ASSET ALLOCATION OUTLOOK

2020-21 likely to be much less rewarding than 2019

We think that returns from "risky" assets – equities, corporate bonds, REITs and industrial commodities – will generally beat those from "safe" ones – government bonds and precious metals – again over the next two years, as the global economy finds its feet. However, in our view both will be weaker than in 2019. We doubt that central banks will spring a major dovish surprise like the one that fuelled this year's rally. Despite recent progress on trade talks between the US and China, we think that most of their differences will remain unresolved. And the recovery in global GDP growth is likely to be lacklustre, with China missing out. Finally, though not our central forecast, a Sanders or Warren victory in the US election is a significant risk to equities there in particular.

- **Overview Table**
- **Projected Returns Table**
- **Cross-Asset Outlook**
- **Intra-Asset Outlook: Bonds**
- **Intra-Asset Outlook: Equities**
- **Intra-Asset Outlook: Commercial Property**
- **Intra-Asset Outlook: Commodities**
- **Currencies & Hedging Outlook**
- **Historical Returns, Sharpe Ratios, Valuations & Correlations Tables**
- **Appendix**

Table 1: Outlook Summary

Asset class	CE view	2020-21	Long Term*
Cash	Cash won't underperform *everything* again over the next couple of years.		
Bonds	High-grade bonds will struggle to beat it.		
Equities	Equities, though, should continue to do better, though not as well as this have this year.		
Commercial Property	The returns from equity REITs will not lag those from ordinary equities by much.		
Commodities	Industrial commodities will keep pace with equities, but precious metals will struggle.		
Currencies	Hedged returns will beat unhedged returns again.		

Colour coding refers to US dollar performance *relative* to all the other asset classes in the table.

*This document covers the outlook for 2020-21. Future publications on our Asset Allocation Service will cover the long-term (post-2021) outlook.

Negative ← → Positive

John Higgins, Chief Markets Economist, +44 (0)20 7811 3912, john.higgins@capitaleconomics.com
Oliver Jones, Senior Markets Economist, +44 (0)20 7808 4061, oliver.jones@capitaleconomics.com

Overview Table

Table 2: Outlook For US Dollar Returns By Asset Class		
Asset class*	**CE view**	**2020-21**
Cash		
US 3m T-Bills	There will be little to choose between returns from USD cash and DM government bonds.	
Bonds		
US Treasuries	Returns will be mediocre, as Treasury yields edge up.	
US TIPS	There will be little to choose between TIPS and Treasuries.	
Euro Governments	Currency weakness will undermine the dollar returns of euro-zone government bonds.	
Japanese Governments	Returns will be very close to zero, as the Bank of Japan keeps policy unchanged.	
UK Gilts	Gilts will underperform other government bonds, as the UK economy improves.	
EM Governments $	Returns from EM sovereign $ bonds will be between those of IG and HY corporate bonds.	
IG Corporates	IG corporate bonds will fare a bit better than DM government bonds.	
HY Corporates	HY corporate bonds will outperform their IG peers.	
Equities		
US	The outperformance of US equities will fade, or reverse if Warren/Sanders win the election.	
Europe (DM)	UK equities will deliver particularly strong returns, with Brexit uncertainty reduced.	
Pacific (DM)	Equities in the Pacific region will produce solid gains.	
Latin America	Latin American equities will be amongst the best performers.	
EMEA (EM)	South Africa's equities will fare worse than most.	
EM Asia	China's equities will underperform, as its economy weakens; India's will outperform.	
Commercial Property		
Developed Market REITs	The returns from equity REITs will not lag those from ordinary equities by much.	
Commodities		
Energy	Output cuts by OPEC and its allies will help energy commodities keep pace with equities.	
Precious Metals	Precious metals will struggle, as monetary support fades and physical demand remains weak.	
Industrial Metals	Returns will be solid, but not spectacular, as tight supply offsets weak demand from China.	
Currencies		
Euro	The euro will weaken, reflecting the relative economic prospects of the US and euro-zone.	
Sterling	Sterling will eventually rise further, assuming progress towards a trade deal with the EU.	
Yen	The yen will broadly hold its ground against the dollar.	

Colour coding refers to US dollar performance *relative* to all the other asset classes in the table.

*See Appendix for a list of indices used to calculate returns.

Negative ← → Positive

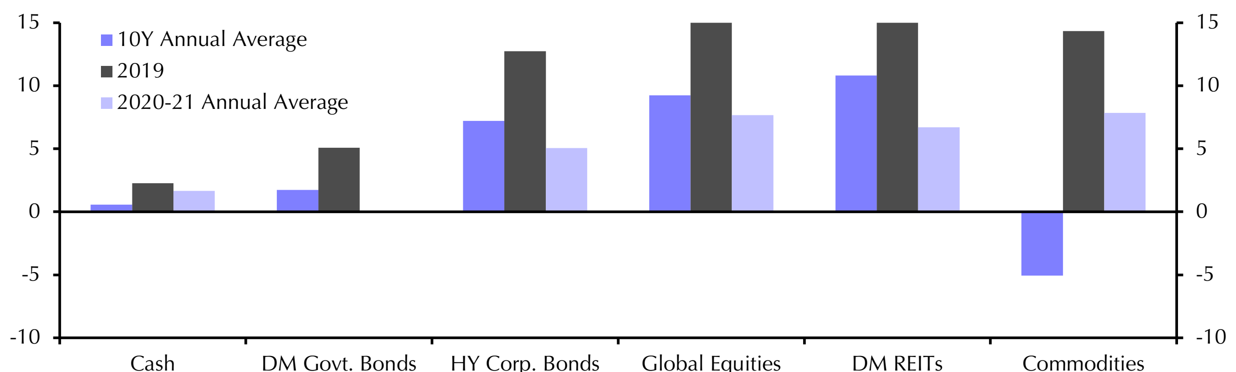
Projected Returns Table

Table 3: Actual and Projected Returns (US Dollars, %)

	10-Year Average*	2019 (f)	2020-21 Average (f)
Cash			
US 3m T-Bills	0.6	2.3	1.7
Bonds			
DM Governments	1.7	5.1	0.1
US Treasuries	3.1	7.0	1.6
US TIPS	3.4	8.5	1.8
Euro Governments	1.5	4.4	-2.0
Japanese Governments	0.0	2.0	-0.4
Gilts	3.4	10.8	0.9
EM Governments $	6.5	13.7	3.9
IG Corporates	3.9	10.8	2.4
HY Corporates	7.2	12.7	5.1
Equities			
Global	9.2	24.4	7.7
US	13.4	29.1	7.3
Europe (DM)	5.7	21.1	9.6
Pacific (DM)	6.4	18.0	8.0
Latin America	-0.8	13.3	8.5
EMEA (EM)	0.7	16.1	4.6
EM Asia	5.8	14.9	4.0
Commercial Property			
DM REITs	10.8	21.4	6.7
Commodities			
Overall	-5.1	14.3	7.9
Energy	-6.4	25.6	8.9
Precious Metals	1.7	13.3	-5.2
Industrial Metals	-2.9	1.8	6.4

Sources: Refinitiv, Bloomberg, CE, (f) = Forecast, *Annualised, **As of 12/12/2019

Chart 1: Actual & Projected Returns (US Dollars, %)



Source: Refinitiv, Bloomberg, CE

Cross-Asset Outlook

2020-21 likely to be much less rewarding than 2019

- We project that the returns from safe and risky assets will be less impressive in 2020-2021 than they have been in general in 2019. (See Charts 2 and 3, respectively.) This mainly reflects a view that monetary policy will provide less support than it has done over the past twelve months.

- A U-turn by the Fed has clearly fuelled this year's healthy return from Treasuries, the *de facto* benchmark safe asset. Admittedly, investors had already begun to anticipate looser US monetary policy at the outset of 2019. But at the time they only were only discounting one 25bp cut in the policy rate, and not until 2020. In the event, the Fed cut the rate by 25bp *three* times between July and October *this* year. Not surprisingly, this unforeseen development was accompanied by a substantial further drop in the 10-year Treasury yield, from about 2.7% at the start of 2019 to less than 1.5% in early September. (See Chart 4.)

- The Fed's pivot also contributed to healthier returns from US equities than Treasuries, despite faltering corporate earnings. This is because the plunge in US government bond yields lowered the risk-free part of the rate at which future profits are discounted. While the unobservable risky part – the US equity risk premium – probably fell as well, given a decline corporate credit spreads (see Chart 5), this was probably partly due to looser Fed policy encouraging a hunt for yield. In the meantime, other asset classes, like US REITs (see Chart 6) and precious metals (e.g. gold – see Chart 7), also benefitted considerably from lower Treasury yields.

- Nonetheless, the Fed's mid-cycle policy adjustment now appears to be over. Indeed, the central bank has signalled as much for a while, which explains why the 10-year Treasury yield has since backed up to 1.9%. Admittedly, we don't expect the Fed to *hike* its policy rate in the next couple of years, despite FOMC participants' median projection in December of a 25bp rise in 2021. But we forecast that the 10-year Treasury yield will edge up in 2020, to 2.0%, as investors' expectations for one more 25bp *cut* are dashed.

- Most other major central banks also either loosened policy in 2019, or at least signalled a more dovish/less hawkish outlook. So interest rate expectations typically declined elsewhere too, providing a corresponding boost to government bonds and equities. Although we forecast that monetary policy will be eased a bit more in 2020-21 in some cases, we don't expect yields to fall a lot further where this happens. So we project that returns from government bonds will barely exceed those from Treasuries with higher initial yields. In some other cases, we think that returns will actually be *worse*.

