

City of Fairbanks
Permanent Fund Review Board
(Quarterly Meeting Minutes)
January 29, 2018

The Permanent Fund Review Board (PFRB) convened at 3:30 P.M. on the above date in the Council Chambers to conduct a quarterly meeting with the following board members in attendance.

Board Members Present: Council Member Valerie Therrien
Patty Mongold
Dave Owen
Bernard Gatewood

Also Present: Carmen Randle, Chief Financial Officer
Brandy Nicoli, Chief Investment Officer-APCM
Blake Phillips, Director of Institutional Sales-APCM

Bernard motioned and Dave seconded to approve the October 18, 2017 minutes, the PFRB unanimously agreed.

Carmen reviewed the account's performance through December 31, 2017:

- \$130,438,875 - Balance including accrued income
- \$ 3,231,879 - Dividend and interest earnings
- \$ 6,086,719 - Realized gain
- \$ 6,604,204 - Unrealized gains
- \$ 105,592 - Management and custodial fees
- \$ 15,385,126 - 2017 Earnings - net of expenses

The 2018 draw is expected to be made in December 2018. The budgeted appropriations to the general and capital funds are shown below, respectively:

- 2018 \$4,815,487 and \$601,936

Reported Performance							
4th Quarter		Year to Date		Last 12 Months		Inception to Date	
Account	Benchmark	Account	Benchmark	Account	Benchmark	Account	Benchmark
3.63%	3.49%	13.18%	12.95%	13.18%	12.95%	5.63%	5.29%
	0.13% ¹		0.50% ²		0.50% ²		
<u>3.63%</u>	<u>3.62%</u>	<u>13.18%</u>	<u>13.45%</u>	<u>13.18%</u>	<u>13.45%</u>	<u>5.63%</u>	<u>5.29%</u>

1 12.5 bps - per quarter rounded
2 50 bps hurdle -annual (YTD = 12.5 basis pts X # quarters)
3 50 bps hurdle codified in March, 2009. Inception performance begins January 31, 1998.

Brandy reported the fund value was \$134,697,575 on January 25, 2018. The portfolio performance resulted in a 13.18% year-to-date return and a 3.63% third quarter return. The combined equity allocation returned 5.47% while the fixed income allocation returned .62%. She indicated that there were four themes over the past year that fundamentally drove equities higher than anticipated:

- Positive Profits-Earnings grow the above expectations shielded equities from global risk
- Synchronized Growth-84 of the 86 reporting countries experienced positive real GDP growth
- Easy Monetary Policies-Major central banks injected an additional \$1.0 trillion into the global economy during 2017
- Low Volatility-Average volatility over the year was 43% below the long-term average

While the economy is recovering it is still below the levels prior to the Global Financial Crisis (GFC). Stock prices are high and there are lofty earnings expectations. Both business and consumer confidence are significantly higher than the GFC low. However, there are four times more flows to bonds than to equities in 2018. In the long-term, global cyclical upturn in growth will be challenged by high debt levels (235% of GDP) and deteriorating demographics. Productivity could improve this outlook should relevant cyclical forces provide a boost.

Alaska Permanent Capital Management does not recommend changes to our portfolio at this time; maintain a modest overweight to international stocks, gradually move towards a neutral as the cycle matures, rebalance regularly to harvest gains and control risk, and expect modest returns relative to history.

There were no compliance issues to report during the quarter.

