

# Sirius Funding plc

## Collateralised loan obligation


 Scope  
Ratings

### Ratings

| Notes (ISIN)                | Rating            | Notional (m) <sup>a</sup> | Notional (% assets) <sup>b</sup> | CE (% assets) | Coupon            | Final maturity |
|-----------------------------|-------------------|---------------------------|----------------------------------|---------------|-------------------|----------------|
| Class A1-EUR (XS1846706585) | AAA <sub>SF</sub> | 1,125.0                   | 75%                              | 25%           | 3m-EURIBOR+1.4%   | 14 Jul 2039    |
| Class A2-USD (XS1846709175) | AAA <sub>SF</sub> | 1,125.0                   | 75%                              | 25%           | 3m-USD-LIBOR+1.4% | 14 Jul 2039    |
| Class A3-GBP (XS1846709258) | AAA <sub>SF</sub> | 1,125.0                   | 75%                              | 25%           | 3m-GBP-LIBOR+1.4% | 14 Jul 2039    |
| Subordinated                | NR                | 1,125.0                   | 25%                              |               | Portfolio excess  | 14 Jul 2039    |
| <b>Rated notes</b>          |                   | <b>3,375.0</b>            |                                  |               |                   |                |

Scope's quantitative analysis is based on the portfolio dated 2 May 2018, subsequent updates and the replenishment criteria in the prospectus provided by the originator. 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 its [SF Rating Definitions](#).

<sup>a</sup> Amounts present the equivalent amount in GBP, the calculation currency of the transaction.

<sup>b</sup> Class A1, Class A2 and Class A3 rank pari-passu.

### Transaction details

|                                   |   |
|-----------------------------------|---|
| Purpose                           | Liquidity/funding                           |
| Issuer                            | Sirius Funding plc (Sirius Funding)         |
| Originator/<br>Collateral manager | Barclays Bank plc (A+/Stable Outlook/S1+)   |
| Closing date                      | 28 June 2018                                |
| Payment frequency                 | Quarterly, 14 January, April, July, October |

Sirius Funding plc is a true-sale cash securitisation of a portfolio comprised of corporate loans denominated in Sterling (GBP), US-Dollar (USD) and Euro (EUR). The loans have been granted by Barclays Bank plc (Barclays) to its United Kingdom and European corporate borrowers. Measured in the transaction's base currency, GBP, the portfolios are of equal size and cross-collateralise three pari-passu senior notes. These three classes of senior notes are denominated in EUR, GBP and USD and each represent 75% 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 continental Europe; the ability and incentives of Barclays as loan originator and collateral manager of the loan portfolios.

Scope believes that a post-Brexit slowdown of the UK economy is well mitigated by Barclays focus of lending to large corporates, whose businesses do not necessarily only depend on the UK markets. Moreover, the uncertainties spurred by Brexit may adversely impact the short-term economic environment, but over a mid-to-long-term, the UK will achieve an access to the European markets similar to the Pre-Brexit conditions. Regulatory requirements that force a relocation to continental Europe mainly impact the banking sector, which is excluded by the eligibility criteria. The exposure to continental Europe is well diversified.

The ratings account for the respective credit enhancement of the rated notes and the strictly sequential amortisation of the senior notes from a loan portfolio whose maximum weighted average life must remain below five years from closing. The ratings also reflect the default risk, recovery upon defaults and dependency structure of the three revolving sub-portfolios, which are denominated in EUR, GBP and USD and jointly collateralise the three senior notes. Our analysis incorporates the transaction's mitigants against adverse portfolio migration during the two-year reinvestment period. In addition, the ratings account for the transaction's

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#### Related research

General Structured Finance  
Rating Methodology,  
August 2017

SME ABS Rating Methodology,  
June 2017

Methodology for Counterparty  
Risk in Structured Finance,  
August 2017

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Bloomberg: SCOP



## Sirius Funding plc

### Collateralised loan obligation

partial risk exposure to fluctuations in i) the three reference rates, 3-months EURIBOR, USD-LIBOR and GBP-LIBOR, and ii) the three currency pairs involved, i.e. USD/GBP, EUR/GBP and USD/EUR.

The ratings also reflect the counterparty risk exposure to Barclays as collections account bank and Elavon as issuer account bank. This risk is mitigated by: i) the high credit quality of Barclays and Elavon (a division of US Bancorp); and ii) the replacement mechanism attached to each role upon loss of a BBB rating. Scope has a public rating on Barclays (A+/ Stable Outlook/S1+) and has analysed the credit quality of Elavon based on publicly available information for US Bancorp.

### Rating drivers and mitigants

#### Positive rating drivers

**Credit enhancement.** The three tranches benefit from 25% subordination individually and cross-collateralisation upon shortfalls and note pay-offs. In addition, there is approx. 0.48% of excess spread available during the revolving period, subject to portfolio losses.

**Portfolio management criteria.** The portfolio management criteria essentially result in a maintenance of the portfolio's current credit profile, i.e. a senior unsecured loan portfolio with an average default risk commensurate with a BB+ rating, a maximum weighted average life of five years and limited concentrations.

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

**Experienced corporate lender.** The loans are part of the core origination activity of Barclays, which has a significant track record in domestic and international corporate lending dating back to 1920, 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.

**UK macroeconomic uncertainty.** Brexit may lead to an adverse economic development in the UK, impacting the general credit performance of corporates in the UK over the medium term. Barclays' lending focus on large corporates partially mitigates this effect, as this type of corporate is generally internationally diversified. In addition, Scope does not expect a long-term impact on the UK economy from Brexit, as the negotiations aim to achieve largely unchanged access to trade with the European Union.

