



For the past nine years, the single most important influence on global asset prices has been the experimental and highly aggressive monetary policies employed by the world’s central banks. It should therefore be no surprise that the planned-for reversal of those policies could be almost as significant to capital markets as was their introduction.

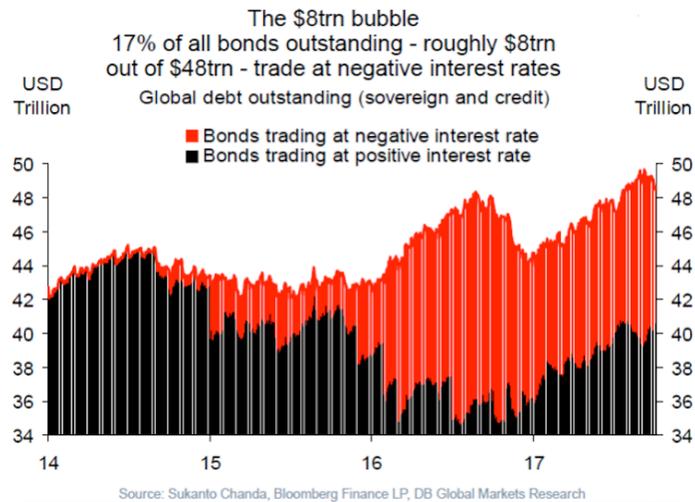


Indeed, one could argue that this is doubly true as, by their own admission, one of the primary drivers behind the Federal Reserve’s decision to pursue such extraordinary monetary policies was to achieve their stated objective of re-inflating the prices of both financial and real estate assets.

First of all, as a means of forcing money into the real economy at a time when banks were not lending, the Federal Reserve drove short-term interest rates down to near 0%, thus causing money to move out of the banking system and into the higher-yielding debt markets, thereby pushing interest rates lower and debt prices higher.

Second, starting in 2008, the Federal Reserve (and then ultimately all of the world’s major central banks) took steps to become the largest holders of sovereign and asset-backed debt in the world, when they created trillions of dollars of credit through an accounting measure called quantitative easing, and used that credit line to buy bonds in the open markets, thus pushing long-term interest rates down to almost unheard of levels, and bond prices to record highs.

So enormous has been the influence of these programs that, even today, 17% of all of the debt in the world still yields negative interest rates. Even more bizarre is the fact that, in 2017, bonds paying negative interest rates have actually outpaced bonds paying positive rates on a total return basis.



Finally, by pushing the yield on savings instruments below the rate of inflation, the Fed purposely made safer asset classes like cash and high-quality debt so unappealing that money flowed into equities and real estate. Their objective was to create a “wealth effect” that would encourage consumer spending and help pull the domestic economy out of its most severe slowdown in more than fifty years.

With one notable exception, the world's central banks have been extraordinarily effective in achieving their stated goals. The one major exception is that the global economy is still

battling a set of deflationary influences that have proven to be both very persistent and immensely difficult to explain, and central bankers have heretofore been unable to restore inflation to their stated 2% target.

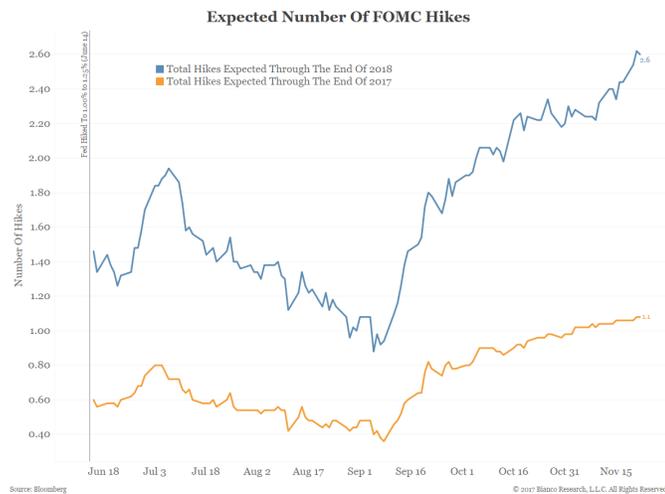
To-date, the Federal Reserve has always blamed this lack of inflation on “transitory factors” like less expensive wireless phone calling plans and slowing inflation in healthcare costs.