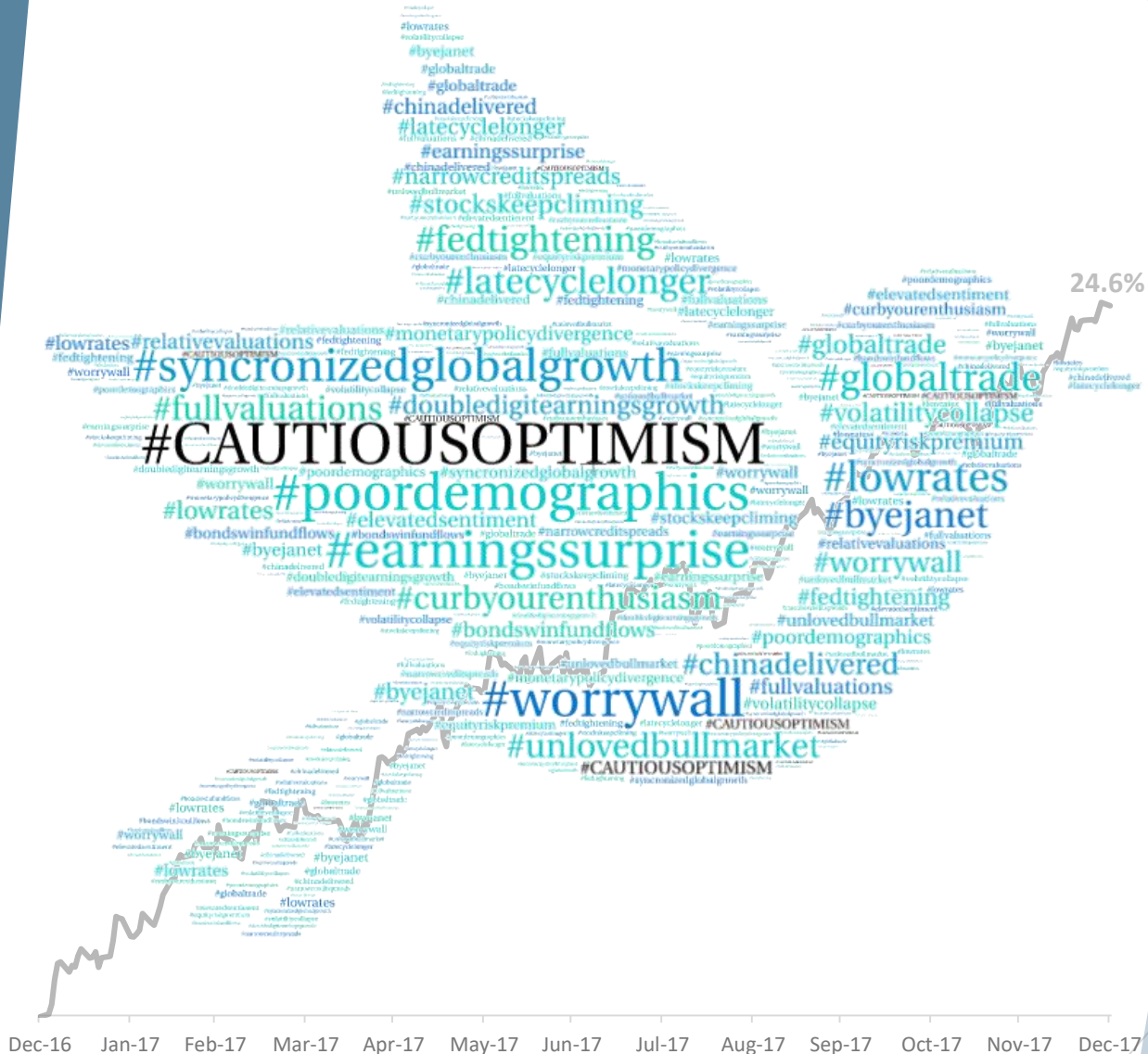
The PFRB set the next quarterly meetings for Wednesday, April 25, 2018 at 1:30 P.M.

The PFRB meeting adjourned at approximately 4:30 P.M.

Minutes will be placed on the April 25, 2018 agenda for approval.

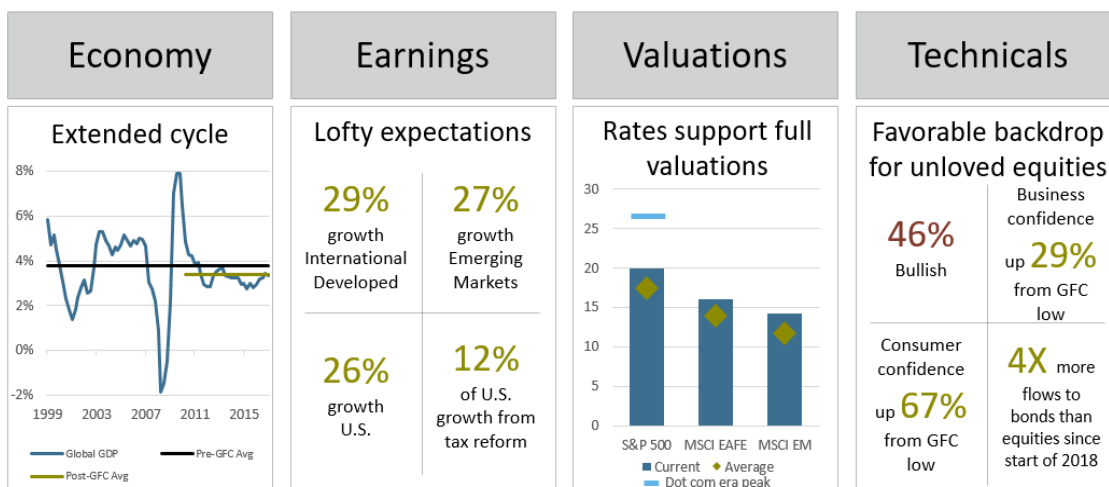
APCM VIEWS

Economic insights and market perspective from the Investment Committee at Alaska Permanent Capital Management



In Brief

As we compile this addition of APCM Views, there are signs that the synchronized global economic expansion will continue suggesting that the global economy seems to have finally shrugged off the ghosts of the 2008 financial crisis. Our assessment of economic growth, unemployment levels and inflation indicates that the stage of recovery varies across the globe. Although challenges and risks to the recovery leave us cautious, we are optimistic that the global economy will continue to heal. Longer term we note that this cyclical upturn will eventually face headwinds due to high debt levels and deteriorating demographics. Improvements in productivity can help offset these headwinds. Our investment team is currently researching timely industry advancements to address key challenges in our cyclical and secular outlook. We look forward to sharing our conclusions with you in the spring of 2018.