- We expect the returns from equities in 2020-21 to be solid, rather than spectacular. Admittedly, we think that already-very-depressed interest rates will prompt investors to continue to reach for yield. And an uneven pick-up in global growth, led by the US, could also buoy sentiment. But we doubt that risk premiums will fall a lot while the outcome of the US elections is unclear and because the US and China won't iron out their differences. In any case, we don't foresee *much* faster economic growth in the US. The pick-up that we envisage is far smaller, for example, than the one that took place in the late 1990s, when productivity there surged after the Fed last successfully piloted the economy to a soft landing. (See Chart 8.) So, unlike then, we don't envisage the stock market in the US soaring again in due course, even long *after* the Fed has taken its foot of the accelerator. (See Chart 9.)

- Finally, we project that the returns from risky commodities in 2020-21 will be similar to those from equities. However, this has more to do with tight supply than a brighter outlook for growth.

Cross-Asset Outlook

Chart 2: Asset Class Returns* In 2020/21 (USD, %)

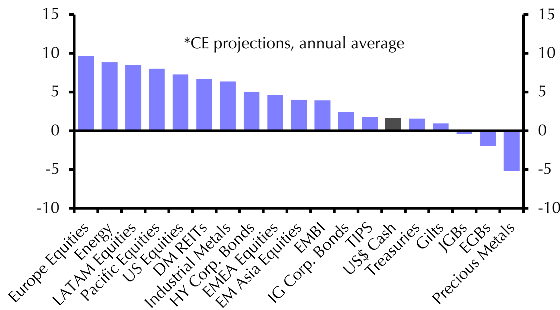


Chart 3: Asset Class Returns, 2019 YTD (USD, %)

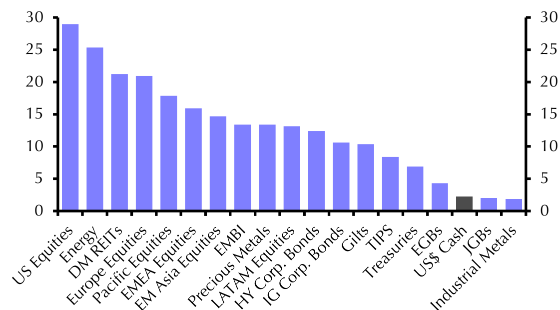


Chart 4: US Implied Policy Rate & 10Y UST Yield (%)

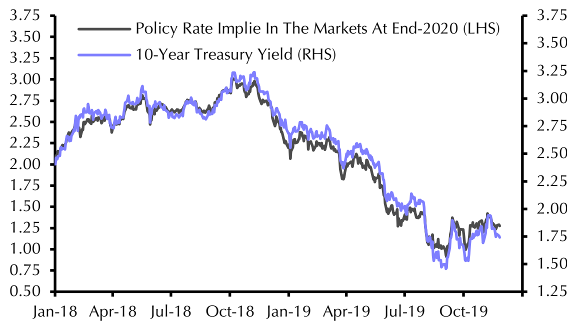


Chart 5: US Equity Risk Premium & Credit Spreads (pp)

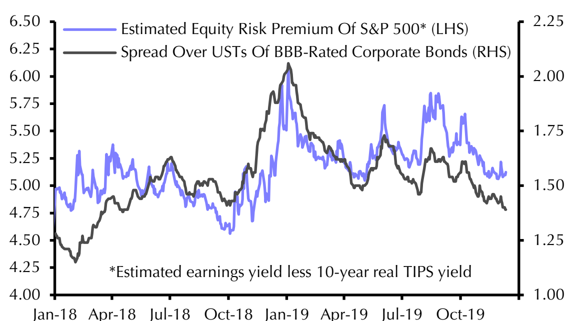


Chart 6: 10Y UST Yield & US Equity REIT Return

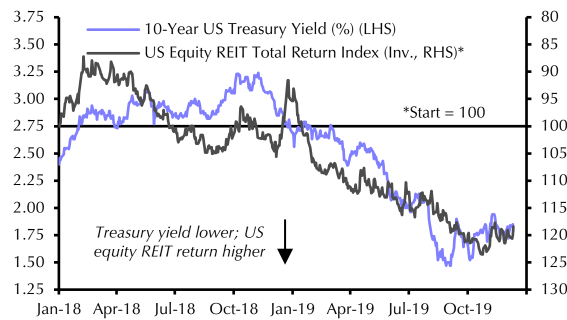


Chart 7: 10Y UST Yield & Gold Price

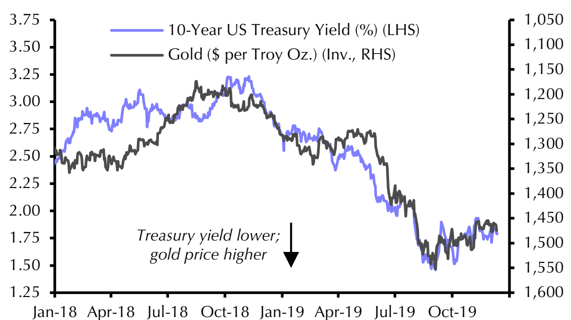


Chart 8: US GDP Growth (%, y/y)

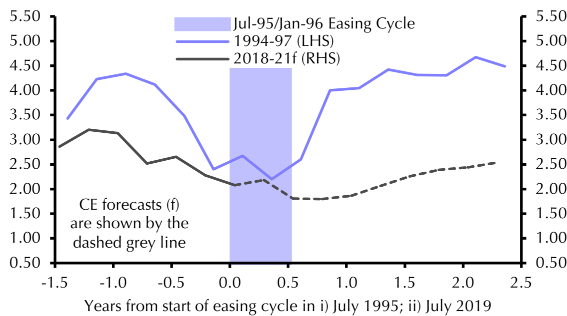
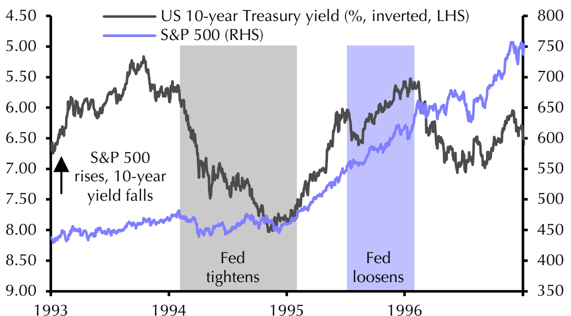


Chart 9: S&P 500 & 10-Year Treasury Yield In Mid-1990s



Sources: Bloomberg, Refinitiv, CE

Intra-Asset Outlook: Bonds

Returns from developed market sovereign bonds likely to be meagre

- Local-currency returns from developed market sovereign bonds have been poor in the past few months after big rally earlier in the year (see Chart 10), and we think they will generally be meagre over the next year or so.

- Yields are already historically-low, so would have to fall much further just to generate returns in line with their average of the past decade. (See Chart 11.) And since investors now assume that policy will remain loose for the foreseeable future, there is arguably less scope for a dovish surprise from central banks on the scale of the one that fuelled the rally earlier in 2019.

- Having said that, there are some differences in our forecasts for local-currency returns across the major advanced economies. (See Chart 12.) For example, we are relatively *pessimistic* about local-currency returns in the US, Canada, the UK and Japan. (See *Currencies & Hedging* section for more on common-currency and hedged returns.)

- In the US and Canada, we think that the economic outlook in 2020 will be positive enough that their central banks will refrain from easing, disappointing investors. (See Charts 13 & 14.) It is a similar story in the UK, provided that the new government makes progress towards a trade agreement with the EU next year. And even though the economic outlook in Japan is poor, the BoJ seems unlikely to loosen either. The bank has set a high bar for further monetary stimulus, and some fiscal support is on the way.

- In contrast, we are relatively *optimistic* about the local-currency returns of government bonds in Australia, and to a lesser extent the euro-zone. Australia's economy is still recovering from a severe housing downturn, and its central bank has more ammunition left than most others. We think it will cut rates by more than is widely anticipated, and belatedly join the quantitative easing club. The ECB is already in the vanguard of unconventional monetary policymaking. But with the euro-zone economy likely to struggle next year, and no meaningful fiscal loosening on the horizon, we think that it will surprise markets with at least *some* additional easing.

- Otherwise, we doubt there will be much to choose between the returns of inflation-linked and conventional sovereign bonds. Even in the US, where the economic outlook seems relatively bright, we expect actual and expected inflation to stabilise, rather than rebound.

- Meanwhile, what happens to developed market sovereign bonds is also likely to be an important factor determining the relative performance of corporate bonds. Comparing indices with similar maturities and credit ratings, corporate bonds in the US have outperformed their euro-zone peers recently. (See Chart 15.) A key reason for the difference has been larger capital gains in the US, driven by a much larger decline in risk-free rates there. (See Chart 16.)

- That could all change next year, as risk-free rates stabilise in the US, but fall further in the euro-zone. We also think that spreads in the euro-zone could fall below those in the US, despite a weaker economic backdrop in the former, as the ECB steps up its corporate bond buying.

- Finally, returns from the JP Morgan EMBI Global (of EM sovereign dollar bonds) typically lie between those of global investment-grade and high-yield corporate bonds. We suspect they will do so again over the next couple of years. Of the largest countries within that index, though, the spreads of Brazil's bonds appear particularly low given the country's credit rating. (See Chart 17.)

