Risk report

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Risk policy and strategy

The basic principles underlying the Deka Group's risk policy and strategy remain largely unchanged from those described in the Group management report for 2020. In order to achieve its commercial objectives, the Deka Group accepts certain risks in line with strategic requirements. These risks are limited by a comprehensive risk management system that covers all types of risk and all business divisions, sales and corporate centres in order to ensure the success of the Deka Group as a business. The framework for business and risk management is provided by the general concept of risk appetite (Risk Appetite Framework – RAF), which forms the main basis for assessing the adequacy of internal capital and liquidity (Internal Capital Adequacy Assessment Process (ICAAP)/Internal Liquidity Adequacy Assessment Process (ILAAP)) and is an integral part of the Deka Group's strategy system. A strong risk culture for the Deka Group is also key to the lasting achievement of the business policy objectives set out in the business strategy.

Whereas the first quarter of 2021 was still dominated by the COVID-19 pandemic and its impact on both the real economy and the financial markets, a clear economic recovery emerged in the second quarter. Various changes were made in 2020 to ensure that the models used by the Deka Group for economic risk management purposes continue to reflect the corporate and market situation in an appropriate and timely manner despite this changed environment. In particular, the risk-bearing capacity calculation in the stress phase involves the additional inclusion of AT1 capital in internal capital. As the market situation continues to ease, the risk-bearing capacity calculation is expected to move to the normal phase, meaning that the inclusion of AT1 capital is likely to be dropped in the course of the year. In order to avoid the impact of excessive market reactions in connection with the COVID-19 crisis and thus excessive procyclical effects in risk management, the observation period for determining historical volatilities in the calculation of economic market price risk was also extended from one to three years. Furthermore, the averaging period for calculating the bond segment curves in order to determine the economic counterparty risk was permanently increased from 20 days to 60 days, as this approach reduces fluctuations resulting from short-term changes in the curves so that they do not overshadow the view of actual portfolio developments.

Risk management and control are reviewed and refined as required on an ongoing basis, taking due account of regulatory requirements.

The Deka Group continued to press ahead with the project initiated in the previous year to implement the vision adopted by the Board of Management for the establishment of an integrated management system for non-financial risks (NFR). Implementing a uniform valuation methodology and consolidated NFR reporting, for example, is ultimately to lead to more efficient and effective processes for identifying, measuring and managing NFR. To increase the granularity of the risk appetite statement, an additional operational limit was introduced at the level of the operational risk sub-types at the end of June. A corresponding methodology was rolled out for redistributing the risk contribution for operational risks to these sub-risk types, as was a process for setting and monitoring the operational limits with the involvement of the individuals responsible for the sub-risk types in the second line of defence. At the same time, further steps were also taken towards developing a holistic reputational risk management system by incorporating relevant business processes into a uniform system for risk assessment and decision-making.

Given how important sustainability risks are from a macroeconomic perspective and in light of the corresponding marked increase in regulatory expectations, the Deka Group has recently significantly stepped up its activities in this area. Sustainability risks are not seen as a type of risk in their own right, but rather as a driver of existing types of risk. A comprehensive analysis of the handling of climate and environmental risks was already performed last year. Taking regulatory expectations into account, a comprehensive action plan for business strategy, governance, risk management and disclosure was drawn up based on an analysis of the status quo. Measures already taken in 2021 are initially intended to boost transparency through a Group-wide analysis of the impact of climate and environmental risks and to refine the strategic and organisational basis for dealing with sustainability risks. With regard to the inclusion of sustainability aspects in DekaBank's lending processes, extensive measures were taken in line with regulatory requirements (primarily the EBA Guidelines on loan origination and monitoring) in order to adapt rules and procedures appropriately in the areas of governance, loan origination, pricing, collateral and monitoring. The development of segment-specific ESG scorecards, which have been in use for new business and renewals since 1 July 2021, are worthy of particular mention in this regard.

The ECB has also announced a climate stress test for the first half of 2022. In various modules, institutions will be asked to answer questions on the climate stress testing framework, to collect key figures on portfolios relevant to climate risk and to conduct a bottom-up stress test including a total of nine stress scenarios with different time horizons. The Deka Group is analysing the draft requirements communicated by the ECB to date and taking preparatory measures.

In the wake of the ECB guide to internal models published back in November 2018, more supervisory reviews of internal models under Pillar I of the Basel Accord (Targeted Review of Internal Models, TRIM) were conducted. The reviews aimed to reduce the variability of model results and thereby increase confidence in internal models. They affected the internal rating models for credit risk (IRBA), internal market risk models (IMA) and internal models for estimating exposure to counterparty risk (IMM). With regard to the IRB approach, suitable measures to fulfil the requirements were initiated based on the findings of the 2019 on-site audit in the fund rating module as part of the TRIM and are currently being worked through. TRIM audits concerning counterparty risk did not affect DekaBank.

