



## Jared Dillian: The week short vol imploded February 8, 2018

**Erik:** Joining me next on the program is Jared Dillian, the author of the extremely popular *The Daily Dirtnap* newsletter.

Jared, obviously, everybody's mind is on the equity market this week. But I think it's really important to bring the volatility complex into this. As you know, your friend Devin Anderson appeared on this program back on November 30<sup>th</sup> and he explained that an equity move the size of what happened on Monday could potentially blow up the volatility complex.

But I think what a lot of people have started to talk about is it may have actually been the tail wagging the dog, that what exacerbated – or some people would even say caused – this equity selloff may have been the vol complex blowing up. So it's a question of cause and effect.

What do you think is going on here? Is it possible that vol caused the equity meltdown? Or did the rate hike cause backing up in interest rates and cause this to start?

And how do you see the interplay between what's happened in equity markets in the last week and what's happened with the volatility complex? And of course the XIV ETF being terminated after it blew up.

**Jared:** I can cover all that. First of all, thanks for having me. You know, this vol blowup where the VIX went from 10 to 50 did not just happen spontaneously. This all was put in motion by the rates market, by the bond market, and the fact that, over the last three or four weeks, rates started to leak higher in tens and bonds because, quite frankly, the news that we were going to get a trillion dollars in Treasury issuance this year. And this was the first time since at least 20 years – it's been a really long time that supply has mattered in the Treasury market.

So the front end had been selling off for a while, and then the back end starts to sell off. And all of a sudden the equity market looks at this and says, we have higher rates and this is a problem. Once the selloff got in motion, then the people who are structurally short volatility had to cover. And, basically, the world was short volatility. And that covering drove the VIX all the way to 50 and it blew up a couple of the inverse vol ETPs. And there you have it.

**Erik:** And of course we should mention that there are some of the algorithmic trading systems that are programmed, when the VIX raises, to start selling equities more aggressively.

**Jared:** Yes.

**Erik:** So there's kind of a self-reinforcing effect that the equity blowup causes the VIX to blow up. The VIX blowup causes the equity blowup to get worse. The equity blowup getting worse exacerbates the VIX blowup. It's all feeding on itself.

Now, I think the big question that this has got to be putting in almost every investor's mind is, it's pretty darn clear that, although this was initiated by backing up of interest rates – I strongly agree with you on that point – one thing led to another. The interplay that we've just described between the vol complex and equity markets exacerbated the selloff.

So does that mean that we just hit the buy the dip opportunity of a lifetime, because it was an artificial selloff that went to levels it shouldn't have? Or is it more likely the case that maybe this is just getting started, because that change in rates is a big deal? It's going to have a continuing effect on the market? And maybe we're looking at a change in overall trend here?

**Jared:** I think, really, the change in trend – it is an equity market, but it really isn't. It's really more about the volatility market. And if you think about how the vol market has been set up, I mean, really, it has been about 20 years since you could make money being long Gamma, being long vol and dynamically hedging. It's been that long where you really do that on a sustainable basis for a couple of years.

So these short-vol strategies have attracted a lot of sponsorship. Because they basically have a Sharpe ratio of infinity. And if you're short S&P vol and the market realizes zero – which is basically what's been happening – then your Sharpe ratio is very, very high. So these strategies have been attracting a lot of sponsorship.

And I can tell you that every vol desk on Wall Street – these are not long Gamma traders. They have to be short Gamma because that is the only trade that worked for the last 10 or 20 years.

And what we saw, what we've seen in the last couple of days, is a regime shift in the volatility market where it will no longer pay to be short Gamma. It will pay to be long Gamma. If you think about what's happened just in the size of these equity moves. The Dow at one point was down 1,600 points. And then, on Tuesday, there was a 1,000-point bottom-to-top swing in the Dow.

If I'm thinking about this as a vol trader, and I'm hearing about 1,000-point moves in the Dow, that sounds like I really want to be long Gamma. And I think people are going to have to learn this the hard way.

I remember when I came into the option market in 1999 I heard about all the old short Gamma traders from the early '90s and the mid-'90s that blew up in the late '90s when volatility appeared. And we had a period of time from about 1996-1997 to 2002 when vol was very high.

And people had to adapt to that environment. They're going to have to adapt again.

**Erik:** It sounds like your opinion here is this is not an anomaly that's going to mean revert, and we're not headed back to VIX at 8 or something – that's over and done with, it sounds like is what you're saying. Why are you saying that?

