]

Why don't we start with the title? That's a catchy title. What do you mean? What "bad" are you talking about it and how much worse can it get?

*Harley*: It's a clever title. I like that. And this picture here actually is from a sign in Normandy, France, where I was this summer for vacation.

Really, the idea is that things can get worse. And do I think is the world going to blow up? No. But I think that negative interest rates is corrosive and will lead to – I don't want to say really bad things, but not good things.

You're removing the signals that we use the price of money, interest rates. That's how we signal across economies, locally, globally, demand for various things. And it cues up people to know whether to make more or less of something.

When you remove that signal, all of a sudden you're walking in the dark. And it gets very problematic.

And the same thing for government policy makers. How do they go and use the interest rate tool for their determination of where the bottlenecks are in the economy?

And so that's what I was alluding to there.

*Erik*: Tell us what the article is about. You've gone into some detail on some trades here. But what is the backstory of what motivates – there is a theme here to these trades. Tell us a little bit about it.

Harley: Negative rates aren't totally insane. There are lots of reasons why negative rates are

actually reasonable, which I've outlined. But going way out the curve with negative rates, that's more problematic. What I've done here is said, okay, let's go look at what some of the ramifications are of very long-term negative rates.

Recall that a forward price – this is a big hobby horse of mine – a forward price is not the prediction of where the market is going to be.

So we have a spot rate of X and the forward is Y. It's not that the market put up their hands and voted and said, that's where we're going to be in a year. No. The forward rate is simply the mathematical calculation to create an arbitrage-free price where people can make money.

The forward price is, I won't say simple to figure out, but it's relatively straightforward. You take all the cash flows, the borrowing costs, lending costs, the dividends. You add them up, discount them back at some PV and you get a forward price.

And what's anomalous here is that when you take these calculations now and add them up, you get forward prices in two of the major stock indices at much lower levels than today's current price.

I focus on the European and the Japanese markets. The Japanese one I find to be very interesting. The price of the Nikkei stock index, which is the cheapest of the major indices with a P/E of only 15-and-change, the 10-year forward price is about 22% lower than today's price in nominal terms.

I find that nutty. I don't think the Nikkei is going to be 22% lower 10 years from now, especially if we get more QE in Japan.

And that price is not a prediction. It's just the pure mathematics of a dividend yield of 1-1/2 or 2% and a negative 10-year rate, going out for 10 years. This allows you to use the derivative market – either futures, forwards, or options – to create some pretty fancy trades that have what I think are unbelievable profiles. And the same thing occurs in the foreign exchange market.

**Erik**: Okay, explain how these trades work. Because you've already said these forwards are not a prediction. It's just a mathematical discounting of an interest rate. So the whole idea is it's supposed to, as you described it yourself, it's supposed to create a number from which there is no risk-free arbitrage.

So if there is no risk-free arbitrage, how do you make money from trading this? Explain the theory of your trades.

*Harley*: Well, I'm not borrowing and lending when I do these trades. It's a one way trade. These are not arbitrage trades. They are risk trades. I put them on for myself and I don't hedge them. They are, I think, incredible portfolio positions. They're going to be volatile. But if you look at the current Nikkei, it's about 22,000. The forward price is like 17,000. And that's the price that dealers, hedge funds, other companies can buy or sell the Nikkei 10 years forward in trades.

If you go then and slap on some options onto this, you can create a profile where you can basically buy like a 10% out-of-the-money call and sell almost a 40% out-of-the-money put – out 10 years for no cost. I kind of like that idea.

I think the Nikkei is going to rise nominally either (A) because it's relatively cheap or (B) because the Bank of Japan has started buying single-name stocks – they already own 70% of all ETFs and 40-odd% of the entire bond market.

And, before you jump up and down saying that I'm bearish on the yen, also I think that you're going to see the Nikkei advance more than the yen depreciates. So, in real terms, you're going to make money.

And the reason for that is Nikkei is ownership of real assets. Steel companies, car companies, computer companies. Those real assets, they make goods and they sell them, and the prices of them float with the currency on the global markets.