Intra-Asset Outlook: Bonds

Chart 10: Local Currency Total Returns From Selected Bond Indices (%)

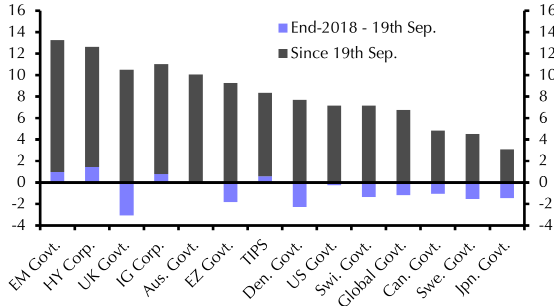


Chart 11: 12-Month Local Currency Returns From ICE BofA ML Global Government Index In 3 Scenarios (%)

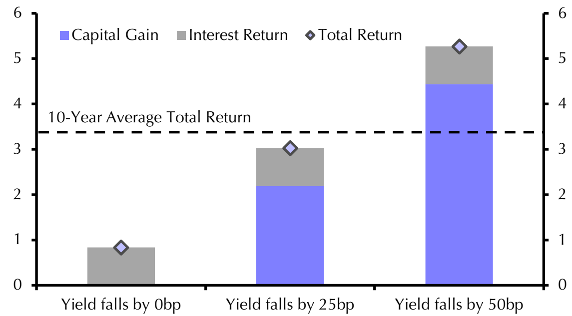


Chart 12: Forecast Local Currency Total Returns By End-2020 For ICE BofAML Indices (%)

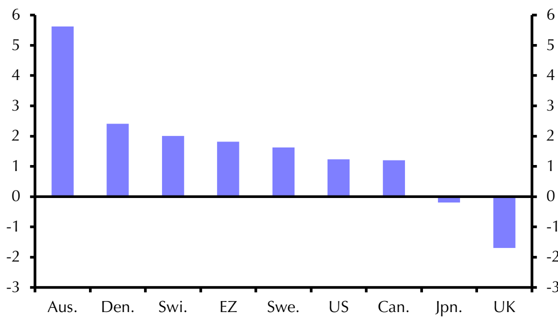


Chart 13: Policy Rates (CE Forecast Vs Markets, %)

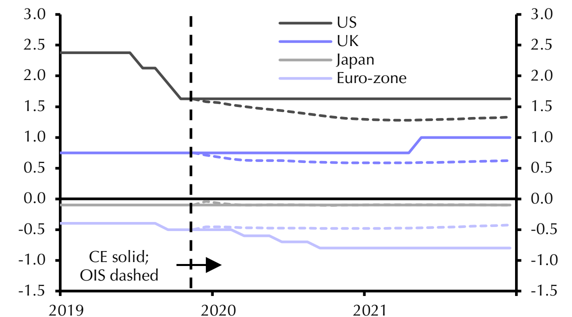


Chart 14: Policy Rates (CE Forecast Vs Markets, %)

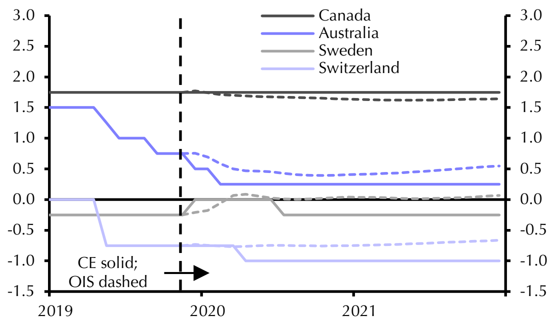


Chart 15: Ratio Of ICE BofAML US & EZ 5-7 Year BBB Corporate Indices (Total Returns, Jan. 19 = 100)

Chart 16: Contributions To YTD Changes In Yields Of ICE BofA ML US & EZ 5-7 Year BBB Corp. Indices (bp)

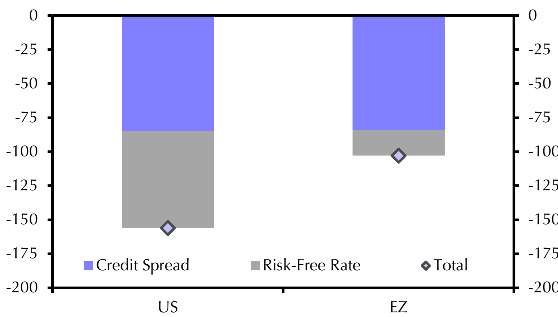
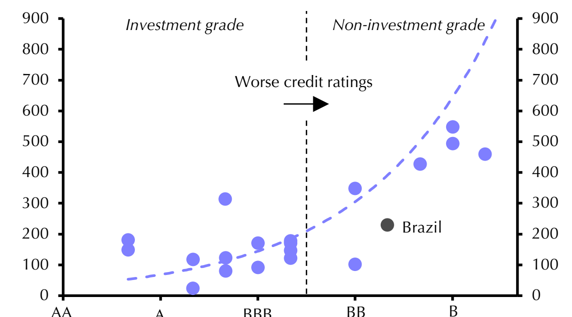


Chart 17: Spreads Of JP Morgan EMBI Global Country Indices & S&P LT FX Credit Ratings



Sources: Refinitiv, Bloomberg, CE

Intra-Asset Outlook: Equities

We expect the long-run outperformance of US equities to end, or at least slow

- Despite the relentless outperformance of mid and large-cap equities in the US during the past decade, our baseline assumption – premised on no major shock in the US elections (see below) – is that it will end, or at least slow, in 2020-21.

- Chart 18 shows the cumulative returns in US dollars from mid and large-cap equities in the US and other developed markets (DMs) since the start of 2010. These returns are based on MSCI's USA and World ex USA indices, respectively.

- The large gap reflects three developments. First, an increase in the relative valuation of the MSCI USA Index, which has offset a drag from comparatively slow growth in dividends per share. Second, an fx effect, owing to a rally in the dollar. And third, and most important, faster growth in earnings per share. (See Chart 19.)

- Chart 20 goes a step further and breaks down the big difference in earnings per share growth into three more parts: aggregate sales, margins and share count. The latter has been the main reason for relatively fast growth in earnings per share in the MSCI USA Index over the last decade as a whole, although a shift in margins has also played a key role in the past couple of years.

- One reason why we don't expect the outperformance of the MSCI USA Index to continue is its relative valuation. As Chart 21 shows, the gap in the price/estimated earnings ratios of the MSCI USA and World ex USA indices has already become unusually large, even when we account for the higher weighting in the MSCI USA Index of, for example, IT firms, which typically trade on higher multiples.

- Another reason is that we don't expect the performance of DM equities outside the US to be weighed down much in general by exchange rate movements. Admittedly, we forecast the euro to fall further against the greenback, undermining the returns in US dollars from equities in DM Europe. But we expect this to be offset by strength in sterling. And elsewhere, we forecast the yen, for example, to be fairly stable.

- Finally, we doubt that growth in earnings per share will continue to diverge. We suspect that growth in aggregate sales will remain a bit faster in the MSCI USA Index than in the MSCI World ex USA Index, given our view that economic growth will pick up sooner, and by more, in the US than in other DMs. Nonetheless, margins and share count may not be the strong tailwinds for the MSCI USA Index they have been this decade. Margins in the US have *already* been boosted by a cut in corporation tax (see Chart 22), which was probably a one-off. And share buybacks there have begun to slow.

- We also expect to see an end to the long-running, widespread, underperformance of emerging market (EM) equities relative to their DM peers. (See Chart 23.) While we are downbeat on equities in Emerging Asia given the outlook for China's economy, we expect those in LatAm, for example, to fare better.

- The elections in the US next year pose a big risk to our baseline assumption. We think that equities there would *underperform* those in many other markets if either Elizabeth Warren or Bernie Sanders were elected president, especially if the Democrats also gained full control of Congress. Both are running on platforms designed to curb the power of the big firms that have fuelled this year's increase in the S&P 500. (See Charts 24 and 25.) They also want to raise corporate taxes and empower workers – see here. By contrast, the re-election of Donald Trump, particularly if the Republicans themselves gained full control of Congress, could conceivably have the opposite effect.

