AUREUS
ASSET MANAGEMENT

January 2020

2020 Global Asset Allocation Review

Introduction

The Aureus annual asset allocation review evaluates the risks and opportunities available in global financial markets and their potential impact on the investment portfolios of our clients. Our Asset Allocation Policy describes our positioning for the coming year and may be adjusted as market conditions evolve.

Beyond this annual perspective on global allocation, Aureus also develops a customized investment policy for each client based on their specific goals and objectives.

Summary

The Aureus 2020 global asset allocation review combines critical interpretations of global market factors with a focus on the following:

2020 Analysis			
Market Factors	▪ US Economy ▪ Global Economy ▪ Corporate Profitability ▪ Interest Rates & Inflation ▪ Geopolitics	**Asset Classes**	▪ Cash ▪ Fixed Income ▪ US Equities ▪ International Equities ▪ Alternative Assets

This year we have modified the format of the allocation to group asset classes by three risk categories: Lower, Moderate and Higher. The allocation represented below represents a 'base case' positioning for portfolios. In practice, each client is adjusted based on risk and return factors specific to their investment objectives.

2020 Asset Allocation Summary

Risk Category & Asset Class	Risk Level	2020 Allocation	Δ vs. 2019	2019 Allocation	2018 Allocation	2017 Allocation
Lower Risk		**26%**	↓	**28%**	**27%**	**25%**
Cash	Low	6%	↓	7%	5%	5%
Absolute Return	Lower	13%	=	13%	12%	10%
High Quality Bonds	Lower	7%	↓	8%	10%	10%
Moderate Risk		**6%**	=	**6%**	**9%**	**11%**
Directional Strategies	Moderate	6%	=	6%	9%	8%
High Yield Bonds	Moderate	0%	=	0%	0%	3%
Higher Risk		**68%**	↑	**66%**	**64%**	**64%**
US Equities	High	46%	=	46%	44%	46%
International Equities	High	22%	↑	20%	20%	18%
Total		**100%**		**100%**	**100%**	**100%**

2020 Asset Class Commentary

This year's asset allocation reflects the following adjustments compared to 2019.

Lower Risk: Lower risk assets are slightly decreased to 26%, compared to 28% in 2019.

- *Cash:* After rising to 2.4% at the end of 2018 and early 2019, Treasury Bill yields are now 1.5%. Three rate cuts by the Fed last year, to boost the economy and reduce the risk of a recession, have left us with very little return on cash equivalent investments. However, some measure of cash is helpful to reduce volatility of the overall portfolio and provide a reserve for adding to equities in the event of a market correction. Cash allocation is 6% for 2020, down from 7% in 2019.
- *Absolute Return:* Absolute Return investments are designed to provide a 4-6% return, or inflation plus 2-3%, with lower volatility to equities and lower correlation to interest rates and fixed income. Given these characteristics we maintain our weighting at 13% for 2020 and use this allocation as volatility-dampening, consistent return component of a diversified portfolio.
- *High quality fixed income:* High quality fixed income investments had strong returns in 2019, driven by the decline in interest rates. However, coupon rates for intermediate maturity (5-7 years) quality bonds are currently at or below 2%. With inflation estimated at 2%, the real return for quality bonds is essentially zero. Given the positive economic outlook for 2020 we believe interest rates will be flat or slightly higher in 2020. As such, we continue to underweight quality fixed income at 7% of a diversified portfolio, down from 8% last year.

Moderate Risk: Moderate risk assets remain at 6% for 2020.

- *Directional Strategies:* Our allocation to Directional Strategies is 6%, which is the total of our recommended exposure to this risk category. In general, strategies in this category are "hedged" meaning they should participate in periods when equity markets move higher but protect on the downside when those markets correct. Given our positive investment outlook for global equities, we have not increased our weight to these strategies, preferring exposure to long-only equities in this environment.
- *High Yield Bonds:* High yield bonds remain at zero allocation on 2020. Spreads for these bonds narrowed in 2019 and do not fully address the credit risk with many of the issuers in this market.

