



Dr. Lacy Hunt: The Bond Bull Market is NOT over!

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Erik: Many investors claim to have been around way back in the day when Alan Greenspan was Fed Chairman. Today's guest, Dr. Lacy Hunt, defended his PhD thesis 50 years ago in 1968, back when William McChesney Martin headed the Federal Reserve. He served as HSBC's chief economist and has held many other very senior roles in the industry.

Today he is with Hoisington Investment Management and he has been spectacularly consistent and spectacularly right about Treasuries for many years.

With so many other experts in the field declaring that the bond bull market is over, and that a new secular bear market in bonds is on the table, Dr. Hunt, we wanted to get you back for your view. Do you agree with the people who are saying, okay, that's it, it's over? And, if not, what is the bullish argument for the bond market?

Lacy: I do not agree, and I have to admit it's a lonely position. My view is that we are going to see lower long-term Treasury bond yields in the years ahead. I think the best and most complete and consistent theory of interest rates was provided to us by the late Nobel laureate, Milton Friedman. And the main conclusion of Friedman's theory is that monetary decelerations such as we're having today ultimately lead to lower interest rates and not higher interest rates.

What Friedman had in mind is that, when the Fed engages in a tightening of monetary policy – what he called a liquidity effect – this tends to raise the short-term rates, but it begins to restrict the flow of money and credit. If this liquidity effect is repeated several times, it will eventually produce a countervailing income effect in which the rate of increase in interest will be slowed as the economy begins to moderate its rate of expansion.

And if the monetary deceleration extends for a protracted period of time, ultimately the inflation rate will fall. Hence Friedman's conclusion: Monetary decelerations ultimately lead to lower interest rates, not to higher interest rates.

Erik: Okay, so if the secular trend is still toward lower interest rates, how do you at Hoisington think about a situation like we have today, where so many people disagree with you? Does that just create a variant perception and a better opportunity to enter new long positions? Or how do you look at this situation where so many people have an opposing view?

Lacy: We focus on a multi-year trend. We do not believe that short-term developments in the credit markets are predictable. But we believe, over time, the economic fundamentals can be assessed in terms of their major trends. And there are a couple of things that we're focused on,

aside from the fact that a major monetary deceleration is under way.

And that is the United States economy, all the other major economies of the world, and now the emerging economies of the world, are pursuing a path of extreme over-indebtedness. And our research believes that this path actually triggers the law of diminishing returns through the production function.

And so, while massive increases in debt can lead to a transitory boost in economic activity, this effect is relatively short-lived. And, ultimately, higher debt undermines economic growth. So over the longer term, extreme indebtedness leads to weaker economic activity, which, of course, is consistent with lower inflation and lower long-term bond yields.

Erik: If the argument for lower long-term bond yields is basically that there's way too much debt – over-indebtedness – around the world, it seems to me an opportunist might think, wow. If you understand this picture, as you clearly do because you've been remarkably consistent and remarkably correct about this for many years, it would seem like an opportunist would be inclined to go pursue something like shorting the high-yield debt and so forth.

But at Hoisington, you focus only on duration management in the Treasury market. Why is it that you focus on that and you apparently have chosen not to pursue what seems to me would be an opportunity for someone with your perspective and knowledge, which is to look at something like shorting junk credit?

Lacy: First of all, we are investment managers. We're institutional, fixed income only. We only operate in the US Treasury space. And we take no credit risk. We have a relatively small staff. Our objective is to pick up these major multi-year trends. And, over the last long period of time, we've been able to rather consistently outperform the Barclays Aggregate, even though we've given up the higher coupon that one would have obtained if they had invested in the spread product.

So we're strictly duration managers. If we think that the multi-year trend in interest rates is upward, then we'll go to the short end of the curve. But we don't short the curve, we just go into the shorter maturities. And if we think the longer-term trend is inflation is downward, then we hold a very long duration as we are now.

Erik: And you are now at your maximum duration, so it seems like there could be an argument to cut back on duration risk and see whether or not the other people who are pushing the market create an opportunity.

Do you just not trade that way? Or do you believe fundamentally that now is the time for maximum duration exposure?

Lacy: Well, we're not at maximum duration. Our duration is in excess of 20 years. We could, if we wanted to and we thought the circumstances warranted it, we could buy all zero coupons

with a 30-year duration. We're not that bullish on the outlook. But we are very bullish and we think that's the long-term trend.