#### Upside rating-change drivers

**Increased credit enhancement** from deleveraging accompanied by good performance may result in a further stabilisation of the ratings at the current level.

**A stable maintenance of the portfolio margin** beyond the revolving period may also lead to a stabilisation.

#### Downside rating-change drivers

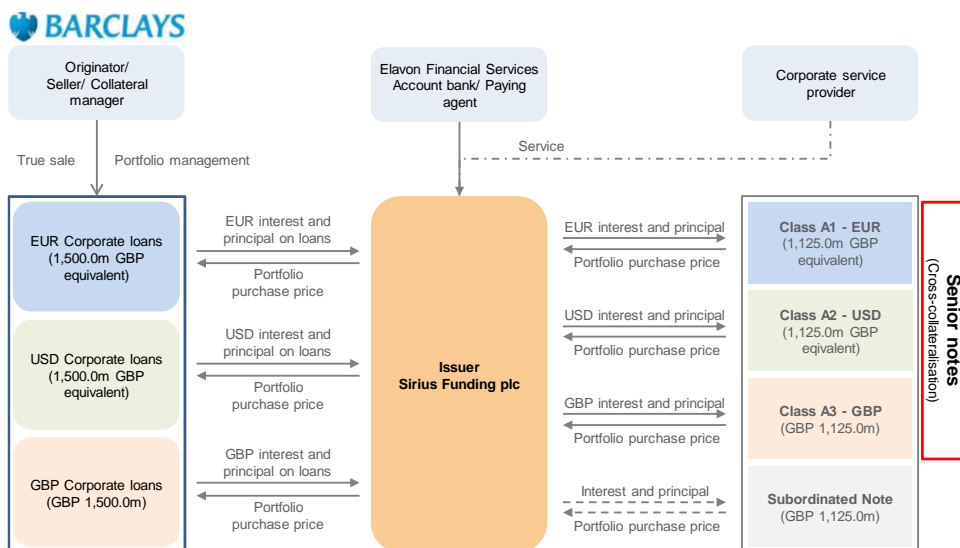
**Worse-than-expected default and recovery performance** of the assets may result in downgrades of the rated notes.

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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 collateralise senior notes in their respective currencies;
- Cross-collateralisation of senior notes from the three sub-portfolios with excess spread and excess principal;
- Two-year rules-based revolving period;
- Continuous rules-based reinvestment of prepayments;
- Tight management criteria; and
- OC tests at 118% ensure preferential treatment of senior notes.

## 2. The loan environment in the UK

Scope believes that a post-Brexit slowdown of the UK economy is well mitigated by Barclays' lending focus on large corporates with an international footprint, which is particularly the case for this portfolio. Large corporates generally have businesses that do not necessarily only depend on their domestic UK markets; the impact of Brexit is therefore muted through business diversification. Moreover, the uncertainties sparked by Brexit may adversely affect the short-term economic environment, but over the mid to long term, the UK will achieve access to the European markets similar to pre-Brexit conditions.

Regulatory business restrictions that force a relocation to continental Europe mainly impact the banking sector, which is excluded by the eligibility criteria.

Obligors from other European jurisdictions may also be affected, should their business models significantly rely on the UK market.

## 3. Asset analysis

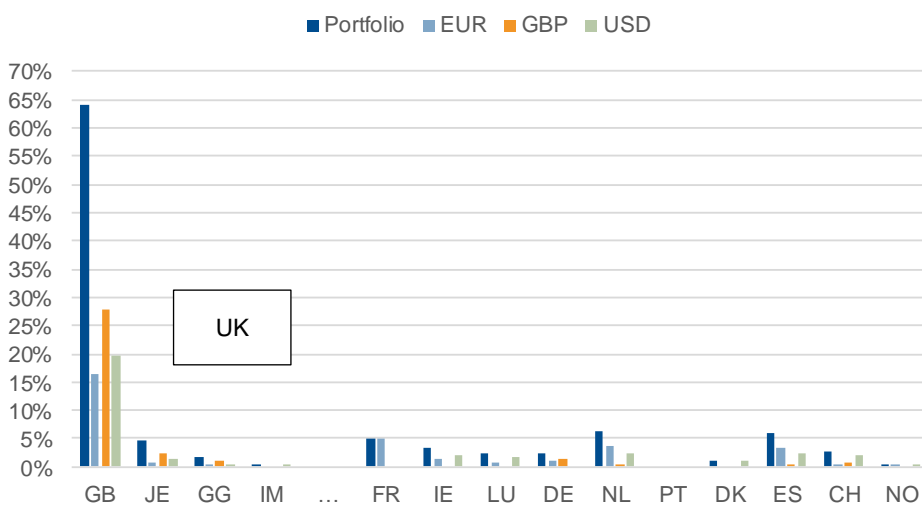
The underlying portfolio will comprise three equally sized, measured in GBP, sub-portfolios of mainly senior unsecured bullet loans from Barclays' balance sheet. The two-year revolving period may alter the sub-portfolios; however, the general risk profile is expected to remain the same, due to the portfolio management criteria.

Lending to large diversified corporates mitigates potential adverse Brexit effects

### 3.1. Closing portfolio

The closing portfolio comprised 706 loans from 325 obligors and is representative of Barclays' corporate loan book. Currently, 70.5% (measured in GBP) of the portfolio is composed of obligors incorporated in the UK. The remainder consists of exposures to obligors across continental Europe. Barclays' consistent lending strategy, the bank's lending focus and the portfolio management criteria will help to maintain the current credit profile.

