

# RatingsDirect®

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## Update: Deutsche Bank AG

**Primary Credit Analyst:**

Richard Barnes, London + 44 20 7176 7227; richard.barnes@spglobal.com

**Secondary Contact:**

Benjamin Heinrich, CFA, FRM, Frankfurt + 49 693 399 9167; benjamin.heinrich@spglobal.com

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# Update: Deutsche Bank AG

## Ratings Score Snapshot

### Global Scale Ratings

#### Issuer Credit Rating

A/Stable/A-1

#### Resolution Counterparty Rating

A+/-/A-1

Turkey National Scale

Issuer Credit Rating

trAAA/-/trA-1+

SACP: bbb+ →

Support: +2 →

Additional factors: 0

|                      |          |    |
|----------------------|----------|----|
| Anchor               | bbb+     |    |
| Business position    | Adequate | 0  |
| Capital and earnings | Adequate | 0  |
| Risk position        | Moderate | -1 |
| Funding              | Adequate | 0  |
| Liquidity            | Adequate |    |
| CRA adjustment       | +1       |    |

|                   |    |
|-------------------|----|
| ALAC support      | +2 |
| GRE support       | 0  |
| Group support     | 0  |
| Sovereign support | 0  |

| Issuer credit rating           |
|--------------------------------|
| <b>A/Stable/A-1</b>            |
| Resolution counterparty rating |
| <b>A+/A-1</b>                  |

ALAC--Additional loss-absorbing capacity. CRA--Comparable ratings analysis. GRE--Government-related entity. ICR--Issuer credit rating. SACP--Stand-alone credit profile.

## Credit Highlights

### Overview

| Key strengths  | Key risks  |
|--|--|
| Broad business model serving retail, corporate, and institutional clients.                   | Although improving, earnings and efficiency metrics lag most rating peers.     |
| Improving strategic execution and profitability, with a tailwind from higher interest rates. | Inherent complexity and cyclical nature of the large investment bank division. |
| Solid capital, funding, and liquidity profiles.  | Weak economic growth, particularly in the bank's home market.                  |

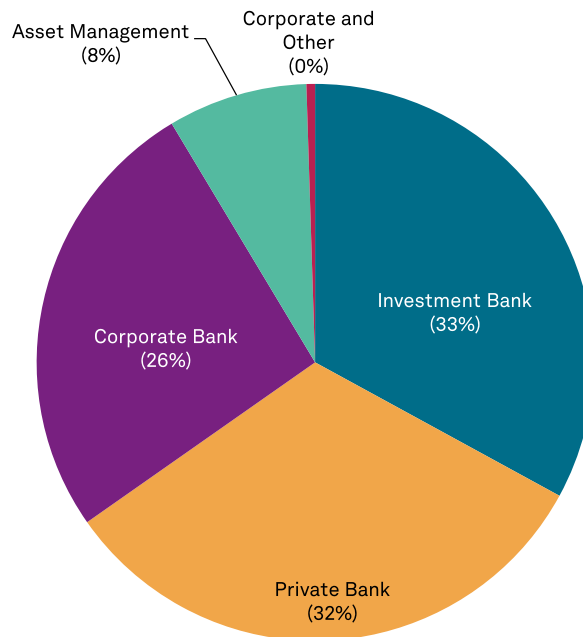
**We raised the rating in December 2023 because Deutsche Bank is strengthening its resilience and performance.** The 2019-2022 transformation program established a more focused and profitable bank, and management is now focused on delivering franchise growth and operating leverage (see "Deutsche Bank Issuer Credit Ratings Raised To 'A/A-1' On Strengthening Performance And Resilience; Outlook Stable," published on Dec. 8, 2023). Like those of peers, its retail and corporate banking activities have received a cyclical boost from higher interest rates that provides greater balance

to the large investment bank division (see chart 1). We also see structural improvements including more disciplined strategic execution and a stronger focus on cost efficiency.

