



10-year return forecasts (2021–30)

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Executive summary

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Long-term capital market assumptions are forward-looking estimates of total returns which are an important component for strategic asset allocation modelling and portfolio construction.

This note outlines our methodology for estimating 10-year capital market returns in local currency terms. Our approach was developed using a framework predominantly based on market measures allowing for a transparent, timely and systematic process updated twice a year.

Our updated Dec-2020 forecasts see return expectations fall across several key asset classes compared to our June 2020 forecasts. Our 10-year government bond forecasts are based on current yields which are in line with June 2020 levels for US, UK and Japan but have fallen by 30bps in euro area government bonds. Additionally, we continue to assume no return premium between our government bond and cash return forecasts.

Investment grade spreads have tightened by approximately 50-60bps in key developed markets since June 2020, lowering return expectations. Euro investment grade return forecasts have fallen more than other developed markets due to the impact of lower returns expected in euro area government bonds. Similarly, US high yield spreads have compressed by approximately 200bps since June 2020 leaving spread levels in the bottom 10th percentile historically which has driven the sharp fall in return expectations for US high yield.

The return forecast for US equities has fallen by 100bps since June 2020. This is primarily due to the richer valuations relative to June 2020 evidenced by the cyclically adjusted price-earnings (CAPE) ratio which is at levels not seen since 2018. Returns expectations for non-US equity markets, which are related to US equity return expectations, have also seen similar falls in return forecasts.

Cash returns

Developed market

On the basis that we are using the government bond return as an anchor, cash returns are estimated by determining an appropriate term premium. This has been distorted in recent years by central bank asset purchase programmes which have depressed the gap between short and long rates. Consequently, we have taken a pre-financial crisis term premium for the US and UK. For the eurozone and Japan where distortions still exist and will continue to do so for some time in our view, we have used a smaller term premium than would be warranted by the historical data.

10-year forecast returns: 2021–2030 (p.a. %)

	US	EUR	UK	JP
Cash returns	0.8	-0.3	0.1	0.0

Source: Schrodgers, Thomson Reuters DataStream. There is no guarantee that forecast will be realized.

Fixed income returns

Developed market and EM local government bonds

The yield to maturity (YTM) for a risk-free bond considers the coupon income and capital gain or loss that the investor will realise by holding the bond to maturity. However, this also assumes that all coupons can be re-invested at the YTM to the maturity date. Therefore, the relationship between initial yield on a 10-year US Treasury bond and its subsequent 10-year return will vary depending on the extent yields rise or fall in the subsequent 10 years. Despite this uncertainty in subsequent yield moves, Bogle (1991, 2015)¹ showed the strong empirical relationship between the initial yield on a 10-year US Treasury bond and its subsequent 10-year return since 1900.

We adopt this straightforward and intuitive approach to estimating 10-year returns expectations for government bonds in our framework. Specifically, we use the YTM on the 7–10 year Merrill Lynch index to estimate US, EUR, UK and JP bond returns for each calendar year. The return forecast for emerging market local debt was estimated by using the yield to maturity for the JPM GBI-EM Global Diversified Composite index. These estimates of 10-year government bonds act as a key ‘anchor’ for many of our other asset class return forecasts.

10-year forecast returns: 2021-2030 (p.a. %)

	US	EUR	UK	JP	EM local
Government bond forecasts	0.8	-0.3	0.1	0.0	4.2

Source: Schroders, ICE indices, JP Morgan indices. There is no guarantee that forecast will be realized.

Inflation-linked government bonds

The yields on US Treasury Inflation Protected Securities (TIPS) have declined dramatically since they were first issued in 1997. TIPS transaction volume was very low relative to nominal Treasuries during an initial period between 1999 and 2004. A high liquidity premium explains why US TIPS have exhibited higher excess returns than nominal Treasuries over this initial period and during the financial crisis in 2008–09.

To mitigate the impact of the initial period after TIPS were first issued, we estimate the return basis between US Treasury bonds and inflation-linked bonds by taking an expanding average from 2004 of monthly excess returns (annualised) between MLX 7–10 year UST index and MLX 7–10 year TIPS index.

We use a similar methodology for the return basis for nominal gilts over inflation-linked gilts, ignoring the stellar returns earned by UK linkers in 2016 after the UK referendum.

10-year forecast returns: 2021–2030 (p.a. %)

	US	UK
Inflation-linked bond forecasts	0.6	0.0

Source: Schroders, ICE indices. There is no guarantee that forecast will be realized.

¹Bogle, J.C., 1991. Investing in the 1990s: Occam’s razor revisited. *Journal of Portfolio Management*, 18(1), pp.88–91.

Bogle, J.C. and Nolan, M.W., 2015. Occam’s Razor Redux: Establishing Reasonable Expectations for Financial Market Returns. *Journal of Portfolio Management*, 42(1), p.119.