This is exactly what happened in Europe, in Germany during the Weimar Republic. You've seen the pictures of people with wheelbarrows full of deutschmarks. What you don't see is the fact that the stocks of those various companies went up even faster because they were real companies. And that's what I think is going to happen here.

So if I can own basically almost a near-the-money option, 10% out of the money, and my risk is that the Nikkei is going to be below 14,000 10 years from now, if you look at the market risk, I love this idea.

And basically I'm taking advantage of the forward and the option skew to lock in this profile.

*Erik*: Harley, you've got some charts which talk about these forwards on Pages 4 and 5. But then on Page 6, you've got a very interesting chart. Tell us what this one is about with the purple and orange lines which you're calling the helio line and the creamsicle line.

*Harley*: What's happening here is kind of interesting. As noted, we have the forward price of the yen. Today is 107–108. Seven years forward is like 90. So that's a much lower forward price.

And, as noted, it's not magic. It's just the differential between the dollar and the yen interest rates and the cross-currency borrowing costs. That creates a lower forward.

What's interesting is, when you get a big differential in spot and forward, you should get a higher volatility. Because, if you think about it, the spot price is today's price. The forward is a

number you can buy or sell. As time goes by, in theory, if the forward goes to 107–108 or the spot goes to 90, that's kind of what the market is looking at. That's a big move.

And as you widen the spread from spot to forward, what you usually see is implied volatility increases because the wider the spread means the greater the uncertainty. And the greater uncertainty should mean a higher implied vol. Because implied vol is the cost of risk.

This is why you see volatilities come down in a flat yield curve and they go up in a steep yield curve. You can go onto my website and find a number of times I've written about this.

What we had five years ago is the purple line. You can see that short-dated (one-month) options were at 6% implied vol. And long-dated options were at 14%, reflecting the big differential between the spot and forward prices. Which is created by the rate differential.

The orange line is what we have right now. It's almost a flat curve. You have a 6% short-dated volatility and 7-1/2% to 8% long-dated vol. That's just nutty.

When you have a differential between the spot and the forward this big, volatility should be a lot higher to reflect that. And it's not. Why isn't it?

There's a million reasons. But the biggest one I'd point to is the Bank of Japan's yield-curve control process where they have said, we're going to keep that 10-year between negative 0.2 and positive 0.2.

Speculators have kind of given up on the market moving in Japan. And volatility has gone down because there's no buyers. As a matter of fact, there's more sellers.

Are they going to be right? I kind of think not. But what this has done is create a really strange situation where a 2-year option on dollar/yen, struck at 100, costs 5-3/4 points. A 7-year option, so five years longer, same strike, costs 3.75, or about 35% less, two full points less.

This is not an arbitrage. You can't buy one and sell the other because they are European options. But it's a way of definitely demonstrating how crazy these forwards are that they create this kind of pricing opportunity where basically you could buy an option with positive carry.

The last time I checked, when you were long an option you stay there, you have negative carry. Here, you have positive carry on an option.

And that's basically summing up the concept of how negative rates have had the unintended consequence of moving prices around to create interesting investment opportunities.

*Erik*: And for our more sophisticated listeners who are able to put on these complex derivative trades, as you just said, it's not an arbitrage because these are European expiries.

You can't just buy one and sell the other.

What do you do here? What is the actual trade that you put on to take advantage if you're expecting that there's some kind of reversion in this anomaly that exists in the market today?

*Harley*: You just buy the 7-year option. The 7-year is worth the wrong price. The 2-year is fine. The 7-year is the wrong price. You just buy that.

But put it away, don't hedge it. If nothing happens, it just goes up in price over time. And if things really go haywire, you have unlimited gain and limited loss of 3-3/4 points over 10 years. Burning 37 basis points a year for 10 years, that's not negative carry, man. That's nothing.

I think it is one of the best tickets in the market. I have this on personally, and this trade is available from almost every Wall Street dealer.

