Adam:	**00:01:09**	All right, welcome. That video actually sets the stage for this conversation reasonably well I think.
Richard:	**00:01:18**	The jazzy tune at the end.
Harley:	**00:01:20**	I liked it.
Adam:	**00:01:23**	That's right. So, listen guys, everyone welcome to this Friday's Resolve Riffs, we have Harley Bassman , not to be confused with YouTube's Harley Baseman apparently who rides Harley's and drops the bass. So welcome Harley to the show.
Mike:	**00:01:41**	Slaps the bass.
Adam:	**00:01:41**	Slaps the bass, that's it.
Harley:	**00:01:43**	Thank you very much. Good afternoon.
Richard:	**00:01:47**	Mike you want to hit us with a disclaimer before we-
Mike:	**00:01:49**	Well, it's my... I don't even know how to do this anymore. It's the first one back. I feel rusty. It's the 15th of January. I haven't done this since last week of December. Welcome, and cheers everyone. I'm enjoying a Basil Hayden bourbon.
Richard:	**00:02:04**	Fancy. I got my usual beer.
Mike:	**00:02:08**	Very nice. We have a couple of folks that are on the wagon, dry January is over there, something I don't know what it is, but they're not joining us. Anyways, as everybody knows, the conversations here are for entertainment purposes only. We hope to amaze and entertain you. Do not take any advice from the four scoundrels on this webcast today, but do enjoy the conversation and allows us to be a little bit freer with thoughts and pursue paths that maybe are not discussed so often. Welcome and if you do enjoy the content, make sure you smash that like button. I just love to use word smash. But anyway.
Richard:	**00:02:48**	And subscribe.
Mike:	**00:02:50**	We're off.

Backgrounder

Richard:	**00:02:52**	Harley, it would be great to get a little bit of an intro from yourself. Your background, known for the Move Index and all that fun stuff, so-
Harley:	**00:03:00**	Well**,** I guess I'm the old on Wall Street, in Chicago MBA. So a monetarist, went to Wall Street. I worked at Drexel actually for a few years, but not with Mike Milken. Then went to Merrill Lynch in '85 and I was there for 26 years. While I was there I created the Move Index, but basically it was you know options, mortgages and all that fun stuff. After Maryland floated I went to PIMCO, managed their hedge funds and I'm now here in California in Laguna Beach.
Adam:	**00:03:38**	So you're not Bill Gross's neighbour by chance, are you?
Harley:	**00:03:44**	I can actually see his old house, the house where he did stuff**,** you could read about it in the paper.
Adam:	**00:03:52**	That was good drama. So, Harley, you write a newsletter, what is that newsletter about and what is the purpose?
Harley:	**00:04:04**	Well, I write under the Moniker Convexity Maven, you can find my stuff at Convexitymaven.com, it's free. My email address is there so just send me a note, I'll add you to it. It's episodic, I write when I like which could be a couple times a month it could be three or four months apart. Tends to be big macro ideas, two to five year horizon, not niche to blitz, no trading, no RV. Then I manage a hedge fund of one which is me. I have a personal ISDA and I could trade anything I like and almost anything you read in my commentaries, it's in my personal account. So I definitely eat my own cooking.

Adam:	**00:04:52**	Nice.
Mike:	**00:04:54**	What's the reason that you go to the extra effort to write and share given that it's a hedge fund one.
Harley:	**00:05:04**	One of the great values of being on Wall Street, being on a trading floor is, aside from all the old school stuff that's now gone, is that you work with very smart people who will push back on your idea. If you can't defend your idea to a smart person, clearly it's not that good idea. And you want someone to come up and say, you're fat, you're dumb, you're bald, and your idea sucks and you give them the first three, but then you say, but it doesn't suck because of this. And it is very difficult to come up with clever ideas in your jammies, so that's the tough part. So, I miss the trading floor for kicking around ideas and finding where the flaws are, getting other ideas from people. The writing, I like to write, but also, it's a way of crystallizing an idea by being forced to write it out. If you can't explain your idea to your mother, then you don't understand it. So, it's almost self-serving in that sense. But also, I'll get feedback from people who will have clever ideas, which will make me rethink what I'm doing, and try and find other ways to go in to attack a problem.
Richard:	**00:06:19**	And if you were to describe-
Adam:	**00:06:20**	I'd like you explain your recommended list, tray of trades to your mother, like the seven year option on 10 year rates and stuff like that. You must have a really special mother.

Convexity and Civilians

Harley:	**00:06:35**	You're circling around the question you want to ask, which is, how do you explain convexity to a civilian? Isn't it really what it comes down to? Because I think there's all options and convexity is a sexy X word and the way you explain it to people is it's unbalanced leverage. So if you get to enter into a financial agreement with someone, we're given certain circumstances, you make $1 or lose $1, under equal up and down. Good news, bad news. That's zero convexity. If you make two and lose one that's positive convexity. If you lose three and make two, that's negative convexity. And then if you take this idea of I know what the return profile is, I know what the yield is of something that up one down one, zero convexity, I should pay to get something that's up two down one. What do you pay for that? Or what yield would I accept? So, if up and down one yield is 5%, should I get four and a half? Four? Three and a half? What number is that going to be for the up and down two to one? And for the negative three versus two? I should get more yield? So, should I get five and a half, six, seven. And if you really want to dig into why are we hiring physics PhDs for most of the 90s on Wall Street, it was to solve that problem. And there's no correct answer, but you can figure out the zip code of where things should be. And that's what most of Wall Street does in terms of anything that's not treasuries, an option in it. A corporate bond, what is that? It's a treasury security plus a default option, what are the odds of that, what should you get paid for that. And so, you can expand this idea to have a look at the entire range of securities or investment opportunities. I'm I getting paid the right number given the risk available? So, that's what the quantum Wall Street once upon a time did. What I did was specific into the mortgage world. So the prepayment option, the default option for mortgages and what that would be worth?
Adam:	**00:09:00**	So, you need the quants because while we all learn the slope of a line rise over run in school, you don't typically learn how to model nonlinear relationships. And typically, when you're modelling convexity, those relationships tend to be nonlinear and sometimes they're nonlinear in multiple dimensions.

Harley: **00:09:19**

Well, by definition, they're nonlinear because they have convexity to them. In simple terms, you're standing on a point and so that's, I guess, one dimension, velocity. So the change from here to there over certain time, velocity is the first derivative. Or delta for options, and the chain. So if you're going from 10 miles an hour to 20 miles an hour, that's acceleration. That's the second derivative. So people actually have plenty of contact with first and second derivative ideas. They just call them different words. We call it delta in Option Land. But you can call it marginal cost in economics. So, people are familiar, they've just got to put it in their own language and it becomes actually reasonable. I mean, they traded options, well before black shorts. And they did that by human intuition as to what are the odds of something happening and what am I willing to pay for it? That's all it's for.