Erik: Okay, and what are the factors that lead you to that? Right now, you say you're just over 20 years in your average duration. What is it that leads you to believe that's the place to be on the curve right now?

Lacy: Well, let's talk about it both on the production side of the economy and on the demand side of the economy. On the production side, the production function is determined by the three factors of production, which would be capital, labor, natural resources – and the level of technology.

The demographic factors right now in the United States and the rest of the world are very weak. In the United States, we have a bust in the population growth rate, we have a baby bust – fertility per 1,000 women fell to a new all-time low in 2017, that was just released. We have a family formation bust.

The demographics are even weaker in Europe than they are in the United States. And in Japan, the population is not even growing. It's actually declining. The US economy is getting older. Europe is even older. Japan is older still. And, even in China, although the demographics are much better than in the US, Japan, and Europe, they are deteriorating there. And so the possibility that we get a boost on the production side from labor is limited.

Natural resources as a factor of input had been relatively stable. We've made certain new discoveries. But we've also used up existing resources. Natural resources haven't been a factor for a long while.

And the way most governments in the world have tried to boost output is through taking on more debt. And so we pushed it through capital. One of the derivatives of the production function is the law of diminishing returns. If you begin to increase labor input, initially you'll boost output. If you continue to boost labor input, the rate of gain will slow, then it will turn flat, eventually will turn negative.

The same is true in the current situation, but the active variable is debt.

Now some may say that technology will bail us out. And we certainly do have interesting things happening. The very distinguished economist Robert J. Gordon from Northwestern University produced a book that was published last year called *The Rise and Fall of American Economic Growth*.

Dr. Gordon's point is that inventions that we're having today are more evolutionary than revolutionary. And that they do not entail the massive use of labor and natural resources of the past. Dr. Gordon looked at what inventions occurred in the great period of American economic growth from 1870 to 1970. And the things that did it were electricity, modern communications,

the internal combustion engine, urban sanitation, and pharmaceuticals and chemicals.

And we have things that are going on, but they are just more marginal. And so, in that type of environment, the increasing use of debt capital is going to trigger the law of diminishing returns and economies will get weaker.

In addition to that, we have a situation where the extreme indebtedness has pushed monetary policy into a situation where it's basically asymmetric. And fiscal policy is not even operative at all.

Let me explain. When the economy becomes extremely overleveraged such as we are, small increases in interest rates cause a big increase in interest expense. In addition, the indebtedness has an undermining effect on the velocity of money. Velocity is a very complex concept. It's just as complex as the consumption function or the investment function.

Over the longer term, for the money turnover to pick up, you need to be able to generate an income stream that repays all of the principle and interest. And our debt is increasingly not of that quality. And so, with high debt levels, not only does a small increase in interest rates produce high levels of interest expense, but the velocity of money falls.

The velocity of money in the first quarter of this year is where it was in 1949. And it's been in an irregular decline, very massive irregular decline, since 1997. So the Federal Reserve is engaging in a program of monetary restraint. And that's working to slow the economy at a time when we have all of these structural problems that I just identified that are affecting adversely the production function.

Now, the possibility – and many people buy this notion – is that the tax cut is going to provide the economy a boost. However, this is a debt-financed tax cut. We didn't cut other forms of spending in order to do it. We're borrowing the money.

And there can be a small boost to the economy when you increase federal spending and cut federal taxes, both of which have occurred very substantially in the past six months, if the debt is sold to the Federal Reserve and the commercial banks.

But the Fed is actually selling government securities and so are the banks. Which means that all the rest of us – in other words, the households, the corporations, what we call the non-bank sector – are, essentially, funding the tax and expenditure changes that are coming back to the households and business sectors. In other words, there is no net creation of funds.

So the net result is that the large increase in federal debt as a result of the tax increase and a huge increase in federal spending that took place in March – the so-called bipartisan deal – we've added close to \$2.5 to \$3 trillion of federal debt over the next 10 years. Before the end of the next decade, gross government debt will reach 120%. It was just under 106% at the end of last year.

So what we have is we're taking policy actions that are popular politically but they are not going to produce economic activity. And the Federal Reserve – because of an uptick in certain price-inelastic goods such as energy, and health, and property and casualty insurances – is tightening monetary policy. And this next mix is not helpful to the US economy remaining in a vigorous mode.