**Chart 1**

**Reasonably diverse revenue base**

Divisional revenues in the first nine months of 2023

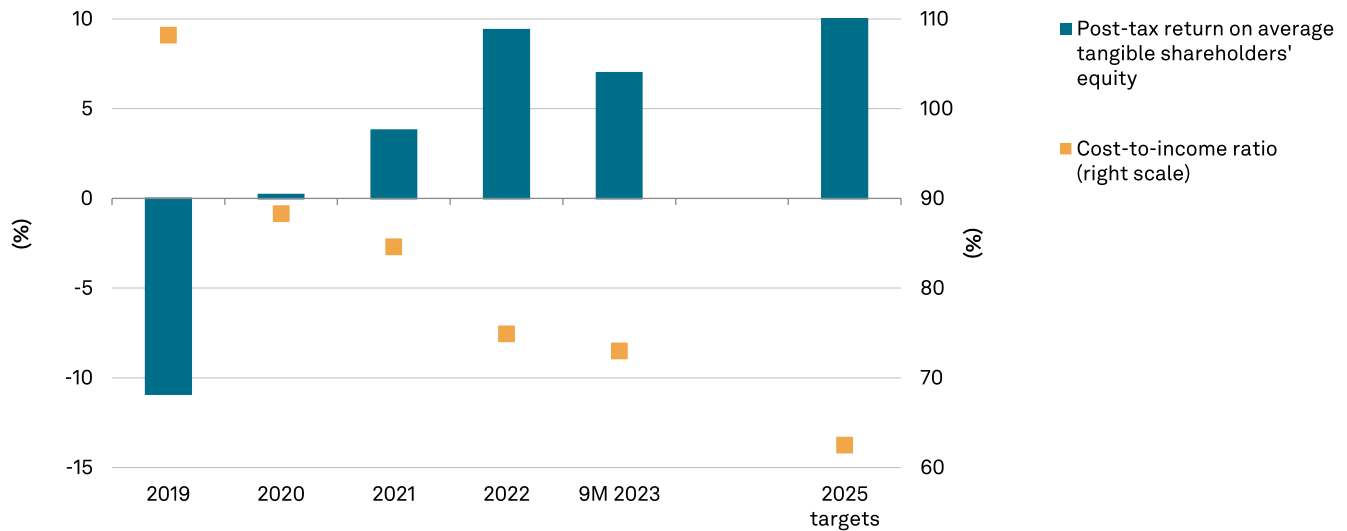


Source: Deutsche Bank.  
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**Deutsche Bank targets further progress through 2025.** It will narrow the performance gap with peers if it achieves its 2025 financial targets, which include a return on tangible equity above 10% and cost-to-income ratio below 62.5% (see chart 2). We think it will make progress toward its goals if it maintains its recent momentum and the external operating environment evolves broadly in line with our base-case expectations.

**Chart 2****Strengthened performance since the start of the transformation program**

Trends in shareholder returns and cost efficiency



The 2025 targets are a return on tangible equity above 10% and a cost-to-income ratio below 62.5%. 9M--Nine month.

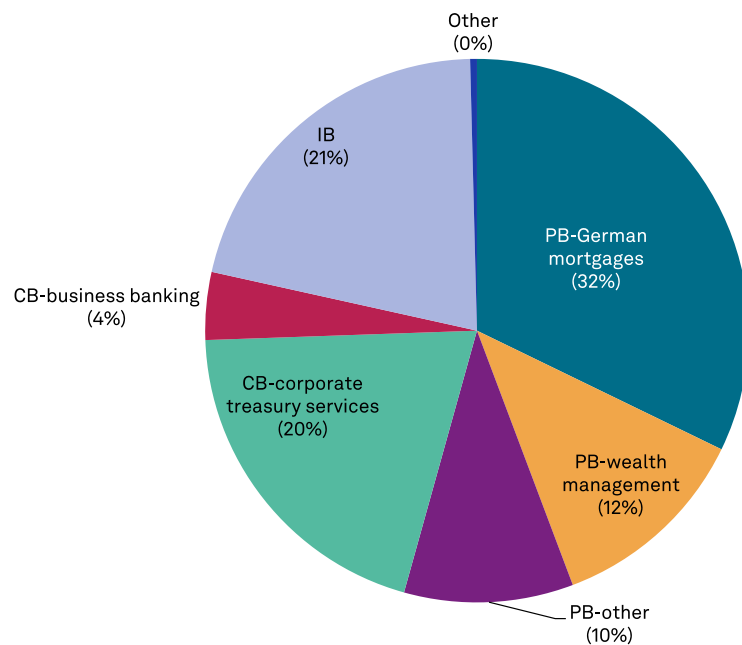
Source: Deutsche Bank.