Long-term, the global cyclical upturn in growth will be challenged by high debt levels (235% of GDP) and deteriorating demographics. Productivity growth could improve this outlook should relevant cyclical forces provide a boost.

*Maintain a modest overweight to international stocks • Gradually move towards neutral as the cycle matures
Rebalance regularly to harvest gains and control risk • Expect modest returns relative to history*

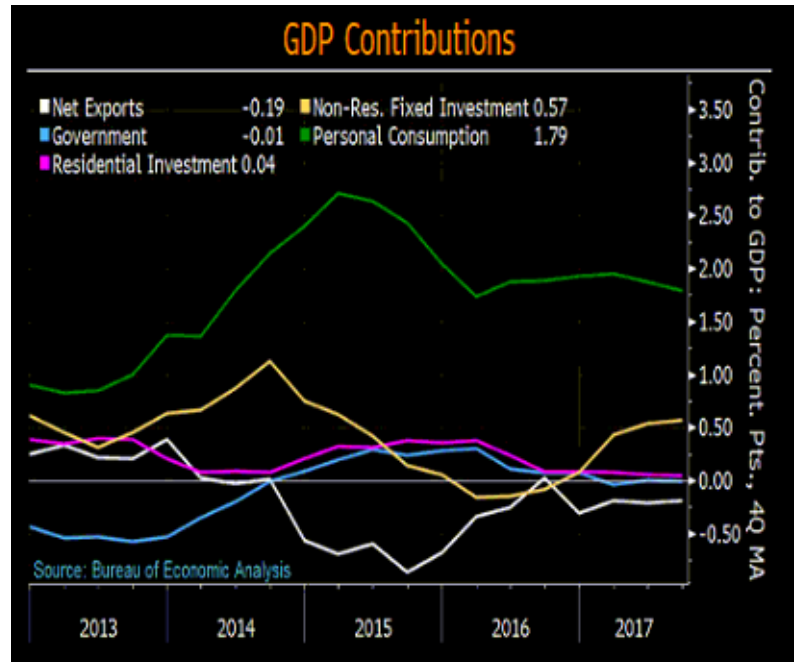
We expand upon these thoughts in the following pages. Note that each page contains a summary recap and consensus outlook followed by APCM's Views. APCM's Cyclical View is a summary of our near term outlook which guides current portfolio positioning. APCM's Secular View is our assessment of the key forces that influence the long term structural outlook.

-APCM Investment Committee

United States: Late-cycle For Longer...

2017 Recap

- After a weak first quarter, the U.S. economy gained momentum throughout 2017 helping achieve Q3 growth of 2.3% yoy, which was in line with initial expectations. Increasing private investment more than compensated for consumer spending, which leveled off. Strong retail spending supported Q4 growth of 2.5% yoy.
- The labor market continued to tighten, with unemployment of 4.1% reaching levels not seen since 2000. However, wage inflation remains muted at 2.5% (LT average 3.5%), dampening consumer spending, which is nearly 70% of the U.S. economy. The personal savings rate continued to decline (2.6% vs. LT average 8.5%), which could be a headwind to future consumption as households rebuild their savings.



Source: Bloomberg

- Headline inflation ticked up to 2.2%, but the Fed's favorite indicator, core PCE, remains below target at 1.4%. According to the latest dot plot, the Fed is not expecting a resurgence of inflation until 2019.

Consensus Outlook

- Financial conditions (availability and cost of credit) remain accommodative, odds of a recession are in line with historical averages (15%), and implications of tax reform (1.0%+ over several years) are all tailwinds for growth. The IMF is forecasting GDP to be 2.6% in 2018, which is above the estimated long term potential of 2.0%. The Fed plans to raise rates three times in 2018, while the market is pricing in two. Wages are expected to increase to reflect the tightness of the labor market. 10 year inflation breakevens have broken out to the upside recently and remain just above 2%.

APCM's Cyclical View

- We look for financial conditions to remain supportive of economic growth while reflecting the Fed's policy normalization. A slowdown in high frequency economic indicators, widening credit spreads, and an inverted yield curve would signal a higher probability of an oncoming recession. Monetary missteps remain a risk to the growth outlook, while tax reform could result in 3.0%+ growth in the near term and could contribute to upward pressure on wages.

