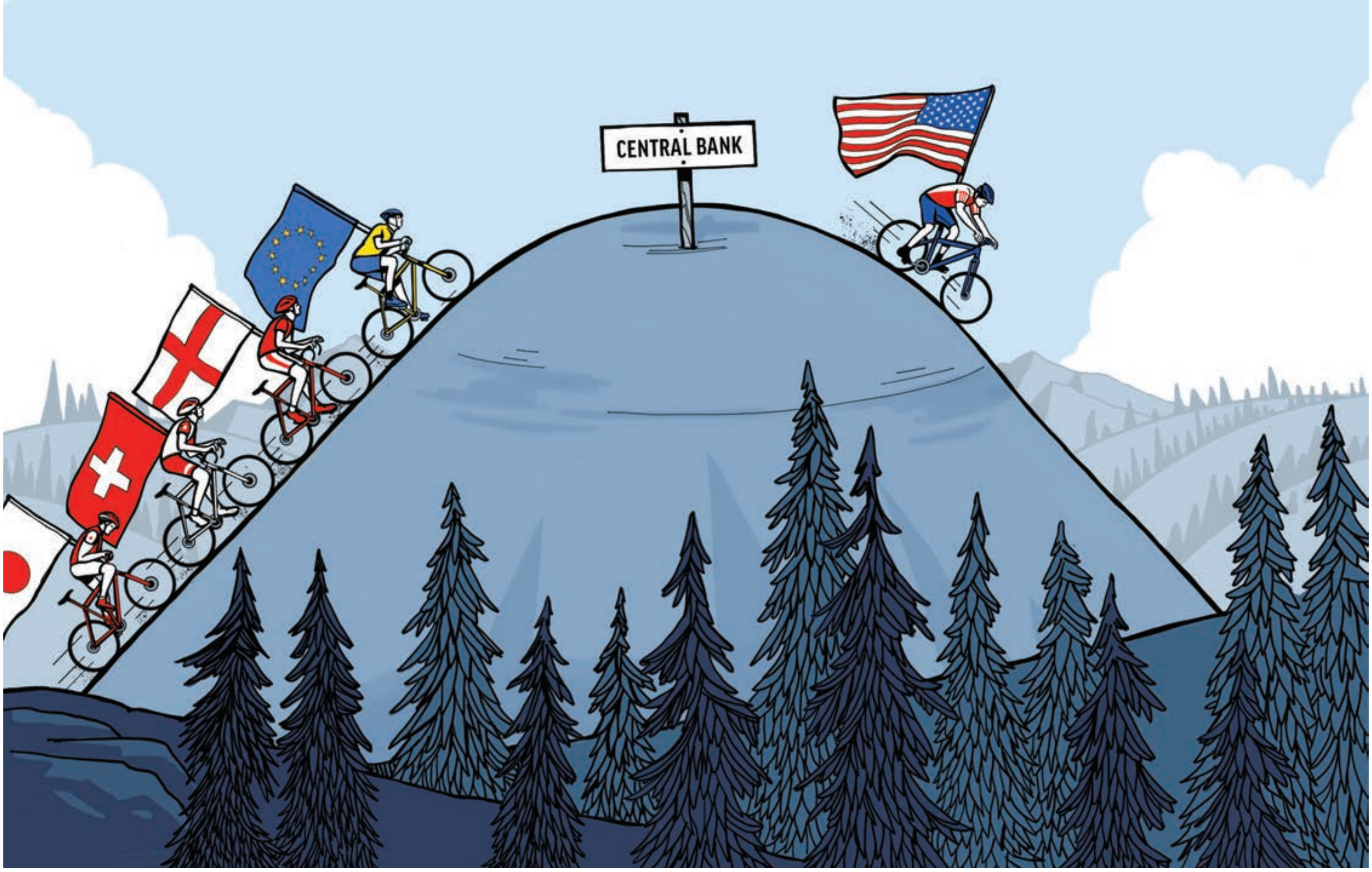
GRESHAM

2018 Annual Outlook

Peak Central Bank



In 2017, investors experienced the best of all possible worlds – uncommon synchronized global growth, strong acceleration in corporate earnings and continuing unprecedented monetary support – that fueled capital market appreciation across the globe. However, investors face a looming milestone in 2018, as we approach Peak Central Bank. The U.S. is well into its monetary normalization phase and other countries will begin to follow. Will the impact of shrinking central bank balance sheets remove the support investors have enjoyed for nearly a decade? Will the status quo of buying every dip be replaced with volatility and sharper corrections, causing investors to sell and seek comfort in cash?

Yes, asset prices are elevated across many markets, but this metric has historically been a lousy predictor of timing market declines. Higher asset prices do portend lower future returns and possibly steeper declines for investors in the event of a correction. However, we can also find several examples in history of similarly elevated valuations, where investors were well rewarded in the subsequent years due to underlying fundamental growth. What will likely change is the historic low level of volatility that investors experienced in 2017, as some of the volatility-reducing influences are likely to dissipate in the coming year.
As a result, investors are likely to be awakened from their complacent state.

Summary

2017 was the perfect Goldilocks scenario for markets. We experienced synchronized global growth across every Organization for Economic Cooperation and Development ("OECD") country. Corporate earnings rebounded, highlighted by emerging markets whose earnings growth exceeded 35%. For the first time in many years, we had fundamental support in the form of economic and corporate earnings growth for market appreciation rather than simply multiple expansion.

Central bank policy is approaching an inflection point. In the U.S., the Federal Reserve ("Fed") has been on a gradual path toward interest rate normalization for several years. In contrast, aggregate global central bank policy remains expansionary, as major non-U.S. central banks have maintained or even expanded their balance sheets. However, we are approaching Peak Central Bank, a point at which the aggregate global central bank asset purchases roll over and become negative. While we are concerned about the implications of this change, we were also encouraged by the muted reaction to the early adjustments by the Fed.

In the U.S., excess capacity in the economy is shrinking, particularly as labor markets tighten, raising the specter of accelerating inflation. The Fed now has to thread the proverbial needle to continue increasing short-term interest rates without overtightening and knocking the economy into a recession.

Equity markets reached record highs in 2017, pushing valuations to concerning new levels, but it is important to remember that high valuations are notoriously bad predictors of market corrections. Strong fundamentals may support U.S. equity markets in the near-term, but we continue to find more compelling opportunities overseas, particularly in southern Europe and in emerging and frontier markets.

Hedge funds finally had a good year, but much of their excess returns can be explained by a strong equity market that floated many boats and a re-crowding effect that is increasing downside risks to investors. On the other hand, intra-stock correlations are down, which provides a better opportunity for top-performing managers to profit from more idiosyncratic stock price movements. Unfortunately, traditional active management continues to disappoint, as the vast majority of managers underperformed once again in 2017.

Private equity performance remains strong, particularly among top-quartile managers. There is evidence to suggest that the opportunity set in public markets is shrinking in the U.S. due to corporate consolidation and fewer IPOs. These structural shifts might also suggest that investors' baseline allocations should be shifting away from public markets and toward private opportunities. We believe that the opportunity set in select private investments, in both real assets and private equity, remains robust. However, these opportunities tend to lie in areas beyond the well-known, large, branded managers, requiring more extensive networking and skill to identify and select managers in these areas.

More specifically, we recommend the following:

- Increase cash holdings to a few years of expenses as a buffer to insulate portfolios against emotional decisions or forced sales in the event of a market decline.

- Continue to underweight fixed income investments based on the low level of current interest rates and our expectations that rates will continue to rise.

- U.S. equities are expensive by historical standards, but recognize that there is a strong possibility that the "melt-up" continues based on robust economic and corporate earnings growth … at least in the short-term. We continue to prefer non-U.S. equities in the intermediate to long-term.

- The fundamental support of international equity markets, particularly in areas like southern Europe, is finally rebounding and moving from recovery into a long-awaited expansion period, justifying an overweight.

- Emerging markets, despite their incredible performance in 2017, remain attractive as earnings growth essentially kept pace with market appreciation, causing us to recommend that investors continue to overweight emerging market equities — and, to a lesser extent, frontier market equities — in their portfolio. It remains critically important to work with managers who operate locally and invest in non-benchmark oriented companies that are less well researched.

- Private equity should remain a core growth allocation for long-term portfolios, although we remain concerned about prices and leverage at the upper-end of the market and in later-stage venture capital investments. Market inefficiencies and opportunities remain prevalent in other areas. We continue our long-standing interest in and exposure to venture capital, particularly in China.

Markets in Review

2017 was a tremendous year for investors across the world, as shown in Chart 1. Most analysts were predicting a sideways year for equity markets given expectations for lackluster earnings and a starting point of elevated valuations. Instead, what we received was an uncommon synchronization of global economic growth and virtuous events that propelled investor returns in nearly every sector and geography. Earnings grew ahead of expectations, corporate tax reform further elevated earnings estimates, dividends surged, and as a result, share prices appreciated sharply. At the same time, interest rates have begun the process of normalization without significant incident … yet. For an equity investor, this past year may rightly be viewed as that extremely rare best of all possible worlds.

