Kreditanstalt für Wiederaufbau (KfW) Issuer Rating Report

SCOPE AAA STABLE

Overview

Scope Ratings has assigned an Issuer Rating and senior unsecured debt ratings of AAA, as well as a short-term debt rating of S-1+, all with a Stable Outlook, to Kreditanstalt für Wiederaufbau (KfW). The ratings are driven by the strong and explicit linkages between KfW and the Federal Republic of Germany, rated AAA with a Stable Outlook.

Highlights

- KfW benefits from an explicit and direct statutory guarantee and an institutional liability (Anstaltslast) from the Federal Republic; these guarantees fully align the credit risk of the institution with that of the sovereign.
- KfW is Germany's national promotional bank, majority owned by the Federal Republic of Germany. According to its statutory mission, KfW supports the economic and policy objectives of the federal government, particularly focusing its promotional activity on the following areas: climate change and the environment, globalisation, digitalisation and innovation and social change.
- The ratings also reflect KfW's specific funding model: KfW is almost entirely wholesale funded, as is not permitted to accept deposits. However, the institution has enjoyed continuous access to global capital markets, with a comparatively lower cost of funding and broad currency diversification.
- KfW carries out its activities primarily by on-lending to banks which results in high and concentrated exposure to the financial sector. However, KfW has so far maintained a conservative risk profile and, despite being exempt from the direct application of banking supervision regulations, complies with significant parts of bank regulatory law, in particular capital and risk management requirements.

Rating drivers (summary)

The rating drivers, in decreasing order of importance in the rating assignment, are:

- KfW benefits from an explicit and direct statutory guarantee and institutional liability from the Federal Republic of Germany.
- The group operates in a prudent manner ensuring its ability to fulfil its promotional mandate, including compliance with capital and risk management requirements.
- Due to its mission and on-lending business model, there is a high and concentrated exposure to the financial sector.
- Reliant on capital markets for funding, however access to markets is very good and sustainable.

Ratings & Outlook

Issuer Rating	AAA
Outlook	Stable
Senior unsecured debt rating	AAA
Short-term debt rating	S-1+
Short-term debt rating outlook	Stable

The ratings are not applicable to debt issued by unguaranteed subsidiaries of the rated bank.

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Rating-change drivers

There are no positive rating-change drivers as KfW is rated AAA, the highest rating on Scope's rating scale. Factors which could negatively impact the ratings are as follows:

A material decrease in the level of support from the Federal Republic of Germany. However, we note that this would entail amendments to various laws and regulations including the KfW law. We view this scenario as very unlikely for the foreseeable future due to the clearly defined public mission and important economic-development role of KfW.

A material change in Germany's credit fundamentals with a subsequent negative rating action would equally affect KfW's rating. We view this scenario as unlikely for the foreseeable future.

Rating drivers (details)

KfW benefits from an explicit and direct statutory guarantee and institutional liability from the German state

Guarantees on KfW are specific to the institution…

KfW is a public law institution which is 80% owned by the Federal Republic of Germany and 20% by the German federal states, the Länder. Established in 1948, KfW is Germany's national promotional bank, supporting the economic and policy objectives of the federal government.

The KfW law expressly states that the Federal Republic guarantees all existing and future obligations of KfW in respect of money borrowed, bonds and notes issued and derivative transactions entered into by KfW as well as obligations of third parties expressly guaranteed by KfW. Under the statutory guarantee, if KfW fails to make any payment required to be paid with respect to securities issued by KfW or made under KfW's guarantee, the Federal Republic will be liable for that payment as and when it becomes due and payable. The obligation directly against the Federal Republic can be enforced without first taking legal action against KfW.

In addition, under the German administrative law principle of Anstaltslast, the Federal Republic is obliged to maintain KfW in a position to pursue its operations and enable it to meet its obligations when due. While Anstaltslast is not a formal guarantee of KfW's obligations, this legal principle in effect ensures that KfW's obligations are backed by the credit of the Federal Republic. No appropriation or any other action by the German parliament is required for the Federal Republic to fulfil its obligation under Anstaltslast.

On a case-by-case basis, KfW may also act directly on behalf of the German federal government. For example, in 2010 KfW provided the German share of financial support measures for Greece and in 2018 acquired 20% of Eurogrid International CVBA which controls one of four transmission system operators in Germany. Risks related to mandated operations reside with the Federal Government.

