# Newfoundland CLO I Limited

## Collateralised loan obligation

## Ratings

| Notes (ISIN) | Rating | Notional (m)[a] | Notional (% assets)[b] | CE (% assets) | Coupon | Final maturity |
|---|---|---|---|---|---|---|
| Class A-1 XS0402206154 US651343AB11 | $AAA_{SF}$ | 5,065.8 | 80.0% | 20.0% | 3M USD Libor + 2.5% | 26 Nov 2039 |
| Class A-2 XS0418594403 US651343AC93 | $AAA_{SF}$ | 2,136.0 | 80.0% | 20.0% | 3M USD Libor + 2.5% | 26 Nov 2039 |
| Class B-1 XS1882681882 US651343AE59 | $A+_{SF}$ | 483.8 | 5.4% | 9.3% | 3M USD Libor + 4.0% | 26 Nov 2039 |
| Class B-2 XS1882681965 US651343AF25 | $A+_{SF}$ | 483.8 | 5.4% | 9.3% | 3M USD Libor + 4.0% | 26 Nov 2039 |
| Subordinated | NR | 833.0 | 9.3% | NA | Portfolio excess | 26 Nov 2039 |
| **Rated notes** | | **8,169.3** | | | | |

Scope's analysis is based on the portfolio dated 27 August 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.

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

[c] Class B-1 and class B-2 rank pari passu.

## Transaction details

| | |
|---|---|
| Purpose | Retranching of existing transaction issued for liquidity/funding purposes |
| Issuer | Newfoundland CLO I Limited (Newfoundland) |
| Originator/ Collateral manager | Barclays Bank PLC (A+/Stable Outlook/S1+) |
| Original closing date | 26 November 2008 |
| Restructuring closing date | 26 November 2018 |
| Payment frequency | Quarterly: 26 February, 26 May, 26 August, 26 November |

Newfoundland CLO I Limited is a balance sheet cash securitisation of a portfolio of corporate loans primarily denominated in US dollars (USD), sterling (GBP) and euros (EUR). The loans were granted by Barclays Bank PLC (Barclays) to corporate borrowers predominantly domiciled in North America and Europe. Issued notes pay USD and foreign exchange risk from the portfolio is hedged with a total return swap.

## 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 global macroeconomic environment, particularly in North America and Europe; and the ability and incentives of Barclays as loan originator, collateral manager of the loan portfolio and total return swap provider.

The ratings account for the credit enhancement and the strictly sequential amortisation of the rated notes from a loan portfolio for which the covenanted weighted average maturity is 26 November 2023. 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 two-year reinvestment period, as well as overcollateralisation tests for the rated notes.

The ratings address exposures to the key transaction counterparties: Elavon Financial


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### Related research

General Structured Finance Rating Methodology

SME ABS Rating Methodology

Methodology for Counterparty Risk in Structured Finance


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Bloomberg: SCOP

Services DAC, UK Branch (Elavon) as account bank, calculation agent and principal-paying agent; Deutsche Bank AG, London Branch as collateral administrator; Deutsche Bank Trust Company Americas as registrar and transfer agent; Deutsche Trustee Company Limited as trustee; and Barclays Bank PLC as total return swap counterparty. Counterparty risks are mitigated by: the credit quality of Barclays and Elavon (a division of US Bancorp); and the replacement mechanism attached to the roles of account bank, principal-paying agent and swap counterparty. Scope has a public rating on Barclays (A+/Stable/S1+) and has analysed the credit quality of Elavon based on publicly available ratings.

## Rating drivers and mitigants

### Positive rating drivers

**Credit enhancement.** The class A and class B notes benefit from 20.0% and 9.3% subordination, respectively. In addition, approximately 0.37% of excess spread is available, which assumes a minimum weighted average portfolio spread of 2.8% and is subject to portfolio losses.

**Portfolio management criteria**. These should will to maintain the portfolio's current credit profile commensurate with a BB+ default risk equivalent, a senior unsecured loan portfolio with a maximum weighted average maturity of November 2023 and limited concentrations.

**Overcollateralisation tests.** The class A overcollateralisation and minimum excess spread reserve tests help to maintain adequate collateralisation of the notes via performing collateral. Upon a breach of the class A overcollateralisation test, principal and interest proceeds are captured to repay the class A notes. Upon a breach of the excess spread reserve test, interest proceeds are captured and reinvested in eligible collateral.

**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.

**Swap**. A total return swap mitigates risk that may stem from mismatching currencies between certain portfolio assets and the issued notes. The swap also promises three-month USD Libor plus 2.8% on a notional balance of USD 9.0bn, to be paid quarterly to the issuer.

### Negative rating drivers and mitigants

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

**Top industry exposure**. 15.7% of the current portfolio is exposed to banking and finance, an industry which can be more volatile in downward credit cycles given its reliance on debt-financing. Specifically, we view US-based exposures as a growing source of financial risk due to elevated asset prices.

### Upside rating-change drivers

**Increased credit enhancement** from deleveraging accompanied by good underlying portfolio performance may further stabilise current class A ratings and result in an upgrade of the class B ratings.

### Downside rating-change drivers

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

**UK macroeconomic uncertainty.** An unexpected no-deal exit by the UK from the EU, with its significant contingent implications for the UK economic outlook, could weigh negatively on the 16.4% portfolio exposure to the UK.