A lack of volatility was the most remarkable aspect of last year's equity market performance. While the market wobbled a few times through some geopolitical events, we never saw a sustained rush of selling activity and every dip became a buying opportunity. 2017 was the first year in U.S. stock market history without a single down month. Further, December marked the 14^{th} consecutive month of rising stock prices in the U.S., exceeding the prior record of 12 months set in 1935-1936 and 1949-1950.

Chart 1. Performance and Valuation

		Performance			Valuation	
			Annualized		Forward P/E	
Market	Index	2017	3 Year	5 Year	Dec 2017	Dec 2016
World Equity	MSCI World	22.4%	9.3%	11.6%	17.0x	16.3x
U.S. Equity	S&P 500	21.8%	11.4%	15.8%	18.5x	17.3x
International Equity	MSCI AC World ex U.S.	27.2%	7.8%	6.8%	14.3x	14.1x
Europe Equity	MSCI Europe	25.5%	6.7%	7.4%	15.0x	14.8x
Emerging Market Equity	MSCI Emerging Markets	37.3%	9.1%	4.3%	12.3x	11.8x
China Equity	MSCI China	54.1%	12.7%	9.9%	13.3x	11.2x
India Equity	MSCI India	38.8%	8.7%	8.9%	18.6x	15.9x
Frontier Market Equity	MSCI Frontier Markets	31.9%	5.0%	9.3%	12.5x	11.0x
					Spreads vs. Treasuries	
10-Year Treasury	Citi Treasury Benchmark 10-Year	2.1%	1.0%	1.0%	-	-
Municipal Bonds	Barclays Mgd Money Short/Int	3.5%	1.9%	1.8%	55 bps	73 bps
U.S. High-Yield Bonds	Barclays High-Yield Corporate Bond	7.5%	6.4%	5.8%	343 bps	409 bps
Emerging Market Bonds	JP Morgan Emerging Market Bond	9.3%	6.8%	3.8%	225 bps	301 bps
Hedge Funds	HFRI Fund Weighted	8.7%	4.3%	5.0%		
Conservative Hedge Funds	HFRI FOF Conservative	4.1%	2.1%	3.4%		
Commodities	Bloomberg Commodity Index	1.7%	-5.0%	-8.5%		
Gold	Spot Price of Gold	13.1%	3.2%	-4.9%		

Source: Bloomberg, MSCI, JP Morgan

World equity markets "melted up" during the year and posted their strongest performance since 2013. Developed world equity markets rose 22%, with developed international markets, boosted by a declining U.S. dollar, roughly keeping pace with U.S. markets. Some, but not all, of this appreciation was supported by stronger-than-anticipated earnings growth, which caused global equity markets to continue to rerate higher, becoming slightly more expensive from a price-to-earnings perspective.

Surprisingly, small-cap stocks in the U.S. lagged large-cap stocks despite being viewed as the largest beneficiary of corporate tax reform. Some of this is likely due to an unwind of the initial post-election euphoria from late 2016, which created a higher starting point for this universe in January of 2017, but three-year returns for these companies still exceed the broader market by several percentage points.

Emerging markets were the star performer in 2017, increasing over 37%, which was supported by several percentage points of currency appreciation. Chinese and Indian markets performed particularly well, increasing 51% and 39%, respectively, on the foundation of strong economic and earnings growth and ongoing reforms. This extends a period of strong relative and absolute performance for emerging market equities after several years of underperforming developed markets. Corporate earnings grew strongly, nearly keeping pace with equity market gains, causing these markets to rerate modestly upward from a relatively lower level as well.

Hedge funds performed better in 2017 for the first time in many years. There are several different ways we can measure this. First, we can look at absolute returns of the hedge fund peer groups. For the year, the Hedge Fund Research ("HFRI") Composite Index rose 8.7%, which is a decent return in absolute terms. However, when world equity markets are up nearly 24%, some investors expect more. On average, hedge fund net exposure to the market has been just under 50% over the last decade, which would imply that equity long/short hedge funds should capture about that percentage of equity market "beta" and return around 11% to 12%. In fact, the HFRI equity long/short index returned 13.4%, evidencing improvement in "alpha" generation or stock-picking skills.

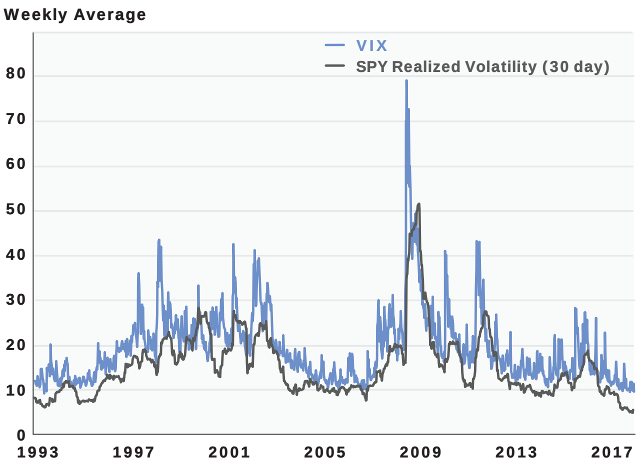
Fixed income markets fared as expected given low yields at the beginning of the year and the ongoing headwind of interest rate normalization. Municipal bonds also performed in line with expectations, returning 3.5% for the year. Intermediate Treasuries returned 2.1%, roughly equivalent to their beginning yield of 2.4%. Riskier bonds fared better, as credit spreads compressed particularly in the early part of 2017, given a growing perception that corporate tax reform would improve profitability and reduce corporate indebtedness over the long term. Corporate bonds returned 6.2% and high-yield bonds returned 7.5%, amid continued recovery from a dismal 2015 and 2016 period when concerns in the energy sector pushed spreads broadly higher across this market.

Volatility and Complacency

While no one can point to a single cause of record-low volatility, one analyst likened it to Agatha Christie's *Murder on the Orient Express*, where many parties are guilty. Low and predictable interest rates, synchronized global growth, strengthening corporate earnings, and the explosion of systematic trading strategies are all among the likely suspects.

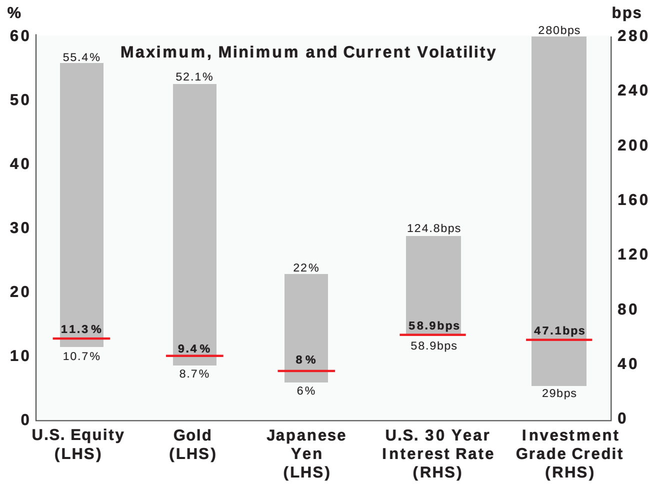
Realized volatility of the U.S. stock market reached its lowest level since the 1960s. Expected volatility, as measured by the VIX Index, shrank to its lowest level on record, as shown in Chart 2. This phenomenon hasn't been isolated to the U.S., as realized volatility of the MSCI World Index sank to its lowest level since at least 1972. Other than owning Bitcoin, one of the best trades in the world last year was to sell volatility and profit from its seemingly never-ending decline. While it is difficult to predict market direction, volatility will likely not remain at these low levels as several contributing factors are likely to reverse in the coming year.

Chart 2. VIX and SPY Volatility at Record Lows



Source: Bloomberg

Chart 3. Recent Low Volatility is Widespread



Source: Bloomberg, CMA, Deutsche Bank, JPMorgan
Note: Current observation is as of January 3, 2018
Note: Year of 1st quality observation: U.S. Equity 2002, Gold 2005, JPY 1998, Interest Rate 2002, IG Credit 2005

Without getting overly technical about the VIX and other volatility measures, many investors have witnessed the lack of volatility through more simple metrics:

- 2017 was the only calendar year in which U.S. and global equity markets never experienced a down month and the U.S. equity market experienced only one down month in the last 22 months.

- The U.S. equity market experienced only four days in 2017 with a 1% or greater daily decline. In contrast, during the preceding three decades this typically has occurred about once every eight trading days.

- The last time the U.S. equity market experienced a 2% daily decline was a few months before President Trump was elected. A 2% decline historically occurs around 10 times a year.

While most investors are aware of the lack of volatility in equity markets, this tranquility has become a global capital markets phenomenon spanning a wide range of markets, as shown in Chart 3.