However, even Chairwoman Yellen is starting to question this important assumption, as she noted last week in a public discussion at New York University's Stern School of Business. “We expect [inflation] to move back up over the next year or two, but I will say I'm very uncertain about this...My colleagues and I are not certain that it is transitory, and we are monitoring inflation very closely,”...“It may be that there is something more endemic or long-lasting here that we need to pay attention to.”

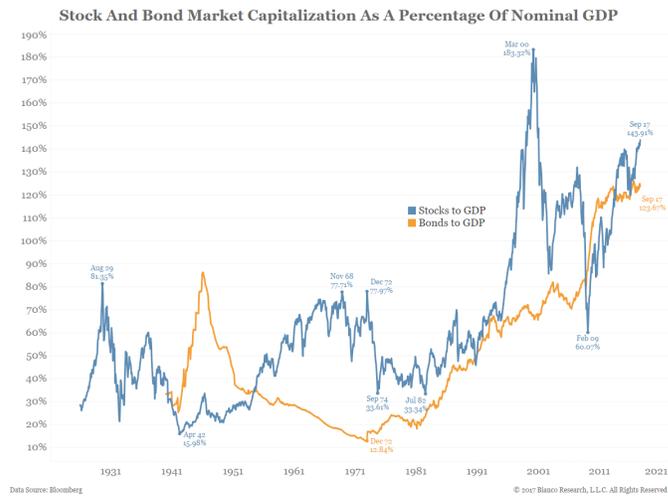
From our perspective, this is a potentially game-changing statement, as the pace of rate hikes, and the rate of withdrawal of these global monetary stimulus programs are all-important. Their effect could be draconian and very challenging for the capital markets, if they take place in an environment of accelerating inflation, but probably instead only represent a manageable headwind for the markets, if a benign inflationary outlook allows for the Fed to maintain a slow and measured tightening of monetary policy.

It is clear that the markets started questioning the supposedly “transitory” nature of low inflation well before the Federal Reserve did, which helps to explain why the markets are only pricing in 2.6 more short-term rate increases by the end of 2018, whereas the Federal Reserve has been guiding investors to expect at least four more rate increases before the end of next year.



As noted above, the central banks have, with the exception of achieving a healthy level of inflation, been exceptionally successful in achieving their goals. On the domestic front, we are in the midst of one of the longest-running, uninterrupted expansions in the history of the U.S. economy and the second most powerful bull market in equities since World War II, which is only exceeded by the 1990 to 2000 bull market.

It is no coincidence that this was the only other time when the equity market represented a larger part of the domestic economy than it does today. Notably, because monetary stimulus is fungible, its benefits extended well beyond the equity markets. Both commercial and residential real estate prices have soared. In addition, monetary stimulus actually accelerated a 36-year-old bull market in bonds and pushed the total value of the bond market to its highest level ever versus the size of the domestic economy.

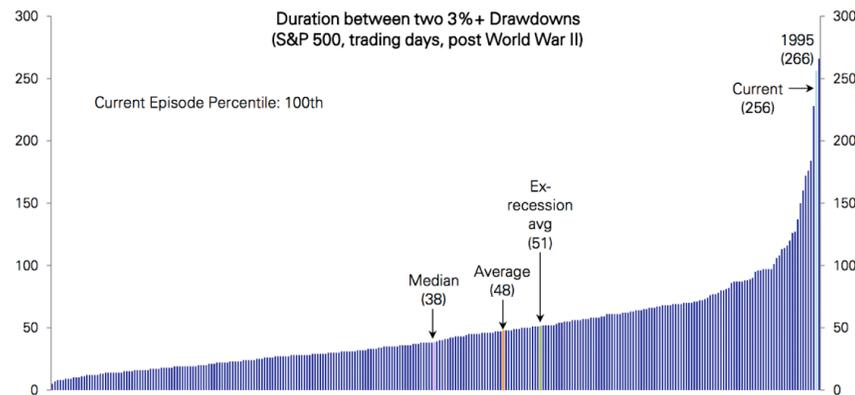


Moreover, these dramatic gains were made against a backdrop of some of the lowest equity market volatility in fifty-three years, and virtually without any periods of significant loss (a full year since a decline of at least 3%).

