

Creditreform Covered Bond Rating

NORD/LB

Public Sector Covered Bond Program

Creditreform 
Rating

| Rating Object | | Program ID | | KrbZK |
|--------------------------------------|---------------|-----------------------------|-----------------------|-------|
| Country Issuer | Germany | Main collateral asset class | Public Sector | |
| Main country of assets | Germany | Legal Framework | German Pfandbrief Act | |
| Covered bonds type | Public Sector | Repayment method | Soft Bullet | |
| Cut-off date Cover pool information: | 31.12.2023 | Publication date: | 23.02.2024 | |

Rating Overview

| Rating Summary | | Key Credit Risk Metrics | |
|--|---------------------|------------------------------|------------|
| Issuer | NORD/LB | Metrics date | 30.10.2023 |
| LT Issuer Rating | A- | Rating Case Default Rate | 14.72% |
| ST Issuer Rating | L2 | Rating Case Recovery Rate | 37.41% |
| +Legal and regulatory framework analysis | +4 Notches | Expected Loss | 9.21% |
| +Liquidity and refinancing risk | +1 Notch | Rating Case Breakeven OC | 15.13% |
| = Rating after 1st uplift | AA+ | Asset-sale discount stressed | 17.01% |
| Cover Pool & cash flow analysis | AAA | Yield Spread stressed | 0.00% |
| + 2nd rating uplift | +1 Notch | | |
| Rating covered bond program / Outlook | AAA / Stable | | |

Program Characteristics

All currencies displayed in EUR

| General Information | | Overcollateralization | |
|-----------------------------|--------------|-------------------------------|--------|
| Bonds Nominal value | 11,833.80 m. | Minimum | 2.00% |
| Cover pool value | 12,942.10 m. | Committed | NR |
| WAL maturity covered bonds | 7.31 Years | Current | 9.37% |
| WAL maturity cover pool | 7.33 Years | | |
| Currency Participations | | Interest Rate types | |
| Euro-denominated Assets | 96.32% | Fixed Rate - Covered Bonds | 98.31% |
| Euro-denominated Bonds | 99.54% | Floating Rate - Covered Bonds | 1.69% |
| Non Euro-denominated Assets | 3.68% | Other Rate -Covered Bonds | 0.00% |
| Non Euro-denominated Bonds | 0.46% | Fixed Rate -Cover Assets | 87.64% |
| | | Floating Rate - Cover Assets | 12.36% |
| | | Other Rate - Cover Assets | 0.00% |

Cover Assets Composition

| General Information | | | |
|---|---------------------------|---|-------------|
| Cover Pool value | 12,942.10 m. | Loans (Public Sector) | 9,716.07 m. |
| Mortgage assets | 0.00 m. | Bonds (Public Sector) | 417.56 m. |
| Public sector assets | 12,386.83 m. | Other (Public Sector) | 2,253.19 m. |
| Other assets | 0.00 m. | Total number of exposures | 3,818 |
| Substitute assets | 555.30 m. | Average Size Loans Public Sector (000s) | 3,244.32 |
| of which Cash | 0.00 m. | Sovereigns (m.) | 867.97 |
| of which Exposures to/ guaranteed by Supranational, Sovereign, Agency (SSA) | 0.00 m. | Regional/ federal authorities (m.) | 2,052.21 |
| of which Exposures to central banks | 0.00 m. | Local/ municipal authorities (m.) | 6,339.91 |
| of which Exposures to credit institutions | 555.29 m. | Others (m.) | 3,126.73 |
| of which Other | 0.00 m. | Weighted Average Seasoning (months) | NR |
| Arrears | % of Public Sector assets | | |
| 1-<30 days | NR | | |
| 30-<60 days | NR | | |
| 60-<90 days | NR | | |
| 90-<180 days | NR | | |
| >= 180 days | NR | | |