Richard: **00:10:22**

Outside of the convexity ideas that you obviously espouse, what are some of the other tools in your tool kit. What's the framework that you use to make sense of the world of investing? And how that informs your investment thesis in general?

Harley: **00:10:41**

When I go and invest, I think that entry level is almost meaningless. I don't try to time the market; I don't try to buy or sell at a certain point. It's do I like the profile or not, and then it's a matter of sizing. Sizing trumps entry-level. You have to invest big enough, so it'll make a difference if you're right.

But not so big that you'll be really damaged if you're wrong. And so sizing is more important than entry-level, assuming you figured out what the good idea is. Usually, when I find an idea I like, I'll just go, and I'll do it right that day. I really have no intuition as to whether will be higher or lower the next day.

The Three Themes

Adam: **00:11:26**

So we actually took the time to review some of your recent writing, say five or six pieces over the last two or three years. And so I thought I'd take a stab at trying to distill your themes, sort of pick two or three major themes that maybe we could try to hit today. And see if we could sort of construct a narrative arc or connection between those themes.

So the first one that I noticed was this idea of demographics is destiny, right? Where you've got a baby boomer population that will have sort of mostly retired by a certain point, millennials will be coming into their prime employment and purchasing years. And if you model this type of relationship back through time, you can, I think, identify a relationship between demographics and interest rates, growth rates, inflation rates.

So, I've noticed that you've sort of got some analysis in your pieces that connect those dots fairly regularly. A second one, which you seem to have sort of accelerated into over the last two or three years, is riffing on this idea of MMT. Which, of course, is just the sort of a way of thinking about the plumbing of the financial system. But it seems to be used as a proxy for fiscal expansion, right? So we're going to use this concept of MMT to legitimize or rationalize a massive amount of expansion of the fiscal balance sheet over the next few years.

Following on that, there's no way to substantially embark on a period of fiscal expansion without eventually running into a wall of inflation. And what does inflation mean for the relationships between the most commonly traded assets in most people's portfolios, namely equities and bonds, right? So does that narrative arc connect for you, and did I do a good job of hitting those three themes? Or is there anything else you want to hit?

Harley: **00:13:32**

Clearly, there must be a Cliff's Notes of what I write because you got it pretty good. Yes, so in no particular order, let's just think about what we've had happen in the last decade. We have the financial blow-up, for good or for evil it occurred, who is the villain, lots of villains out there, which is a fine topic for a beer or some other hard beverage. But once we had that event, the government had to go and save the system.

Which means saving the bankers, although frankly, they all should have gone to jail, especially the boss at my firm, because we are a financial economy. We're not based upon gold, we're not based upon barter, we're a financial economy, and we're a levered financial economy. We have three, four, eight times leverage over the actual money we have. And that money goes through the system via the plumbing of the banks. So, therefore, we had to go and save the banks, that's the Fed.

And so QE1 was the right thing to do; it had to happen, villains or not. Was QE2, 3, and 4 necessary? No, it wasn't. That was a mistake, and it's still a mistake. But we had to save the plumbing. Now we've saved the plumbing, now what do we do? We have too much debt. How do you get rid of debt? There's three ways where only two of them are viable.

One of them, which is what we did after World War II, was you grow out of it. But that's not happening for lots of reasons, so let's take it off the table. So now you have default or inflate, and inflation is just a slow-motion default. So the Fed's idea was, fine we're going to go since we don't want default. Because default means people lose their jobs, money is lost, bad things happen.

Richard: **00:15:25**

Break the system, basically.

Harley: **00:15:28**

It's not even breaking the system, it's just human beings individually are harmed. What Andrew Mellon, right 1933 or whatever it says, I liquidated farms, looked at the banks, liquidate everything. But the idea was to go flush the system out, which I guess is fine in theory if you're dealing with inanimate objects.

But we're dealing with people who actually are going to suffer, then that's a bad idea as a public policy concept. So bankruptcies were a bad idea as a public policy idea. Especially if you're the one who goes bankrupt. So inflation is a fine idea, because basically, it's a tax across the country, across everybody.

And it's a silent tax, which makes it viable politically. The problem we had here is that when the Fed tried to create inflation, it didn't go to wages for labour or for people. It went into assets. So, people who say the Fed pumped in money and we had no inflation, that's totally false. We have plenty of inflation in assets, stocks, bonds, gold, real estate, gems, art. It all went up. Private equity it's just a leveraged collection of stocks and bonds.

Mike: **00:16:46**

Agreed.

Harley: **00:16:47**

So, it's the same thing. So yes, and is that public policy good? Clearly not. I mean, I did okay, I have assets, so I did okay on this thing; I suspect you guys did also. But I mean, is that public policy good? Of course not. So now we got to go to the next stage, and we're going to go and get fiscal policy to try to create the inflation in wages. How will it do that? I don't know that's slide up.

But MV money times velocity equals PQ price times quantity, equals GDP. What the fed did the first time was take M up, but V went down, so nothing changed. So velocity has been collapsing, so the idea now is how do you go and get velocity up? Well, when you give me a dollar, I'm spending a dollar, okay. That's not it, different slide. When you take velocity up, when you give me a dollar, I don't spend it; I save most of it. I spend some of it. When you give Joe six-pack a dollar, he's going to spend it. As a matter of fact, I think about from a Fed study a few years ago, 40% of households could not scrounge up $400 in an emergency.

A car repair, washing machine goes out, whatever it might be. So if they get money, they're spending it. So Fed money printing goes to assets, that doesn't work, fiscal spending via the federal government going to ordinary people, that will work. And so that's what's going to happen right now, is that. Now before we go any further to MMT, let's step back a second. This slide right here, I presume it must be up for people.

Bad News for Good People

This is the Pig and the Python, so it's talking about demographics. Demographics is the iceberg, which is 10% above the water which you can see, and 90% below the water. And this is where I base basically everything I do. If you look at this chart, which is basically thanks to … of Australia, if you're going to go and pay for a service, this is the one to do.

You see that this baby boom cohort, 1946-1964, as they entered the workforce, what do they do? They get married, they have kids. They buy a car; they buy a house, they buy a washing machine. There is massive demand as household formation occurs, and who are they buying it from? They're buying it from their parents who were working, who are then the larger part of the workforce, but that's a smaller generation.

Therefore, the supply that they can create is less than the demand from this bulge. And that's why you said rates go up, and inflation go up because of this demand. And it peaks in the late 70s, early 80s when is that? When the boomers are turning 30-35, peak spending years, peak household formation. It then travels on down on a very bumpy path, and what's interesting here is you see how it's going to turn up again.

