Forecast
Multi-Asset Solutions

Q4 2020

Long Term Asset Class Forecast

Our longer-term asset class forecasts are forward-looking estimates of total return and risk premia, generated through a combined assessment of current valuation measures, economic growth, inflation prospects, ESG considerations, yield conditions as well as historical price patterns. We also include shorter-term return forecasts that incorporate output from our multi-factor tactical asset allocation models. Outlined below is the process we use to arrive at our return forecasts for the major asset classes.

For a copy of the latest quarterly investment commentary from the Investment Solutions Group, please reach out to your State Street representative.

Inflation

The starting point for our nominal asset class return projections is an inflation forecast. We incorporate both estimates of long-term inflation and the inflation expectations implied in current bond yields. US Treasury Inflation-Protected Securities (TIPS) provide a market observation of the real yields that are available to investors. The difference between the nominal bond yield and the real bond yield at longer maturities furnishes a marketplace assessment of long-term inflation expectations.

Cash

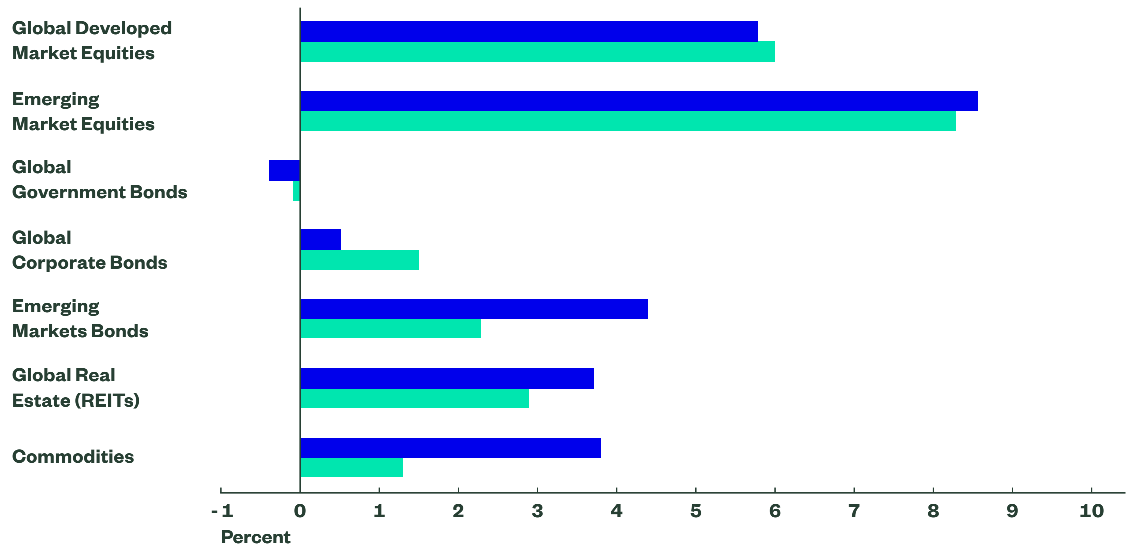
Our long-term forecasts for global cash returns incorporate what we view as the normal real return that investors can expect to earn over time. Historically, cash investors have earned a modest premium over inflation but we also take current and forward-looking global central bank policy rates into consideration in formulating our cash forecast.

Bonds

Our return forecasts for fixed income are derived from current yield conditions together with expectations as to how real and nominal yield curves will evolve relative to historical precedent. We then build our benchmark forecasts from discrete analysis of relevant maturities. For corporate bonds, we also analyze credit spreads and their term structures, with separate assessments of investment-grade and high-yield bonds. We also take into account the default probability for high yield bonds in the foreseeable future.

Figure 1
Forecasted Long-Term Annualized Return

Long Term (10+ Years)
Short Term (1 Year)



Source: State Street Global Advisors Investment Solutions Group as of 09/30/2020.
Forecasted returns are based upon estimates and reflect subjective judgments and assumptions. These results were achieved by means of a mathematical formula and do not reflect the effect of unforeseen economic and market factors on decision-making. The forecasted returns are not necessarily indicative of future performance, which could differ substantially.

Equities

Our long-term equity market return forecasts combine estimates of real return potential, derived from historical and current dividend yields, forecast real earnings growth rates and potential for expansion or contraction of valuation multiples. Notably, our way of estimating real earnings growth rates incorporates forecasts of labor, capital and productivity levels. Across both developed and emerging markets, variations in labor, capital and productivity levels result in region-specific differences in our estimates, allowing for more region-appropriate forecasts for both developed and emerging market equities.

