

Rating object		Rating information					
Coöperatieve Rabobank U.A. (Group)		3 1 1111 11 3				Outlook: Stable	
Creditreform ID: 400976778	Rating of Bank Capi	tal and Uns	secured De	bt Ins	truments:		
(Main-) Industry:	Incorporation: 1972 (Main-) Industry: Banks	Senior Unsecured	Tier 2		Additional Tier 1		
Management:	Wiebe Draijer (CEO)	A-	BBB-		BB+		
	Bas Brouwers (CFO) Petra v. Hoeken (CRO)	Prepared on: Monitoring until: Publication:		wal of the rat	ing		
	Publication: 08 February 2018 Rating type: unsolicited Rating system(s): bank ratings; rating of bank capital and unsecured debt instruments			s			
	Rating history:	www.ci	editreform-ra	ting.de	9		

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SWOT-Analysis

Strengths

- Second largest bank in the Netherlands with international business activities and an international focus on the food and agribusiness
- + The cooperative character with a large branch presence in the Netherlands. In addition to the branch business and the wholesale, rural & retail operations, the direct bank Rabodirect generates additional deposits
- Constant business with stable net profits in recent years
- + Continuous improvement of efficiency due to personnel reduction in the event of persistently low interest rates in retail banking
- + Comfortable liquidity with good refinancing options on the interbank market

Weaknesses

- High dependency on the Dutch home market and on the agricultural sector
- Deterioration of the quality of assets from 2013 to 2016, despite a decline in the total assets
- Compared to peers, Rabobank has only average equity figures
- Average performance in the EBA stress test in 2016

Opportunities / Threats

- + The Netherlands expecting an above-average GDP growth rate compared to neighbouring European countries
- + Credit portfolio in relatively non-cyclical sectors
- +/- Within a year, the number of employees was significantly reduced
- Due to the maturity transformation, there is a risk of adequate refinancing if there should be a decline in daily deposits
- The net interest margin will continue to be impacted by a low interest environment

Analysts

Tobias Stroetges Lead-Analyst

Philipp J. Beckmann Co-Analyst / Senior Analyst



Company Overview

The Dutch Cooperative Bank Coöperatieve Rabobank U.A. (Rabobank) has a history that began more than 115 years ago. The Rabobank was founded with the merger of the two head organizations Coöperatieve Centrale Raiffeisen-Bank in Utrecht and the Coöperatieve Centrale Boerenleenbank in Eindhoven in 1972.

Today the Rabobank Group is the second largest bank in the Netherlands (status: 2016) in terms of total assets. As an international financial services provider the bank operates in more than 40 countries in the business lines retail banking, corporate and wholesale banking, private banking, leasing and real estate services. Rabobank is one of the world's leading banks in the food and agricultural sector and funds its lending business mainly via deposits, which are largely sourced through its branch network.



Business Development

Performance

The Rabobank Group generates more than 2/3 of its operating income from its interest business, which has remained relatively constant in recent years. Since 2013, the interest income and interest costs lowered. Loans to Dutch customers were a major contributor to net interest income. The second-largest driver of revenue for Rabobank is net fee & commission income, which has decreased by 4.1% since 2013. The net interest income and the net fee & commission income amounted to 83.3% of operating income in 2016. The net trading income was a significantly smaller source of income due to the cooperative business model. The net trading result largely consists of financial assets and liabilities "at fair value through profit or loss". Overall, operating income declined by 2.8%.

The Group's operating expenses have raised by 5.9% from the previous year despite a reduction in personnel costs. Although personnel costs were declined by 5.5%, the number of employees was reduced by 12.4% in the same period (from 52,013 employees to 45,567). The increase in operating expenses ultimately resulted from increased additions to provisions in 2016.

The "Pre-impairment Operating Profit" decreased by 18.5% as a result of higher costs and lower income. The "Net Profit after depreciation and taxes" in 2016 was still 8.6% below the previous year due to lower loan impairments. The decline in loan losses is in particular due to the improved economic situation in the Netherlands.