Between 2023 and 2025, the labor force growth rate will go back up. And with that, you should see rates; inflation go back up. Because the boomers who were the suppliers of goods, we are retiring and dying and everything else that's good. And the millennials are forming households and having babies. And the reason why it's lagged a little bit is that my kids, the millennials, get married and form households at a later date than the boomers. The boomers had their first kids at like age 24-25 millennial four to five years later. As a matter of fact, this was in the Times, in the Journal last year, they did it by city. And if you look at like New York or San Fran, first child is born like age 31 in those cities. That's average. But when you have a kid, you are going to buy a bigger house, you're going to buy that minivan, and you're going to buy all the stuff. So this demand is going to come, and supply is from the boomers who are retiring.

So, that's the story of how Democrats is going to take this thing up, and then you're going to turbocharge this thing with fiscal spending that will take this giant pile of money and set it afire. Because the velocity is the match, that will set the money of fire. And I don't mean in a bad way, I just mean we're going to get the inflation that we've been waiting for and the Fed's wanted. And I'm not looking for hyperinflation, but it isn't going to be one-two, it'll be three-four. And that as a public policy short term, that's a good thing.

Adam: **00:22:00** Okay. And one of the things that struck me is you have several charts on this in your deck and in some of your reports. But you clearly have an interest in how an uptick in inflation and a commensurate uptick in rates may impact the relationship between equity returns and bond returns. What that means to typical portfolios, the typical retirement portfolios that an average retiree has to support their later years. And so I'm just wondering if we could focus on that for a little bit. What implications are you discovering? And what does that mean in terms of expectations for portfolios?

Harley: 00:22:49

Okay, I'm not going to predict the end of the world. But if I'm right about what's going to happen, then it will be bad news for good people, and the reason why is this. Do I have that there? I don't. What we've had for the last 9, 10, 11 years is, and you can find this in my website, various places, Is the correlation of stocks to bonds, and you've got to be really careful when you're talking stocks and bonds, you're talking prices or yields. For stocks, you could talk price, so the daily price movement, the daily price change, and that's legit. For bonds, you can't talk price because there is no price to a bond because the bond is always changing. A 30-year bond becomes a 29-year bond, a five-year becomes a four year, so its price movement changes. So you have to look at yield to go and make it an apples-to-apples comparison. So presently, the correlation of stocks to bonds, so stock price to bond yield is positive. Stock price to bond price is negative. So you get this negative, I don't want that one.

Go to page nine, what I have up right now. When you look at that, what drives that correlation? It's been interest rates inflation, which is the same kind of thing if you believe that real rates are near a half, let's say, 10-year notes and inflation are the same thing. When you have inflation below three and a half, you tend to get stocks and bonds to go in opposite directions. And so they hedge each other. So this idea of a 60/40 portfolio being self-hedging is kind of good. But if you want to go and really juice that up, you become Ray Dalio and become a billionaire offering risk parity. Nothing wrong with what he did, it was a clever idea, and it's worked. And what he did and other risk parity funds, and what you guys might be doing, because you're levered, is you'd have a hundred dollars, you buy $130 of bonds and 70 bucks of stocks.

That ratio is adjusted according to the correlation. So you look at the last 90 days or 120 days, whatever it might be, what's the correlation of stocks to bonds, and you do the weighting accordingly. And in theory, if you got the right numbers, then they go back and forth, and they hedge each other, and you get a positive return out of that. What happens if you get the correlation to flip? So stocks and bonds both go down together or go up together. And that tends to happen when you get inflation or rates above three and a half or four percent. So once again, here's a … chart; you can see where the breaks are in this. He has two and a half percent inflation here, let's go to, this is from Bank of America. And they have theirs at five percent. It depends how you do it, if you're looking at interest rates or inflation, CPI versus whatever, next one here is I think it was Credit Suisse.

Look where it crosses the line? At three and a half. So everyone, I mean they're all using the same data, so you're going to go and get the same result. And so that's the idea, is if we do get rates above three and a half four, then you're going to see the correlation flip the other way. And if you take the correlation and you go back 50, 60 years, 70 years, before 2009, the correlation was zero. You had half the time above, positive correlation half the time below. But over the course of 40 years, there's no correlation in that sense. But you did get the correlation to line up when you got low rates of inflation.

So, that's the great fear, can't we get rates above three and a half or four percent? No. But if it's going to happen, using my projection of demographics and then the acceleration of fiscal spending, it's going to be two, three, four years from now. And so don't panic, all's fine, save for the pool. But I think 2023 to 25 should be where we get the higher rates, and then you're going to have the correlation flip. Then what happens, everyone that's levered is going to get killed, because if you have 200 dollars of assets, and a hundred dollars of,

I'll use the word equity, I mean cash, dollars in the account and they both go down, you got a problem. And that's what happened in March, and that's what really accelerated the collapse; everything went down. Stocks, bonds, gold, everything, went down.
And, if you're levered, you've got a real problem. And that's why the Fed had to step in with the double bazookas to go stop things because you can get into a margin scenario, where you can't stop the game. So that's how bad things can get if the correlations flip. And it's the notion that you've seen everywhere, the demise of the 60/40 portfolio that's just bogus, man. I mean, if you're 60/40 and you're unlevered, there's nothing wrong with that. So they both go down, whatever. I mean, you're supposed to always be diversified, and the rule about 60/40, which is well before all this risk parity nonsense, was that you're supposed to invest your age in bonds. So if you're 25, you have 75 stocks, 25 bonds. If you're 60, you have 60 bonds, 40 stocks because you have less time to make it back. A 60/40 portfolio on an unlevered basis is going nowhere; I have no problem with that. It's the leverage that's the issue.

Mike: __00:29:08__ How do you think the, there's a couple things there. Like the 70s are a great example, the efficient frontier between stocks and bonds was, as you say, a straight line. Bonds, all they did was change the risk that you took in the portfolio. There was no enhancement; there was no curve to that efficient frontier because there was a correlation between the two assets. But at that time, you also had assets driven by inflationary pressures, they didn't have TIPS back then, but you had gold and commodities do exceptionally well. Now taking out the tail of things, because I think there's a tail hedge opportunity there in a crisis like March. So in our risk priority products, there's a large allocation or a risk-based allocation to those things that respond well in different types of inflationary pressures. How does that, does that change your view on risk parity? Keeping in mind that there is a whole other set of asset classes that will thrive during inflationary periods. And risk parity is really also firmly about including those because you have to have those assets to perform in those inflationary regimes.

Holiday Stocking Stuffers

Harley: __00:30:15__ Well, I was speaking about these pure, simple risk parity of stocks to bonds. I did not include other hedge products, or other asset classes or options, so let's be clear about that. To the extent that you guys or anybody buys into the idea that the correlation changes over time and the driver of that change is something, interest rates, rate levels, gold levels, real rates could be any of those things.
You then introduce those products into your portfolio, then you're fine. Specifically, if you go to the last page of my most recent write-ups, what do I say in there? I say two things. Number one is I've replaced, in my PA, so just as a reminder. My last write-up was called My Holiday Stocking Stuffers, where I go, and I lay out my portfolio of what I think's the best investments, that's basically my PA. And then the one before that, Wages of Fear, was a somewhat in-depth non-monetary essay on why we will have inflation in the next X number of years. So I've gotten rid of credit risk, and I've replaced it with leverage risk. Because the Fed is offering me free leverage, with rates being at zero for the next two or three years. And volatility being reduced via QE. That doesn't mean it's going away; it doesn't mean it can't go up; I'm just saying that whatever it would be if the Fed was not involved, it's lowered with the Fed involved. And so I'll buy REITs or other closed-end funds

because that's employing leverage as opposed to a junk bond fund, or junk bonds in general.

