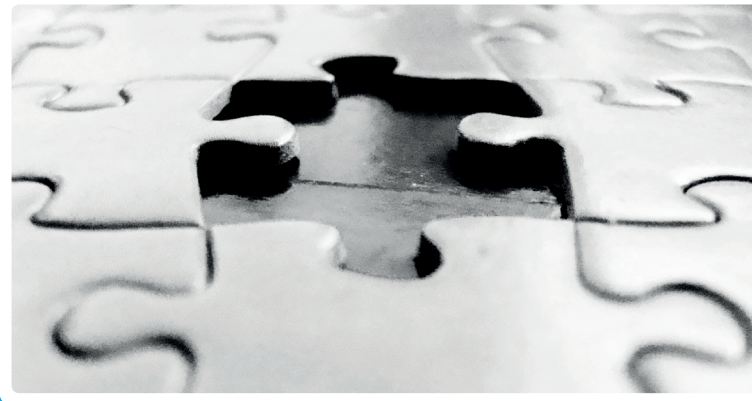


# Emerging market debt – The missing piece of the cashflow matching puzzle



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Cashflow matching strategies are customised investment solutions, designed to enable clients such as pension schemes or insurance companies to meet their liabilities. We believe that emerging market fixed income has an important role to play in designing cashflow matching strategies.

## BROADENING THE OPPORTUNITY SET

Historically, matching portfolios have concentrated on the developed market (DM) investment grade (IG) universe without considering the benefits of investment grade-rated emerging market (EM) fixed income.

At LGIM, we aim to consider the entire global fixed income opportunity set in order to meet our client's specific cashflow requirements. Including an allocation to EM IG fixed income within a matching portfolio can be an efficient method of improving diversification, whilst increasing the portfolio's risk-adjusted return potential.

## A SOLUTION TO THE CASHFLOW MATCHING CONUNDRUM

Central bank largesse has driven the yield on DM IG fixed income to all-time lows (around 37% of the euro

IG credit market is currently offering negative yields) and has significantly reduced the fixed income universe available to meet a client's yield requirements. This low yield environment, set against the rating constraints included in many mandate guidelines, has created a funding conundrum – particularly at the front end of the cashflow profile in matching strategies.

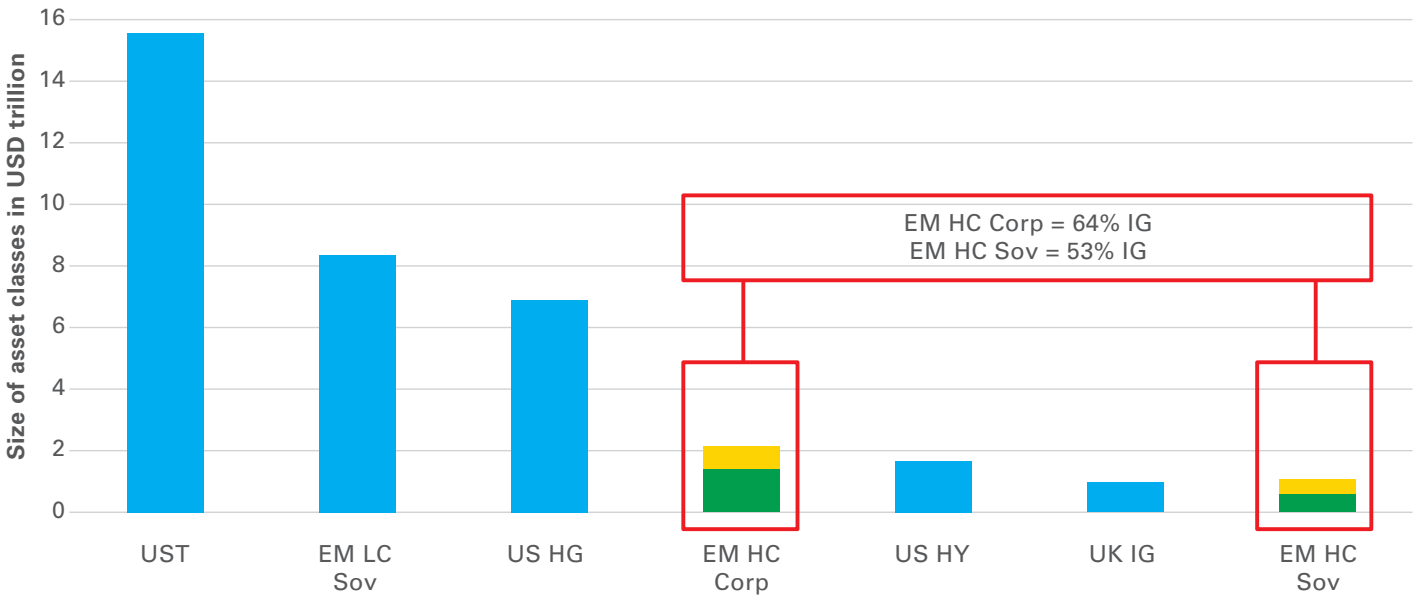
We believe EM IG fixed income offers a solution to this cashflow matching puzzle. EM IG significantly expands the universe for meeting yield requirements and offers welcome diversification from traditional cashflow matching solutions that have typically centred on DM IG corporate credit. Furthermore, the EM IG universe brings opportunities in both **sovereign** and **corporate** credit markets.

