Simon White: Equities are running out of road

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Erik: Joining me next on the program is Simon White, managing editor at [Variant Perception](). Simon has prepared an excellent chart book for our listeners. You can find the download link in your Research Roundup email.

Simon, I think the question on everybody's mind is – we're speaking on Thursday morning, actually, just before the market opens, so we're one session behind the listeners in terms of market history – Are we at the end maybe of a correction that's perhaps played out? Or are we maybe at the beginning of something much bigger in terms of equity markets?

What do you guys see on the horizon?

Simon: Hi Erik. Thanks for having me on the show. That's an excellent question and one unsurprisingly we've been getting from many of our clients. I think the lead into this market is extraordinary. The last year we had virtually no bears left. Everyone was no doubt tempted in by a market that had like 202 consecutive days last year within 3% of an all-time high, which is obviously quite extraordinary price action.

And then we had – late January, early February – we had, essentially, the vol spike. We had many different players in the markets that were short vol either implicitly or explicitly. You know, things like risk parity. And we had this sort of mini-crash.

Now, once you get a crash, the market dynamics tend to change very quickly. And then you're kind of in, to some extent, uncharted territory because you have different players taking their cues off one another. And you get much more volatile price action.

So we have tried to put some sort of template on what happens. We discovered a book, a really good book, by a guy called Didier Somette, called *Why Stock Markets Crash*. This guy is a geophysicist and he applied the maths of plate tectonics to stock market crashes. And what he noted was that stock markets tend to display very similar behavior after crashes, which is what physicists call harmonic oscillation.

Now, this is the sort of motion that a pendulum – if we go to the slide deck, which I think your listeners can get hold of – on Slide 7 on the bottom chart there you can see a sort of a stylized example of what this motion looks like. This is like the motion of a pendulum, as I said.

You get this self-correcting force towards the center of the movement, but with declining amplitude. And what's uncanny is how previous crashes, such as in 2011 and 2015 in the S&P – and we have these charts there as well – have followed this pattern.

Generally, it lasts for eight to twelve weeks. And, obviously, we're kind of eight weeks into that thing. The crash was seven or eight weeks ago. What normally happens is you get a retest of the lows at some point towards the eight-week horizon in that total pattern that we're going through right now. And we're kind of bang on. As I say, it's kind of extraordinary how similar this particular mini-crash is to previous crashes.

For us it's kind of like we're right on the precipice, if you like. This is the point where, if we have just seen the lows retested in the last couple of days, and we almost had a very strong rebound yesterday that seems to have followed through to today – Thursday as you say, Erik.

If that's something that is the lows being retested, then we should expect to see some sort of short-term rebound because that crash pattern dynamic is over. But we're kind of right at the precipice. I wish I had a 100% solid answer, but when you're in this sort of highly volatile state as we are today, it's extremely difficult to know 100% for sure.

Erik: Great minds think alike. Your views are very similar to my own. And I guess the question it begs – let's assume that, one way or another, this is a correction that, you know, it's not the end of the world – either we're already there or we've got maybe one more test lower. But eventually it's going to play out as a correction and start to recover.

Do you think that we've got room to get to new all-time highs and the market moving even higher? Or do you think the top is in already?

Simon: This is the thing. I think you have to stand back a little bit – what does one mean by a market top? And I would say this is the sort of question that applies to finance in general, because often people use words in many different contexts. Often you find you're talking about something but you both have a different meaning about what that particular thing means. So you realize that that's the sort of basis of your either confusion or disagreement.

When it comes to "top," I think still many people tend to believe it's something that happens very suddenly and once you hit the top the market goes straight back down. But we've looked at tops, market tops, in quite a lot of detail at Variant Perception.

We actually wrote a paper a few years ago called "Understanding Market Tops." And in that paper we highlight that every market top is unique but they do share many common characteristics. The key thing to note is that market topping is a process and it's not a point. So it's not something that happens and suddenly.

Bottoms of markets are more like that. They tend to be a little bit more event-like. But tops can go on for a long, long time.