…and do not include legally independent subsidiaries

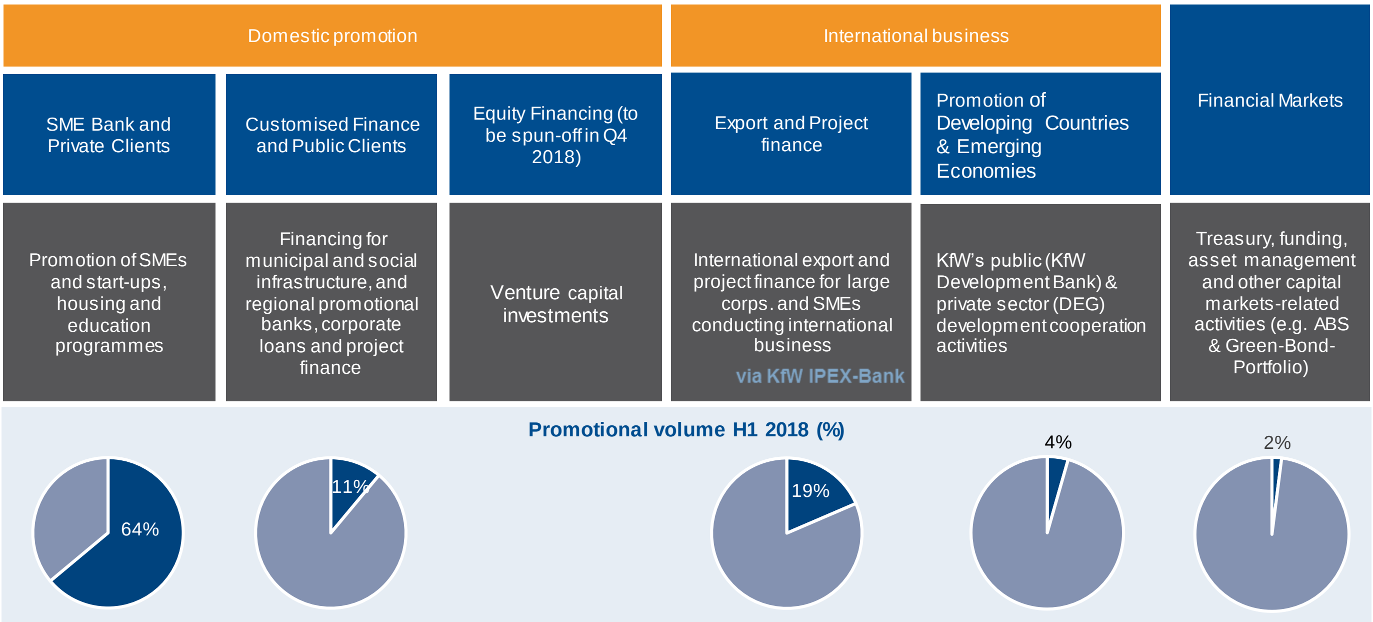
In a formal understanding established in March 2002, the European Commission confirmed that KfW's promotional activities will continue to benefit from Anstaltslast and the statutory guarantee from the Federal Republic. However, the institution's commercial business (i.e. activities not deemed to be of a promotional nature) must be separated.

Since 2008, KfW IPEX-Bank has been operating the export and project finance business as a wholly owned legally independent subsidiary. KfW is permitted to fund KfW IPEX-Bank only at market rates and cannot extend to the institution any of the benefits of Anstaltslast or the guarantee from the German state.

Besides IPEX-Bank, KfW group has a second main operating subsidiary: the Deutsche Investitions- und Entwicklungsgesellschaft mbH (DEG) which promotes private sector development cooperation. IPEX-Bank, DEG and KfW Entwicklungsbank carry out KfW group's international business. Moreover, KfW is planning to pool and spin-off its venture capital equity financing activities in a newly founded subsidiary and subsequently expand the offering by making EUR 2bn available for the financing of high-tech companies.

Following the re-organisation of domestic promotional activities, three business areas have been created: SME Bank and Private Clients (aggregating highly standardised direct and on-lending solutions), Customised Finance and Public Clients (catering to institutional counterparties and individual financing solutions) and the Equity Financing business area, aggregating the venture capital investments mentioned above.