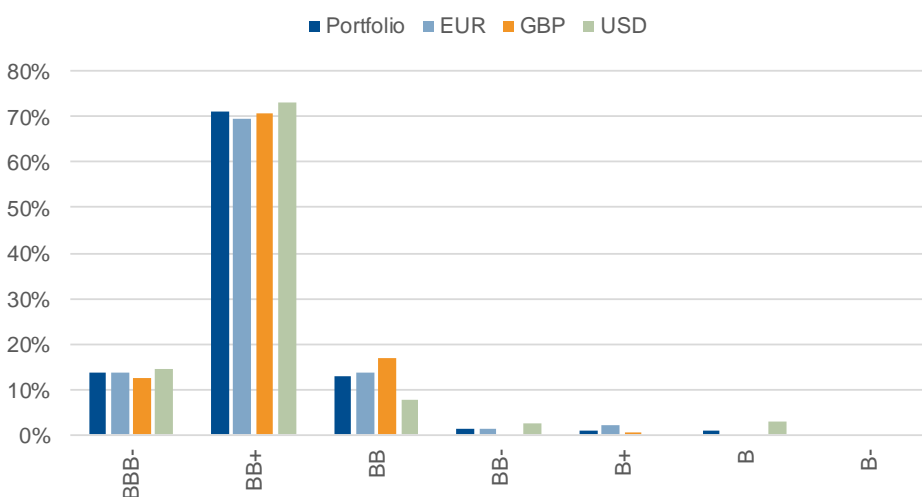
**Figure 2: Regional distribution of the initial portfolio and sub-portfolios**



Closing portfolio displays high non-investment grade credit quality

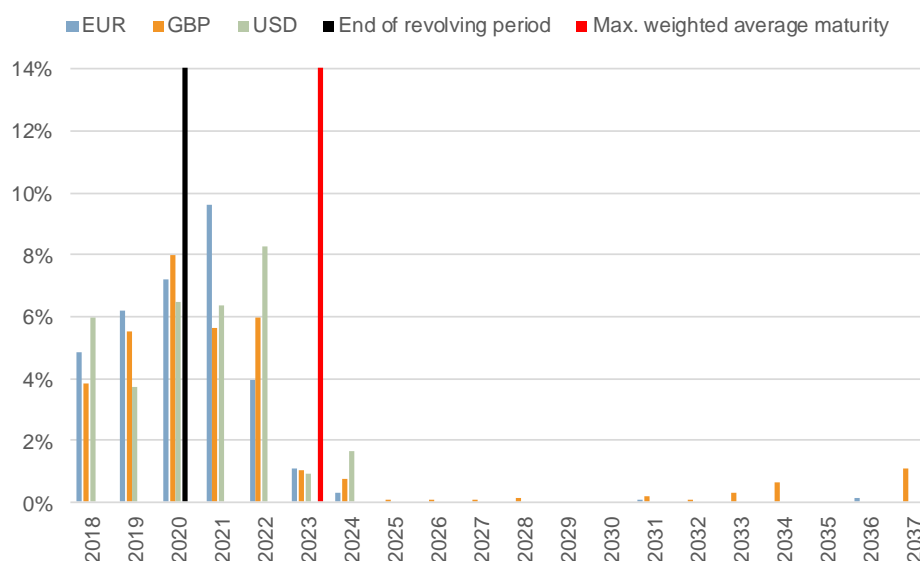
The current portfolio has an average default risk commensurate with a BB+ rating, based on a mapping of the default grades assigned by Barclays to the portfolio loans to Scope's ratings.

**Figure 3: Portfolio and sub-portfolio credit quality as assessed by Scope (PD)**



Contractual amortisation during the reinvestment period amounts to approx. 47.0%. The extension of the life of the transaction is also limited, because of the long average maturity of those assets that do not mature during the revolving period (July 2022) and the maximum weighted average maturity of July 2023.

**Figure 4: Portfolio and sub-portfolio maturity profiles**



### 3.2. Reinvestments

Scope assumed a reinvestment of contractual amortisation and recovered amounts during the reinvestment period. For reinvestments, we assumed a five-year term and the same credit quality as the repaid exposure.

The reinvestment criteria help to maintain the portfolio credit quality and may result in a slight increase in the weighted average life of the portfolio. The reinvestment of a repaid loan is subject to tight eligibility criteria, applying the following rules-based selection priority:

- i) the reinvested loan has to be in the same currency as the repaid loan;
- ii) other loans from the same loan facility,
- iii) other loans from the same obligor,
- iv) loans from the same obligor group, or
- v) the best rated eligible loan on Barclays balance sheet.

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

The management of the portfolio is subject to criteria which allow only limited adverse deviation from the closing portfolio:

**Figure 5: Selected reinvestment criteria**

| Reinvestment criteria                                 | Current portfolio         | Limit  |
|---|---------------------------|--|
| Max. Moody's weighted average portfolio rating factor | 1,076                     | Max. 1,350                                   |
| Max. weighted average maturity                        | June 2021                 | Max. June 2023                               |
| Min. weighted average portfolio spread                | 1.5%                      | Min. 1.5%<br>(0.25% on a single asset basis) |
| Max. single obligor concentration                     | 2.5%                      | Max. 2.5%                                    |
| Max. top three obligor concentration                  | 6.5%                      | Max. 7.5%                                    |
| Max. industry concentration                           | 15.0% (Banking & Finance) | Max. 25%                                     |

Initial portfolio will change due to reinvestments

Senior notes' exposure to counterparty risk and macroeconomic deterioration is limited, due to short life

There are also OC tests in place which ensure proper collateralisation of each senior note with principal denominated in the respective currency in order to maintain the natural hedge. Each of the senior notes has to be covered by at least 118% of principal in its own currency.