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***We see pockets of risk within the generally robust loan portfolio.*** Deutsche Bank's lending is diversified and well-collateralized, and has performed solidly despite tepid economic growth, particularly in its home market of Germany (see chart 3). Credit loss charges were 28 basis points (bps) of average loans in the first nine months of 2023, and the bank expects the full-year figure to be at the upper end of the 25 bps-30 bps range. The portfolio includes certain exposures that we see as higher risk, notably elements of the €32 billion non-recourse commercial real estate (CRE) loan book that falls within the scope of the bank's severe stress test. Elevated refinancing risks, particularly in the U.S., mean that CRE is likely to remain a material contributor to the bank's credit loss charges in 2024. The bank's CRE stress test indicates potential losses of €900 million in a severe downturn scenario, which would be an earnings event rather than a hit to capital.

**Chart 3****Diverse, well-collateralized loan portfolio**

Gross IFRS loans at Sep. 30, 2023



PB--Private Bank. CB--Corporate Bank. IB--Investment Bank. IFRS--International Financial Reporting Standards. Source: Deutsche Bank.

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We see operational and other nonfinancial risks as a material component of Deutsche Bank's risk profile. It appears on track in taking remedial action to strengthen its systems and controls, including its anti-financial crime framework.

***We think Deutsche Bank has supportive capitalization and loss-absorbing capacity.*** Its regulatory metrics and guidance surprised on the upside in the third quarter of 2023. The common equity Tier 1 ratio improved to 13.9% and management indicated that it will potentially free up about €3 billion more capital than it previously planned. As a result, it looks likely to raise its €8 billion target for shareholder distributions in 2021-2025, which we reflect in our risk-adjusted capital (RAC) projection alongside other relevant factors.

The RAC ratio was 10.1% at year-end 2022, but a February 2023 change in our economic risk assessment for Germany lowered it by 21 basis points on a pro forma basis. We expect the ratio will rise to 10.0%-10.5% at year-end 2025 but our capital and earnings assessment remains adequate and a neutral rating factor. This is because the projected ratio only marginally exceeds our 10% threshold and we consider that Deutsche Bank's capital, earnings, and financial flexibility metrics are not currently supportive of a stronger outcome. Our additional loss-absorbing capacity ratio (ALAC) is set to remain comfortably above the 6.5% threshold for a two-notch ALAC rating uplift.

**Deutsche Bank's funding and liquidity profiles are neutral to the rating.** The 132% liquidity coverage ratio and 121% net stable funding ratio as of Sept. 30, 2023, were consistent with internal targets. We view positively that 71% of the deposit base came from the bank's home market and, excluding bank deposits, 39% of the deposit base was insured. Deutsche Bank's liquidity position was tested in March 2023 following short selling of its shares and it navigated this short-lived stress well, in our view.

**We incorporate a positive comparable rating analysis (CRA) adjustment in the rating.** The adjustment is informed by peer analysis and captures attributes not fully captured in our other rating factors. Specifically, we think the improvements outlined above in Deutsche Bank's business position, capital and earnings, and risk position do not warrant a higher assessment for those individual factors but cumulatively merit a stronger rating outcome.

## Outlook

The stable outlook reflects our expectation that Deutsche Bank will maintain its disciplined strategic execution and strengthen its performance toward its 2025 targets. This progress would further improve the bank's resilience to unexpected stress. It also assumes that the bank's asset quality will remain robust amid slow economic growth and geopolitical upheaval, and it will maintain sound capital and liquidity ratios in line with management's guidance.

If we were to improve our capital and earnings assessment during our two-year outlook horizon, we would likely remove the positive CRA adjustment and affirm the issuer credit and issue ratings.

### Downside scenario

We could lower the ratings if Deutsche Bank fails to deliver a stronger and more consistent performance, resulting in a noteworthy repositioning of its business and operating models. An escalation of economic and geopolitical risks could also pressure the ratings if it significantly weakens the bank's prospective asset quality and earnings.