Erik: Now, where the whole theme here is the source of the problem is over-indebtedness, too much debt, a lot of people would argue that if that's the problem, it's going to result in low Treasury yields for a while.

But some people would argue that, eventually, you've got to reach the point where it becomes impossible to repay that debt in real terms. Of course, it can always be paid back in nominal terms if you print enough money. But in real terms, a lot of people would argue it becomes impossible to ever repay the debt.

Do you agree with that argument? And, if so, how far away are we from that point?

Lacy: Okay, let me first of all say that, under the Federal Reserve Act of 1937, the Fed does not have the ability to print that money. It does not have the tools or the mechanisms to print money. This has been said repeatedly. It was said during quantitative easing 1, 2, and 3. The Fed can expand its balance sheet, but it does not control the money multiplier, or "little m" as it's called.

So you would have to rewrite the Federal Reserve Act. You could do that and then give the Federal Reserve the authority. But that requires a basic change in legislation. Once you were to do that, you could then stoke inflation.

Unfortunately, what we've learned is that these theories of grand design, such as giving the Fed the legal capacity to print money, produce changes that are not really totally anticipatable. A lot of unintended consequences occur. But what we know from history is that, when central banks and governments proceed along this path, they only raise inflation. They don't raise real growth.

One of the consequences of giving the Fed the ability to print money is that it would further undermine the wellbeing of 70% or 80% of our households, which are already doing poorly and have not been served well by the high-debt policies that we've been pursuing. In other words, we do have some in our society who, because of their abilities or capabilities, or their income and wealth base, they can progress whether we have slow growth or no growth, with inflation or without inflation.

But the vast majority of our people do not perform well at the extremes. And this is true whether the growth is slow with low inflation, or whether the growth is slow or non-existent with high inflation. You leave most of our folks behind. And so we could change the Federal

Reserve Act of '37. But, at the end of the day, we would make the United States the equivalent of Venezuela or Argentina or the Weimar Republic. But at the current time, the Federal Reserve does not have the ability to print money.

Now, I forgot the major thrust of your question, but I didn't want that money printing issue to go. So if you could just repeat that question for me?

Erik: Well, thank you, because that actually strengthens the question. Thank you for pointing that out. Realizing now that the Fed under its current charter cannot just print money in order to make the debt go away, does this problem of over-indebtedness eventually reach a point where it becomes impossible to ever pay that debt back?

Certainly, when individuals borrow too much money, eventually they get to a point of no return where all of the income they could possibly ever generate won't even pay the interest payments, and they can't get out of that debt burden. Is there a risk of the US government getting there?

Lacy: A very fair question. In other words, this trying to solve an indebtedness problem by taking on more debt – eventually you get to the point where it changes the end game. And I don't think it does change the end game. Because, if the law of diminishing returns is applicable, and we just undertook an expansion in federal debt over the next 10 years of at least \$2.5 trillion, maybe more –

So let's say we go into a downturn. And some sharp analyst says, well, look, we just had a major increase in federal spending and a major reduction in taxes, and that didn't really help us. So we tried \$2.5 trillion. Why not go \$5 trillion? Or \$10 trillion?

Well, you see we're in a nonlinear world. The law of diminishing returns is nonlinear. And so we double the rate of increase in debt and we get faster and more negative results.

Let me give you some historical evidence on this. We can look at three periods of extreme over-indebtedness that are fairly well documented. All of these periods have in common that the extreme over-indebtedness produced a panic year and after the panic the economy went into a period of prolonged economic weakness with falling inflation.

The first of those episodes occurred in 1873. The US had taken on a great deal of debt to build the transcontinental railroads. If you remember, we built the central route first, and then northern and southern routes, and all kinds of feeder lines. The number of industries that fed them expanded greatly. And state and local governments guaranteed some of the debt.

There was over-investment, over-consumption. The panic year was 1873. President Grant was in charge. He had no idea what happened to him. And the United States was in a low deflationary environment, all the way into the 1890s.

The second case, of course, is better known – but a similar result. We took on a great deal of debt starting in the 1910s all the way to 1929, 1930. The causes originally were pretty reasonable, but we got into over-investment, over-consumption, over-speculation. The panic year was 1929.