And I guess that would probably beg the question – some people might be looking at this saying, holy cow, here is your opportunity right now to short the VIX, get in on that short-vol trade which has been working so well for so many years. And this is clearly a huge dislocation. Some people would be saying if there has ever been a buy the dip of a lifetime, it's going short vol here at these higher levels.

So it sounds like you think we've got a regime change that is going to be locked in for a while. Why is that? And what does it mean in terms of other implications and knock-on effects?

**Jared:** Honestly, it's sort of my intuition, my opinion. If you think about the significance of what happened with XIV and SVXY, right. I mean, basically, these are funds which gained in value for a period of about six years and then blew up. Six years of gains gone in one day.

What that means symbolically – the symbolism of that – is that the short-vol trade has been discredited. And that's an explicit short-vol trade. If you're long XIV, you are explicitly short vol. If you're short VIX futures or variant swaps, you're explicitly short vol.

There are implicit short-vol trades too, that also are going to blow up if we have a regime change. I don't know how risk parity works really well, but it seems like an implicit short-vol trade to me that is in danger. There are a lot of brokerages which market iron condor strategies to their customers. That is an explicit short-vol trade.

So I think they're all in danger. I think we've had a regime shift.

**Erik:** Jared, we had Chris Cole on the program a couple of weeks ago, and he had this pyramid slide showing that the explicit short-vol trade that everybody talks about – that's the XIV ETF and the other explicit strategies – are tiny compared to the much larger pyramid of short-vol strategies which include risk parity that you just mentioned. But also pension overwriting and a number of other things.

So do you think that we are at a point where potentially the whole pyramid gets unwound? And we're only at the beginning of this? And what would you look for if the answer is it's hard to be sure yet? What would you look for to tell you whether or not we've got a major regime change in terms of where vol is headed, or if this was a blip that maybe has room to mean revert?

**Jared:** I haven't seen Chris's slide, but from how you've described it I agree with that. And I do think that this is in the beginning – the very top of the first inning, nobody out – of an unwinding process that's going to take a really, really long time.

And I really think it is because of the psychological significance of what just happened. People

are not going to be able to put the genie back in the bottle. And I think what you have to look for is, just like any other chart person would tell you, higher lows in volatility.

So if people try to stuff vol back into the teens, or 13 or 12 or 11, and it doesn't work, and we continue to get volatility in the stock market, then I'd say we have higher lows in vol and the trend has changed. Right now, it's a little bit too early to make that call. I'm making that call just because of my intuition, but I think you do need a little bit more evidence.

**Erik:** Jared, I want to focus specifically on the way the XIV blew up. And the number of people that were hurt by it. Now, certainly, on this program, we have been harping on this show after show after show that this short-vol trade was destined to blow up someday.

We're not the only ones. There are lots and lots of smart people all over the industry who have been saying this short-vol thing is a disaster in the making. It's worse than picking up nickels in front of a steamroller. It's going to lead to disaster.

Now, what's happened is this trade originally was something that very sophisticated institutional investors put on. And then we had the creation of these retail products like the XIV that took a strategy that lots and lots of experts in the industry were counselling strongly against as having a blowup risk, that exactly this would happen. And that's well known.

The people that make money on building ETFs went ahead and offered this to retail investors anyway. It seems to me – and I think Chris Cole said this in his interview – this is the class-action lifetime opportunity if you're a lawyer, to look at this and say they didn't understand. This was a product that was not appropriate for retail investors. The experts were saying it was a bad idea.

And those greedy ETF inventors went ahead and offered it to retail anyway and let them be the suckers to essentially provide that source of short volatility that was really writing disaster insurance creating cheap tail hedges for everybody else. I've got to believe this is a class-action law firm's dream come true.

Do you think that it's going to change the industry in terms of what kinds of products are offered? We've still got triple-levered ETFs and inverse double-levered ETFs and all this. Do you think that what happened here is potentially going to have a serious legal risk for Credit Suisse? And do you think that it's going to change the industry in terms of other offerings of strategies in ETFs that maybe smarter people would not recommend retail investors engage in?

**Jared:** You know, the thing with ETFs is that you have a lot of ETFs which are really meant as institutional products, but they have retail appeal. And XIV is one of them. It's an institutional product. Joe Blow has no business shorting vol systematically. But it has a ticker, it's listed on an exchange, so he can do it.

In terms of who lost money on XIV and SVXY, probably equal parts big boys and individual investors. And certainly a lot of people didn't know the risk. You know, once again, the SEC

approved these products. They approved leveraged ETFs. I wrote a piece about leveraged ETFs on Bloomberg about a year ago, about how the SEC probably regretted that it approved leveraged ETFs. And then they went and approved four-times-leveraged ETFs. The SEC has been very permissive about allowing these types of products to exist.

