MORNING BRIEFING
July 19, 2017

Gray Swans

See the collection of the individual charts linked below.

(1) The Nirvana scenario. (2) Taleb's birds. (3) Black Swans don't have to be bad. (4) An industry of bird watchers. (5) Is predicting Black Swan events an oxymoron? (6) There are a few Gray Swans out there. (7) The Grayest Swan is a melt-up. (8) Healthcare reform is sinking in the swamp. (9) Are consumers retrenching or not? (10) A primer on ETFs and their potential contribution to a meltdown.

Strategy: Pesky Birds. If inflation remains subdued and the economic expansion continues, bond investors should earn yields on their bonds surpassing inflation. If this scenario persists for five to 10 years, they should earn a modest real return as long as their bonds mature over the same period. They are unlikely to have significant capital losses or gains along the way. Stock prices should continue to rise along with earnings and dividends.

Of course, it's never quite so easy to predict the outlook for bonds and stocks. There are those pesky Black Swans that could show up when they are least expected. Black Swan events were discussed by Nassim Nicholas Taleb in his 2001 book *Fooled by Randomness*: *The Hidden Role of Chance in Life and in the Markets,* which focused on financial events. His 2007 book *The Black Swan: The Impact of the Highly Improbable* generalized the metaphor as follows:

"What we call here a Black Swan (and capitalize it) is an event with the following three attributes. First, it is an outlier, as it lies outside the realm of regular expectations, because nothing in the past can convincingly point to its possibility. Second, it carries an extreme 'impact'. Third, in spite of its outlier status, human nature makes us concoct explanations for its occurrence after the fact, making it explainable and predictable. I stop and summarize the triplet: rarity, extreme 'impact', and retrospective (though not prospective) predictability. A small number of Black Swans explains almost everything in our world, from the success of ideas and religions, to the dynamics of historical events, to elements of our own personal lives."

Since the start of the current bull market, pessimistic prognosticators have industriously been anticipating all sorts of dire Black Swan events, including the disintegration of the Eurozone, a financial crisis in China, currency wars, and many more. Geopolitical crises also might turn into Black Swan events. Not surprisingly, none of these terrible prospects actually happened, since by definition Black Swans are very hard to predict. Despite the symmetry of Taleb's argument, Black Swans are widely associated with bad outcomes. Plenty come to mind that could trip up bond and stock investors:

(1) *Inflation.* First and foremost would be a significant revival of inflation. That would force central banks to raise rates. Bond prices would fall, and stock markets might do so once rates got high enough to cause a recession, which might be signaled by an inverted yield curve. I have often discussed in the past all the reasons why inflation might be dead for the foreseeable future.

(2) *Monetary policy*. The bears are saying that stocks will fall once the European Central Bank and Bank of Japan terminate their QE programs and start to normalize their monetary policies. Then again, they warned that once the Fed terminated its quantitative easing (QE) program, stock prices would fall.

The program was terminated at the end of October 2014, yet the S&P 500 rose 21.9% through the latest record high on July 14 of this year.

(3) *Geopolitics.* Tensions between China and its neighbors, especially the ones allied with the US, could flare up as China continues to build small islands in the South China Sea to claim sovereignty over this important trade route. The Trump administration may take a tougher stance against the nuclear ambitions of North Korea and Iran, raising the chances of a military confrontation. Russian President Vladimir Putin seems intent on reviving the Soviet Union even if that provokes another Cold War, with the potential for dangerous skirmishes with NATO forces. However, in recent years, and certainly during the current bull market, stock investors have learned that selloffs triggered by geopolitical crises tend to be buying opportunities that don't last long.

(4) *Melt-up*. In late 2012, a widely feared and anticipated Black Swan event was that the US economy would fall off a "fiscal cliff" in early 2013 because Democrats and Republicans couldn't agree on a federal budget. When they did so at the start of the new year, I wrote that investors might have tired of looking out for Black Swans. I suggested that the Black Swan this time might be a melt-up in the stock market.