I think the thing that we're seeing today is we're seeing multiple signs that the market is going through a topping process. And the previous vol-driven fall that we saw in the market back in

January–February I think is part of that topping process.

And some of the things that we are looking at in equities that kind of suggest that we're going through that process – equities have been held up by a number of supports over the last years. And a lot of those supports, to us, are looking like they're at risk.

If you want to go to the slide deck, on Slide 8 we're looking at a number of things here. We're looking at global growth, looks like its peaking. We just put out our "Leading Indicator Watch," which is one of our monthly reports. And all the indicators that we're looking at for global growth suggest that we're very near the peak in global growth.

We also have the Federal Reserve systematically removing liquidity from markets and giving no sign it's really about to change course. That's a dynamic as well that the market is having to try and digest.

Also our leading indicators are unequivocally pointing to higher inflation. Another big question that we get asked a lot is about inflation. And that's something, again, we try and follow our leading indicators rather than try and have an opinion or trying to pick and choose data to try and suit what our particular view is.

You read a lot of people who tend to be inflationist or deflationist and tend to do that, tend to pick and choose. We just follow our indicators. And they've been, as I say, unequivocally pointing to higher inflation, certainly over the last year.

So in the top right chart in Slide 8, you can see for instance I've got there the Federal New York's underlying inflation gauge clearly points to higher inflation. We also have our own leading indicators also pointing to higher inflation.

Higher inflation, though, is the enemy of price-earnings multiples. If you look at the bottom left chart, and that's a chart going back to the 1920s, you can see that higher inflation tends to lead to lower price multiples. Certainly a lower CAPE ratio.

And that's something, again, that's been holding the market up for most of the last few years. Price-earnings multiples are responsible for over half of S&P returns over the last five years, which is much higher than normal periods.

Furthermore, you've got profit margins coming under pressure. Again, we use our leading indicators here. We have our wages leading indicator that has consistently pointed to higher US wages over the last year, year and a half. And we're really beginning to see that slowly feed through.

But, very intuitively, you take that wages leading indicator, you invert it, and you push it forward by almost two years – which you can see in the bottom right-hand chart – that tends to lead corporate profits. And, again, it makes perfect sense. Wages are the biggest single expense that companies have. And that is clearly pointing to much lower profit margins over the next two years.

So we're really seeing all these fundamental supports for equities falling away. At the same time, markets are getting used to higher rates, they're getting used to things like much more exaggerated trade tensions, and they're having to get used to these fundamental supports starting to fall away.

So we see that the market is in a topping process. Now that doesn't stop the possibility that we get a further subsequent high after today. But it does mean that the environment is much more difficult for equities.

And it also means that people are going to have to get used to much higher volatility. Which means your risk-reward, essentially, for going long is much lower. Because you could suddenly get caught on the wrong side of another move that we saw in February but perhaps even more severe.

The reason why February's move, I think, was contained was because a lot of the people who are implicitly short vol – so take your risk parity guys – they kind of have to react to realized volatility, not so much implied volatility. And that kind of operates with a bit of a lag.

If the correction had been sustained more than 10%, and perhaps lower than 10%, they would have had to derisk even more than what they did. And then you would have got this cascade effect and a much deeper market downturn.

So it kind of feels like we got a little bit away with it back in February, but these dynamics are still there and these are the risks that the market still potentially faces.

Erik: I want to come back to something that you said a minute ago, which is the Fed is continuing to reduce its balance sheet, destroying US dollars, reducing the supply of them, while at the same time other central banks are increasing the supply. It seems so clear to me – and our friend Russell Napier had a piece on this recently – if you're reducing the supply of US dollars I would think that that would be dollar bullish. But we're seeing so many people coming out in the last few weeks with these dollar-bearish calls.

Where do you guys see this? And how do you reconcile these various different forces that people are talking about affecting the dollar index?

Simon: Another question that we've been asked a huge amount of times lately. And it's something that obviously is super-important. If you get the direction of the dollar right, if you are an international investor investing in many different currencies, that can contribute a huge amount to your overall returns.