And then the third case, more recent, is Japan in 1989. The panic year was brought on by extreme over-indebtedness. Public and private debt in Japan at the time was approaching roughly 300% of GDP, which is where China is today, slightly higher than where we are today. And now the Japanese public and private debt is in the vicinity of 600% of GDP.

One of the things you can do is you can start from each of the panic years and you can track the progression of the longest-maturity Treasury bond or government bond. And compare that to how we're tracking since our recent panic year of 2008. If you do that little exercise, what you'll see is that, after 10 years passed since our panic in 2008, the current level of the long US government bond is very close to where the JGB was 10 years after 1989 – where we were 10 years after the panic year in 1873 and 10 years after the panic year in 1929.

So the indebtedness undermines economic growth, brings down the inflation rate, and produces low long-term interest rates. There have been some pretty important studies of a more recent nature. There's probably a dozen or more econometrics studies that have looked at the impact of high debt levels on economic growth. And what those studies show is that when government debt goes above 90% of GDP, and holds there for five years or more, that you lose about 1/3 of your growth rate versus trend.

Well, we're well above that now. Our gross government debt is approaching about 107.5% of GDP. So we've been well above that 90% threshold, and for more than five years. So we should have lost about 1/3 of our growth from trend. Historically, in real per capita terms, since 1790 the economy has grown about 2.1% per annum. But since we've been in this period of high growth, the real per capita growth has only been about 1% or 1.1%. In other words, we've almost lost half against trend, which is even greater than the 1/3 that most of the studies estimated.

But there was one of the studies, done by two European researchers, [Dr. Cristina Checherita](#) and [Dr. Philipp Rother](#). It was funded by the European Central Bank, published by the European Central Bank. What they discovered is that, as the debt levels move to these high areas where we are today, the effect becomes nonlinear. And that is also consistent with the law of diminishing returns. The law of diminishing returns is a nonlinear relationship.

This is hard for a lot of people to accept. They think that if you can just expand the debt levels by a large enough amount that you'll get a better result. They don't understand that the mechanism is not there. And, as you use higher and higher debt levels, the results become worse.

Erik: I want to continue on that theme because you described the panic year in Japan in 1989,

which was 29 years ago, almost 30 years ago. It seems to me that the over-indebtedness of Japan has been persistent since then. They never solved the problem.

Now got the United States has had its panic year, in 2008. Since then, not only has the United States' indebtedness only increased, but China has come from way behind – it seems like they're almost in a contest to outborrow and spend everybody else – China's credit expansion has been massive.

What's the big picture globally here? It seems like there's a race on to get more and more overindebted. Almost like everybody is competing with everybody else. Where is this going to lead us, eventually, on a global scale?

Lacy: In 2008, the over-indebtedness problem was in three areas of the world: the United States, Europe, and Japan. Today the global economy is more indebted than 10 years ago, because China was not indebted 10 years ago. It's massively increased. And so have the emerging economies.

So, initially, when debt is used it has a positive response. It's just its overuse, excess use, that is the problem. But one of the things that I like to do is to look at the amount of GDP growth generated per each dollar of debt. Globally, in 2007 each dollar of debt generated 36 cents of GDP growth. Today we're 20% lower at 31. And 10 years ago in China a dollar of debt generated 61 cents of GDP growth. Today it's only 33 cents. And Japan – each dollar of debt is only generating 22 cents.

Now, the US is doing a little bit better relative to the rest of the world. We're producing 40 cents of GDP growth for every dollar of debt. But that's down more than 10% from what it was in 2007.

So the thing that's important to understand is that there are no major areas of the world that are lightly indebted. And we're all getting the same result.

The debt can provide a transitory boost to economic activity. There is no question about that. But the effect wears off pretty quickly. And the European economy is slowing again. Japan actually contracted in the first quarter. The latest numbers out of China have been disappointing. And I think that this is the evidence that we see. The debt has this very brief interlude in which economies respond. But, ultimately, the debt take us lower.

And I might just suggest, Erik, that you look up a paper written a long time ago in 1752 by the great David Hume. My professor said that the enlightenment could not have happened without him. Hume was Adam Smith's mentor. Very complete man. I think he knew everything there was to know about the world at the time of his life.

In 1752, he wrote a paper called "[Of Public Credit](#)" – Hume was probably one of our 10 greatest intellects. Smith said that he was the greatest mind that he ever met, and Smith knew

everybody including Voltaire and Ben Franklin. Albert Einstein credited Hume's discussion of time and space as the inspiration for his theory of relativity. Hume was quite a thinker.