### Upside scenario

An upgrade is unlikely over the outlook horizon but could occur if Deutsche Bank positions its creditworthiness closer to peers with 'a-' group stand-alone credit profiles. We would look for evidence of franchise growth, stronger and more consistent performance, balanced divisional earnings contributions, and robust balance sheet metrics.

## Key Metrics

### Deutsche Bank AG--Key ratios and forecasts

| (%)  | --Fiscal year ended Dec. 31-- |       |         |         |         |
|--|-------------------------------|-------|---------|---------|---------|
|  | 2021a                         | 2022a | 2023f   | 2024f   | 2025f   |
| Growth in operating revenue                      | 5.7                           | 5.5   | 7.0-8.0 | 1.0-2.0 | 2.0-3.0 |
| Growth in customer loans                         | 9.9                           | 2.7   | 0.5-1.5 | 1.0-2.0 | 1.0-2.0 |
| Net interest income/average earning assets (NIM) | 1.6                           | 1.9   | 1.8-2.0 | 1.8-2.0 | 1.7-1.9 |

**Deutsche Bank AG--Key ratios and forecasts (cont.)**

|   | <b>--Fiscal year ended Dec. 31--</b> |              |              |              |              |
|---|--------------------------------------|--------------|--------------|--------------|--------------|
| <b>(%)</b>                                      | <b>2021a</b>                         | <b>2022a</b> | <b>2023f</b> | <b>2024f</b> | <b>2025f</b> |
| Cost to income ratio                            | 82.8                                 | 75.8         | 69-72        | 67-70        | 66-69        |
| Return on average common equity                 | 4.2                                  | 9.2          | 7.0-8.0      | 7.5-8.5      | 8.0-9.0      |
| New loan loss provisions/average customer loans | 0.1                                  | 0.3          | 0.25-0.35    | 0.25-0.35    | 0.2-0.3      |
| Gross nonperforming assets/customer loans       | 2.7                                  | 2.6          | 2.5-2.8      | 2.5-2.8      | 2.3-2.6      |
| Risk-adjusted capital ratio                     | 9.9                                  | 10.1         | 10.0-10.5    | 10.0-10.5    | 10.0-10.5    |

All figures are S&P Global Ratings-adjusted. a--Actual. f--Forecast. NIM--Net interest margin.

**Key Statistics****Table 1****Deutsche Bank AG--Key figures**

|                        | <b>--Year-ended Dec. 31--</b> |             |             |             |             |
|------------------------|-------------------------------|-------------|-------------|-------------|-------------|
| <b>(Mil. €)</b>        | <b>2023*</b>                  | <b>2022</b> | <b>2021</b> | <b>2020</b> | <b>2019</b> |
| Adjusted assets        | 1,350,939.0                   | 1,329,696.0 | 1,317,169.0 | 1,318,534.0 | 1,290,645.0 |
| Customer loans (gross) | 484,760.0                     | 481,343.0   | 468,467.0   | 426,427.0   | 427,733.0   |
| Adjusted common equity | 52,764.0                      | 52,508.6    | 49,643.3    | 46,140.6    | 47,160.4    |
| Operating revenues     | 22,220.0                      | 26,806.0    | 25,400.0    | 24,028.0    | 23,163.0    |
| Noninterest expenses   | 16,089.0                      | 20,327.0    | 21,030.0    | 20,527.0    | 23,233.0    |
| Core earnings          | 3,596.0                       | 5,317.0     | 2,975.0     | 1,312.0     | (3,423.0)   |

\*Data as of Sept. 30.

**Table 2****Deutsche Bank AG--Business position**

|   | <b>--Year-ended Dec. 31--</b> |             |             |             |             |
|---|-------------------------------|-------------|-------------|-------------|-------------|
| <b>(%)</b>  | <b>2023*</b>                  | <b>2022</b> | <b>2021</b> | <b>2020</b> | <b>2019</b> |
| Total revenues from business line (currency in millions)        | 22,220.0                      | 27,210.0    | 25,410.0    | 24,028.0    | 23,163.0    |
| Commercial banking/total revenues from business line            | 26.1                          | 23.3        | 20.3        | 21.4        | 22.7        |
| Retail banking/total revenues from business line                | 32.3                          | 33.6        | 32.4        | 33.8        | 35.6        |
| Commercial and retail banking/total revenues from business line | 58.4                          | 56.9        | 52.7        | 55.2        | 58.3        |
| Trading and sales income/total revenues from business line      | 33.0                          | 36.8        | 37.9        | 38.6        | 30.1        |
| Asset management/total revenues from business line              | 8.1                           | 9.6         | 10.7        | 9.3         | 10.1        |
| Other revenues/total revenues from business line                | 0.5                           | (3.3)       | (1.2)       | (3.1)       | 1.6         |
| Investment banking/total revenues from business line            | 33.0                          | 36.8        | 37.9        | 38.6        | 30.1        |
| Return on average common equity                                 | 7.2                           | 9.2         | 4.2         | 0.9         | (9.1)       |