So it's a very interesting question because there's a number of different views about it just now. But also it's a very important question when it comes to looking at one's portfolio.

We were bearish on the USD for most of 2017. But now, principally due to the oversold-ness, we've turned medium-term bullish. That's obviously been a tough call, because we turned, as I said, towards the end of last year and the dollar has had a bit of a torrid time. And we're sticking to that call.

Now, I think this is what's happened. Towards the end of last year, many people began to upgrade their forecasts for the US on the back of tax stimulus. But that meant that the outlooks for other countries were revised up too. What's good for the goose is good for the gander. But with a Beta of more than one.

And that meant the other currencies began to rally more than the dollar. Which, paradoxically, meant the dollar was weakening in response to a stronger US economy.

You can actually see this relationship if you go to Slide 9 in the deck. It very elegantly illustrates this in the chart on the bottom left-hand side. When many PMIs of countries around the world are in expansion, the dollar tends to weaken. And vice versa when more of these PMIs start to fall.

But what does this mean today? Well, it means that anything that's a risk to global growth is a potential boost to the dollar. And you can see this in the top chart on that slide. Global growth ex-US tends to be much more volatile and fluctuate with a greater amplitude than US growth. As I mentioned earlier, our lead indicator watch went out today – we see global growth as peaking.

To add to this, we've got these trade tensions. If you look at global exports versus global growth, you can see a very clear link. When global trade starts to fall, that's very bad for global growth.

Now, at the minute, the US and China have agreed to tariff $100 billion of goods in total. Even if only some of this is passed through, that's a sizable chunk of global trade. And this is something that perhaps makes sense to these guys.

This political scientist, Edward Luttwak, said that trade wars are the logic of conflict in the grammar of commerce. And that's kind of what we're seeing played out today. But what happens, interestingly, it seems that whenever we get a bad trade headline the dollar kneejerk reaction tends to weaken in response to these headlines.

But history points in the opposite direction. If you look at the bottom right-hand chart on that slide, it clearly shows that falls in global trade are often accompanied with a stronger dollar.

We think that, basically, when you get declines in global growth it tends to hurt the rest of the world more than the US, which means that their currencies tend to fall more than the dollar.

Which obviously means the dollar tends to rally. That's something we foresee certainly in the medium term.

Longer term, I think the dollar is still overvalued. I think if you're looking out into – you get a significant rally in the dollar – if you look at the longer-term valuation measures for the dollar such as purchasing power parity, almost all currencies are undervalued versus the dollar. Also, if you look at things like the real effective exchange rate, the dollar still has – on a longer-term basis the dollar still has a very strong real effective exchange rate.

So I think longer term you still have to be dollar bearish. But many things we see today are pointing to a stronger dollar.

Erik: Simon, there's an aspect of this I want to ask you about because it perplexes me. There is a lot of very famous people – Jeff Gundlach is one of them – who have predicted two things: both much higher US Treasury yields and a much lower US dollar relative to other currencies.

Now, the common wisdom in macro always used to be that, as your Treasury rates are appreciating or getting more competitive with other countries, that forces international flow into your currency and attracts more money from international markets, and the currency appreciates.

Usually this inverse relationship is kind of an emerging markets thing that doesn't happen in developed markets, where you have the currency declining even as the Treasury yield is increasing.

Has something fundamentally changed that's leading all these people to a prediction that kind of doesn't jibe with what the old-school religion of macro is? Or am I missing something?

Simon: Again, that's a good question. And I think there is a very strong link between the dollar – more specifically, rather than just yields, the link that we have noticed is the link to the dollar and the yield curve. Interestingly, if you look at previous instances or longer-term correlations between the dollar, it's the things you might expect, like Fed funds rate, that have high correlations. Or it might be gold or commodities.

But what's unusual about the last year is the extreme link or high correlation between the dollar and the yield curve.

We've shown that on Slide 10 of the deck that you've got there. This correlation is now almost one right now, if you look at it on a one-year rolling basis. (We've got the chart there going back to 1985 which is, I think, about as far back as we could actually take it.) That's an all-time extreme.

