# Duke Global Funding Ltd

## Collateralised Loan Obligation

### Ratings

| Series | Rating | Notional (m)[a] | Notional (% assets)[b] | CE (% assets)[c] | Coupon | Final maturity |
|---|---|---|---|---|---|---|
| Class A-1 – GBP (XS2404569746) | $AA+_{SF}$ | 1,156.0 | 64% | 36% | Compounded daily SONIA+1.9% | 16 Dec 2050 |
| Class A-2 – USD (XS2404573003) | $AA+_{SF}$ | 1,419.1 | 64% | 36% | 3M-USD-Libor+1.9% | 16 Dec 2050 |
| Subordinated – GBP | NR | 1,435.9 | 36% | | Portfolio excess | 16 Dec 2050 |
| **Rated notes** | | 2,575.1 | | | | |

Scope's quantitative analysis is based on the portfolio dated 5 October 2021. Scope's Structured Finance Ratings constitute an opinion about relative credit risks and reflect the expected loss associated with the payments contractually promised by an instrument on a particular payment date or by its legal maturity. See Scope's website for the SF Rating Definitions.

[a] Equivalent amounts in GBP.

[b] Class A-1 and class A-2 notes rank pari-passu.

[c] Credit enhancement is defined as the proportion of subordinated notes in all series of notes.

### Transaction details

| | |
|---|---|
| Purpose | Liquidity/Funding |
| Issuer | Duke Global Funding Ltd |
| Originator/ Collateral manager | Barclays Bank PLC (Barclays) |
| Closing date | 9 November 2021 |
| Payment frequency | Quarterly, 16 March, 16 June, 16 September, 16 December |

Duke Global Funding Ltd is a true-sale cash securitisation of a portfolio composed of corporate loans, commercial real estate loans and trade finance obligations denominated in sterling (GBP), US-dollar (USD) and euro (EUR). The loan obligations have been granted by Barclays mainly to corporate borrowers based in the United Kingdom or the United States. Measured in the transaction's base currency, GBP, the three sub-portfolios cross-collateralise two pari-passu senior notes. These two classes of senior notes are denominated in GBP and USD and each represent 68% and 72% of the respective currency's portfolio balance.

### Rating rationale (summary)

The ratings reflect the legal and financial structure of the transaction; the credit quality of the underlying portfolio and its management criteria in the context of the macroeconomic conditions in the United Kingdom and the United States; and the ability and incentives of Barclays as loan originator and collateral manager of the loan portfolios.

Brexit's impact on the UK economy, especially on the financial services sectors, is becoming clearer with the enactment in 2021 of the EU-UK Memorandum of Understanding and Trade and Cooperation Agreement. At the same time, the UK is being challenged by the Covid-19 pandemic. The resilience of the UK's economy, government debt profile and reserve-currency status has been demonstrated amid this dual crisis. Rising public debt and Covid-19 variants still pose risks to the UK's economic recovery. However, as for Barclays, the portfolio originator of the transaction in the UK, its business focus on lending to large corporates and its global business diversification have enabled considerable stability despite the sluggish and uncertain macroeconomy. As for the US, despite its economic recovery and stability being challenged by high and rising government debt, we project its economy to recover robustly and its GDP to exceed pre-

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**Related Methodologies**

General Structured Finance Rating Methodology, December 2020

Methodology for Counterparty Risk in Structured Finance, July 2021

SME ABS Rating Methodology, May 2021

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crisis output in Q2 2021. This is well ahead of the pace of recovery in most European economies, including France and the UK.

The ratings account for the respective credit enhancements of the rated notes and the strictly sequential amortisation of the senior notes from the loan portfolio, whose maximum weighted average maturity date is the earlier of four years since the last purchase date and the payment date in December 2028. The ratings also reflect the default risk and recoveries upon default of the revolving portfolio. Our analysis incorporates the transaction's mitigants against adverse portfolio migration during the reinvestment period, scheduled to end in March 2024, as well as overcollateralisation tests for the rated notes. In addition, the ratings account for the transaction's partial risk exposure to fluctuations in i) the two reference rates (compounded daily SONIA and three-month USD-Libor); and ii) the three currency pairs involved – the US dollar and pound sterling, the euro and pound sterling, and the US dollar and euro.

The ratings address exposures to the key transaction counterparties: i) Barclays as collateral manager, vendor, vendor trustee, initial purchaser and retention holder; ii) Elavon Financial Services DAC, UK Branch (Elavon) as account bank, principal paying agent, transfer agent and registrar; iii) U.S. Bank Global Corporate Trust Limited as calculation agent, information agent and collateral administrator; and iv) U.S. Bank Trustees Limited as trustee. Counterparty risks are mitigated by: i) the credit quality of Barclays and Elavon (a division of US Bancorp); and ii) the replacement mechanism attached to the roles of account bank and principal paying agent upon loss of a BBB rating. We have a rating on Barclays and analysed the credit quality of Elavon based on public ratings available.

## Rating drivers and mitigants

### Positive rating drivers

**Credit enhancement.** The class A-1 and class A-2 notes benefit from the 36% of credit enhancement provided by subordination and cross-collateralisation upon shortfalls.

**Overcollateralisation (OC) test.** The OC test helps to maintain the proper collateralisation of the senior notes with performing collateral. Upon a breach of the test, interest and principal proceeds from the portfolios will be captured to repay the senior notes.

**Experienced corporate lender.** The loans are part of the core origination activity of Barclays, whose record in domestic and international corporate lending spans more than a century, with a focus on lending to large corporates.

### Negative rating drivers and mitigants

**Market risk exposure.** The transaction is exposed to fluctuations in foreign exchange rates and interest rates, which are partially mitigated by the natural hedge provided by the senior notes.

**Low recovery rates.** The portfolio will generally comprise senior unsecured exposures, which results in low expected recoveries upon default.

**High concentration in specific industries.** About 36.4% of the portfolio is concentrated in four industries as per the Moody's industrial classifications: Real Estate, Banking, Finance and Insurance. This may further rise during the life of the transaction as the corresponding portfolio profile limit is set at 50%. This leaves the transaction vulnerable to a downturn in these specific industries.

**Portfolio management criteria.** The collateral quality test based on the weighted average rating factor allows a possible deterioration of the portfolio's current credit profile to a default risk commensurate with B-. This is mitigated by the reinvestment criteria, which ensure that the credit quality of replenished assets is at least maintained.

### Upside rating-change drivers

**Increased credit enhancement** from deleveraging accompanied by good portfolio performance may result in a further stabilisation of the ratings or even an upgrade.