In the 1752 paper, "Of Public Credit," he looked at two great civilizations that had become extremely overindebted, the Mesopotamian and Roman, as well as a whole host of other cases. And his concluding remarks were something like this: When a government or a state has mortgaged all of its future revenues – that's a pretty scientific statement, when a government has mortgaged all of its future revenues – the state by necessity lapses into tranquility, languor, and impotence. (Languor, of course, is an old-fashioned word which is derived from languishing.)

And I think that Hume's insight, working with not the sophisticated data that we have, and not the technological understandings that have occurred in the last 350 years since then, gives us insight that Hume actually understood it correctly.

The over-indebtedness problem creates more additional problems. It will not solve an indebtedness problem. It makes it only worse.

Erik: Japan, at least, in the current era was the first to really get to that extreme of over-indebtedness. It's been 30 years. Nothing has gotten markedly better there. The United States is massively overindebted. China has – and, as you say, emerging markets – have joined the club. Everybody around the world, the Eurozone, China, Japan, the United States, is in this club of massive over-indebtedness.

And, as you've described, the law of diminishing returns means that even the interim benefit, the short-term benefit you get from going into more debt, is diminishing dramatically in terms of the GDP benefit per dollar of additional debt. It sounds to me like the story of a systemic problem that's in its late stages.

How does this end? I mean, eventually do you get to some kind of global reset where all of the debt is written off? What happens?

Lacy: Well, there are people who have called for a so-called debt jubilee. The problem is that you bankrupt your financial institutions because they hold so much of it. There's really no way to write it off. That's the bottom line. There is no way to do a reset.

You could go down the false road of changing the Federal Reserve Act allowing the Federal Reserve to print money. But the only way money printing works is if you increase the use of debt capital, which further triggers the law of diminishing returns. You will get a side effect of inflation, but you won't boost real growth. And so, in essence, you're just going to make people more miserable than they already are.

Erik: So in your opinion, is there a solution? If you were in charge of the whole world, Grand Dictator of Everything, is there some policy choice that could be made that would solve this

problem of a collapsing rate of real growth in the economies around the world? Or are we just too indebted and there is no way out?

Lacy: We have to live within our means or have some event – you perhaps could have some sort of technological event. You might remember that we had a pretty miserable decade, slightly longer, after the debt bulge in the 1920s. And, really, when World War II started, things were not any better. When Germany invaded Poland, that began to help us a little bit because we were selling to all sides in the war. Things improved a little bit. But even then, the unemployment rate was still 17%. Not the extreme high levels of the worst days of the Depression, but the economy was doing rather poorly.

And then World War II intervened. And, of course, World War II was a tragedy. Maybe 70 million people lost their lives and there was tremendous destruction, all kinds of human suffering in addition to the loss of life.

But one of the consequences for the United States is that we had mandatory rationing. And, sort of as an accident, an unplanned accident, the savings rate in the United States went up to 28%. We had quite a few readings above 25%. So what basically happened is we were able to pay down the debt of the 1920s.

So when World War II ended, a lot of economists – including Keynes himself before he died, as well as the American Keynes, Alvin Hansen – projected that we would go back into the Great Depression. But we did not. We had a very substantial recovery at the end of World War II. And we propelled the growth in the economy. We funded the Marshall Plan, rebuilt Europe and Japan. Because we had cleaned up our balance sheet. It was kind of an accident.

But, to give you a more formal answer, what you want to read is the 2010 study done by [McKinsey Global Research](#). You can go on their website and get the study.

Basically, the thing that you have to do is you have to live within your means. You have to undergo a prolonged period of austerity. Which, of course, people are not willing to stand for. But that's what we did after the panic year of 1873. There was no central bank. There was no willingness to run budget deficits. We just lived within our means until we paid off the excessive debt of the 1860s and 1870s. It was a long, difficult time. But it solved the problem.

We had another similar episode in the 1820s and 1830s. We took on a lot of debt to finance the early railroads, steamship lines. And then there was over-investment, over-consumption. The panic year was 1838. Van Buren was president. He didn't know what hit him either. And we had a very, very difficult time period.