In addition, as part of the implementation of the EBA Guidelines on PD estimation, LGD estimation and treatment of defaulted assets, further IRB reviews are currently being carried out for four modules in connection with the corresponding model change notifications. In the coming year, more of these reviews will be conducted until all IRB rating modules have been reviewed by the supervisory authority.

The potential economic impact of changes to the Credit Risk Standardised Approach (CRSA) and the Internal Ratings Based Approach (IRBA) that are currently planned as part of the finalisation of Basel III (Basel IV) continues to be monitored. The same applies to the Fundamental Review of the Trading Book (FRTB). The measures needed to fulfil the requirements of the new FRTB standard approach are already being implemented. The planned introduction of the Standardised Measurement Approach (SMA) for calculating operational risk capital, which could also affect Pillar II of the Basel framework under certain circumstances, is also being monitored.

Capital adequacy in the first half of 2021

See also: Economic report: page 11 ff.

The risk position presented in the risk report relates to the Deka Group's risk position overall, and therefore corresponds to the definition used as the basis for presentation of the Deka Group's business development and profit performance in the economic report.

While in the first quarter of the year, the negative effects associated with ongoing lockdowns to contain the COVID-19 pandemic were still keeping the handbrake on the economy, a clear economic recovery emerged at the beginning of the second quarter. The positive economic environment overall, with expectations of rising corporate profits, continues to be reflected in a generally positive situation on the financial markets. In addition to price gains on the stock markets, this is reflected in particular in low risk premiums on the credit and bond markets.

The reforms to interest rate benchmarks (reference rates) initiated by the Financial Stability Board resulted in further noticeable changes on the market in the first half of 2021. After the focus in 2020 was on establishing the new reference rates, such as the Euro Short-Term Rate (€STR), Secured Overnight Financing Rate (SOFR) and Sterling Overnight Index Average (SONIA) in the market, the emphasis in 2021 is on switching existing transactions over to the new rates. The discontinuation of LIBOR rates at the end of 2021, especially for three currencies, the British pound sterling (GBP), the Japanese yen (JPY) and the Swiss franc (CHF), means that the transition is mandatory for the affected transactions. Pressure in this regard, particularly from the UK banking regulator, has led to an early shift away from GBP LIBOR and towards GBP SONIA in the market.

The retirement of key LIBOR rates means that DekaBank will have to make significant adjustments to its systems, models and data repositories in the course of the year, in addition to contractual adjustments. Some of these have already been implemented successfully or are in the process of being implemented on schedule. Another aspect will involve the definitive switch of corresponding LIBOR-based derivative contracts with central counterparties in the second half of 2021. By contrast, the development of option markets for the new reference rates is still in its infancy. Moves by the supervisory authorities to push market development should, however, provide significant impetus in this area, too, in the coming months.

Looking at the Deka Group, market development in the first half of 2021 was characterised by very strong performance on the stock markets and declining volatility. This has contributed to very positive issuing business, especially for share certificates. Due to the neutral risk position, developments on the stock markets and rising swap interest rates, especially at the long end, had only a minor impact on the risk situation. The sideways trend in credit spreads also contributed to the low impact. By contrast, market developments have resulted in a significant drop in risks from Riester products and pension obligations.

The Deka Group held adequate capital throughout the reporting period. In particular, the Common Equity Tier 1 capital ratio and utilisation of risk capacity and of the risk appetite remained at non-critical levels throughout.

Economic perspective (current situation)
During the reporting period, the models employed by the Deka Group for economic risk management continued to reflect the corporate and market situation in an appropriate and timely manner. The Deka Group's total risk (value-at-risk – VaR; confidence level 99.9%; holding period one year) stood at €2,045m at the end of the first half of the year. As such, it showed a significant drop relative to the position at the end of 2020 (€2,821m), mainly due to the dwindling effects of the coronavirus crisis. This was based on significantly lower counterparty, market price and business risk, while operational risk and investment risk increased slightly.

Over the same period, risk capacity rose to €5,560m (year-end 2020: €5,236m). This increase was driven primarily by the increase in retained earnings in connection with the retention of parts of the annual profit, a higher revaluation reserve, lower deduction items for deferred tax assets and for risks from pension obligations, as well as higher year-to-date IFRS profit after tax and pro rata distribution. There was an opposite effect particularly from the drop in net unrealised gains and losses on securities in the investment portfolio. The utilisation of risk capacity was down significantly as against the end of 2020 (53.9%) to 36.8%, meaning that it remains at a non-critical level. If the stress phase were to end during the year and AT1 capital were therefore no longer included in internal capital, risk capacity would be reduced and the utilisation ratio would increase, although it would remain at a non-critical level. There would be no need to adjust the risk appetite.