Richard: **00:32:13** Are you also counting on the Fed's backstop there? Because I was looking at that earlier, and you're talking about the Muni bonds and the mortgage REITs. Kind of sounds like you're the Fed put, which a lot of people equate to equities. But in actual fact, what they really came to the rescue was the corporate bonds back in March to allow the plumbing of the system to avoid the clogging of that plumbing. So it sounds to me like you're kind of counting on that backstop. Would that be accurate?

Harley: **00:32:43** Yes and no. I do think that the Fed will dampen volatility. I also think that over the course of time, the markets are bigger than the Fed. We're not going to become Argentina, but markets are markets. And also, by the way, a steeper curve is not a bad thing. Fed holding the front end at zero or one, and the back end going to four is not a bad thing. As a matter of fact, as a public policy concept, it's a great idea. Because insurance companies, pension funds are getting killed with low rates. To the extent that right now, with a very flat curve and very low rates, there are people who get hurt, okay. You are taking money from A and putting it in B's pocket. The insurance and pension funds are getting killed over here; savers are being hurt to the extent that we steepen the curve. But we allow people to borrow over the front end at a low rate, that's okay also. So I don't think the Fed needs to keep the curve flat to accomplish its job. But back to your other question, what I've done in my portfolio, and what I'm trying to devise for, I will call them civilians, non-professionals as a way to buy, to get longer-term protection.

What I've done is I've bought this long-dated option that's struck at three and a half percent, and the idea being that if I could buy a long-dated option at three and a half four percent. That if rates do get up there, I'm stopped out. And with vols very low, and four percent being very far away. I mean, we were there a few years ago, but from where we are now, it's very far away. it's an option, it's very cheap. You could own a lot of these leveraged assets, closed-end funds, REITs, whatever. And they're not going to get hurt until rates really get up there; I mean, the mortgage REITs probably own a lot of Fannie Threes, I'm going to guess, maybe some three and a half's. And so those bonds really don't get nightmarish until you get those things below par. And then they extend out, and they get killed. How about a close? I mean, you guys don't care, but I mean I do.

Closed-end muni funds in California, quality funds. So no junk. You could buy national funds, make sure it doesn't have Puerto Rico, Illinois, Connecticut, New Jersey. I mean, you don't want that crap. But other diverse states, my California fund yields four, four and a quarter, four and a half percent, what's wrong with that? Now how do they get that return? They get it because they probably own four percent callable bonds.

So the fact that they're paying out a four and a half yield doesn't mean that the bonds actually yield that because you can see the NAV declining. These bonds are probably, they're probably priced at 112 on their way to par. So I'm getting the four percent coupon, but these bonds are going to get called eventually and get reinvested at a lower rate. So you got to be careful about that. But what's the problem with that four percent Muni bond, is that right now, it has four, five, seven years to go because they were issued three-four years ago. If we get rates above four, they go from being a five year to a 25 year. Then they whip on out, and then you have some real rate risk. Well, if I buy an option struck where that inflection point is, I'm basically buying back that extension risk in the closed-end fund.

Mike:	**00:36:33**	That's great, I love that. It kind of dovetails on Corey Hoffstein's question about, a big fan of your work and your Stocking Stuffers. When you're thinking about your trades, are you thinking them as one-off or as integrated? Are you considering your trades in isolation versus a collective portfolio? And I think it's opportune to add that question there because it sounds to me like there's a lattice work in the portfolio that is accounting for certain things. So, the Muni bonds are there, but there is a hedge to the potential destructive tide that could come in by rising rates in those Muni bonds. So maybe you can continue to chat about the Muni bonds and the hedge, but also in the context of the rest of the portfolio. Do you continue that sort of lattice work of consideration?
Harley:	**00:37:23**	It does hand and glove together. As long as the rates stay three or below on the 10-year, I think almost everything is fine. Is it going to happen by share luck or by the Fed or by demographics or by the economy? I'm not sure of that.
Richard:	**00:37:46**	Are you concerned at all with yield curve control?
Harley:	**00:37:51**	Well, yield curve control is just QE on the back end, so yes.
Richard:	**00:37:56**	Right …
Harley:	**00:37:58**	I have no idea why I mean call, … or Rich Clarita; they have an idea, what they want to do is unclear. I mean, with inflation at two, you know one choice, inflation's at five because it makes sense for them to keep on buying bonds at two and a half percent, probably not. Because then you're going to end up with a currency problem. I mean, the money has to go somewhere, and the Fed certainly cannot control our currency, at least not yet. I suppose they could if they wanted to, but to date, you would have never seen the U.S. government intervene in FX markets. They've jawboned a few times, but they've never really gone into the markets and bought and sold.
Adam:	**00:38:43**	Why are we not concerned about credit risk on mortgage REITs.
Harley:	**00:38:49**	Well, I mean A.G. and …, they only buy Fannie, Freddie, Ginny bonds so they can't default. I mean, I guess in theory, I guess Fannie could default, but not.
Richard:	**00:39:02**	Federal backstop again.

High Yield REITs

Adam:	**00:39:03**	So, the reason why the mortgage REIT ETF yields whatever it is, eight and a half percent. Is that because of the callable nature of the bonds? Like, help me understand why this yield is so high and why the beta of that fund, as an example, is close to two vis-a-vis the S&P.
Harley:	**00:39:31**	The beta has to do with the leverage, which is tricky. What is a mortgage REIT? Let's just look at a simple REIT that only buys Fannie three and a half's. So what do they do? So you give them a hundred dollars, they take a hundred dollars, and they buy seven hundred dollars of Fannie three and a half's. So they have to borrow 600. So our first step over here is they're borrowing 600 bucks; where are they borrowing it at? Well, they're borrowing it LIBOR plus pennies. What's the risk? The risk is that rate goes up, right? Their borrowing cost goes up. And forget the movement of the three and a half's for now of the portfolio; it doesn't move. If that rate goes from 0.25 to 1.25, well, all of a sudden, the amount of yield you're going to earn out of that thing gets collapsed by a lot. So they have to go and hedge that front end. Well, right now, you don't have to hedge, or if you do, it's very cheap because the Fed said I'm not taking rates up for two and a half years. So risk number one, that's gone or very cheap to hedge. Risk number two is you buy your 30s or 30-year mortgages, the price of that could go down, okay. So what do you got

to do? You have to go and sell 10-year treasuries, 10-year swaps, 10-year futures, some number.