Complacency

These are truly remarkable times, where market pull-backs have become profit opportunities rather than something to be feared. We have now trained nearly an entire generation of investors to simply "buy the dips" with little regard for down-side risk and valuation. While it's difficult to measure precisely, several metrics suggest that investor complacency has reached lofty levels and perhaps all-time highs:

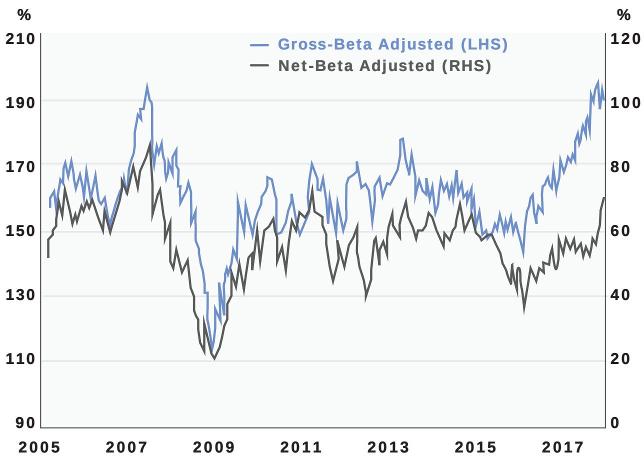
- U.S. retail investors say that today is the best time ever to invest in the market. The University of Michigan consumer sentiment report, which asks about the probability of an increase in stock prices over the coming year, reported that 65% of respondents see such an increase — a record level.

- Optimism has surged to the point where cash balances for Charles Schwab clients reached a record low late last year and stock holdings in household accounts reached the second highest level in history, surpassed only by that of March 2000, which was the absolute peak of the dot-com bubble.

- And it isn't just retail investors who are feeling good about the market. Morgan Stanley noted a similar trend in institutional investors who are "loading the boat on risk" with gross and net leverage among hedge funds reaching near record levels, as shown in Chart 4.

The two pressing questions for investors — about which no one seems overly concerned at the moment — are when and how, and not whether, this tranquility will end. When investor sentiment is so tilted toward

Chart 4. U.S. Equity L/S Leverage is Extremely High



Source: Morgan Stanley Prime Brokerage

optimism it reduces the dry powder available to buy the next dip. As the old saying goes, when everyone in the boat leans to one side, you should consider leaning the other way.

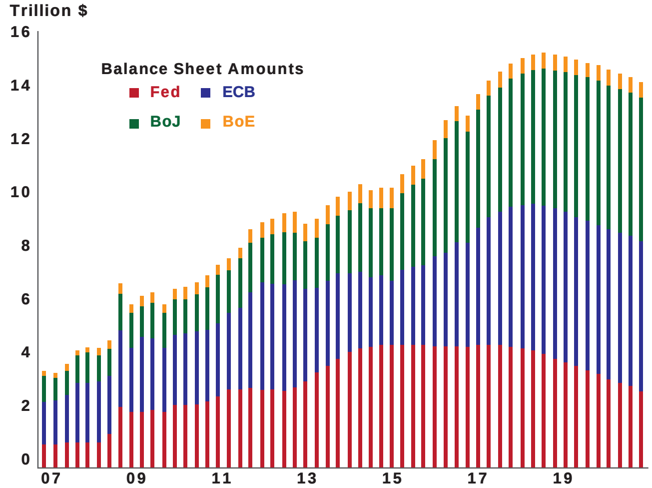
Peak Central Bank

If one of the leading suspects for record-low volatility is central bank monetary policy, what happens when it unwinds? Optimists point to the fact that the Fed has been increasing interest rates and has now begun reducing its $4.5 trillion balance sheet without a noticeable effect on markets or the economy … so far. While encouraging, the issue should be examined on a global basis, as the Fed is not the only central bank that implemented a highly accommodative monetary policy.

All of the major central banks — including the European Central Bank, the Bank of Japan, the Bank of England and the Swiss National Bank — have been repressing interest rates by targeting artificially low short-term rates and purchasing longer-maturity securities, which have bloated their balance sheets and reduced longer-dated interest rates. Collectively, it is estimated that the four major central banks around the world own over $15 trillion dollars in government, agency and corporate bonds, nearly $12 trillion of which have been accumulated since the Global Financial Crisis ("GFC").

While the Fed started raising interest rates roughly two years ago and more recently started to reduce its balance sheet holdings, the other major central banks have not yet taken their foot off the gas. In fact, when measured in aggregate, we have not yet reached Peak Central Bank, as shown in Chart 5, which analysts expect to occur in 2018.

Chart 5. Approaching Peak Central Bank



Source: Thomson Reuters

Passing Peak Central Bank is likely to go unnoticed by most investors and should not itself be cause for concern as a catalyst for a market correction. However, to the extent central bank policy is a prime suspect in supporting the volatility-reducing tendency for investors to buy the dips, the passing of this milestone removes a tailwind. As a result, we expect volatility across markets to increase in 2018 as central banks slowly remove the guardrails.

Further, much of the developed world's capital markets remain expensive by historical standards. This is not new for investors, as the proverbial spring has been coiling tighter over the last several years in response to experimental central bank policies that have flooded the market with liquidity. Now, as central banks begin draining the legendary punch bowl, the question is how will markets react?

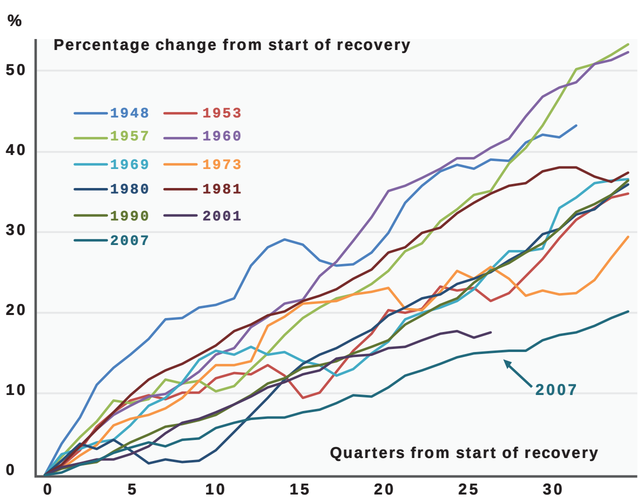
Global Economy

Global economic growth is surging to its highest level in the current economic cycle. Of the 45 countries tracked by the OECD, all 45 are expanding and 33 of those countries are growing at an accelerating rate. We have not witnessed this type of broad, synchronized economic growth since prior to the GFC.

Similarly, the U.S. economy headed into the final stretch of 2017 powered by one of its strongest periods in the current nine-year expansion. Gross domestic product expanded at a 3.1% annualized rate in the second quarter, 3.3% in the third, and analysts estimate the economy grew between 2.5% and 3.0% in the fourth quarter. Looking forward, Fed officials expect the U.S. economy to grow at 2.5% in both 2018 and 2019, which would be very healthy relative to earlier periods in the current cycle.

Stronger economic growth is welcome news, as the current U.S. expansion cycle has been the weakest on record, as shown in Chart 6. What the cycle has lacked in strength, it has now compensated for in duration. The current expansion has reached nine years, making it the third longest in the post-World War II era. While some analysts worry that this expansion period is getting "long in the tooth," investors should remember that economic cycles typically don't die of old age. Historically, it is central bank policy mistakes or a sudden unwinding of excesses built up during boom years that eventually sicken the patient.

Chart 6. Cumulative Increase in GDP Lowest Since 2007



Source: Federal Reserve of Minneapolis
Note: Real GDP, chained 2009 dollars, seasonally adjusted

Tax Cuts and Upside Economic Risk

In addition to current economic strength, it appears likely we will experience additional economic upside due to increased federal spending from hurricane disaster relief, recently increased spending caps and tax cuts. Much of this stimulus is not yet fully incorporated into forward-growth estimates. Just three months ago, the Fed predicted 2018 GDP growth of 2.1% and an unemployment rate of 4.1%, but since then these figures have surged to 2.5% and 3.9%, respectively. While it is still early for a robust analysis of the new tax law, preliminary estimates are already projecting GDP growth closer to 3.0% and unemployment as low as 3.5%.

While the positive direction of corporate tax reform is clear, its magnitude remains uncertain and will likely be uneven across the economy. The law reduces effective corporate tax rates from 34.6% to 21%, which is in-line with other G7 and OECD nations and should provide an immediate boost to cash flow.

For multinational corporations, who already enjoy lower effective tax rates from their ability to off-shore earnings, their repatriation of those funds under the new amnesty program will provide a significant boost through share repurchases, dividends and other measures.

For smaller corporations, lower tax rates will provide an immediate boost to after-tax earnings and cash flow. Additionally, the ability for companies to immediately expense new equipment should further boost cash flow and future productivity. Both of these measures should be supportive of smaller companies' share prices.

If too much of something can be considered a bad thing, one possible negative is that this large fiscal stimulus comes at a time when the U.S. economy is already nearing full capacity. Ironically, in an economic recovery that has been anemic by all standards, this large growth-oriented program, which would be welcome at any other part of the economic cycle, may create problems for the Fed. One analyst likened this to "throwing a big can of gasoline on a fire that's already quite hot" in describing concerns about exacerbating inflation, due to already tight labor markets.