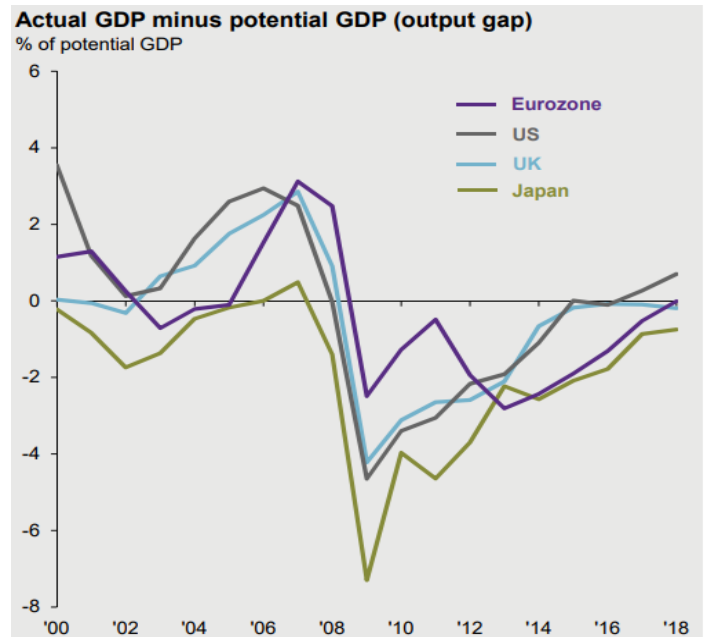
APCM's Secular View

- Longer term, unfavorable demographics and high debt levels create headwinds for growth. However, meaningful investment stemming from tax reform has the potential to be a catalyst to increase productivity levels.

Developed Markets Exceed Expectations

2017 Recap

- Better than expected economic growth in developed international economies can be attributed to the cyclical upturn in global trade and manufacturing, as well less fiscal austerity in some countries (i.e. Europe). While consumption and investment have been the drivers of growth, individuals and businesses overseas continue to be supported by unprecedented amounts of monetary and/or fiscal stimulus (Japan).
- Overall growth improved in the EU with 2017 GDP expected to be 2.4%, above 2017 estimates of 1.6%. The dispersion between countries is wide in both level of recovery and future growth expectations. The output gap has closed in Germany and growth is accelerating in Ireland and Spain (2.5%+), while Italian growth is below 1% and UK growth is slowing. The ECB faces the challenge of unwinding stimulus while remaining accommodative to select economies.



Source: J.P. Morgan Asset Management

- Japan's economy continues its two year uninterrupted expansion with 2017 GDP expected to be an impressive 1.7%, relative to a 0.8% projection. A weaker yen against key trade partners boosted exports, while low rates continue to spur investment. In spite of 2.7% unemployment, a lack of wage pressures are holding back consumption.

Consensus Outlook

- Weak inflation in international developed economies suggests monetary policy will remain supportive and the continuation of the cyclical upturn in global trade is expected to produce growth above long term potential. The pace of growth in Japan should slow to 1.2%, but remain above trend (LT potential 0.85%), while EU economies are expected to grow at 2.2% (LT potential 1.0%). The UK is operating close to long term potential (1.5%), while uncertainty surrounding BREXIT negotiations dampens the near term outlook.

ACPM's Cyclical View

- We look for trade and manufacturing growth to remain steady throughout the year. Inflation spikes could result in departures from continued policy support. As such, we are monitoring high frequency trade indicators (PMI and FX data) and breakeven inflation expectations. Global trade remains important to the near term outlook, while protectionist policies pose risks.

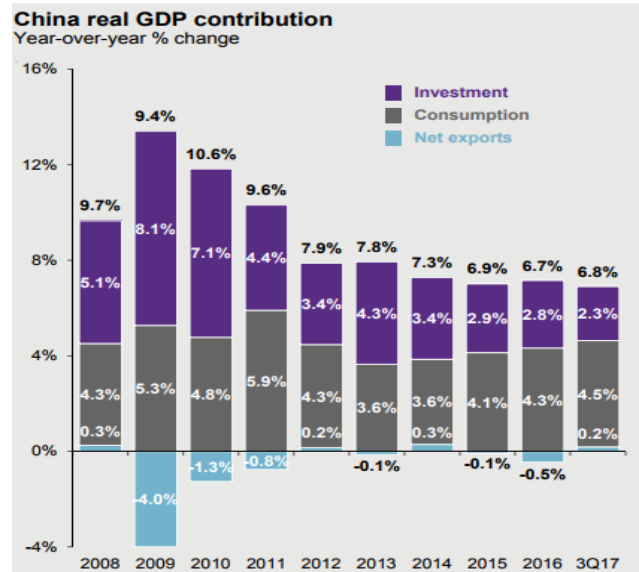
ACPM's Secular View

- Longer term, unfavorable demographics and high debt levels create headwinds for growth. The cyclical upturn creates an opportunity for policy makers to promote higher productivity and investment in human capital.