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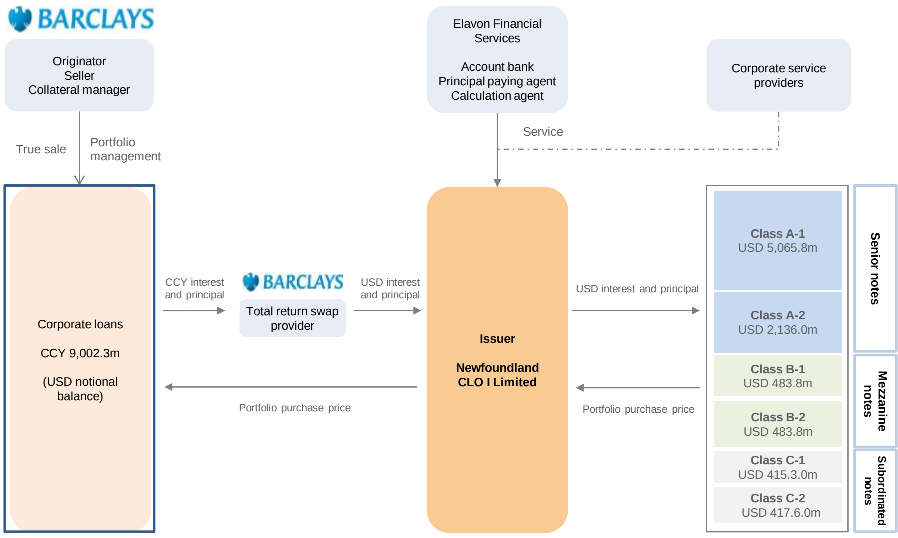
# 1. Transaction summary

**Figure 1: Simplified transaction structure**




Source: Transaction documents and Scope.

## 1.1. Key transaction features

- USD 9.0bn corporate loan portfolio collateralises the class A and class B notes with principal and excess spread;
- Two-year rules-based revolving period;
- Continuous rules-based reinvestment of prepayments;
- Tight management criteria; and
- Class A overcollateralisation test and minimum excess spread reserve test to ensure preferential treatment of the rated notes.

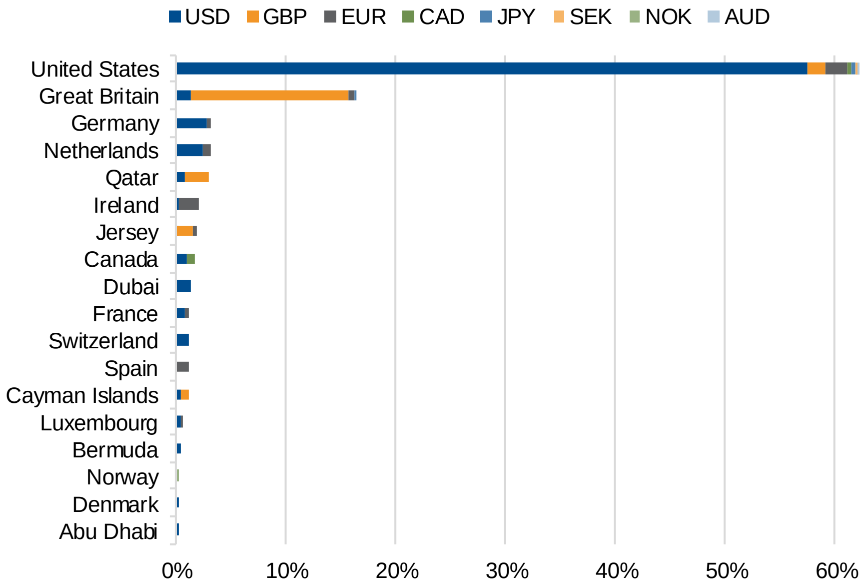
# 2. Asset analysis

The underlying portfolio mainly comprises senior unsecured corporate loans from Barclays' balance sheet. Currency exposures are in USD (70.2%), GBP (20.4%) and EUR (7.3%), with an additional five currencies making up the remaining 2.1% of the portfolio. The two-year revolving period may alter the portfolio's composition; however, the general risk profile is expected to remain unaltered due to the portfolio management criteria.

## 2.1. Closing portfolio

The closing portfolio comprised 902 loans from 313 obligors and is representative of Barclays' corporate loan book. Currently, 62.2% (measured in USD-equivalent) of the portfolio's obligors are incorporated in the US and 30.5% in Europe. The remaining 7.3% are based in Qatar, Canada, Dubai, Cayman Islands, Bermuda and Abu Dhabi.

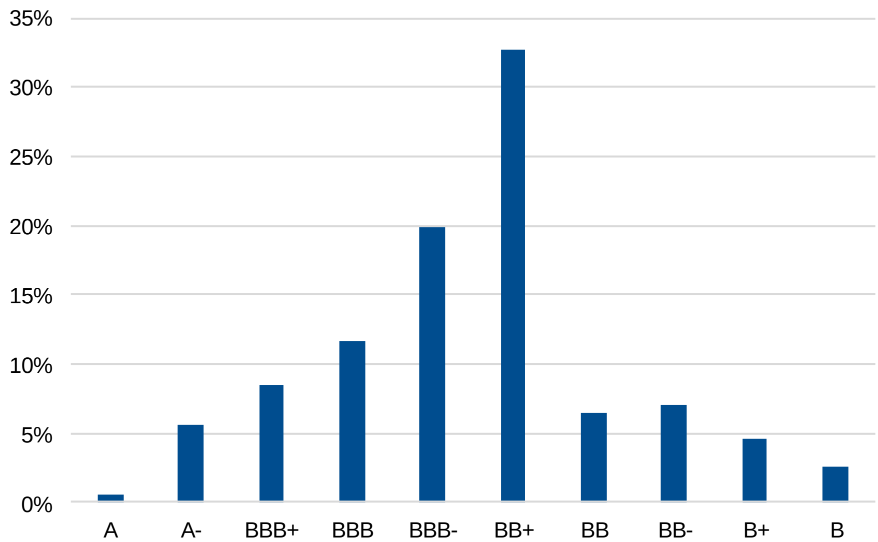
**Figure 2: Currency exposure by obligor country of incorporation**