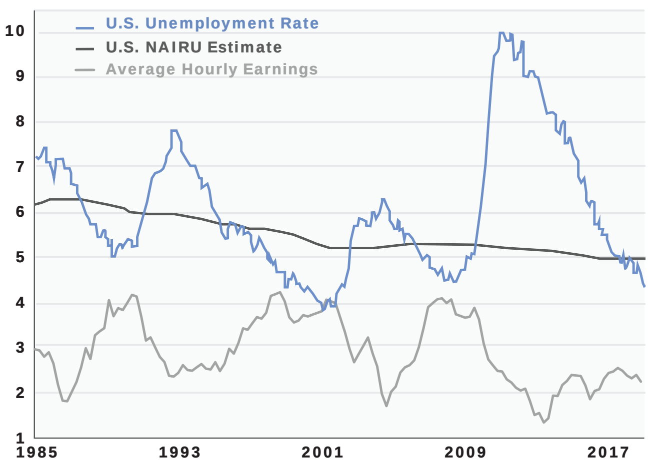
Employment, Wages and Inflation

In the U.S. and most of the developed world, unemployment peaked in 2009 during the GFC. Since then, the employment picture has steadily improved, but at a rate that led most commentators to dub this a "jobless recovery". While it's true that employment has been slow to recover, we are finally approaching the point where most economists would now describe labor markets as tight. The U.S. unemployment rate currently stands at 4.1%, which is a 17-year low and well below where Fed officials estimated it would be at the beginning of 2017 when the rate stood at just under 5%.

Historically, tight labor markets have led to wage growth and increased consumption, contributing to broadly higher inflation. To model this relationship, economists estimate the non-accelerating inflation rate of unemployment or NAIRU, which refers to the level of unemployment below which inflation should theoretically begin to rise. Chart 7 shows that the relationship between low unemployment and wage growth is quite clear, as each time unemployment drops below NAIRU, wage growth tends to accelerate. If GDP growth continues on its expected pace, some analysts estimate the unemployment rate could fall to 3.5% — a level not seen since the late 1960s — or even lower.

Chart 7. Unemployment Rate Now Below NAIRU

Rate of Change (%)



Source: Gavekal Data/Macrobond

Core inflation, which eliminates volatile food and energy components, is currently 1.7%, a level still below the Fed's target of 2.0%. In fact, inflation has been stubbornly low throughout this recovery, leading some economists to believe that the relationship between tight labor markets and inflation is broken or at least structurally altered relative to prior periods.

Threading the Needle

The Fed increased its benchmark federal-funds rate in December by a quarter of a percentage point to a range between 1.25% and 1.5%. This recent rate hike marks the fifth quarter-point increase since late 2015 after keeping interest rates near zero for seven years. Fed officials also raised their projections for economic growth and solidified their expectations of ongoing, steady interest rate increases consistent with their well-telegraphed plan.

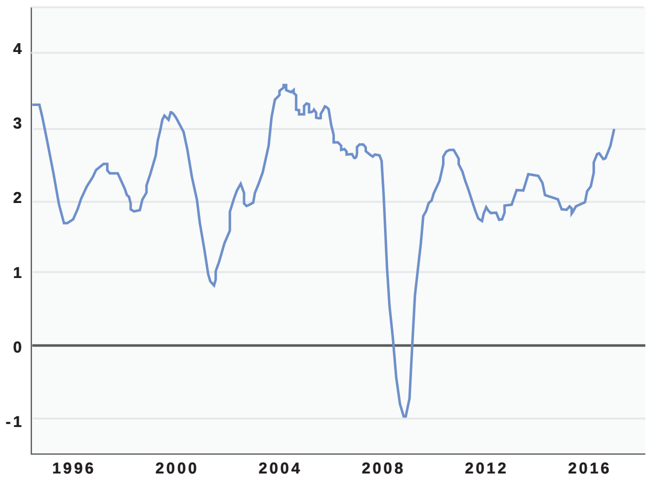
Some analysts are worried that the recent increase in the fed funds target rate was unwarranted at a time when inflation is well below the Fed's target. While these concerns may prove valid, the problem is that inflation has historically been a highly lagging indicator, meaning that by the time inflation shows up it's too late for the Fed to adjust.

There is no denying that a bit more inflation would be welcome, but too much is a real risk. The New York Federal Reserve publishes a forward-looking inflation gauge that has proven somewhat predictive. Chart 8 shows that inflationary pressures are starting to grow, as this measure has reached a level not seen in over a decade. Couple these nascent inflationary pressures with the potential for upside economic surprise and further tightening labor markets, and we begin to see that the risk of increasing inflation is quite real.

To date, the Fed's interest rate normalization process has been on autopilot. With inflation low and employment markets slack, the pace of interest rate increases could be more measured with little risk of a policy mistake. However, now that labor markets are tight, the balancing act of containing inflation without overtightening and causing a sharp decline in employment will become more difficult.

Chart 8. U.S. Inflationary Pressures are Starting to Brew

YOY Increase in CPI (%)



Source: *Federal Reserve Bank of New York*

Balancing growth and inflation during periods of tight labor markets requires the Fed to thread a proverbial needle. Tighten too much and risk choking off growth prematurely. Tighten too little and runaway inflation requires subsequent excessive tightening to wring it out of the system, which tends to have a severe negative effect on employment and the economy.

Throughout history, even a small uptick in the unemployment rate has been a perfect predictor of a recession. According to BCA Research, there has never been a case where the unemployment rate has risen by more than one-third of a percentage point without causing a recession, as shown in Chart 9.

This may seem like a relatively small increase, but economies are full of feedback loops where even a modest deterioration of economic conditions causes households to become cautious and cut back on spending, creating a self-reinforcing negative reaction. The Fed is now operating in dangerous territory.

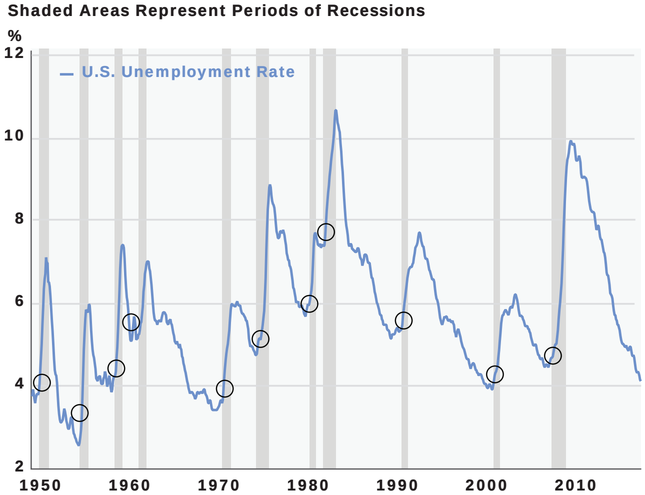
Flat Yield Curve – A Recession Predictor?

As the Fed continues to increase short-term rates, one side effect is that the U.S. yield curve is becoming flatter. Currently, the spread between the 10-year Treasury bond (~2.7%) and 3-month Treasury bills (~1.4%) has narrowed to 1.3% or 130 basis points (bps). Historically, a flat yield curve has been a perfect predictor of impending recessions. According to BCA Research, every U.S. recession over the past 50 years has been preceded by a flat or inverted yield curve, as shown in Chart 10. The current 130 bps yield spread does not foretell significant risk, but if the Fed stays on its current path of increasing short-term interest by 25 bps three or four times in 2018, the yield curve will become even flatter, implying a recession is imminent.

While the possibility of a flattening yield curve looms, this traditional warning signal should not lead to heightened concern, at least not yet. History has shown that rising inflation expectations have led to a steeper yield curve through rising long-maturity bond yields, as bond investors typically demand higher yields

Chart 9. Unemployment Upticks Lead to Recessions

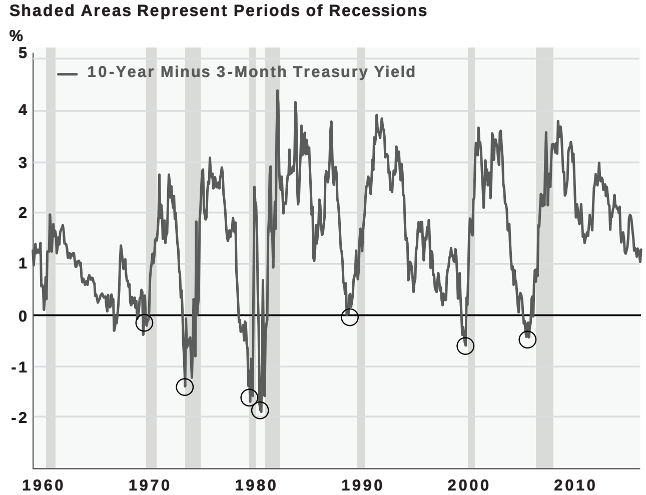
Shaded Areas Represent Periods of Recessions



Source: *BCA Research*

Chart 10. Flat or Inverted Yield Curves have Predicted Recessions

Shaded Areas Represent Periods of Recessions



Source: *BCA Research*

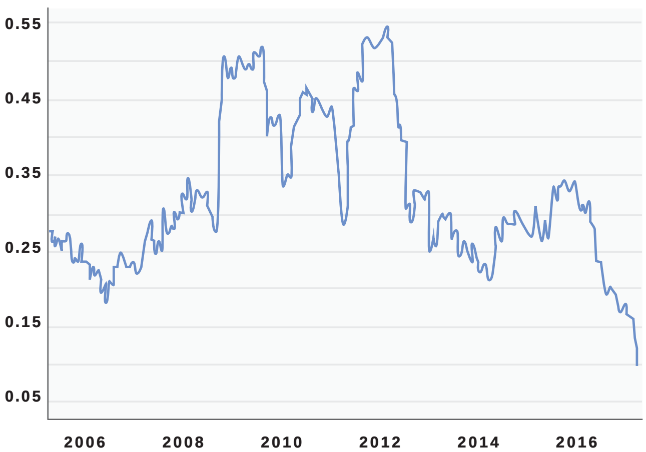
to compensate for their loss of purchasing power over longer periods of time. We have already begun to see longer-dated bond yields increase in 2018.