Figure 1: KfW group business overview



Source: Company data, Scope Ratings

Sovereign guarantees and their accounting in line with EU rules

KfW's close links to the Federal Republic of Germany via its ownership structure and guarantees may raise the question as to whether KfW should be part of the general government sector in terms of national accounts. It is our understanding that a publicly controlled development bank is not allocated to the government sector according to the European System of National and Regional Accounts (ESA 2010) framework if the development bank acts as a financial intermediary and is sufficiently autonomous in performing its duties. Consequently, and in principle, the business activities of KfW have no effect on Germany's general government deficit/surplus or on general government gross debt. 'Financial intermediary' in this context means that moneys are mediated between third parties on the institution's own balance sheet and therefore the institution puts its own economic existence at risk ('places itself at risk'; ESA 2010, Rule 2:57).

Based on its legally prescribed activities, KfW is autonomous to a great extent in its decision making and, in addition, is classified as a financial intermediary on the European Central Bank's list of Monetary Financial Institutions. Consequently, KfW is categorised as a financial corporation, to the extent that its regular business usually has no effect on Germany's Maastricht fiscal criteria.

However, there are exceptions for the eventuality that the public owner (in this case the German federal government) initiates and uses the development bank as an 'instrument' for specific transactions and remains involved economically, decisively and directly in the consequences of those transactions. In such cases of 'acting in lieu and on behalf of the government' the transactions will be allocated to the government sector (applying the national accounts concept of 're-routing') and affect the sovereign's deficit/surplus and/or gross debt fiscal criteria. In the case of KfW, an example is provided by the sovereign loan to Greece which the development bank manages on behalf of the German federal government and which increases Germany's general government gross debt.

Despite the development bank's apparent lack of integration into the sovereign accounts, we do not see any weakened link between the government and the bank. The guarantees in place have been established by law and, in our view, provide a solid basis for the credit quality of KfW's debt.

The group operates in a prudent manner ensuring its ability to fulfil its promotional mandate, including compliance with capital and risk management requirements.

Supervision mostly in line with general financial institutions

KfW is not considered a ‘credit institution’ or ‘financial services institution’ under the German Banking Act or relevant EU directives and regulations (such as Capital Requirements Directive IV and the Capital Requirements Regulation) and has historically been supervised by the Federal Ministry of Finance in consultation with the Federal Ministry of Economics and Technology.

However, from September 2013, with the publication of the KfW regulation, some provisions of bank regulatory law started to apply to KfW by analogy. It is the responsibility of the Federal Financial Supervisory Authority (BaFin) in cooperation with the Bundesbank to ensure compliance with these provisions.

These include capital adequacy requirements and a special regime for minimum requirements for risk management (MaRisk). In addition, the German regulation concerning remuneration policies (Institutsvergütungsverordnung) applies from January 2018.

Over the past three years, KfW has been subject to the first on-site reviews by BaFin and the German Central Bank. The assessments focused on areas such as the Internal Capital Adequacy Assessment Process, credit risk measurement, risk-control processes, liquidity risk and IT systems. It is our understanding that the results of the examinations were satisfying overall, although some findings related to IT, internal auditing and operational risk-management resulted in a temporary capital surcharge on KfW.

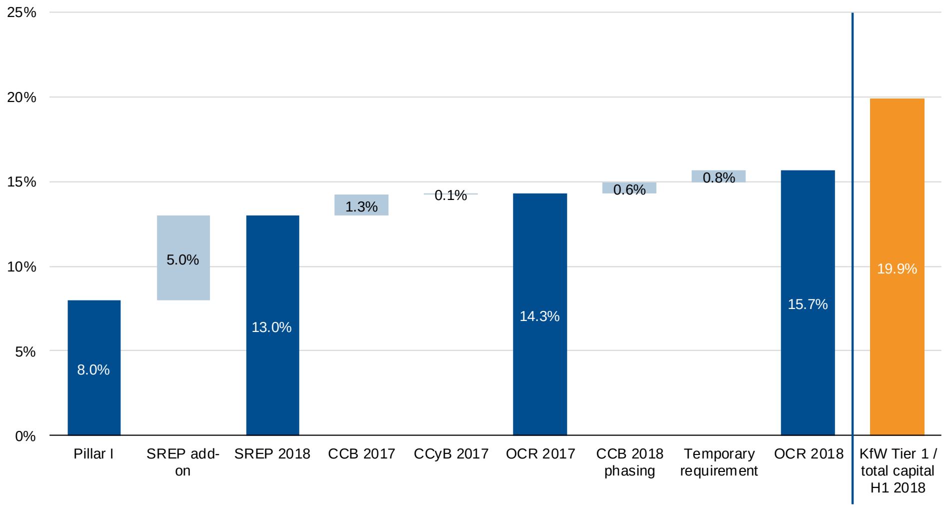
Strong capital levels further supported by profit retention