During the first half of 2017, I observed that money was pouring into exchange-traded funds (ETFs). That influx was driving a broad-based surge in stock prices, since the most popular ETFs tend to track the broad market indexes. The problem with the popularity of this investment style is that while it works great on the way up, it has the potential to worsen future corrections and bear markets, as indiscriminate selling of ETFs causes indiscriminate selling of all the stocks they include, no matter their fundamentals. Unlike mutual funds, ETFs don't hold liquid assets to meet redemption orders; they have to sell stocks when investors decide to redeem.

(5) *Contrarian alert.* Contrarians were put on high alert at the end of June 2017, when Fed Chair Janet Yellen said at a London conference: "Would I say there will never, ever be another financial crisis? You know probably that would be going too far, but I do think we're much safer, and I hope it will not be in our lifetimes, and I don't believe it will be." Yet she also described asset valuations as "somewhat rich if you use some traditional metrics like price earnings ratios." Yellen turned 71 on August 13, 2017, so her lifetime may not be as long as yours. For someone who tends to be very precise, her use of "our lifetimes" sure leaves room for interpretation! In any event, her comment is reminiscent of other ill-fated predictions by Fed chairs—like Greenspan's "once-in-a-century" technology and productivity revolution and Bernanke's no "significant spillovers" stance on the subprime mortgage debacle.

I'll go out on a limb and predict that there will be another financial crisis in our lifetimes. However, like previous ones, it likely will offer a great opportunity for buying stocks. For now, I'm seeing lots of White Swans, no Black Swans, and a few Gray Swans.

US Politics: The Swamp Thickens. Yesterday morning, we all learned that the GOP effort to repeal and replace Obamacare in the Senate had collapsed. This is a Gray Swan, I suppose. It doesn't come as much of a surprise, though it is somewhat surprising that the Republicans can't get their act together. The stock market presumably rallied following the November 8, 2016 presidential election because Donald Trump, a Republican, won with Republican majorities in both houses of Congress. That seemingly increased the chances that Trump's Reaganesque policy agenda would get implemented quickly. Not so fast: The Republicans are badly split between moderates and conservatives. So is tax reform now dead too?

Senate Republican Leader Mitch McConnell announced that he was calling the bluff of his fickle GOP colleagues and planning a repeal-only vote, putting them on the line to act on the promise they had repeatedly made in their campaigns, with no excuses: "Regretfully, it is now apparent that the effort to repeal and immediately replace the failure of Obamacare will not be successful. So, in the coming days, the Senate will vote to take up the House bill with the first amendment in order being what a majority of the Senate has already supported in 2015 and that was vetoed by then-President Obama: a repeal of Obamacare with a two-year delay."

Republican Senators Susan Collins of Maine, Shelley Moore Capito of West Virginia, and Lisa Murkowski of Alaska immediately declared they could not vote to repeal the Affordable Care Act without a replacement—enough to doom the effort before it could get any momentum.

In any event, McConnell may be trying to get the issue buried so he can move on to tax reform, while showing the base he tried everything he could. Some politicos are speculating that the failure of health reform would make tax reform more likely—because of political desperation by Republicans, who'll need something to run on.

Maybe so, but Joe and I aren't convinced that the stock market rally since Election Day was all about Trump and his agenda. Corporate profits started to recover last summer from the earnings downturn that was mostly attributable to the energy industry's recession. S&P 500/400/600 forward earnings all rose to record highs again last week (*Fig. 1*). In addition, global economic activity has improved since late last year with many overseas stock markets outperforming the US's since then (*Fig. 2*). Here is the global performance derby…

(1) … in local currencies since November 8, 2016: Japan (18.0%), EMU (17.8), Emerging Markets (14.9), S&P 500 (14.9), All Country World (14.6), and United Kingdom (8.2).

(2) … in dollars over the same period: EMU (22.3), Emerging Markets (16.5), All Country World (15.3), S&P 500 (14.9), United Kingdom (14.0), and Japan (9.6).