Another important feature of our equity forecasts is that they include elements of ESG through leveraging State Street Global Advisor's R-Factor scores. Improvements in a country's aggregated and normalized R-Factor scores are used to incrementally reduce its risk expectations within the forecast and the other way around.

Smart Beta

Smart Beta forecasts are developed using MSCI World index forecasts as a starting point and adding expected alpha and beta adjustments as appropriate.

Private Equity

Our long-term forecast for private equity is based upon past performance patterns of private equity funds relative to listed equity markets and our extrapolation of these performance patterns on a forward basis. According to several academic studies[1,2] the annual rate of return of private equity funds over the long term appears to be largely in line with that of listed equities, with outperformance relative to listed equities before fees, but relative underperformance after fees. Some more recent academic studies[3] find better results, especially for buyout funds. Before fees, we believe that an average private equity fund can outperform small-cap listed equities by perhaps 0.5% over the long run. All else being equal, this makes our long-term forecast for private equities not considerably different to our projections for small-cap stocks, but we also consider additional factors, including financial conditions and capital availability.

Because private equity firms have enjoyed available and affordable capital, and have recently realized record-high valuation multiples, our return forecast continues to reflect a more competitive return environment. Since private equity funds tend to use ample leverage and are often much less liquid than publicly traded investments, we rate the long-term risk level of private equity as higher than that of small-cap equities.

REITs

Real Estate Investment Trusts (REITs) have historically earned returns between bonds and stocks due to their stable income streams and potential for capital appreciation. Hence, we model it as a blend of two approaches. The first approach is to apply the average historical spread of the yields over Treasuries to forecast the expected return. The second approach is to account for inflation and long-term capital appreciation with the current dividend yield.

Commodities

Our long-term commodity forecast is based on the level of world GDP, as a proxy for consumption demand, as well as on our inflation outlook. Additional factors affecting the returns to commodity investors include how commodities are held (e.g., physically, synthetically, or via futures) and the various construction methodologies of different commodity benchmarks. Futures-based investors have the potential to earn a premium by providing liquidity and capital to producers seeking to hedge market risk. This premium is greatest when the need for hedging is high, driving commodities to trade in backwardation, with future prices that are lower than spot prices. When spot prices are lower, however, the market is said to be in contango, and futures investors may realize a negative premium.

Figure 2
SSGA Asset Class Return Forecasts
As of September 30, 2020

Asset Class	Short Term 1 Year (%)	Intermediate Term 3–5 Years (%)	Long Term 10+ Years (%)	Long-term Risk (Std Dev) (%)
Global Equities (ACWI)	6.3	5.8	6.1	14.7
Global Developed (World)	**6.0**	**5.5**	**5.8**	**14.7**
US Large Cap	6.6	5.6	5.7	15.2
US Mid Cap	6.3	5.8	6.0	18.0
US Small Cap	6.0	6.1	6.2	19.5
Europe	5.5	6.0	6.4	16.0
Euro	5.4	5.9	6.2	19.8
Developed Pacific	3.3	3.5	4.5	18.0
Australian Equities	3.5	5.8	7.4	15.1
New Zealand Equities	5.1	5.4	6.1	16.8
Global Value Tilted Equities	5.8	5.3	5.5	15.1
Global Quality Tilted Equities	6.2	5.7	6.0	13.9
Global Momentum Tilted Equities	7.2	6.6	6.9	15.5
Global Minimum Variance Equities	6.5	6.0	6.2	10.9
Emerging Markets (EM)	**8.3**	**8.6**	**8.6**	**21.1**
EM Asia	8.8	8.9	8.7	22.1
EM EMEA	6.7	8.1	9.2	19.7
EM Latin America	7.4	7.6	8.1	28.8
Global Government Bonds	**-0.1**	**-1.0**	**-0.4**	**3.7**
Global Corporate Bonds	**1.5**	**-0.3**	**0.5**	**7.4**
Non-US Government Bonds	-0.2	-1.0	-0.5	3.7