Hedge Funds, Crowding and Active Management

As mentioned earlier, hedge funds performed well in 2017 for the first time in many years. There are several possible explanations for this performance. At the top of this list is declining correlation among stocks, as shown in Chart 11. In theory, lower correlation among stocks implies greater opportunities for active management, and particularly hedge funds as they thrive on capturing differences in relative performance through long and short positions.

Chart 11. U.S. Individual Stock Correlation Plunged in 2016-2017

U.S. Equity Average Pairwise Correlation - Trailing 1 Yr. Using Weekly Returns



Source: Bloomberg

Crowding

Another likely contributor to positive performance is a "re-crowding" effect, as active managers have been piling into large-cap growth stocks. Value stocks and less-efficient small-cap stocks, which have historically been favored by hedge funds, are decidedly out of favor in the recent rally. In their place are a few large, momentum-driven stocks primarily concentrated in the technology sector, such as Facebook, Amazon, Netflix and Google. By hedge funds crowding into these same companies, they are effectly creating their own good performance. Chart 12 shows the impressive performance of the most widely owned hedge fund stocks, as determined by Goldman Sachs' VIP list, compared to the S&P 500. Since the last hedge fund unwind of crowded positions in early 2016, the VIP basket has outperformed the S&P 500 by an incredible 15 percentage points.

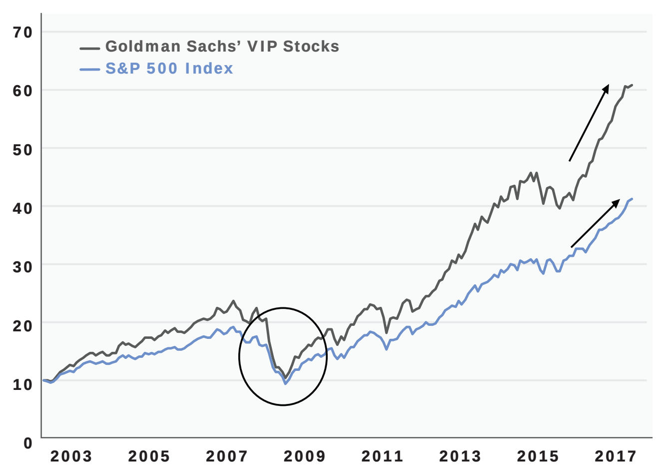
However, when sentiment turns and these positions experience declines, many hedge fund managers sell and reduce their leverage, prompting a cascading selling effect that exacerbates losses. Chart 12 also shows the significant declines of these crowded positions during the GFC (2007-2009), which make the large S&P 500 losses look relatively modest in comparison.

Our concern about a potential unwind of crowded positions is heightened by several factors. First, Goldman Sachs' prime brokerage data shows that hedge fund concentration (i.e., the percentage of their assets invested in the top 10 stocks) is at 68%, which is near a record high. Additionally, as we showed earlier in Chart 4, hedge funds have also increased the gross and net leverage levels in their portfolios to near-record highs.

Hedge funds increasing their exposure through leverage and concentrating their portfolios in a narrow group of stocks that are trading at elevated levels … what could go wrong?

Chart 12. Crowded Stocks have Dramatically Outperformed Again

Cumulative Performance Scaled to 10



Source: Bloomberg

Traditional Active Management Still Apologizing

For years, traditional active managers have continued to apologize for under-performing their respective benchmarks. The primary culprit in their humble explanatory notes was the high correlation among stocks brought about by an unprecedented risk-on/risk-off environment in the aftermath of the GFC. As we discussed earlier, 2017 finally provided these managers with a year of low correlations among stocks.

The good news is that performance appears to have improved. The bad news is that it was still nowhere near the levels that investors should expect. At the halfway point of 2017, it appeared that performance was improving, with nearly 50% of U.S. large-cap active managers able to beat their benchmarks — you can be the judge as to whether this is sufficient. Unfortunately, by the end of the year, it looks like they reverted, with only one-third of these managers beating the S&P 500.

Longer term, the performance of traditional active management remains poor. Over recent three, five and ten-year periods, the percentage of managers failing to survive and beat their benchmark remains around 85%. In our opinion, the industry is in need of structural reform. Some are calling for an active management "renaissance" in which true active management replaces the current benchmark-hugging behavior.

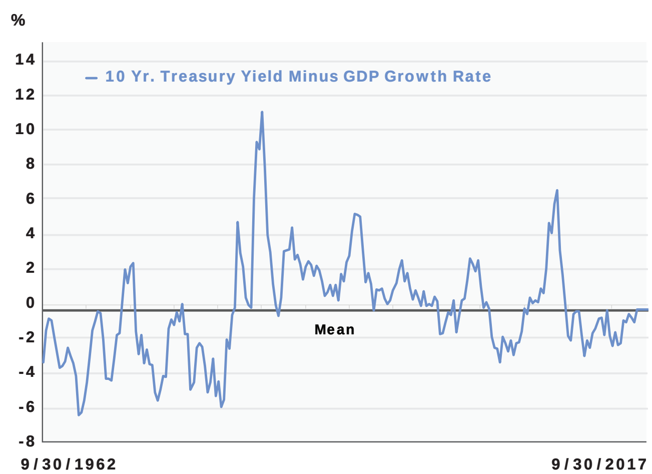
We are hopeful, but remain skeptics. Until then, accessing actively managed strategies from a different universe than traditional mutual funds and retail-oriented products sold by big banks and broker dealers is required to have a chance to generate strong relative performance. This approach has been central to Gresham's investment success for many years now.

Interest Rates and Fixed Income

By design, the epicenter of global monetary policy distortions has been interest rates. One of the goals of these policies is to encourage spending and shift investors into riskier assets, thereby creating a wealth effect that fosters further spending. As we pass Peak Central Bank and the Fed continues to normalize interest rates, we should attempt to understand what "normal" might look like.

Over time, yields on long-term bonds issued by governments in good standing tend to find equilibrium around the nominal structural growth rate of a particular economy. Chart 13 shows this relationship in the U.S., as the average difference between 10-year Treasury yields and nominal GDP growth is approximately 0%. For example, if we expect real U.S. GDP growth to be 2.0% and inflation to move toward 2.0%, we would expect 10-year bond yields to gravitate toward 4.0% from their current 2.7%. While we expect upcoming interest rate changes to be gradual, the headwinds for fixed income investors will remain, as bond yields persist well below their equilibrium levels.

Chart 13. 10-Year U.S. Treasury Yields vs. Nominal GDP Growth



Source: St. Louis Federal Reserve, Bloomberg

Municipal Bonds

The current question for municipal bond investors is the impact of the new tax reform. The muni market is known as a retail market, as individual investors seek tax-exempt income generated by these bonds. With the top tax rate declining from 39.6% to 37%, we do not expect this modest marginal rate change to have a significant effect on overall municipal market demand.

Earnings Growth and Equity Markets

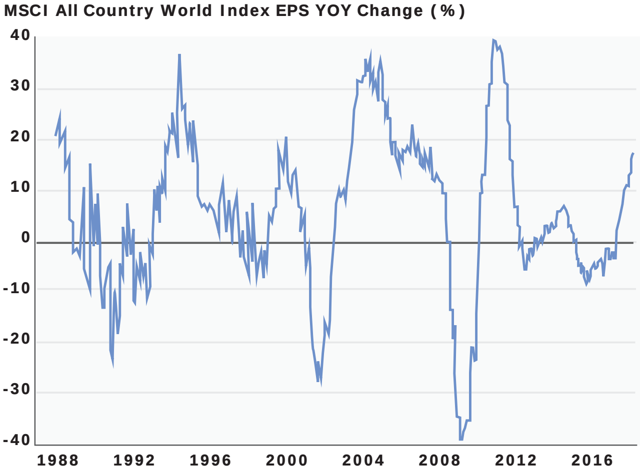
Accommodative central bank policies have finally begun to have a positive impact on corporate earnings nearly a decade after the GFC. Chart 14 shows that earnings turned positive in the second half of 2016 and have been growing quite rapidly for the last five quarters. This is an extremely welcome change, having come on the heels of seven consecutive quarters of negative year-over-year comparisons. At last, equity market gains are being supported (at least partially) by corporate earnings growth rather than just central bank liquidity. It should be no surprise that the addition of synchronized global growth and accelerating corporate earnings to a sea of liquidity created the perfect storm for an equity market "melt-up".

Unlike in many prior years, earnings estimates actually increased during 2017 and will likely finish up 11% for the year. Most analysts expect this positive trend to continue, with earnings projected to grow 8% to 10% in 2018. In addition to this positive momentum, the recently enacted corporate tax cut should add to 2018 estimates and beyond. We are already beginning to see analysts revise their estimates upwards.

As a result, the market becomes effectively cheaper than what the current price-to-earnings ratio suggests. For example, if the market is currently trading at 18x current earnings and they are expected to increase 20% in the coming year, the market's forward valuation is that much less expensive and intimidating at 14.4x earnings.