Now if you think about why does an XIV exist to begin with? Well, XIV exists because VXX exists. And VXX was everybody's dream in the mid-2000s. People wanted to securitize volatility into a product that you could trade that was listed on an exchange. People wanted a way to be long volatility without having to worry about all the other Greeks.

So somebody came up with it. They listed VXX. And everybody knows what happened. It just went down relentlessly for 10 years and continues to go down. But the ETF does exactly what it's supposed to do. It does what it's supposed to do in the prospectus.

And XIV was created as a reaction to that. If the long-vol strategy goes down all the time because of carry, then the short-vol strategy must go up all the time because of carry.

Now, somebody who's a seasoned trader will know that short volatility as a strategy can give you six to ten years of gains and they you'll wipe them all out in one day. That's the nature of the trade. A lot of people didn't understand that.

Are people being misled? Probably not. I think if the SEC approved the products, and all the risks were disclosed in the prospectus – you know XIV and SVXY did exactly what they were supposed to do. They did not malfunction. So, actually, I would struggle to see the legal basis for a lawsuit here.

**Erik:** Yeah, I guess to my thinking the legal basis for the lawsuit is there's enough money involved to motivate the lawyers to make up whatever story they need to. There is so much money that got lost in one day. I agree with you, half of it was institutional guys that should be responsible, know what they were getting into.

But there's a whole lot of waitresses and bartenders that somebody told to buy this thing called XIV, it can only go up, it never goes down. And they didn't do any homework. They didn't read any prospectus. They didn't do anything.

And I don't think it's a question of the product not performing. I think it's more of an industry direction and policy regulation question of, is it the policy and intention of SEC and other authorities to say as long as the risks are properly disclosed, if somebody doesn't read it it's their problem?

Or is it more the industry's posture that products like ETFs, that are very popular with retail investors, shouldn't be offered if they have risks that are difficult for a lot of retail investors to understand? I think that's going to be the legal battle.

And I'm sure the battle will occur, just because of the amount of money that's involved, regardless of whether there's any merit to an argument or a claim against Credit Suisse. There's enough money involved that somebody's going to bring one. And we'll see what happens in the court.

I think we've covered the volatility side of what's happened this week pretty thoroughly. Let's go back to equities now.

Certainly the blowup of the volatility complex contributed to exacerbating and accelerating the downside in equities – at least as we're speaking on Wednesday afternoon, the day before this podcast will be released, the trend appears to be a bounce, at least so far. We're maybe 50% retraced so far, in terms of the big loss that happened earlier this week.

Do you think we're headed to new highs and the market continues on? Or do you think that we're going to see a failed rally and eventually newer lows? Where do we go from here in terms of equities?

**Jared:** I think it's possible that we get new highs. It wouldn't really make me happy, but I think it's possible. I think that there's a parallel here to a specific day in history that I remember quite well – February 27<sup>th</sup>, 2007. And, if you recall, the stock market peaked in July of 2007. But there was a day of very serious losses, a one-day even in February.

And, interestingly enough, both February 27<sup>th</sup>, 2007, and this Monday were the highest vol of vol days in history. In 2007, on that day, the VIX went from 10 to 18 in one day. A very similar vol of vol type of move.

And the catalyst for that particular move was China raising reserve requirements, and the ABX, which had been listed a couple of months earlier, had gone down about 10 points. If you remember, the ABX was the index of sub-prime mortgages.

And I think there's a possibility that this little vol blowup, which caused the VIX to gap from 10 to 50 in a couple of days, it might not be the actual top of the stock market. It could be the beginning of the end. It could be a precursor to the top, and the top might be a couple of months from now.

That's a possibility. Or, the other possibility is that we've seen the highs and the bear market has begun. Which is also possible.

**Erik:** Now, one thing that occurred to me just as you were speaking there, if I go back to '87 – I think the date was October 19<sup>th</sup> of 1987 when the 23% or whatever it was in one-day event happened – but, really, that experience started with volatility spikes and crazy things starting to happen about a month earlier. So is there an analogy here to maybe this is the tremor that comes before the big quake? And the October '87 event is still a month ahead of us?

**Jared:** I think that is the analogy, for the reasons that I described earlier. I think that this is the beginning of volatility and we're going to get more volatility.

And, when I was thinking about the short-vol trade kind of like you guys were, I thought to myself where would the S&P be in the event that the vol market broke? And I thought it would be similar to 1987. I thought it would be a 20% move.