### Downside rating-change drivers

**A worse-than-expected default and recovery performance** of the assets may result in downgrades of the rated notes.

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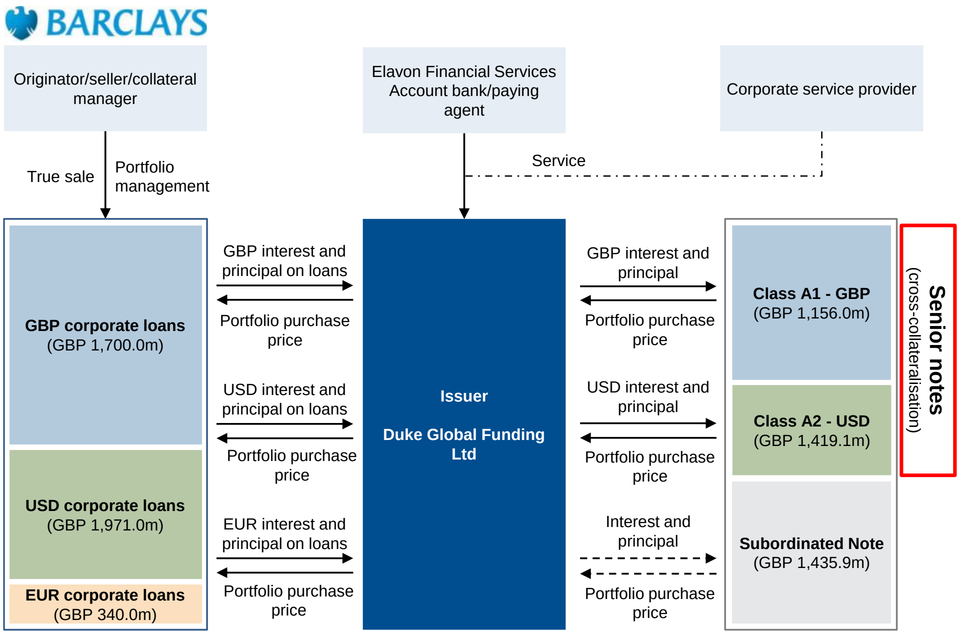
## 1. Transaction summary

**Figure 1: Simplified transaction structure**




Source: Transaction documents and Scope.

### 1.1. Key transaction features

- Three sub-portfolios denominated in GBP, USD and EUR collateralise class A-1 and class A-2 notes denominated in GBP and USD, respectively;
- Cross-collateralisation of senior notes from the three sub-portfolios with excess spread and excess principal;
- Rules-based reinvestment of prepayments scheduled to end in March 2024 (around 2.4 years from the closing date);
- OC tests at 135% for the class A-1 notes and 130% for the class A-2 notes ensure preferential treatment of senior notes.

## 2. Originator and seller

Barclays aims to be a 'focused international bank'. It has four core businesses: Personal and Business Banking, Barclaycard, Corporate Bank and Investment Bank. The group concentrates on i) businesses with strong returns; ii) areas where it already has robust capabilities such as credit, equities, rates and foreign exchange, primarily in its two large home markets, the US and the UK.

### 2.1. Business positioning

We believe that this transaction is consistent with Barclays' strategy of: i) managing its balance sheet and costs; ii) improving return on capital; iii) increasing lending where returns justify it; and iv) investing in key franchises, such as Barclaycard, to improve earnings.

We believe Barclays' interests are aligned with those of the noteholders. In a scenario in which the transaction does not perform satisfactorily, Barclays' future access to external sources of funding could be jeopardised.

## 2.2. Sanctioning and underwriting

### 2.2.1. Loan origination

Regarding the loans for this securitisation, 44.3% are originated out of Barclays' corporate banking unit –including to UK and international customers– and 55.7% out of its investment banking unit. The corporate banking unit is focused on lending to larger SMEs and big corporates. The investment banking unit is continuously seeking investment grade lending opportunities (BBB range clients account for approximately 52% of client opportunities and 45% of the assets allocated between 2012 and Q3 2019), as a result of its largely unchanged risk appetite and strategy.

**Proper involvement of business and risk in sanctioning process**

We consider the workflows in place for sanctioning and executing the corporate channel's credit applications to be effective and to limit risk in accordance with the bank's risk appetite. Barclays ensures compliance with tis risk appetite by always involving the risk department at the beginning of the sanctioning process and in the final execution stages, to ensure compliance with the bank's risk appetite. The processes do not differ significantly from standard processes at comparable banks, and they involve the proper segmentation of sanctioning authority as well as the separation of business and risk-review powers.

Business approval may require authorisation from a special lending-commitment committee, constructed of senior management, if total facilities granted to the obligor exceed GBP 50m. Origination may autonomously approve (from a business perspective only) smaller facilities of less than GBP 25m, where specific return and margin expectations are met. If outside those parameters, approval is subject to the agreement of the pricing team.

Credit approval involves a three-stage process: transactions are pre-screened, then analysed in detail, and finally approved when due-diligence output and agreed loan terms are finalised.

### 2.2.2. Risk models

Barclays employs standard market risk assessment tools which incorporate external ratings and obligor-specific information (financial and non-financial):

- Through-the-cycle (TTC) Default Grade (DG) is the bank's credit scoring system scaled from 1 to 23, in sequential order of minimum probability of default to non-performing entities.
- TTC PD is the through-the-cycle probability of default over the next year.
  - Default probabilities are calculated using:
    - KMV Credit Edge
    - Rating Agencies
    - RiskCalc
    - UK SME2 (internally developed for obligors with less than GBP 20m of turnover)

From a regulatory point of view, Barclays' risk models conform to the Advanced Internal Rating Based Approach.

## 2.3. Servicing and recovery

**High standard of proactive servicing and recovery processes**

We consider Barclays' loan servicing and management of non-performing loans to meet the highest European banking standards. Its approach is proactive and diligent, driven by the aim of maintaining a close relationship with the obligor.

Barclays' servicing and recovery strategy is consistent with its business model, which focuses on maintaining a close relationship with its core clients in order to recognise and tackle any potential adverse developments at an early stage.

We believe that Barclays' recovery strategy suits the sophisticated relationship between the bank and its corporate obligors. The recovery function is performed by a unit called Special Asset Management. The approach is cooperative, with the aim of identifying solutions that would help a stressed or distressed obligor become performing again. The core elements are restructuring and cooperation throughout the work-out process. Barclays would only seek a managed exit solution or a liquidation strategy if a cure is not possible.

During the monitoring process, Barclays maintains an early-warning list identifying potential problem loans. Additionally, Barclays' TTC DG of exposures on the early-warning list may be adjusted downwards for a more conservative analytical approach.