**EM FIXED INCOME IS *NOT* A NICHE ASSET CLASS**

A common misconception is that EM fixed income is a *niche* asset class. This could not be further from the truth. EM fixed income is currently a c.\$12 trillion asset class and growing. Within this universe EM hard currency (HC) is

c.\$3.3 trillion. Cashflow matching solutions would focus on the HC IG portion of this EM universe which is c.\$2 trillion. This is a significant expansion on the under \$1 trillion IG investible universe in the UK.

**Figure 1. The c.\$2Tn EM HC IG market expands the investible universe for cashflow matching portfolios**

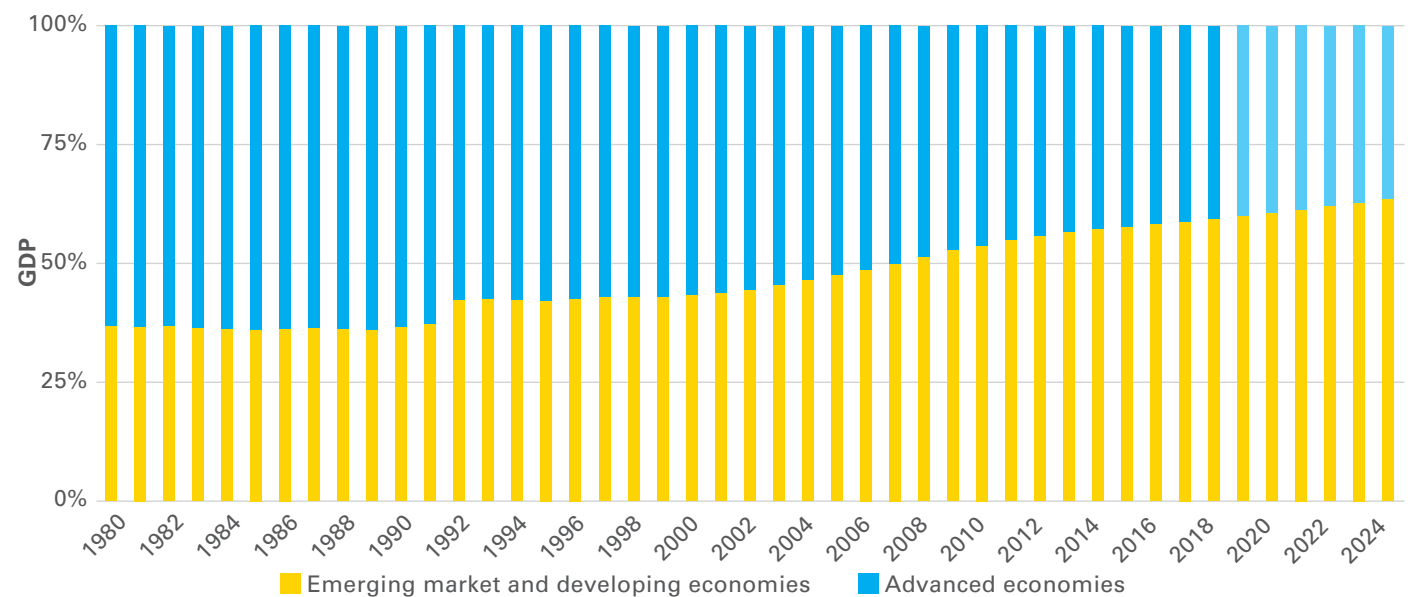


Source: JP Morgan, Bloomberg, 2018.