Emerging Markets Deliver Solid Growth

2017 Recap

- China continued to meet their growth target with GDP increasing by 6.8% yoy, driven by an increase in consumption. Investment growth has slowed to reflect structural reforms to eliminate excess capacity, particularly in the steel and coal industries. Political events resulted in a wide range of reforms to mitigate financial sector risks as banking sector assets are now over 300% of GDP, up 240% since 2012.
- Robust growth in China and the cyclical rebound in global manufacturing and investment boosted global trade (4.3% yoy) to the benefit of many emerging market economies, particularly in South East Asia. Under Modi India has benefited from structural reforms, lower inflation, and accommodative monetary policy, which has provided a positive backdrop for growth.



Source: J.P. Morgan Asset Management

- Russia and Brazil, key commodity exporters, rebounded from 2016 recessions to post positive growth, which is expected to be 1.8% and 0.7%, respectively. While oil prices increased over 10% to end the year just above \$60, this is still a substantial decline from 2014 highs of \$100+.

Consensus Outlook

- Emerging Asia are expected to grow at 6.5% in 2018. The region should account for over half of global growth. China's growth will taper toward 6.5% next year, while India accelerates to 7.4%. Collectively, emerging market economies will continue to benefit from the broad pick up in economic activity with 2018 GDP expectations at 4.9% yoy.
- The upturn in global growth and a lengthy continuation of easy financial conditions create medium term risks as this backdrop can lead to financial excesses, particularly in China. In the event of a stumble, the lack of global integration in China's financial system reduces the magnitude of systematic financial contagion, but the level of economic integration would spur a slowdown in global GDP. While not an immediate threat, curtailing the buildup of these excesses is important to the outlook.

APCM's Cyclical View

- In China, we are monitoring the ability of policy makers to balance the need for deleveraging (particularly in state owned enterprises), while meeting growth targets. The current reserve balance (\$3.1T) can provide support should the economic growth picture change.

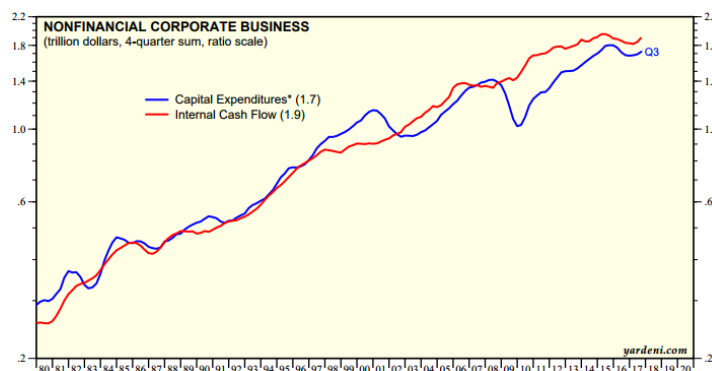
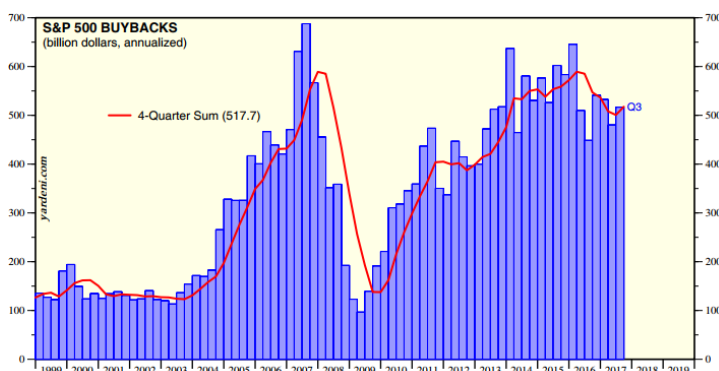
APCM's Structural View

- Longer term, as a whole, emerging markets are expected to outpace developed economies given more favorable demographics and room for productivity improvements. However, some key emerging economies (China, Russia) face demographic and structural challenges, highlighting the need for reforms.

Will U.S. Tax Reform Help Repair Balance Sheets?

2017 Recap

- Corporations continued to increase debt throughout 2017, albeit at a slower pace than previous years. The low rate environment still made debt issuance attractive.
- While gross leverage remained elevated at 25 year highs, interest coverage ratios (ability to service debt) were stable throughout the year and rating downgrades hit cyclical lows.
- Share buy backs slowed throughout the year while investment spending increased. This signals movement toward a successful shift from unsustainable levels of debt financed share buybacks.
- Corporate tax reform lowered the marginal corporate tax rate (35% to 21%), reduced incentives for companies to keep cash abroad, limited the deductibility of interest expense, and allowed immediate expensing of capital investments.



Consensus Outlook

Source: Yardeni Research

- Markets are pricing in higher earnings expectations as a result of tax reform. The change to the tax law will have redistributive effects with some sectors benefiting more than others. The effects on operating cash flows should be marginal, the cost of debt will increase, and there will be incentives for business reinvestment and capital spending. However, surveys are mixed as to how companies will deploy the cash windfall from tax reform. This capital can be allocated toward share buybacks, capital expenditures, M&A activity, or paying down debt.