But you're selling some kind of duration asset; then it goes down, rates go up, so you're shorting something. The risk you have there is the spread between your Fannie mortgages and your 10-year treasury moves around. Well, that risk is going to, exists and isn't changing, but it's reduced because the Fed is buying what 30, 40, 50 billion a month of mortgages. So whatever risk is there, it's not gone, it's just reduced. As long as they're buying those mortgages.

Then finally, even if that's spread between the two rates, the mortgage, and the treasury, let's say it is fixed at 50, I'm making up a number, and it goes up and down as rates go up and down. The ten year is always going to be a ten year, and in the current world, it's going to move like eight points for every 100 basis points of rate change. The mortgage will move in a different manner. It's negatively convex. There's an embedded option in the mortgage. Who owns that option? Regular ma, pa homeowner, right? If you have four percent rates, the rates go to three, you're going to refinance. So that bond, it's gone, poof go away, and a new mortgage gets issued. So if rates go down, that security goes away.

So, in a lower rate environment, that rate might only go up three points given stuff. If rates go to five percent, well, you're never going to refinance because you have a four percent rate in a five percent world. So all of a sudden, this goes from being up whenever X years to being a 30-year mortgage, so more like a 10-year bond. Well, now it could drop like a stone if rates go up. That negative convexity is actually the biggest risk they have. How do they hedge that? They go, and they buy long-dated options, two and three-year options that kind of mimic the convexity of a mortgage security. Well, what do we know about that? That option is now at ah; I should bring this up. Let's go to the videotape; there we go.

Mike: **00:43:30** You want to share the screen, there we go, yes.

Harley: **00:43:34** This is the Move Index, it's not exactly the same as the price of a two-year option on a 10-year rate, but it's close enough. And you can see that we're basically sitting at forever lows. We're not at the rock bottom low, but it's pretty low over the history of last 40 years. And so the cost of buying back that long-dated convexity option is now as cheap as it's ever been. That's why mortgage REITs are able to yield eight, nine, ten percent because they're using the leverage, but the cost of buying back all the risks that they've sold into the market theoretically. The funding risk, the duration risk, the convexity risk is very cheap to buy back. And that's what's going on.

Adam: **00:44:28** So, if I look at the chart of, for example, the mortgage REIT ETF and I look at what happened through March. Can we attribute that 50-60% decline in March to exclusively to refinance risk, then?

Harley: **00:44:44** No. Because we only spoke about … AGNC that primarily use Fannie, Freddie, Ginnie mortgages. The other REITs out there will do other things. They will buy adjustable-rate mortgages, ARMs. They will buy AAA prime mortgages. So, if you want to lend money to someone who is buying a house that's more than 700 thousand dollars, that guy can't get a Fannie mortgage because it can't be sold to Fannie or Freddie. So, there'll be a private label mortgage. If you want to go, and there might be loans to commercial CNBS, commercial mortgage securities. And so those loans, they went down much faster than Fannie and Freddie, because they had credit risk that could be well, that'd be a problem, right? The rich guy could go bankrupt and not pay his mortgage back. So a number of REITs got really crushed on that.

What you saw happen in March, April is everyone got margin called at the bottom. And they were forced to sell at the bottom. And that's why the book value of a lot of these guys got clipped, and it's never coming back. Because they were forced to sell at, they had a bond that was trading at 105 in February, and they were forced to sell it at 80 in March. And, of course, that bond is back to 100 now, but they were forced to sell at the bottom on a margin call. And then you have other mortgage rates who buy mortgage servicing, which is an entirely different animal, which we can spend lots of time talking about. And there's pros and cons to using mortgage servicing as an asset. And so the ETF you're looking at has all those different kinds of REITs in there, and it depends what kind of risk you want to take. I own all of them, well, not all of them, many of them. The AGNC is a leveraged bet; you got seven to one. If you go buy PennyMac or NRZ, then you're looking at having servicing in your portfolio. And you're only leveraged three or four to one. So you have less leverage but a different mix. They're all the same concept, but they're different.

Adam: **00:47:20** The idea I think what you're trying to, the idea you're espousing, is that you like mortgage REITs, but specifically, you like the ones that are backed by Fannie, Freddie by the agencies. And though, and the risk that you're taking on those is exclusively limited to financing risk, refinance risk, and duration extension risk if rates go above a certain level. And you can hedge that risk explicitly for some of the lowest costs in history. So the real risk you're taking there if you put the hedge on, is just a leverage and a refinance risk? And those, you're accepting those, but you're getting paid a very large spread over treasuries for accepting that risk on the order of six, seven percent in excess yield?

Harley: **00:48:21** The answer is yes. I mean, I own a bunch of different REITs. I've basically spoken mostly about the simple REITs because the risks are straightforward, and can be explained, and people understand them. And there's very little execution risk involved. Whereas if you start investing in mortgage servicing, all of a sudden that's a very complicated asset, and it requires a lot more I.Q. to make that work. And there could be mistakes that occur. I mean, one of the reasons you saw a number of the REITs that had mortgage servicing get crushed was because the servicer. If I own a home, let's just say, and I have to pay my monthly mortgage. I don't write a check to the bank anymore; that mortgage has been sold. And there's a servicer who has it, and he basically takes the money in, chops it up, and sends it on out to investors who want bonds. And let's just assume these are Fannie and Freddie bonds, so they're government guaranteed.

If I don't pay for three months, that servicer has to still send the money on to the bondholders of Fannie and Freddie. And now what will happen is the mortgage defaults; it gets cleaned up. Fannie and Freddie then give that money back to the servicer. So he's whole; he doesn't get hurt. But he has to go and fund that loan that, the advances he's made until he gets the money back from Fannie and Freddie. What if he's a small fry, and he can't dig up the money? That was the big problem you had in March, April, May. It was that we didn't know if the mortgage servicers could fund their advances, the money that they're giving to. Because the people who own the Fannie, Freddie, and Ginnie bonds? They get their money every month, life or death, no matter what. The government will not default on that. So the money has to come somewhere, so that was the risk there. And there was uncertainty as to whether some of these REITs could actually dig up the money for that.

MMT and Inflation

Adam: **00:50:30** Thanks for that briefing on REITs, because I know that that's a big chunk of what you're sort of recommending as a sort the 2021 portfolio. So it's good to dig into some of the details there. If you'll indulge me because I know a big part of your thesis is that we are going to see inflation. It will be accelerated by this MMT narrative and the fiscal expansion that it is providing an excuse for. What other assets do you think are positioned to do well in an inflationary environment? And how can investors get positioned effectively in those assets?