Utilisation of allocated risk capital was non-critical both at Deka Group level and in all business divisions. The risk appetite of €4,000m (unchanged since the end of 2020) was 51.1% utilised as at 30 June 2021 (year-end 2020: 70.5%).

Change in Deka Group risk over the course of the year *in €m (Fig. 15)*

	30 Jun 2021	31 Dec 2020	Change	
Counterparty risk	867	1,157	–290	–25.1%
Investment risk	23	20	2	10.6%
Market price risk	479	825	–346	–41.9%
Operational risk	280	279	2	0.6%
Business risk	396	541	–145	–26.8%
Total risk	**2,045**	**2,821**	–777	–27.5%

Normative perspective (current situation)

Capital adequacy is determined in accordance with the CRR. Alongside counterparty risk, market risk and operational risk, the credit valuation adjustment (CVA) risk is also taken into account.

The Deka Group's regulatory own funds as of 30 June 2021 stood at €5,981m (31 December 2020: €5,753m).

The increase in Common Equity Tier 1 capital by 5.8% to €4,694m was due primarily to the inclusion of year-end effects from 2020 (profit retention and inclusion of the risk provisions set up in 2020 in the comparison of provisions).

Tier 2 capital amounted to €813m (year-end 2020: €842m). This change was due to the reduced eligibility of Tier 2 capital instruments under the CRR in the last five years before maturity.

Risk-weighted assets fell by €591 m from the year-end 2020 figure of €31,307m to €30,716m as of 30 June 2021. As expected, credit risk increased by €2,412m as against the end of the year to €20,017m, mainly due to the first-time application of CRR II. This results in higher RWA for guarantee products due to the application of the CCF approach, as well as higher RWA due to the application of the SA CCR approach when determining the counterparty risk for derivatives. The increased credit risk was offset by a drop in market risk of €2,900m to €6,678m. This was mainly attributable to a drop in general market risk as a result of lower spread volatilities and to a drop in specific market risk resulting from the adjustment to reflect the new interpretation of the use of offsetting options in specific interest rate risk. Operational risk increased slightly by €20m to €3,505m. CVA risk came to €516m (year-end 2020: €638m).

As of 30 June 2021, the Common Equity Tier 1 capital ratio stood at 15.3% (year-end 2020: 14.2%). The Tier 1 capital ratio as of the reporting date was 16.8% (year-end 2020: 15.7%). The total capital ratio rose from 18.4% as of 31 December 2020 to 19.5% at the reporting date.

Taking account of the requirements of the SREP (Supervisory Review and Evaluation Process), DekaBank had to comply at Group level with a phase-in Common Equity Tier 1 capital ratio of at least 8.44% as at 30 June 2021. This capital requirement is comprised of the Pillar 1 minimum requirement (4.50%) plus the Pillar 2 requirement (1.5%, taking into account partial P2R coverage by Tier 2 (T2) capital, reduced to 1.125% for the Tier 1 capital ratio and Common Equity Tier 1 capital ratio), the capital conservation buffer (2.5%), the countercyclical capital buffer (as at the end of June 2021: 0.068%) and the capital buffer for other systemically important banks (0.25%). The capital requirement for the Tier 1 capital ratio (phase-in) was 9.94%. For the total capital ratio (phase-in), it was 12.32%. These requirements were clearly exceeded at all times.

Deka Group own funds *in €m (Fig. 16)*

	30 Jun 2021		31 Dec 2020	
	CRR II (without transitional provisions)	CRR II (with transitional provisions)	CRR I (without transitional provisions)	CRR I (with transitional provisions)
Common Equity Tier 1 (CET 1) capital	4,694	4,694	4,437	4,437
Additional Tier 1 (AT 1) capital	474	479	474	484
Tier 1 capital	**5,168**	**5,173**	**4,911**	**4,921**
Tier 2 (T2) capital	813	813	842	842
Own funds	**5,981**	**5,986**	**5,753**	**5,763**
Credit risk	20,017	20,017	17,605	17,605
Market risk	6,678	6,678	9,578	9,578
Operational risk	3,505	3,505	3,485	3,485
CVA risk	516	516	638	638
Risk-weighted assets	**30,716**	**30,716**	**31,307**	**31,307**
%				
Common Equity Tier 1 capital ratio	**15.3**	**15.3**	**14.2**	**14.2**
Tier 1 capital ratio	**16.8**	**16.8**	**15.7**	**15.7**
Total capital ratio	**19.5**	**19.5**	**18.4**	**18.4**