By a number of measures, the domestic stock market has been experiencing the most prolonged period of extraordinarily low volatility in history.

It is almost as if all investors have reached a state of perfect Zen, where they feel that they know all and understand all, and thus feel no fear or need to alter their current course. The bad news is that this is a textbook example of the type of complacency and investor overconfidence that ultimately almost always ends very badly. However, history also teaches us that, while measurables like valuation and sentiment can tell you much about upside potential and downside risk, they tell you virtually nothing about the timing of an inflection point or the ultimate catalyst for the reversal.

The most obvious potential candidate for a catalyst is the anticipated reversal of the past decade's global monetary stimulus, which might best be referred to as Quantitative Tightening or QT.



Source: Haver, Deutsche Bank

For over nine years, the world's central banks have been an investor's best friend, but their policies are about to turn from being a tailwind to being a headwind for asset prices. There has already been a notable impact on market internals, where the capital markets are transitioning out of an environment where everything gained value due to monetary stimulus, and largely without regard for a security's unique fundamentals, to one where securities are starting to trade based specifically on those unique fundamentals. For evidence, you need look no further than the fact that, in 2017, 30% of all S&P 500 stocks are down on the year, while 40% of S&P stocks are up by at least 20%. What a great environment for active securities selection.

This sea-change is prompting an increasing amount of speculation about whether or not one of the longest-running equity bull markets in history is finally running out of steam. It is a very interesting question, at least from an academic perspective. Whether or not it is a question worth pondering from a pragmatic perspective is another matter entirely, as will be discussed.

Peak	% Decline	P/E Ratio (TTM)	CAPE Ratio	10 Year Yield
May 1946	-26.6%	21.7	16.0	2.2%
June 1948	-20.6%	9.0	11.6	2.4%
July 1957	-20.7%	14.1	16.9	3.9%
Jan. 1962	-26.4%	21.3	21.2	4.1%
Feb. 1966	-22.2%	17.5	23.7	4.8%
Nov. 1968	-36.1%	18.4	22.2	5.7%
Jan. 1973	-48.2%	18.1	18.7	6.5%
Sept. 1976	-19.4%	11.1	11.8	7.6%
Nov. 1980	-27.1%	9.2	9.7	12.7%
July 1987	-33.5%	20.8	17.3	8.5%
July 1990	-19.9%	16.8	17.8	8.5%
July 1998	-19.3%	29.9	38.3	5.5%
Mar. 2000	-49.1%	28.3	43.2	6.3%
Oct. 2007	-56.8%	20.7	27.3	4.5%
Apr. 2011	-19.4%	19.0	21.8	3.9%
Current	???	24.7	31.2	2.3%

Source: Robert Shiller

In the meantime, what we know as a matter of fact is that the central banks have been so successful in their quest to reflate the prices of financial assets that most major asset classes, including equities, debt, and securitized real estate are now quite

expensive based upon traditional measures of value. For example, the cyclically-adjusted price-to-earnings multiple (CAPE Ratio) just hit a level of 31.2, which means that the Standard & Poor's 500 Index is now valued at almost twice its average ratio of only 16.8. However, here too, one needs to question the practical implications of this fact.

CAPE Ratio	3 Years		5 Years		10 Years	
	Best	Worst	Best	Worst	Best	Worst
5 to 15	33.4%	-3.0%	29.7%	1.5%	21.4%	7.0%
15 to 25	32.8%	-10.6%	28.6%	-4.1%	19.5%	0.5%
25 & Higher	29.7%	-16.1%	18.7%	-6.6%	9.3%	-3.4%

Data through Sept. 2017

After all, of the 15 equity bear markets that have taken place since the end of World War II, six or seven of them (depending on whether you are

benchmarking the CAPE Ratio or the P/E Ratio) actually began when the markets were selling at below average valuations. Of equal importance, it is not that unusual for markets to trade for months, if not years, at multiples that are overvalued based upon their averages.