Now, the vol market didn't break. It actually functioned properly. It was just a giant dislocation. But I still think that the volatility is really ahead of us.

**Erik:** We've talked about volatility and we've talked about equities and what's happened here. But, as you said earlier, what brought this all on was really a backing up in interest rates. So, we've had Jeff Gundlach and several other notable people kind of make a declaration saying, okay, this is it. The 35-year bond bull market is over. We're headed towards much higher Treasury rates.

And I guess the thing that I would have asked before this week, I would have said, wait a minute, I don't see how that's possible – because I think, first of all, you run the risk of crashing the equity market.

And, second of all, at some point, if you try to get back to historically normal rates, the US Government can't possibly – we used to have 7%–8% Treasury rates, but we didn't have a 20 trillion dollar national debt at that time. There's no way the US Government can service this debt at what we think of as historically normal interest rates.

So I kind of think in terms of how much farther can this increase in rates go before it causes big problems? And it seems like this week may have been the first of those problems. Would you agree with that? And how far can it go? And what's driving it? And do you think it's going to continue?

**Jared:** I think a lot of people sort of lose track of the fact that the bond market is dictated by supply and demand like any other market. It just doesn't seem like that all the time. Right now we have the prospect of a lot of supply. I mean, the bond market, honestly, is a mess. It's an absolute mess right now, as we speak. Considering that we dropped on an intra-day basis in the stock market 6% and the bond market can't get out of its own way, is not really a good sign.

Having said that, I think the time to get bearish on the bond market was when tens were at 1.6, not when they're at 2.6. That's a pretty big move. And I think that there's a limit as to how high yields can go, if you think that a recession is coming sooner rather than later.

Having said all that, you can make the argument that, just on a valuation basis, the bond market and the stock market have been overvalued simultaneously, and that both of them could decline at the same time. And that's exactly what's happening.

**Eric:** Let's assume that that is what's happening. I think there's a very strong probability that it is. A lot of really smart people have opined in the last several years – people are worried about stock market crashes, but, boy, if you see a popping of a bubble in the bond market that's where you really talk about major, major consequences in terms of the global economy.

Are we potentially at the beginning of something that could escalate into a bond market crisis? Or is this just kind of a warning sign that maybe the market is going to correct? And what would you expect?

Obviously, we could resort to more quantitative easing and buy up this excess supply of bonds in order to contain rates. That has not been the policy direction that's been announced. And everybody would like us to believe we're moving away from those kinds of policies.

Do you think at some point policy makers will be forced to make a U-turn and go back to accommodative monetary policy in order to prevent rates from running away?

**Jared:** I think that we can sustain a lot more pain in the bond market before people start thinking of that kind of stuff. I mean, even – today, like tens are at 2.70–2.80. 30-year fixed mortgages are around 4.25%, 4.5%. It's still really, really low. Nobody's experiencing any pain because mortgages went from 3.5% to 4.5%. I mean, you really have to get mortgage rates up to 6% before that starts making a difference.

The same thing with Treasury debt. I think that the interest expense has to go up by a couple hundred billion dollars in order for people to start thinking about what can we do to get interest rates lower? And keep in mind that the Treasury under Obama actually did a pretty good job of extending the duration of its maturities.

I think we used to be at about a three-, three-and-a-half-year duration in the bond market. And now I think we're at about six or seven. And Mnuchin, when he was first named Treasury Secretary, wanted to issue 50s and 100s to extend the duration even more. So I think the Treasury has actually done a pretty good job of setting us up so we're not entirely dependent on short-term funding.

**Erik:** Jared, let's move on to the US dollar. Something that's perplexed me for the last several weeks is, in many ways, it looked like the dollar was headed lower. But at the same time Treasuries are headed higher. That's not the usual relationship.

What's going on here? And where do you see the dollar headed from here?

**Jared:** I actually teach at a university. I teach finance. And whenever I talked about FX we would – we would do a whole chapter on FX and the first thing I would say is 80% of currency movements are explained by interest rates.

I'm a pretty good FX trader. I have made a living literally for the last eight to ten years of

following central bank policy, predicting changes in direction, and trading FX off of it. And for the last 6 to 12 months, really the last 6 months, interest rates have had nothing to do with it. The weakness in the dollar has been persistent and totally unexplained.

I don't have an answer to your question. I can't say, well, it's because of Trump. Or it's because of trade. Or it's because of who knows?