Asset Class	Short Term 1 Year (%)	Intermediate Term 3–5 Years (%)	Long Term 10+ Years (%)	Long-term Risk (Std Dev) (%)
Non-US Corporate Bonds	0.4	-0.4	0.3	11.2
US Government Bond	0.3	-0.8	0.1	5.0
US Investment Grade Bond	1.0	-0.3	0.5	4.3
US High Yield Bond	2.0	2.5	3.5	8.9
US Long Treasury STRIPS Bond	2.1	-3.0	-3.4	24.2
Euro Government Bonds	-0.4	-1.3	-0.6	4.6
Euro Corporate Bonds	0.0	-0.8	-0.1	4.2
Euro High Yield Bonds	2.3	1.6	2.3	12.5
Australian Government Bonds	0.2	-0.6	0.2	4.7
Australian Corporate Bonds	0.8	0.4	1.3	3.2
New Zealand Government Bonds	-1.6	-1.8	-0.4	4.1
Japanese Government Bonds	-0.2	-0.7	-0.5	4.0
Japanese Corporate Bonds	0.2	0.1	0.2	2.0
UK Government Bonds	0.1	-1.6	-1.0	7.2
UK Corporate Bonds	1.0	-0.1	0.6	7.2
Emerging Markets Bonds	**2.3**	**3.2**	**4.4**	**13.4**
Global Real Estate (REITs)	**2.9**	**3.3**	**3.7**	**18.3**
Commodities	**1.3**	**2.7**	**3.8**	**15.2**
Hedge Funds	4.0	4.3	4.9	5.9
Private Equity	7.0	6.6	6.7	25.3
US Cash	0.3	0.6	1.3	1.0
Australian Cash	0.3	0.5	1.4	1.0
New Zealand Cash	0.3	0.8	1.4	1.1

Source: The forecasted returns are annual arithmetic averages based on State Street Global Advisors' Investment Solutions Group September 30, 2020 forecasted returns and long-term standard deviations. The forecasted performance data is reported on a gross of fees basis. Additional fees, such as the advisory fee, would reduce the return. For example, if an annualized gross return of 10% was achieved over a five-year period and a management fee of 1% per year was charged and deducted annually, then the resulting return would be reduced from 61% to 53%. The performance includes the reinvestment of dividends and other corporate earnings and is calculated in the local (or regional) currency presented. It does not take into consideration currency effects. The forecasted performance is not necessarily indicative of future performance, which could differ substantially.

Endnotes

1 Phalippou, Ludovic and Olivier Gottschalg, 2009, "the Performance of Private Equity Funds". *Review of Financial Studies*, vol. 22, no 4 (April) : 1747–1776.

2 Kaplan, Steven N, and Antoinette Schoar. 2005. "Private equity Performance: Returns, Persistence and Capital Flows." *Journal of Finance*, vol. 60, no 4 (August): 1791–1823.

3 Robert Harris, Tim Jenkinson, and Steven Kaplan. 2014. "Private Equity Performance: What Do We Know?" *Journal of Finance,* vol. 69, no 5: 1851–1882.

About State Street Global Advisors

Our clients are the world's governments, institutions and financial advisors. To help them achieve their financial goals we live our guiding principles each and every day:

- Start with rigor
- Build from breadth
- Invest as stewards
- Invent the future

For four decades, these principles have helped us be the quiet power in a tumultuous investing world. Helping millions of people secure their financial futures. This takes each of our employees in 28 offices around the world, and a firm-wide conviction that we can always do it better. As a result, we are the world's third-largest asset manager with US $3.05 trillion* under our care.

* This figure is presented as of June 30, 2020 and includes approximately $69.52 billion of assets with respect to SPDR products for which State Street Global Advisors Funds Distributors, LLC (SSGA FD) acts solely as the marketing agent. SSGA FD and State Street Global Advisors are affiliated.

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Glossary

Bloomberg Barclays U.S. Corporate High Yield Index A fixed-income benchmark of US dollar-denominated, high-yield and fixed-rate corporate bonds. Securities are classified as high yield if the middle rating of Moody's, Fitch and S&P is Ba1/BB+/BB+ or below. Bonds from issuers with an emerging markets country of risk, based on Barclays' emerging markets country definition, are excluded.

Commodities A generic, largely unprocessed, good that can be processed and resold. Commodities traded in the financial markets for immediate or future delivery include grains, metals, and minerals.

Credit Spreads The spread between Treasury securities and non-Treasury securities that are identical in all respects except for quality rating.

Dividend Equities and Dividend Yield Equity securities that pay dividends. A dividend is a distribution of a portion of a company's earnings, decided by the board of directors, to a class of its shareholders. Dividends can be issued as cash payments, as shares of stock, or other property. Equity, also known as stock, is a type of security that signifies ownership in a corporation and represents a claim on part of the corporation's assets and earnings. The dividend yield is the ratio of the dividend paid per share of issued equity over the share price.