Higher Risk: Higher risk assets are slightly increased to 68% from 66% in 2019.

- *US Equities:* The US Equitiy allocation remains at 46% following an excellent year in 2019 that saw the market, as measured by the S&P 500, advance over 31%. While this is an exceptional one-year move, over the last 5 years the market has an annualized total return of 11.7%, only slightly above its long-term average. The fundamental case for equities remains in place with US Real GDP growth in the moderate 2.5%-3.0% range. Interest rates remain low, unemployment remains at a 40-yr low, public, corporate and consumer balance sheets are healthy. The primary area of concern is valuation. A year ago, following the Q4 2018 correction the P/E ratio stood at 14.6x, compared to its current level of 18.2x. While currently ~1.5 points above its long-term average, we think the backdrop of renewed earnings growth, accelerating global economic trends, easing trade tensions, and supportive macro policies warrant maintaining the weight of our US equity allocation in 2020.
- *International Equities:* Returns for international equity markets were very good in 2019 with developed markets +22% and emerging markets +18%. The increase in our "Higher Risk" asset bucket is entirely due to a higher emphasis on international equities, which we increase from 20% to 22%. Within international equities, we believe emerging markets have a particularly attractive setup into 2020. Since the 2009 market sell-off, the S&P 500 has returned 378% compared to just 124% for the MSCI AC World ex-US Index ("ACWI ex-US", the benchmark for all non-US equity markets). In contrast to elevated

valuations in the US, the ACWI ex-US P/E multiple of 14.2x is only modestly above its 13.8x 20-yr average. Global economies were negatively impacted in 2019 by spillover effects of the US/China dispute and should also benefit from any easing of tensions.

2019 – Year in Review

Investment Return Summary

Asset Class/Index	Asset	Calendar Year					Annualized		
		2019	2018	2017	2016	2015	3 Year	5 Year	10 Year
Cash									
BofA ML U.S. Treasury Bills	Treasury Bills	2.3	1.9	0.8	0.4	0.1	1.7	1.1	0.6
Fixed Income									
Barclays US Aggregate	US Fixed Income	8.7	0.0	3.5	2.7	0.6	4.0	3.0	3.8
Barclays US Intermediate Agg.	US Fixed Income	6.7	0.9	2.3	2.0	1.2	3.3	2.6	3.2
BofA ML High Yield	US High Yield Bonds	14.4	-2.3	7.5	17.5	-4.6	6.3	6.1	7.5
Global Equities									
S&P 500	US Large Cap	31.5	-4.4	21.8	12.0	1.4	15.3	11.7	13.6
Russell 2000	US Small Cap	25.5	-11.0	14.7	21.3	-4.4	8.6	8.2	11.8
MSCI EAFE	Developed International	22.0	-13.8	25.0	1.0	-0.8	9.6	5.7	5.5
MSCI EMF	Emerging International	18.4	-14.6	37.3	11.2	-14.9	11.6	5.6	3.7
Alternatives									
HFRX Equity Hedge	Equity Hedge Funds	10.7	-9.4	10.0	0.1	-2.3	3.3	1.5	1.2
HFRX Global Hedge Fund	Hedge Funds	8.6	-6.7	6.0	2.5	-3.6	2.4	1.2	1.1
S&P GSCI	Commodities	17.6	-13.8	5.8	11.4	-32.9	2.4	-4.3	-5.4
S&P GSCI Gold	Gold	18.0	-2.8	12.8	7.8	-10.9	9.0	4.4	2.7
Inflation									
CPI-U (Less Food and Energy)	Inflation	2.3e	2.2	1.8	2.2	2.1	2.1	2.1	1.9