Intra-Asset Outlook: Equities

Chart 18: MSCI US$ Returns Since End-2009 (%)

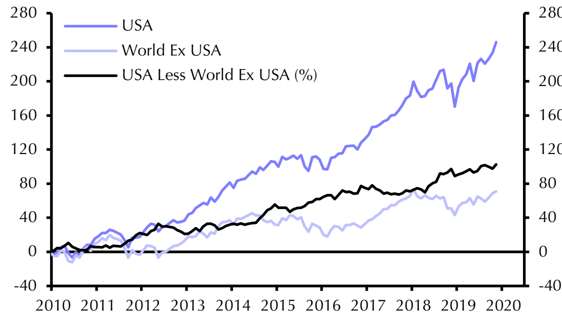


Chart 19: Breakdown Of Gap In US$ Returns Between MSCI USA & World Ex USA Indices Since End-2009 (%)

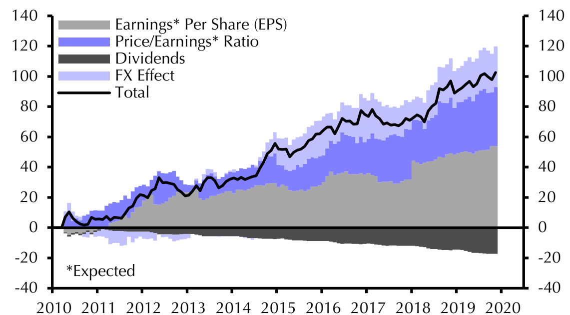


Chart 20: Breakdown Of Gap In EPS Growth Between MSCI USA & EMU Indices Since End-2009 (%)

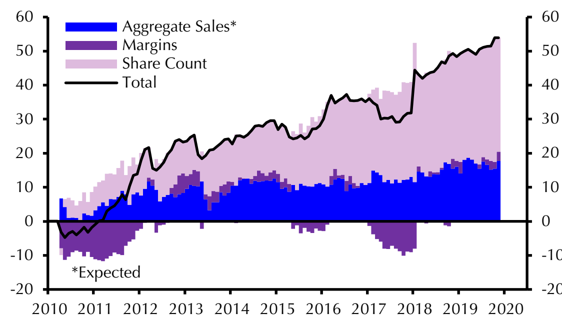


Chart 21: Actual & Equivalent-Sector-Weight P/E Ratios* Of MSCI USA & World Ex USA Indices Since End-2009

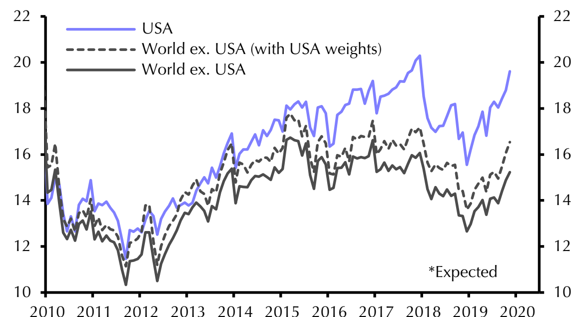


Chart 22: Median Effective Tax Rates Of S&P 500 Companies Since End-2009 (%)

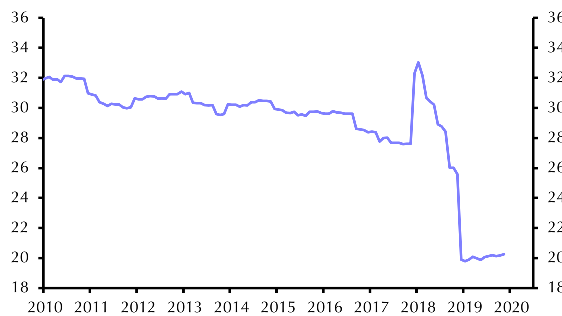


Chart 23: Breakdown Of US$ Returns* Across Selected MSCI Indices Since End-2009 (%)

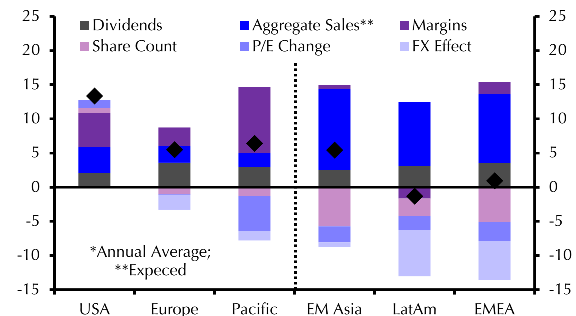


Chart 24: Cumulative Market Share Of S&P 500 Companies Ranked By Size

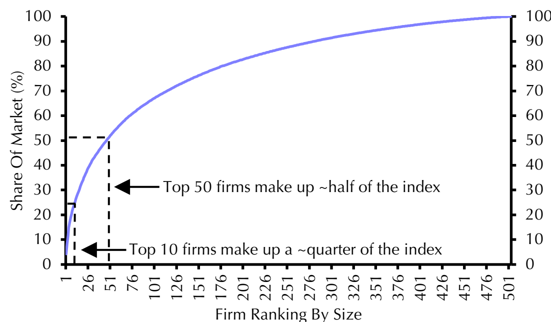
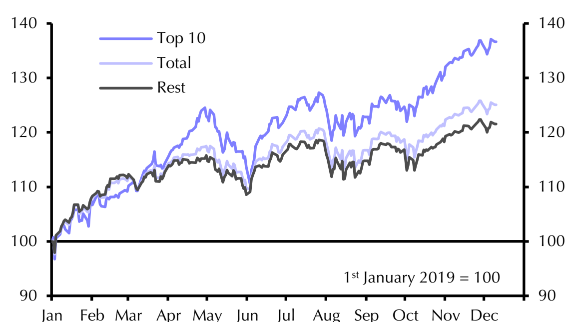


Chart 25: S&P 500 Price Index Current Top 10 vs. The Rest (Start Of 2019 = 100)



Sources: Bloomberg , CE

Intra-Asset Outlook: Commercial Property

REITs unlikely to lag ordinary equities by much

- We project that the local-currency (LC) return from MSCI's Global Annual Property Index – a proxy for *direct* investment in commercial property at the global level – will shrink from 7.4% in 2018 to 6.2% in 2019, and to an annual average of just over 5% in 2020-21, as prices rise more slowly. (See Chart 26.) As a result, we anticipate that the average annual LC return in those years will be a little less than the near-8% that we project from MSCI's All Country World Index (ACWI) of global equities. (See Chart 27.)

- Commercial property is represented in our Asset Allocation service by S&P's Developed Real Estate Investment Trust (REIT) Index, in which the weight of the US is about 66%. REITs are an *indirect* way of gaining exposure to property.

- In the short run, the returns from REITS are often more correlated with those from equities than those from direct investment in property. (See Chart 28.) So it is not surprising that the ~21% year-to-date LC return from S&P's developed REIT index is much closer to the comparable return of ~25% from MSCI's ACWI Index than it is to our forecast for the comparable return from MSCI's Global Annual Property Index for 2019.

- For much of this year, the high dividend yields of equity REITs – which are required to distribute most of their income – made them appealing to investors frustrated by the low and falling yields of bonds. Indeed, equity REITs typically outperformed ordinary equities until early October. Since then, however, they have *underperformed* ordinary equities, as bond yields have backed up. (See Chart 29.) We doubt that this underperformance will continue in earnest in the US in 2020-21, given our views that i) the 10-year Treasury yield will edge up only slightly, to 2%; and that ii) the returns from ordinary equities will be worse than this year.

- There are also two other reasons to think that equity REITs won't lag ordinary equities by much in the US over the next couple of years.

- First, the valuations of US equity REITs don't seem overly-stretched. The price/funds from operations ratio of the US FTSE Nareit Equity REITs Index, for example, is not a lot higher than its post-Global-Financial-Crisis (GFC) average, and similar to the P/E ratio of the S&P 500. (See Chart 30.) (The P/FFO ratio is considered a better valuation metric for REITs than the P/E ratio.)

- What's more, the gap between the dividend yield of the US FTSE Nareit Equity REITs Index and the yield of ICE BoAML's index of Treasuries remains larger than its average since 1990, which is often considered to be the start of the modern REIT era. (See Chart 31.) Chart 32 plots the gap in the two yields on the horizontal axis against average annual returns from the US FTSE Nareit Equity REITs Index on the vertical axis, using monthly data during this period. The latest gap is shown by the vertical line. The subsequent return has been positive far more frequently than it has been negative when the gap has been as large as it was at the end of last month.

- Second, the "fundamentals" of US equity REITs still seem solid. Since the GFC, their leverage has been trending down; their interest outlays have been declining as a share of net operating income (NOI); and they have been lengthening the maturity of their debt to guard against tighter monetary policy. (See Chart 33.) In addition, occupancy rates are generally high and growth in NOI remains positive, despite slowing.

- The bottom line is that we project that the returns in 2020-21 from equity REITs in the US, and in developed markets more generally, will not be much less than those from ordinary equities.

Intra-Asset Outlook: Commercial Property

Chart 26: LC Return Components, Global Property (pp)

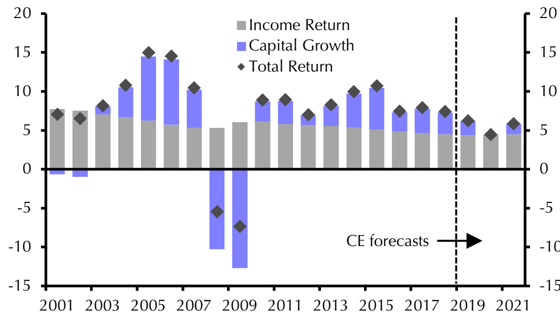


Chart 27: Global LC Returns, Property Less Equities (pp)