Credit returns

Investment grade, high yield and emerging market debt

In estimating 10-year credit total returns, we consider the following return components: government bond returns, returns due to additional spread yield and returns due to downgrades and defaults.

Returns due to the additional spread yield component are estimated using the current option-adjusted spread for a 7–10 year corporate bond index. For investment grade (IG) we take account of the effects of ratings downgrades in forecasting returns. Credit losses from defaults are estimated using long term S&P IG and high yield (HY) default and recovery rates.

10-year forecast returns: 2021–2030 (p.a. %)

	US	EUR	UK	EMD
Investment grade bond forecasts	1.6	0.4	0.9	3.1
High yield bond forecasts	3.1			

Source: Schroders, ICE indices, S&P. There is no guarantee that forecast will be realized.

Equity returns

US equities

We estimate US equity returns by decomposing the total return estimate into the following components:

$$\text{US equity return forecasts} = \text{bond yield} + \text{equity return premium (valuation adjusted)}$$

Using a long data series of US equities and bonds² we estimate the equity return premium (ERP) relative to 10-year bond yields. We first estimate a long-run ERP using an expanding window of rolling excess annual returns of US equities over US bond yields since 1900. We then apply a valuation adjustment to this unconditional ERP estimate that accounts for the impact of starting equity valuations on the return forecast. The cyclically adjusted price earnings (CAPE) ratio has been extensively shown in the academic literature as having mean reversion properties and a strong relationship with future equity returns over a 5–10 year horizon. Hence, we adjust the ERP forecast by adding the return implied by the CAPE ratio reverting to its 10-year average at the end of the subsequent decade.

Other equity markets

A key feature of our framework is to ensure that there is an internal consistency and coherence between return estimates across markets. Across our equity return forecasts we achieve this by estimating the returns to all other countries/regions based off the US estimates. Specifically, we take the current US ERP estimate (relative to US bonds) and multiply it by the country/region's historical ERP beta to US ERP. We use an expanding window from 2000 of quarterly data to estimate the betas. The beta-adjusted country/region ERP estimate is then added to its nominal bond return estimate to come up with the equity return forecast.

10-year forecast returns: 2021–2030 (p.a. %)

	Global	US	EUR	UK	JP	EM
Equity forecasts	4.3	4.4	2.8	2.8	2.6	6.7

Source: Schrodgers, MSCI indices, ICE indices, Shiller. There is no guarantee that forecast will be realized.

² <http://www.econ.yale.edu/~shiller/data.htm>

Alternatives

Commodities

We decompose the total returns to commodities into the following components:

$$\text{Commodity total return forecasts} = \text{cash return} + \text{roll return} + \text{spot return}$$

The roll yield return reflects the return from rolling from the current futures contract to a longer-term contract to maintain exposure to the commodity after the current contract has expired. The spot return simply reflects the change in the price of the commodity futures for immediate delivery. We estimate the roll return through the long run historical difference between excess returns of the Bloomberg Commodity index, which includes the roll return, and the spot return, which measures only price return. Additionally, we model the forecast spot return using the long-run annualised historical average of monthly spot returns of the Bloomberg Commodity index back to 1990.

Private equity

For private equities, we estimate the illiquidity premium by taking the long-term average excess returns over US equities and using the LPX50 index as our asset proxy.

Hedge funds

We use a 50/50 blend of the HFRI Fund of Funds composite index and the Credit Suisse Multi-Strategy Hedge Fund index as a proxy for the asset class returns. We estimate returns from hedge funds by taking the long-run average excess returns of this blended index over US cash.

10-year forecast returns: 2021–2030 (p.a. %)

	Commodities	US private equity	Hedge funds
Alternative asset forecasts	0.2	5.0	3.2

Source: Schroders, Bloomberg indices, HFRI indices, CS indices. There is no guarantee that forecast will be realized.

Volatility forecasts

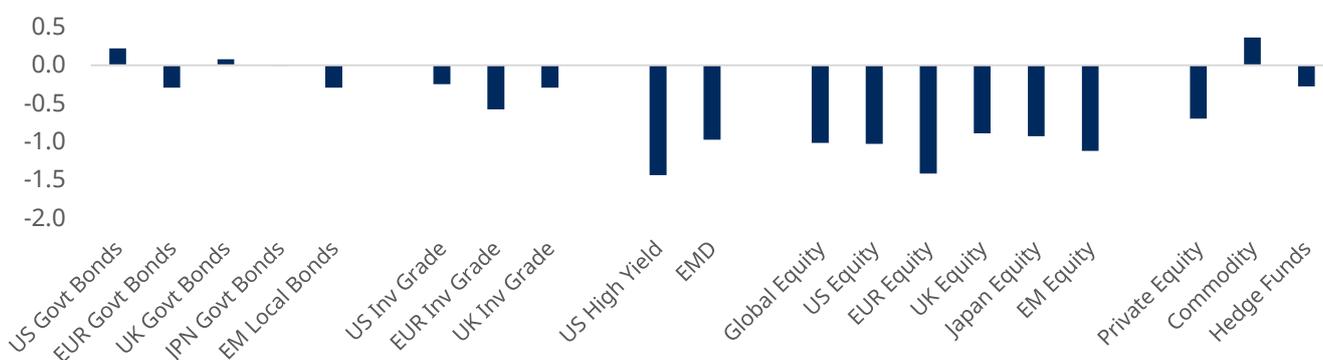
For all assets we make an assumption that volatility will match that of the past 10 years. The measure we use is annualised monthly volatility of the asset's local currency returns, where available. These measures will be adjusted in future following further research.