Best performing   Worst performing

In contrast to 2018, when very few asset classes other than cash equivalents posted positive returns, every asset class delivered positive returns in 2019. As in 2017, 2019 had double-digit returns for the major global equity markets and single-digit returns for the fixed income markets. US large-cap stocks led the way with an impressive 31.5% return, followed by US small-cap stocks at 25.5%. US markets posted positive returns in all four quarters of 2019 led by the first quarter return of 13.6% (a welcome rebound following the 13.5% decline posted in Q4 2018) and ending with a fourth quarter return of 9.1%. There was less price volatility in 2019 with two minor corrections of 6-7% in the second and third quarters. During the year, international equity markets, both developed and emerging, delivered returns in the 20% range, trailing the US market but much improved over the negative results in 2018.

Headline economic news for the year was generally positive, with the caveat that growth trends slowed as the year progressed and the impact of tariffs and business uncertainty weighed on corporate spending. The US economy grew at a 2.2% rate for the year, unemployment fell to a 40-year low at 3.6%, wage growth moved higher to the 3.5% level, and inflation remained near 2%. Corporate earnings grew only 1% in 2019 following the +20% tax-reform-enhanced growth in 2018. The Fed, fearing recession early last year, abandoned its tightening strategy and instead reversed course and cut interest rates three times during the year. Low corporate earnings growth combined with the S&P 500's rise moved the price-to-earnings ratio from 14.6x in January 2019 to the current level of 18.2x.

Interest rates, as measured by the 10-year Treasury Note, fell from 3.2% in November 2018 to a low of 1.5% in August 2019 before finishing the year at 1.9%. That decline drove a surprisingly good year of returns for bonds, with intermediate bond indexes gaining 7% for the year. High-yield bonds returned 14%, benefitting from falling interest rates and narrowing spreads to Treasuries.

Alternative asset class returns were positive in 2019 but trailed equity market returns. Higher-risk directional strategies returns were in the 10% range and lower-risk absolute return strategies were in the 5% range. Commodity returns rebounded as oil prices rose 20% in 2019.

2019 Model Factors

Model Factor 1 - Fundamentals

Key considerations include economic prospects, inflation expectations, and the corporate earnings outlook.

Economic Overview

China, Trade and Tariffs

A year ago, the trade and tariff war with China began to heat up. After a possible compromise between the US and China evaporated in June, President Trump imposed 25% tariffs on roughly $34 billion of Chinese goods in July and China retaliated with its own list of $34 billion of US goods. Importantly, this retaliatory list included soybeans and pork products. In August, President Trump announced a further tariff of 10% on an additional $300 billion worth of goods. The back and forth of words and threats continued through much of 2019 until late in the year when President Trump agreed to delay an additional round of tariffs in an effort to usher along a Phase 1 agreement ahead of the holidays.

The effects of this trade war have been twofold: First, growth rates in both US imports and exports fell, hurting several key US industries such as farming and manufacturing. Second, the costs of the tariffs appear to have been almost fully passed on to both US consumers and producers. To protect US farmers, the administration has paid subsidies over the past two years amounting to over $25 billion (in contrast, the cost of the entire bailout of the US auto industry in 2009 was less than $12 billion). But no subsidies were directed to US manufacturers whose global exports fell.

The US trade deficit also dropped in 2019, the first such annual decline since 2013. However, the cost of the trade war in lost GDP was considerably greater than the fall in the trade deficit.

Going forward, President Trump has said that he would like to make a trade deal with China. However, the Chinese have backed away from certain US demands of any such accord, particularly much greater protections for US intellectual property. The likely prospect is for a limited deal between the US and China that fails to satisfy hard liners in either country. Therefore, we expect continued flareups in tensions in 2020.

Consumer Economy

The US consumer is the engine of our economy, with consumer spending representing 68% of US GDP. Fortunately for the US economy, consumers are doing quite well. This makes the odds of a recession in 2020 low, particularly when paired with easing global trade tensions. The US consumer is currently benefiting from a combination of low unemployment, steady wage growth, low inflation, healthy stock market returns, and modest debt service obligations. On this last metric, compared to 4Q 2007 - immediately preceding the financial crisis - debt payments as a % of disposable personal income have dropped from 13.2% to 9.7% today. This period has also seen household net worth rise from $71.3 trillion to $116.6 trillion.

