London Borough of Croydon Pension Fund

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Currency Hedging of Equities

Introduction The weakness of Sterling over the last couple of years has benefitted the Fund's allocation to overseas equities, as the appreciation of other currencies relative to Sterling has provided an additional contribution to returns.

However, with Sterling now much lower, we believe that the Pension Committee should consider hedging some of the Fund's overseas equity exposure in order to protect gains that have been experienced to date.

Sterling's ultimate floor is highly uncertain as it is so dependent on the trade deals the UK agrees and how long negotiations take. It is possible that Sterling overshoots on the way down. However, we believe there is an argument to put some hedging on at the current time.

- Executive Summary
 Even though Sterling has fallen significantly already on the back of a negative outlook for UK growth and inflation under a Brexit scenario, we expect that Sterling could continue to weaken in the wake of the decision by the UK to leave the European Union (EU). Negative news flow and reduced capital inflows will keep Sterling weak.
 - However, limited monetary easing implications and some valuation support indicate that the greater part of Sterling's depreciation has now occurred.
 - Sterling will remain at the mercy of uncertain economic and political developments for several years which obscures the outlook but we regard levels of US\$1.20 as cheap.
 - Sterling's ultimate floor is highly uncertain as it is so dependent on the trade deals the UK agrees and how long negotiations take. It is possible that Sterling overshoots on the way down.
 - However, we believe that the Pension Committee should consider hedging some of the Fund's equity exposure in order to protect gains that have been experienced to date.

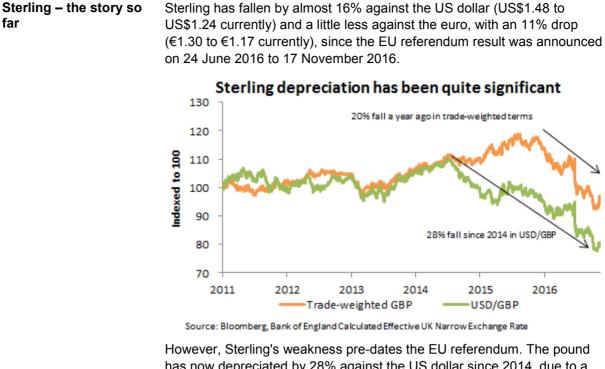
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has now depreciated by 28% against the US dollar since 2014, due to a tighter US monetary stance, concern over a widening UK current account deficit and, in the past year, by Brexit worries. In broad trade-weighted terms, the fall is smaller but still a sizeable 20% since its 2015 peak (see chart).

The table below shows the approximate currency exposures of the FTSE 4 Good Global Index, the benchmark for the Fund's global equity holdings.

Currency	FTSE 4 Good Global Index (%)
GBP	10.2
USD	47.8
EUR	16.4
JPY	8.7
Other	16.9
Total	100.0

Source: Aon, FTSE 4 Good Global Index. Data as at 31 October 2016.

Around 90% of the Fund's equity portfolio is denominated in non-GBP currencies, with the USD accounting for the largest proportion of this (48%). All of the Fund's equity exposure is unhedged.

The Fund's overseas

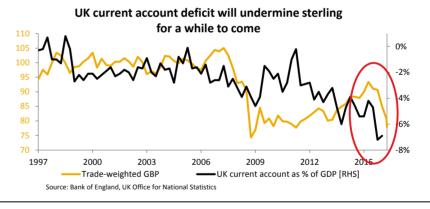
equity exposure

There are good reasons why Sterling has weakened on Brexit fears The current path of a potential 'Brexit' is less than clear. However, we think it likely that Brexit will cause the UK to fall into a mild recession in 2017. Conversely, whilst Eurozone growth will suffer it is expected to remain above 1% and US growth will be only marginally impacted by the referendum result.

UK productivity will likely take a hit as weak business confidence and lower foreign investment into the UK take their toll. UK inflation will rise temporarily above the 2% target, as a result of more expensive imports due to Sterling depreciation, but this should not start a trend given weaker UK growth and global deflationary forces.

An improving current account will ultimately provide Sterling support but not in the shorter-term The size of the UK current account deficit was instrumental in bringing Sterling down in advance of the EU referendum as it made Sterling vulnerable to a Brexit vote. The current account is likely to improve from the existing deficit of 6.9% of GDP in the coming years as a cheaper pound makes exports more competitive and imports more expensive.