**Closing portfolio is of high non-investment grade credit quality**

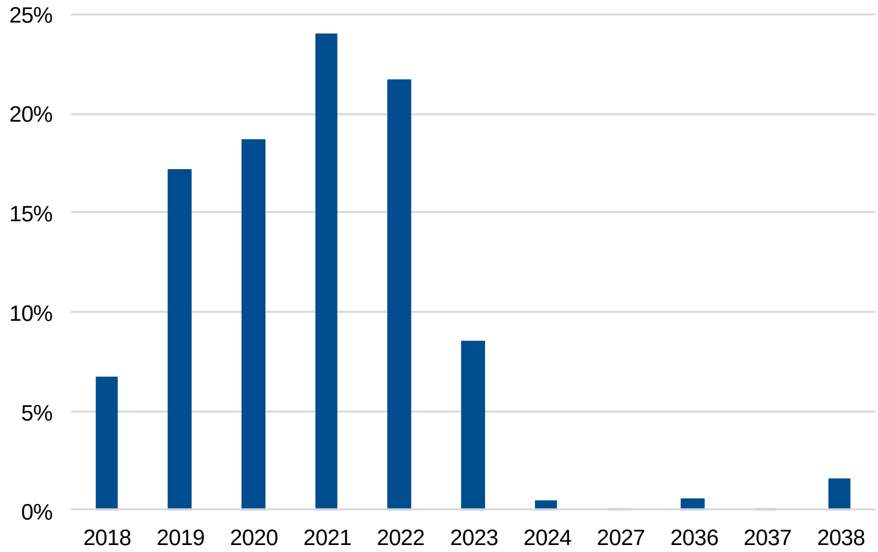
The current portfolio's average default risk is commensurate with a BB+ rating (probability of default), based on the mapping of Barclays' default grades for the portfolio loans to Scope's ratings.

**Figure 3: Portfolio credit quality as assessed by Scope (probability of default)**




Contractual amortisation during the reinvestment period amounts to approximately 37.6%. Extending the transaction's life is limited given the long average maturity of assets that do not mature during the revolving period – ending November 2020 – and the maximum weighted average maturity in November 2023.

**Figure 4: Portfolio maturity profiles**

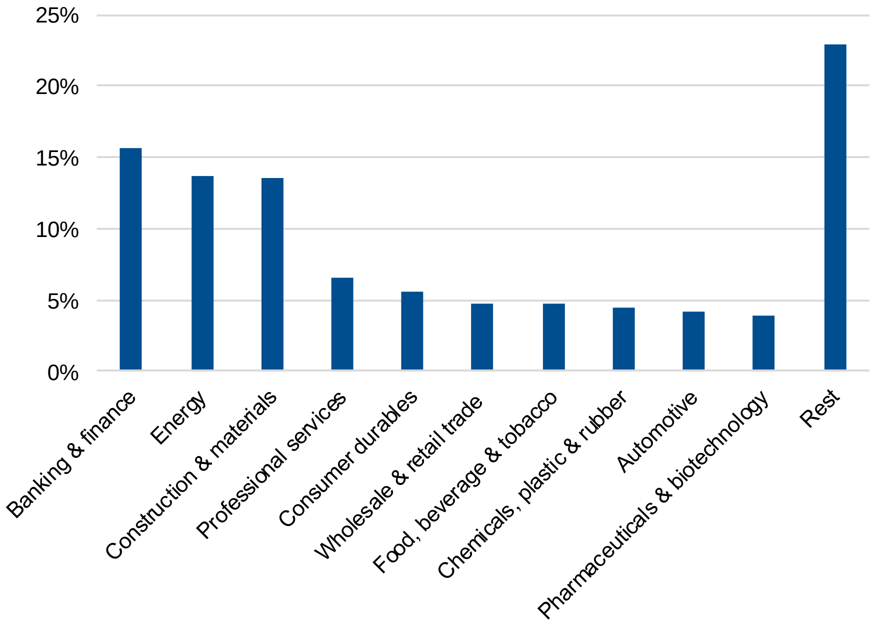



The current portfolio is well diversified across 21 industries, with an inverse-Herfindahl Index score of 11.7.

However, the 15.7% exposure to the banking and finance industry may be a source of risk against the backdrop of Brexit and elevated US asset prices. With respect to the US, where 63.0% of the portfolio's banking and finance segment is incorporated, equity prices are near all-time highs and home prices exceed pre-crisis levels. 34.2% of the portfolio's banking and finance segment is composed of loans to fund managers and 18.3% to private equity funds.

Barclays' prudent lending standards to proven institutions and its continuous monitoring of exposures, coupled with the transaction's tight replenishment criteria, partially mitigate this industry sector risk.