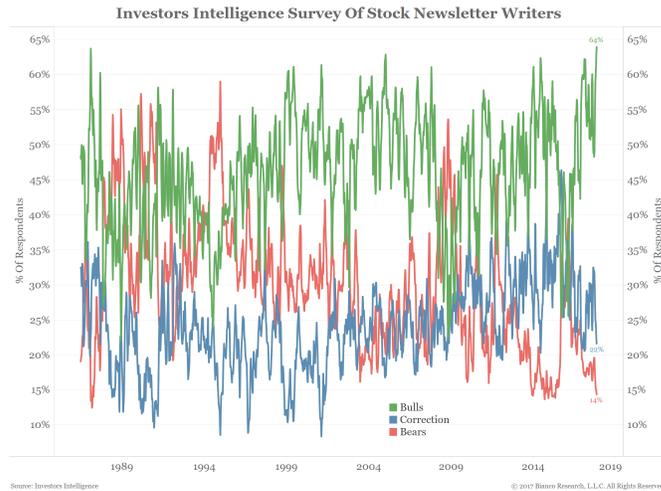
The fact is that markets rarely trade at fair value, and instead spend their long cycles vacillating between extremes of overbought and oversold, and normally

CAPE Ratio	3 Years	5 Years	10 Years
5 to 15	16.4%	16.1%	15.7%
15 to 25	10.3%	10.8%	9.1%
25 & Higher	3.9%	2.1%	4.9%

Data through Sept. 2017

ultimately moving further in each direction than almost anyone expects. However, this is not to suggest that valuations do not matter, as risk/adjusted returns have historically been much more favorable when valuations are low than when they are high. Even so, valuation has historically proven to be a very poor timing tool, particularly when you consider that even very overvalued equity markets have historically averaged modestly positive returns over three, five, and ten year periods.

Sentiment, which is currently very bullish, particularly within the professional investing community, is similar to valuation in many regards. It can tell you much about a market's upside potential and its downside risk (with very bullish sentiment indicating high levels of potential risk and vice-versa), but it offers relatively limited utility as a timing tool.



Ironically, the most vociferous concerns that we hear expressed center around the potential for a market “crash” (as it deprives investors of an opportunity to moderate their risk). We say ironically because, while bear markets (a 20% or greater decline) take place on average every five years, crashes are very rare. Indeed, one would be hard-pressed to find someone who could even name more than two trend-altering “crashes” in U.S. market history.

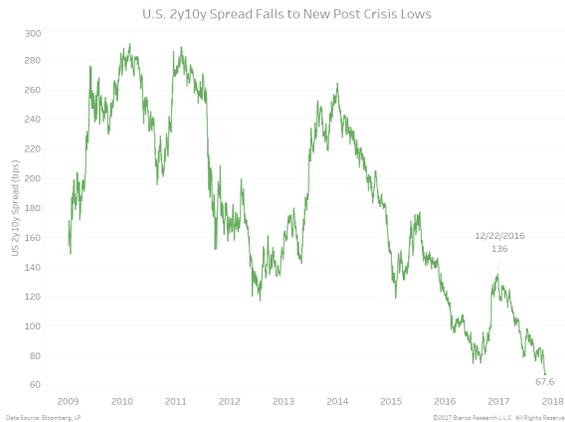
Moreover, unlike the 2010 “Flash Crash”, which lasted all of thirty-six minutes, significant crashes do not happen in a vacuum, and normally give plenty of warning for those actually paying attention. If you take the 1987 “Black Monday Crash” as an example, it was not some random event that occurred as a result of happenstance. Instead, the market had advanced by 44% over the prior year, despite a slowing U.S. economy. The U.S. trade deficit was ballooning and the value of the dollar was falling sharply. The Fed was aggressively raising interest rates, as newly-appointed Federal Reserve Chairman Greenspan continued his predecessor’s battle against hyper-inflation. In addition, the week before the crash, Iran had hit two U.S. commercial ships with silkworm missiles, and the U.S. responded on the morning of the crash by having U.S. warships launch an attack on an Iranian oil platform.