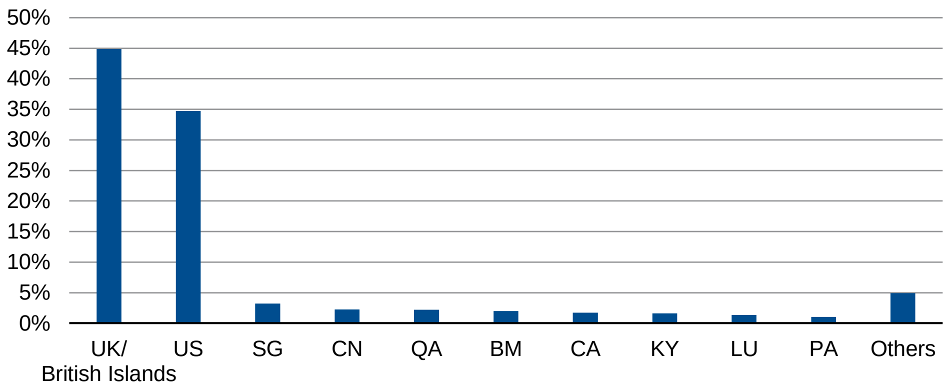
## 3. Asset analysis

The underlying portfolio will comprise three sub-portfolios – denominated in GBP, USD and EUR, respectively -of mainly senior unsecured bullet loans from Barclays' balance sheet. The sub-portfolios may alter during the 2.4-year revolving period. We expect the general risk profile to either remain the same or deteriorate to the portfolio profile limits due to the portfolio management criteria.

### 3.1. Closing portfolio

The closing portfolio comprises 519 loans from 254 obligors. 420 loans are representative of Barclays' senior unsecured corporate loan book, 27 are senior secured commercial real estate loans (CRE loans) and 72 are trade finance obligations. 44.9% of the portfolio is composed of obligors incorporated in the UK/British Islands and 34.8% in the US. The remainder consists of exposures to obligors in Asian, North America and continental Europe.

**Figure 2: Regional distribution of the initial portfolio**

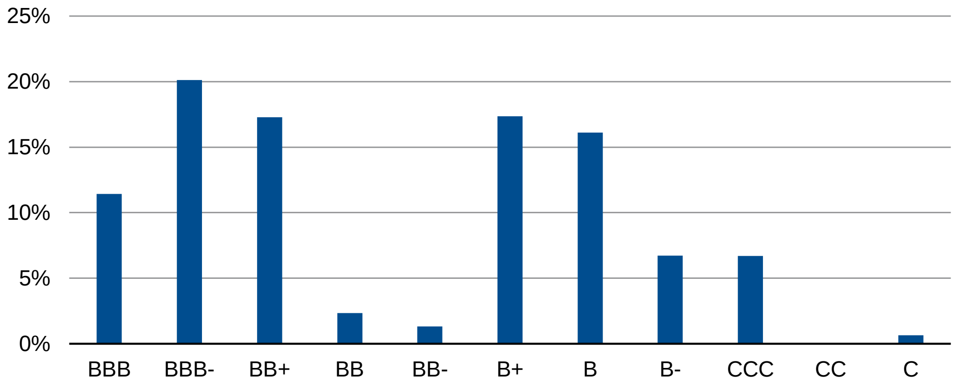



**Closing portfolio mostly non-investment grade**

The current portfolio has an average default risk commensurate with a B+ rating[1], based on a mapping of Barclays' default grades for the portfolio loans to our ratings.

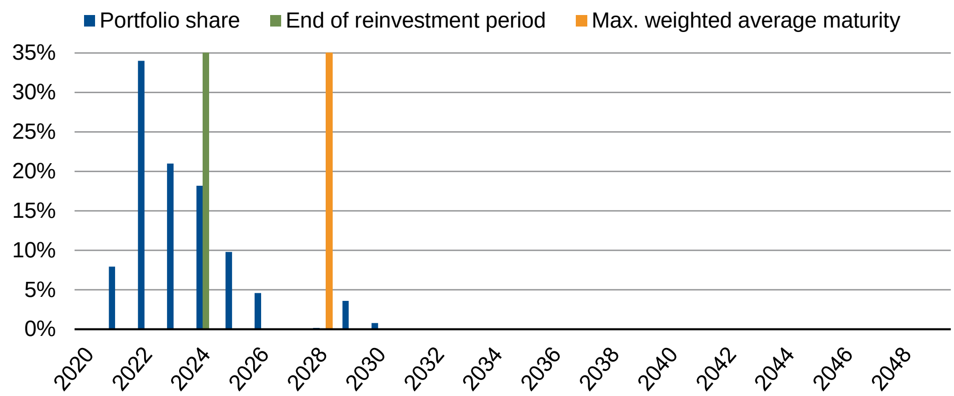
[1] The default risk of B+ rating is considered on a basis where Scope extended the weighted average maturity of the portfolio to 7.2 years.

**Figure 3: Portfolio credit quality as per our assessment (probability of default)**




Around 80% of the current portfolio consists of bullet loans and more than 95% of the loans are expected to mature before 2027, with the portfolio weighted average maturity in October 2023. The portfolio maturity profile will further change due to portfolio management criteria, especially during the reinvestment period, subject to the maximum weighted average maturity limit.

**Figure 4: Portfolio maturity profiles**




## 3.2. Reinvestments and portfolio management criteria

**Rules-based reinvestment criteria help to maintain portfolio credit profile**

The portfolio management criteria help to manage the portfolio credit quality and diversification and may result in an increase in the weighted average life of the portfolio. The reinvestment of a repaid loan is subject to tight eligibility criteria. Loans shall be reinvested in the following rules-based selection priority to ensure the credit quality is at least maintained:

1. Other loans from the same loan facility,
2. Other loans from the same obligor,
3. Loans from the same obligor group, or
4. The best rated eligible loan on Barclays balance sheet.

The reinvested loan has to be in the same currency as the repaid loan.

If there is more than one loan eligible at any level, the newest loan will be selected.

The management of the portfolio is also subject to profile tests and collateral quality tests. If above their respective limit, these metrics need to be maintained or improved each time Barclays modifies the composition of the portfolio. The portfolio profile and collateral quality tests allow a potential adverse migration from the closing portfolio, especially in relation to credit quality and industry concentration.

**Figure 5: Selected collateral quality tests and portfolio profile tests**

| Reinvestment criteria | Current portfolio | Limit |
|---|---|---|
| Max. Moody's weighted average portfolio rating factor | 2,493 | Max. 3,490 |
| Max. weighted average maturity | October 2023 | Max. December 2028[2] |
| Min. weighted average portfolio spread | 2.1% | Min. 1.95% |
| Max. concentration of single obligor with Moody's rating | 3.0% | Max. 3.0% |
| Max. concentration of single obligor with Moody's rating | 2.5% | Max. 2.5% |
| Max. industry concentration in "Real Estate", "Banking", "Finance" and/or "Insurance" according to Moody's industrial classifications | 36.4% | Max. 50.0% |
| Max. industry concentration in other industries | 8.2% | Max. 15% |
| Max. semi-annually paying exposures in each GBP, USD | 9.9% in GBP<br>7.4% in USD | Max. 15% in each GBP, USD |
| Max. annually paying exposures in each GBP, USD | 0.5% in GBP<br>2.2% in USD | Max. 2.5% in each GBP, USD |
| Max. senior secured commercial real estate (CRE) exposures | 10.0% | Max. 10.0% |
| Max. trade finance obligations | 7.4% | Max. 10.0% |
| Max. education loans | 0.7% | Max. 15.0% |
| Max. project finance loans | 0.6% | Max. 15.0% |
| Max. fixed rate exposures | 0.9% | Max. 10.0% |

OC tests are also in place to ensure proper collateralisation of each senior note with the principal denominated in the respective currency. This maintains the natural hedge. Class A-1 (GBP) and class A-2 (USD) notes must be covered by at least 135% and 130% of principal in its own currency.