The risk posed to the US economy from consumers may be a lack of workers. With the labor force at or near “full employment”, we would expect to see payroll pressure, which creates a risk of shocks to wage growth and inflation. While baby boomers have been waiting longer to retire than previous generations, this benefit cannot continue indefinitely. Their eventual retirement will pressure the available pool of labor and force the economy to lean more on productivity growth to continue the current economic expansion. Finally, sentiment and geopolitical events can create risks to consumers' willingness to spend — something that may be particularly prevalent in a heated election year.

Global Monetary Policies

Global monetary authorities have been very accommodative for much of the past decade. Central banks have slashed interest rates and enlarged their balance sheets with aggressive purchases of government bonds. The world is now awash with cheap sources of credit; astonishingly, close to one-third of global government debt is now at negative interest rates.

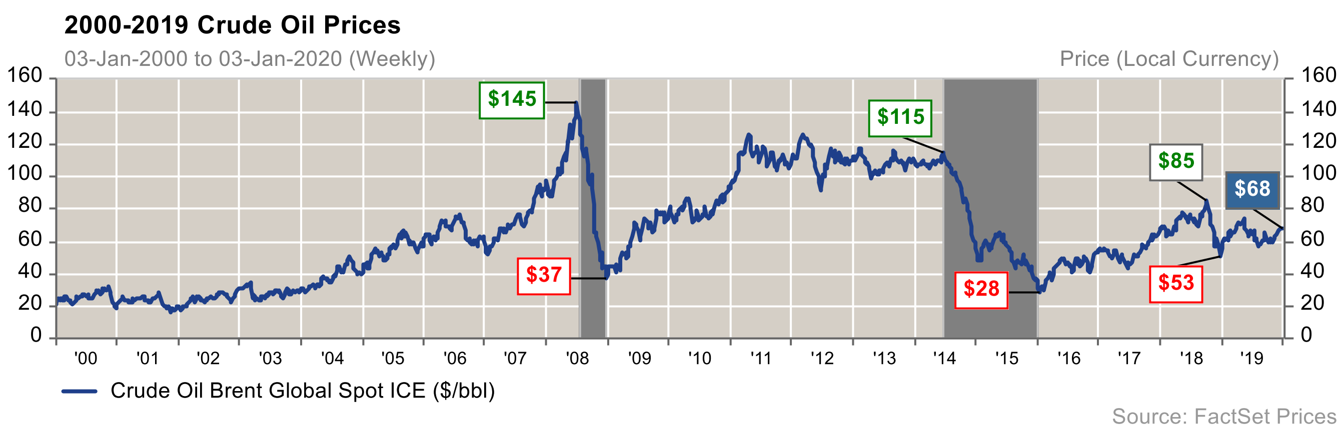
Despite all this monetary stimulus, much of the world has exhibited sub-average GDP growth for many years. Only in China, where the government spent heavily on infrastructure and housing, and in the US, where there was some modest fiscal stimulus early in the Obama administration and then considerably more under the Trump administration, has growth been enough to bring unemployment down substantially and boost general economic activity. Europe, principally Germany, has refused to change its cautious attitude towards government spending.

Today, we are beginning to see more world governments adopt generous spending plans. In the UK, for example, the Prime Minister stated that Brexit will be accompanied by much more investment in health care and education. In the US, President Trump's massive tax cut has resulted in $1 trillion government deficits as far as can be projected. China has just announced measures to encourage local government borrowing and spending on a broad range of projects.

The upshot is that both monetary and fiscal policies are now generous across much of the globe. Growth should rise as a result. To date, this stimulus has not brought about higher inflation. We believe that this combination of faster growth coupled with little rise in inflation is likely to remain intact for 2020.