A detailed group income statement for the years 2013-2016 can be found in figure 1 below:

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Income Statement	2013	%	2014	%	2015	%	2016	%
	2013	70	2014	70	2015	70	2016	70
Income (€000) Net Interest Income	9.095.000	70.40/	0.440.000	70.4%	0.420.000	69.4%	0.740.000	68.3%
	-,,	70.4%	9,118,000		9,139,000		8,743,000	
Net Fee & Commission Income	2,001,000	15.5%	1,879,000	14.5%	1,892,000	14.4%	1,918,000	15.0%
Net Insurance Income	NA	0.0%	NA	0.0%	NA	0.0%	NA	0.0%
Net Trading Income	177,000	1.4%	697,000	5.4%	911,000	6.9%	634,000	5.0%
Equity Accounted Results	79,000	0.6%	145,000	1.1%	351,000	2.7%	106,000	0.8%
Dividends from Equity Instruments	NA	0.0%	NA	0.0%	NA	0.0%	NA	0.0%
Rental Revenue	-129,000	-1.0%	77,000	0.6%	7,000	0.1%	16,000	0.1%
Lease and Rental Revenue	313,000	2.4%	355,000	2.7%	362,000	2.7%	391,000	3.1%
Other Noninterest Income	1,383,000	10.7%	678,000	5.2%	512,000	3.9%	997,000	7.8%
Operating Income	12,919,000	100%	12,949,000	100%	13,174,000	100%	12,805,000	100%
Expenses (€000)								
Depreciation and Amortisation	528,000	5.8%	437,000	5.3%	443,000	5.2%	438,000	4.9%
Personnel Expense	5,322,000	58.4%	5,086,000	62.2%	4,786,000	56.6%	4,521,000	50.5%
Occupancy & Equipment	NA	0.0%	NA	0.0%	NA	0.0%	NA	0.0%
Tech & Communications Expense	NA	0.0%	NA	0.0%	634,000	7.5%	718,000	8.0%
Marketing and Promotion Expense	NA	0.0%	NA	0.0%	172,000	2.0%	160,000	1.8%
Other Provisions	NA	0.0%	NA	0.0%	506,000	6.0%	1,063,000	11.9%
Other Expense	3,267,000	35.8%	2,658,000	32.5%	1,918,000	22.7%	2,061,000	23.0%
Operating Expense	9,117,000	100%	8,181,000	100%	8,459,000	100%	8,961,000	100%
Operating Profit & Impairment (€000)								
Pre-impairment Operating Profit	3,802,000		4,768,000		4,715,000		3,844,000	
Asset Writedowns	2,598,000		2,766,000		1,846,000		1,126,000	
Net Income (€000)								
Nonrecurring Revenue	0		0		0		0	
Nonrecurring Expense	774,000		321,000		0		0	
Pre-tax Profit	430,000		1,681,000		2,869,000		2,718,000	
Income Tax Expense	88,000	20.5%	-161,000	-9.6%	655,000	22.8%	694,000	25.5%
Discontinued Operations	1,665,000		0		0		0	
Net Profit	2,007,000		1,842,000		2,214,000		2,024,000	

Figure 1: Group income statement (Source: S&P Global Market Intelligence / Coöperatieve Rabobank)

The lower net profit is also reflected in the profitability ratios, in particular in the ROAA, ROAE and RoRWA (figure 2). In the case of ROAA, the decline in the total assets is partially offset by the lower profit for the year. Similarly, ROAE shows lower equity and RoRWA as a result of the lower risk-weighted assets in comparison to 2015. The "net interest margin" has remained relatively constant over the past four years. The cost income ratios have risen in line with previous years, however they should fall in the medium term as a result of personnel reduction. In comparison with the Peer Group the Rabobank's income ratios are on average. The consistency shown over the last four years without any significant downturns is to be assessed positively.

Income Ratios (%)	2013	%	2014	%	2015	%	2016	%
Return on Average Assets (ROAA)	0.28	NA	0.27	-0.01	0.33	0.06	0.30	-0.03
Return on Equity (ROAE)	4.98	NA	4.76	-0.22	5.53	0.77	4.95	-0.58
RoRWA	0.93	NA	0.87	-0.06	1.04	0.17	0.95	-0.09
Net Interest Margin	1.34	NA	1.41	0.07	1.39	-0.02	1.34	-0.05
Cost income Ratio ex. Trading	71.55	NA	66.77	-4.78	68.98	2.21	73.63	4.65
Cost income Ratio	70.57	NA	63.18	-7.39	64.21	1.03	69.98	5.77
Change in %Points								

Figure 2: Group key earnings figures
(Source: S&P Global Market Intelligence / Coöperatieve Rabobank)

Assets and Asset Quality

As mentioned in the previous above, the total assets decreased by 2.4% compared to 2015 to €662.6bn. As shown in figure 3 below, the asset side of the balance sheet is



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equivalent to the income statement to over 2/3 of "net loans to customers". These credit agreements are almost 72% with Dutch customers, approximately 11% in North America and approximately 7% in the rest of Europe (the remaining shares are distributed worldwide and can be neglected in the analysis due to their small share of the total credit portfolio). The credit portfolio consists of 46% domestic residential mortgage loans.