APCM's Cyclical View

- Corporate health in the year to come will be based upon key capital allocation decisions. We look to monitor the overall leverage in the system, how much companies reinvest (capital expenditures), how well they reinvest (return on investments is greater than the cost), and uses of repatriated cash.

APCM's Secular View

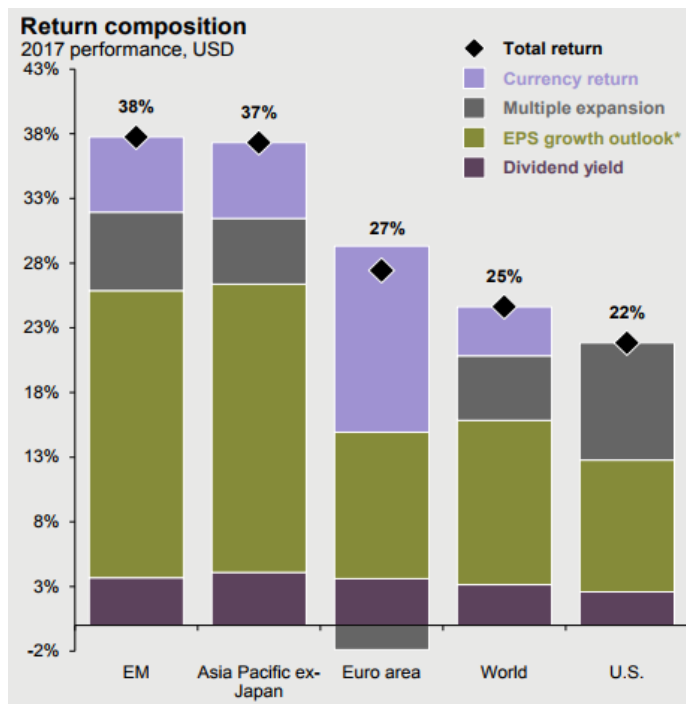
- Longer term, meaningful investment to increase production capacity by replacing aging equipment and structures is crucial to reversing the trend of weak productivity in both advanced and emerging economies.

Markets Keep Going Up, Data Keeps Backing it Up

-Evercore ISI

2017 Recap

- In 2017, the cyclical economic rebound supported earnings as global trailing earnings increased by over 16%. Earnings growth accelerated in developed international markets (22%), while emerging markets posted a second year of double digit gains (19%).
- Earnings in the U.S. provided the much needed support given current price levels. Large and mid sized companies, which have more international exposure, benefited from the global expansion and weakening dollar. Both large and mid stocks posted 10% earnings growth yoy, while small stocks lagged with earnings of 6% yoy.
- In spite of the impressive rebound in earnings, EPS still remain below previous peaks in Europe and many EM countries.



Source: J.P. Morgan Asset Management

Consensus Outlook

- In the U.S., tax reform is being reflected in earnings expectations with smaller companies seeing the largest revisions. Large cap earnings are projected to increase by 26%, with approximately half of the growth attributed to tax cuts. Mid and small cap companies are expected to grow by 34% and 44%, respectively.
- International companies are expected to have another year of double digit earnings growth stemming from both an increase in top line revenue and margin expansion. Developed countries are projected to increase 29%. Emerging market earnings will grow by 27%, driven by China, Russia, and Brazil.

APCM's Cyclical View

- Lofty earnings expectations pose a key risk given current valuations should companies fall short. Operating margins in the U.S. remain elevated at 13%, expectations of higher wages will put downward pressure on earnings. To monitor this risk we are watching inflation prints most associated with wage growth. There is room for margin expansion overseas as operating margins peaked at 11% before the financial crisis and are currently projected to be 10%. We monitor earnings revisions and key drivers of ROE for signs of a reversal from the current optimistic outlook.

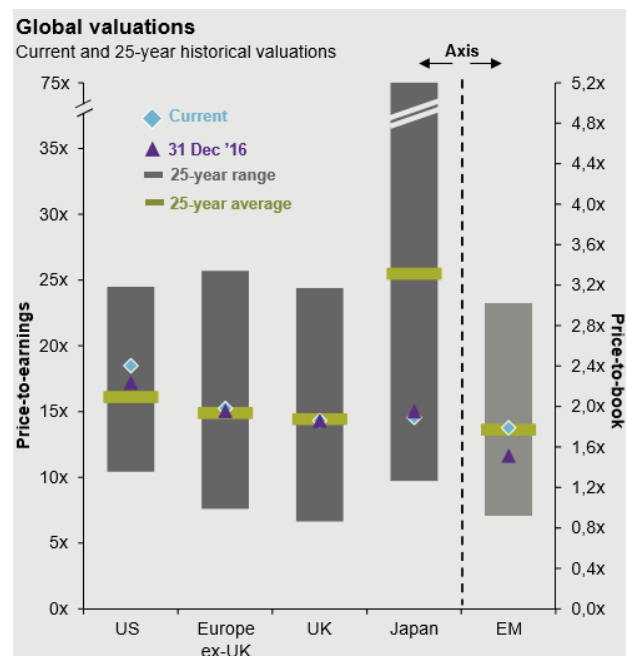
APCM's Secular View

- Longer term, the earnings outlook is important to support asset prices as valuations leave little room for multiple expansion, thus supporting subdued return expectations. Over a 10 year horizon (our long term capital market forecast), international equities stand to benefit from lower relative valuations and currency tailwinds of a weaker dollar for U.S. investors.