Oil Prices

Oil prices moved steadily higher in 2019 but remain well below their 2008 and 2014 peak prices. US production has consistently outpaced EIA ("US Energy Information Administration") estimates for the past several years, which has: 1) helped keep oil prices relatively subdued, and 2) left the US less economically exposed to fluctuations in oil prices and tensions in the Middle East. While this has been an unequivocal positive for the US consumer, it has been a difficult 5-yr period for the stocks of domestic producers. Over the past couple years US



oil producers have responded to investor calls for more disciplined capital expenditures by reeling in spending to more closely align with cash flows. The near-term benefit of this strategy is better free cash flow generation and healthier balance sheets, but the negative consequence could be less future oil production (from fewer new wells). Even if US production growth does begin to slow, it is unclear whether OPEC will view this as an opportunity to end output cuts. This leaves us with the view that—absent shocks—oil prices may be range bound in 2020, with limited downside from slowing capex, but upside potentially capped by OPEC's ability to increase supply.

Interest Rates and Inflation

The modest growth experienced in this long economic expansion has kept inflation in check for many years. Increases in wage growth, often an indicator of inflation, appear to be offset by productivity gains. The Fed, after increasing rates in 2018 and reversing course to decreasing rates in 2019, will closely monitor the economy for signs of inflation. If signs appear, we can expect action in the form of rate increases. Barring negative inflation readings, we expect interest rates to remain near the current levels in 2020.

Corporate Earnings

We began 2019 expecting earnings growth in the 5-7% range. Despite the impressive market return, our estimate proved too optimistic, with current estimates predicting just 1% earnings growth for the year. While a good portion of this discrepancy can be attributed to the energy sector, the escalating trade war with China and the associated tariffs were also a meaningful contributor. In addition to the direct impact of tariffs, greater policy uncertainty led companies to pull back on capital investments and deplete inventories. The Global Purchasing Managers' Index (PMI) measures economic trends for both manufacturing and services. PMI's above 50 indicate expansion conditions and, while they remained in the expanding range, declined from the mid-50s to the low 50s as economic trends slowed through 2019.

With the calming of trade tensions, the signing of a Phase 1 trade deal with China, and a refocusing of Washington's attention on the upcoming elections, we expect modest economic growth in 1H20 with an acceleration in 2H20. This bodes well for business sentiment and makes mid-to-high single digit earnings growth a more realistic possibility for 2020. While market returns in 2019 were primarily driven by expansion of the P/E multiple, from 14.6x-18.2x, we believe the market will need to rely more on fundamental earnings growth for returns in 2020.

Economic Growth

United States:
Despite worries about trade and business spending, steady consumer wage improvement and low unemployment should result in real growth once again in the 2% range, or slightly higher. Profits may rise about in line with sales or 4-7%. Principal uncertainties remain in the domestic political and international geopolitical fields. The first phase of a US/China trade deal should remove some uncertainty.

Factors	Influence
▪ Moderate, steady economic growth	+
▪ Corporate earnings growth	=
▪ Trade and tariff concerns	=
▪ Continued wage growth and low unemployment	+
▪ Low interest rates and inflation	+
▪ Above average equity valuation	–

Europe and Japan:
Europe was disappointing in 2019, as Germany's reluctance to employ stimulative fiscal measures, despite a large budget surplus, was a major drag. Now that Brexit appears a reality, we believe the UK could see a modest improvement in growth from the removal of the overhang. Japan remains stuck at about 1% growth but should see a tourism benefit as host of this year's Olympics.

Factors	Influence
▪ Slowing economic growth	–
▪ Supportive central banks	+
▪ Political uncertainty in several countries	–
▪ Brexit implementation	=
▪ Trade and China Impact	+

Emerging Markets:

China started 2020 by releasing bank reserves into their system, thereby helping liquidity. That might be enough to maintain China's growth at close to 6% real, although 5% appears a safer estimate. There seems to be little chance for commodity-based countries to improve until the slump in industrial production abates. We believe this is a possibility for the back half of 2020.