**Figure 5: Portfolio industry profile**



## 2.2. Reinvestments

We have assumed that a reinvestment of contractual amortisation and recovered amounts during the reinvestment period will be: i) at the same credit quality as the repaid exposure; and ii) at a term that sets the portfolio's weighted average remaining life just above the limit in the documentation (November 2023).

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

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

- Other loans from the same loan facility,
- Other loans from the same obligor,
- Loans from the same obligor group, or
- The best-rated eligible loan on Barclays' balance sheet.

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

The management of the portfolio is also subject to profile tests and collateral quality tests that need to be either met, maintained or improved when Barclays modifies the portfolio composition. The combination of reinvestment criteria, portfolio profile and collateral quality tests allows only limited adverse deviation from the closing portfolio (see Figure 6 below).

**Figure 6: Selected collateral quality tests and portfolio profile tests**

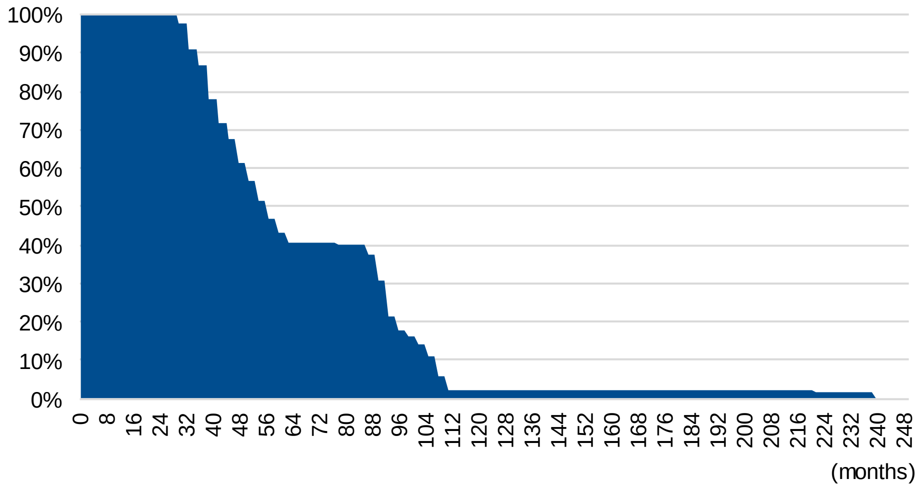
| Reinvestment criteria | Current portfolio | Limit |
|---|---|---|
| Max. Moody's weighted average portfolio rating factor | Estimated at 1,037 | 1,075 coupled with a Moody's max. asset correlation of 7.0% |
| Max. weighted average maturity | July 2021 | November 2023 |
| Max. top four obligor concentration (rated) | 2.5% | 2.5% per obligor |
| Max. top 5-7 obligor concentration (rated) | 2.0% | 2.0% per obligor |
| Max. industry concentration | 15.7% (banking & finance) | 45.0%* |
| Max. non-USD obligations concentration | 29.8% | 30.0% |
| Max. Barclays' watch list 1 concentration | 0.1% | 7.5% |

*Combined: banking & finance and real estate development

## 2.3. Amortisation profile

The amortisation profile reflects not only the bullet nature of most assets but also the portfolio's high granularity. We assume that this will continue through the reinvestment period due to the reinvestment criteria.

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




## 2.4. Portfolio analysis

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

### 2.4.1. Default rate analysis on portfolio

The resulting default distribution for the reference portfolio exhibits a mean default rate of 5.5% and an implicit coefficient of variation of 65.5% over a weighted average portfolio life of 5.4 years. This assumption represents a long-term view on the portfolio credit performance and incorporates the credit quality displayed in the preliminary portfolio, the management criteria and the potential portfolio life extension afforded by the revolving period.

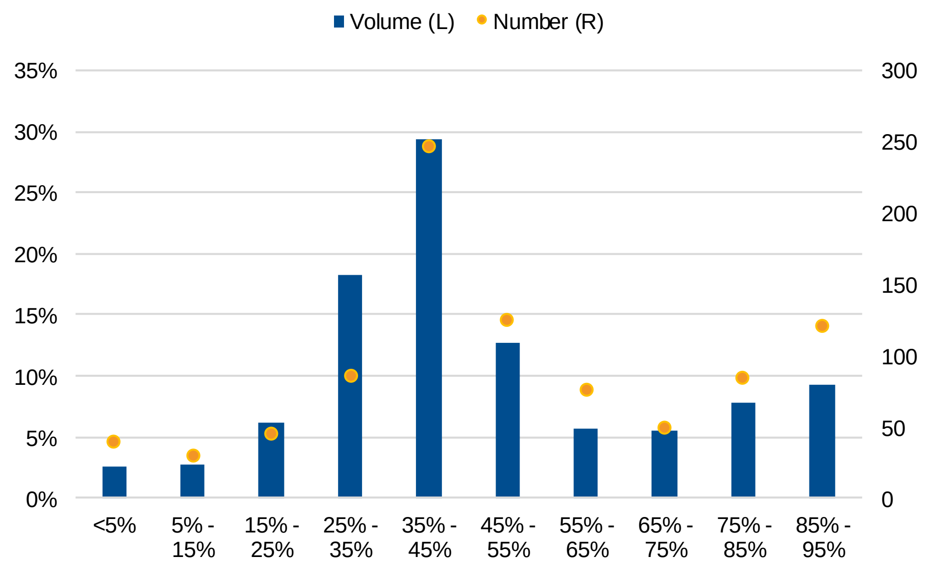
We have inferred each loan's default probability by mapping our ratings to Barclays' through-the-cycle default grades specific to the transaction. The mapping was based on rating migration data covering a period from 2008 to 2016. For obligors whose default risk was derived using Barclays' rating models specific to UK small and medium enterprises, we applied a two-notch-equivalent stress to the mapping. Additionally, if a public rating was available, we selected the weaker credit rating result of our mapping and the second-best public rating.