The reinvestment of collections would stop if Barclays ceased to be the collateral manager in this transaction.

Funds available for reinvestment can be invested in liquid investments of a credit quality commensurate with at least BBB and a maturity up to the next quarterly payment date.

## 3.3. Portfolio analysis

We analysed the reference portfolio on a loan-by-loan basis using a Monte Carlo simulation. For each loan, we assumed: i) a specific default probability; ii) a specific recovery upon default; and iii) asset correlation between the loans.

### 3.3.1. Default rate analysis of portfolio

The resulting default distribution for the reference portfolio exhibits a mean default rate of 30.1% and an implicit coefficient of variation of 26.6% over a weighted average portfolio life of 7.2 years. The default rate distribution accounts for the diversification effects among the three sub-portfolios. The analysis incorporates the reinvestment period, portfolio profile and collateral quality tests, which result in a reference portfolio exhibiting a longer weighted average life, worse credit quality and higher industry concentration than the portfolio at closing date.

We inferred the loans' default probability from the mapping of Barclays' through-the-cycle default grades to Scope's ratings. For obligors of senior unsecured corporate loans

[2] The maximum weighted average maturity is the earlier of four years since the last purchase date and the payment date in December 2028, therefore December 2028 is the hard limit.

whose default risk was derived using Barclays' rating models specific to UK SMEs, we applied a stress to the mapping commensurate with a two-notch downgrade of the Barclays' score.

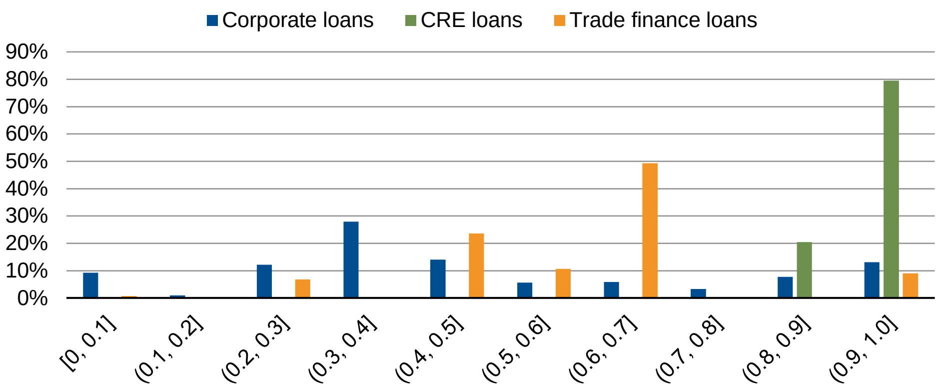
#### 3.3.2. Recovery rate

We assumed a base case portfolio recovery rate of 59.8%, and an AA-rating-conditional portfolio recovery rate of 41.1%, which reflects a haircut of 31.3%.

The recovery rate for each loan reflects the recovery rate implied by the loss-given-default (LGD) rate that Barclays assigns to each exposure. For the corporate loans segment, we adjusted each loan's recovery rate to ensure the portfolio's weighted average recovery rate matches the recovery performance recorded by Barclays for similar types of loans after the 2008 financial crisis. For the commercial real estate loans, we assumed a base-case weighted average recovery rate of 96.7%, given the low weighted average loan-to-value ratio (LTV) of 44.7%. For the trade finance loans, we applied the same approach to adjust the base-case recovery rate as for the corporate loans segment. This conservative approach is justified by the lack of realised LGD information for that particular segment, as no default has occurred since 2007.

An additional 10% recovery rate haircut was applied to exposures from the five largest obligors. We also assumed that recovery proceeds are fully realised 12 months after defaulting.

**Figure 6: Base case portfolio recovery rate distribution**




#### 3.3.3. Asset correlation

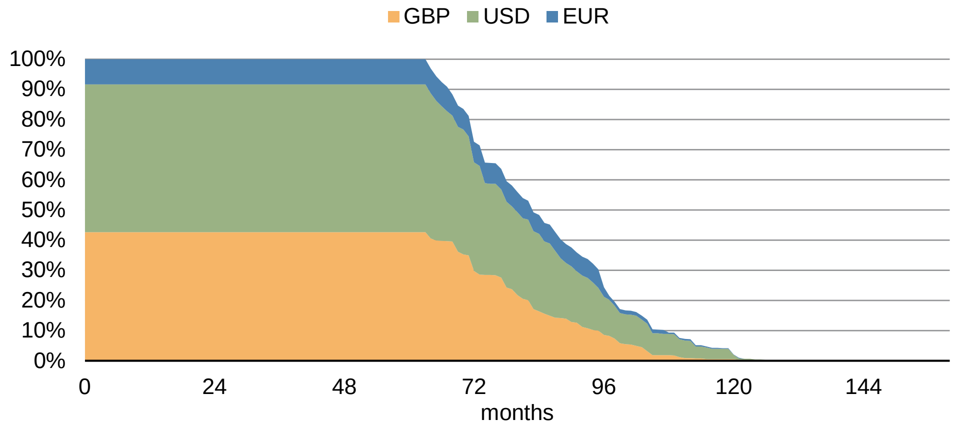
For this transaction, we assumed pairwise asset correlations ranging from 2% to 47%, composed of additive factors including a general factor of 2%, a location factor of 5% and an industry factor of 20%. The asset correlation reflects the loans' exposure to common factors such as the general economic environment, the jurisdiction and the respective industry sector. We considered an additional top-obligor factor of 20% for exposures from five largest obligors.

#### 3.3.4. Amortisation

**Portfolio modelled with a 7.2y weighted average life**

We assumed an amortisation profile that reflects the mainly bullet nature of the assets, the granularity of the portfolio, the reinvestment period, and the portfolio management criteria, including reinvestment criteria. The resulting amortisation profile has a 7.2-year weighted average life.

**Figure 7: Expected portfolio amortisation profile (0% prepayment, 0% defaults)**




### 3.3.5. Foreign exchange and interest rate fluctuations

The natural hedge and the individual strength of the senior notes protect the transaction against fluctuations in foreign exchange rates and interest rates. The senior notes show only marginal sensitivity to fluctuations in the foreign exchange rate of the currencies involved and to fluctuations in the reference interest rates.