Two trading days before the crash, the Dow Industrial Average fell by 3.8% and then fell another 2.4% the trading day immediately before the crash. By the time that the 1987 “Black Monday Crash” finally occurred, the Dow Jones Industrial Average was already down by over 12% from its August 25 record high. It was not a “healthy” market.

The markets were paying attention to these risks, but many investors felt little “fear or need to alter their current course” (sound familiar?) because of a new and then very popular futures hedging strategy called “portfolio insurance” that was supposed to protect against losses in the cash markets. In fact, it did the exact opposite, and actually exacerbated the selling, as cash market losses generated selling in the futures market, which caused further cash market losses, which catalyzed additional futures market selling and so on and so on.

The bottom line is that, while crashes do occur, most bear markets are processes instead of events. They unfold over time, which means that it is not so important to try to proactively anticipate their start. Timing exact market turns is almost impossible, which makes jumping in and out of markets impractical. However, that is not to suggest that one should not make adjustments over time, like lowering overall portfolio risk when the markets are very expensive and/or market fundamentals are starting to deteriorate.

It is helpful that the most unpredictable market influences, like wars and terrorism, are not the ones that normally represent the catalysts for major declines. Indeed, if you examine the primary catalysts for every major bear market since the Great Depression, you will find the 1961 Cuban Missile Crisis and the 1973 Arab oil embargo identified as bear market catalysts. However, the primary catalyst for every other major bear market was economic in nature,



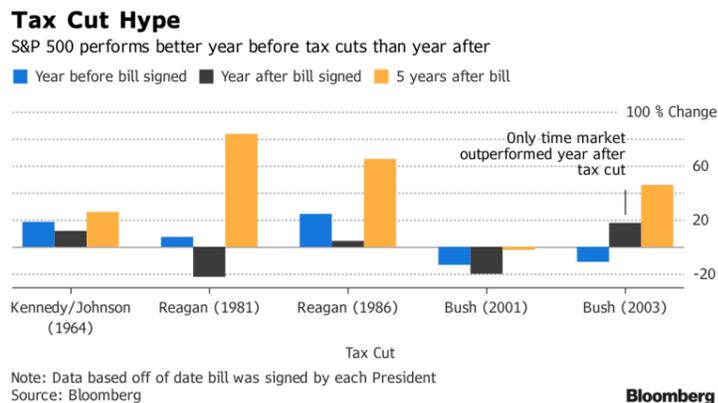
and therefore much more predictable, and much for useful from an investor’s perspective.

That said, virtually all of the world’s major equity markets are vastly overdue for a 5% to 10% decline, but we expect for that to be delayed until 2018, due to the benefits of waiting to sell that are attributable to the potential passage of tax reform.

Even so, there are several factors worth keeping an eye on between now and the end of the year. The first of these is the potential inversion of the yield curve, where short-term rates move higher than longer-term rates. This has historically proven to be a reliable predictor of recession, and can motivate banks to stop lending, which would obviously hurt the economy.

This risk will be exacerbated if the Fed continues to raise short-term rates, which they may be forced to do, despite market expectations, as the Fed’s tightening of monetary policy is thus far proving insufficient to offset the ongoing monetary stimulus from overseas economies. Indeed, according to a just-released report by the Federal Reserve Bank of Chicago, we are now experiencing the loosest monetary conditions since January of 1994.

On the political front, near-term risk revolves around two issues. The first is the December 8th debt ceiling limit that could potentially, albeit unlikely, result in a government shutdown.



The second is the risk that the tax reform bill stalls in Congress. While this attempt at tax reform fails to live up to its potential, it is market-friendly, and investors will be disappointed if it does not pass. Interestingly, there have been five tax reform packages passed over the past 70 years. It is noteworthy that the mean average return in the S&P 500 in the year prior to enactment has been +14.3%, and in the year after passage, it has been -7.5%. The median average numbers of 18.9% and -13.1% respectively are even more noteworthy.

While there are clearly some potential catalysts for near-term volatility, and while there is little doubt that stocks are in the later stages of their historic advance, we do not yet see the economic fundamentals that would suggest to us an imminent sea change in the current trend of the global equity markets.