### 2.4.2. Recovery rate

We have assumed a base case portfolio recovery rate of 51.4%, derived from Barclays' recovery performance following the 2008 financial crisis for similar loan types. The AAA rating-conditional and A rating-conditional portfolio recovery rates are 30.6% and 38.7% respectively, which reflect haircuts of 40% and 24%, respectively, accounting for the fluctuation of recovery rates in Barclays' historical performance data. We have also applied a 10% recovery rate haircut to exposures representing either 5% of the portfolio or which contribute more than 1% to the portfolio's expected loss. We have also assumed that recovery proceeds are fully realised 12 months after defaulting.

The recovery rate for each loan reflects the recovery rate implied by the loss-given-default rate that Barclays assigns to each exposure. We have adjusted this recovery rate for each loan, except for education loans, to ensure the portfolio's weighted average recovery rate matches Barclays' post-financial-crisis recovery performance for similar types of loans. For education loans, we used Barclays' recovery rate assumptions stressed by 5% as a base case scenario.

**Figure 8: Base case portfolio recovery rate distribution**




### 2.4.3. Asset correlation

For this transaction, we assume 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 have also considered an additional top-obligor factor of 20% for obligors representing more than 5% of the portfolio or contributing over 1% of the portfolio's expected loss.

### 2.4.4. Constant prepayment rate

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

Our analysis incorporates a zero prepayment rate as all prepayments will be fully reinvested over the life of the transaction. This may lead to a marginal extension of the transaction's life, but we expect the impact to be limited as reinvestment is subject to the portfolio profile tests and collateral quality tests.

### 2.4.5. Foreign exchange and interest rate fluctuations

The multi-currency portfolio is fully hedged by a total return swap provided by Barclays. The mechanism effectively comprises an interest rate swap and a series of cross-currency swaps. On a given payment date, Barclays pays the three-month USD Libor plus 2.8% to the issuer based on a USD 9.0bn notional balance, where the issuer pays to Barclays all interest accrued from the portfolio. Any principal proceeds received from the portfolio are converted into USD before each payment date and then distributed according to the priority of payments. The foreign exchange spot rate is determined at the asset level, one business day before a given asset is included in the portfolio, therefore removing any currency risk.

## 3. Financial structure

### 3.1. Capital structure

Following the effective date of the restructuring, the issuer's capital structure comprises: two classes of pari-passu senior notes, class A-1 and class A-2; two classes of pari-passu mezzanine notes, class B-1 and class B-2; and strictly subordinated class C-1 and class C-2 notes.

The class A notes and class B notes pay a quarterly coupon of three-month USD Libor plus 2.5% and three-month USD Libor plus 4.0%, respectively. Unused excess spread is paid to the class C-1 and C-2 noteholders.

### 3.2. Priority of payments

Combined priority of payments provides the main protection against payment interruption

The structure features a combined priority of payments which provides material protection against payment interruption. Principal collections from the assets can pay timely interest on the class A and class B notes.

A senior expense cap of USD 100,000 applies to the trustee fees and expenses as well as the administrative expenses.

**Figure 9: Interest priority of payments, main items**

| Interest priority of payments |
|---|
| **A(i)** Taxes |
| **A(ii)** Retained profit |
| **B** Trustee fees & expenses |
| **C** Administrative expenses |
| **D** Discretionary payment into expense reserve account – up to USD 100,000 |
| **E** Senior management fee (set at zero as long as Barclays is collateral manager) |
| **F** Swap termination payment (if applicable) |
| **G** Class A-1 and class A-2 interest |
| **H(i)** Class B-1 and class B-2 interest |
| **H(ii)** Class B-1 and class B-2 deferred interest |
| **I** Class A-1 and class A-2 principal repayment to cure senior par-value test, if required |
| **J** During reinvestment period, payment into principal account for reinvestment to cure excess spread reserve test, if required |
| **K** Following reinvestment period, redemption of class A-1 and class A-2 notes and then class B-1 and class B-2 notes |
| **L** Subordinated management fee (set at zero as long as Barclays is collateral manager) |
| **M** Unpaid trustee fee & expenses |
| **N** Unpaid administrative expenses |
| **O** Swap termination payment if swap counterparty has defaulted (if applicable) |
| **P** Vendor trustee fee |
| **Q** Class C notes interest |

**Figure 10: Principal priority of payments, main items**

| Principal priority of payments |
|---|
| **A** Unpaid items from Interest priority of payments (A through I) |
| **B** Following reinvestment period, redemption of class A-1 and class A-2 notes (pari-passu) and then class B-1 and class B-2 notes (pari-passu) |
| C During reinvestment period, payment into principal account for reinvestment |
| **D** Further unpaid items of the interest priority of payments list (L through O) |
| **E** Vendor trustee fee |
| **F** Redemption of class C notes |

### 3.3. Amortisation and provisioning

We believe that the combination of sequential amortisation, overcollateralisation tests, excess spread and total return swap effectively protects the rated notes.