Despite KfW already calculating key regulatory ratios on a voluntary basis for the past years, the bank has been subject to the regulatory reporting requirements for capital ratios since January 2016. In Q2 2017 KfW received an initial partial approval from the BaFin for the calculation of capital ratios under the advanced internal ratings-based approach, and targets to receive approval for the remaining portfolio segments by 2022. As of H1 2018, KfW reported a 19.9% total capital ratio composed predominantly of Tier 1 capital. The bank reports no significant Tier 2 capital in its equity.

With regard to capital adequacy, KfW is subject to Pillar 1 capital requirements, a Supervisory Review and Evaluation Process (SREP) requirement and the capital buffers regime introduced under Capital Requirements Directive IV. KfW will need to maintain a capital conservation buffer (CCB) and, as applicable, a countercyclical capital buffer (CCyB). Furthermore, starting from 2019, KfW will phase in a buffer of 1% for other systemically important institutions, over three years, at the discretion of BaFin.

KfW capital ratios compare extremely well with the overall capital requirement (OCR) of 14.3% set by the BaFin as of 31 December 2017 and composed of a total SREP requirement of 13% plus a capital conservation buffer of 1.25% and a 0.054% countercyclical capital buffer. The overall capital requirement at YE 2018, including an additional temporary capital requirement as well as the phasing-in of the CCB, will be 15.7%.

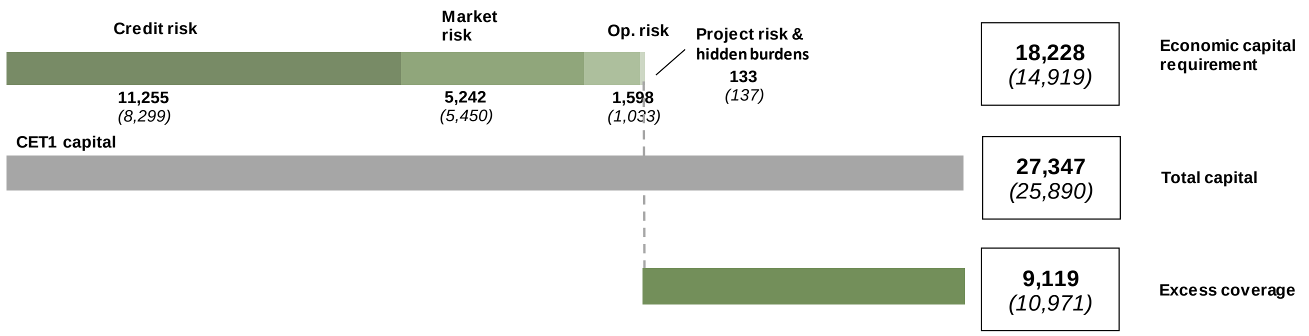
Figure 2: KfW capital requirements for 2017 and 2018 versus reported capital ratios



Source: Company data, Scope Ratings

With regard to capital levels, in addition to complying with regulatory requirements KfW also particularly focuses on its economic risk-bearing capacity (Figure 3). All risk monitoring and management measures must ensure compliance with both an economic solvency target and minimum requirements for the regulatory capital ratios.