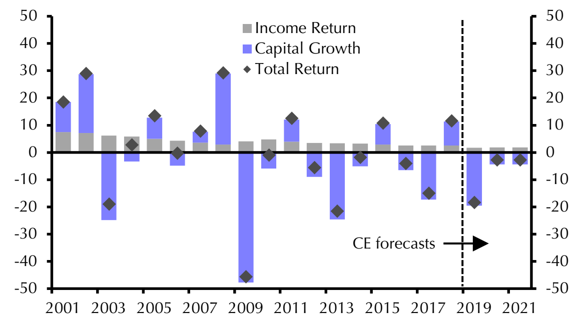


Chart 28: Correlation Of US REITs With US Equities

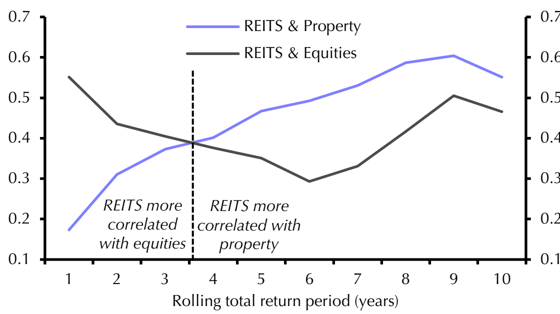


Chart 29: 10Y UST Yield & US Equity REIT/Equity Ratio

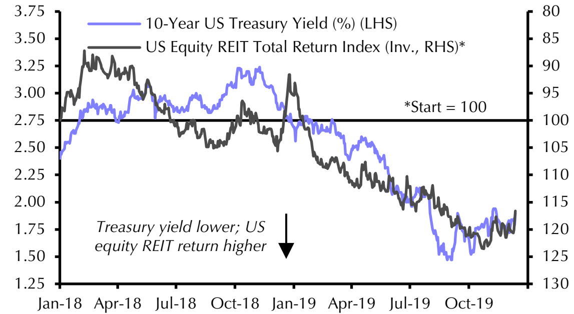


Chart 30: US Equity REIT P/FFO & US Equity P/E Ratios

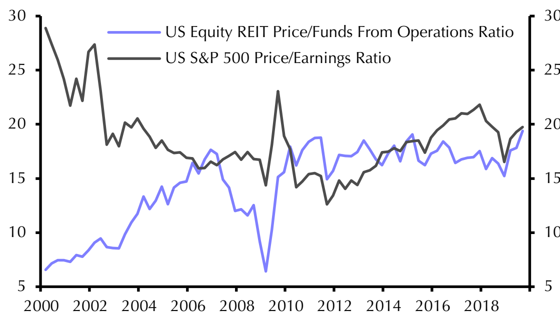


Chart 31: US Equity REITs: Yield Gap (pp)

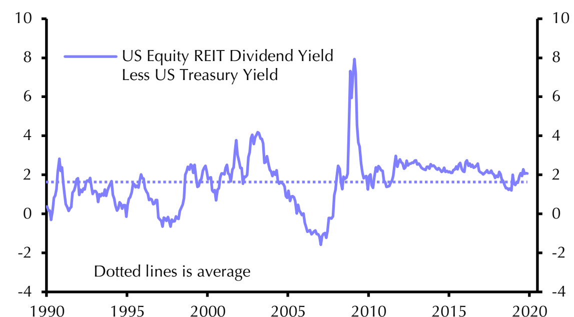


Chart 32: Yield Gap* & Returns From US Equity REITs

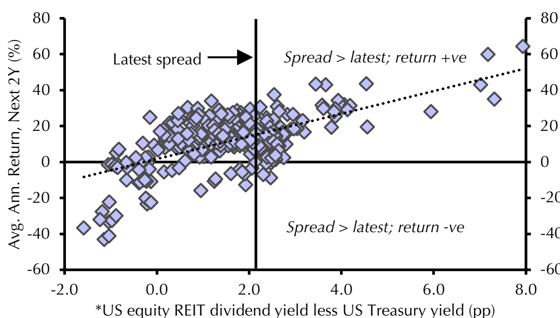
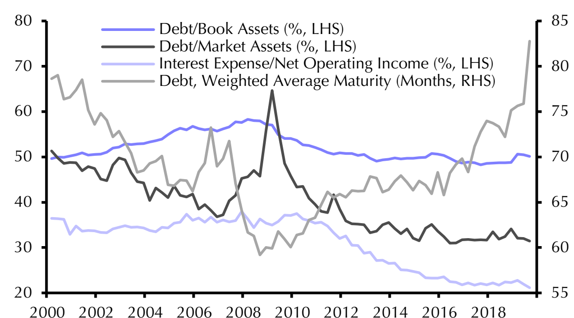


Chart 33: US Equity REITs: Selected Fundamentals



Sources: Refinitiv, Bloomberg, MSCI, Nareit, CE

Intra-Asset Outlook: Commodities

Energy commodities likely to keep pace with equities for a bit longer

- The returns from energy commodities have kept pace with, or beaten, those from other risky assets like equities recently (see Chart 34), and we forecast that they will do so again over the next year or two.

- One key reason is that OPEC and its allies have agreed to deepen previous cuts to their oil output. Even allowing for patchy compliance, we think that will be enough to shift the oil market into deficit next year, lending further support to prices. That would also probably push oil futures curves further into backwardation, boosting roll returns which have been negative for much of the past decade. (See Chart 35.)

- Further ahead, however, we expect energy commodities to *under*perform equities significantly. That would just represent the resumption of the usual historical pattern. (See Chart 36.) Returns from energy commodities have tended to trail those from equities by a large margin, aside from during significant supply disruptions or other unusual events like the collapse of the dot com equity bubble and the "golden age" of EM economic growth in the early 2000s. (They have also typically been worse than the returns from the equities of energy producers – see Chart 37.)

- Beyond the recently-announced OPEC cuts, we are not anticipating any other such events for the foreseeable future. Equity valuations may be historically-high, but we do not think they are unsustainable. Neither does another surge in EM economic growth appear likely. And in the background, the energy intensity of economic output will probably continue to decline, particularly as the pressure to combat global warming mounts. That all points to the resumption of the long-running underperformance of energy commodities.

- Industrial metals have struggled recently, underperforming energy commodities and other risky assets. But we suspect they will fare a bit better, in both absolute and relative terms, in 2020-21 – even as China's economy loses momentum – given the prospects for supply.

- For example, we doubt that copper output will rebound nearly as quickly as is widely assumed following this year's disruptions. Exchange stocks of the metal are also low. And, while we correctly argued that the price of nickel would drop back after its huge run-up earlier this year, we think it will *rise* again next year, with the market likely to be in a deep deficit.

- In contrast to energy commodities, we also think that the longer-term prospects for at least *some* industrial metals are fairly bright, despite our pessimistic long-run view of China's economy. In particular, we think that copper (the largest constituent of the GSCI Industrial Metals, see Chart 38) will benefit from stronger demand from the renewable energy and electric vehicle sectors, while little new supply comes online.

- Precious metals outperformed other "safe-haven" assets earlier this year, but have trailed them recently. (See Chart 39.) That is likely to continue in our view. As precious metals are a "real" asset, their returns tend to follow those from TIPS more closely than those from other havens. But they are also more volatile, meaning they outperform when returns from TIPS are good, and underperform when they are bad. (See Chart 40 – note the scales.) We therefore expect precious metals to struggle, as TIPS yields stabilise and physical demand remains weak.

- Chart 41 shows our 2020-21 forecasts for the returns from the GSCI Energy, Industrial Metals and Precious Metals, compared to their averages of the past decade.

Intra-Asset Outlook: Commodities

Chart 34: YTD Returns From Risky Assets (%, USD)

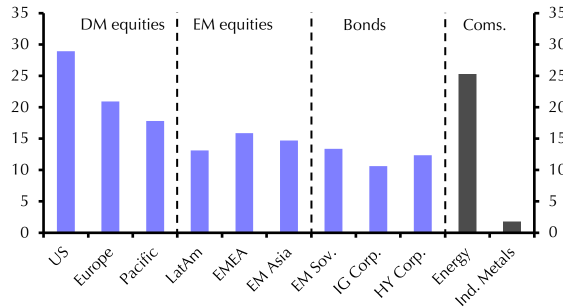


Chart 35: Price Of WTI Oil 1 Month Futures & Contango/Backwardation

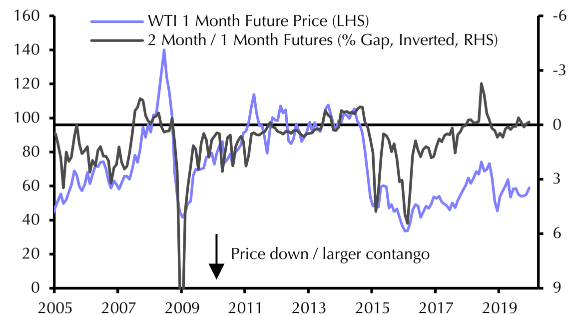


Chart 36: Ratio Of Total Return Indices, S&P GSCI Energy/S&P 500 (Jan. 1983 = 100)

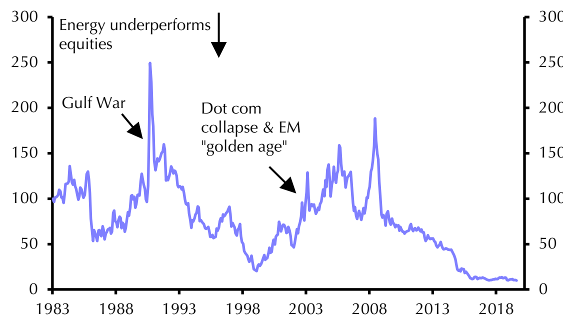


Chart 37: Total Returns Of Energy Firms' Equities In MSCI World & GSCI Energy (Jan. 2005 = 100)

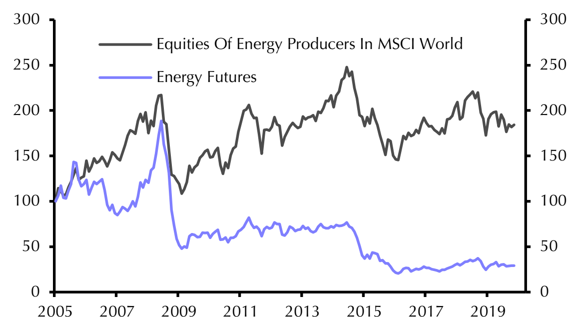


Chart 38: S&P GSCI Industrial Metals Weights (%)