**Class A and class B notes benefit from sequential amortisation**

The amortisation of the class A and class B notes is strictly senior to the subordinated notes. During the reinvestment period, no interest can be paid to class C-1 and C-2 noteholders unless the excess spread reserve test is met (i.e. senior par value exceeds 125.0%), and no principal can be paid to amortise the class C-1 and C-2 notes. However, a one-time partial redemption of the class C-2 notes of USD 2.3m is scheduled for the first payment date. This amount will cover the original setup costs of the transaction. After the reinvestment period, no payment can be made to class C-1 and C-2 noteholders until classes A-1 through to B-2 are fully repaid. The class A overcollateralisation test triggers the repayment of class A notes if the test value is below 113.5%.

Following the end of the replenishment period, principal amounts received from the portfolio will be allocated to redeem the senior notes on a quarterly basis, unless the proceeds qualify as unscheduled prepayments. In that case they will be reinvested, subject to the reinvestment criteria.

### 3.4. Interest rate risk

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

Interest rate risk is not material for the rated notes given the existing total return swap. Additionally, the reference rate for the total return swap is three-month USD Libor, which is the same reference rate on the rated notes.

We have assumed a portfolio margin of 2.8% during and after the reinvestment period, which is aligned with the minimum weighted average spread limit and the covenanted minimum margin to be paid by the swap counterparty to the issuer.

### 3.5. Accounts

**Commingling exposure to Elavon, the account bank**

The issuer has several sub-accounts that are all held with Elavon. The accounts represent commingling risk exposure given Elavon's role as account bank (see Counterparty risk). Potential negative carry is covered by available excess spread and credit enhancement.

## 4. 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 concentrates 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.

### 4.1. Business positioning

We believe this transaction is consistent with Barclays' strategy of: i) managing its balance sheet and costs; ii) improving return on capital; iii) increasing lending where justified by returns; and iv) investing in key franchises, such as Barclaycard, to improve earnings. This transaction shows the meaningful progress that 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, Société Générale, 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 rated notes' eligibility as liquidity instruments for the central bank.

## 4.2. Sanctioning and underwriting

### 4.2.1. Loan origination

The loans for this securitisation are originated out of Barclays' corporate and investment banking units, with the former primarily focused on UK domestic lending and the latter focused on the international corporate lending business.

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

We consider the workflows for sanctioning and executing credit applications to be effective and in accordance with the bank's risk appetite. 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 comparable banks and they involve the proper segmentation of sanctioning authority, as well as the separation of business and risk-review functions.

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, analysed in detail, and approved when due-diligence output and agreed loan terms are finalised.

### 4.2.2. Risk models

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

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

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

Currently, the bank is consolidating its 30 default probability models into four models that will serve the needs of its four main corporate lending sectors.

## 4.3. Servicing and recovery

**High-standard, proactive servicing and recovery processes**

We consider 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 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 core clients to recognise and tackle any potential adverse development early on. Barclays closely monitors obligors to ensure remedial actions can be implemented far ahead of actual performance failures.

We believe 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, aimed at 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. We had access to Barclays' confidential data, which showed high cure rates and full recoveries.

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 the credit quality of level-one exposures must be above the minimum eligibility criteria.

Figure 11 shows the relationship between recovery actions and the different levels on the early-warning list.

**Figure 11: Actions associated with early-warning list levels**

| | Level 1 (Low) | Level 2 (Medium) | Level 3 (High) | Bad & doubtful (Defaulted) |
|---|---|---|---|---|
| **Definition** | Caution | Doubt – close control required | Concern – actively minimise risk | Default – actively minimise risk |
| **Description** | 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 |
| **Risk of obligor failure** | Low | Medium or high (6-12-month horizon) | High (6-month horizon) | Very high or failed |
| **Potential loss** | Unlikely | Low or medium | High | (Impairment policy applies) |
| **Exposure policy** | Maintain or reduce | Maintain or reduce or exit | Reduce or exit | Reduce or exit |
| **Headroom of lending facility** | To be reconsidered | Discontinued if unnecessary | Discontinued if unnecessary | Limits cancelled (if appropriate) |

Source: Barclays

## 5. Cash flow analysis

**The rated notes benefit from strong credit enhancement and good portfolio quality**

Our cash flow analysis reflects the transaction's strong credit enhancement. We have derived the portfolio default rate distribution using a loan-by-loan Monte Carlo simulation of the entire portfolio.

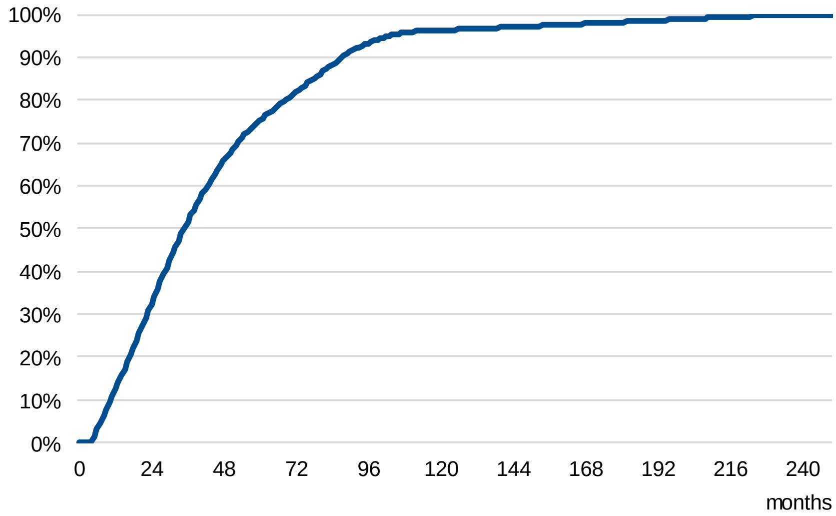
**Scope performed a bespoke cash flow analysis for this transaction**

We projected cash flows using the portfolio default distribution to calculate the probability-weighted loss for the rated notes. Our analysis of cash flows also produced the expected weighted average life for the rated notes.