\*Data as of Sept. 30.

Table 3

| Deutsche Bank AG--Capital and earnings               |                        |      |      |      |       |
|--|------------------------|------|------|------|-------|
|  | --Year-ended Dec. 31-- |      |      |      |       |
| (%)  | 2023*                  | 2022 | 2021 | 2020 | 2019  |
| Tier 1 capital ratio                                 | 16.3                   | 15.7 | 15.6 | 15.3 | 15.0  |
| S&P Global Ratings' RAC ratio before diversification | N/A                    | 10.1 | 9.9  | 9.4  | 9.4   |
| S&P Global Ratings' RAC ratio after diversification  | N/A                    | 11.7 | 11.5 | 11.1 | 11.1  |
| Adjusted common equity/total adjusted capital        | 86.0                   | 86.0 | 84.9 | 86.9 | 87.9  |
| Net interest income/operating revenues               | 46.7                   | 50.9 | 43.9 | 48.0 | 59.4  |
| Fee income/operating revenues                        | 31.6                   | 36.7 | 43.0 | 39.2 | 41.1  |
| Market-sensitive income/operating revenues           | 16.8                   | 9.8  | 13.4 | 13.0 | 2.0   |
| Cost to income ratio                                 | 72.4                   | 75.8 | 82.8 | 85.4 | 100.3 |
| Preprovision operating income/average assets         | 0.6                    | 0.5  | 0.3  | 0.3  | (0.0) |
| Core earnings/average managed assets                 | 0.4                    | 0.4  | 0.2  | 0.1  | (0.3) |

\*Data as of Sept. 30. N/A--Not applicable. RAC--Risk-adjusted capital.

Table 4

| Deutsche Bank AG--Risk-adjusted capital framework data |                 |                      |                                |                                    |   |
|--|-----------------|----------------------|--------------------------------|------------------------------------|---|
| (Mil. €)   | Exposure*       | Basel III RWA        | Average Basel III RW(%)        | S&P Global Ratings' RWA            | Average S&P Global Ratings' RW (%)      |
| <b>Credit risk</b>                                     |                 |                      |                                |                                    |   |
| Government and central banks                           | 267,580         | 16,673               | 6                              | 4,363                              | 2                                       |
| Of which regional governments and local authorities    | 6,642           | 10                   | 0                              | 241                                | 4                                       |
| Institutions and CCPs                                  | 60,726          | 8,677                | 14                             | 14,314                             | 24                                      |
| Corporate  | 386,161         | 145,179              | 38                             | 307,039                            | 80                                      |
| Retail   | 236,417         | 60,500               | 26                             | 74,162                             | 31                                      |
| Of which mortgage                                      | 186,833         | 36,724               | 20                             | 41,773                             | 22                                      |
| Securitization§  | 71,168          | 13,092               | 18                             | 20,229                             | 28                                      |
| Other assets†  | 5,287           | 1,252                | 24                             | 17,591                             | 333                                     |
| Total credit risk                                      | 1,027,339       | 245,372              | 24                             | 437,697                            | 43                                      |
| <b>Credit valuation adjustment</b>                     |                 |                      |                                |                                    |   |
| Total credit valuation adjustment                      | --              | 6,184                | --                             | 24,819                             | --                                      |
| <b>Market risk</b>                                     |                 |                      |                                |                                    |   |
| Equity in the banking book                             | 6,208           | 13,021               | 210                            | 32,503                             | 524                                     |
| Trading book market risk                               | --              | 26,132               | --                             | 36,508                             | --                                      |
| Total market risk                                      | --              | 39,153               | --                             | 69,011                             | --                                      |
| <b>Operational risk</b>                                |                 |                      |                                |                                    |   |
| Total operational risk                                 | --              | 58,349               | --                             | 70,766                             | --                                      |
|  | <b>Exposure</b> | <b>Basel III RWA</b> | <b>Average Basel II RW (%)</b> | <b>S&amp;P Global Ratings' RWA</b> | <b>% of S&amp;P Global Ratings' RWA</b> |
| <b>Diversification adjustments</b>                     |                 |                      |                                |                                    |   |
| RWA before diversification                             | --              | 362,183              | --                             | 602,293                            | 100                                     |