But it's been really hard to trade FX in this environment. Especially – if you look at the Euro – I started getting bullish on the Euro a while back, because I thought that they would taper asset purchases and I thought that they would eventually raise interest rates. I thought it would take them a while. You know, here we are about a year, a year and a half later, and they haven't done anything.

And, you know, we're pricing in still, even with the downturn in the markets, we're still pricing in three hikes this year. The dollar should be a lot stronger. And I just don't have an answer. It's really perplexing to me.

**Erik:** I want to follow up on that and just see if you are as perplexed as I am by the relationship also to gold here. Because the way I look at this, everything you just said is spot on. I couldn't agree more.

And the one exception I might say is, if you wanted an explanation for how could the dollar be going down in the face of these rates, the answer would be this is the kind of thing that you see not in developed markets but in emerging markets.

And what it means is that we're starting to see a loss of faith globally in the United States and in the US dollar as the hegemonic currency that drives the world. And the Shanghai Futures Exchange yuan-denominated oil contract is evidence of this. And what it means is the dollar is falling from prominence and therefore is headed down, even though rates are headed higher.

Now, I didn't think something like that was going to happen for several more years, but I do think it's plausible. The thing is, if that was it, I would think gold would be just to the moon. And we're seeing gold roll over here. Am I right to think that the action in gold kind of rules out that explanation? Or am I missing something?

**Jared:** I think gold has kind of done okay. I think what you might be missing is – believe it or not, I'm a France bull. I might be the only France bull in the world. And I was very vocal about the French elections. First at the possibility that François Fillon might win. I was excited about him. And I was also excited about Macron.

Macron has turned out to be a free market reformer. He is reforming a lot of the French economic system. And he, by getting elected, has made Europe stronger. So I think, relative to Europe, gold maybe necessarily isn't going up because there is actually a currency that is a counterbalance to the US. And even though the ECB isn't doing anything, I would offer that as

an explanation as to why that exchange rate is where it is.

**Erik:** Jared, let's move on to another subject you've written quite a lot about, which is Canada. Canadian equity market, Canadian housing, these are fascinating topics. We've heard a few different opinions on the program.

What's going on with the Canadian economy? And how do you interpret the actions that you've seen both in equities and in housing in Canada?

**Jared:** People have some understanding that Canada has a housing bubble. There's just no two ways about it. They have a housing bubble. The levels of personal debt in Canada are the highest in the world. The average home price is \$500,000 in Canada. That's the average.

And the central bank, Poloz is sort of in a position where he's stuck. The economy has been strong. They've been printing 4% GDP. But it's very hard for him to raise interest rates because most people in Canada have an adjustable rate mortgage. And those adjustable rate mortgages are indexed to five-year notes in Canada. And yields on fives have gone from 80 basis points to over 2%.

So there's been a huge tightening in Canada. The BOC has hiked rates three times since the summer. And I think they're stuck. Poloz has said that they're probably not going to hike anymore. They've been following the US. They've hiked three times, we've hiked three times. And, honestly, I think they're done.

I think that the housing market is pretty close to the downturn that everybody's been waiting for the last couple of years. Home sales just came out in Toronto. They were down 22% year-over-year, so you're starting to see some of that crappy data.

**Erik:** And do you think that there is a potential that money coming in from outside the country – on the one hand they've gone out of their way to intentionally impose these taxes on foreign transactions. But if the market starts to crash and they need to rescue it, I wonder if somebody will say that was a mistake, we need to derestrict things.

And if that were to happen, do you think there's a chance that that saves the market? Or is it just too big that once the avalanche starts nothing can stop it?

**Jared:** Well I think most of that foreign money was coming from China. And since those foreign buyers taxes were imposed in Vancouver and Toronto, China has been pretty successful at imposing capital controls. So a lot less of that money is finding its way to Canada.

So I think, even if they were to reverse those foreign buyers taxes, it's a little bit too late. You're just not going to see that flood of money coming from China anymore.

**Erik:** Well, Jared, I want to thank you for a fantastic interview. Before we go, though, please

tell our listeners about The Daily Dirtnap and what you do there.

**Jared:** First of all, I write a lot of free stuff for [Mauldin Economics](#). If you want to read me for free and test it out, go to [mauldineconomics.com](#) and check out [The 10<sup>th</sup> Man](#). But my paid newsletter service is called The Daily Dirtnap. And you can go to [dailydirtnap.com](#).

**Erik:** Jared, thank you so much for an excellent interview. Patrick Ceresna and I will be back. And be sure to stay tuned, folks, because Devin Anderson will be joining us in the postgame segment where we're going to come back and talk a little bit more about the blowup that occurred in the volatility complex this week.