Chart 14. Global Earnings Growth Picking Up

MSCI All Country World Index EPS YOY Change (%)



Source: Datastream, IBES, JP Morgan Asset Management

Elevated Valuations and Bubbles

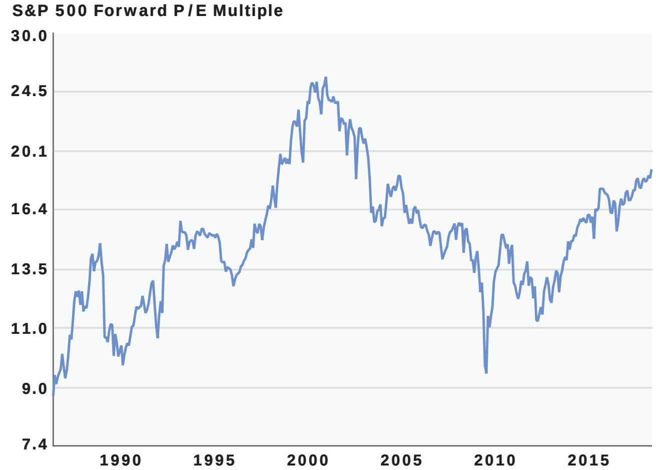
At the end of 2017, prices started to seem frothy as Bitcoin raced to $20,000, a da Vinci sold for $450 million, and 100 year bonds traded at near the rate of inflation. We entered the year with the S&P 500 trading at over 17x forward earnings, which is expensive by almost any standard. History suggests that investors should expect reduced returns from a relatively higher starting point such as this. However, that was clearly not the case in 2017, as U.S. equity markets increased well over 20%. Valuation may be an important consideration for estimating future returns, but it has been a lousy predictor for market corrections.

A quick examination of U.S. market history suggests that current market valuations are elevated by historical standards, as shown in Chart 15. However, the market has reached a similar level several times throughout history and in many instances investors have been rewarded with strong returns in the subsequent years. For example, in the early 1990s, after a brief softening period due to central bank tightening, the market progressed strongly through the end of the decade. Similarly, in 2003, the market reached a comparable level and proceeded to reach new highs over the next four years.

Both periods had a common factor — a sustained period of strong corporate earnings growth — that drove market performance. Earnings were so strong

Chart 15. U.S. Equities Multiples are Elevated

S&P 500 Forward P/E Multiple



Source: Datastream
Note: y-axis is a logarithmic scale

that the market actually derated (i.e., it became less expensive) for some period, as earnings growth outpaced market appreciation. So, can the market continue to melt up? It's possible, but we will need a continued upward trajectory in corporate earnings to support it, particularly as we pass Peak Central Bank.

International Markets

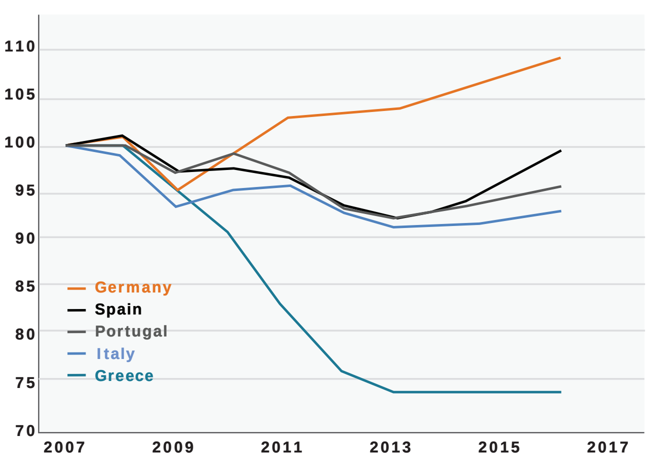
Despite stronger-than-anticipated growth in the U.S., we believe economic leadership will remain balanced across the globe in 2018, similar to what we saw in 2017. Many European economies are moving from recovery to expansion and emerging markets should continue their strong momentum.

In particular, we believe Southern Europe presents several interesting investment opportunities, as the cyclical recovery from the GFC remains in its early stages from the deep corrections required to correct pre-crisis excesses. Unlike other developed nations, the recession for the so called "PIGS" (Portugal, Italy, Greece and Spain) lasted for five years or more, as shown in Chart 16. Recently, these economies have begun to reach a bottom and several have begun a robust expansion period.

Further supporting these recovery trends is the European Central Bank ("ECB"), which appears poised to remain in an accommodative policy mode for some time given the slack in its collective economies. Unlike the Fed, which is unwinding its monetary stimulus, the ECB and other major central banks have yet to take their foot off the accelerator. This will provide ongoing tailwinds for economic growth.

Chart 16. Recovery for "PIGS" Just Beginning

Real GDP Growth (2007 = 100)

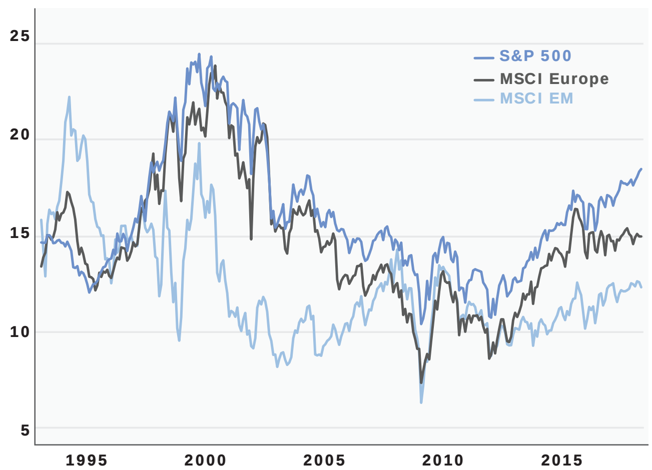


Source: Credit Suisse

From a valuation perspective, developed international equity markets are still trading relatively cheaper than U.S. markets, as shown in Chart 17. More attractive valuations, strong earnings growth and a supportive monetary environment would normally give us reason to continue our lean away from the U.S. and toward international markets. However, investors should recognize that U.S. earnings momentum, propelled by corporate tax reform, may allow U.S. markets to keep pace or even outperform in the short-run.

Chart 17. Price / Earnings Multiples Remain Attractive in Europe

Price / Earnings Ratio



Source: Datastream, IBES, Macrobond, Morgan Stanley Research

Emerging Markets

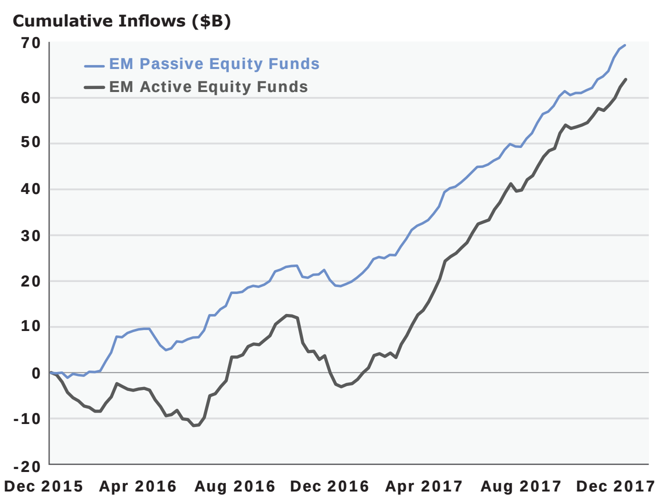
One year ago, analysts were fixated on a stronger dollar and President Trump's trade war rhetoric to foretell gloom and doom for emerging markets ("EM"). Our view was that EM economies were far more resilient and could better withstand these forces, unlike their experience of the past few decades. More specifically, many of these economies have adopted flexible exchange rates, which naturally rebalance their economies, and few remain reliant on foreign capital as a primary source of funding. Of the 15 EM economies with the largest investable markets, only two still run a large current account deficit.

Economic growth in EM was quite strong, expanding at an estimated 5.1% in 2017, as Russia and Brazil emerged from their recessions. These turnarounds are welcome news, augmenting the already strong growth emanating from China and India. Continuing this momentum, analysts estimate that GDP growth across EM will accelerate in 2018, expanding at 5.5%. EM countries now constitute 35% of global GDP, up from 5% just 30 years ago when the MSCI EM Index began. These countries also constituted the significant majority of global incremental growth in 2017. Further, analysts estimate that EM countries will contribute roughly 75% of global GDP growth in 2018, with China alone accounting for roughly one-third.

In capital markets, what a difference a year makes, as EM equities are now the consensus trade among global investors. Capital inflows in 2017, after several years of outflows that depressed performance, have been quite strong, as shown in Chart 18. Additionally, as we predicted, when investor flows returned to EM equities they began with passive mandates and benchmark-hugging, western style strategies, which is evident from the chart as shown by the dominance of passive-oriented capital inflows.

EM earnings are estimated to have grown at over 35%, as shown in Chart 19, which is quite impressive after many years of low and/or negative growth. Most importantly for investors, despite EM equities returning over 37% in 2017, they are still cheap compared to developed markets, as their earnings growth nearly kept pace with their market appreciation and, as a result, they have not become more expensive for investors.