Furthermore, **emerging markets continue to be the driving force behind global growth**. EM countries currently account for more than 50% of the World's GDP, which raises the

question: Can a portfolio really be described as efficient and suitably diverse if there is no allocation to emerging markets?

**Figure 2: EM countries contribute more than half of global GDP and are likely to be the key driver of future growth**



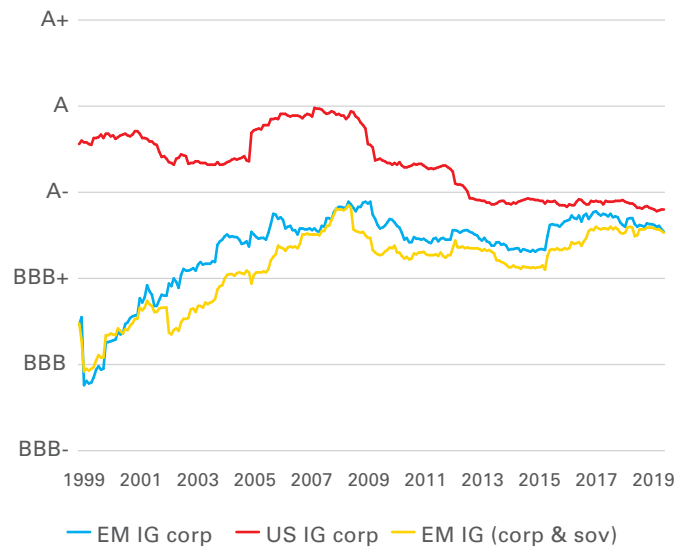
Source: IMF, 2018.

**SUPERIOR RISK-ADJUSTED RETURN POTENTIAL**

Many investors believe EM fixed income is an exotic, risk-prone asset class. However, we believe this is a short-sighted assessment. This misconception usually stems from the notion that EM fixed income is simply one homogenous asset class. This myth is quickly dispelled when one realises that the EM fixed income universe encompasses an extremely diverse spectrum of countries ranging from AAA all the way down to D. More than half of the bonds in the most closely followed EM indices are IG rated.

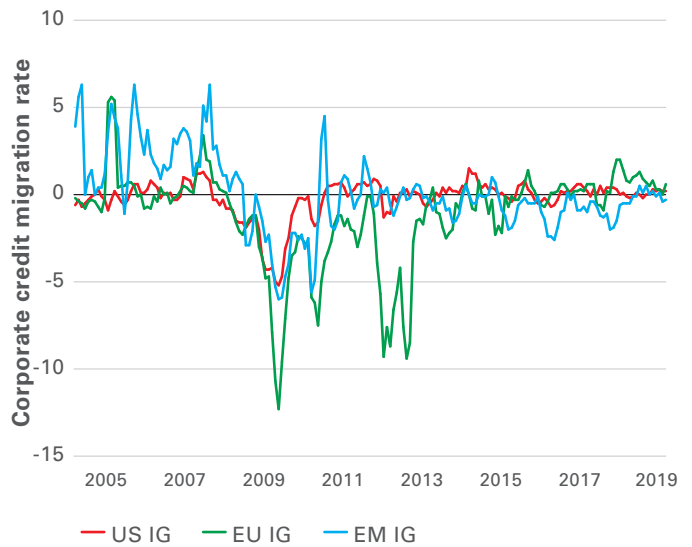
In fact, many EM economies are in a far healthier shape than previous eras and their vulnerability to external shocks has been reduced through market friendly reforms, such as exchange rate flexibility and independent central bank policy. This is encapsulated in the ratings migration trends we have seen in EM versus DM.

**Figure 3. EM IG has seen stable migration rates over the past eight years**



Source: BAML Research, February 2019.

**Figure 4: EM IG ratings have trended upwards over the past decade and are now comparable with US IG**



Source: BAML Research, February 2019.

We believe that the combination of **the benefits of diversification** and **higher spread** that EM IG currently offers versus its DM IG counterpart creates a compelling investment proposition. By allocating into EM IG, investors can gain exposure to an expanded universe including EM sovereigns and quasi-sovereigns (which are strategically important companies which tend to have an element of state ownership).