Table 4

| Deutsche Bank AG--Risk-adjusted capital framework data (cont.) |    |                           |                         |                                   |  |
|--|----|---------------------------|-------------------------|-----------------------------------|--|
| Total diversification/<br>Concentration adjustments            | -- | --                        | --                      | (79,904)                          | (13)   |
| RWA after diversification                                      | -- | 362,183                   | --                      | 522,389                           | 87   |
|  |    | <b>Tier 1<br/>capital</b> | <b>Tier 1 ratio (%)</b> | <b>Total adjusted<br/>capital</b> | <b>S&amp;P Global Ratings'<br/>RAC ratio (%)</b> |
| <b>Capital ratio</b>   |    |                           |                         |                                   |  |
| Capital ratio before adjustments                               |    | 56,616                    | 15.6                    | 61,087                            | 10.1   |
| Capital ratio after adjustments†                               |    | 56,616                    | 15.7                    | 61,087                            | 11.7   |

\*Exposure at default. §Securitization exposure includes the securitization tranches deducted from capital in the regulatory framework. †Exposure and S&P Global Ratings' risk-weighted assets for equity in the banking book include minority equity holdings in financial institutions.

‡Adjustments to tier 1 ratio are additional regulatory requirements (e.g. transitional floor or pillar 2 add-ons). RWA--Risk-weighted assets. RW--Risk weight. RAC--Risk-adjusted capital. Sources: Company data as of Dec. 31, 2022, S&P Global Ratings.

Table 5

| Deutsche Bank AG--Risk position   |                        |        |        |        |        |  |
|---|------------------------|--------|--------|--------|--------|--|
|   | --Year-ended Dec. 31-- |        |        |        |        |  |
| (%)   | 2023*                  | 2022   | 2021   | 2020   | 2019   |  |
| Growth in customer loans  | 0.9                    | 2.7    | 9.9    | (0.3)  | 7.5    |  |
| Total diversification adjustment/S&P Global Ratings' RWA before diversification | N/A                    | (13.3) | (14.1) | (15.6) | (15.2) |  |
| Total managed assets/adjusted common equity (x)                                 | 25.7                   | 25.5   | 26.7   | 28.7   | 27.5   |  |
| New loan loss provisions/average customer loans                                 | 0.3                    | 0.3    | 0.1    | 0.4    | 0.2    |  |
| Net charge-offs/average customer loans  | 0.2                    | 0.2    | 0.1    | 0.2    | 0.2    |  |
| Gross nonperforming assets/customer loans + other real estate owned             | 2.6                    | 2.6    | 2.7    | 2.8    | 2.2    |  |
| Loan loss reserves/gross nonperforming assets                                   | 40.2                   | 39.0   | 37.8   | 41.3   | 42.6   |  |

\*Data as of Sept. 30. N/A--Not applicable. RWA--Risk-weighted assets.