So we have this dynamic with the yield curve being extremely correlated to the dollar. And obviously we've had this situation that the yield curve is generally been flattening. And the dollar has generally been weakening.

What's interesting about this chart is that when you get these extremes in correlations, as we've got today but even more so, that tends to correspond with pullbacks in the dollar. So that's something, again, that we're perhaps expecting to see today.

But I think even more interesting is the real yield curve. That's something that tends to be looked at less often. I think it can give you very interesting information.

I think when the Fed is trying to raise rates, and it's trying to raise rates ahead of inflation, so obviously it's trying to get the real yield at the short end of the curve higher. What they also want to see is, not only that longer yields go up, but they want the longer real yields to go up.

That's a very good situation for them to be in. That means that the real yield curve is steepening. Because, essentially, the market is saying that's great. You're raising rates at the front end so we're seeing stronger real yields. And the longer-term rate of growth is not being hampered by that. So the market's given it a kind of thumbs-up to say you're not going to screw growth up further down the line.

So the real yield curve is being quite well-behaved lately. It's generally – it's flattened a little bit over the last year. But this year, if anything, it's slightly steepened. You can see the relationship between the real yield curve and the dollar on the bottom right-hand chart. And that tends to, again, support our view that the dollar is medium-term supported.

So that's something, again, that fits in with that longer-term view. I think when you've got to be worried is when you see the real yield curve flatten, and flatten significantly. That's something I think would be a very ominous sign for the state of US growth.

Erik: And where do you see it going? It looks like, as I look forward to Slide 11 here, you see a steepening of the yield curve. So it sounds like you don't think a yield curve inversion or recession is immediately on the near horizon at least.

Simon: It's not on the near horizon. What's basically our view on the yield curve is that, I think, we're kind of past the flattening phase. We've been flattening for four years. And it's going to have a steepening bias.

Now that's not to say it's going to suddenly steepen very aggressively. I think we need to see a recession before we get that. And the Fed having to rapidly reverse course before you get anything extreme like that.

Now, I know that the yield curve is often seen as a great recession indicator, and it is. It really is. If you have a desert island and you could only take one leading indicator – if you were so unlucky that you're only allowed to take leading indicators – you would take the yield curve. It's the single best leading indicator. And when it inverts – I think there's been one false positive, which is 1967, that didn't point to a recession.

But the problem with the yield curve is that there are lags involved. So from when it inverts to when you get the recession it could be anything from six months to a two and a half years. So I think there's much better things that you can use to try and predict recession.

What we've done at Variant Perception is we've built a recession signal. And that was one of the early founding reasons, if you like, for us trying to build this business. Economists are very smart people, but they seem to miss a bunch of stuff. And one of the things that they seem to systematically be unable to do is to predict recessions. And that's obviously something, when in markets, is extremely important to get right.

So we spent a lot of time on this. We built a number of recession models. The signal's actually in the slide deck in one of the earlier slides. I think it's Slide 5. It really tries to capture the sudden movement that an economy moves from a non-recessionary state to a recessionary state.

Whenever you read someone has upped their probability of recession from 45% to 50%, I would take that with a grain of salt, because economies don't linearly move from a non-recessionary state to a recessionary state. They tend to do so in a much more binary fashion, a bit like a phase transition.

Again, going back to physics, when a pot of water is boiling, it doesn't gradually change from water to steam. It gets up towards 100°C and then there is this thing called a phase transition and it moves into steam. Recessions are very much a similar kind of thing.

So our recessionary signal is something that we are going to rely on for us to try and predict the next US recession. We were able to use that in real time in the last recession back in January 2009 to tell our clients that the US was already in recession.

But, going back to the yield curve, I think where we are today – as I said, I try not to get mixed up in whether an inversion is going to happen for a recession – it's neither a necessary nor a sufficient sign for a recession to happen. But we are clearly seeing that longer yields are biased higher.

And on Slide 11 we have our fair value model for the US. Now, that's not a prediction of where we expect 10-year yields to go. But the interesting thing to look at there is when the gap is very large. Then it gives you what the direction of travel is likely to be.