Inflation An overall increase in the price of an economy's goods and services during a given period, translating to a loss in purchasing power per unit of currency. Inflation generally occurs when growth of the money supply outpaces growth of the economy. Central banks attempt to limit inflation, and avoid deflation, in order to keep the economy running smoothly.

MSCI World Index The MSCI World Index is a free-float weighted equity index. It includes about 1,600 stocks from developed world markets, and does not include emerging markets.

Nominal Bond Yield The annual income that an investor receives from a bond divided by the par value of the security. The result, stated as a percentage, is the same as the rate of interest the security pays.

Private Equity An umbrella term for large amounts of money raised directly from accredited individuals and institutions and pooled in a fund that invests in a range of business ventures.

Real Interest Rates, or Real Yields An interest rate that takes into consideration the actual or expected inflation rate, which is the actual amount of yield an investor receives. The real rate is the calculation of the "nominal" interest rate minus the inflation rate as follows: Real Interest Rate = Nominal Interest Rate – Inflation.

REITs (Real Estate Investment Trusts) Publicly traded companies that pool investors' capital to invest in a variety of real estate ventures, such as apartment and office buildings, shopping centers, medical facilities, industrial buildings, and hotels.

Tactical Asset Allocation Models Illustrate a dynamic approach to asset management that emphasises exposure to asset classes that are designed to enhance returns or control drawdowns.

Yield Curve (e.g., US Treasury Curve) A graph or line that plots the interest rates or yields of bonds with similar credit quality but different durations, typically from shortest to longest duration. When the yield curve is said to be "flat," it means the difference in yields between bonds with shorter and longer durations is relatively narrow. When the yield curve is said to be "steep," it means the difference in yields between bonds with shorter and longer durations is relatively wide.

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Investments in small and mid-sized companies may involve greater risks than in those of larger, better known companies, but may be less volatile than investments in smaller companies.

Companies with large market capitalizations go in and out of favor based on market and economic conditions. Larger companies tend to be less volatile than companies with smaller market capitalizations. In exchange for this potentially lower risk, the value of the security may not rise as much as companies with smaller market capitalizations.

Hedge funds are typically unregulated private investment pools made available to only sophisticated investors who are able to bear the risk of the loss of their entire investment. An investment in a hedge fund should be viewed as illiquid and interests in hedge funds are generally not readily marketable and are generally not transferable. Investors should be prepared to bear the financial risks of an investment in a hedge fund for an indefinite period of time. An investment in a hedge fund is not intended to be a complete investment program, but rather is intended for investment as part of a diversified investment portfolio.

Foreign investments involve greater risks than U.S. investments, including political and economic risks and the risk of currency fluctuations, all of which may be magnified in emerging markets.

The views expressed in this commentary are the views of the SSGA Investment Solutions Group through the period ended September 30, 2020 and are subject to change based on market and other conditions. The opinions expressed may differ from those of other SSGA investment groups that use different investment philosophies.
Equity securities may fluctuate in value in response to the activities of individual companies and general market and economic conditions.
The value of the debt securities may increase or decrease as a result of the following: market fluctuations, increases in interest rates, inability of issuers to repay principal and interest or illiquidity in the debt securities markets; the risk of low rates of return due to reinvestment of securities during periods of falling interest rates or repayment by issuers with higher coupon or interest rates; and/or the risk of low income due to falling interest rates. To the extent that interest rates rise, certain underlying obligations may be paid off substantially slower than originally anticipated and the value of those securities may fall sharply. This may result in a reduction in income from debt securities income.

Increase in real interest rates can cause the price of inflation-protected debt securities to decrease. Interest payments on inflation-protected debt securities can be unpredictable.
Investing in REITs involves certain distinct risks in addition to those risks associated with investing in the real estate industry in general. Equity REITs may be affected by changes in the value of the underlying property owned by the REITs, while mortgage REITs may be affected by the quality of credit extended. REITs are subject to heavy cash flow dependency, default by borrowers and self-liquidation. REITs, especially mortgage REITs, are also subject to interest rate risk (i.e., as interest rates rise, the value of the REIT may decline).
Investing in commodities entails significant risk and is not appropriate for all investors.
Commodities investing entail significant risk as commodity prices can be extremely volatile due to wide range of factors. A few such factors include overall market movements, real or perceived inflationary trends, commodity index volatility, international, economic and political changes, change in interest and currency exchange rates.
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