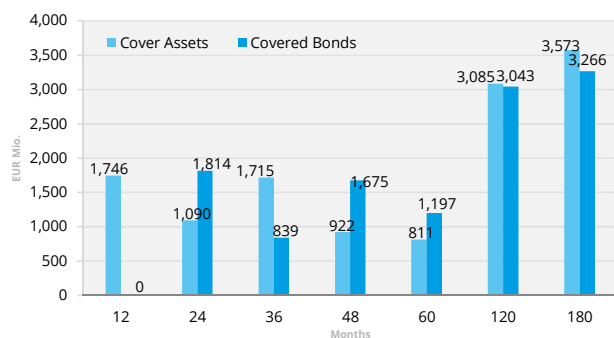
Creditreform Covered Bond Rating

NORD/LB

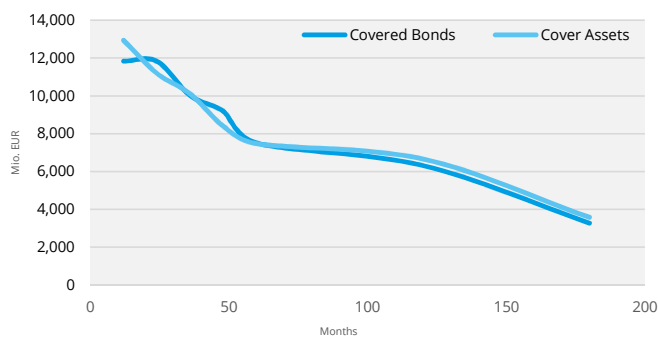
Public Sector Covered Bond Program

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Rating

Distribution by remaining time to maturity



Amortization Profile



Loan Distribution by country (as % of total Public Sector assets)

| Country | % Public Sector Loans |
|----------------|-----------------------|
| Austria | 3.5% |
| Belgium | 2.1% |
| Bulgaria | 0.0% |
| Croatia | 0.0% |
| Cyprus | 0.0% |
| Czech Republic | 0.0% |
| Denmark | 0.6% |
| Estonia | 0.0% |
| Finland | 0.1% |
| France | 1.5% |
| Germany | 87.9% |
| Greece | 0.0% |
| Netherlands | 0.2% |
| Hungary | 0.0% |
| Ireland | 0.0% |
| Italy | 0.0% |
| Latvia | 0.1% |
| Lithuania | 0.0% |
| Luxembourg | 0.8% |
| Malta | 0.0% |
| Poland | 0.2% |
| Portugal | 0.0% |
| Romania | 0.0% |
| Slovakia | 0.0% |
| Slovenia | 0.0% |
| Spain | 0.0% |
| Sweden | 0.1% |
| United Kingdom | 0.5% |
| Iceland | 0.0% |
| Liechtenstein | 0.0% |
| Norway | 0.0% |
| Switzerland | 0.6% |
| Australia | 0.0% |
| Brazil | 0.0% |
| Canada | 0.4% |
| Japan | 0.1% |
| Korea | 0.2% |
| New Zealand | 0.0% |
| Singapore | 0.0% |
| US | 1.0% |
| Other | 0.1% |

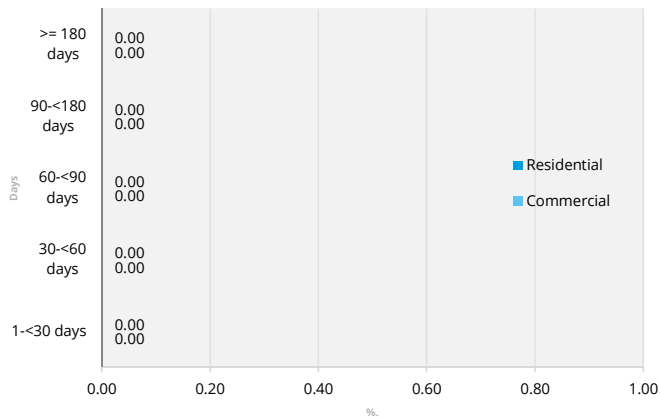
Currency Distribution

| Currency | Covered Bonds | Cover Assets |
|----------|---------------|--------------|
| EUR | 11,779.50 m. | 12,465.90 m. |
| AUD | 0.00 m. | 0.00 m. |
| BRL | 0.00 m. | 0.00 m. |
| CAD | 0.00 m. | 0.00 m. |
| CHF | 0.00 m. | 64.79 m. |
| CZK | 0.00 m. | 0.00 m. |
| DKK | 0.00 m. | 0.00 m. |
| GBP | 0.00 m. | 111.90 m. |
| HKD | 0.00 m. | 0.00 m. |
| ISK | 0.00 m. | 0.00 m. |
| JPY | 0.00 m. | 36.46 m. |
| KRW | 0.00 m. | 0.00 m. |
| NOK | 0.00 m. | 0.00 m. |
| PLN | 0.00 m. | 0.00 m. |
| SEK | 0.00 m. | 0.00 m. |
| SGD | 0.00 m. | 0.00 m. |
| USD | 54.30 m. | 263.06 m. |