Equity Risk Premium Supports Stocks

2017 Recap

- Equity returns can be decomposed into dividends, earnings growth, and multiple expansion (prices rise faster than earnings). In 2017, earnings and dividends were the primary driver of returns, although the U.S. and emerging markets were aided by multiple expansion. Stocks in developed international economies did not experience multiple expansion (i.e. Europe), but U.S. investors benefited from currency returns.
- Overseas, relative valuations are more appealing with the MSCI EAFE Index trading at a forward P/E of 15.0x vs a 14.7x at the start of the year and the MSCI EM Index ended with a forward P/E of 12.5x vs 12.0x in January.
- Baa credit spreads in the U.S. compressed throughout the year to end 178 bps above Treasuries (60 bps more expensive than the LT average) as the search for yield has overwhelmed growing uneasiness about balance sheet strength and increased debt issuance.



Source: J.P. Morgan Asset Management

- Term premiums also continued to compress as the curve flattened. The 2-10 spread declined 70 bps to end at 52 bps (LT average 95 bps) and the 10-30 spread declined 27 bps to end at 33 bps (LT average 58 bps).
- Both earnings yields and corporate bond yields declined throughout the year. The S&P 500 earnings yield of 4.3% is still above the Baa corporate bond yield of 3.7%, making stocks relatively attractive to bonds.

Consensus Outlook

- Expectations for the continuation of economic expansion, tame inflation, modest upward pressure on U.S. rates, and unprecedented easy monetary policy overseas suggest valuations in the stock and bond markets can remain at elevated levels in the near term. We monitor indicators that could trigger a sharp correction in valuations such as inflation and rate expectations, reported earnings, volatility, and sentiment. To quantify this risk given consensus earnings estimates (\$151), a return to the historical valuation average (16x) indicates a price correction of 15%.

APCM's Cyclical View

- Today's high valuations provide less of a cushion to absorb shocks leaving the markets vulnerable to unpredictable geopolitical events, adverse economic or financial shocks, as well as other "unknowns". However, unless recession risk picks up, such drawdowns should be less severe.

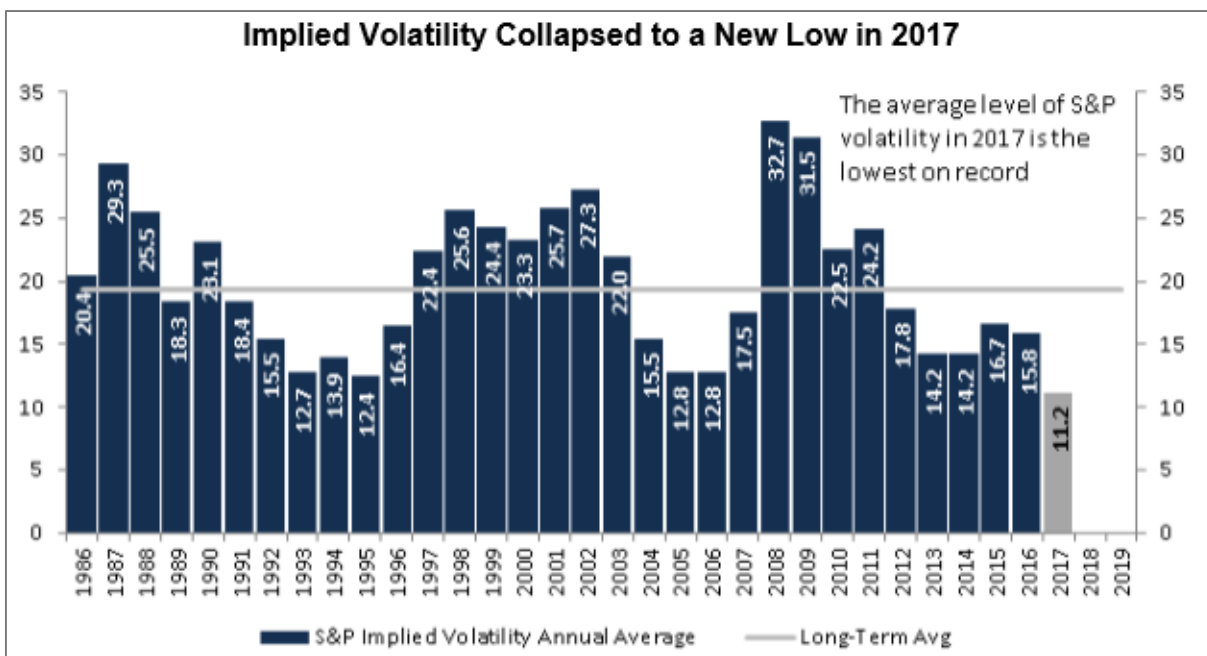
APCM's Secular View

- Longer term, valuations indicate returns have been borrowed from the future and gains are likely to be more modest going forward. However, the global equity risk premium still suggests investors will be adequately compensated for the risk of stocks.