10-year local currency return and risk forecasts: 2021–2030 (p.a. %)

		Forecast return	Forecast volatility
Cash	US	0.8	0
	EUR	-0.3	0
	UK	0.1	0
	JP	0.0	0
Government bonds	US	0.8	5.2
	EUR	-0.3	4.7
	UK	0.1	5.0
	JP	0.0	1.8
	EM local (USD)	4.2	12.2
Inflation-linked bonds	US	0.6	5.4
	UK	0.0	5.3
Investment grade bonds	US	1.6	5.7
	EUR	0.4	6.2
	UK	0.9	6.3
High yield bonds	US	3.1	7.7
	EMD	3.1	7.9
Equity	Global	4.3	12.5
	US	4.4	13.7
	EUR	2.8	14.1
	UK	2.8	12.5
	JP	2.6	17.1
	EM	6.7	13.1
Alternatives	Commodities	0.2	13.7
	Private equity	5.0	19.9
	Hedge funds	3.2	4.2

Source: Schroders, Bloomberg indices, CS indices, HFRI indices, ICE indices, JP Morgan indices, MSCI indices, S&P, Shiller. There is no guarantee that forecast will be realized.

Percentage change in 10Y forecast returns from June-2020 for key asset classes



Source: Schroders. There is no guarantee that forecast will be realized.

Appendix – Historical 10-year return forecasts (2011–2020)

Government bonds	US	EUR	UK	JP	EML
30 December 2011	1.6	3.9	1.7	0.7	6.6
31 December 2012	1.4	2.5	1.5	0.6	5.5
31 December 2013	2.7	2.6	2.7	0.6	6.8
31 December 2014	2.1	0.9	1.6	0.2	6.5
31 December 2015	2.2	1.0	1.8	0.2	7.1
30 December 2016	2.4	0.7	1.0	0.0	6.8
29 December 2017	2.4	0.8	1.0	0.0	6.1
31 December 2018	2.7	0.9	1.2	-0.1	6.5
28 June 2019	1.9	0.2	0.8	-0.2	5.7
31 December 2019	1.9	0.2	0.7	-0.1	5.2
30 June 2020	0.6	0.0	0.1	0.0	4.5

Source: Schroders, ICE indices, JP Morgan indices. Past results should not be relied upon to guide future expectations.

Credit	US IG	EUR IG	UK IG	US HY	EMD
30 December 2011	3.5	5.6	4.5	6.0	4.2
31 December 2012	2.6	3.3	3.1	4.8	3.1
31 December 2013	3.8	3.4	3.7	5.3	4.7
31 December 2014	3.2	1.6	2.5	5.0	4.2
31 December 2015	3.5	1.9	2.9	5.6	4.7
30 December 2016	3.3	1.6	2.0	4.5	4.2
29 December 2017	3.1	1.5	1.9	4.4	3.9
31 December 2018	4.0	2.1	2.4	6.0	5.4
28 June 2019	2.9	1.1	1.7	4.6	4.2
31 December 2019	2.7	0.9	1.6	3.9	3.8
30 June 2020	1.8	1.0	1.2	4.3	3.7

Source: Schroders, ICE indices, S&P. Past results should not be relied upon to guide future expectations.

Equity	Global	US	EUR	UK	JP	EM
30 December 2011	9.0	8.6	10.6	7.1	5.4	12.1
31 December 2012	8.0	7.9	8.5	6.5	5.1	10.5
31 December 2013	7.5	7.7	7.1	6.5	4.2	10.5
31 December 2014	6.1	6.3	4.8	4.8	3.3	9.6
31 December 2015	6.5	6.8	5.1	5.4	3.5	10.5
30 December 2016	5.9	6.2	4.2	4.0	2.9	9.6
29 December 2017	4.8	5.1	3.3	3.1	2.0	8.1
31 December 2018	6.6	7.1	4.9	4.5	3.3	9.6
28 June 2019	5.9	6.3	4.1	4.1	3.1	8.7
31 December 2019	5.7	6.1	4.0	3.9	3.2	8.2
30 June 2020	5.3	5.4	4.3	3.7	3.6	7.8

Source: Schroders, MSCI indices, ICE indices, Shiller. Past results should not be relied upon to guide future expectations.

Note: Prior period return forecasts may be re-stated due to revisions made to cyclically adjusted price earnings (CAPE) ratio and its components.

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