Factors	Influence
▪ Improved global growth	=
▪ Reasonable equity valuations	+
▪ Government stability in China	+
▪ US trade policy	+

Model Factor 2 - Valuation

Key considerations are valuation and yields, viewed historically, in absolute and relative terms.

Equities

Global Equity Valuation Comparison

	10 Year P/E Ratio			Jan.	Jan.	10 Year Price/Book Ratio			Jan.	Jan.
Country/Region	High	Low	Avg.	2020	2019	High	Low	Avg.	2020	2019
US	18.8	10.0	15.0	18.2	14.6	3.4	1.6	2.5	3.4	2.8
Europe	16.2	8.3	12.8	14.4	11.7	1.8	1.0	1.5	1.7	1.4
Japan	20.7	10.9	14.1	15.0	11.7	1.5	0.8	1.1	1.2	1.1
Emerging Markets	18.9	9.8	13.2	14.0	11.9	2.3	1.4	1.7	1.8	1.6

Source: FactSet, January 2020. Forward P/E and P/B ratios.

The US market now sells for around 18.2x next year's earnings, toward the higher end of its historic range. An argument could be made that the market is overvalued; however, with stable economic growth, moderating recession fears, and interest rates near historical lows – suggesting that bond returns are unlikely to be competition for equity returns – we believe equities remain relatively attractive.

Based on the price/earnings ratio, valuations in Europe, Japan, and emerging markets are only modestly above their 10-year averages. While they are less expensive than the US on a historic relative basis, overall economic growth has been disappointing and supports the rationale for lower valuation. The important element here is the ability to deliver meaningful economic growth. A successful US/China Phase 1 trade agreement removes some uncertainty for global economic growth, but select countries face other challenges including implementation of Brexit.

Bonds

US interest rates fell precipitously in 2019. The 10-year Treasury Note reached 3.2% in October 2018 and fell to 1.5% in August 2019 before finishing the year at 1.9%. Amidst the August swoon, we briefly experienced an inverted yield curve where short-term interest rates (3-month duration) were higher than long-term rates (10-years). Expectations for slower growth and fears of recession diminished as the Fed lowered short-term rates three times in 2019 and the yield curve returned to a slightly more normal structure. At current levels, bonds offer very little in terms of competitive return for equities—even less so when factoring in an annual inflation rate of roughly 2%.

Developed market bonds outside the US continue to have rates at or below 0% reflecting the attempts of global monetary authorities to stimulate economic growth.

Model Factor 3 - Geopolitical

Key considerations are government and political conditions in specific geographies that may impact economies and investment markets.

United States

A highly partisan election this November will keep political developments front and center. Once the Democratic challenger is selected, it may be easier to distinguish the specific policies of the two candidates. Foreign news will also be key to voter confidence, with conditions in the Middle East and China being both important and volatile. While the trade war may slowly diminish, particularly as the President seeks good news at election time, there are plenty of other concerns.

Europe

Now that the UK seems firmly fixed on Brexit, we are interested to see how quickly the country will be able to secure other trade deals. Europe is being led by a stubborn Germany, which despite negative interest rates and a budget surplus, refuses to give a boost to growth through positive fiscal measures. Southern Europe will continue to struggle with low growth, far too many restrictive regulations, and a split political structure featuring populists and nationalists.

Japan

Steady but very slow growth remains the forecast for Japan. Domestic concerns revolve around a stagnant population, with too many people entering the retirement age and too few starting the productive earnings years.

Emerging Markets

China continues to slow but from a relatively high rate of growth. The country is undergoing a fundamental transformation from heavy industry, infrastructure, and real estate, to an economy more dominated by consumer and service industries. As it does, demand for commodities may ease while that for technology, health care, and education should rise.