However, we do not expect this driver to support Sterling in the near-term for two reasons. Firstly, the current account will not shrink immediately and it is then dependent on how well UK trade negotiations go. Secondly, the high levels of uncertainty surrounding the UK will discourage the capital inflows that have been financing the deficit to date. Foreign direct investment inflows are likely to reduce from both EU and non-EU sources as the UK loses its direct access to the single market. The longer Brexit negotiations take, the greater could be the negative impact from financial flows.



Can Sterling fall further?

Sterling exchange rates are impacted by growth and policy decisions in other regions, not just the UK, and the ties between global financial markets and the global growth implications of a strong dollar mean that Sterling depreciation against the dollar has its limits.

The key question, however, is how much of Brexit's total impact has already been incorporated into Sterling's current level, given the steep falls we have seen both before the referendum and since the result at the end of June. We look at monetary policy outlook and exchange rate valuations to provide some guidance.

But Sterling doesn't look cheap quite yet	Sterling has experienced large shock depreciations in the past – the most recent was in 2008 after the Global Financial Crisis when Sterling fell by 35% against the US dollar in just over a year. However, Sterling was extremely overvalued at an exchange rate above US\$2 before this collapse.
	The situation is very different today. Sterling was close to fair value against the US dollar before the Brexit vote and the current fall in Sterling has not been large enough to reach extreme undervalued levels. OECD purchasing power parity (PPP), based on relative inflation considerations, indicates fair value at US\$1.43, less than 15% above current levels.
	We believe that the near-term risks are still to the downside from the uncertainties forced by Brexit, but we are getting to a point where Sterling is starting to look cheap.
	We regard an exchange rate against the US dollar of US\$1.20 as cheap, while levels around US\$1.30 could attract some hedging. A fall to US\$1.20 is 30% below 2014 highs, 19% below Brexit announcement levels and only 3% below current levels.
Hedging implications	We have been supportive of the Fund's unhedged currency exposure to their overseas assets for the last few years. Even though we did not expect that the UK would vote to leave the EU, earlier this year, in March 2016 we felt that sterling wasn't on a strong footing given some risk of Brexit.
	We now regard an exchange rate against the US dollar of US\$1.20 as cheap, while levels below US\$1.30 could attract some hedging. A fall to US\$1.20 is 30% below 2014 highs, 19% below Brexit announcement levels and 7% below current levels. For other major currencies, €1.10 (5.5% from current levels) and the current ¥130 level appear attractive to hedge euro and yen exposure respectively.
	Sterling's ultimate floor is highly uncertain as it is so dependent on the trade deals the UK agrees and how long negotiations take. It is possible that sterling overshoots on the way down. However, given that the US weight in the MSCI World Index is as high as 59%, the threshold for having some initial hedging in place is closer to current levels.
Implementation considerations	The Pension Committee may wish to consider hedging some of the Fund's overseas equity exposure in order to protect gains that have been experienced to date. A shift from unhedged to hedged share classes is usually the simplest way to hedge, however this option is not available to the Fund. Alternatively, the hedging can be provided either through the investment manager (Legal & General Investment Management) or the custodian (BNY Mellon), as long as there are best execution checks. We can work with the Officers to explore the most appropriate implementation mechanism from both an efficiency and cost perspective.

Summary	•	Sterling has weakened markedly against a number of major currencies since the EU referendum was announced, continuing a trend of general weakness seen earlier this year and beyond.
	•	The risk posed by the Fund's USD exposure is more significant than all other currencies and represents a more stable base against which to consider currency hedging.
	•	Sterling is below "Fair Value" but not yet cheap. We believe there are policy actions, and just as importantly international policy <i>divergences</i> , which could see Sterling weaken further against the Dollar in the near term before possibly returning to something approaching Fair Value.
	•	We believe that the Pension Committee should consider hedging some of the Fund's overseas equity exposure in order to protect gains that have been experienced to date.
		We look forward to discussing this paper with the Pension Committee

 We look forward to discussing this paper with the Pension Committee at the upcoming meeting on 6 December 2016.

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