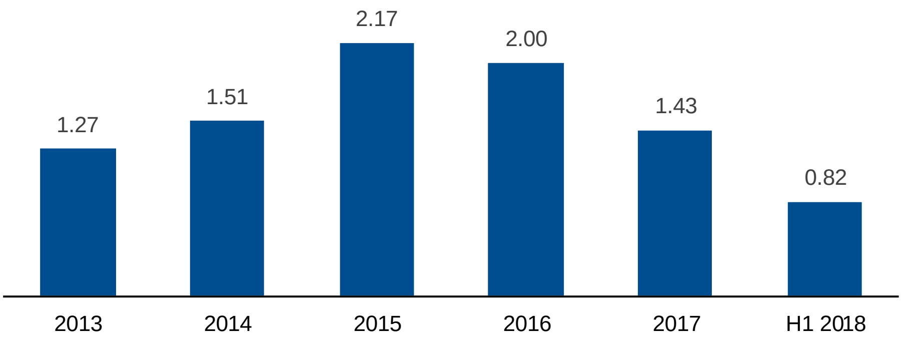
Figure 3: KfW economic risk-bearing capacity at YE 2017 (YE 2016) with a 99.99% confidence level (in EUR m)



Source: Company data, Scope Ratings

As a promotional bank, KfW does not seek to maximise profits. However, the institution does aim to maintain an overall level of profitability that allows it to strengthen its equity base in order to support its promotional activities (Figure 4). KfW is also prohibited under the KfW law from distributing profits, which are instead allocated to statutory reserves and separately reportable reserves.

Figure 4: Profitability track record – consolidated profit (in EUR bn)

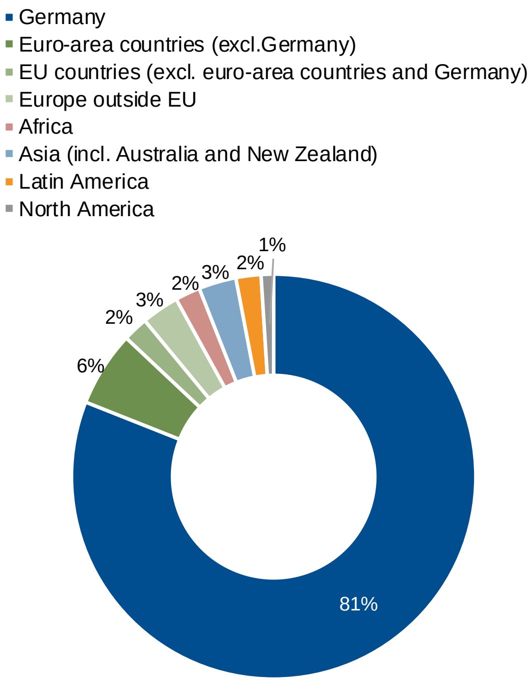


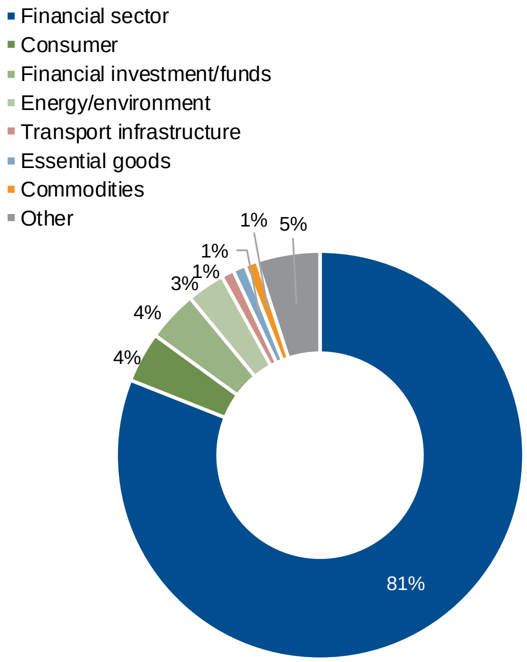
Source: Company data, Scope Ratings

Due to its mission and on-lending business model there is high and concentrated exposure to the financial sector

Under its statutory mandate, KfW must generally involve financial institutions when granting financing. Loans are extended to banks which then on-lend the funds to the ultimate borrowers. In some cases, KfW lends directly to the ultimate borrower (e.g. municipalities as well as export and project financing activities along with education programmes). Consequently, KfW's exposure is tilted towards financial institutions. The risk of the group's loan portfolio by sector as per the economic capital concept, is shown in Figure 5. Economic capital is a measure of how much capital is required to cover the difference between credit value-at-risk and expected loss.