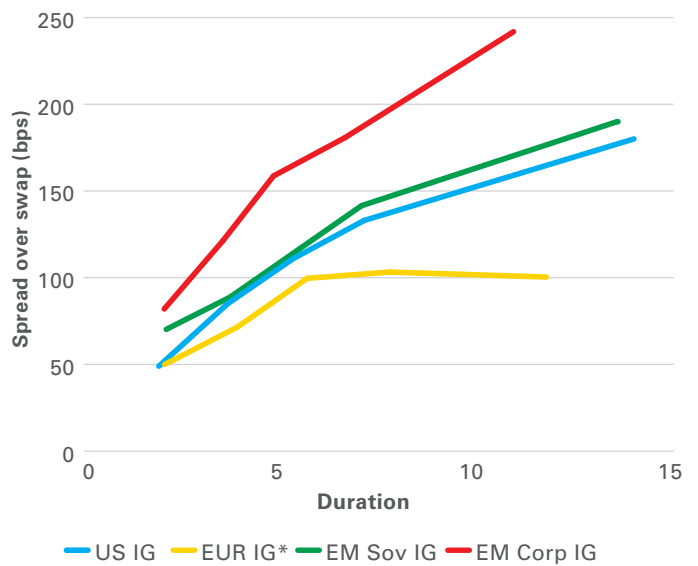
For example, Qatar National Bank (5 year bond, A+ rated) which is substantially owned by the state is trading at ~35bps premium in spread compared to Daimler (5 year bond, A rated). Codelco is one of the world largest copper producing companies and is wholly owned by the Chilean state. Codelco’s bond spread (6 year, A rated) is trading ~50bps over a Rio Tinto bond of similar maturity (6 year, A rated). Given the higher spread, we believe that EM IG fixed income can drive a significant improvement in the risk-adjusted return potential of a cashflow matching portfolio.

**Figure 5: EM IG displays lower correlations with the asset classes typically found in a cashflow matching portfolio**

	EM HC Sov IG	EM HC Corp IG	Global Corp IG	US Corp IG	EUR Corp IG	UK Corp IG	UK Gilt	UST
EM HC Sov IG	1.00							
EM HC Corp IG	0.90	1.00						
Global Corp IG	0.64	0.59	1.00					
US Corp IG	0.67	0.64	0.93	1.00				
EUR Corp IG	0.48	0.44	0.84	0.63	1.00			
UK Corp IG	0.57	0.63	0.77	0.69	0.66	1.00		
UK Gilt	0.31	0.23	0.76	0.68	0.53	0.76	1.00	
UST	0.42	0.32	0.86	0.91	0.54	0.52	0.75	1.00

Source: JP Morgan, Barclays, based on 10-year monthly USD returns, April 2019.

**Figure 6: Material spread pick-up in EM IG over DM IG markets**



Source: JP Morgan, Bank of America Merrill Lynch, April 2019.

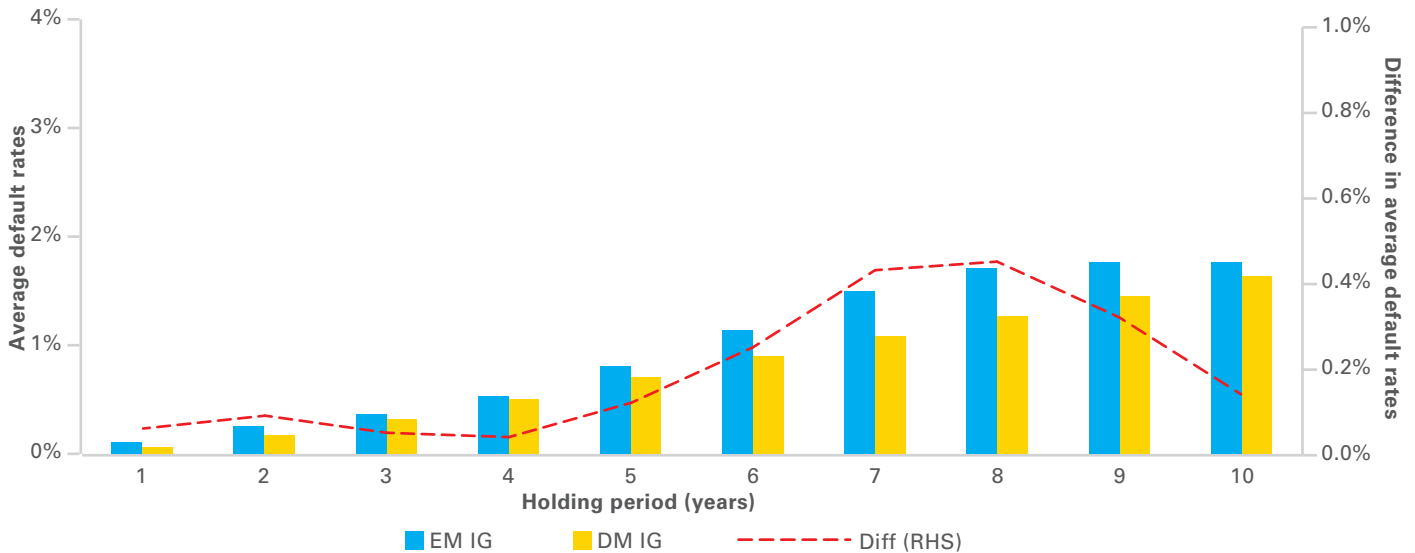
\*EUR IG spread hedged back into USD terms using cross currency basis.