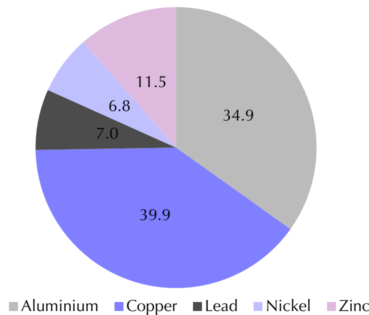


Chart 39: YTD Returns From Safe Assets (%, USD)

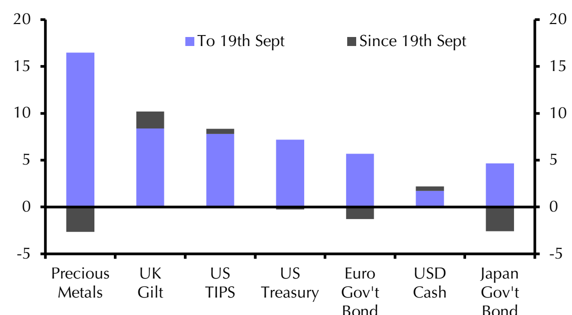


Chart 40: Quarterly Returns From ICE BofA ML TIPS Index & GSCI Precious Metals Index (%)

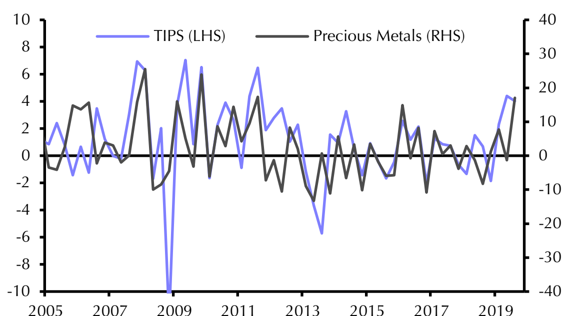
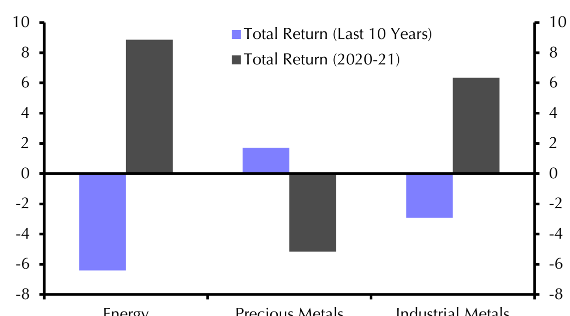


Chart 41: Forecast Returns From GSCI Commodity Indices (%)



Sources: Refinitiv, Bloomberg, CE

Currencies & Hedging Outlook

Hedged returns likely to beat unhedged returns over the next year or so

- From the perspective of a dollar-based investor, we think that *hedged* returns from assets denominated in other major currencies will generally continue to exceed *unhedged* returns over the next year or so.

- Dollar-based investors are still effectively being "paid" to hedge their exposure to other major currencies (bar the Canadian dollar and the Norwegian krone), even though the "payment" has fallen a bit this year. (See Chart 42.) It reflects the implied strengthening of other currencies against the dollar in the forward market. (In the cases of the Swiss franc, euro and Japanese yen, this is equivalent to more than 2% over the next year – see Chart 43.)

- One consequence is that the hedged yields of bonds denominated in major currencies other than the dollar are generally much higher than their local-currency yields – which are mostly below, or close to, 0%. In fact, the hedged yields of 10-year sovereign bonds outside the US are generally a little higher than the equivalent Treasury yield. (See Chart 44.)

- Given the outlook for monetary policy, the effective "payment" for hedging fx exposure back into dollars (the implied depreciation of the dollar in the forward market) is likely to *increase* a bit in a few cases over the course of 2020.

- Short-term interest rate differentials are by far the most important determinant of hedging benefits/costs. (See Chart 45.) They shifted *against* the dollar earlier this year, as interest rates fell faster in the US than elsewhere, but we think that will partly reverse in 2020. The Fed is likely to stay on pause for an extended period, as the US economy gradually recovers but inflation stays low. Meanwhile, at least some other central banks are likely to keep cutting rates, as growth elsewhere disappoints. (See Chart 46.)

- Movements in cross-currency basis may also make a difference at the margin. But we are not anticipating very large changes on that front. Really big shifts in basis tend to occur only during severe financial turmoil, like the global financial and euro-zone debt crises of 2007-08 and 2011-12, respectively.

- What's more, the comparatively small spike in basis following the jump in US repo rates in September has largely unwound already, now that the Fed's intervention and renewed expansion of its balance sheet has helped to restore calm in money markets. (See Chart 47.)

- We may see a repeat of the moves in basis that typically occur around year-end. They reportedly reflect demand from large financial institutions window-dressing their balance sheets, in response to the additional capital requirements placed on global systemically-important banks under Basel III. Nonetheless, these moves tend to be short-lived, and small. (See Chart 48.) And even if money market rates do rise by more than usual this time, we think that the Fed will swiftly intervene again.

- In the meantime, we think that further dollar strength (in the spot market) will generally undermine the *unhedged* returns of foreign-currency assets in 2020. (See Chart 49.)

- Although the greenback has risen a long way over the past decade, it does not yet look very overvalued on most conventional measures. Meanwhile, we expect growth in the global economy to remain subdued, particularly outside the US. And tensions between the US and China are likely to persist, despite the latest progress towards a limited trade deal. Both of those developments would probably be positive for the dollar relative to most other major currencies.

Currencies & Hedging Outlook

Chart 42: Cost/Benefit Of Hedging Into US Dollars Based On 12m Forwards (%)

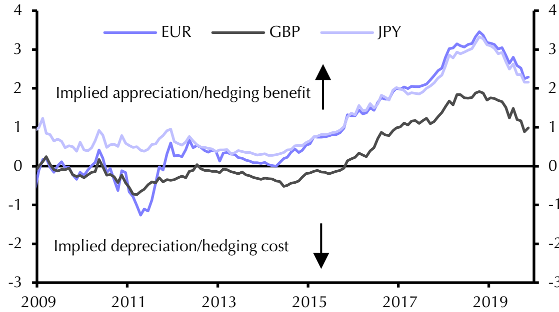


Chart 43: Cost/Benefit Of Hedging Into US Dollars Based On 12m Forwards (%)

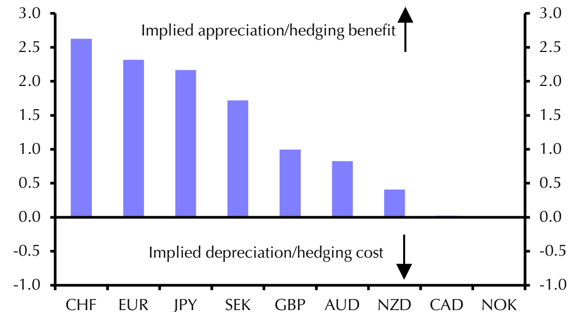


Chart 44: Yields Of 10-Year Benchmark Government Bonds Hedged Into US* (%)

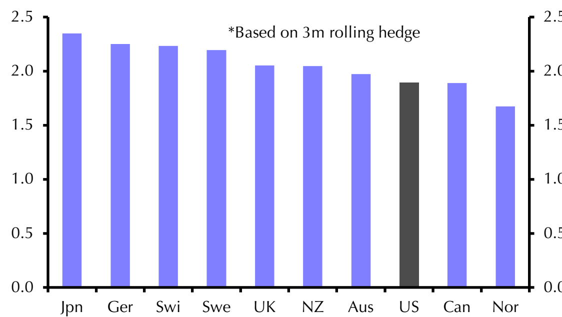


Chart 45: EZ Less US Interest Rate Gap (pp) & Benefit/Cost Of Hedging Euros Into US Dollars (%)

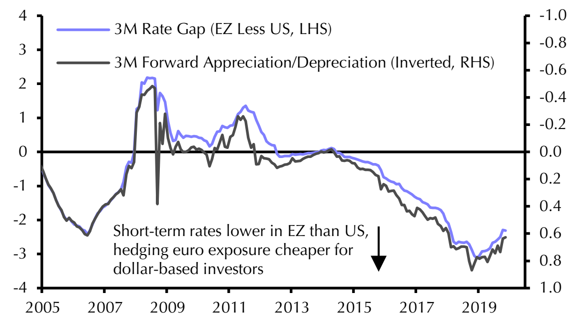


Chart 46: Forecast Changes In Policy Rate Vs US By End-2020 (pp)

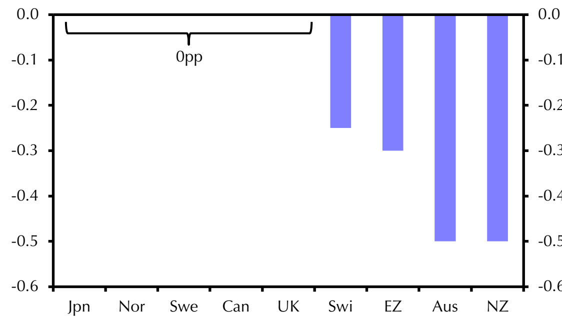


Chart 47: Euro-zone Less US Short-Term Interest Rate Gap & Hedging Cost Based On FX Forwards