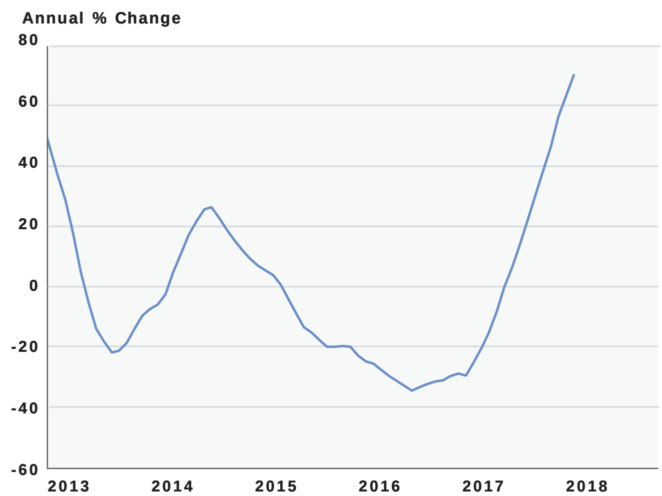
Chart 18. Inflows into EM Equity Funds



Source: EPFR, Goldman Sachs Global Investment Research

Global funds remain underweight EM, despite the strong inflows in 2017. Goldman Sachs Research estimates that the China underweight alone is around $49 billion merely to move to an equal-weight allocation to the country, let alone move overweight. Set against the context of 2017 EM equity inflows of $55 billion — one of the strongest years on record — the magnitude of the potential capital inflows becomes apparent. This provides an additional upside catalyst for continued performance.

Chart 19. EM Earnings Growth is Supporting Market Appreciation



Source: MSCI Inc.

For most investors, allocations to emerging markets remain undersized by their traditional, constrained views of risk. It is ironic that the unorthodox "risky" monetary policies in the world have been pursued by the U.S., Europe and Japan, while most EM countries have gravitated toward more traditional and less-risky approaches.

Frontier Markets

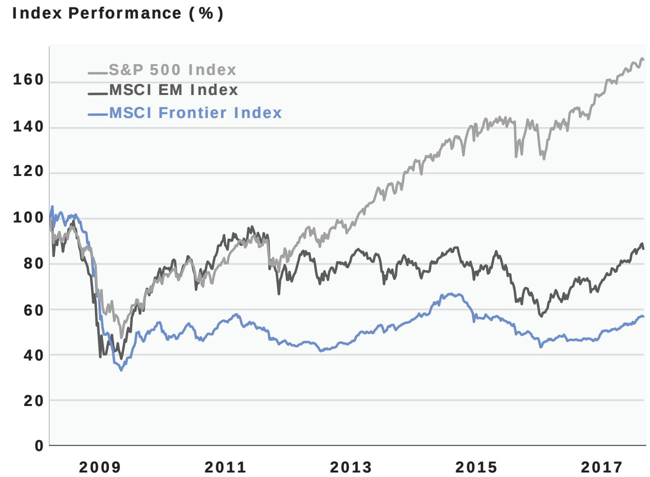
Emerging markets have been a consistent emphasis and performance driver for Gresham clients over the last decade. However, as the distinctions between emerging and developed economies lessen, we must broaden even our horizons to the next opportunities and inefficiencies — frontier markets. In many ways, we see similarities to the emerging market opportunities over the last few decades.

For context, the population of frontier markets will exceed that of the major EM countries, i.e., the BRICs (Brazil, Russia, India and China), within a few years and is estimated to be 50% larger by the year 2050. Further, these countries will benefit from a demographic profile that is far superior to both the developed world and many of the EM countries, especially China. As we witnessed with China and other EM countries, the impact of this type of compounding growth is difficult for analysts and markets to anticipate and is typically vastly understated.

Over the last ten years, EM equities have dramatically underperformed the S&P 500, which created a good entry point for our clients. Frontier markets have lagged even further behind, as shown in Chart 20. Recently, we have seen considerable outflows from those markets, as many western investors capitulated, creating a more attractive entry point for our clients, as shown in Chart 21. We saw a similar lack of interest in EM in 2014 – 2016 until capital began flowing back into them, leading to significant appreciation.

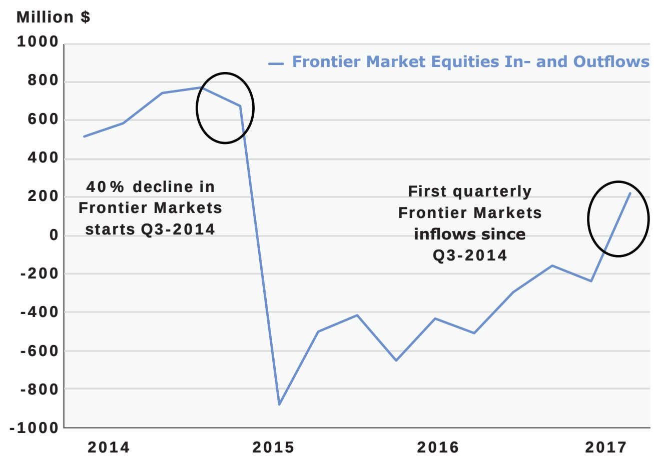
We believe considerable opportunity exists within the frontier markets, but they remain immature, volatile and illiquid. As a result, investors must remain vigilant and cautious in their approach and allocation. Capital flows in these markets remain less connected to global markets, given their sizable local investor base, and require a different approach than EM mandates. Index-based investing, to an even greater degree than with EM investment mandates, will inevitably miss opportunities. Finding active managers with an index-agnostic approach, a long-term investment approach, deep fundamental analysis capability and strong networks within the various regions is critical to success.

Chart 20. Frontier Equities have Significantly Underperformed



Source: Bloomberg

Chart 21. Investments in Frontier Market Equities Track Performance



Source: EPFR Global

Private Investments

Private investments remain a core element of long-term investment success. The goal of a long-term investment portfolio is to generate returns in excess of inflation and grow the real (inflation-adjusted) purchasing power of assets, typically requiring equity-oriented investments to accomplish this goal. Most studies show that private equity has produced a premium over public equity investments through time. According to Cambridge Associates, over the last ten years, ending June 30, 2017, private equity has outperformed U.S. equity markets by over 200 bps (9.41% vs. 7.18%) per year. This gap widens to nearly 500 bps (13.07% vs. 8.34%) over a fifteenyear period. However, over shorter periods of time, particularly when public markets perform well, this relationship may invert. It may seem obvious, but evaluating private investment performance requires a long time horizon.

Manager Selection

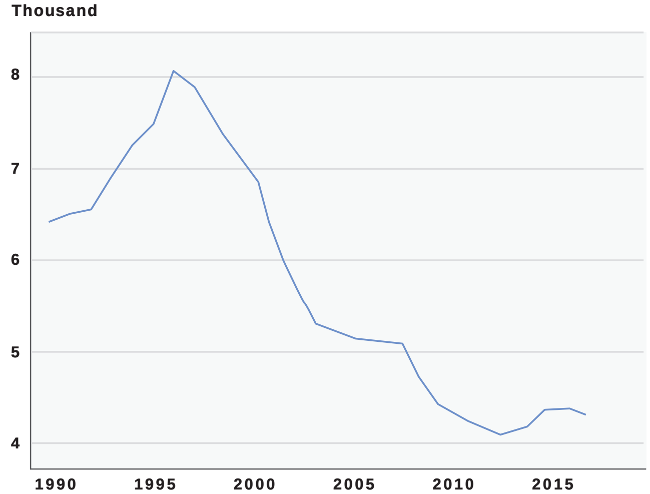
Beyond providing a long-term investor with premium returns over public markets, both private equity and private real assets are areas where manager selection is critically important. For the eleven vintage years from 2005 to 2015, the average premium generated by investing in the threshold manager defining the top-quartile would add nearly five percentage points per year to an investor's return. This is a significant advantage over both the average private equity manager and an even greater advantage over public equity investments. Similarly, investing in the threshold manager defining the lower quartile would subtract over four percentage points from investor returns. In other words, investing in lower-quartile managers more than eliminates all of the advantage of investing in private equity as an asset class. Truly, manager selection matters.

Secular Changes

An annual commentary such as this piece, in which we are prohibited by regulation from discussing specific managers and strategies, doesn't lend itself to a particularly insightful discussion of private investment performance given the long-term, evolutionary nature of these strategies. However, occasionally there are notable trends that have implications for investors. One such trend is the changing opportunity set of both public and private markets.

According to BCA Research, the number of U.S.-listed companies has nearly halved since the 1990's, as shown in Chart 22. This has been driven by both delistings and fewer new listings. We have also seen an increase in business consolidations. As a result, according to J.P. Morgan, the average U.S. listed company has a market cap of $7 billion, which is roughly 10x higher in real terms than in 1976.

Chart 22. Number of Listed U.S. Companies has Declined



Source: World Bank Indicators

We are also seeing a decline in new listings in the U.S. equity market. We believe there are two reasons for this ongoing phenomenon. First, the regulatory cost of being a public company in the U.S. is estimated to be well more than double the cost for companies in other developed markets. Additionally, reduced regulations on private capital — such as an expanded definition of an "accredited investor" and new regulations that increased the number of shareholders a private company is allowed before reporting — are leading many companies to choose to remain private, since fundraising has become significantly easier over the last five years. This has led to a fairly persistent 8% to 10% annual decline in the number of U.S. listed companies.