**LIMITED DEFAULT AND DOWNGRADE RISK**

When it comes to building a cashflow matching portfolio, we are primarily worried about rating downgrades and outright defaults. As with the DM IG universe, default rates

within the EM IG universe are typically very low, whilst ratings migration has been improving for the IG sub-set of the asset class (as illustrated in Figure 3 and 4).

**Figure 7: Average default rates for various holding periods are only marginally higher in EM than DM**



Source: Moody's Investors Services, 1995-2018.

**EM IG ALLOCATIONS BRING BENEFITS TO A CASHFLOW MATCHING PORTFOLIO**

Given the nuances of the EM universe, we believe taking a more active approach to the EM allocation of a cashflow matching strategy is beneficial. It allows the fund manager more flexibility to mitigate credit risk (i.e. ratings

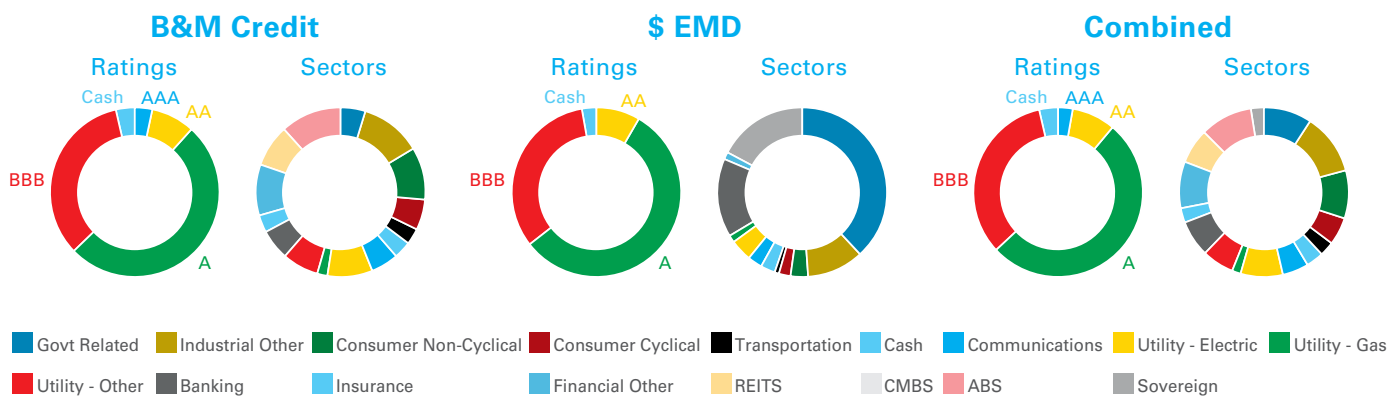
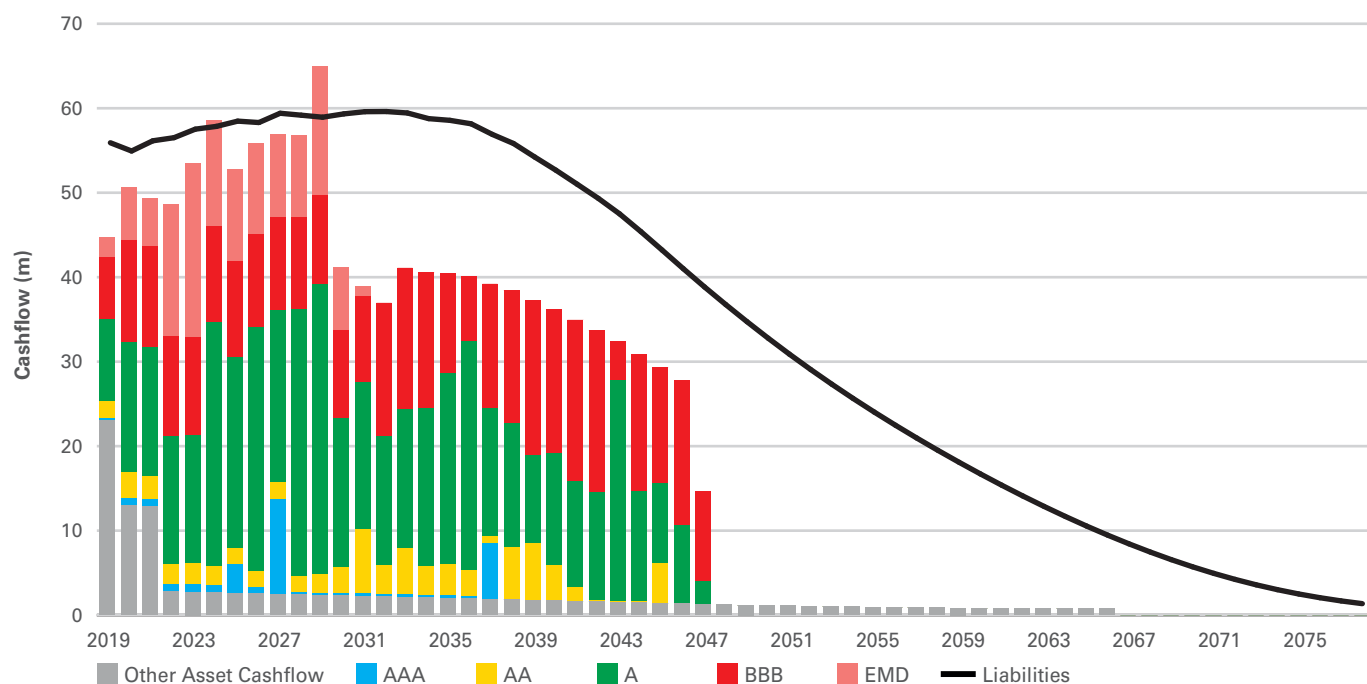
downgrades) whilst delivering better risk-adjusted returns. However, the turnover of an EM sleeve is expected to be significantly lower than a pure active approach.