Harley: **00:51:16** Well, I'll say, I'm a monetarist, and I do think you will have inflation. You cannot print money faster than the growth of the economy without inflation, has not happened in five thousand years of human history. It can't happen now. That said, it could take quite a while, what's our investment lifetime? 40 years? I mean, the Roman Empire took 400 years to go down. I mean, it could be quite a while. And it could easily be 20 more years before we get the inflation. I think it's going to be three to five, or now it's two to four. But I could be wrong on that. But if it wasn't the case, that was the situation, then why wouldn't every government in the world just print all the money they want, give to the poor people and then all of a sudden everyone's rich, like why won't we do that.

Mike: **00:52:10** Money's confidence, and you have no confidence if you do it all at once. That's why you boil the frog slowly, or you do it through a nice, easy two to three percent inflation, isn't it?

Harley: **00:52:22** Well, we could point to Japan; I suppose, Japan is always a push back. They have no inflation, and they have now what 320% debt to GDP.

Richard: **00:52:31** The demographic factor I think in Japan plays a big role there. And the fact that their large pension plans as well as their biggest insurers, and from a regulatory standpoint. There's I guess, "regulatory capture" in the sense that they're forced to hold JGBs, and that's why JGBs have been for 30 years the Widow Maker trade, right? You try to short that, you try to short it, and you just can't get it. Which is I guess German bunds have become part of that lexicon in the last five years, because yes, it's going down the same path. But I wanted to ask you, Harley, what would change your general, this main hypothesis that you have. That this mint thesis that is rates are coming up because of inflation. So Lacy Hunt talks about how not before the Fed's liabilities have become legal tender will we see inflation. So, he remains in the deflationary camp until that triggers. So I'm sure you're familiar with that, with him and his idea. So what do you think about that? And what are some of the variables that you're watching that might pose a challenge and would make you change your mind on your general thesis?

Harley: **00:53:46** I mean, Dr. Hunt has been dead right for 30 years. And although I think it's a technicality, I mean the idea that Q.E. is not money printing. It's kind of like a magic trick. I mean, just because the treasury issues bonds to Merrill and Goldman and Solomon, and then they sell it to the Fed as opposed to the treasury selling …, it's the same thing, okay. All you're doing is giving a couple of ticks to Wall Street on the way through. It's kind of like the beer you're drinking, you're borrowing it before it meets its end. So we already have the money printing; the bigger issue is the velocity. What would make me change my mind? Well, nothing. I mean, I know I'm right; I just may not live to see it. So the question is, what would make me not think it's going to be in 2023-24.

Richard: **00:54:46** It's a time frame issue, yes.

Harley: **00:54:47** It's a timing issue. I suppose it would be if we go through this MMT period that we're about to enter right now, and you did not see any material growth in nominal GDP. So basically, the money gets printed and just evaporates. And Lacy talks a bit about that, talking about the leverage factor of money printed or debt versus what kind of GDP you get out of it, and how it's kind of declining, declining to declining. Although, really is just a flip coin of velocity. So, it's all the same thing, the money has been printed, and it's gone into assets. Will MMT, forget MMT, well, fiscal policy, and that's what it really is. I mean, who cares if they print the money, you got to spend it. Will fiscal policy elevate nominal GDP? The answer should be yes. Because they're targeting people who spend, as opposed to targeting us, that's what it'd be. By the way, just quickly, let's go back a second, wait one second. On Japan, I disagree with that comment slightly. I think the big reason is not the pensions per se, but the fact that they owe the money to themselves. The debt is not external.

Richard: **00:56:05** Not foreign-owned, yes.

Harley: **00:56:08** Right. And then number two is the Widow Maker might, I suppose, has been their bonds. You could control the bonds; they actually can't buy as many bonds as they want. So the real trade is not the rate of JGBs it's the currency. That's the conundrum here, is why the currency hasn't blown up, because the U.S can't, we could keep rates at one percent on ten years, the Fed can do that. But the currency is going to collapse then, and that's what they can't control. So I have traded Japanese currency, and I've made more than I've lost, but I will tell you, sitting here at 104 as opposed to 125, I am a bit surprised.

Mike: **00:56:49** The other thing is the collapse in the U.S dollar is inflationary, I suppose. I mean generally. So on sort of the fiscal side, and the sort of fiscal policy, MMT, targeting sort of the low. I'd love to get your comments on this as a monetarist and someone who has more knowledge than myself. I always get tripped up by the idea that we're going to have this centrally planned economy, where governments of the world are going to decide that what we're going to target, or the fiscal policy is going to target this inflation, or sorry employment rate.

And that we're going to have resulting productivity out of that in some shape or form that actually grows the economy more than the cost of the spending of the extra dollars of the fiscal policy. I mean, I think it could be done, I mean, I think it probably was done to some degree in the, what was it called? The Big New Deal or the Big Old Deal, I can't remember.

The Green New Deal

Richard: **00:57:55** Are you going on a Green New Deal, is that it?

Mike: **00:57:57** Well, that's it, the Green New Deal, 3 trillion, right? So you spend a bunch of money, it puts a bunch of people to work. Like you say, you put into pockets, and hopefully, it goes to things that for the next 100 years, there's so many projects that were built a hundred years ago that are quite, they're actually relevant today. So, to some degree, it was done well, I just wonder about the ability for those in control of fiscal policy to actually figure out the most productive assets rather than Adam Smith's invisible hand. That's where I get tripped up. But I'm not sure if that makes sense at all if you want to comment on that or.

Harley: **00:58:28** I am not optimistic that the government is very good at allocating where money should go to, for a variety of reasons. One, because it's hard to do it, for anyone to do it. And number two is there are political forces at work, away from just the actual money return. So I'm more of a believer in the invisible hand, I suppose. Productivity, by the way, is not exactly related to any of those things.

Mike: **00:58:59** Yes, what should we do? If you were at the master switchboard, what might you suggest we do?

Harley: **00:59:08** Where the Fed has been guilty going back 12 years, actually really more like 15 years. If you want to go and start the curdle of truth was that 1998, when the government started saying we're going to make more housing loans to lower-income people, below the credit quality of what we do. And that started to increase the credit risk in the mortgage market. And then skipping ahead to 04, 05, 06 when the Fed said we could take rates up at a measured pace. This is the key. When they said measured pace, they meant I'm taking rates up 25 basis points every six weeks from here to somewhere higher. When you do that, you basically create moral hazard because now you know that rates can't go up 30 basis points in the next month or six weeks because the Fed told you.

Then you go, and you can take on massive leveraged risk because the Fed has said we're going to go at a measured pace. Not at a random pace, a measured pace. And to the extent that the Fed does that, they created leverage in the system, over-leverage, overconfidence, moral hazard. And so the housing downturn was not the bad thing per se. It was that people were massively over-levered and short convexity, optionality, all the bad things. They're doing the same thing again.

Mike: **01:00:49** I was just going to say you're laying the bread crumbs I'm following, I feel like they're doing it again.

