and liabilities attributable to Group financing as well as profit and loss transfer agreements.

Gross capital expenditures consist of capital expenditures in property, plant and equipment and intangible assets excluding capitalized borrowing costs. Net capital expenditures are calculated by deducting the participation of third parties in the financing of specific capital expenditure projects (essentially the investment grants of the Federal Government and the Federal states).

Additions from changes in the scope of consolidation are shown as part of segment gross capital expenditures, and comprise exclusively the capital expenditures in property, plant and equipment and intangible assets, including the goodwill acquired as part of company acquisitions or included in the consolidated financial statements for the first time.

The number of employees comprises the workforce, excluding trainees and dual degree students (students on courses combining theory and practice), at the end of the reporting period (part-time employees have been converted to full-time employees).

The segments are subject to the same accounting principles which are described in the section PRINCIPLES AND METHODS 190 FF. and which are applicable for the remainder of the consolidated financial statements. Intra-Group segment transactions are generally conducted on an arm's length basis.

EXPLANATIONS OF THE INFORMATION ACCORDING TO REGIONS

External revenues are stated on the basis of the registered offices of the Group company providing the service.

Non-current assets are allocated on the basis of the location of the company. The non-current assets comprise intangible assets, property, plant and equipment as well as non-current receivables and other assets (excluding financial instruments, deferred tax assets, rights from insurance policies as well as assets in conjunction with benefits after termination of the employment agreement).

INFORMATION CONCERNING MAJOR CUSTOMERS

In the year under review as in the previous year, no single customer accounted for more than 10% of overall Group revenues.

Risk management and derivative financial instruments

MANAGEMENT OF FINANCIAL AND ENERGY PRICE RISKS

As a mobility, transport and logistics group with international operations, DB Group is exposed to financial risks in the form of changes in interest rates and exchange rates. In addition, there are also energy price risks on the procurement side as a result of fluctuations in the prices of diesel fuel and electricity. One of the aspects of corporate policy is to actively manage and thus limit these risks by means of the use of derivative financial instruments.

DB AG is responsible for all financing and hedging transactions of DB Group with its central Group Treasury, and operates in close cooperation with the subsidiaries, where the risk positions primarily arise. Group Treasury follows the relevant regulations for risk management (minimum requirements for risk management (Mindestanforderungen an das Risikomanagement; MaRisk), Corporate Sector Supervision and Transparency Act (Gesetz zur Kontrolle und Transparenz im Unternehmensbereich; KonTraG)). Speculation is not permitted. Ongoing market and risk assessment takes place as part of risk management.

Derivative financial instruments are used exclusively for hedging interest, currency and energy price risks. All individual transactions correspond to on-balance-sheet or anticipated underlyings (for instance senior bonds, purchases of diesel fuel and electricity). The aim is to achieve qualification as an effective hedge in accordance with IFRS 9.

INTEREST RATE RISKS

The interest rate risks are attributable to borrowings raised in conjunction with variable interest rates.

In accordance with IFRS 7, the effects of theoretical changes in market interest rates on income and shareholders' equity are investigated by means of a sensitivity analysis. For this purpose, the following financial instruments are considered:

- Derivatives designated in cash flow hedges (interest hedges and cross-currency hedges) have an impact on the hedge reserve in shareholders' equity and are therefore taken into consideration in the sensitivity calculations relating to shareholders' equity.
- The sensitivity calculations for net interest income include financial instruments with variable interest (cash at banks, short-term borrowings/investments, cross-currency swaps, loans).

If the level of market interest rates for the exposure had been 100 basis points higher (lower) as of the balance sheet date, the comprehensive income would have been affected as follows:

	2019		2018	
	Change in market level of interest rates			
(€ million)	+100 BP [1]	-100 BP [1]	+100 BP [1]	-100 BP [1]
Impact on comprehensive income	+17	-19	+28	-31
thereof net profit for the year	+2	-2	+7	-7
thereof covered directly in equity	+15	-17	+21	-24

[1] Basis points.

FOREIGN CURRENCY RISKS

The foreign currency risks are attributable to financing measures and operating activities.

In order to avoid interest rate and foreign currency risks, the foreign currency bonds issued and loans within the framework of Group financing are converted into euro liabilities and receivables by means of cross-currency swaps. However, it is not necessary for such bonds to be converted in individual cases if there is a guarantee that the bond can be serviced out of inflows of foreign currency payments.

Subsidiaries hedge all significant foreign currency positions in their functional currency via Group Treasury. In exceptional cases and to a limited extent, subsidiaries are permitted to hedge foreign currency positions with banks themselves.