Figure 5: Economic capital requirements by region and sector (YE 2017, EUR 14.9bn)





Source: Company data, Scope Ratings

In its domestic business, KfW lends to commercial banks, as well as Landesbanken and Landesförderinstitute which are responsible for promotional activities within their respective states. There is no significant single name concentration.

These exposures are related to housing investment, corporate loans and municipal infrastructure programmes as well as global funding facilities: in the context of this initiative, KfW introduced a USD refinancing solution for Landesförderinstitute in 2018.

KfW already applies the large exposure regime of the Capital Requirements Regulation which became mandatory in January 2016. Exposures to any one client or group of connected clients are limited to 25% of KfW's own eligible funds and exposures exceeding 10% of KfW's own eligible funds are subject to special internal monitoring requirements.

Credit quality tends to be sound. Looking back, KfW experienced exceptional years in 2007 and 2008 when it participated in the rescue of IKB Deutsche Industriebank which entailed a significant increase in risk provisions. As of year-end 2017, 72% of net credit exposure was classified as investment grade, 23% as non-investment grade, 3% as on a watch list and 2% as in default.

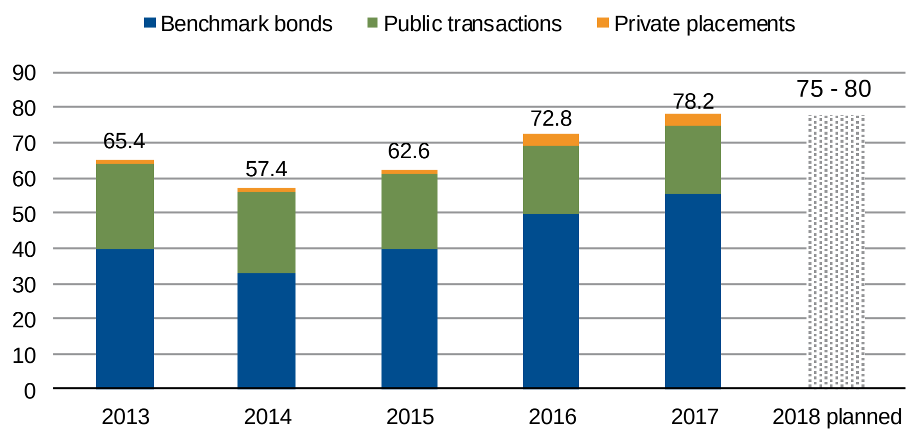
Reliant on capital markets for funding, however access to markets is very good and sustainable.

A large, steady capital market participant with a globally diversified and relatively stable investor base

As KfW is not permitted to take deposits, the group funds itself almost entirely in the capital markets through bonds and notes. As of year-end 2017, these instruments represented nearly 90% of total liabilities. In line with the mid- and long-term nature of promotional loans, the majority of borrowings have initial maturities of over one year. While the group operates with a moderate duration gap, this risk is actively managed. Short-term borrowing, primarily in the form of commercial paper, is mainly used for liquidity purposes.

Each year an overall funding requirement is determined based on the expected level of business activity to be financed. Over the past five years, KfW has targeted between EUR 65bn and EUR 80bn of annual issuance volumes (Figure 6). Funding levels are reviewed mid-year and adjusted according to promotional requirements. In 2018 KfW revised its target to between EUR 75bn and EUR 80bn, versus EUR 70bn to EUR 75bn previously.

Figure 6: Capital market funding volume (in EUR bn)



Source: Company data, Scope Ratings

In order to achieve the most favourable market terms, KfW pursues a funding strategy based on diversification – in terms of instruments, currencies and investors. Interest rate and currency risks are reduced through hedging instruments and partly also by matching funding liabilities with loans. Both EUR and USD are considered core currencies and have together accounted for around 85% of new capital market funding over the past years. KfW regularly raises funds in around 15 different currencies, the use of which is part of a continuous and opportunistic funding plan. The number of annual capital market transactions may involve as many as 200 or more individual issues.

Significantly, KfW's proxy sovereign status affords the group continued access to capital markets for funding. During the financial crisis in 2011, KfW actually benefited from the lower cost of funds, particularly for short-term paper. The group attracts a wide investor base comprised mostly of central banks, banks, asset managers and pension funds.