We assumed significant deviations in the foreign exchange and interest rates from current levels. For foreign exchange risk, we tested the resilience of the transaction against adverse exchange rate movements based on historical observations since 1970; for interest rate risk, we tested the resilience of the transaction against adverse interest-rate developments based a set of deterministic, adverse interest-rate scenarios which identify the scenario that most severely impacts expected loss. The cash flow analysis incorporates fluctuations in the range of 0.31 to 1.10 for GBP/USD and 0.40 to 1.19 for GBP/EUR, and in the range of -1% to +20% for interest rates (see Appendix II and Appendix III).

# 4. Financial structure

## 4.1. Capital structure

The issuer's capital structure comprises two classes of pari-passu senior notes, class A-1 and class A-2, along with strictly subordinated notes. The proceeds from the issuance are used to purchase the initial portfolio of assets.

The senior notes pay a quarterly coupon of compounded daily SONIA plus a 1.9% margin for the class A-1 notes and three-month USD-Libor plus 1.9% for the class A-2 notes. After the end of the replenishment period any excess of interest funds after satisfying the OC test is used to repay the principal on class A-1 and class A-2 notes before the subordinated noteholders are paid.

## 4.2. Priority of payments

**Combined priority of payments provides the main protection against payment interruption**

The structure features a combined priority of payments that provides material protection against payment interruption. Principal collections from the assets can be used to pay timely interest on the senior notes.

Most of the items shown in Figure 8 must be paid on a pro-rata basis in the respective portfolio's currency (CCY), except for taxes and retained profits, which are immaterial for this transaction. A senior expense cap of GBP 100,000 applies to all expenses senior to the senior notes' interest, except for the senior expense reserve replenishment (item D in Figure 8). Should funds in a particular currency be insufficient to pay its share in the expenses or the respective senior notes' interest, funds from the other portfolios will be redenominated to service the amount due. Any shortfalls will be distributed equally among the two senior notes.

**Figure 8: Interest available funds and simplified priority of payments**

| Interest available funds |
|---|
| Interest collected from the portfolio in CCY |
| Interest collected on the respective accounts in CCY |
| Interest collected on eligible investments |

| Interest priority of payments | |
|---|---|
| **A(i)** Taxes (GBP) | |
| **A(ii)** Retained profit (GBP) | |
| **B** Trustee fees & expenses (CCY) | |
| **C** Administrative expenses (CCY) | |
| **D** Discretionary payment into expense reserve account - up to GBP 50,000 (GBP) | |
| **E** Senior management fee (CCY, set as 0 if Barclays is collateral manager) | |
| **F** GBP class A-1 note interest | **F** USD class A-2 note interest |
| **G** Principal repayment to cure OC tests, if required | |
| **H** (After reinvestment period) class A principal repayment until full redemption | |
| **I** Subordinated management fee (CCY) | |
| **J** Unpaid trustee fee & expenses (CCY) | |
| **K** Unpaid admin expenses (CCY) | |
| **L** Subordinated note interest (GBP) | |

**Figure 9: Principal available funds and simplified priority of payments**

| Principal available funds |
|---|
| Principal collected from the portfolio in CCY |
| Principal recovery proceeds collected in CCY |
| Other funds identified as principal |

| Principal priority of payments | |
|---|---|
| **A** Unpaid items from interest priority of payments (items A(i) to F) | |
| **OC test cure in GBP** (remainder of interest item G in GBP) | **OC test cure in USD** (remainder of interest item G in USD) |
| **B** GBP senior note reinvestment/senior note principal | **B** USD senior note reinvestment/senior note principal |
| **C** Further unpaid interest items, subject to full payment of all senior notes | |
| **D** Remainder to subordinated note | |

## 4.3. Amortisation and provisioning

We believe that the combination of sequential amortisation, OC tests, cross-collateralisation and excess spread are effective at protecting the senior notes.

**Senior notes benefit from sequential amortisation**

The amortisation of the senior notes is strictly senior to the subordinated notes. The amount allocated to replenishments per currency portfolio equals the principal collections available after all senior costs and senior notes' interest have been paid. This includes the per-currency curing of the OC test.

Following the end of the replenishment period, these amounts will be allocated to the senior note redemption on a quarterly basis unless they qualify as prepayments. In that case they will be reinvested, subject to the reinvestment criteria.

### 4.4. Portfolio interest rates and margin compression

**Interest type and payment frequency accommodate liabilities well**

Unhedged interest rate risk has limited materiality for the senior notes given the current (0.9%) and envisaged share of fixed-rate assets in the portfolio. Most of the portfolio loans reference an index rate that is highly correlated to the reference rate applicable to corresponding senior notes in the same currency. The portfolio mainly comprises loans that pay as frequently or more frequently than the notes, i.e. 89.9% of the portfolio loans pay monthly or quarterly interest. Additionally, the eligibility criteria limit the maximum amount of loans denominated in GBP and USD that pay less frequently than quarterly to 17.5%. An interest-smoothing account helps to manage timing mismatches and potential shortfalls will be covered by the various enhancement mechanisms.

We considered the minimum weighted average portfolio margin of 1.95% as the portfolio spread in our analysis. On the one hand, the transaction might become subject to margin compression, as the single-asset reinvestment criteria, a minimum margin of 0%, allows an erosion of the portfolio margin. On the other hand, a significant decrease is unlikely given the mainly non-investment grade nature of the borrowers in the pool. In an additional sensitivity run, we tested a 50bps margin compression and the results indicated a negligible impact.

## 5. Quantitative analysis

**Senior notes benefit from strong credit enhancement**

Our quantitative analysis reflects the transaction's strong credit enhancement mechanisms. We derived the portfolio default rate distribution and the recovery rates from a loan-by-loan Monte Carlo simulation of the entire portfolio and derived the default timings for each respective currency's sub-portfolio.

**Bespoke cash flow analysis**

We used a cash flow tool, combined with the portfolio default distribution to calculate the probability-weighted loss for the senior notes. The cash flow tool also produces the expected weighted average life for the senior notes. Our cash flow analysis considers the mechanisms of this transaction, in particular the OC tests and the cross-collateralisation.

Our base case takes into consideration the default timing derived from the Monte Carlo simulation. We tested front-loaded and mid-loaded default timing scenarios, which demonstrated only a very limited impact given the available credit enhancement.

Figure 10 shows the cumulative default-timing assumption for the portfolio in the base case.