The leverage ratio determined in accordance with CRR II, i.e. the ratio of Tier 1 capital to total assets (leverage ratio exposure, LRE), adjusted in line with regulatory requirements, stood at 5.7% as at 30 June 2021 (year-end 2020: 5.6%). Taking account of the phase-in provisions, the leverage ratio for the Deka Group was 5.7% (year-end 2020: 5.6%). The improvement was due to the €257m increase in Tier 1 capital with a simultaneous increase in the leverage ratio exposure by €2,037 m (in line with the increase in total assets, which was offset by effects resulting from the first-time application of CRR II). The leverage ratio was at all times substantially above the minimum of 3.0% to be adhered to from June 2021 onwards.

The MREL requirements were changed to an RWA- and LRE-based calculation method in the middle of 2021. The total of own funds and MREL-eligible liabilities is expressed in relation to RWA and LRE. As at the reporting date, the MREL ratio in line with the RWA-based approach amounted to 61.6%, while the figure according to the LRE-based approach came to 21.0%. Both ratios were well above the minimum ratios that will apply as of 1 January 2022. Compared against 31 December 2020 (€19.2bn), there was a slight reduction in own funds and MREL-eligible liabilities to €18.9bn. As of the reporting date, this figure was composed of own funds of €6.0bn, senior non-preferred issues of €8.5bn, senior preferred issues of €4.3bn and unsecured subordinated liabilities of €0.2bn.

The subordinated MREL requirements were also calculated using the RWA- and LRE-based method. The total of own funds and all subordinated liabilities eligible based on statutory requirements is expressed in relation to RWA and LRE. As at the reporting date, the subordinated MREL requirements under the RWA-based approach were 44.8%, while the figure under the LRE-based approach came to 15.3%. Both ratios were well above the minimum ratios that will apply as of 1 January 2022.

Macroeconomic stress tests

Macroeconomic stress testing incorporates both the economic and normative perspectives. The in-depth analysis of the results of the macroeconomic stress scenarios in both perspectives also takes into account their probability of occurrence and lead time, as well as the possible mitigation measures available if necessary. Under this approach, the internal thresholds were complied with at all times during the reporting period and at the end of June in all the scenarios examined, and no action was required in relation to capital adequacy.

Liquidity adequacy in the first half of 2021

The Deka Group continued to have ample liquidity, measured using the liquidity balances and LCR, throughout the first half of 2021. There were no breaches of the internal limits and emergency triggers or the external minimum LCR and NSFR at any time.

The pandemic is now having no material impact on the liquidity side. The share of refinancing via commercial papers remained low compared to the overall refinancing profile. The volume of evergreen financing was at a low level to improve the ability to manage the liquidity risk position.

Economic perspective

There were clear positive liquidity balances in all relevant maturity bands of the "combined stress scenario" funding matrix for periods of up to 20 years. This was also the case for the alternative stress scenarios. Limits and emergency triggers were complied with throughout the reporting period.

As at 30 June 2021, the accumulated liquidity balance of the Deka Group's "combined stress scenario" funding matrix in the short-term range (up to one week) stood at €3.6bn (year-end 2020: €5.2bn). In the maturity band of up to one month, the liquidity surplus totalled €7.6bn (year-end 2020: €8.2bn), and in the medium range (three months) it was €10.8bn (year-end 2020: €12.0bn).

In relation to the net cash flows of approximately €0.3bn on day 1, the Deka Group has a high liquidity potential (around €3.2bn) that is readily convertible at short notice. The Group has access to a large portfolio of liquid securities which are eligible as collateral for central bank borrowings, as well as to available surplus cover in the cover pool and corresponding repo transactions. The strict requirements concerning the liquidity potential ensure that the securities used for this purpose can generate liquidity even in a stressed market environment.