And that kind of feels like, again, where we are today. Yields had plenty of opportunity earlier in the week for bonds essentially to rally much more than they did when the market was selling off, but they didn't. It feels like we are clearly in a new regime now.

The way we are looking at that, in terms of the yield curve, is the chart on the top right. There is a very, very strong link between fixed-income volatility and the yield curve. So rises and falls in fixed-income volatility tend to match rises and falls in the yield curve.

Now, again, we've been in this extremely low volatility environment over the last few years, and that's coincided with this essentially relentless flattening of the yield curve. But now, again, fixed-income volatility got to an all-time low last year and it's begun to pick up. At the same time, we saw a pickup in the yield curve.

The yield curve flattened again of course over the last week or two. But I think it's going to be easier to be on the steepening side of this trade now than the flattening trade. And the real key to why this is all likely to happen is; why is fixed-income volatility likely to pick up? Well, not only the fact that it was super-low and it would be much harder for it to go much lower.

If you look at the bottom right-hand chart on Slide 11, we have the Fed now trying to reduce its balance sheet. What we can see from that chart is, when the volatility of changes in the size of the Fed's balance rises that tends to coincide with rises of fixed-income volatility.

So now, as I said, we have the Fed actively reducing its balance sheet. We're much more likely to see higher volatility in its balance sheet. And that will coincide with higher fixed-income volatility, which will mean a steeper yield curve.

Erik: Going back to the 2008 event, one of the indicators that a lot of really astute investors looked at was the Treasury-Eurodollar spread, or the TED spread. It seems like these days the new buzzword is LIBOR-OIS.

What is the difference between the TED spread and the LIBOR-OIS spread? And, in particular, they're both measures of the health of the banking system.

As I look at Slide 12, on the left side of the page, you've got a graph of LIBOR-OIS. It really looks like it's blowing out in a pretty dramatic way. Is that a major warning sign? And what does it point to in terms of what's coming?

Simon: The short answer is that it is a warning sign, but not in the way people, I think, expect it to be a warning sign. You mentioned 2008. We're not there today. Back then LIBOR-OIS widening was all about a demand issue. People had stopped lending and there was a scramble for offshore dollars. And that's why LIBOR really started to soar and it went way, way higher than it's going today.

Today is very different though. It's a supply issue. Now you have a lot of tax reform going on in the US. One of the bigger parts of it is there's a tax break on repatriated dollars. So US corporates like, think people like Apple which has this vast amount of offshore dollars, are now incentivized to bring these dollars home and use it for investment. But more likely it will go into share buybacks and to pay dividends and the usual sort of thing.

Ultimately, this means there's less offshore dollars available for unsecured lending. And that must mean, therefore, that the price of offshore dollar lending begins to rise. And that's why we're seeing the rise in LIBOR. So people are now just having to adjust to paying more for the dollars. It's not that people are unwilling to lend them. There's just less of them. And therefore the price to borrow them has to go up to reflect that.

Now, you mentioned the TED spread. Another part of that, why that spread has been widening, is the fact that the US Treasury has been hugely increasing bill issuance to pay for the tax stimulus. That also caused that LIBOR-OIS to widen. And that's obviously why you see the TED spread to widen.

They are similar things. Because the main part that both have is the Eurodollar part means exactly the same as LIBOR. The OIS is obviously just where the Fed is. So you're just looking at slightly two sides of the same thing.

LIBOR-OIS I would say is just a cleaner rate to watch because the OIS thing at the base is ultimately the Fed's overnight rate compounded and LIBOR is obviously the synthetic rate that banks lend to one another.

But the key thing, I guess, to emphasize to your listeners is this is not an acute issue. But it is a chronic one, because LIBOR is still the reference rate for not billions but trillions of dollars of loans.

Effectively, this widening in the LIBOR-OIS spread has added almost two 25-basis-point hikes over and above the Fed's – the Fed's already got on seven hikes since 2015. This will increase repayments on consumer loans, mortgages, floating rate corporate loans, and it's going to squeeze bank margins as well.