Our base case takes into consideration the default timing derived from the Monte Carlo simulation. We tested front-loaded and back-loaded default timing scenarios, which did not demonstrate a significant impact given the portfolio's credit quality and available credit enhancement.

Figure 12 shows the cumulative default-timing assumption for the portfolio, representing the assumed default timing over the life of the transaction.

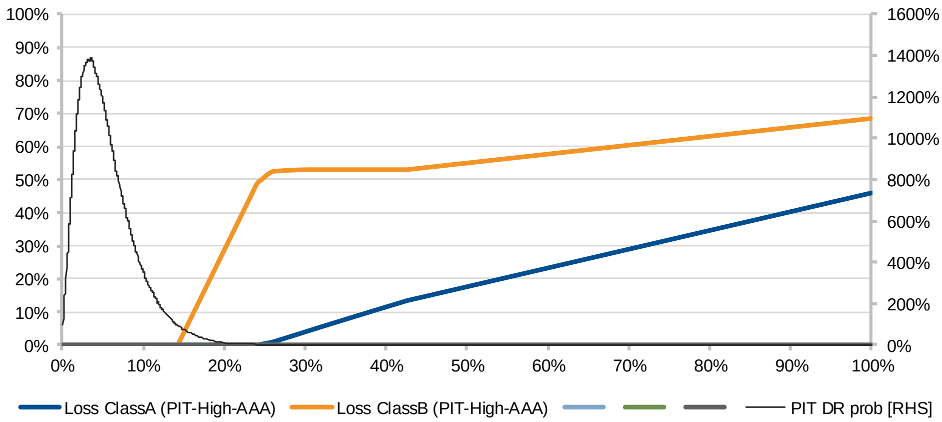
**Figure 12: Default-timing assumption**




**Overcollateralisation test curing causes minor performance divergence under high default rate scenarios**

Figure 13 provides the losses of the class A and class B 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.

**Figure 13: Cash flow analysis results under AAA conditional recovery rates**




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

## 6. Rating stability

### 6.1. Rating sensitivity

We have 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 results for the rated 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, rated $AAA_{SF}$: sensitivity to probability of default, zero notches; sensitivity to recovery rates, zero notches;
- Class A-2, rated $AAA_{SF}$: sensitivity to probability of default, zero notches; sensitivity to recovery rates, zero notches;

- Class B-1, rated A+$_{SF}$: sensitivity to probability of default, three notches; sensitivity to recovery rates, three notches;
- Class B-2, rated A+$_{SF}$: sensitivity to probability of default, three notches; sensitivity to recovery rates, three notches.

### 6.2. Break-even analysis

**No losses for senior notes at portfolio default rates of 17.2% or lower for zero recovery**

The resilience of the class A notes is demonstrated by the break-even default rate analysis. The class A notes would not experience any loss at portfolio lifetime default rates of: i) 17.2% or lower, under a zero-recovery assumption; or ii) 24.1% or lower, under the portfolio's AAA$_{SF}$ recovery rate assumption of 30.6%.

The class B notes would not experience any loss at portfolio lifetime default rates of: i) 10.3% or lower, under a zero-recovery assumption; or ii) 16.1% or lower, under the portfolio's A$_{SF}$ recovery rate assumption of 38.7%.

## 7. Sovereign risk

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

Sovereign risk does not limit the ratings on this transaction. The following sections highlight the two jurisdictions with the highest portfolio exposures, the US (62.2%) and the UK (16.4%).

### 7.1. United States

The US economic recovery (AA/Stable) has proven resilient with growth for 35 consecutive quarters, averaging a real GDP growth rate of 2.2% since 2010. The economy is beyond full employment, with an unemployment rate of below 4% since June 2018, and core inflation near, and in fact slightly above, the Federal Reserve's price stability mandate of 2% since April 2018. The US economy recovered faster from the Great Financial Crisis than its peers and, in terms of real GDP, is now a solid 18% above its pre-crisis level. This reflects the country's flexible and competitive economy, which has led to one of the highest GDP per capita levels in the world, of around USD 60,000 (the seventh highest, based on IMF figures).

Over the medium term, we expect real GDP growth to hover around 2%, driven by the government's fiscal stimulus, solid private consumption helped by a strong labour market and rising household wealth, a recovery of private investment on the back of strong purchasing manager indices and industrial orders, as well as supportive financial conditions and a still favourable external environment. While the 2018 growth rate is likely to be comparatively high, at around 3% – Q2 2018 figures indicate an annualised growth rate of around 4% – several factors constrain the medium-term growth outlook.

These include the difficulty in adapting to structural shifts from technological changes reshaping the labour market, low productivity growth, rising skills premia and an ageing population, and declining labour force growth, which has been the main contributor to real GDP growth over the past few years according to the OECD. In fact, potential GDP growth has slowed significantly because of falling total-factor and labour productivity and is now estimated at around 1.6% for 2011-20 – an all-time low since the 1950s, according to data from the Congressional Budget Office. The Budget Office's outlook for 2020-28 averages potential growth at around 1.9%, similar to the IMF's 1.75%, which expects the short-term boost to investment following tax reforms this year to fade after 2019.