*Erik*: It really is amazing. Normally, we get so used to just certain rules that are ingrained into our minds. Never, ever buy very long-dated options unless you have an incredibly strong conviction about your view, because long-dated options always cost a lot.

Well, sometimes the perversion of negative rates makes them cheaper than short-dated options. That really is very unexpected.

Is that why this mispricing is there? Because most people aren't even thinking it's a possibility?

*Harley*: There's two things going on here. You were right, "were" being the operative word.

You used to see a very big upward sloping term surface. That means the implied volatility. The cost of a 1-month option was a number and a longer-dated option was higher volatility. So, as time went by, if you bought a long-dated option, you lost on the theta. But, more importantly, you lost on the vega as you rolled down the term surface. And that's the purple line right here.

What's happened – and this happened in most markets – the term surface has flattened. Long-dated options have come down.

There's a number of reasons for that. It doesn't really matter what they are. The flattening of the term surface has really changed the investment process. And I think why it's there is people have kind of given up. They feel that the Fed and the other central banks have basically colluded together to go and reduce risk.

I'm not predicting a disaster, but this is exactly what happened in '03–'04–'05, when the Fed raised rates at a measured pace at 25 cents every meeting and they said this is what we're going to and do. When the Fed signals that they're going to do something in a path, you're going to have problems there. Because people will then go and take advantage of it by taking too much risk.

*Erik*: Okay, Harley, let's spin this another way. I think it's pretty clear that the Fed is going to be forced to continue to hold rates low for as long as they're able to. What other creative ways are there to take advantage of this in terms of trades that benefit from expectations?

Obviously, nothing is guaranteed. You could have rates back up to 5% tomorrow. But you and I agree that's profoundly unlikely.

What are other ways to exploit that viewpoint?

*Harley*: I'm going to go and preview my next commentary. It will be a while before I write it, but the basic idea is this.

I said there were two reasons why these trades exist. One was negative rates and flat fall surfaces. The other is that people don't want to take liquidity risk anymore.

Sharpe ratios have become the dominant tool for analyzing investments. And the Sharpe ratios are basically saying, how volatile is the asset I'm buying versus the return? You take that ratio. It was a great idea to go and start to look at how volatile a trade is, an investment, versus its return. This is Markowitz who got a Nobel Prize for it.

But to say that the daily mark-to-market volatility of an instrument has some kind of relationship to the probability it will reach its expected return is nonsense. Yet Sharpe ratios are what everyone is using now to go and sell their various funds and investments. They always say risk-adjusted return. Risk-adjusted return should be what are the odds I'm going to get my money back? Not what are the odds it's going to go up and down by 1% or 2% per day.

And you see many investment managers having stop-outs where if a price goes down by 6% I have to sell. No-no-no-no. I'm not sure why.

My answer to that is just buy less of it than get stopped out, which is why I say sizing is more important than entry level.

And I think what you keep seeing is this migration of investment managers to short-dated, liquid, transparent instruments. And there's a lot of hedge funds that yielded, what, 3–4% in the last five years over here. They're all in the same place, in highly liquid instruments.

And anything that has sort of bid offer to it, it has some mark-to-market volatility, it's basically open season out there. No one's trading in that.

My advice is – the trades I've described to you are for professionals. But for the average listener, look for investments where there is a liquidity premium for it. Where people are demanding an extra return because it's volatile or because it's hard to get in on.

Closed-in funds are a classic example. I love closed-in funds. They yield 8% to 12%. But these funds, they don't trade that much. I mean, the trade enough to get in and out of them. If you want to go out and buy \$100,000, \$200,000, it's pretty easy. But if you had a few million dollars, you couldn't do that. At least not in one day.

And they trade at a supreme discount because of that. Because you can't get in and out in a day.

I think looking for investments where there is a liquidity premium, not a risk premium, not the odds that you're going to lose your money, but a liquidity premium that means you can't get in and out in one day at a single price, that's where I would put my money. That's where opportunity lies.