The currency sensitivity analysis in accordance with IFRS 7 is based on the following assumptions:

- The concluded cross-currency swaps and currency transactions are always allocated to original underlyings.
- All major foreign currency positions arising from operating activities are always 100% hedged. If exchange rate changes are 100% hedged, they do not have any impact on results or capital.
- Foreign currency risks can only occur if a 100% hedge does not exist in justified exceptional cases; for instance if a conservative estimate is made for hedge volumes for anticipated foreign currency cash flows in order to avoid overhedging.

- On-balance-sheet foreign currency risks may result from energy price hedging which is not denominated in the respective functional currency.

If the following foreign currencies for currency hedges had weakened (or strengthened) by 10 % as of the balance sheet date, comprehensive income would not have been significantly affected.

	2019		2018	
	Appreciation / depreciation of foreign currency by			
(€ million)	+ 10 %	- 10 %	+ 10 %	- 10 %
USD	+ 6	- 6	+ 4	- 4
CNY	+ 11	- 13	+ 4	- 5
ILS	+ 1	- 1	+ 1	- 1
QAR	+ 1	- 1	+ 1	- 1
SAR	- 1	+ 1	+ 1	- 1
AUD	- 1	+ 1	0	0
SGD	- 3	+ 3	- 2	+ 2
RON	+ 4	- 5	0	0
TRY	0	0	- 1	+ 2

DB Group has numerous equity investments in foreign subsidiaries, whose net assets are exposed to a translation risk. This translation risk is not perceived to be a foreign currency risk for the purposes of IFRS 7, and is not hedged.

ENERGY PRICE RISKS

The Energy Price Risk Management Committee (ERMC) is responsible for managing and minimizing energy risks; this committee is responsible for ensuring the implementation of the risk policy of DB Group specifically with regard to energy price risks (in particular for procurement of diesel and electricity). The ERMC takes decisions with regard to specific hedging strategies and measures in which financial and energy derivatives are used.

Swaps relating to the commodities underlying the price formulae are used as hedges for the risks of price changes for sourcing electricity. Diesel price risks are for instance limited by the conclusion of diesel swaps (usually by means of hybrid hedging of diesel price and currency risks).

The following assumptions have been made for performing the sensitivity analyses in accordance with IFRS 7:

- In the case of energy price swaps, the effective part is recognized in shareholders' equity, and the ineffective part is recognized in the income statement.
- If options are used (collars), the intrinsic value constitutes the effective part of the hedge, so that the intrinsic value is shown in shareholders' equity. On the other hand, the fair value is not part of the hedge, and is shown in the income statement.

If the energy prices at the end of the year had been 10 % lower (or higher), comprehensive income would have been affected as follows:

	2019		2018	
	Changes in market prices by			
(€ million)	+ 10 %	- 10 %	+ 10 %	- 10 %
Impact on comprehensive income	+ 59	- 59	+ 71	- 71
thereof covered directly in equity	+ 59	- 59	+ 71	- 71
Diesel	+ 41	- 41	+ 42	- 42
Hard coal	+ 18	- 18	+ 29	- 29

CREDIT RISK OF INTEREST, CURRENCY AND ENERGY DERIVATIVES

The credit risk is actively managed by way of strict requirements relating to the creditworthiness of the counterparty at the point at which the transactions are concluded and also throughout the entire life of the transactions, and also by way of defining risk limits.

In order to minimize the credit risk of long-term derivative transactions, DB Group has concluded credit support agreements (CSA) with its core banks. In the CSA, it was agreed that both parties would mutually provide cash securities for interest and cross-currency swaps as well as energy derivatives. Securities are exchanged daily with all relevant banks.

Related amounts which are not netted in the balance sheet:

	Financial assets / liabilities shown in the balance sheet		Related amounts which are not netted in the balance sheet: Financial Instruments		Cash securities received / provided		**Net amounts**	
As of Dec 31 *(€ million)*	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018
Derivative financial instruments – assets	315	263	- 139	- 149	- 176	- 114	**0**	**0**
Derivative financial instruments – liabilities	366	391	- 139	- 149	- 211	- 216	**16**	**26**

The assets of financial derivatives and thus the maximum counterparty default risk have increased as a result of exchange rate fluctuations of the euro against other currencies, particularly against the Swiss franc and the Japanese yen. The liabilities of derivative financial instruments have increased only slightly. The cash collateral provided is still predominant. The maximum individual risk (default risk in relation to individual contract partners) was € 79 million (as of December 31, 2018: € 54 million) and existed in relation to a bank with a Moody's rating of A1.

For transactions with terms of more than one year, all contract partners which are exposed to a credit risk have a Moody's rating of at least Baa2.

LIQUIDITY RISK

Liquidity management involves maintaining adequate liquid assets, constantly checking the commercial paper market for ensuring adequate market liquidity and depth, and the constant availability of financial resources via GUARANTEED CREDIT FACILITIES OF BANKS (NOTE (28) 218).