The second-largest asset is "Cash and Cash Equivalents". This increased by 12.8% against the trend, mainly as a result of an increase of €19.5bn in deposits with central banks. The deposits with central banks are far above the regulatory minimum reserve for the Netherlands. In the current low-interest environment, the high deposits are a suboptimal investment strategy and thus reduce the profitability of Rabobank. However, a substantial high-quality buffer of liquid assets is one of the pillars of Rabobank's prudent liquidity-risk management.

The third major position on the asset side is the securities portfolio, which decreased by 11% compared to the previous year. The "total debt" financial instruments (-€4.9bn) and the "total derivative" financial instruments (-€5.7bn) are responsible for this decline. As the "financial assets" account for 97% of the total assets and there are no significant changes in the other assets, they can be neglected in the course of further analysis.

Assets (€000)	2013	%	2014	%	2015	%	2016	%
Cash and Cash Equivalents	83,826,000	12.5%	89,371,000	13.1%	97,377,000	14.3%	109,849,000	16.6%
Net Loans to Customers	458,136,000	68.5%	463,589,000	68.1%	467,519,000	68.9%	453,933,000	68.5%
Total Securities	95,136,000	14.2%	104,556,000	15.4%	90,929,000	13.4%	80,904,000	12.2%
Financial Assets	637,098,000	95%	657,516,000	97%	655,825,000	97%	644,686,000	97%
Equity Accounted Investments	3,747,000	0.6%	3,807,000	0.6%	3,672,000	0.5%	2,417,000	0.4%
Other Investments	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Insurance Assets	NA	0.0%	NA	0.0%	NA	0.0%	NA	0.0%
Noncurrent Assets HFS & Discontinued Ops	9,073,000	1.4%	327,000	0.0%	155,000	0.0%	281,000	0.0%
Tangible and Intangible Assets	9,947,000	1.5%	9,659,000	1.4%	9,639,000	1.4%	5,972,000	0.9%
Tax Assets	2,080,000	0.3%	2,712,000	0.4%	2,583,000	0.4%	2,531,000	0.4%
Total Other Assets	7,150,000	1.1%	7,065,000	1.0%	6,953,000	1.0%	6,706,000	1.0%
Total Assets	669,095,000	100%	681,086,000	100%	678,827,000	100%	662,593,000	100%

Figure 3: Development of assets (Source: S&P Global Market Intelligence / Coöperatieve Rabobank)

The change in the asset side also affects the asset quality indicators (figure 4). The share of NPL was reduced last year. In comparison with the 2013 figure shows that the NPL had already comprised a much smaller share. The ratio of "net write-offs/RWA" has improved significantly and the share of RWA's in total assets remained virtually constant.

The varied performance of the individual asset ratios is also shown by the peer group comparison. Rabobank's ratio of "NPL/loans" is above average. In relation to the RWAs the share is too high, in particular the value of 11.45% in 2014. The "net write-offs" ratio is slightly below the average due to the improvement in 2016 to 2015. The other asset ratios are in a benchmark area around the median.

Asset-Quality (%)	2013	%	2014	%	2015	%	2016	%
Non Performing Loans (NPL) / Loans	3.52	NA	5.26	1.74	4.19	-1.07	4.09	-0.10
NPL/RWA	7.61	NA	11.45	3.84	9.15	-2.30	8.77	-0.38
Potential Problem Loans / NPL	NA	NA	NA	NA	NA	NA	NA	NA
Reserved / Impaired Loans	53.49	NA	50.35	-3.14	46.37	-3.98	45.20	-1.17
Net Write-offs / Risk-adjusted Assets	0.67	NA	0.99	0.32	1.04	0.05	0.66	-0.38
Risk-weighted Assets/ Assets	31.51	NA	31.11	-0.40	31.39	0.28	31.88	0.49