And then a very fortuitous event occurred. Sort of a technological – you could call it a technological invention, but it wasn't. There was the discovery of gold in California. And this event caused a tremendous surge in economic activity. It financed the westward expansion. And the 1850s was the fastest decade of peacetime growth in US history. Only wartime decades

were faster.

So you could have something of that equivalent. But the other thing is you have to have austerity. World War II was a period of austerity. Serious austerity. If you wanted to buy ten pounds of sugar, you couldn't do it. Maybe you had a ration book for five. If you wanted a new car, that was out of the question. If you wanted four new tires, that was out of the question. Maybe you could buy one.

We had the income that was gained from selling all of our products to the rest of the world. We were selling to helping the other countries that were war zones. And so we had a tremendous benefit from our trade surpluses. We became a very wealthy country.

But the only controllable solution is to live inside one's means. And that's not something that any one of the popular democracies want to hear. They think that there is a more immediate solution. Japan has been trying that now unsuccessfully for 30 years. And we've been trying it unsuccessfully now since the 1990s. And the net result is that our trend rate of growth is almost 1/2 less than what it historically has been.

Erik: I'd like to come back to a subject of inflation. There are a lot of signs that we're seeing in the economic data that tell us maybe inflation and inflation expectations are starting to tick up. And we've also had kind of a flurry of economists saying they expect inflation to be on the horizon.

Do you agree with those views? Is inflation sustainable in this economic environment of such slow money? It's hard for me to understand inflation suddenly taking off when we have record low velocity of money. Is this sustainable? And, if so, what does it do to your investment view?

Lacy: Well, money supply growth in 2017 was in the fourth lowest quantile since 1900. But we're getting a further deceleration in money supply growth. Right now, the six-month rate of growth in money is under 3%. And the one-year is under 4. Historically, money has grown at about 6.75% since 1900. It's a very weak rate of growth. And the velocity of money is actually in the lowest quantile.

Now, we do have increases in certain microsectors of the economy. We've had a mini oil shock – the OPEC producers have cut back on production and the oil price has basically gone up 50% in the last year, more or less. We're continuing to have increases in health insurance costs. And as a result of the natural disasters last year there have been increases in property and casualty insurance.

Now, these items that I just mentioned are what we call price-inelastic goods and services. A price-inelastic good is one that you do not have a good substitute for. If you go into the filling station and the price is up, you're more or less a price taker.

You can make adjustments over time, but there are not very good substitutes. You can decide

to walk and not pay it at all, but that option doesn't readily exist. You might be able to move or something later on. With regard to medical and property and casualty insurance, you're basically a price taker.

When you get a confluence of increases in these price-inelastic goods, and money supply growth is decelerating, the consumers then have to cut back on what they're spending on discretionary goods. And so the price increases of inelastic goods basically, therefore, serve as a triggering mechanism for a downturn in the rest of the economy. It's kind of a supply side shock of some sort. And it's ultimately not inflationary.

Increases in price-inelastic products will boost the inflation rate over the short run, but ultimately inflation is what I would define as a money/price/wage spiral. You have to have a monetary acceleration that raises prices. And then wages will follow. Inflation is not a wage/price spiral.

And, similarly, if firms decide they want to pay workers more, and money supply growth is decelerating, then it will erode profit margins. So what we've actually seen is that, if you go back to 2014, the unemployment rate was close to 6%. And real average hourly earnings, which is for the nonsupervisory workers, at that point in time it was growing about 3% per annum. Well the unemployment rate now is under 4% but in the 12 months ending April, real average hourly earnings are unchanged.

So it doesn't mean that you cannot have transitory bouts of inflation. But when money supply and the velocity of money are acting in such a pattern as they are today, the price increases serve to weaken the economy and undermine future growth.

Erik: Well, Dr. Hunt, I can't thank you enough for a fantastic interview. Before we close, please tell our institutional listeners where they can find out more about what you do at Hoisington Investment Management.

Lacy: They can go on our website at www.hoisingtonmgt.com. We publish a quarterly letter that we put on our website. We make that letter available on the website as a public service to institutional clients. If you are interested in following how we at Hoisington think about the future, you can read our quarterly review. It comes out within 10 or 12 days after the end of the calendar quarter.

Erik: And I'll add that it is extremely well respected in the industry as one of the most insightful pieces of reading on fixed income markets.

Dr. Hunt, thank you so much. Patrick Ceresna and I will be back as MacroVoices continues right here at macrovoices.com.