US Consumer: MIA? Another Gray Swan is the puzzling weakness in consumer spending. June's retail sales remained stalled around record highs, falling unexpectedly for the second month. That's surprising given that payroll employment rose 222,000 during June following May's 152,000 gain. Both are solid gains. Could it be that consumers are retrenching because of policy uncertainty in Washington, DC? Will they be relieved that Obamacare remains the law of the land? Or do they recognize that it is no bargain, and may be imploding in any case? Perhaps they've been hard hit by higher out-of-pocket costs for health care and are retrenching on discretionary purchases.

June's total retail sales was down 0.2% m/m following a 0.1% decline in May (*Fig. 3*). Some of the weakness was attributable to gasoline sales, which declined along with the pump price (*Fig. 4*). Car sales have stalled in recent months (*Fig. 5*).

On the other hand, our Earned Income Proxy for private-sector wages and salaries rose to another record high in June, gaining 0.6% m/m and 4.5% y/y. Retail sales excluding gasoline has closely followed our proxy (*Fig. 6*). Debbie reports that adjusted for inflation, retail sales during the three months through June rose 4.9% (saar) from the previous three months (*Fig. 7*).

ETFs: 50 Shades of Gray. Equity ETFs are creating a new market structure that hasn't been seriously stress-tested by a sharp decline in stock prices. Could the recent record inflows into ETFs, which have clearly boosted the stock market over the past year, turn into significant outflows that exacerbate or even cause the next bear market? ETFs still represent a small share of the markets, constituting less than 10% of US equity market capitalization, according to a May 2017 academic paper found on SSRN. That's too small to matter, assuming all is functioning as it should. But ETFs could turn dysfunctional under stress if hordes of retail investors get spooked and sell their ETF shares all at once. Below, I've asked Melissa to have a closer look at this possibility:

(1) *Similar shades*. Created in the 1990s, ETFs were developed primarily as a vehicle for long-term investors to passively track indexes. Active ETFs have also since come to the markets, but there are a lot fewer of them than passive ones. One selling point of ETFs over their close cousin, traditional open-end mutual funds, for investors is that they don't have to wait until the end of the day to buy or sell them. ETFs trade all day long, while traditional open-end mutual funds trade only at the market's close of trading each day at the net asset value (NAV) of the underlying securities (although orders can be placed on traditional open-end mutual funds throughout the day). An ETF's price, on the other hand, might represent a premium or a discount to the underlying securities, although the goal is to track the designated mix of underlying securities (such as an index in the case of passive ETFs) as closely as possible.

(2) *Shadow market*. Only those deemed "authorized participants" (APs) by the Securities and Exchange Commission (SEC) with ETF dealer agreements have the power to create and redeem ETF shares. APs buy in the primary market the underlying securities with which to create a basket of stocks at a prescribed mix (e.g., the same as that of the S&P 500 if its being tracked) to form the ETF shares, i.e., "creation units." The portfolio of assets underlying ETF creation units are held in a trust. The opposite, "redemption units," are existing ETF shares that APs transform back into the underlying securities, which may be sold back on the primary market. So far, so good.

While the above all occurs in the primary market, most of the action happens in the secondary market, where ETF shares are traded rather than the underlying securities. In fact, only 10% of daily activity in all ETF shares occurs on the primary market, according to a 2015 ICI study. It's in the secondary market where retail investors can play, buying and selling ETF shares on a stock exchange like the shares of most publicly traded companies.

Here's where it gets interesting. By nature, the price of ETFs on the secondary market doesn't always perfectly equal the NAV of the underlying securities—thus creating an arbitrage opportunity for APs, who bring the ETF price back to equilibrium NAV by way of simple supply and demand. Everyone is happy.

By the way, the spread between an ETF's intraday price and its NAV may also simply be traded away due to normal price fluctuations on the secondary market ("in-kind" between ETF shares), or on the primary market (among the underlying assets) absent any creation or redemption of ETF shares, or arbitrage transaction. It's also important to note that APs are not under any obligation to engage in these transactions and only do so for their own benefit.

(3) *Silver knights.* So how does the arbitrage opportunity work? ICI neatly explained it in a 2012 blog post:

"When an ETF is trading at a premium to its underlying value, authorized participants may sell short the ETF during the day while simultaneously buying the underlying securities. At the end of the day, the authorized participant will deliver the creation basket of securities to the ETF in exchange for ETF shares that they use to cover their short sales. The authorized participant will receive a profit from having paid less for the underlying securities than it received for the ETF shares. The additional supply of ETF shares also should help bring the ETF share price back in line with its underlying value.