The maintenance of the current portfolio profile is further enhanced, as the reinvestment of collections would stop if Barclays were to cease 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. Post-reinvestment portfolio

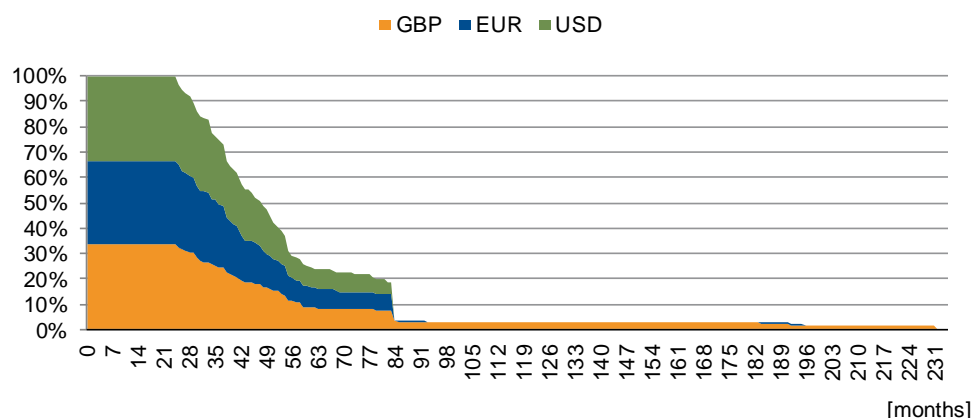
The closing portfolio will change due to monthly replenishments during the two-year revolving period and through the reinvestment of prepayments. This will increase the weighted average maturity of the portfolio by 2.0 years, while preserving constant credit quality.

The currency specific OC tests ensure that each senior note is always covered with sufficient portfolio principal in the respective currency, which maintains the natural hedge of the transaction.

### 3.4. Amortisation profile

The amortisation profile reflects the mainly bullet nature of the assets (80.3% of the initial portfolio), but also the high granularity of the portfolio. Scope assumes that this will continue throughout the reinvestment period due to the reinvestment criteria. The loans denominated in EUR and USD have a shorter risk horizon than the GBP loans, which reflects the natural footprint of Barclays in the UK (see Figure 1 Figure 2).

**Figure 6: Expected portfolio amortisation profile (0% prepayment, 0% defaults)**



### 3.5. Portfolio analysis

For each loan, Scope has assumed: i) a specific default probability; ii) a specific recovery upon default; and iii) asset correlations between the loans.

#### 3.5.1. Default rate analysis on portfolio

Scope has analysed the reference portfolio on a loan-by-loan basis using a Monte Carlo simulation. The portfolio default rate distribution applicable to the joint portfolio has a mean default rate of 6.6% and an implicit coefficient of variation of 63.5% over a weighted average portfolio life of 5.5 years. The default distribution takes the diversification effects between the three sub-portfolios into account. The analysis also incorporated the reinvestment period, because of the absence of performance related termination triggers.

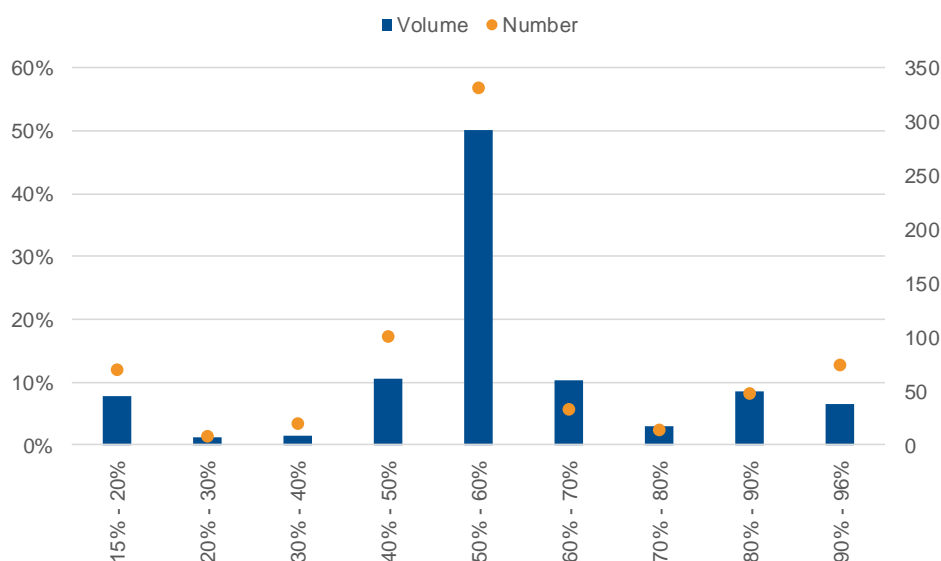
Scope inferred the loans' default probability from the mapping of Barclays' default grades to Scope's ratings. The mapping was based on rating migration data covering a period from 2008 to 2016.

### 3.5.2. Recovery rate

Scope has assumed a base case portfolio recovery rate of 57.8%, derived from Barclays' recovery performance following the financial crisis in 2008 for similar types of loans. The AAA-rating-conditional portfolio recovery rate is 34.8% – a 40% haircut to the base case, representing the fluctuation of the recovery rate found in Barclays' historical performance data. An additional 10% recovery rate haircut is applied to exposures representing either 5% of the portfolio exposure or which contribute more than 1% to the portfolio's expected loss. Recovery proceeds will flow over a two-year period after a default and spread equally on a per-quarter basis.

The recovery rate for each loan reflects the recovery rate implied by the loss-given-default (LGD) rate that Barclays assigns to each exposure. Scope has applied an adjustment factor of 95% to each exposure's recovery rate implied by the assigned LGD, to reflect Barclays' average recovery performance since 2008 of 57.8% under the base case.