Harley: **01:00:53** They're creating moral hazard, at which you see me picking up the breadcrumbs. I'm saying take leverage risk, they've just said this over here. I'm not going to fight the Fed. I mean, three years from now I might be sorry. But I mean, for right now, the Fed has said take leverage risk because we're not moving rates. Now the idea is that people will spend money in the economy, which we saw didn't happen.

But this is the big risk here. So what I'd like to do is have the Fed pull their hands back from the market. Capital markets are very important for lots of reasons, they're channelling money from grandma, who has a set of assets, and Wall Street then funnels that money through its pipes over to a start-up who's beginning a business, they're going to hire people, that's a good thing, right? That's what Wall Street does. We're the plumbing. And we take money from savers and give it to people who are growing businesses. That's all fine and dandy. What is the price to transfer that money at, and what's the price we're going to go and lend the money at? You need the market to signal people as to what that should be. So they take the proper amount of risk. And right now, what the Fed is doing is they're screwing up the market signal.

They've removed the market signals; we're just basically investing blindly now because we really have no idea. And the worst case is in corporate bonds, junk bonds actually. Because they've taken the rate down, and we have no idea what the real risk is. And the fact that government has put money into the system, that has not increased the creditworthiness of these companies; they can still go bankrupt. But the signal we usually get, which is the bond prices go down, equity price goes down, that's missing. And so it's really causing, people have no idea, no one, we're driving blind right now which is a real problem. And I would like to go in and get rid of those problems. I mean, saving the system in March, April is fine, but trying to hold, I mean, junk bonds at 4.9 percent? Like that's nutty man, I mean it's just nutty. So I would get rid of that.

Richard:	**01:03:11**	I remember reading something today, I forget where it was, that said that the more the Fed screws up, the more dependent it makes the system on itself. So the worse it does at the helm, the more we need it because of the way that their policies are forcing everyone to depend on this theatrics of central banking and forward guidance and all the moral hazards that you've been describing. So, what is the way out? It seems like we're stuck between a rock and a hard place with no good options going forward. They're crying for fiscal policy to save them and to rekindle the animal spirits that QE hasn't been able to do. So?
Harley:	**01:03:54**	I think in 2013, they missed the window. You know the Taper Tantrum, that was the window for the Fed to go and release the market, release the kraken. Release the market, and try to get some normalcy back, so markets are functioning independently. And the window was there; they could have done it. You can't do it in last March; you can't, people are going to get hurt. And at some point, you get to a situation where it's almost impossible enough for the Fed to get out; the debt is too big. And when Volcker applied the screws to the economy in 1979, 1980 debt to GDP was about 30 percent. Now we're at 110, 90 somewhere there.
Richard:	**01:04:52**	Depends how you measure it, right? There are some measures that, with all the federal obligations that would put that amount much higher than the 110.
Harley:	**01:05:04**	Indeed, it would. But let's just do apples to apples, if we're 30%, my teams is 80, and we're 90% now. Taking rates up by 100 or 200 is a whole different animal in terms of the harm, damage it would cause to the economy. And so the Fed has now kind of got themselves kind of boxed in where they really can't take rates up a lot without causing trouble. Now I think back-end rates can go up; front-end rates a little more challenging.
Mike:	**01:05:32**	Yes, that's interesting. The long-term rates, if they go up, obviously there's, I think, some threat to very large weights in certain equity market cap-weighted indices that are priced to perfection based on those long-term rates. Some are prime for rotation.
Harley:	**01:05:49**	There is the story that like Amazon, Google, Facebook, Apple, all those things are basically 50-year bonds, that they're going to make a lot of money, but it's not going to be for a while. And so you have to take those earnings and pull them back, pulling them back at a one percent or a half percent rate is a whole different present value than a three percent rate. I mean, the current 30-year treasury, I think, has a risk profile about 22. So if rates go up when it's like 160, 170 now for the 30 years, you take that rate up a 100, the bond goes for 178. That's just hundred, and I mean, and so if you have a 50-year treasury, which is what maybe Apple or Amazon is, and you take rates up by 200, yes. If you believe in that theory, it's not pretty.
Mike:	**01:06:46**	Are there any inflation, sort of parts of the market. So inflationary parts of the market, let's say oil and gas or gold, or areas where you're seeing opportunity to take advantage of some of the equity risk premium involved in those, and the potential for them to either provide a yield. Whether it be like high yield but in oil and gas or MLPs. Are there any areas of the market where you're seeing opportunity, where you think the inflationary tailwind will actually benefit that area? And actually, help it make those coupon payments, or is that something that you look at?
Adam:	**01:07:22**	Guys, I'm sorry, I'm going to let you guys go because I've got, like I said, officiate a swim meet right now. But you guys carry on, and Harley, really nice to meet you, and thanks so much for the great conversation.
Harley:	**01:07:34**	Yes.
Adam:	**01:07:35**	See you guys.

Richard:	**01:07:36**	See you.

Gold, Bitcoin…

Harley:	**01:07:38**	So MLPs, I wrote about those a year and change ago, that didn't work a lot. Unclear to me, MLPs are a financial Ponzi scheme, or it's just a matter of bad leverage. They've gone down, they've come back up again. The trades that I advocated were option trades; I still have them on. I'm not sure what I think of MLPs, because the beta versus oil interest rates and S&P clearly is not working because these things are still down by over half from where they were. Gold, I own gold. Personally, I'm not a gold bug.
Mike:	**01:08:22**	Do you own the gold outright? Do you own producers? Do you do any option strategies on that?
Harley:	**01:08:29**	I prefer to own direct gold in some manner, fashion or form. Because the producers have a lot of leverage, but my experience with them has never been good. Because when things go well, they manage to burn the money. I mean it's like, I mean owning an option on gold, which is what the miners are is terrific. But these guys seem to get a little crazy whenever things really get going. So I'd rather have more certainty than that.
Richard:	**01:09:00**	Do you consider owning one of the gold ETFs, an outright, or are you, you'd rather own either the futures with the physical delivery or the actual outright bars?
Harley:	**01:09:11**	GLD is fine. I mean, if you want to own gold outright, then you need a gun and a safe.
Mike:	**01:09:18**	Buy some ammo and some beans.
Harley:	**01:09:20**	Yes. But I mean, the miners are fine, I mean, if you regress them versus the gold price, they look cheap actually, and they'll probably do well. I've owned gold since 2000 - I don't know 14, 13, whatever it is, and I haven't touched it. I had a position, I have a size, and that's what I own. It's a very long-term hedge against really bad things happening.
Richard:	**01:09:47**	It's a currency, right? It's a currency that can't be debased.
Harley:	**01:09:50**	That's exactly what it is, yes. Which is why Warren Buffett was wrong. Warren Buffett was comparing it to how many Exxon's and farmland you can own, and he says you don't get a yield out of it, no. It's the same thing as owning 100 euros, it's a currency.
Richard:	**01:10:06**	Yes. Do you come close with a 10-foot pole to the big bad B-word of the day, Bitcoin?
Harley:	**01:10:14**	One of my favourite write-ups, it's on my website called Tulips for the Masses. Bitcoin is a speculative vehicle, it's like pork bellies, but you can't eat them. If you want to go trade Bitcoin, be my guest. Can Bitcoin go to 100,000? Of course, it can. Can it go to zero? Yes, eventually. Two things, one it's not a transactional tool. The amount of transactions Bitcoin can actually handle is microscopic compared to the millions a day that Visa does. It is not a transactional tool. Number two, it is not a store of value.. Store of value means I could buy X loaves of bread today. I don't want to buy the loaves of bread today, I want the bread tomorrow, so I put it into something, dollars and I could buy my loaves of bread tomorrow. That's what money is; money is unspent goods.
Richard:	**01:11:23**	Let me take the other side of that argument, just for a second, just for argument's sakes. Why does gold have any value? I mean, one might argue that there's a narrative around gold. It's been around for thousands of years as part of humanity's ballast towards any form of currency. And then, after Bretton Woods, we decided to do without it. But wouldn't you be able to argue that Bitcoin might eventually compete for that narrative that affords gold value?
Harley:	**01:12:00**	Yes. But my point was it's not a store of value, because it has like a 60 vol to it. I mean, the yen has a six VOL, the euro is seven vol, … the Russian ruble has a 14 vol, okay. So on a relative basis, gold is microscopic compared to Bitcoin. I mean, it's a speculative tool, and on top of it, here's why I think it's crazy. It's an act of war against a sovereign nation, and