Table 6

| Deutsche Bank AG--Funding and liquidity              |                        |       |       |       |       |
|--|------------------------|-------|-------|-------|-------|
|  | --Year-ended Dec. 31-- |       |       |       |       |
| (%)  | 2023*                  | 2022  | 2021  | 2020  | 2019  |
| Core deposits/funding base                           | 70.1                   | 61.7  | 59.7  | 60.0  | 61.3  |
| Customer loans (net)/customer deposits               | 78.5                   | 88.8  | 89.3  | 85.6  | 85.5  |
| Long-term funding ratio                              | 84.6                   | 76.1  | 74.8  | 75.5  | 77.6  |
| Stable funding ratio                                 | 98.3                   | 93.2  | 94.2  | 104.1 | 105.3 |
| Short-term wholesale funding/funding base            | 16.5                   | 25.7  | 27.0  | 26.2  | 24.0  |
| Regulatory net stable funding ratio                  | 121.0                  | 120.0 | 121.0 | N/A   | N/A   |
| Broad liquid assets/short-term wholesale funding (x) | 1.9                    | 1.3   | 1.2   | 1.6   | 1.7   |
| Broad liquid assets/total assets                     | 19.9                   | 21.2  | 22.0  | 26.6  | 25.7  |
| Broad liquid assets/customer deposits                | 44.2                   | 52.9  | 56.1  | 71.5  | 67.3  |
| Net broad liquid assets/short-term customer deposits | 21.0                   | 11.4  | 11.0  | 28.2  | 28.7  |
| Regulatory liquidity coverage ratio (LCR) (x)        | 132.0                  | 142.0 | 133.0 | N/A   | N/A   |
| Short-term wholesale funding/total wholesale funding | 53.5                   | 65.6  | 65.3  | 64.3  | 60.8  |
| Narrow liquid assets/3-month wholesale funding (x)   | 2.1                    | 1.4   | 1.5   | 2.3   | 2.0   |

\*Data as of Sept. 30. N/A--Not applicable.

## Deutsche Bank AG--Rating component scores

| Issuer credit rating        | A/Stable/A-1 |
|-----------------------------|--------------|
| SACP                        | bbb+         |
| Anchor                      | bbb+         |
| Economic risk               | 3            |
| Industry risk               | 4            |
| Business position           | Adequate     |
| Capital and earnings        | Adequate     |
| Risk position               | Moderate     |
| Funding                     | Adequate     |
| Liquidity                   | Adequate     |
| Comparable ratings analysis | +1           |
| Support                     | +2           |
| ALAC support                | +2           |
| GRE support                 | 0            |
| Group support               | 0            |
| Sovereign support           | 0            |
| Additional factors          | 0            |

ALAC--Additional loss-absorbing capacity. GRE--Government-related entity. SACP--Stand-alone credit profile.

## Related Criteria

- General Criteria: National And Regional Scale Credit Ratings Methodology, June 8, 2023
- General Criteria: Hybrid Capital: Methodology And Assumptions, March 2, 2022
- Criteria | Financial Institutions | Banks: Banking Industry Country Risk Assessment Methodology And Assumptions, Dec. 9, 2021
- Criteria | Financial Institutions | General: Financial Institutions Rating Methodology, Dec. 9, 2021
- General Criteria: Environmental, Social, And Governance Principles In Credit Ratings, Oct. 10, 2021
- General Criteria: Group Rating Methodology, July 1, 2019
- Criteria | Financial Institutions | General: Risk-Adjusted Capital Framework Methodology, July 20, 2017
- General Criteria: Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017
- General Criteria: Principles Of Credit Ratings, Feb. 16, 2011

## Related Research

- Deutsche Bank Issuer Credit Ratings Raised To 'A/A-1' On Strengthening Performance And Resilience; Outlook Stable, Dec. 8, 2023
- Deutsche Bank AG, May 31, 2023

- Bulletin: Robust German Banking Industry Weathers Increased Geopolitical Economic Risk, Feb. 16, 2023

### Ratings Detail (As Of December 12, 2023)\*

#### Deutsche Bank AG

|                                   |                 |
|-----------------------------------|-----------------|
| Issuer Credit Rating              | A/Stable/A-1    |
| <i>Turkey National Scale</i>      | trAAA/--/trA-1+ |
| Resolution Counterparty Rating    | A+/--/A-1       |
| Certificate Of Deposit            |                 |
| <i>Foreign Currency</i>           | A/A-1/A-1       |
| Commercial Paper                  | A-1             |
| Junior Subordinated               | BB              |
| Resolution Counterparty Liability | A+              |
| Senior Subordinated               | BBB             |
| Senior Unsecured                  | A               |
| Short-Term Debt                   | A-1             |
| Subordinated                      | BBB-            |