**Figure 7: Base case portfolio recovery rate distribution**



### 3.5.3. Asset correlation

For this transaction, Scope has 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. Scope considered a top-obligor additional factor of 20% for obligors representing more than 5% of the portfolio or contributing more than 1% expected loss to the portfolio.

### 3.5.4. Constant prepayment rate

Scope considered a prepayment rate of zero, due to the full reinvestment of all prepayments over the life of the transaction. This may lead to a marginal extension of the life of the transaction. However, the impact is very limited, as the reinvestment of prepayments also has to comply with all reinvestment criteria. The maximum weighted average maturity will prevent any reinvestments beyond June 2023.

Full reinvestment of prepayments with limited impact on the portfolio risk profile

### 3.5.5. 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 rates of the currencies involved and to fluctuations in the reference interest rates.

Scope assumed foreign exchange (FX) and interest rate fluctuations reflecting significant deviations from current levels based on historical observations dating back to 1953 for the FX rates and 1980 for interest rates. The cash-flow analysis incorporates fluctuations in the range of 0.48 to 0.85 for GBP/USD and 0.66 to 1.06 for GBP/EUR, and in the range of -1% to +20% for interest rates (see page 17, Foreign exchange rate stress cases, and page 18 Interest rate stress cases).

## 4. Financial structure

### 4.1. Capital structure

Three classes of pari-passu senior notes, Class A1, Class A2 and Class A3, were issued along with a strictly subordinated note. The proceeds from the issuance were used to purchase the initial portfolio of assets.

The senior notes pay a quarterly coupon of 3-months EURIBOR + 1.4% for the Class A1 notes, 3-months USD-LIBOR + 1.4% for the Class A2 notes and 3-months GBP-LIBOR + 1.4% for the Class A3 notes. Unused excess spread is paid to the Subordinated Note holders.

### 4.2. Priority of payments

The structure features a combined priority of payments which provides material protection against payment interruption. Principal collections from the assets can be used to pay timely interest on the senior notes. The combined priority of payments also allows credit enhancement to cover losses from negative carry or interest rate mismatches (Figure 8 and Figure 9).

Most of the items in Figure 8 have to 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 there be insufficient funds for a particular currency 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. Shortfalls, if any, will be distributed equally among the three senior notes.

**Figure 8: Interest available funds and 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           |

Combined priority of payments provides the main protection against payment interruption



| Interest priority of payments                                       |                              |                              |
|---|------------------------------|------------------------------|
| A(i) Taxes (GBP)  |                              |                              |
| A(ii) Retained profit (GBP)   |                              |                              |
| B Trustee fees & expenses (CCY)                                     |                              |                              |
| C Admin expenses (CCY)  |                              |                              |
| D Expense reserve – up to GBP 100,000 (GBP)<br>[Cap does not apply] |                              |                              |
| E Senior management fee (CCY)                                       |                              |                              |
| F EUR Class A1 note interest  | F USD Class A2 note interest | F GBP Class A3 note interest |
| G Principal repayment to cure OC tests, if required                 |                              |                              |
| H Subordinated management fee (CCY)                                 |                              |                              |
| I Unpaid trustee fee & expenses (CCY)                               |                              |                              |
| J Unpaid admin expenses (CCY)                                       |                              |                              |
| K Subordinated note interest (GBP)                                  |                              |                              |

**Figure 9: Principal available funds and 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)          |   |   |
| <b>EUR OC test cure in EUR</b><br>(remainder of interest item G in EUR)      | <b>USD OC test cure in USD</b><br>(remainder of interest item G in USD) | <b>GBP OC test cure in GBP</b><br>(remainder of interest item G in GBP) |
| <b>B EUR senior note reinvestment/senior note principal</b>                  | <b>B GBP senior note reinvestment/senior note principal</b>             | <b>B USD senior note reinvestment/senior note principal</b>             |
| C Further unpaid interest items, subject to full payment of all senior notes |   |   |
| D Remainder to subordinated note   |   |   |

#### 4.3. Amortisation and provisioning

Scope believes that the combination of sequential amortisation, OC tests, cross-collateralisation and excess spread effectively protect the senior notes.

The amortisation of the senior notes is strictly senior to the subordinated notes. The amount allocated to replenishments per currency portfolio equals the monthly 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

Unhedged interest rate risk has limited materiality for the senior notes. Most of the portfolio loans reference an interbank rate that is highly correlated to the reference rate applicable to corresponding senior notes in the same currency. The portfolio mainly comprises loans

Senior notes benefit from sequential amortisation

Interest type and payment frequency accommodate liabilities well

that pay as frequently or more frequently than the notes, i.e. 86.7% of the portfolio loans pay monthly or quarterly interest. Additionally, the eligibility criteria limit the maximum amount of loans paying less frequently than quarterly to 17.5%. An interest-smoothing account helps to manage timing mismatches and potential shortfalls will be covered by credit enhancement.

Scope considered the minimum weighted average portfolio margin of 1.5% for its analysis. The transaction could become subject to margin compression, as the single-asset reinvestment criteria, a minimum margin of 0.25%, allows an erosion of the portfolio margin, following the revolving period. To account for potential margin compression, Scope also applied a 0.5% margin stress following the end of the reinvestment period to the three sub-portfolios, respectively.

#### 4.5. Accounts

The issuer has interest and principal accounts for each currency.

The accounts not only represent commingling risk exposure to Elavon as the account bank (see Counterparty risk on page 14). Potential negative carry is covered by available excess spread and credit enhancement.

### 5. Originator and seller

Barclays aims to be a “focused international bank” and has three core businesses: Personal and Business Banking, Barclaycard, and Investment Bank. The group is concentrating on businesses capable of generating strong returns, as well as on 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 UK.