Figure 4: Development of asset quality (Source: S&P Global Market Intelligence / Coöperatieve Rabobank)



Refinancing and Capital Adequacy

In 2016, both equity and liabilities declined, however their shares in the balance sheet remained constant. In the case of financial liabilities, deposits from banks (+15.6%) and customer deposits (+0.6%) increased YOY. These customer deposits consisted of 64% of domestic customers and 72% of the deposits have a daily maturity. Under the position "Total Debt", "Senior Debt" was down by 8.7% to €172bn and "Subordinated Debt" up by 8.8% to €16.9bn YOY. Rabobank's expanded hedging business is responsible for the increase in derivative debt.

In addition to the four main liabilities items, the other debt positions can be neglected for the analysis. A detailed development of the debt is shown in the following table:

Liabilities (€000)	2013	%	2014	%	2015	%	2016	%
Total Deposits from Banks	14,745,000	2.3%	18,066,000	2.8%	19,038,000	3.0%	22,006,000	3.5%
Total Deposits from Customers	329,247,000	52.2%	330,715,000	51.5%	349,465,000	54.8%	351,586,000	56.5%
Total Debt	219,220,000	34.8%	216,305,000	33.7%	203,904,000	32.0%	188,849,000	30.4%
Derivative Liabilities	48,713,000	7.7%	66,236,000	10.3%	54,556,000	8.6%	48,024,000	7.7%
Securities Sold, not yet Purchased	1,458,000	0.2%	1,324,000	0.2%	573,000	0.1%	739,000	0.1%
Other Financial Liabilities	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total Financial Liabilities	613,383,000	97%	632,646,000	99%	627,536,000	98%	611,204,000	98%
Insurance Liabilities	NA	0.0%	NA	0.0%	NA	0.0%	NA	0.0%
Unit-Linked Insurance and Investment Contr.	NA	0.0%	NA	0.0%	NA	0.0%	NA	0.0%
Tax Liabilities	554,000	0.1%	728,000	0.1%	778,000	0.1%	887,000	0.1%
Noncurrent Asset Retirement Obligations	288,000	0.0%	385,000	0.1%	356,000	0.1%	315,000	0.1%
Other Provisions	1,077,000	0.2%	800,000	0.1%	996,000	0.2%	1,546,000	0.2%
Total Other Liabilities	7,434,000	1.2%	7,656,000	1.2%	7,964,000	1.2%	8,117,000	1.3%
Total Liabilities	630,561,000	94.2%	642,215,000	94.3%	637,630,000	93.9%	622,069,000	93.9%
Total Equity	38,534,000	5.8%	38,871,000	5.7%	41,197,000	6.1%	40,524,000	6.1%
Total Passiva	669,095,000	100%	681,086,000	100%	678,827,000	100%	662,593,000	100%
Deposits from Customers Growth*	-1.52	NA	0.45	1.97	5.67	5.22	0.61	-5.06
*Change in %Points								

Figure 5: Development of refinancing and capital adequacy (Source: S&P Global Market Intelligence / Coöperatieve Rabobank)

The development of equity is shown in table 6. The increase in "total capital" is largely due to the accumulation of the net profit. This improvement in equity is also reflected in the capital ratios. The core tier 1 ratio rose by 0.53%-points over the last year. CET1 has increased by 3% to €29.6bn, Tier 1 capital has even improved by 5.8% to €37.1bn, while Tier 2 capital has increased by 9.7% to €15.8bn (the strongest increase). The group's equity has risen, however the quality has deteriorated. The decrease in risk-weighted assets of €1,866m and higher capital levels lead to improved ratios.

Compared with its peer group, Rabobank's capitalization is consistently on average. Only the "Total capital" ratio is above average. This is also confirmed by the results of the EBA stress test 2016 in the adverse stress scenario.