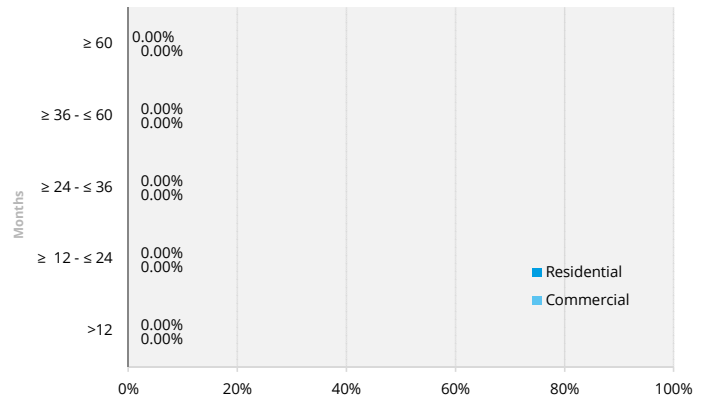
Loan Distribution by Regions (as % of total Public Sector assets)

| Region | % of Public Sector assets |
|------------------------|---------------------------|
| Baden-Wuerttemberg | 5.57% |
| Bavaria | 4.54% |
| Berlin | 5.09% |
| Brandenburg | 0.61% |
| Bremen | 3.01% |
| Hamburg | 2.28% |
| Hesse | 9.97% |
| Mecklenburg-Vorpommern | 3.25% |
| Lower Saxony | 40.13% |
| North Rhine-Westphalia | 12.21% |
| Rhineland-Palatinate | 3.00% |
| Saarland | 0.44% |
| Saxony | 0.50% |
| Saxony-Anhalt | 3.06% |
| Schleswig-Holstein | 5.75% |
| Thuringia | 0.59% |

Arrears Distribution



Seasoning Distribution



LTV Distribution

| Unindexed LTV Distribution Commercial Loans | | | Unindexed LTV Distribution Residential Loans | | |
|---|---------|---------|--|---------|---------|
| LTV | Nominal | % Loans | LTV | Nominal | % Loans |
| >0 - <=40 % | NR | NR | >0 - <=40 % | NR | NR |
| >40 - <=50 % | NR | NR | >40 - <=50 % | NR | NR |
| >50 - <=60 % | NR | NR | >50 - <=60 % | NR | NR |
| >60 - <=70 % | NR | NR | >60 - <=70 % | NR | NR |
| >70 - <=80 % | NR | NR | >70 - <=80 % | NR | NR |
| >80 - <=90 % | NR | NR | >80 - <=90 % | NR | NR |
| >90 - <=100 % | NR | NR | >90 - <=100 % | NR | NR |
| >100% | NR | NR | >100% | NR | NR |

Transaction Parties

Swap Counterparties

| Key Transaction parties | Name | LEI | Counterparty Name | LEI | Type of swap |
|-------------------------|---------|----------------------|----------------------------------|-----|--------------|
| Issuer | NORD/LB | DSNHHQ2B9X5N6OUJ1236 | NR | NR | NR |
| | | | | | |
| | | | <i>Type of swap arrangements</i> | | |
| | | | Intra-group interest rate swaps | | No |
| | | | Intra-group currency rate swaps | | No |