**TO ILLUSTRATE HOW AN ALLOCATION TO EM IG MAY WORK IN PRACTICE, WE DETAIL A CASE STUDY BELOW.**

It is common for us to meet a client with cashflow shortfalls at the front-end of their matching portfolio. They would like to cover these shortfalls whilst maintaining the portfolio's yield. Short dated EM IG bonds offers a neat solution to this problem given the higher spread on offer for a similar

credit quality. **As such we are able to construct an EM IG HC portfolio with half the duration of the typical DM IG credit portfolio, whilst achieving an extra 50 bps in spread.** This enables the scheme to better cashflow match its liabilities without dampening returns.

**Figure 8: Cashflow matching with EM IG allocation example**



Summary characteristics	DM IG credit portfolio	\$ EM IG portfolio	Aggregate of credit portfolios
Market value (GBP)	£700m	£110m	£810m
Duration	10.7	5.4	10.0
Average rating	A2 / A3	A2 / A3	A2 / A3
Overseas Exposure (USD / EUR)	35%	100%	44%
Gross spread (vs Gilts)	149 bps	205 bps	153 bps <sup>+</sup>
Net spread (vs Gilts)*	124 bps	184 bps	128 bps <sup>+</sup>

Source: LGIM, January 2019.

<sup>+</sup> Portfolio spread is calculated as duration weighted average spread.

\* Net spread figure is after an allowance for long term defaults and collateral drag on hedging overseas positions.

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