A growing focus on sustainability and general ESG criteria may further support KFW's strong capital market position

Investors with a focus on sustainable investments are attracted to KfW due to its position as a promotional bank and its government mandate to improve economic, social and environmental conditions in Germany, and globally.

KfW's overarching sustainability approach spans the bank's lending business, investments and general governance:

- With regard to KfW's lending business, the bank is one of the largest financiers of environmental investments. Since the German government introduced the Energiewende (transition to renewable energies) in 2010, KfW's promotional mandates have been strongly focused on this task. In 2017, around 43% of KfW's new funds raised were employed in environment and climate protection. KfW has become a major player in the green bond market over the past four years. The bank debuted with its first green bond in 2014 and was able to successfully establish a benchmark-size programme – which is important for liquidity in this funding segment – more or less from the start. The net proceeds from the issuance of green bonds are channelled into projects under KfW's Renewable Energies Standard programme.
- On the investments level of the bank itself, KfW also pursues sustainability targets, with specially defined investment criteria for its liquidity portfolio. As part of its promotional activities for financing climate and environmental protection measures, KfW launched a dedicated green bond portfolio in 2015. The targeted volume size is EUR 2.0bn and at the end of 2017 the investment amounted to EUR 0.9bn.
- Given the bank's close connection with the federal state, prudent governance has always been a strong focus, mirrored in strict control mechanisms and codes of conduct.

KfW has been confirmed as one of the top performers with regard to environmental, social and governance (ESG) factors by various specialised investment research firms. The bank was, for example, assigned high sustainability ratings by Sustainalytics, Oekom and imug, which placed KfW among the best financial institutions worldwide.

Although ESG criteria in and of themselves have not had any direct impact on the credit quality of institutions so far, we believe that over time this may change. Hence, any institution which focuses on sustainability and responsibility from an ESG perspective and which successfully applies these criteria to its business model will be able to influence market developments in this respect; ultimately this may lead to a competitive advantage. The benefits may include access to market funding at beneficial levels and, potentially, preferential business opportunities. Consequently, this development could support a continuously higher overall credit standing in our view.

I. Appendix: Selected financial information – KfW Group

	2013Y	2014Y	2015Y	2016Y	2017Y
Balance sheet summary (EUR m)					
Assets					
Cash and interbank assets	282,107	280,493	277,341	287,324	285,206
Total securities	66,132	87,646	89,710	81,439	51,239
of which, derivatives	35,563	56,924	58,075	48,725	23,867
Net loans to customers	113,926	118,213	133,135	135,265	126,671
Other assets	2,590	2,720	2,787	2,985	9,231
Total assets	**464,755**	**489,072**	**502,973**	**507,013**	**472,347**
Liabilities					
Interbank liabilities	12,683	17,951	24,004	19,837	6,002
Senior debt	385,523	403,997	415,200	422,574	406,290
Derivatives	28,433	28,629	24,650	21,585	17,509
Deposits from customers	11,306	10,082	9,624	11,634	9,889
Subordinated debt	2,247	2,247	300	200	0
Other liabilities	4,050	4,568	3,995	4,128	3,915
Total liabilities	**444,242**	**467,474**	**477,773**	**479,958**	**443,605**
Ordinary equity	20,513	21,598	25,200	27,055	28,742
Equity hybrids	0	0	0	0	0
Minority interests	0	0	0	0	0
Total liabilities and equity	**464,755**	**489,072**	**502,973**	**507,013**	**472,347**
Core tier 1/Common equity tier 1 capital	19,752	20,343	24,090	25,890	27,347
Income statement summary (EUR m)					
Net interest income	2,413	2,423	2,601	2,610	2,393
Net fee & commission income	275	307	257	257	303
Net trading income	137	69	478	349	194
Other income	-208	27	148	123	20
Operating income	**2,617**	**2,826**	**3,484**	**3,339**	**2,910**
Operating expense	984	1,072	1,136	1,199	1,247
Pre-provision income	**1,633**	**1,754**	**2,348**	**2,140**	**1,663**
Credit and other financial impairments	299	146	23	160	209
Other impairments	0	0	0	0	0
Non-recurring items	NA	NA	NA	NA	NA
Pre-tax profit	**1,336**	**1,609**	**2,302**	**1,980**	**1,453**
Discontinued operations	0	0	0	0	0
Other after-tax Items	0	0	0	0	0
Income tax expense	63	95	130	-21	26
Net profit attributable to minority interests	0	0	0	0	0
Net profit attributable to parent	**1,273**	**1,514**	**2,171**	**2,002**	**1,427**