**Figure 10: Default-timing assumption**

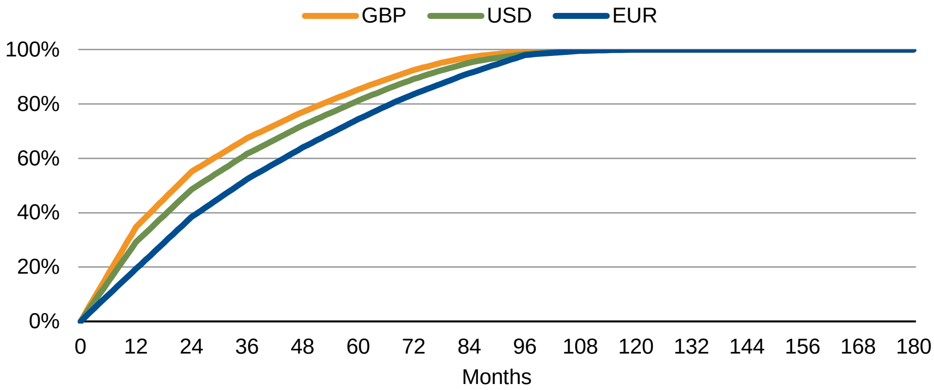
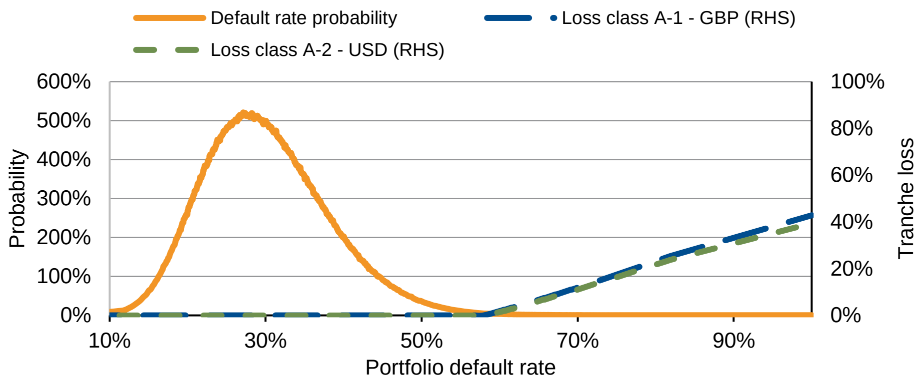



Figure 11 shows the losses of the senior notes at all portfolio default rates under our base case assumptions. The chart shows how subordination and other credit enhancement mechanisms protect the rated notes.

**Figure 11: Cash flow analysis results under AA-conditional recovery rates**




Note: The probabilities displayed on the left-hand axis should be considered in the context of the calculation of the probability density.

The AA+SF ratings assigned to the senior notes constitute a forward-looking opinion on relative credit risks. The ratings reflect the expected loss associated with payments contractually promised by an instrument on a payment date or by its legal maturity. We calculate an instrument's expected loss over an expected risk horizon, with the result benchmarked against the idealised expected loss table provided in our General Structured Finance Rating Methodology.

## 6. Rating stability

### 6.1. Rating sensitivity

We tested the resilience of the ratings against deviations from the main input parameters: the portfolio mean-default rate and the portfolio recovery rate. This analysis has the sole purpose of illustrating the sensitivity of the ratings to input assumptions and is not indicative of expected or likely scenarios.

The following shows how the ratings for the senior notes would change if the portfolio's expected default rate is increased by 50% and the portfolio's expected recovery rate is reduced by 50%, respectively:

- Class A-1: sensitivity to probability of default, two notches; sensitivity to recovery rates, three notches.

- Class A-2: sensitivity to probability of default, two notches; sensitivity to recovery rates, three notches.

### 6.2. Break-even analysis

**No losses for senior notes at portfolio default rates of 38.2%/38.4% or lower with zero recovery**

The resilience of the ratings is shown through the break-even default rate analysis. The senior notes would not experience any loss at portfolio lifetime default rates of: i) 38.2%/38.4% or lower for class A-1/class A-2, respectively, under a zero recovery rate assumption; or ii) 58.0%%/58.4% or lower for class A-1/class A-2, respectively, under a rating-conditional recovery rate assumption of 41.1%.

## 7. Sovereign risk

### 7.1. The United Kingdom

**Sovereign risk does not limit the transaction's ratings**

Sovereign risk does not limit the ratings on this transaction. Our AA/Stable rating on the UK and the US, respectively, takes the risks of an institutional framework and legal insecurity into account.

We consider that the entering into force of the Trade and Cooperation Agreement with the EU in May 2021 has mostly eliminated 'cliff-edge' Brexit risk and the associated significant economic, fiscal external-sector and institutional repercussions for the UK's credit ratings. Besides this, the additional Memorandum of Understanding agreed by EU and UK in March 2021 presents an important step for more substantive access rights granted to the UK financial industry in the medium run.

The UK's economy has exhibited resilience amid the dual crisis of Brexit and the Covid-19 pandemic. Though UK economic output contracted sharply in 2020 by 9.8%, we expect a strong but uneven economic rebound, supported by large-scale fiscal and monetary stimulus. We expect output to grow 6.6% in 2021 driven by increased consumption and to a return to pre-pandemic levels by 2022. In the medium term, we expect the growth potential of the UK economy to remain at around 1.5%, comparable to those of other AA rated sovereign peers such as the United States (1.9%) and France (1.4%).

The UK labour market has also been resilient over the Covid-19 crisis. We project the UK unemployment rate to average 4.6% in 2021 before reaching 4.0% in 2022, as compared with 4.6% in 2020 and 3.9% in 2019.

Budget support measures with regards to the recession in 2020 led to a fiscal deficit of 13.4% of GDP in 2020. We foresee the deficit to remain elevated in 2021 at 11.4%. As a result, we project government debt as a percentage of GDP to increase to around 106% in 2021, which is a sharp increase from the 85% level shortly before the pandemic. We expect budget deficits to remain high, which would contribute to the rise in public debt ratios over the medium term to 112% of GDP by 2026, bringing an enduring significant challenge to the UK's credit ratings outlook.

### 7.2. The United States

The US government has strengthened its response to the Covid-19 crisis as well as to the crisis' economic consequences, with President Joseph Biden's proposal of a three-pillar recovery package including the American Rescue Plan, the American Jobs Plan and the American Families Plan. By enhancing the economy's productive capacity, supporting domestic demand and tackling infrastructure deficits as well as structural weaknesses with respect to the social safety net, we consider the programme supports a more inclusive and sustainable economic rebound and raises economic growth potential.

Government debt has reached a high and rising level given ongoing significant spending programmes and economic support policies amid early economic recovery. The US Senate approved legislation on Thursday to temporarily raise the federal government's

$28.4 trillion debt limit and avoid the risk of a historic default this month but put off until early December a decision on a longer-lasting remedy.[3] We expect the US government to raise or suspend the debt ceiling under a party-line vote in the end, thereby avoiding a sovereign credit default. Nevertheless, the last-minute nature of any legislation sidestepping temporary default would remind investors of the significant, recurring risk to the willingness and capacity of the US to meet its debt obligations due to the debt ceiling.