ISIN List of rated securities

| Issuer | ISIN | Coupon Type | Coupon Rate (%) | Issue date | Maturity date | Program ID |
|---------|--------------|-------------|-----------------|------------|---------------|------------|
| NORD/LB | DE000NLB1LD6 | Fix | 2.13 | 24.04.2013 | 24.04.2028 | KrbZK |
| NORD/LB | DE000NLB34V8 | Fix | 3.25 | 10.01.2023 | 10.02.2025 | KrbZK |
| NORD/LB | DE000BRL3280 | Fix | 0.75 | 25.02.2015 | 25.02.2025 | KrbZK |
| NORD/LB | DE000NLB8CC2 | Fix | 2.27 | 25.04.2014 | 25.04.2029 | KrbZK |
| NORD/LB | DE000NLB2JX6 | Fix | 1.13 | 18.05.2015 | 18.07.2025 | KrbZK |
| NORD/LB | DE000NLB8739 | Fix | 0.63 | 18.01.2017 | 18.01.2027 | KrbZK |
| NORD/LB | DE000BRL3298 | Fix | 1.00 | 15.05.2015 | 15.05.2025 | KrbZK |
| NORD/LB | DE000NLB34X4 | Fix | 2.75 | 16.01.2023 | 15.07.2027 | KrbZK |
| NORD/LB | DE000NLB2Q36 | Fix | 0.38 | 09.10.2017 | 09.10.2024 | KrbZK |
| NORD/LB | DE000NLB85X6 | Fix | 0.25 | 28.10.2016 | 28.10.2026 | KrbZK |
| NORD/LB | DE000NLB4XD5 | Fix | 3.95 | 26.10.2023 | 18.04.2024 | KrbZK |
| NORD/LB | DE000NLB4XE3 | Fix | 3.50 | 21.11.2023 | 21.11.2033 | KrbZK |
| NORD/LB | DE000BRL3264 | Fix | 1.00 | 11.12.2014 | 11.12.2024 | KrbZK |

Data Definitions

The data is presented with a cut-off date. Following the clarification regarding the source of information:

Issuer: Issuer source of information includes all available public information, i.e. Investor Reports, Harmonised Transparency Templates "HTT", National Transparency Templates "NTT", Prospectus etc.

Information not applicable for the jurisdiction and not relevant for the issuer and/or CB program at the present time will be labeled as "NR" (Not Relevant)

Information not disclosed by the issuer will be labeled as "ND" (Not Disclosed)

| Field Name | Source | Definition |
|---|--------|--|
| Program ID | CRA | Unique CRA internal identification for a rating |
| Covered bonds type | Issuer | The covered bonds type (public sector covered bonds or mortgage covered bonds) |
| Country Issuer | Issuer | The issuer country |
| Main country of assets | Issuer | The country with the maximum participation of cover assets |
| Main collateral asset class | Issuer | The main collateral asset class of the covered bonds |
| Legal framework | CRA | The set of legislative and regulatory rules of the respective jurisdiction that regulates the covered bonds (CB) program |
| Bonds Nominal value | Issuer | The total amount of outstanding covered bonds as of cut-off date expressed in millions |
| Cover pool value | Issuer | Aggregate value of all cover assets in the cover pool (incl. Substitute assets) as of cut-off date expressed in millions |
| WAL maturity covered bonds | Issuer | The weighted average remaining maturity of all outstanding covered bonds in years |
| WaL maturity cover pool | Issuer | The weighted average remaining maturity of all outstanding covered assets in years |
| Repayment method | Issuer | Hard Bullet: Covered bonds are repaid on the maturity date which cannot be extended Soft Bullet: The maturity date of the covered bonds can be extended by a fixed period Conditional pass-through (CPT): Covered bonds with a scheduled maturity date, and an extension mechanism defined by certain conditions Hard & Soft Bullet: The covered bond program with a combination of hard bullet and soft bullet maturity structures |
| Overcollateralization (OC) - Current | CRA | The proportion of cover assets that exceeds the current outstanding covered bonds, calculated as $\frac{[(\text{Cover pool value}) - (\text{outstanding covered bonds})]}{(\text{outstanding covered bonds})} * 100$ |
| Overcollateralization (OC) - Minimum | CRA | The minimum OC level that the issuer must maintain according to the respective CB legislation |
| Overcollateralization (OC) - Committed | CRA | The minimum OC level that the issuer has committed to maintain, as published in its public available reports. If no level of committed OC is reported, the field shows "NR" (Not Relevant) |
| Fixed Rate - Covered Bonds | Issuer | Share of covered bonds paying a fixed rate of interest |
| Floating Rate - Covered Bonds | Issuer | Share of covered bonds paying a floating rate of interest |
| Other Rate -Covered Bonds | Issuer | Share of covered bonds paying an other rate of interest |
| Fixed Rate -Cover Assets | Issuer | Share of cover assets yielding a fixed rate of interest |
| Floating Rate - Cover Assets | Issuer | Share of cover assets yielding a floating rate of interest |
| Other Rate - Cover Assets | Issuer | Share of cover assets yielding an other rate of interest |
| Euro-denominated Assets | Issuer | Share of cover assets denominated in Euros, in percentage of total cover pool value |
| Euro-denominated Bonds | Issuer | Share of covered bonds denominated in Euros, in percentage of bonds nominal value |
| Non Euro-denominated Assets | Issuer | Share of cover assets denominated in currencies other than Euros, in percentage of total cover pool value |
| Non Euro-denominated Bonds | Issuer | Share of covered bonds denominated in currencies other than Euros, in percentage of bonds nominal value |
| LT Issuer Rating | CRA | Long-term ratings assess the default risks for each category of a bank's financial instruments with a residual term-to-maturity of more than one year |
| ST Issuer Rating | CRA | Short-term ratings assess the default risks for each category of a bank's financial instruments with a residual term-to-maturity of less than one year |
| Legal and regulatory framework analysis | CRA | A qualitative assessment of legislative and regulatory rules of the respective covered bonds program |
| Liquidity and refinancing risk | CRA | A qualitative assessment of regulatory requirements for the liquidity and refinancing risk of the respective covered bonds program |
| First rating uplift | CRA | The rating after adding up the notches from Legal and regulatory framework analysis and Liquidity and refinancing risk with LT Issuer rating |
| Cover pool and cash flow analysis | CRA | The quantitative assessment of the cover assets and covered bonds at different rating-level stressed scenarios |
| Second rating uplift | CRA | The rating after adding up the notches from cash-flow analysis with 1st rating uplift (only effective if the rating from cash-flow analysis is higher than the 1st rating uplift) |
| Rating covered bond program / Outlook | CRA | Final rating and outlook of the covered bond program |