#### 5.1. 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. This transaction demonstrates the meaningful progress which has been made in strengthening the bank’s liquidity position, bringing it more in line with its peer group of large universal banks. This peer group includes HSBC, BNP Paribas, Societe Generale, Deutsche Bank, Santander, UBS and Credit Suisse.

Barclays’ corporate lending is based on a risk-return approach that focuses on lending to the dominant or large players in a particular sector. The bank is continuously seeking investment grade lending opportunities (78% of lending volume between 2012 and Q2 2017), as a result of its largely unchanged risk appetite and strategy.

Barclays’ interests are well aligned with those of the noteholders. Adverse performance or mismanagement may jeopardise the appropriateness of the senior notes as central bank eligible liquidity instruments.

#### 5.2. Sanctioning and underwriting

##### 5.2.1. Loan origination

Loans for this securitisation are generally originated out of Barclays’ corporate banking unit, which includes UK domestic lending, but also the international lending business. The corporate bank is focused on lending to larger SMEs and big corporates.

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 risk appetite of the bank. Barclays always involves the risk department at the beginning of the sanctioning process as well as during the final execution stages, to ensure compliance with the bank’s risk appetite. The processes do not differ significantly from standard processes at

Account represents commingling exposure to Elavon, the account bank

Proper involvement of business and risk in sanctioning process

comparable banks, and they involve the proper segmentation of sanctioning authority as well as the separation of business and risk-review power.

Business approval may require authorisation from a special lending-commitment committee 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, 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.

### 5.2.2. 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
    - RiskCalc
    - FAB Scorecard (internally developed for obligors with <GBP 20m revenue)
    - SME Grading (internally developed for non-FAB compliant obligors)
    - Rating agencies

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

Currently, the bank is running a project to consolidate the 30 PD models used in the bank into 4 PD models that serve the needs of the four different main corporate lending sectors.

### 5.3. Servicing and recovery

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

Its servicing and recovery strategy is consistent with the bank's business model, which focuses on maintaining a close relationship with its core clients in order to recognise and tackle any potential adverse development at an early stage. Barclays monitors obligors closely with the aim of initiating remedial action in the event of any adverse developments significantly ahead of any actual performance failures.

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 which 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. Scope has had access to Barclays' confidential data which showed high cure and full recovery rates.

During the monitoring process, Barclays maintains an early-warning list identifying potential problem loans. The eligibility criteria for this transaction explicitly exclude loans in early-

warning levels two to four, while exposures that are level one would have to display a credit quality that is above the minimum eligible credit quality.

Figure 10 shows the relationship between recovery actions and the different levels on the early-warning list.

**Figure 10: Actions associated with early-warning list levels**

|                                     | Level 1<br>(Low)                 | Level 2<br>(Medium)  | Level 3<br>(High)                            | Bad & doubtful<br>(Defaulted)        |
|-------------------------------------|----------------------------------|--|--|--------------------------------------|
| <b>Definition</b>                   | Caution                          | Doubt – close control required   | Concern – actively minimise risk             | Default – actively minimise risk     |
| <b>Description</b>                  | Prudent temporary classification | Viability is questioned, but performance over next 12 months not compromised | Failure could occur if position deteriorates | Non-performing, insolvent or default |
| <b>Risk of obligor failure</b>      | Low                              | Medium or high (6- to 12-month horizon)                                      | High (6-month horizon)                       | Very high or failed                  |
| <b>Potential loss</b>               | Unlikely                         | Low or medium  | High   | (Impairment policy applies)          |
| <b>Exposure policy</b>              | Maintain or reduce               | Maintain or reduce or exit   | Reduce or exit                               | Reduce or exit                       |
| <b>Headroom of lending facility</b> | To be reconsidered               | Discontinued if unnecessary  | Discontinued if unnecessary                  | Limits cancelled (if appropriate)    |

Source: Barclays

## 6. Quantitative analysis

Scope's quantitative analysis reflects the transaction's strong credit enhancement mechanisms.

Scope derived the portfolio default rate distribution from a loan-by-loan Monte Carlo simulation of the entire portfolio and derived the default timings for each respective currency's sub-portfolio. Recovery rates were also determined for the respective sub-portfolios, to reflect the slightly diverging recovery levels found in the three sub-portfolios.

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

Scope's base case takes into consideration the default timing derived from the sub-portfolio analysis, which embodies the credit qualities of the sub-portfolios, i.e. the lower the credit quality of the sub-portfolio, the more front-loaded the default timing.

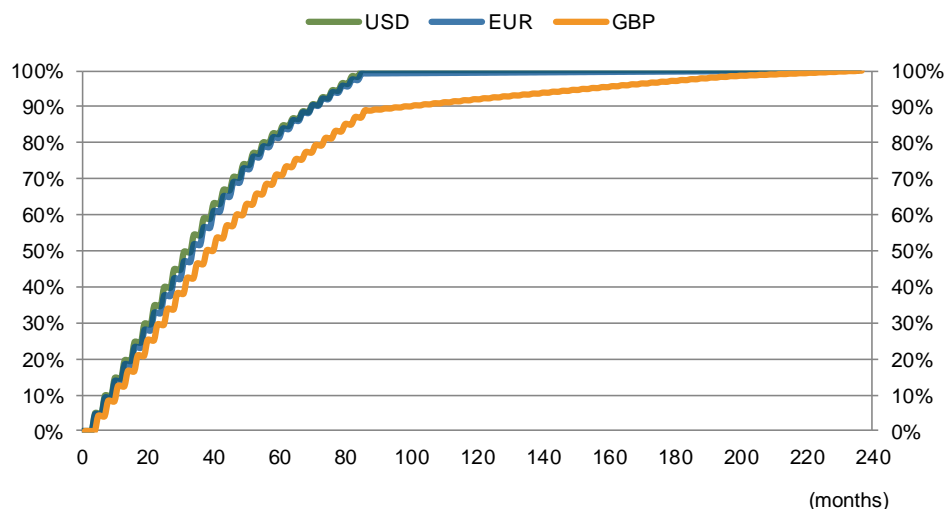
Scope also tested front-loaded, back-loaded and diverging default timings, which however did not show a significant impact in the context of the considered portfolio credit quality and available credit enhancement.