We believe elevated US asset prices constitute a growing source of financial risk. Equity market valuations are at all-time highs and price-earnings ratios are well above long-term averages. Similarly, nominal house price indices are again above pre-crisis peaks and mortgage growth has picked up during the last few quarters. However, we note that the house-price-to-rents ratio, while rising to 1.34 in Q2 2018, remains well below the previous peak of 1.65 in Q2 2006. Still, as interest rates rise, household debt servicing will increase, albeit gradually as most debt is fixed-rate.

### 7.2. United Kingdom

Regarding the UK, risks of an institutional-framework meltdown and legal insecurity are considered in our AA/Negative Outlook rating for the sovereign, although we do not anticipate a no-deal Brexit and hard landing.

We consider the most probable outcome to negotiations with the EU to be a soft Brexit (Scope's baseline) or no Brexit. The possibility of a hard Brexit will, however, remain central to the public discourse in the period ahead.

Nevertheless, the overall annual growth rate for 2018 is anticipated to be weaker than for 2017 as some factors, which have supported UK resilience to a more rapid slowdown in recent years, wane. These include greater constraints on consumers, with inflation at 2.7% YoY in August, meaning real wage growth has been limited even as regular pay rose by 2.9% in nominal terms in the three months to July. We also note: i) Brexit could bring an acceleration in banking sector migrations and softness in investment; and ii) the export sector's impetus to the economy since the referendum could moderate if there is a slowdown in the euro area (the UK's largest trading partner) alongside ongoing risks to global growth from trade conflicts.

In 2017, the UK grew by 1.7%, the slowest rate since 2012 though only a modest decline from 1.8% in 2016. UK GDP expanded by 0.4% QoQ in Q2, up from 0.2% in Q1, with a monthly estimate of economic performance placing growth at a higher 0.6% in the three months to July versus the three months to April. However, findings of the Centre for Economics and Business Research indicate that inventory stockpiling in preparation for Brexit contingencies provided a temporary boost to UK GDP in the second half of 2018.

Our assessment of the UK's economic performance suggests that the exit process may already have cost the country at least 1.2% in output since the vote. This is based on an analysis of growth of the UK's 10 largest trading partners before and after the 2016 referendum. In the analysis we used the historical relationship between the UK's economic performance and that of its trading partners to approximate UK economic over-/under-performance between Q3 2016 and Q2 2018.

## 8. Counterparty risk

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

### 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 replacement of the collateral manager by considering a stressed senior management fee per period of USD 50,000 and USD 450,000 during and after the reinvestment period, respectively.

Commingling risk from the collateral manager is immaterial for the rated notes, because of Barclays' high credit quality (A+/Stable/S1+ by Scope) and the typically routine intraday transfer of funds to the issuer account bank. Risk is further mitigated through a replacement of the bank as swap counterparty 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 represent material risk for the rated notes**

The class A and class B notes have an expected weighted average life of 4.3 and 6.9 years respectively, including during the reinvestment period. 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 of the US Bancorp. Commingling risk is further mitigated by a replacement trigger of 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 and Vistra (Cayman) Limited, the corporate services provider. The special purpose vehicle is essentially governed by the terms in the documentation. The issuer is incorporated under the laws of the Cayman Islands.

### 9.2. Asset replacement

Barclays is obliged to replace or repurchase any asset in the portfolio that does not comply with eligibility criteria in the documentation, as of the inclusion date. Additionally, Barclays may exchange assets at its own discretion subject to the reinvestment criteria, capped at a 12-month rolling average of 30% of the existing portfolio balance. The exchange must happen at least at par.

We believe the risk of weaker assets being transferred to the portfolio is low, as replacements have to fulfil eligibility criteria and the updated portfolio has to comply with the portfolio profile tests and collateral quality tests.

### 9.3. Use of legal and tax opinions

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

We have reviewed the legal opinions produced for the issuer at the initial issuance date of November 2008. These provide comfort on the issuer's legal structure and supports our 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.

## 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 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**

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.

## 11. Applied methodology and data adequacy

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

Barclays has 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 2008 financial crisis and the recovery environment following that crisis.

## I. Summary of portfolio characteristics

The analysis assumes a portfolio worth USD 9,002.3m, where the actual portfolio totals USD 8,293.4m with USD 708.9m in cash.

| Key features | Preliminary portfolio as of 27 August 2018 | Portfolio limits |
|---|---|---|
| Originator (% of balance) | Barclays Bank Plc | |
| Closing date | 26 November 2018 | |
| Portfolio balance (USD-equivalent) | 8,293.4m | 9,002.3m |
| Number of assets | 902 | N/A |
| Average asset size (USD) | 9.1m | N/A |
| Maximum asset size (USD) | 225.0m | 225.0m |
| Weighted average remaining term | 2.9 years[1] | November 2023 |
| Largest obligor | 2.5% | Max. 2.5% |
| Top four obligors | 9.5% | Max. 10.0% |
| Largest country of incorporation | 62.2% (United States) | |
| Largest currency | 70.2% USD | Min. 70% USD |
| Largest industry sector | 15.7% (banking & finance) | Max. 45% |
| Current weighted average spread | 2.8% | 2.8% |
| Bullet loans | 91.2% | |

[1] Unadjusted for replenishment.

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