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Information not applicable for the jurisdiction and not relevant for the issuer and/or CB program at the present time will be labeled as "NR" (Not Relevant)

| Field Name | Source | Definition |
|---|--------|--|
| Metrics date | CRA | The date on which CRA assigned the initial / follow-up rating of the covered bond program, as well as the proprietary metrics to determine the rating of the covered bonds program |
| Rating Case Default Rate (RDR) | CRA | Stressed default rate of the cover assets represented by the base case stressed scenario |
| Rating Case Recovery Rate (RRR) | CRA | Stressed recovery rate of the defaulted assets represented by the base case stressed scenario |
| Expected Loss | CRA | Stressed loss rate of the cover assets represented by the base case stressed scenario. The expected loss rate has been calculated as $[RDR \cdot (1 - RRR)]$ [%] |
| Rating Case Breakeven OC | CRA | The required stressed OC level compatible with the base case rating |
| Asset-sale discount stressed | CRA | Stressed Asset value haircuts of the main collateral asset class represented by the base case stressed scenario |
| Yield Spread stressed | CRA | Stressed positive yield spreads between covered bonds and cover assets represented by the base case stressed scenario |
| Average Seasoning | Issuer | Average length of the loans from the origination date to the cut-off date in months |
| Loan Size | Issuer | Average size of the loans (i.e. Total value of cover assets / Number of loans) |
| Mortgage assets | Issuer | Outstanding mortgage assets in the cover pool expressed in millions |
| Public sector assets | Issuer | Outstanding public sector assets in the cover pool expressed in millions |
| Other assets | Issuer | Outstanding other assets in the cover pool expressed in millions |
| Substitute assets | Issuer | Outstanding substitute assets in the cover pool expressed in millions |
| Residential mortgage value | Issuer | Outstanding residential mortgage loans in the cover pool expressed in millions |
| Commercial mortgage value | Issuer | Outstanding commercial mortgage loans in the cover pool expressed in millions |
| Other mortgage value | Issuer | Outstanding other mortgage loans in the cover pool expressed in millions |
| Loans (Public Sector) | Issuer | Outstanding loans among public sector assets expressed in millions |
| Bonds (Public Sector) | Issuer | Outstanding bonds among public sector assets expressed in millions |
| Other (Public sector) | Issuer | Outstanding other loans among public sector assets expressed in millions |
| Sovereigns (m.) | Issuer | Outstanding Sovereigns loans among public sector assets expressed in millions |
| Regional/ federal authorities (m.) | Issuer | Outstanding regional governments loans among public sector assets expressed in millions |
| Local/ municipal authorities (m.) | Issuer | Outstanding local governments loans among public sector assets expressed in millions |
| Others (m.) | Issuer | Outstanding loans of other debtors among public sector assets expressed in millions |
| of which Cash | Issuer | Nominal value of total cash in the substitute assets expressed in millions |
| of which Exposures to/ guaranteed by Supranational, Sovereign, Agency (SSA) | Issuer | Nominal value of the exposures to/ guaranteed by Supranational, Sovereign, Agency (SSA) in the substitute assets expressed in millions |
| of which Exposures to central banks | Issuer | Nominal value of the exposures to central banks in the substitute assets expressed in millions |
| of which Exposures to credit institutions | Issuer | Nominal value of the exposures to credit institutions in the substitute assets expressed in millions |
| of which Other | Issuer | Nominal value of the other type of exposures in the substitute assets expressed in millions |
| Total number of exposures | Issuer | Total number of public sector exposures or total number of mortgage loans in the cover assets |
| Arrears % of public sector assets | Issuer | Percentage of public sector loans with arrears |
| Arrears % of residential loans | Issuer | Percentage of residential mortgage loans with arrears |
| Arrears % of commercial loans | Issuer | Percentage of commercial mortgage loans with arrears |
| 1-<30 days | Issuer | Percentage of loans with arrears of less than 30 days |
| 30-<60 days | Issuer | Percentage of loans with arrears between 30 and 60 days |
| 60-<90 days | Issuer | Percentage of loans with arrears between 60 and 90 days |
| 90-<180 days | Issuer | Percentage of loans with arrears between 90 and 180 days |
| >= 180 days | Issuer | Percentage of loans with arrears equal or above 180 days |
| Distribution by remaining time to maturity | CRA | The remaining residual life of cover pool assets and the remaining maturity of covered bonds in months |