In June 2021, we projected the US economy to recover robustly, with 6.2% growth in 2021 before 4.8% in 2022. After the 3.5% economic contraction of 2020, GDP is expected to have exceeded pre-crisis output as of Q2 2021, well ahead of the pace of recoveries in most European economies, including France and the United Kingdom. On the basis of the public investment programme, we consider there to be upside risk to its prevailing US growth potential estimate of 1.9% – with potential output growth having otherwise seen secular decline since the turn of the century.

## 8. Counterparty risk

**Counterparty risk does not limit the transaction's ratings**

In our view, none of the counterparty exposures constrain the ratings achievable by this transaction. We considered counterparty substitution provisions in the transaction and, when available, our ratings or other public ratings on the counterparties. We also considered eligible investment criteria.

The transaction is mainly exposed to counterparty risk from the following counterparties: i) Barclays Bank PLC as collateral manager, vendor, vendor trustee, initial purchaser and retention holder, ii) Elavon Financial Services DAC, UK Branch (Elavon) as account bank, principal paying agent, transfer agent and registrar; iii) U.S. Bank Global Corporate Trust Limited as calculation agent, information agent and collateral administrator; and iv) U.S. Bank Trustees Limited as trustee.

### 8.1. Operational and commingling risk from collateral manager

**Collateral manager replacement unlikely**

Operational risk from the collateral manager role is well mitigated in this transaction by the high credit quality and general resolvability of Barclays as one of the 30 banks that the Financial Stability Board considers to be a "Globally Systemically Important Bank". Nevertheless, our analysis accounts for a potential collateral manager replacement by considering a stressed senior management fee after the reinvestment period.

Commingling risk from the collateral manager is immaterial from the rated notes, because of Barclays' high credit quality and the usually intra-day transfer of funds to the issuer account bank. This risk is further mitigated through a replacement of the bank as collateral account holder upon a loss of BBB by Scope.

### 8.2. Commingling risk from account bank and paying agent

**Commingling risk is sufficiently remote as to not to represent material risk for the senior notes**

Given the high credit quality of US Bancorp, the parent company of Elavon Financial Services DAC, we consider the risk of commingling losses as sufficiently remote to be immaterial for the rated notes. We assessed the credit quality of Elavon using public information as well as the public ratings on US Bancorp. Commingling risk is further mitigated by a replacement trigger for Elavon as account bank based on its public rating.

## 9. Legal structure

### 9.1. Legal framework

This securitisation is governed by English law and represents the true sale of the assets to a bankruptcy-remote vehicle without legal personality, represented by Vistra (UK) Limited, the corporate service provider. The special purpose vehicle is essentially governed by the terms in the documentation.

[3] https://www.reuters.com/world/us/us-senate-democrats-republicans-haggle-over-short-term-debt-fix-2021-10-07/

### 9.2. Asset replacement

Barclays is obliged to replace or repurchase any assets in the portfolio that do not comply with transaction eligibility criteria as of each purchase date.

### 9.3. Use of legal and tax opinions

**Tax efficient set-up; bankruptcy remote special purpose vehicle**

We had access to the English legal opinion produced for several transaction parties, including the issuer. This provides comfort on the issuer's legal structure and the legally valid, binding and enforceable nature of the contracts.

The section related to tax matters indicates that the transaction is structured to be tax-efficient, i.e. no meaningful taxes apply to the issuer, except for VAT in the context of contracted services, which remain a cost for the issuer.

## 10. Monitoring

We will monitor this transaction based on the performance reports from the collateral administrator as well as other available information. The ratings will be monitored on an ongoing basis.

**Scope analysts are available to discuss all the details surrounding the rating analysis**

Scope analysts are available to discuss all the details of the rating analysis, the risks to which this transaction is exposed, and the ongoing monitoring of the transaction.

## 11. Applied methodology and data adequacy

For the analysis of this transaction we applied our General Structured Finance Rating Methodology, SME ABS Rating Methodology and Methodology for Counterparty Risk in Structured Finance. All documents are available on our website www.scoperatings.com.

## I. Summary of portfolio characteristics

The analysis considered replenishment covenants and the portfolio from 5 October 2021. The table shows all amounts in GBP equivalent amounts.

| Key Features | Portfolio as of 5 October 2021 | Portfolio adjustments for replenishments |
|---|---|---|
| **Originator (% of balance)** | Barclays Bank PLC (100%) | |
| **Closing date** | 9 November 2021 | |
| **Portfolio balance (GBP m)** | 4,011 | |
| **Number of assets** | 519 | |
| **Average asset size (GBP m)** | 7.7 | |
| **Maximum asset size (GBP m)** | 150.0 | |
| **Weighted average remaining term** | 2.0 years | **7.2 years** |
| **Largest obligor** | 3.0% | |
| **Top three obligors** | 9.0% | |
| **Largest country** | 44.9% (United Kingdom[4]) | |
| **Largest industry sector** | 19.7% (Construction & materials) | |
| **Current weighted average margin** | 2.06% | **1.95%** |
| **Amortising loans** | 21.0% | |

[4] UK includes Jersey, Guernsey, Isle of Man and British Virgin Islands.

## II. Foreign exchange rate stress cases

The charts below show the stresses applied to the USD/GBP and the EUR/GBP exchange rates.

**Figure 12: Stresses applied to USD/GBP exchange rate**

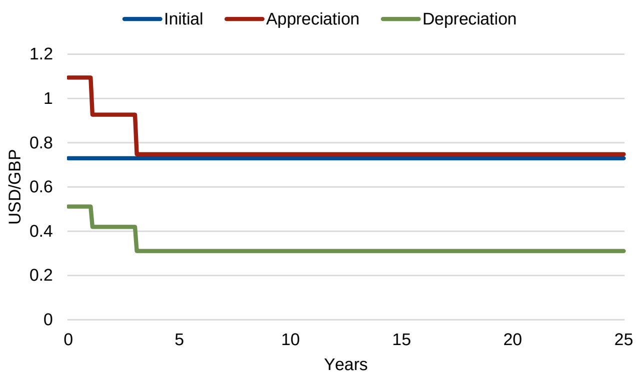
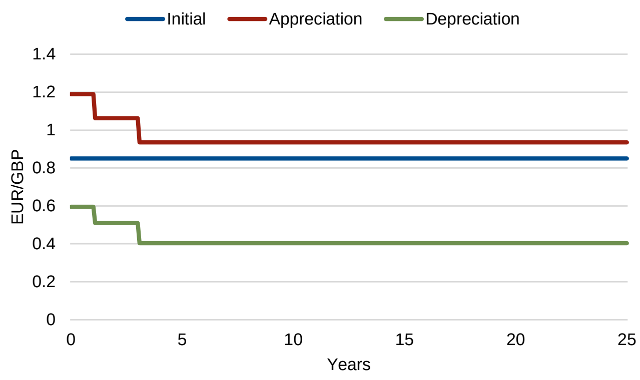