Figure 11 shows the cumulative default-timing assumptions per sub-portfolio, representing the assumed default timings over the life of the transaction. The default definition underlying the analysis is 90+ days past due.

Senior notes benefit from strong credit enhancement and good portfolio quality

Scope performed a bespoke cash flow analysis for this transaction

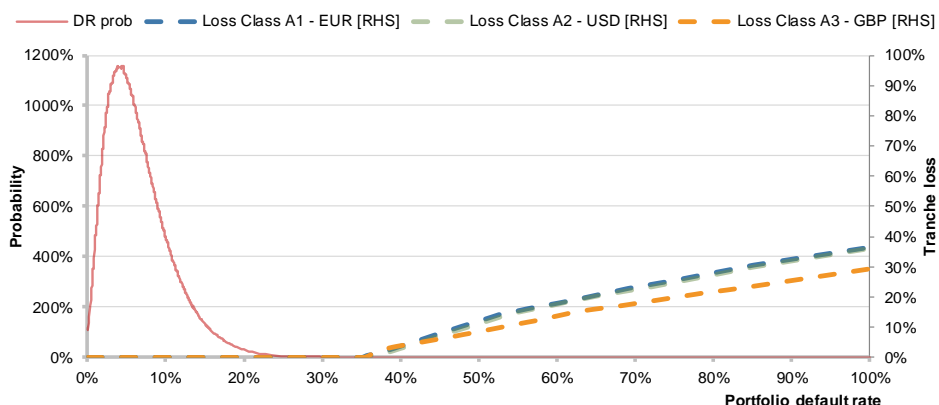
**Figure 11: Default-timing assumptions for each sub-portfolio**



OC test curing causes minor performance divergence under high default rate scenarios

Figure 12 shows the losses of the three senior notes at all portfolio default rates. The chart shows how credit enhancement and excess spread protect the rated notes, as well as recovery proceeds in the event of default. The deviations in the loss rates under high default rate scenarios are driven by the senior tranche individual OC test curing mechanism.

**Figure 12: Cash flow analysis results under AAA-conditional recovery rates**



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

## 7. Rating stability

### 7.1. Rating sensitivity

Scope tested the resilience of the ratings to deviations in 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 rating 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 A1, rated AAA<sub>SF</sub>: sensitivity to probability of default, zero notches; sensitivity to recovery rates, zero notches.

Class A2, rated AAA<sub>SF</sub>: sensitivity to probability of default, zero notches; sensitivity to recovery rates, zero notches.



No losses for senior notes at portfolio default rates of 22.7% or lower for zero recovery

Sovereign risk does not limit the transaction's ratings

Collateral manager replacement unlikely

Class A3, rated AAASF: sensitivity to probability of default, zero notches; sensitivity to recovery rates, zero notches.

## 7.2. Break-even analysis

The resilience of the senior notes is demonstrated by the break-even default rate analysis. The notes would not experience any loss at portfolio lifetime default rates of: i) 22.7% or lower, under a zero recovery assumption; or ii) 35.0% or lower, under the portfolio's AAASF recovery rate assumption of 34.8%.

## 8. Sovereign risk

Sovereign risk does not limit the ratings on this transaction. Regarding the UK, risks of an institutional-framework meltdown, legal insecurity, capital transfer, or currency conversion problems are immaterial for the ratings, even in the context of an exit from the European Union.

However, UK economic growth will weaken as investment decisions are postponed until the effects of Brexit can be quantified, and we expect conditions to worsen. Brexit-related uncertainties also remain high. We anticipate that investments will drop significantly as companies revise strategies, with production expected to move away from the UK.

Economic growth will remain subdued throughout 2018. In our view, the mid- and long-term consequences of Brexit depend heavily on the political actions of both the EU and the British government. The process of leaving the EU will continue for at least another year, after which the UK's growth potential will depend on access to the European single market.

We expect unemployment to rise, especially for the financial sector and for companies seeking access to the EU market. Effects will still be visible in the mid term and will slow growth rates further.

The trade sector is especially vulnerable, reflecting its dependency on imports and the insufficient action taken to remedy deficiencies in international competitiveness. Most external balances are deeply negative. However, the strong depreciation of the pound, as a reaction to Brexit, may mitigate some of these effects.

The industrial sector is also under pressure now that the UK is faced with a shrunken industrial base that has failed to improve productivity and profitability – with few exceptions.

## 9. Counterparty risk

The transaction's counterparty risk supports the highest ratings. Scope does not consider any of the counterparty exposures to be excessive.

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

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, Scope's analysis accounts for a potential collateral manager replacement by considering a stressed collateral management fee of 1% of the outstanding portfolio following the reinvestment period.<sup>1</sup>

Commingling risk from the collateral manager is immaterial for the senior notes, because of Barclays' high credit quality (A+ Stable / S1+ by Scope) and the usually intra-day transfer of funds to the issuer account bank. Risk is further mitigated through a replacement of the bank as collateral account holder upon a loss of BBB by Scope.

<sup>1</sup> The stressed fee does not apply during the reinvestment period, as that period would be terminated upon a replacement of Barclays as collateral manager.