Capital (€000)	2013	%	2014	%	2015	%	2016	%
Total Capital	41,650,000	NA	45,139,000	8.38	49,455,299	9.56	52,873,173	6.91
Total Risk-weighted Assets	210,829,000	NA	211,870,000	0.49	213,091,666	0.58	211,225,517	-0.88
Capital Ratios (%)								
Core Tier 1 Ratio	13.54	NA	13.55	0.01	13.49	-0.06	14.02	0.53
Tier 1 Ratio	16.64	NA	15.99	-0.65	16.45	0.46	17.55	1.10
Total Capital Ratio	19.76	NA	21.31	1.55	23.21	1.90	25.03	1.82
Leverage Ratio	4.80	NA	3.60	-1.20	3.93	0.33	4.60	0.67
Fully Loaded: Common Equity Tier 1 Ratio	13.54	NA	11.80	-1.74	12.05	0.25	13.45	1.40
Fully Loaded: Tier 1 Ratio	16.64	NA	NA	NA	12.64	NA	NA	NA
Fully Loaded: Risk-weighted Capital Ratio	19.76	NA	NA	NA	19.68	NA	NA	NA
Total Equity/ Total Assets	5.76	NA	5.71	-0.05	6.07	0.36	6.12	0.05
Change in %Points	-				-			

Figure 6: Development of capital ratios (Source: S&P Global Market Intelligence / Coöperatieve Rabobank)

Liquidity

The liquidity situation of Rabobank is very comfortable due to their business model and cooperative character. The liquidity buffer of €103bn (previous year: €98bn) in "High Quality Liquid Assets" (HQLA) is considerable. This high value is attributable to deposits with central banks, which are likely to have a negative interest rate. Rabobank has and will continue to maintain ample liquidity buffers on top of minimum regulatory levels. The LCR rate of 130% and the calculated "Net Stable Funding Ratio" of 119% meet the current and future regulatory requirements according to Basel III without any problems.

However, the "Interbank Ratio" has fallen sharply in recent years. The "Loan to Deposit" ratio remained largely constant.

In the case of matching maturity between deposits and loans, there is a strong overweight in deposits available on demand (72% of total deposits) and long-term loans with a maturity of more than five years (57% of the total credit volume).

Liquidity (%)	2013	%	2014	%	2015	%	2016	%
Liquidity Coverage Ratio	126	NA	144	18.00	128	-16.00	130	2.00
Interbank Ratio	276.62	NA	254.41	-22.20	170.36	-84.05	115.62	-54.74
Loan to Deposit (LTD)	139.15	NA	140.18	1.03	133.78	-6.40	129.11	-4.67
Change in % Bointe								

Figure 7: Development of liquidity
(Source: S&P Global Market Intelligence / Coöperatieve Rabobank)



Conclusion

Rabobank has managed to keep profits at a high level in a low-interest rate environment, which has been ongoing for over 6 years. The year—over-year decline in net profit in 2016 is mainly a result of the negative impact of exceptional items. The lower personnel costs have not yet been able to absorb this decline. It remains to be seen whether Rabobank can advance its digitalization progress in order to reduce its personnel costs.

The asset side of the balance sheet shows that Rabobank is heavily dependent on its lending business; more than 2/3 of the balance sheet total consists of net customer loans. As a result, Rabobank has a certain degree of independence from the capital market in turbulent times, however it can only participate to a limited extent with rising profits in investment banking. Its independency from the capital market also entails a dependency on the Dutch economy. The development of the Dutch economy is seen as positive for the coming years.

On the refinancing side of the balance sheet, the Rabobank is dependent on customer deposits. The core capital ratios are peer group average, but the CET1 capital should be expanded in the case of rising risk-weighted assets.

Rabobank liquidity situation was guaranteed at all times in 2016 and is sufficient to meet future challenges.

All in all, Rabobank enjoys a high degree of stability in its business development without any substantial risks. Rabobank benefits from its role as a major player in the Netherlands and as a global address for agricultural financing.

In a scenario analysis, the rating develops significantly better in the best-case scenario and considerable worse in the worst-case scenario.



Ratings Detail

Bank ratings

The bank ratings are dependent on a host of quantitative and qualitative factors. An improvement in either sub-category may result in a higher rating score.

LT Issuer / Short-Term / Outlook A / L2 / Stable

Bank Capital and Debt Instruments Ratings

The ratings for bank capital and debt instruments are inter alia dependent on subordination and relative size of the instrument class, based on the long-term issuer rating of the bank.

'preferred' senior unsecured debt:

Tier 2 (T2):

BBB
Tier 1 (AT1):

BB+

Ratings Detail and History

Ratings		
Bank Capital and Debt Instruments		
'preferred' senior unsecured	01 February 2018	A-
Tier 2	01 February 2018	BBB-
Tier 1	01 February 2018	BB+
Bank Issuer Rating History		
LT Issuer / Short-Term / Outlook	17 May 2017	A / L2 / Stable

Figure 8: Ratings



Regulatory

Creditreform Rating AG was neither commissioned by the rating object nor by any other third parties for the rating. The analysis took place on a voluntary basis by Creditreform Rating AG and is to be described in the regulatory sense as an unsolicited rating.