at some point, governments of the world will go and crush it. In the U.S, how it will get destroyed is they're going to demand that you file an FBAR, FBAR foreign bank account, they'll do that someday. Because that's what it is, right? it's a foreign currency and held outside the U.S; it's a foreign bank account, which is legal, okay. I mean, I had an account in Europe, and I filed a report every year, it's legal.

You just can't hide it; you hide it, you go to jail. And once the government goes and demands that, and people say, well, I could break the law or not break the law, it's not going to go well. How did Al Capone go to jail? It wasn't for**,** it wasn't for killing people, tax evasion.

Mike: <u>**01:13:25**</u> Mail fraud, wasn't it? Mail fraud and tax evasion, anyway.

Harley: <u>**01:13:28**</u> At the end of the day, I mean the government is not going to allow Bitcoin to be a legal tender for paying taxes.

Mike: <u>**01:13:37**</u> Now, it has to evolve to something like gold, or some sort of store of value. And there's lots of evolution that has to occur before that happens, obviously, adoption and whatnot.

Mike: <u>**01:13:46**</u> And by the way, and we already have an electronic currency, it's called Venmo. I mean, we really don't need a new system for this.

Mike: <u>**01:14:00**</u> And we're running an hour and fifteen minutes, and I always like to; I'd love to thank you to think about our offer. Harley, what do you think a couple of sort of unexpected major surprises might be over the upcoming 12 months? What are things that just are our views not widely held, that you think are maybe most likely? So, it's a bit unfair because you could see something very obvious this year. Well, this is happening, and it's quite obvious, or it could be, well, things look kind of normal. But what would a couple of surprises be for 2021 that you think the general market is not quite seeing or pricing properly.

<u>2021 and Beyond</u>

Harley: <u>**01:14:43**</u> Well, I mean, I liked that question a lot more two years ago because of the politics involved. I still think that the biggest risk we face is not trade per se or taxes, or even fiscal policy, it's an immigration policy. And that's because the reason why the U.S has done so well, and you already hit on this before with Japan, is the labor force, the demographic. You've seen Europe, Japan, Russia they're all getting killed because the labor force is shrinking. In the U.S, we've had a growing labor force. Now, you might say that immigration is bad politics, or you don't like it, but immigration is people, and they arrive, and they work. And they do pay taxes okay, maybe not income taxes per se.

Mike: <u>**01:15:38**</u> Sales taxes.

Harley: <u>**01:15:39**</u> Sales taxes, they're renting a house, and the guy who owns that house pays his real estate taxes. So they are paying into the system. You can get the nitty-gritty about schools and hospitals. From a macro standpoint, immigration is increasing the labor force, and to the extent, we reduce that, that's how you kill my whole story. My whole story is based upon labor force growth rate, and so that would be the worst that would happen.

Richard: <u>**01:16:07**</u> And labor participation rate, right? Because one of the things that doesn't really get talked about all that much but has been happening is a steady decline of the participation rate in the labor force. So, I guess the ability to keep bringing in able-bodied people to keep fuelling the labor force helps to backstop some of that decline. That will accelerate as the baby boomers go into retirement, would that be accurate?

Harley: <u>**01:16:38**</u> Sure. And of course, I mean the boomers have to go and sell assets, one just to live, but two legally. I wrote this up, I guess, two or three articles ago, about the projection of IRAs and what has to get sold legally once you turn 70 and a half. And I presume that most boomers have active management equity accounts, whereas millennials have SPY or something like that. … don't give advice to my kids anymore, they've all done much better than I have in investing.

But they're going to sell equities, and they're probably going to buy bonds. And so that's a headwind for the stock market. I still in the near term, the trade that I like for ordinary people is these long-dated risk reversals, where you buy these out of the money calls, out two, three years, and you sell out of the money puts. So, the last one, I mean, I wrote about one of them six months ago, where you did the 360 versus the 240, and then this year's Stocking Stuffers, I think was the 415 versus 275. Down there, 275, 250. I mean you're talking PE's of 14, 15, 16. Those are not bad numbers to have. And if fiscal policy occurs, in the near term, that should be good for nominal GDP, which will be good for stocks. Will you get inflation three years from now, and that'll be bad for stocks because PE's will go down accordingly? Yes. But I mean, two years is a long time away, man. So I kind of …

Harley: **01:18:34** You got to call in for 2022; you don't get those today.

Harley: **01:18:38** That's right.

Mike: **01:18:40** That's fantastic. Any final thoughts, anything you want to offer? We've talked about where they can find you, at the, what is it again?

Richard: **01:18:50** Convexity Maven

Mike: **01:18:51** … I was going to something but Maven something, but Convexitymaven.com. Is there anything else that we should, any other pearls of wisdom that they can find you at? Any places where they can get you?

Harley: **01:19:01** No, I am not on social media. I'm a believer that the matrix is the gospel.

Mike: **01:19:07** Got it, fantastic. Well, thank you very much.

Richard: **01:19:12** Yes. Harley, you're very generous with your time, and this was great; I hope we get to do it again sometime.

Harley: **01:19:17** Thank you.

Mike: **01:19:19** And if you have any issues with what Harley said, make sure you hit him up. It's what he's here for; he wants to get his thoughts challenged.

Harley: **01:19:26** You're welcome.

Richard: **01:19:28** All right, guys.