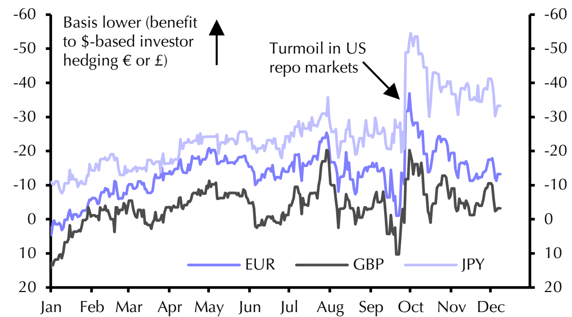


Chart 48: 3M JPY Basis Vs USD (bp)

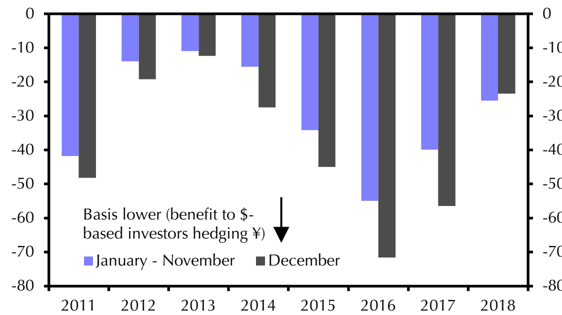
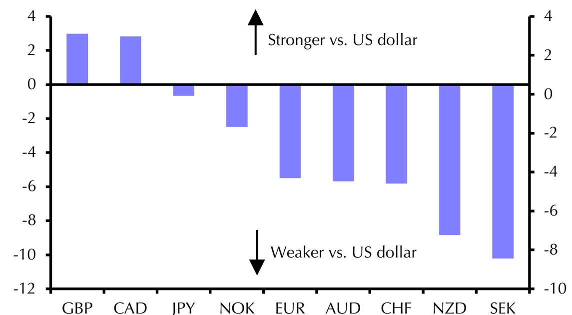


Chart 49: Forecast Currency Changes Vs USD By End-2020 (%)



Sources: Bloomberg, Refinitiv, CE

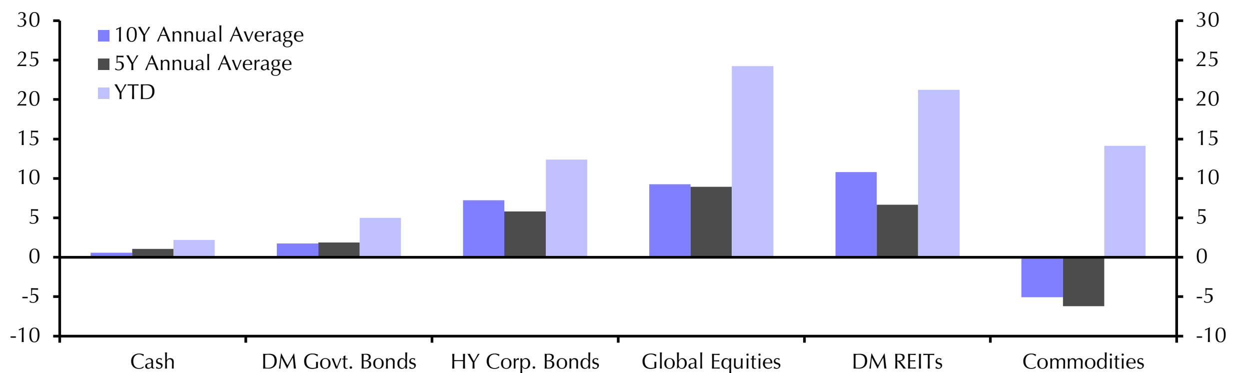
Historical Returns Table

Table 4: Returns (US Dollars, %)

	YTD	1 Year	3 Year*	5 Year*	10 Year*
Cash					
US 3m T-Bills	2.2	2.3	1.6	1.1	0.6
Bonds					
DM Governments	5.0	6.9	3.8	1.9	1.7
US Treasuries	6.9	8.4	3.5	2.4	3.1
US TIPS	8.4	9.1	3.5	2.5	3.4
Euro Governments	4.3	5.3	4.9	0.5	1.5
Japanese Governments	2.0	5.8	2.9	3.3	0.0
Gilts	10.3	10.9	5.4	0.5	3.4
EM Governments $	13.4	13.7	6.1	6.1	6.5
IG Corporates	10.6	11.4	5.5	3.1	3.9
HY Corporates	12.4	11.0	6.3	5.8	7.2
Equities					
Global	24.2	19.1	12.0	8.9	9.2
US	29.0	22.0	14.2	11.8	13.4
Europe (DM)	20.9	17.4	9.9	5.2	5.7
Pacific (DM)	17.8	14.3	8.3	7.0	6.4
Latin America	13.2	13.7	10.0	4.6	-0.8
EMEA (EM)	15.9	13.5	8.1	4.9	0.7
EM Asia	14.7	13.3	11.1	6.5	5.8
Commercial Property					
Developed Market REITs	21.2	15.6	8.3	6.7	10.8
Commodities					
Overall	14.1	4.9	1.4	-6.2	-5.1
Energy	25.3	10.4	3.9	-7.1	-6.4
Precious Metals	13.4	16.6	6.3	2.6	1.7
Industrial Metals	1.8	-1.3	0.8	-1.7	-2.9

Sources: Refinitiv, Bloomberg, CE, *Annualised

Chart 50: Returns (US Dollars, %)



Source: Refinitiv, Bloomberg, CE

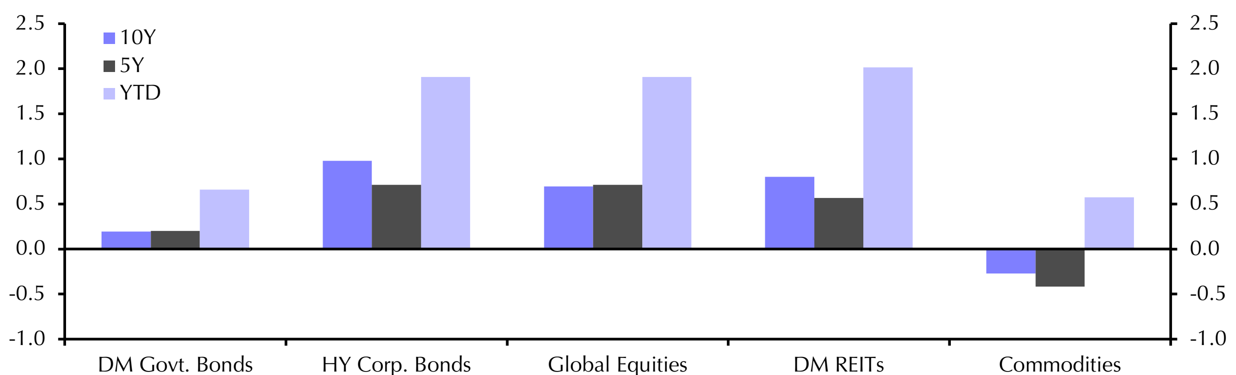
Sharpe Ratios Table

Table 5: Sharpe Ratios*

	YTD	1 Year	3 Year	5 Year	10 Year
Bonds					
DM Governments	0.7	1.0	0.4	0.2	0.2
US Treasuries	1.2	1.5	0.5	0.4	0.6
US TIPS	1.7	1.7	0.5	0.4	0.6
Euro Governments	0.3	0.6	0.4	0.0	0.1
Japanese Governments	0.0	0.5	0.1	0.3	0.0
Gilts	1.3	1.5	0.6	0.0	0.3
EM Governments $	2.1	2.3	0.9	0.7	0.9
IG Corporates	2.4	2.6	1.0	0.5	0.7
HY Corporates	1.9	1.4	1.1	0.7	1.0
Equities					
Global	1.6	0.8	1.0	0.6	0.7
US	1.9	0.8	1.1	0.8	1.0
Europe (DM)	1.4	0.9	0.8	0.3	0.4
Pacific (DM)	1.5	0.7	0.7	0.5	0.5
Latin America	0.3	0.3	0.4	0.1	0.0
EMEA (EM)	0.8	0.6	0.6	0.1	0.1
EM Asia	0.7	0.4	0.6	0.3	0.4
Commercial Property					
Developed Market REITs	2.0	1.1	0.9	0.6	0.8
Commodities					
Overall	0.6	0.0	0.1	-0.4	-0.3
Energy	0.8	0.2	0.2	-0.3	-0.2
Precious Metals	0.9	1.2	0.5	0.2	0.1
Industrial Metals	-0.2	-0.6	-0.1	-0.1	-0.1

Sources: Refinitiv, Bloomberg, CE, *Average USD monthly excess returns (over USD 3m T-Bills) divided by standard deviation.