"When an ETF is trading at a discount, authorized participants may buy the ETF shares and sell short the underlying securities. At the end of the day, the authorized participant will return ETF shares to the fund in exchange for the ETF's redemption basket of securities, which they will use to cover their short positions. The authorized participant will receive a profit from having paid less for the ETF shares than it received for the underlying security. The lower supply of ETF shares available also should help bring the ETF share price back in line with its underlying value."

But what happens if a subset of the APs lacks enough incentive to step in? That could be the case either because the risk outweighs the benefit of doing so or because they don't have the capital or credit to do so. Well, the good news is that the ratio of APs to ETFs is greater than 1 to 1. On average, each ETF has about 34 agreements, according to the previously cited 2015 ICI study. However, they might not all be active. On the other hand, one AP might represent multiple external institutional market-makers that are participating in the arbitrage game through the APs. The point is: if one AP (or market-maker) is out, another will likely step in. For example, when the high-frequency ETF trading market-maker Knight Capital Group experienced a technology glitch in 2012, it severely impaired the firm's capital base. Consequently, the firm's ability to provide liquidity in the ETF markets caused ETF spreads to widen. However, the gap was temporary. Knight reportedly enlisted the help of rival market-makers to provide adequate liquidity to restore balance to those shares impacted.

(4) *Ashes, ashes*. But what if all of the APs decide to take a metaphorical cigarette break at the same time? Well, the odds of that are as slim as a Black Swan event. But it could theoretically happen if investor confidence is so shaken that ETF prices come tumbling down faster than APs would dare to step in. ETF spreads could widen. Retail investors trying sell their ETF shares on the secondary markets might receive only the discounted price for their shares rather than the NAV of the underlying securities.

That situation could be bad for markets, but how bad depends on how big ETFs are relative to the markets, which is not that big. It could get really bad if the situation caused retail investors more broadly to pull their money out the markets. "There is no market mechanism to stop how perceived informed traders can cause other market participants to change behavior and sell alongside," wrote Dean Barr in a relevant LinkedIn post. But they'd all probably be doing so anyway if they were spooked enough to sell their shares of ETFs en masse in the first place. In other words, we'd probably all have bigger problems than ETFs on our hands in that scenario (a North Korea gone ballistic is one example that comes to mind).

(5) *Uncertainty principle*. Ari Rubenstein, CEO and co-founder of Global Trading Systems LLC, told lawmakers at a 6/27 House Financial Services Committee hearing: "In some ways the markets are a bit untested … It's definitely something we should talk about to make sure industry participants are prepared in those instruments." Rubenstein was apparently referring to the untested nature of ETFs during a period of stress, according to a recent Bloomberg article.

By the way, financial markets blogger "Heisenberg" made a couple of interesting points in a 2/21 article for Seeking Alpha. The article explained that one of the selling points that ETF managers make to investors is that ETFs help to lower market volatility because large blocks of ETF shares can trade on the secondary market without impacting the price of the underlying securities. But that might not be a good thing, according to the author Heisenberg, because if "one day" everyone was "dumping" ETFs, the ETF model "goes out the window." Ironically, elaborates the author, the advent of ETFs may have worsened the liquidity of the underlying assets by creating demand for the ETF portfolio in lieu of the assets themselves.

(6) *Gray area*. To address potential liquidity issues, the SEC passed a 400+ page rule pertaining to ETFs at the end of 2016 for which compliance dates begin in 2018. According to a summary of the rule from a March 2017 Morgan Lewis panel, most ETF firms would be required to establish and execute a

written liquidity risk management program, required to be disclosed to the SEC.