"Combined stress scenario" funding matrix of Deka Group as at 30 June 2021 *in €m (Fig. 17)*

	D1	>D1 to D5	>D5 to 1M	>1M to 3M	>3M to 12M	>12M to 5Y	>5Y to 20Y	>20Y
Liquidity potential (accumulated)	3,229	3,125	5,188	6,029	–1,221	–356	–75	–5
Net cash flows from derivatives (accumulated)[1]	–230	24	1,647	3,069	3,827	2,638	2,127	2,115
Net cash flows from other products (accumulated)	518	416	775	1,701	10,986	9,577	980	–2,812
Liquidity balance (accumulated)	**3,516**	**3,564**	**7,609**	**10,799**	**13,593**	**11,859**	**3,033**	**–701**
For information purposes:								
Net cash flows from derivatives by legal maturity (accumulated)[1]	–230	–233	–250	–192	–272	–486	–851	–1,245
Net cash flows from other products by legal maturity (accumulated)	–3,145	–3,631	–9,663	–13,359	–11,388	–4,580	–4,949	–639
Net cash flows by legal maturity (accumulated)	**–3,375**	**–3,864**	**–9,914**	**–13,551**	**–11,659**	**–5,066**	**–5,800**	**–1,885**

[1] Including lending substitute transactions and issued CLNs

As at 30 June 2021, repo transactions, overnight and time deposits and other money market products accounted for 57.3% of total refinancing (year-end 2020: 52.2%). The remainder of the refinancing concerned capital market products, primarily with longer maturity profiles. The refinancing profile for lending business was well balanced, given the maturity structure.

The coronavirus crisis has resulted in a change in the refinancing profile. The proportion of refinancing from other banks has declined, while refinancing via funds has increased. The volume of money market refinancing via commercial papers increased, but is still at a very low level.

Normative perspective

The regulatory LCR requirements were met throughout the period under review. In percentage terms, the increase in net cash outflows was greater than that in holdings of high-quality, liquid assets. This resulted in a reduction in the liquidity coverage ratio at Deka Group level compared to 31 December 2020. The LCR as at 30 June 2021 stood at 149.7% (year-end 2020: 185.6%). The average during the first half of 2021 was 166.1% (average for H1 2020: 164.8%). The LCR fluctuated within a range from 149.1% to 198.8%. It was thus always substantially above the minimum limit of 100.0% applicable in 2021.

The net stable funding ratio (NSFR) came to 118.5%, meaning that, at the end of June, it was substantially above the minimum limit of 100% applicable as of June 2021. The ratio expresses available stable funding in relation to required stable funding. The NFSR is thus designed to ensure stable long-term funding for assets in relation to their degree of liquidity. A period of one year forms the basis for the assessment.

Both perspectives (macroeconomic stress tests)

The internal thresholds were complied with in both perspectives at all times, even in the macroeconomic stress testing.

Individual risk types

Counterparty risk

Current risk situation

Counterparty risk, as determined on the basis of the credit value at risk (CVaR) with a confidence level of 99.9% and a holding period of one year, fell significantly in the first half of 2021 to €867m (year-end 2020: €1,157m). Risk capital allocated to counterparty risk stood at €1,595m (year-end 2020: €1,630m) and was 54.4% utilised (year-end 2020: 71.0%). The level of risk capacity utilisation therefore remained non-critical.

The risk development was due primarily to portfolio optimisation measures in the Capital Markets business division and in the Treasury corporate centre. In addition, the positive market development that had already started to emerge at the end of 2020, despite the ongoing COVID-19 crisis, continued in the first half of the year and led to a stabilisation in risk premiums, prompting a further reduction in risk.

The risk position of the cluster portfolio was assessed using an expected shortfall redistribution. The result was a significant decrease in absolute terms compared with the end of 2020. The relative share of the cluster portfolio in the overall portfolio also decreased slightly. Risk concentration remained in line with the Deka Group's credit risk strategy.

Gross loan volume increased moderately by 6.8% as against the end of 2020 (€120.2bn) to reach €128.3bn. A significant portion of the increase related to the financial institutions risk segment, which was affected in particular by the increased deposits with the Bundesbank and increased repo lending volumes. In the funds risk segment, the gross loan volume increased due to more securities issued as collateral as part of borrowing transactions and also due to increased fund units. The reduction in gross loan volume also came partly from market fluctuations from interest rate derivatives and fewer promissory note loans in the savings banks risk segment. A lower risk from bond volumes in the Public sector International and Public sector Germany risk segments also had the effect of reducing the gross loan volume. The lending business volume comprising various, predominantly collateralised infrastructure, transport, export and real estate financing was down on the level seen at the end of 2020. The ship portfolio's share of gross loan volume fell slightly to 0.7% (year-end 2020: 0.8%). The aircraft portfolio had a share of 2.0% (year-end 2020: 2.4%). In connection with the COVID-19 crisis, the transport loan portfolio in particular is being closely followed and monitored on an ongoing basis.