#### Issuer Credit Ratings History

|             |                              |                   |
|-------------|------------------------------|-------------------|
| 08-Dec-2023 |                              | A/Stable/A-1      |
| 17-May-2023 |                              | A-/Positive/A-2   |
| 09-Nov-2021 |                              | A-/Stable/A-2     |
| 26-Feb-2021 |                              | BBB+/Positive/A-2 |
| 23-Apr-2020 |                              | BBB+/Negative/A-2 |
| 28-Jun-2018 | <i>Turkey National Scale</i> | trAAA/--/trA-1+   |
| 08-Jul-2016 |                              | trAAA/--/trA-1    |

#### Sovereign Rating

|         |                 |
|---------|-----------------|
| Germany | AAA/Stable/A-1+ |
|---------|-----------------|

#### Related Entities

##### Deutsche Bank AG (Canada Branch)

|                                |              |
|--------------------------------|--------------|
| Issuer Credit Rating           | A/Stable/A-1 |
| Resolution Counterparty Rating | A+/--/A-1    |

##### Deutsche Bank AG (Cayman Islands Branch)

|                                |              |
|--------------------------------|--------------|
| Issuer Credit Rating           | A/Stable/A-1 |
| Resolution Counterparty Rating | A+/--/A-1    |

##### Deutsche Bank AG (London Branch)

|                                   |              |
|-----------------------------------|--------------|
| Issuer Credit Rating              | A/Stable/A-1 |
| Resolution Counterparty Rating    | A+/--/A-1    |
| Resolution Counterparty Liability | A+           |
| Senior Subordinated               | BBB          |
| Senior Unsecured                  | A            |

##### Deutsche Bank AG (Madrid Branch)

|                                |              |
|--------------------------------|--------------|
| Issuer Credit Rating           | A/Stable/A-1 |
| Resolution Counterparty Rating | A+/--/A-1    |

##### Deutsche Bank AG (Milan Branch)

|                      |              |
|----------------------|--------------|
| Issuer Credit Rating | A/Stable/A-1 |
|----------------------|--------------|

| Ratings Detail (As Of December 12, 2023)*(cont.)        |                     |
|---|---------------------|
| Resolution Counterparty Rating                          | A+/--/A-1           |
| <b>Deutsche Bank AG (New York branch)</b>               |                     |
| Senior Subordinated                                     | BBB                 |
| Subordinated  | BBB-                |
| <b>Deutsche Bank Luxembourg S.A.</b>                    |                     |
| Issuer Credit Rating                                    | A/Stable/A-1        |
| Resolution Counterparty Rating                          | A+/--/A-1           |
| <b>Deutsche Bank National Trust Co.</b>                 |                     |
| Issuer Credit Rating                                    | A/Stable/A-1        |
| Resolution Counterparty Rating                          | A/--/A-1            |
| <b>Deutsche Bank Securities Inc.</b>                    |                     |
| Issuer Credit Rating                                    |                     |
| <i>Local Currency</i>                                   | A/Stable/A-1        |
| Resolution Counterparty Rating                          |                     |
| <i>Local Currency</i>                                   | A/--/A-1            |
| <b>Deutsche Bank Trust Co. Americas</b>                 |                     |
| Issuer Credit Rating                                    | A/Stable/A-1        |
| Resolution Counterparty Rating                          | A/--/A-1            |
| <b>Deutsche Bank Trust Co. Delaware</b>                 |                     |
| Issuer Credit Rating                                    | A/Stable/A-1        |
| Resolution Counterparty Rating                          | A/--/A-1            |
| <b>Deutsche Bank Trust Corp.</b>                        |                     |
| Issuer Credit Rating                                    | A/Stable/A-1        |
| Senior Unsecured  | A-1                 |
| <b>Deutsche Securities Inc.</b>                         |                     |
| Issuer Credit Rating                                    | A/Stable/A-1        |
| <b>Deutsche Securities, S.A. de C.V., Casa de Bolsa</b> |                     |
| Issuer Credit Rating                                    |                     |
| <i>CaVal (Mexico) National Scale</i>                    | mxAA+/Stable/mxA-1+ |

\*Unless otherwise noted, all ratings in this report are global scale ratings. S&P Global Ratings' credit ratings on the global scale are comparable across countries. S&P Global Ratings' credit ratings on a national scale are relative to obligors or obligations within that specific country. Issue and debt ratings could include debt guaranteed by another entity, and rated debt that an entity guarantees.

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