These factors are causing a relative shift in the opportunity set toward private markets and many sophisticated investors, such as large endowments, are making corresponding changes in their allocations. The Yale University endowment currently targets over 50% to private investments, including buyouts, venture capital, real estate and natural resources. Relatedly, its allocation to public market equity is less than 20%, with only 4% allocated to U.S. equity. Similarly, the University of Michigan endowment targets over 43% of its endowment to private investments, with just over 25% allocated to public markets.

It is important to note that endowments typically have very long investment horizons and can control the need for liquidity better than most individual investors. However, the structural shifting of the opportunity set should cause sophisticated individual investors, with access to top-tier private investment opportunities globally, to consider increasing their allocations to the area. One advantage for individual investors is that many of these private strategies, except for income-oriented strategies, tend to be focused on long-term, tax-efficient capital appreciation.

Opportunities

Many investors warn about the ever-increasing amount of capital in private markets and the size of the new mega funds. There is no question that the amount of capital being raised in private equity has increased and it appears 2017 will set another record for fundraising at just under $800 billion dollars, including the largest fund ever raised. However, fund raising for private investments has actually averaged just over 1.5% of MSCI World Market Cap for the last decade, which seems reasonable in the context of the expanding universe of private companies. Relatedly, according to Hamilton Lane, private equity's share of global capital markets has actually declined since 2006, because private investments are always in the process of returning capital to investors. This is not to condone accelerating fundraising or to suggest that these larger capital bases will be as well-invested as smaller, earlier vintage year funds, but simply to say that the concern about fundraising is likely overblown when taken in a broader, global context.

We believe that the opportunity set in select private investments, in both real assets and private equity, remains robust. However, the large inflows have begun to concentrate capital in the largest funds that are now competing for similar deals and eliminating many of the inefficiencies and opportunities to buy "cheap". We continue to find better opportunities in areas beyond the large, well-known, branded managers, requiring more effort and skill in identifying and selecting managers.

In particular, we continue to be impressed with the opportunities we are finding among smaller private equity managers in the U.S. Additionally, our interest in earlier-stage venture capital continues, where valuations have been less affected than later-stage investments. Relatedly, we continue to allocate a significant portion of our venture capital commitments to opportunities in China, where proven managers are building business franchises that leverage growing middle-class consumption, which will eventually dwarf that of the U.S. Many of these investments have already proven quite productive for our clients.

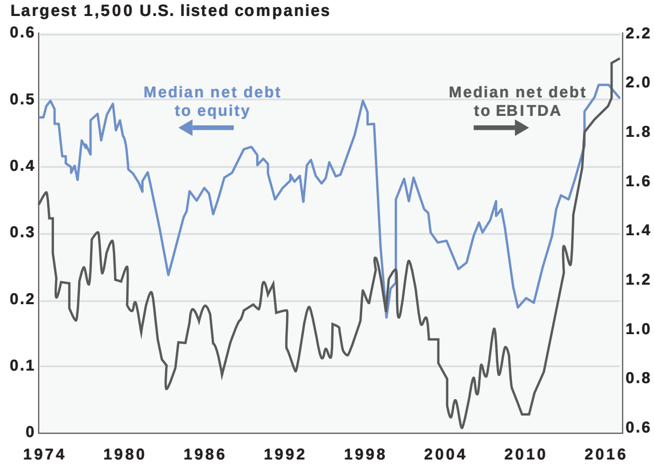
Key Risks and Investment Themes

Investors should consider several key risks as a backdrop for current investment decisions. As discussed earlier, we are approaching Peak Central Bank, which will have serious implications for capital market liquidity. Very simply, the post-GFC stimulus is unprecedented and we cannot predict the impact of its removal. Early signs from the Fed's normalization of its monetary policy are positive, as capital markets exhibited record low volatility in 2017, but volatility will increase.

Another area of concern is corporate debt, which is at an all-time high relative to cash flow and equity, as shown in Chart 23. While many large multi-national corporations are not over-levered and are in the process of on-shoring excess cash, the balance sheet

Chart 23. Use of Debt by Large U.S. Companies at All-Time High

Largest 1,500 U.S. listed companies



Source: Morgan Stanley, JP Morgan

of the median U.S. company, as shown in the chart, is levered at record levels. This is a natural result of artificially low interest rates, which has allowed many corporations to finance their shareholder initiatives, such as stock buybacks and special dividends, through massive issuance of low-cost debt. This misallocation of capital has allowed lower-quality companies to survive and can exacerbate down-side consequences for these companies should we enter a correction.

"Dash to Cash"

When things are good, as they are now, investor behavior shifts toward complacency. As Hyman Minsky pointed out, stability (i.e., low volatility) inherently leads to instability (i.e., market corrections), as complacent investors willingly (or unknowingly) accept uncompensated risks that allow excesses to build in various areas of the economy. This imbalance of bulls vs. bears leads to problems when a bout of panic selling begins, forcing sizable losses as investors realize they are "out over their skis." The challenge, as we discussed earlier, is that the timing of these corrections is difficult (impossible?) to predict. So, what should investors do?

First, there are always reasons to worry, but the vast majority of them are false indicators. These warnings should be heeded as a reminder that investment portfolios need to remain balanced by reallocating back to long-term targets and harvesting gains from appreciated assets. This rebalancing process is always important, but it is particularly so after a year like 2017, when certain asset classes within investor portfolios appreciate significantly more than others. In theory, rebalancing allows investors to avoid the proverbial dash-to-cash or panic selling when markets decline, since their portfolios will continue to behave consistent with their expectations for market volatility.

Investment Themes

Long-term investment success requires investors to recognize the unknown and unknowable elements of the capital markets. John Kenneth Galbraith once reminded us that "There are two types of forecasters: those who don't know, and those who don't know they don't know." In this humble spirit, we offer our recommendations:

- **Cash** historically offers investors poor long-term returns. This is particularly true of the last decade when short-term interest rates were repressed by central banks. However, as the Fed continues to raise rates, we expect cash yields to approach the level of inflation — real returns on cash will no longer be negative! Not only is the cost of holding cash now down, but valuations across capital markets are even more elevated. Consequently, investors should consider holding a few years of expenses in cash, not as a market timing mechanism, but rather as a protection against liquidating to fund expenses after a market decline.

- **Bonds** remain unattractive based on the current low level of interest rates. Our negative view is further compounded by our expectation that rates will continue to rise, as the Fed, and eventually other central banks, gradually increase short-term rates. Additionally, as we pass Peak Central Bank, long-term rates are likely to rise as well.

- **U.S. Equities** are expensive, but high valuations are historically bad predictors of market declines. With continued economic and corporate earnings growth, boosted by tax reform and other fiscal measures, we believe the market may continue to melt up … at least for a while. While it's likely some appreciation remains, we are concerned about the re-crowding of certain popular stocks and sectors that now present elevated risk to investors.

- **International Equities** are modestly less expensive than U.S. equities. Many of these developed market international economies, particularly in Southern Europe, are just now moving from recovery to expansion, which provides the platform for strong earnings growth over the next several years. We recommend continuing to lean into these markets.

- **Emerging and Frontier Markets** remain a favored area despite appreciation of 37% in 2017 due to the foundation provided by earnings growth that exceeded 35%. We recommend allocating to emerging markets at the maximum extent of your investment policy and as much as your intestinal fortitude can withstand in the interest of very long-term appreciation. Manager selection and a non-benchmark orientation remain critical for long-term success, as much of the current investor inflows have been narrowly focused on benchmark-included companies. Frontier markets, while still immature and illiquid, exhibit similarly constructive, long-term attributes and recent outflows and underperformance have provided an attractive entry point.

- **Hedge Funds** finally had a better year in 2017, but much of this performance can be attributed to a generally rising equity market and re-crowding into a narrow set of large growth stocks that created their own performance. Hedge fund investors should be quite mindful of investing in managers pre-disposed to these crowded names. The "unwind" during the first quarter of 2016 might only have been a small warning compared to the decline we may see in the next episode.

- **Private Investments,** both in real assets and private equity, remain a critical component of a growth-oriented investment portfolio. Long-term performance supports this case, which appears to be accelerating as the number of publicly listed companies in the U.S. continues to shrink. Manager selection makes an extraordinary difference in investment outcomes — simply gaining exposure to the area through a commercial fund-of-funds or scattershot approach is not sufficient. Large managers competing for larger, auction deals are driving valuations to high levels once again. These are areas to be avoided, as the lower potential returns from these investments may not justify their illiquidity. In contrast, our early-stage U.S. and Chinese venture portfolios continue to develop interesting franchises with transformative potential, building on the already strong returns our clients have experienced from these investments.

About Gresham

Gresham Partners is an independent investment and wealth management firm that serves its clients as a multifamily office and an outsourced chief investment officer. Gresham has been serving select family offices, foundations and endowments since the firm was established in 1997. Today, we manage or advise on over $6 billion for about 100 clients located nationally.

Past performance is no guarantee of future results. Investments in emerging and frontier markets are speculative and involve the risk of loss. No representation or warranty expressed or implied is made as to the accuracy or completeness of the information contained herein. Nothing contained herein should be relied upon as a promise or representation of future performance or as being intended to be investment advice.

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