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| Field Name | Source | Definition |
|--|---------|---|
| LTV | Issuer | The loan-to-value (LTV) is the ratio of a loan to the value of the property securing the loan |
| Unindexed LTV Distribution Commercial Loans | Issuer | Unindexed LTV distribution of commercial loans represented by finite continuous distributions of intervals expressed in volume and percentage of total commercial loans |
| Indexed LTV Distribution Commercial Loans | Issuer | Indexed LTV distribution of commercial loans represented by finite continuous distributions of intervals expressed in volume and percentage of total commercial loans |
| Unindexed LTV Distribution Residential Loans | Issuer | Unindexed LTV distribution of residential loans represented by finite continuous distributions of intervals expressed in volume and percentage of total residential loans |
| Indexed LTV Distribution Residential Loans | Issuer | Indexed LTV distribution of residential loans represented by finite continuous distributions of intervals expressed in volume and percentage of total residential loans |
| Loan distribution by country | Issuer | The share of cover assets across countries represented by the respective asset classes |
| Loan distribution by region | Issuer | The regional distribution of cover assets of the main country of collateral asset class in percentage |
| Currency distribution | Issuer | Distribution of currencies of the covered bonds and cover assets expressed in millions |
| Arrears Distribution | Issuer | The distribution of arrears of the cover assets with respect to each asset class |
| Seasoning Distribution | Issuer | The distribution of seasoning of the cover assets with respect to each asset class |
| Amortization Profile | CRA | The maturity structure of the cover assets and liabilities |
| % Residential Loans | Issuer | Outstanding value of loans that are secured by the residential property expressed as % of total outstanding loans in the cover pool |
| % Commercial Loans | Issuer | Outstanding value of loans that are secured by the commercial property expressed as % of total outstanding loans in the cover pool |
| LEI | CRA | Legal Entity Identifier (LEI) enables unique identification of legal entities in financial transactions |
| Transaction parties | Issuer | Key transaction parties of the covered bond program |
| Fixed Coupon | Issuer | All assets and liabilities in the covered bond program that yield a fixed interest rate |
| Floating Coupon | Issuer | All assets and liabilities in the covered bond program that have variable interest rates |
| EIEURxM | Reuters | Euro x Month EURIBOR |
| EURSWExY | Reuters | Euro x Year Interest Rate Swap Fixing |

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