The rule further stipulates that ETFs are prohibited from acquiring illiquid assets that would cause illiquid holdings to exceed 15% of the fund's net assets. The SEC's rule seems like a reasonable step in the right direction. However, some gray area remains, in our opinion. Illiquid assets are well defined as those that would be difficult to sell within seven calendar days at a reasonable price (i.e., not at a fire sale price). However, it seems to us that that it would be hard to predict what would happen if liquidity problems were to occur for assets that were already acquired. The SEC specifies that the rule is not intended to create "fire sales," but that doesn't mean that they can't happen.

CALENDARS

US. Wed: Housing Starts & Building Permits 1.170mu/1.206mu, MBA Mortgage Applications, EIA Petroleum Status Report. **Thurs:** Leading Indicators 0.4%, Jobless Claims 246k, Philadelphia Fed Manufacturing Index 22.0, Weekly Consumer Comfort Index, EIA Natural Gas Report. (Bloomberg estimates)

Global. Wed: Japan Merchandise Trade Balance (yen) 488b. **Thurs:** Eurozone Consumer Confidence -1.1, UK Retail Sales 2.5% y/y, Australia Employment & Unemployment Rate 15k/5.6%, ECB Central Bank Rate Decision 0.00%, ECB Marginal Lending Facility & Deposit Facility Rate 0.25%/-0.40%, ECB Asset Purchase Target (euros) 60b, BOJ Policy Balance Rate & 10-Year Yield Target -0.10%/0.0%, Kuroda. (DailyFX estimates)

STRATEGY INDICATORS

YRI Weekly Leading Index (*link*): Our Weekly Leading Index (WLI)—a good coincident indicator that can confirm or raise doubts about stock market swings—fell for the sixth time in seven weeks since reaching a new record high, down 0.9% during the week of July 8 and 3.6% over the period. Our WLI is the average of our Boom-Bust Barometer (BBB) and Bloomberg's Weekly Consumer Comfort Index (WCCI). Our BBB also contracted six of the past seven weeks by a total of 4.4%, following a two-week surge of 3.3% to a new record high. Over the seven-week period, jobless claims climbed to 245,750 (4-wa) from 235,500, which was the lowest since April 1973. The CRB raw industrial spot price index—another BBB component—drifted lower. Meanwhile, the WCCI fell for the fifth time in six weeks, by 8.2%.

S&P 500 Q2 Earnings Season Monitor (*link*): With over 8% of S&P 500 companies finished reporting Q2-2017 results, their revenue and earnings surprise data are better than at the comparable point of the Q1 season, but y/y growth comparisons are mixed. Of the 43 companies in the S&P 500 that have reported, 74% exceeded industry analysts' earnings estimates by an average of 6.0%; they have averaged a y/y earnings gain of 36.6%. At the same point during the Q1-2017 reporting period, a higher percentage of companies (77%) in the S&P 500 had beaten consensus earnings estimates by a lower 5.4%, and earnings were up a lower 22.0% y/y. On the revenue side, 74% beat sales estimates so far, with results coming in 1.4% above forecast and 5.8% higher than a year earlier. At this point in the Q1 season, a lower 47% had exceeded forecasts, companies reported revenues as forecasted, and sales rose a higher 7.3% y/y. Q2 earnings results are higher for 72% of companies vs 65% at the same point in Q1, and revenues are higher for 88%, the same percentage as a quarter ago. Although these figures will change markedly as more Q2-2017 results are reported in the coming weeks, the early results are encouraging. Q2-2017 should mark the fourth straight quarter of positive y/y earnings growth, but growth is likely to fall back into the single digits following Q1's double-digit percentage growth, which was the first double-digit growth seen since Q3-2011.

US ECONOMIC INDICATORS

Import Prices (*link*): Import prices in June advanced 1.5% y/y, easing for the fourth month from February's 4.7%—which was the biggest 12-month gain since February 2012. It had bottomed at -11.6% in September 2015. Petroleum prices advanced 4.5% in the 12 months through June, down from February's seven-year high of 74.1%. The yearly gain in nonpetroleum products accelerated 1.4% y/y, back up at April's cyclical high; the yearly rate had turned positive in December (0.3% y/y) for the first time since November 2014. Total import prices fell for the third time in four months, down 0.3% last month; nonpetroleum import prices ticked up 0.1% after no change in May and a 0.3% advance in April.

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