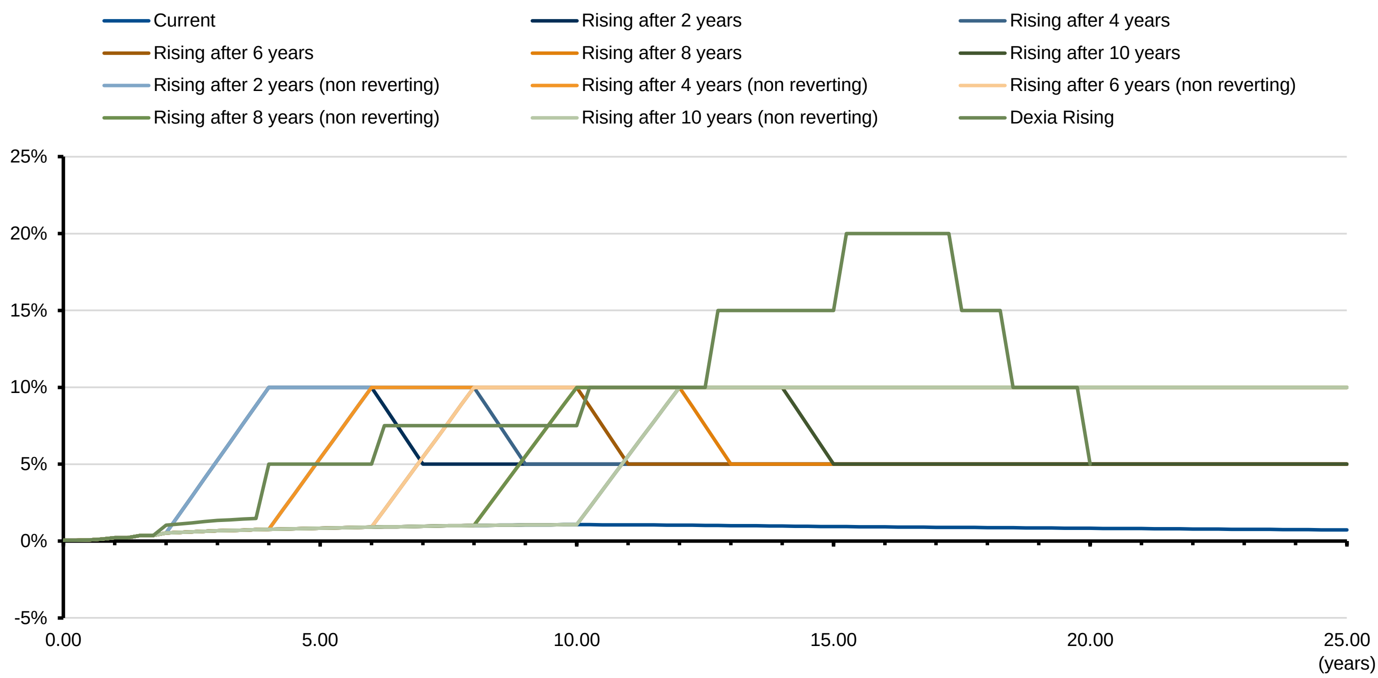

**Figure 13: Stresses applied to EUR/GBP exchange rate**

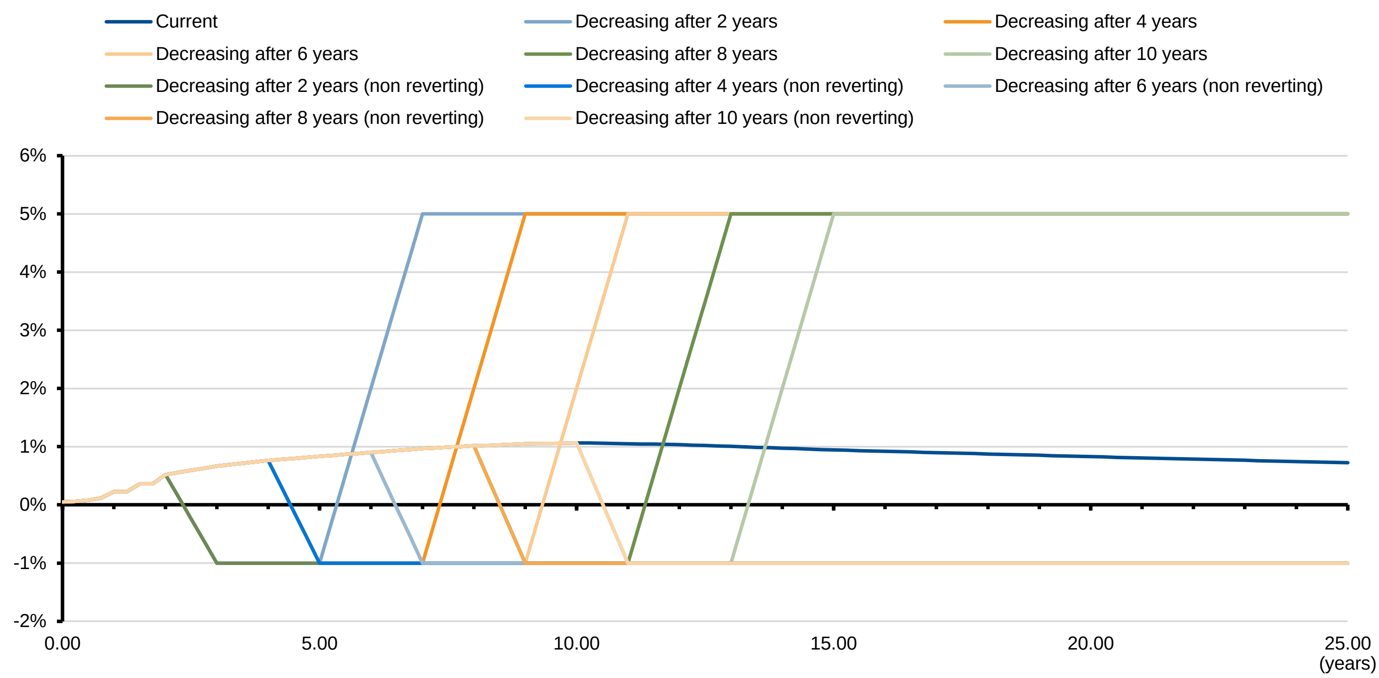


## III. Interest rate stress cases

The charts below show the stressed scenario applied to compounded daily SONIA for illustration purposes. Similar levels of stress apply to three-months USD-Libor (not displayed).

**Figure 14: Stresses scenario applied to compounded daily SONIA (rising and decreasing interest rate forward curves)**



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