The rating is based on publicly available information and internal evaluation methods for the rated bank. The quantitative analysis is based mainly on the latest annual accounts, interim reports, other investor relations information of the bank, and calculated key figures by S&P Global Market Intelligence subject to a peer group analysis were 41 competing institutes.

The information and documents processed satisfied the requirements according to the rating system of Creditreform Rating AG published on the website www.creditreform-rating.de. The rating was carried out on the basis of the rating methodology for unsolicited bank ratings as well as the methodology for the rating of bank capital and unsecured debt instruments.

On 01 February 2018, the rating was presented by the analysts to the rating committee and adopted in a resolution.

The rating result was communicated to Coöperatieve Rabobank U.A. (Group) and the preliminary rating report was made available to it. There was no change in the rating score.

The rating is subject to one-year monitoring from the creation date (see cover sheet). Within this period, the rating can be updated. At the latest after one year, a follow-up is required to maintain the validity of the rating.

In 2011 Creditreform Rating AG was registered within the European Union according to EU Regulation 1060/2009 (CRA-Regulation). Based on the registration Creditreform Rating AG (CRAG) is allowed to issue credit ratings within the EU and is bound to comply with the provisions of the CRA-Regulation.

Conflict of Interests

No conflicts of interest were identified during the rating process that might influence the analyses and judgements of the rating analysts involved or any other natural person whose services are placed at the disposal or under the control of Creditreform Rating AG and who are directly involved in credit rating activities or approving credit ratings and rating outlooks.

In case of providing ancillary services to the rated entity, CRA will disclose all ancillary services in the credit rating report.

Rules on the Presentation of Credit Ratings and Rating Outlooks

The approval of credit ratings and rating outlooks follows our internal policies and procedures. In line with our policy "Rating Committee," all credit ratings and rating outlooks are approved by a rating committee based on the principle of unanimity.

To prepare this credit rating, CRA has used following substantially material sources:

- 1. External service provider for aggregated data base
- 2. Website of the rated bank



3. Annual report

4. Abridged version of the annual report

There are no other attributes and limitations of the credit rating or rating outlook other than displayed on the CRA website. Furthermore CRA considers satisfactory the quality and extent of information available on the rated entity. In regard to the rated entity Credit-reform Rating AG regarded available historical data as sufficient.

Between the disclosure of the credit rating to the rated entity and the public disclosure no amendments were made to the credit rating.

The "Basic data" information card indicates the principal methodology or version of methodology that was used in determining the rating, with a reference to its comprehensive description.

In case where the credit rating is based on more than one methodology or where reference only to the principal methodology might cause investors to overlook other important aspects of the credit rating, including any significant adjustments and deviations, Credit-reform Rating AG explains this fact in the credit rating and indicates how the different methodologies or these other aspects are taken into account in the credit rating. This information is integrated in the credit rating report.

The meaning of each rating category, the definition of default or recovery and any appropriate risk warning, including a sensitivity analysis of the relevant key rating assumptions, such as mathematical or correlation assumptions, accompanied by worst-case scenario credit ratings as well as best-case scenario credit ratings are explained.

The date at which the credit rating was released for distribution for the first time and when it was last updated including any rating outlooks is indicated clearly and prominently in the "Basic data" card as a "Rating action"; first release is indicated as "initial rating", other updates are indicated as an "update", "upgrade or downgrade", "not rated", "confirmed", "selective default" or "default".

In the case of a rating outlook, the time horizon is provided during which a change in the credit rating is expected. This information is available within "Basic data" information card.

In accordance to Article 11 (2) EU-Regulation (EC) No 1060/2009 registered or certified credit rating agency shall make available in a central repository established by ESMA information on its historical performance data, including the ratings transition frequency, and information about credit ratings issued in the past and on their changes. Requested data are available at the ESMA website: https://cerep.esma.europa.eu/cerepweb/statistics/defaults.xhtml.

An explanatory statement of the meaning of Creditreform's default rates are available in the credit rating methodologies disclosed on the website.



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