If you look at the top right-hand chart on Slide 12, higher LIBOR means higher household debt ratios, so debt ratios for households are going to rise. That's going to be a headwind for consumption. Also, commercial paper rates have been rising, as well as the size of their issuance.

In the bottom right-hand chart, you can see that tends to lead to wider credit spreads. At the same time you've got these ultra-low rates that we've had for many years. Interest coverage ratios for firms, rather than rising as you might expect in a low-rate environment, have been falling. This higher LIBOR will only make this worse. It will only compound this. And so, again, that will lead to wider credit spreads.

This corroborates what we're seeing from many of our other LEIs for wider credit spreads. We have a whole suite of different structural indicators and some more tactical ones as well. They're all pointing the same way to higher credit spreads and higher XT volatility.

The final thing to emphasize is this widening in LIBOR-OIS is permanent. I don't think it's going to stay at – it's now about 60 basis points. There's a very good chance it's going to come off a little bit and be a bit lower, but it's not going to go back to where it was in November. Because this is a permanent loss of offshore dollars.

And I think this is something probably the Fed wants. One of the big accelerants of the financial crisis back in 2008 was all the European banks who'd basically been tapping US money market funds getting these unsecured dollars and using them to buy heavily compromised mortgage bonds.

Obviously, when everyone stopped lending to one another because these mortgage bonds turned out to be as they were, very bad bets, you had this huge issue that caused LIBOR to spike extremely high. And the Fed obviously had to introduce swap lines.

I don't think they want to be in that situation again. I don't think they want to allow people to get the same amount of leverage as they did back in 2008. So this is something that I think they want to see, this widening in the spread.

Erik: We have a fairly significant listener base in Canada. And I know that the Canadian macro outlook is a subject that you guys have written about for your institutional clients recently.

Give us the update on how you see things evolving in terms of the Canadian macro outlook.

Simon: Canada we've been looking at from the perspective of they have been getting dragged along, essentially, by US rate hikes. And they have had more aggressive rate hikes priced in than the US, even though our leading data for Canada has been turning down.

So our view has basically been that the way to look at Canada certainly from a trading perspective is to try and fade those moods in Canadian rates. And obviously that means that leaves the Canadian dollar under pressure as well. So that's the more the cyclical picture.

Longer term, we still have the housing market. The housing market is still – household debt ratios are extremely high. And we have some of the egregious lending, obviously nowhere near as bad as to the extent as in the US because lending standards are much more stringent in Canada. But they still have this huge amount of household debt, which is a big structural issue.

And that's something I think we're going to look at. We've written previous thematic reports. I think we did one about two years ago. But we're going to do an update on that in the next six months.

Erik: Another topic on a lot of people's minds is China. And, particularly, a lot of people have predicted that the credit expansion there has caused so much excessive debt that when China's economy rolls over it could get ugly. I think you're starting to see signs that maybe China's LEIs are looking lower.

What's your outlook for China? And how does that relate to your outlook for commodities generally?

Simon: China has been something that we've obviously discussed a lot. We've built a number of structural indicators that tell us what – probably now everybody knows that, in terms of structurally bearish trade, China is one of the best out there in terms of it has a huge debt overhang. But China is very good at managing that in a much shorter time scale.

So that's why we focus on more cyclical leading indicators. And they began to turn over late last year, mid to late last year. We're seeing two things here really. We're seeing economic leading indicators turning over, which points to lower growth. And we're also seeing liquidity tightening.

This is part of an intentional strategy, a lot of it, by China. And, now that President Xi has solidified his position after the 19th Party Congress in October, I think they are going to allow themselves a little bit more leeway than they otherwise would in terms of lower growth.

Because they want to attack economic reform. They want to attack environmental reform. And they also want to tame some of the more cowboy aspects of the shadow finance industry in China. So we're really seeing the effects of that manifest through.

When it comes to liquidity, the epicenter of the tightness is in the non-bank financial institutions because they really are the origins of wealth management products, trust products, and all these other things that they now want to clamp down on. But no lending market operates in isolation, so some of that tightening has fed through into other rates. Lending rates have risen. We've seen CHIBOR generally has risen. And money growth has fallen.