Gross loan volume *in €m (Fig. 18)*

	30 Jun 2021	31 Dec 2020
Financial institutions	68,480	56,700
Savings banks	6,523	7,434
Corporates	9,075	9,010
Public sector International	3,393	4,948
Public sector Germany	9,970	11,690
Transport and export finance	4,791	5,272
Property risks	10,606	10,417
Funds (transactions and units)	11,456	10,721
Other	4,003	3,962
Total	**128,296**	**120,155**

Net loan volume increased by 10.8% as against the end of 2020 (€61.0bn) to reach €67.6bn. This was because the increase in business volume resulted in higher deductions for secured lending when converting from gross to net loan volume. This mainly reflected the offsetting of reverse repo transactions, especially as a result of the increased volume of reverse repos in the financial institutions risk segment, the netting of lending transactions (due to their increased volume in the funds risk segment) and the offsetting of credit derivatives (due to their decreased volume in the Public sector International and Public sector Germany risk segments). Increased deposits with Deutsche Bundesbank in the financial institutions risk segment had the effect of increasing the net loan volume. There was also a decline in volume in the savings bank financing segment, which was also visible after netting.

Net loan volume *in €m (Fig. 19)*

	30 Jun 2021	31 Dec 2020
Financial institutions	31,618	23,245
Savings banks	6,336	7,232
Corporates	3,580	3,927
Public sector International	1,176	1,294
Public sector Germany	9,519	10,360
Transport and export finance	605	682
Property risks	2,611	2,644
Funds (transactions and units)	8,134	7,660
Other	4,003	3,962
Total	**67,583**	**61,005**

The gross loan volume in the eurozone rose by a total of €12.8bn. This was due to increased deposits with Deutsche Bundesbank, an increase in repo transactions with counterparties in Germany and France and an increased lending volume in Germany and Luxembourg. As a result, the percentage of gross loan volume increased from 72.5% at the end of 2020 to 77.9%.

The volume movements in the EU countries outside the eurozone, as well as in the OECD excluding the EU, resulted primarily from the UK's exit from the EU, as well as reduced reverse repo transactions with capital market counterparties that shifted their business from the UK to Germany. In addition, the increase in the OECD countries was also due to greater exposure to securities lending with Swiss counterparties.

Gross loan volume by region *in €m (Fig. 20)*

	30 Jun 2021	31 Dec 2020
Eurozone	99,967	87,165
EU excluding eurozone	987	16,848
OECD excluding EU	24,307	13,096
International organisations	161	24
Other countries	2,875	3,023
Total	**128,296**	**120,155**

The gross loan volume attributable to Germany increased by €12.1bn to €64.4bn and equated to a proportion of 50.2% at the mid-year point. In the eurozone, €14.1bn or 11.0% of the gross loan volume was attributable to counterparties in Luxembourg. Counterparties in France accounted for 7.0% of the gross loan volume, and counterparties in Belgium accounted for 5.1%.

The gross loan volume relating to borrowers in Spain and Italy fell to €2.6bn, from €3.3bn at the end of 2020. The collateralising effect of repo transactions meant that the net loan volume attributable to borrowers in Italy was lower than the gross loan volume. As a result of both the collateralising effect of repo transactions and the derivative collateralisation of the bond portfolio, the net loan volume attributable to borrowers in Spain was less than the gross loan volume.

Gross loan volume by regional concentration *in €m (Fig. 21)*

	30 Jun 2021	Percentage of Gross loan volume
Germany	64,448	50.2%
Luxembourg	14,110	11.0%
United Kingdom	10,931	8.5%
France	9,036	7.0%
Belgium	6,512	5.1%
Spain	1,939	1.5%
Netherlands	1,255	1.0%
Italy	709	0.6%
Other	19,357	15.1%
Total	**128,296**	**100.0%**

The gross loan volume remained focused primarily on the short-term segment. The proportion of transactions with a time to maturity of less than one year was 40.2% at the end of the first half of 2021 (year-end 2020: 41.2%). The proportion of maturities longer than ten years was 6.6%, compared with 8.9% at 31 December 2020. The average legal residual term of gross lending was down to 3.3 years (year-end 2020: 3.9 years) mainly due to the increased deposits with Deutsche Bundesbank.

The level of risk concentration in the loan portfolio fell slightly during the first half of 2021. As at 30 June, 16.3% (year-end 2020: 19.9%) of total gross loan volume was attributable to borrower units with a gross limit of at least €2.5bn or an overall net limit of at least €1.0bn (counterparty clusters). The number of counterparty clusters was down as against the end of 2020 from two to 26. As part of the adjustment to the credit risk strategy for 2021, the allocation of counterparty clusters to new risk segments and their limit guidelines were adjusted. Of the gross loan volume attributable to the cluster portfolio, 34.3% related to public sector counterparties, savings banks, and government-related and supranational institutions. A total of 15.3% of net loan volume related to counterparty clusters (year-end 2020: 20.4%).