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

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

The senior notes have a short expected weighted average life of just 3.5 years including the reinvestment period. Given the high credit quality of US Bancorp, the parent company of Elavon Financial Services DAC, Scope considers the risk of commingling losses as sufficiently remote to be immaterial for the senior notes. Scope assessed the credit quality of Elavon using public information as well as the public ratings of the US Bancorp. Commingling risk is further mitigated by a replacement trigger of Elavon as account bank based on its public rating.

## 10. Legal structure

### 10.1. 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 Intertrust Management Limited, the corporate service provider. The special purpose vehicle is essentially governed by the terms in the documentation.

### 10.2. Asset replacement

Barclays is obliged to replace or repurchase any asset in the portfolio that does not comply with the eligibility criteria in the documentation, as of the inclusion date. We believe that the risk of weaker assets being transferred to the portfolio is mitigated by the eligibility criteria, as replacements have to fulfil the reinvestment criteria.

Additionally, Barclays may exchange assets at its own discretion subject to the reinvestment criteria and capped at a maximum of a 12-months rolling average of 30% of the existing portfolio balance. The exchange must happen at least at par accounts for accrued interest.

### 10.3. Use of legal and tax opinions

Scope reviewed the legal opinions produced for the issuer. These provide comfort on the issuer's legal structure and supports Scope's general legal analytical assumptions.

The tax opinion produced for the issuer indicates that the transaction is structured in tax-efficient way, i.e. no taxes apply, except for minimum retained profit tax and VAT in the context of contracted services, which remain an unrecoverable expense for the issuer.

## 11. Monitoring

Scope will monitor this transaction based on the performance reports from the collateral administrator as well as other available information. The ratings will be monitored continuously and reviewed at least once a year, or earlier if warranted by events.

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

## 12. Applied methodology and data adequacy

For the analysis of this transaction Scope applied its General Structured Finance Rating Methodology, dated August 2017, and applied the principles of the SME ABS Rating Methodology, dated June 2017, as well as the Methodology for Counterparty Risk in Structured Finance, dated August 2017. All documents are available on our website [www.scooperatings.com](http://www.scooperatings.com).

Barclays provided Scope with performance information for its internal default and recovery measures, covering a period from 2008 to 2016. This period contains both the stress impact of the 2007 financial crisis and the recovery environment following that crisis.

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

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



## I. Summary of portfolio characteristics

The analysis considered replenishment covenants and the portfolio from 02 May 2018. The table shows all amounts in GBP equivalent amounts.

| Key features                         | Preliminary portfolio as of 2 May 2018 | Portfolio adjustments for replenishments |
|--------------------------------------|--|--|
| Originator (% of balance)            | Barclays plc                           |  |
| Closing date                         | 28 June 2018                           |  |
| Portfolio balance (GBP equivalent m) | 4,500                                  |  |
| Number of assets                     | 706                                    |  |
| Average asset size (EUR)             | 13,846,154                             |  |
| Maximum asset size (EUR)             | 112,500,000                            |  |
| Minimum asset size (EUR)             | 2,667                                  |  |
| Weighted average remaining term      | 3.0 years                              | <b>5.5 years<sup>2</sup></b>             |
| Largest obligor                      | 2.5%                                   |  |
| Top three obligors                   | 6.5%                                   |  |
| Largest country                      | 70.5% (United Kingdom <sup>3</sup> )   |  |
| Largest industry sector              | 15.0% (Banking & Finance)              |  |
| Current WA margin                    | 1.5%                                   | <b>1.5%</b>                              |
| Amortising loans                     | 19.7%                                  |  |

<sup>2</sup> The increase reflects the reinvestment of 47.0% of the portfolio with a term of 5 years.

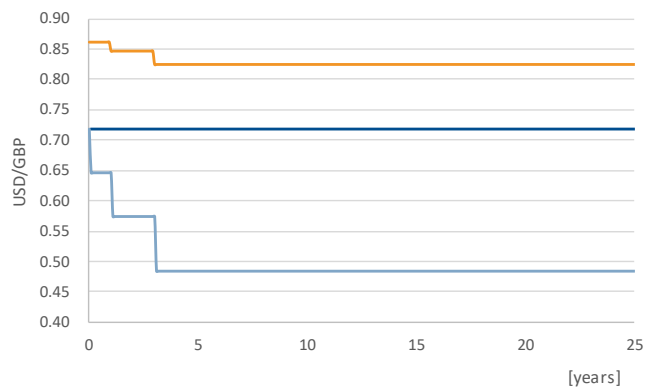
<sup>3</sup> UK includes the Channel Islands.



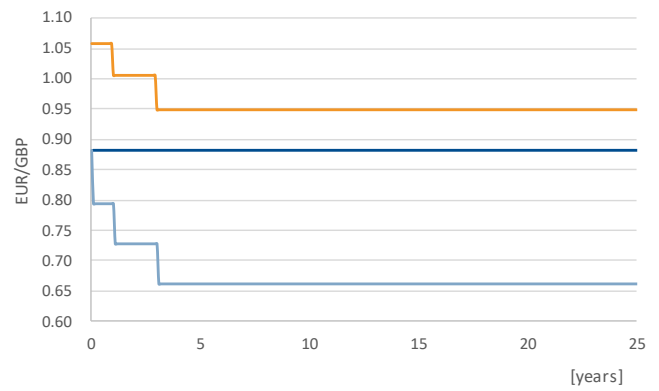
## II. Foreign exchange rate stress cases

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

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



**Figure 14: Stresses applied to EUR/GBP exchange rate**



### III. Interest rate stress cases

The charts below show the stressed scenario applied to 3-months EURIBOR for illustration purposes. Similar levels of stress apply to 3-months USD-LIBOR and 3-months GDP-LIBOR (both not displayed).

**Figure 15: Stressed scenario applied to 3-months EURIBOR in this transaction**





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