All these things, again, point to a much weaker outlook in China. Now we're not at the point of this is run for the hills time. But the indicators are all pointing in the same direction. They're all pointing down. And they're pointing quite reasonably, emphatically down. We have the credit impulse has been turning over. That points to a weaker coincident outlook.

So you have a situation where they are trying to fix things, but they are willing to accept more pain than they might otherwise. And this is kind of being compounded as well by what's happening in the US. US rates are rising. And whenever rates rise it's obviously a problem for emerging markets. And it's a problem for China.

So far, the good thing is that the dollar has remained weak. The dollar has remained weak, and that takes the pressure off the renminbi and it takes some pressure off the capital account. The FX reserves have been kind of growing very slowly. They certainly haven't been falling.

The thing, obviously, to watch for a catalyst for that situation to worsen – and obviously China would try and lean against this, but they might wait until something worse happens, if you like, before they do that – it is the stronger dollar. And that, as we spoke about earlier, is something that we expect to see at least in the medium term.

Erik: And you've also written recently about Japan. And I think you've observed, perhaps, that growth may have peaked there. What do you see going on in terms of the Japanese outlook?

Simon: Japan is clearly kind of rolling over, but from a high level. So this is a situation where you have growth peaking but it's not turning down negatively so far. That's kind of where we are with China. But they are in a better situation than they were, certainly, a year and a half ago with the monetary policy outlook in Japan.

The Bank of Japan introduced the yield curve control policy, which was much more effective than the previous one, which was a negative interest rate. The problem with negative interest rates was, when you have monetary policy, you need the banking system to help you transmit that monetary policy across the economy.

Unfortunately, negative interest rates do the opposite. The banks were essentially gumming up the yield curve control policy, instilled a positive yield curve, and that then helps the banks, and the banks can then help the easing and monetary policy get out into the wider economy. So that's the positive backdrop.

The more cyclical backdrop is that we expect to see some more slowing growth. But inflation – that picture is much better in Japan than it has been recently. Inflation in Japan – obviously that's the thing that they were trying to fix.

But we now have signs that wages are beginning to pick up. We also have for Japan our wages leading indicator, which is also pointing to higher wages. And we're beginning to see that trickle through into some of the inflation numbers. So it really is a case of the Bank of Japan holding firm here.

I think one of the risk factors, by the way, that hopefully has alleviated, was the scandal that Prime Minister Abe was involved in. That caused his approval ratings to shoot right down. That would be hugely problematic, because, if Abe was to lose his job, then I think the whole reform program would be put into question.

However, that looks like something that's probably going to be okay and pass us by and I think Japan is going to rumble along okay here. I think it's still one of the better-developed market economies out there, especially if you want to look at currency-hedged equities and things like that.

Erik: Simon, earlier you mentioned a report that you guys wrote called "Understanding Market Tops," which, needless to say, is extremely topical right now. We have negotiated with your colleagues at Variant Perception to make that available to our listeners. They will need to go to the Variant Perception registration page and register their email in order to access it.

Give them a sense of what they can expect to find in that paper.

Simon: Sure. We tried to create a systematic process at Variant Perception. That means that we – around a framework, we can then essentially package that and give people ideas about how we think. So we don't just talk about what we think but how we think. And, in that vein, we've written a number of Understanding papers, one of which is called "Understanding Market Tops."

As we discussed earlier, it's really about trying to identify how and what market tops have in common. Within that piece, that people tend to really find useful, is a checklist for tops and all the different things – whether it's corporate leverage, whether it's economic leading indicators, whether it's the internals of the market, or just overall bullish and bear sentiment – which things that market tops tend to have in common.

Overall, the piece gives a very good rundown of what market tops look like and how they behave, which, as you say Erik, is very topical right now.

Erik: Listeners, you'll find a link in your Research Roundup email to a registration page at variantperception.com where you can register to access that report.

Simon, I want to thank you for a fantastic interview. Patrick Ceresna and I will be back as MacroVoices continues right here at macrovoices.com.