As was already the case at the end of 2020, shadow banking entities under the principal approach (limit utilisation of total net risk position: 35%) accounted for less than 1% of the net loan volume as at the 30 June 2021 reporting date. For shadow banking entities under the fallback approach, this share was virtually 0%. The utilisation figures are considered acceptable, especially given that the shadow banking entities have an average rating of "A–" on the DSGV master scale.

Over the reporting period, the average rating for the gross loan volume deteriorated by one notch to a rating of 4 on the DSGV master scale. The average probability of default rose to 26 bps (year-end 2020: 20 bps), which was due to deteriorating credit ratings for a central counterparty and for high-volume counterparties in the financial institutions risk segment as well as for various aircraft, ship, real estate and aviation companies, partly as a result of the COVID-19 pandemic. The average rating for the net loan volume remained stable at "A–" with a virtually unchanged average probability of default of 9 bps (year-end 2020: 10 bps).

Net loan volume by risk segment and rating *in €m (Fig. 22)*

	Average PD in bps	Ø-Rating 30 Jun 2021	30 Jun 2021	Average PD in bps	Ø-Rating 31 Dec 2020	31 Dec 2020
Financial institutions	4	AA–	31,618	6	A	23,245
Savings banks	1	AAA	6,336	1	AAA	7,232
Corporates	16	3	3,580	17	3	3,927
Public sector International	3	AA	1,176	3	AA	1,294
Public sector Germany	1	AAA	9,519	1	AAA	10,360
Public infrastructure	18	3	860	14	2	936
Transport and export finance	231	9	605	159	8	682
Energy and utility infrastructure	41	5	2,983	46	5	2,822
Property risks	22	4	2,611	11	2	2,644
Retail portfolio	0	0	161	0	0	204
Funds (transactions and units)	12	2	8,134	11	2	7,660
Total	**9**	**A–**	**67,583**	**10**	**A–**	**61,005**

The Bank continues to achieve its target rating of investment grade (5 or better) for the portfolio as a whole without difficulty, with regard to both its gross and net loan volume. 92.6% of net loan volume remained in the same grouping (determined by rating class) as at the end of 2020.

Market price risk

Current risk situation

Market price risk at Deka Group level (measured using VaR with a confidence level of 99.9% and a holding period of one year) fell significantly compared with the position as at the end of 2020 (€825m) to €479m. The strong decrease was primarily attributable to a lower risk from guarantee products. This was due to a significant increase in interest rates in the first quarter and a positive trend on the stock markets.

Utilisation of the allocated risk capital for market price risk stood at €1,300m (year-end 2020: €1,255m). This represents a non-critical utilisation level of 36.8%.

Market price risk for the Deka Group (excluding guarantees) as at 30 June 2021 was €48.3m (year-end 2020: €51.9m), measured as the VaR with a confidence level of 99.0% and a holding period of ten days. The portfolio optimisation measures taken in response to developments in connection with the coronavirus crisis achieved the intended effect. As the situation on the financial markets has calmed down, the COVID-19 crisis is no longer having any direct impact on market price risk. Should another wave of the pandemic emerge, triggering renewed fluctuation on the financial markets, then market price risk would also be expected to increase again. At the same time, the portfolio optimisation measures mean that the risk position is less susceptible to market crises.

Utilisation of the operational management limit at Deka Group level (excluding guarantees) stood at €88.0m as of the reporting date. This represented an utilisation level of 55% and was therefore non-critical.

Deka Group value-at-risk excluding guarantee products[1] (confidence level 99%, holding period ten days)
in €m (Fig. 23)

	30 Jun 2021						
Category	**Asset Management Securities business division**	**Asset Management Real Estate business division**	**Asset Management Services business division**	**Capital Markets business division**	**Treasury**	**Deka Group excluding guarantees**	Change in risk vs 31 Dec 2020
Interest rate risk	4.2	0.0	4.6	11.1	36.6	48.5	−7.7%
Interest rate (general)	0.7	0.0	4.2	5.1	6.1	8.2	−28.1%
Credit spread risk	4.0	0.0	2.4	10.6	38.4	49.5	−8.0%
Share price risk	0.6	0.2	0.4	7.0	2.4	6.4	0.0%
Currency risk	0.2	0.0	0.0	0.6	9.5	10.0	89.7%
Total risk	**4.1**	**0.2**	**4.6**	**13.6**	**38.0**	**48.3**	−6.9%

[1] Risk ratios for interest rate risk and total risk, taking account of diversification. Includes issue-specific credit spread risk.

The VaR for general interest rate risk (excluding risks on guarantee products) decreased from €11.4m at year-end 2020 to €8.2m. The reduction began in the first quarter with a tighter management of risk (adjustments to hedges).