I can go and diversify myself. I can allocate and size appropriately. I can barbell the strategy so I have some money in liquid assets and other monies in longer-term profile instruments. I know what my basic instruments are going to be and I have some extra money put aside in case of emergency.

But I can allocate some money for illiquid instruments. That is where the return is. So I have an illiquid portfolio, but it's not going to blow up on me. I will get my money back if I'm patient.

*Erik*: You know, Harley, you're really focusing on one of my favorite topics, which is the disparity that exists in perception in the industry. So many people think volatility and risk are the same thing. And they're just not. And it's the reason that Sharpe ratios are so misleading.

You've just explained why that fallacy of volatility equals risk is not true. And you've gone a step farther and described how you can actually benefit and trade it by looking for opportunities that are mispriced because so many people have an incorrect understanding. They're equating risk with volatility when they shouldn't be.

What other fallacies exist in finance that yield tradable opportunities other than the perception of volatility and risk being the same thing?

*Harley*: I think instead of looking outward it's looking inward. It's saying, what are my financial needs and what are my cash flow requirements over time? And then lining those two up.

I think people, they want to go to a cocktail party and they want to brag that they are invested in a hedge fund. Are these instruments really doing better than the market? Are you really getting some advantage? Or do you just get the sound of I'm in an alternate asset class? Which a hedge fund truly is not. It's just other asset classes put together with a V structure.

It kind of bleeds off of my usual comment that it's always greed, ego, and hubris. The Greeks had this right 3,000 years ago. That tends to be the destroyer of mankind.

People make investments based on their ego as opposed to their rational needs. I think if they focused on that they would probably end up in a better place. It would mean that they don't have to get caught in a bad situation. If you get over-levered or you put your money too much in one bucket over there, when you get a drawdown like '09 you're forced to sell.

If you've set yourself up so you've allocated your monies properly, and you have a risk bucket and it goes down but truly it's not going to default on you, you could ride that out. And the people who rode out '09 are clearly heroes. But I'll tell you, it's hard to do.

Last December 24 I was about to jump out the window. It looked pretty bad. But I'd allocated the money, I'd allocated the risk, and I said, I can survive this because what I've done – I'll be okay. Even if these prices are staying here or going even lower, I'm okay because I have allocated properly.

Size is more important than entry level. Don't try and time the market. You're not going to do it. No one's going to do it. Size yourself properly and diversify.

*Erik*: Well, Harley, I can't thank you enough for a fantastic interview. Before we let you go, for our listeners who want to follow your work – you're basically a retired guy [and] just out of the goodness of your heart you're operating this fantastic website, <u>Convexity Maven</u>. As far as I know, you don't even sell anything.

Tell us what the website is about, what people can expect to find there.

*Harley*: Well, you're welcome. Convexitymaven.com is published every, I don't know, two or three months. It depends what kind of mood I'm in. I would say "retired" is mostly true. I like to say I run a hedge fund of one, because I'm not sure I can get any other investors to come on in. if you have questions or comments or want to be added to my list: <u>harley@bassman.net</u>.

If you're interested in educational material, I'm always asked about books. I basically culled through my commentaries and I posted some in <u>The Maven's Classroom</u>. That's probably a good source to look at interesting ideas, or when I have pieces I've written that explain the concept as opposed to a trade.

*Erik*: Well, Harley, if you're running a hedge fund of just one investor, it seems to me like a perfect opportunity to indulge that ego and hubris and charge yourself a higher fee than any hedge fund has ever charged anyone else before.

And that way you can feel that you are earning – I think Medallion Fund was 5 and 44, so charge yourself 6 and 45 and you'll be the best-paid hedge fund manager in market history.

Harley: A clever idea. Maybe I'll try that.

*Erik*: Well, see you next time, Harley.

*Harley*: Thank you very much. Have a good day.

*Erik*: We'll leave it there. Patrick Ceresna and I will be back as MacroVoices continues at <u>macrovoices.com</u>.