While we appreciate other emerging market countries for their growth prospects amid a maturing US market, we are cautious due to economic uncertainties. In India, new government policies are being pursued to jumpstart a slowing economy. While Brazil has a better outlook due to a low rate environment and important fiscal reforms, particularly a well-received pension plan, questions regarding the pace of the economic recovery still linger.

Model Factors – Summary Table:

Region	Economic Fundamentals	Valuation & Risk	Geopolitical
US	▪ Consumer leads the economy forward ▪ Federal reserve remains accommodative ▪ Budget deficit of about $1.4 trillion will have to wait to be addressed ▪ Wage growth of a little over 3% and low unemployment are basic strengths	▪ Every absolute equity valuation measure appears high, but stocks remain cheap relative to bonds ▪ Earnings growth may be in the 4-6% range ▪ Corporations still buying back their stock as individuals reduce their equity exposure	▪ The national campaign and election will be of major interest ▪ US and China appear to be on a long-term path of establishing separate trading blocs ▪ The Middle East and North Korea remain wild cards
Developed Markets	▪ EU still stuck with too little fiscal stimulus, reflecting German attitudes ▪ EU central bank will maintain stimulative policy, as short rates remain negative ▪ Should Brexit be accomplished successfully, UK outlook improves ▪ Japan policy of negative rates and low growth should continue	▪ Equity markets seem cheap, but growth prospects are limited ▪ Negative interest rates make EU and Japanese debt unattractive	▪ UK political situation finally clarified ▪ German elections most likely will not indicate any significant change ▪ Nationalism and populism are potent forces
Emerging Markets	▪ China resolved to achieve 6% growth again, through emphasis on consumer sector and services ▪ Trade and tariffs remain a negative issue ▪ Asian countries appear more favorably placed than either S. America or eastern Europe	▪ After a strong year in 2019, Chinese equities seem fairly priced ▪ Debt levels are high, especially in dollar denominated debt, suggesting vulnerability if their currencies decline	▪ China staking out its claim for leadership in Asia and other parts of the emerging world ▪ Tariffs and other trade restrictions will still hamper growth

Expected Returns

2020 Asset Allocation: Expected Returns

Asset Class	Expected Nominal Return	2020 Allocation	Expected Nominal Return Attribution
Cash	1.5% – 2.0%	6%	0.1% – 0.1%
Fixed Income	1.5% – 3.0%	7%	0.1% – 0.2%
US Equities	6.0% – 8.0%	46%	2.8% – 3.7%
International Equities	6.0% – 10.0%	22%	1.3% – 2.2%
Directional Alternatives	5.0% – 7.0%	6%	0.3% – 0.4%
Absolute Return Alternatives	4.0% – 6.0%	13%	0.5% – 0.8%
Total Portfolio Nominal Return		100%	**5.1% – 7.4%**
Less Expected Inflation			(2.0%)
Total Portfolio Real Return			**3.1% – 5.4%**

Calculating expected returns is mainly a quantitative exercise to establish a range of returns for both asset classes and an overall "average" portfolio. History has shown that rarely will these asset classes deliver these expected returns during any one calendar year given the cyclicality and volatility of individual asset classes. For example, US equities returned 21.8% in 2017, followed by -4.4% in 2018 and 31.5% in 2019, delivering a three-year annualized return of 15.3%. Over longer periods these more volatile one-year returns are smoothed and returns generally move toward longer term asset class averages. The expected nominal returns in the table above incorporate factors specific to our view of the current market environment and allow us to express our assumptions and apply them to a client's portfolio.

For 2020, we expect better returns to come from US equities and international equities. In a base-case portfolio implementation, we would estimate a diversified portfolio to generate returns in the 5.1% to 7.4% range, with the overweight to global equities providing the bulk of the return contribution.

As always, we remain diligent in our approach to the financial markets and the management of our clients' investment portfolios. As new information becomes available we update our models and, when market conditions warrant, will adjust our allocations.

We appreciate the opportunity to share our views and welcome your questions and comments.