The VaR for credit spread risk fell to €49.5m on the reporting date (year-end 2020: €53.8m). The slight drop was due to a reduction in bond positions. In line with the business model, risk concentration in terms of credit spread risk was mainly attributable to German and US bonds issued by the public sector, financial institutions and corporates.

At €6.4m, share price risk was unchanged as against the 2020 year-end level and thus remained less significant.

Currency risk rose from €5.3m at the end of 2020 to €10.0m in the reporting period. The increase resulted from the adjustments in connection with the LIBOR changeover. At the reporting date, the currency risk was attributable primarily to positions in US dollars and pound sterling and, like the share price risk, was of minor significance.

Operational risk

Current risk situation

The VaR for operational risk (confidence level of 99.9%, holding period of one year) increased only marginally from €279m at year-end 2020 to €280m. The slight increase in risk resulting from the reassessment of various loss scenarios was almost completely offset by a relatively small number of newly or retrospectively recorded loss events. In the context of the COVID-19 pandemic, updated costs for additional protective and disinfection measures, as well as for the provision of face masks and self-testing kits to employees, are particularly worthy of note. In addition, effects that had previously been taken into account, with the effect of reducing losses, were no longer included in the quantification in line with the requirements on the treatment of the various cost components set out by the EBA at the end of the previous year. Risk capital allocated to operational risk stood at €350m (year-end 2020: €335m). Utilisation of this amount was 80.1%. Utilisation thus remains at a non-critical level.

The OR loss potential calculated as part of the Group-wide risk survey increased to €72m (year-end 2020: €66m) due to newly included loss scenarios, for example in connection with the first-time inclusion of the subsidiary IQAM Invest GmbH, and also due to updates to various existing risk assessments. There was no need for any additional adjustments in connection with the COVID-19 pandemic, as related aspects were given extensive consideration in the previous year. As things currently stand, there is no reason to expect any increased risk profile in this context in the future either, as the Deka Group has adapted to the new working situation through various measures and the projections already reflect the changes in the cost structure.

On 15 July 2021, a revised Federal Ministry of Finance (BMF) circular dated 9 July 2021 was published on the tax treatment of share trades transacted around the dividend record date. Compared to the original BMF circular dated 17 July 2017, this BMF circular sets out more specific details regarding the requirements for relief from capital yields tax (*Kapitalertragsteuer*), as well as with regard to the legal consequences in the event of a refusal by tax authorities to allow relief for share trades transacted around the dividend record date. Based on the revised BMF circular of 9 July 2021 on the tax treatment of cum/cum transactions, tax risks exist in connection with relief from capital yields tax on share transactions made around the dividend record date in the years 2013 to 2015. All matters are reported in the interim report as at 30 June 2021 in accordance with DekaBank's interpretation of the relevant tax regulations and accounting standards.

In addition, DekaBank has begun voluntary investigations to ascertain whether its involvement enabled third parties to conduct share trades around the dividend record date and make use of abusive tax structures or whether it was otherwise involved in such structures. Based on the findings available to it, DekaBank considers it unlikely that the tax authority will be able to make a claim in relation to these matters beyond what has been recognised in the financial statements as at 30 June 2021.

Business risk

The VaR of business risk was €396m as at 30 June 2020, significantly lower than the level of €541m at the end of the previous year. The reduction in risk was due predominantly to lower volatilities against the backdrop of the market recovery following the coronavirus crisis, with effects in the Asset Management Securities, Asset Management Services and Capital Markets business divisions. This meant that the allocated risk capital, which was reduced to €725m (year-end 2020: €750m), was 54.6% utilised. Should the COVID-19 pandemic flare up again and trigger increased market volatility, it would be impossible to rule out a renewed increase in business risk. A comprehensive revamp of the model for quantifying business risk is currently under way, with the revised model expected to go live for the Asset Management Securities business division at the end of August 2021. The revised model has a refined and, as a result, more accurate modelling system at its core, making it possible to replace some of the conservative assumptions that are implemented at present. As a result, we currently expect to see a reduction in risk.

Further risks

Investment risk

The VaR of investment risk was €23m at 30 June 2021 and was therefore up slightly on the level of €20m at the previous year-end. The reason for the slight increase in risk was the increase in the IFRS carrying value of an equity investment as a result of the current fair value measurement in accordance with IFRS 9 as part of the regular remeasurement of equity investments at mid-year. The risk capital allocated to investment risks remained unchanged at €30m, with utilisation of 75.1%. The COVID-19 pandemic did not have any major impact on investment risk, and no such impact is expected based on the information available at present.