Chart 51: Sharpe Ratios



Source: Refinitiv, Bloomberg, CE

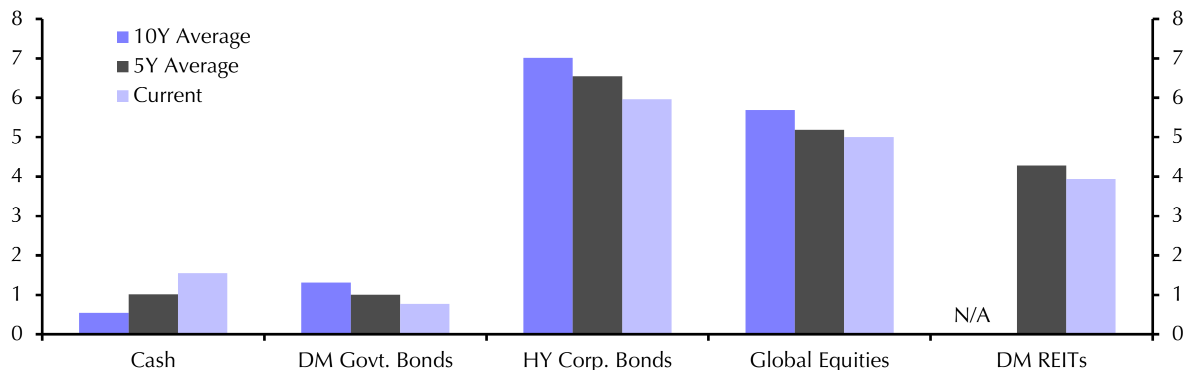
Valuations Table

Table 6: Historical Average Valuations*

	End-November	1 Year	3 Year	5 Year	10 Year
Cash (Yield, %)					
US 3m T-Bills	1.5	2.1	1.6	1.0	0.5
Bonds (Yield, %)					
DM Governments	0.8	0.9	1.1	1.0	1.3
US Treasuries	1.8	2.1	2.2	1.9	1.7
US TIPS	0.3	0.5	0.5	0.4	0.2
Euro Governments	0.1	0.3	0.6	0.6	1.5
Japanese Governments	0.0	0.0	0.1	0.1	0.4
Gilts	0.9	1.0	1.2	1.3	1.8
EM Governments $	5.0	5.8	6.0	6.0	5.9
IG Corporates	2.3	2.7	2.8	2.8	3.0
HY Corporates	6.0	6.3	6.1	6.5	7.0
Equities (12m Trailing Earnings Yield, %)					
Global	5.0	5.6	5.3	5.2	5.7
US	4.6	5.2	4.9	5.0	5.6
Europe (DM)	5.0	5.6	5.3	4.8	5.5
Pacific (DM)	6.3	7.0	6.9	6.6	6.2
Latin America	6.6	6.6	5.6	5.0	5.9
EMEA (EM)	9.8	10.3	8.7	7.7	9.4
EM Asia	6.3	7.0	7.0	7.3	7.5
Commercial Property (12m Trailing Dividend Yield, %)					
Developed Market REITs	3.9	4.2	4.4	4.3	-
Commodities (Real Price, 2015 USD)					
Overall	372	380	396	384	511
Energy	173	180	188	178	251
Precious Metals	1736	1655	1598	1583	1793
Industrial Metals	286	300	322	305	351

Sources: Refinitiv, Bloomberg, CE, *Based on monthly data.

Chart 52: Yields* (%)



Source: Refinitiv, Bloomberg, CE, *Yield for cash and bonds, 12m trailing earnings yield for equities, 12m trailing dividend yield for property.

Correlations Table

Table 7: Annual Correlation Coefficients 1999-2018*

	US 3m T-Bills	US Treasuries	US TIPS	Euro Gov'ts	Japan Gov'ts	UK Gilts	EM Gov'ts $	IG Corporates	HY Corporates	US	Europe (DM)	Pacific (DM)	Latin America	EMEA (EM)	EM Asia	DM REITs	Energy	Prec. Metals	Ind. Metals
Cash																			
US 3m T-Bills		0.3	0.2	-0.1	0.0	-0.1	0.1	-0.2	-0.3	-0.3	-0.1	-0.1	0.1	0.1	0.0	-0.1	0.4	0.2	0.1
Bonds																			
US Treasuries	0.3		0.5	0.2	0.3	0.1	-0.3	-0.1	-0.6	-0.8	-0.7	-0.7	-0.5	-0.6	-0.6	-0.3	0.0	0.2	-0.5
US TIPS	0.2	0.5		0.4	0.2	0.6	0.5	0.6	0.2	-0.2	-0.1	-0.2	0.2	0.1	0.1	0.3	0.4	0.6	0.1
Euro Gov'ts	-0.1	0.2	0.4		0.1	0.7	0.2	0.7	0.3	0.0	0.3	0.0	0.1	0.1	0.1	0.3	0.1	0.3	0.2
Japan Gov'ts	0.0	0.3	0.2	0.1		-0.1	0.0	0.0	-0.2	-0.3	-0.3	0.0	-0.1	0.0	-0.1	-0.4	0.1	0.4	-0.1
Gilts	-0.1	0.1	0.6	0.7	-0.1		0.5	0.8	0.5	0.3	0.5	0.2	0.3	0.3	0.4	0.7	0.2	0.5	0.4
EM Gov'ts $	0.1	-0.3	0.5	0.2	0.0	0.5		0.7	0.7	0.5	0.6	0.6	0.7	0.8	0.7	0.6	0.6	0.6	0.8
IG Corporates	-0.2	-0.1	0.6	0.7	0.0	0.8	0.7		0.8	0.4	0.6	0.3	0.6	0.5	0.6	0.7	0.3	0.6	0.6
HY Corporates	-0.3	-0.6	0.2	0.3	-0.2	0.5	0.7	0.8		0.7	0.8	0.6	0.8	0.7	0.7	0.7	0.1	0.4	0.8
Equities																			
US	-0.3	-0.8	-0.2	0.0	-0.3	0.3	0.5	0.4	0.7		0.9	0.8	0.7	0.7	0.8	0.6	0.2	0.1	0.6
Europe (DM)	-0.1	-0.7	-0.1	0.3	-0.3	0.5	0.6	0.6	0.8	0.9		0.8	0.8	0.8	0.8	0.7	0.3	0.3	0.8
Pacific (DM)	-0.1	-0.7	-0.2	0.0	0.0	0.2	0.6	0.3	0.6	0.8	0.8		0.7	0.9	0.9	0.4	0.4	0.2	0.7
Latin America	0.1	-0.5	0.2	0.1	-0.1	0.3	0.7	0.6	0.8	0.7	0.8	0.7		0.9	0.9	0.5	0.4	0.6	0.9
EMEA (EM)	0.1	-0.6	0.1	0.1	0.0	0.3	0.8	0.5	0.7	0.7	0.8	0.9	0.9		0.9	0.5	0.5	0.5	0.8
EM Asia	0.0	-0.6	0.1	0.1	-0.1	0.4	0.7	0.6	0.7	0.8	0.8	0.9	0.9	0.9		0.4	0.3	0.5	0.8
Property																			
DM REITs	-0.1	-0.3	0.3	0.3	-0.4	0.7	0.6	0.7	0.7	0.6	0.7	0.4	0.5	0.5	0.4		0.1	0.3	0.7
Commodities																			
Energy	0.4	0.0	0.4	0.1	0.1	0.2	0.6	0.3	0.1	0.2	0.3	0.4	0.4	0.5	0.3	0.1		0.2	0.3
Prec. Metals	0.2	0.2	0.6	0.3	0.4	0.5	0.6	0.6	0.4	0.1	0.3	0.2	0.6	0.5	0.5	0.3	0.2		0.6
Ind. Metals	0.1	-0.5	0.1	0.2	-0.1	0.4	0.8	0.6	0.8	0.6	0.8	0.7	0.9	0.8	0.8	0.7	0.3	0.6	

Sources: Refinitiv, Bloomberg, CE, *Based on annual total returns data

Appendix

Table 8: Index List

Cash	
US 3m T-Bills	ICE BofAML 3M T-Bill Index
Bonds	
DM Government	ICE BofA ML Global Government Bond Index
US Treasuries	ICE BofAML US Treasury Index
US TIPS	ICE BofAML Inflation-Linked Treasury Index
Euro Governments	ICE BofAML Euro Government Index
Japan Governments	ICE BofAML Japan Government Index
Gilts	ICE BofAMLUK Gilt Index
EM Governments $	JP Morgan EMBI Global
IG Corporates	ICE BofAML Global Corporate Index
HY Corporates	ICE BofAML Global High Yield Index
Equities	
Global	MSCI ACWI Index
US	MSCI USA Index
Europe (DM)	MSCI Europe Index
Pacific (DM)	MSCI Pacific Index
Latin America	MSCI Latin America Index
EMEA (EM)	MSCI EMEA Index/MSCI EME Index
EM Asia	MSCI EM Asia Index
Commercial Property	
Developed Market REITs	S&P Developed REIT Index
Commodities	
Overall	S&P GSCI
Energy	S&P GSCI Energy
Precious Metals	S&P GSCI Precious Metals
Industrial Metals	S&P GSCI Industrial Metals

Disclaimer: While every effort has been made to ensure that the data quoted and used for the research behind this document is reliable, there is no guarantee that it is correct, and Capital Economics Limited and its subsidiaries can accept no liability whatsoever in respect of any errors or omissions. This document is a piece of economic research and is not intended to constitute investment advice, nor to solicit dealing in securities or investments.

Distribution: Subscribers are free to make copies of our publications for their own use, and for the use of members of the subscribing team at their business location. No other form of copying or distribution of our publications is permitted without our explicit permission. This includes but is not limited to internal distribution to non-subscribing employees or teams.

Email **sales@capitaleconomics.com** Visit **www.capitaleconomics.com**