An Unloved Equity Bull Market

2017 Recap

- Realized volatility in equity markets was exceptionally low with the S&P 500 averaging just above 6%, less than half the normal average and the lowest since 1964.
- In spite of elevated business and consumer sentiment, investors remained cautious with surveys conveying an equally bullish and bearish outlook on markets for most of the year.
- Fund flows also highlighted caution as investors poured more money into bonds vs. stocks. Flows were negative within the domestic stock market while positive inflows demonstrated investors favored international stocks.



Consensus Outlook

Source: Evercore ISI

- The projected continuation of the favorable backdrop for risky assets (positive growth, limited upward pressure on rates, and modest inflation) is currently priced into the markets. Implied volatility for the U.S. stock market (VIX) and bond market (MOVE) remain below historical averages at 11.5% and 52 bps, respectively.

APCM's Cyclical View

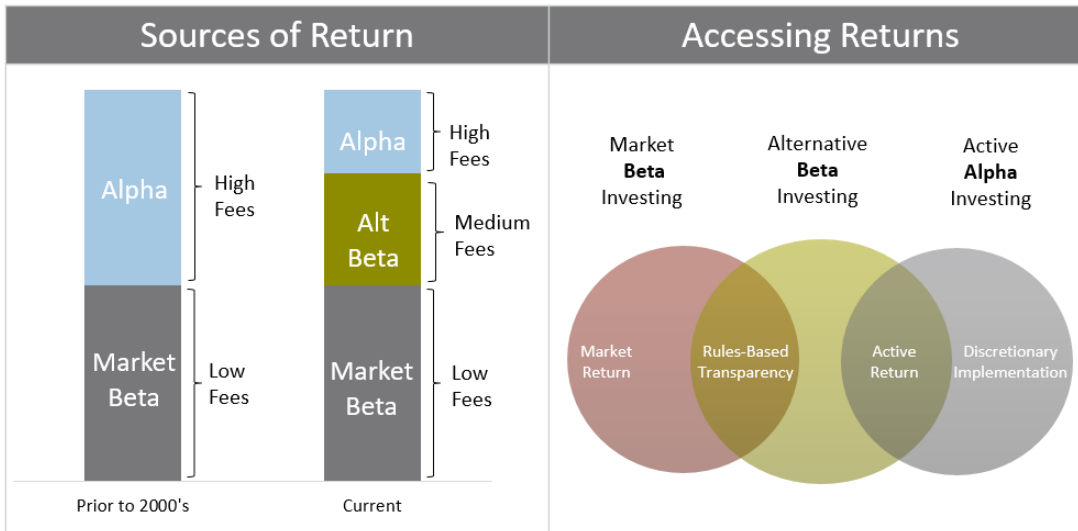
- The market environment for risk is positive when volatility is low, dispersion is high, and correlations are low. We look for a directional change in fundamental high frequency indicators which would trigger a pick up in volatility and correlations.

APCM's Secular View

- The eventual transition out of this low volatility regime should not derail a sound investment strategy. APCM integrates reasonable future volatility projections for portfolio construction and strategic planning purposes.

Parting Thoughts

Over the past several years, APCM’s investment committee has been monitoring two key industry advancements which are creating interesting investment opportunities for our clients.



The industry’s broader understanding of sources of return has enabled fund providers to create exchange traded funds (ETFs) which capture exposure to new asset classes and strategies in a way that enables investors to pursue investment performance and/or help manage portfolio risk.

Asset Classes		
Investment vehicles that improve portfolio efficiency without relying on alpha and can be accessed in a cost-effective manner.		
Equity	Fixed Income	Alternatives
U.S. Large Cap	U.S. Fixed Income	REITs
U.S. Mid Cap	TIPS	Commodities
U.S. Small Cap	Int'l Bonds	Private Equity*
Int'l Equity	Cash	Infrastructure*
Emerging Markets		
Implementation Strategies		
Actively managed variants of other asset classes that gain exposure to alternative risk premium in a systematic manner.		
Fundamental Factors		
Hedge Fund Beta Strategies*		

Currently, APCM’s team of analysts are working on quantifying the portfolio benefits and evaluating the ability of ETF providers to capture the desired exposure net of fees. These advancements are timely and offer investment options to address key challenges in our cyclical and secular outlook.

APCM’s research is ongoing and we look forward to sharing our conclusions with you in the spring of 2018.