Source: SNL Financials

II. Appendix: Ratios – KfW Group

	2013Y	2014Y	2015Y	2016Y	2017Y
Funding and liquidity					
Net loans/deposits (%)	1007.7%	1172.5%	1383.4%	1162.7%	1280.9%
Liquidity coverage ratio (%)	NA	NA	NA	NA	NA
Net stable funding ratio (%)	NA	NA	NA	NA	NA
Asset mix, quality and growth					
Net loans/assets (%)	24.5%	24.2%	26.5%	26.7%	26.8%
NPLs/net loans (%)	NA	NA	NA	NA	NA
Loan-loss reserves/NPLs (%)	NA	NA	NA	NA	NA
Net loan growth (%)	-2.1%	3.8%	12.6%	1.6%	-6.4%
NPLs/tangible equity and reserves (%)	NA	NA	NA	NA	NA
Asset growth (%)	-8.8%	5.2%	2.8%	0.8%	-6.8%
Earnings and profitability					
Net interest margin (%)	0.5%	0.5%	0.5%	0.5%	0.5%
Net interest income/average RWAs (%)	2.4%	2.0%	1.9%	2.1%	1.9%
Net interest income/operating income (%)	92.2%	85.7%	74.7%	78.2%	82.2%
Net fees & commissions/operating income (%)	10.5%	10.9%	7.4%	7.7%	10.4%
Cost/income ratio (%)	37.6%	37.9%	32.6%	35.9%	42.9%
Operating expenses/average RWAs (%)	1.0%	0.9%	0.8%	1.0%	1.0%
Pre-impairment operating profit/average RWAs (%)	1.6%	1.5%	1.7%	1.7%	1.3%
Impairment on financial assets /pre-impairment income (%)	18.3%	8.3%	1.0%	7.5%	12.6%
Loan-loss provision charges/net loans (%)	0.3%	0.1%	0.0%	0.1%	0.2%
Pre-tax profit/average RWAs (%)	1.3%	1.3%	1.7%	1.6%	1.2%
Return on average assets (%)	0.3%	0.3%	0.4%	0.4%	0.3%
Return on average RWAs (%)	1.2%	1.3%	1.6%	1.6%	1.1%
Return on average equity (%)	6.6%	7.1%	9.1%	7.7%	5.1%
Capital and risk protection					
Common equity tier 1 ratio (%, fully loaded)	20.6%	NA	NA	NA	NA
Common equity tier 1 ratio (%, transitional)	20.6%	14.1%	18.3%	22.3%	20.6%
Tier 1 capital ratio (%, transitional)	20.6%	14.1%	18.3%	22.3%	20.6%
Total capital ratio (%, transitional)	22.3%	15.1%	18.4%	22.3%	20.6%
Leverage ratio (%)	NA	NA	NA	NA	NA
Asset risk intensity (RWAs/total assets, %)	20.6%	29.5%	26.2%	22.9%	28.2%

Source: SNL Financials

III. Appendix: Support assumptions determination

Given the strong level of integration with the German Federal Government, we would apply a top-down approach in accordance with our methodology for Government Related Entities. However, the existence of a statutory guarantee on all obligations of KfW, justifies the alignment with the rating of the Federal Government of Germany (rated AAA with a Stable Outlook).

Criteria	Level of integration with government	
	High/ Strong	***Limited/ Weak***
Legal Status & Resolution Framework	◉ Public; Insolvency, bankruptcy and resolution laws unlikley to apply	○ Private; Insolvency, bankruptcy and resolution laws do apply
Purpose/ Activities	◉ Good/ service is backed by constitution or in the public interest	○ Good/ service has mostly a commercial purpose
Shareholder Structure & Control	◉ Significant public ownership	○ Mostly private ownership
Approach*	**Top-down**	

* Two of the three parameters indicate the chosen approach for most instances.

Source: Scope Ratings

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