The following table shows the contractually agreed undiscounted interest payments and redemption payments relating to the original financial liabilities as well as the derivative financial instruments with a positive and negative fair value of DB Group:

Maturity analysis of financial liabilities as of Dec 31, 2019 *(€ million)*	**2020**		**2021**		**2022–2024**		**2025–2029**		**2030 ff.**	
	Fixed/variable interest	**Redemption**	**Fixed/variable interest**	**Redemption**	**Fixed/variable interest**	**Redemption**	**Fixed/variable interest**	**Redemption**	**Fixed/variable interest**	**Redemption**
NON-DERIVATIVE FINANCIAL LIABILITIES										
Interest-free loans	–	163	–	157	–	467	–	–	–	–
Senior bonds	386	2,177	347	1,803	786	5,038	684	7,472	346	4,563
Commercial paper	4	890	–	–	–	–	–	–	–	–
Bank borrowings	0	221	0	3	–	401	–	1	–	–
EUROFIMA loan	8	–	8	200	–	–	–	–	–	–
Leasing liabilities	84	984	70	885	147	1,629	142	981	178	536
Financing liabilities from transport concessions	1	13	1	12	1	39	0	13	–	–
Other financial liabilities	–	204	–	1	–	6	–	1	–	–
Trade liabilities	–	5,789	–	184	–	49	–	14	–	–
Other miscellaneous liabilities	–	3,432	–	2	–	10	–	79	–	–
DERIVATIVE FINANCIAL LIABILITIES (NET/GROSS SETTLED)										
Cross-currency derivatives connected with cash flow hedges	50	525	36	268	87	174	81	992	16	577
Interest derivatives not connected with cash flow hedges	–	–	–	–	–	–	–	–	–	–
Interest derivatives connected with cash flow hedges	5	–	–	–	–	–	–	–	–	–
Currency derivatives connected with cash flow hedges	–	951	–	–	–	–	–	–	–	–
Currency derivatives not connected with cash flow hedges	–	1,316	–	8	–	4	–	–	–	–
Energy price derivatives	26	–	17	–	13	–	1	–	–	–
DERIVATIVE FINANCIAL ASSETS (GROSS SETTLED)										
Cross-currency derivatives connected with cash flow hedges	79	665	58	38	161	1,145	114	1,875	32	679
Interest derivatives not connected with cash flow hedges	–	–	–	–	–	–	–	–	–	–
Interest derivatives connected with cash flow hedges	–	–	–	–	–	–	–	–	–	–
Currency derivatives connected with cash flow hedges	–	198	–	0	–	–	–	–	–	–
Currency derivatives not connected with cash flow hedges	–	1,093	–	40	–	22	–	–	–	–
Energy price derivatives	–	–	–	–	–	–	–	–	–	–
VOLUNTARY INFORMATION ABOUT DERIVATIVES										
DERIVATIVE FINANCIAL ASSETS (NET SETTLED)										
Cross-currency derivatives connected with cash flow hedges	–	–	–	–	–	–	–	–	–	–
Interest derivatives not connected with cash flow hedges	–	–	–	–	–	–	–	–	–	–
Interest derivatives connected with cash flow hedges	–	–	–	–	–	–	–	–	–	–
Currency derivatives connected with cash flow hedges	–	–	–	–	–	–	–	–	–	–
Currency derivatives not connected with cash flow hedges	–	0	–	0	–	–	–	–	–	–
Energy price derivatives	-17	–	-7	–	-13	–	-1	–	–	–
INFLOW OF FUNDS FROM DERIVATIVE FINANCIAL INSTRUMENTS (GROSS SETTLED)										
Cross-currency derivatives connected with cash flow hedges	-129	-1,293	-111	-278	-306	-1,392	-243	-2,861	-69	-1,237
Interest derivatives not connected with cash flow hedges	–	–	–	–	–	–	–	–	–	–
Interest derivatives connected with cash flow hedges	–	–	–	–	–	–	–	–	–	–
Currency derivatives connected with cash flow hedges	–	-1,136	–	–	–	–	–	–	–	–
Currency derivatives not connected with cash flow hedges	–	-2,411	–	-49	–	-28	–	–	–	–
Energy price derivatives	–	–	–	–	–	–	–	–	–	–
FINANCIAL WARRANTIES										
Financial warranties	–	15	–	–	–	–	–	–	–	–

	2019		2020		2021 – 2023		2024 – 2028		2029 ff.	
Maturity analysis of financial liabilities as of Dec 31, 2018 *(€ million)*	Fixed / variable interest	Redemption	Fixed / variable interest	Redemption	Fixed / variable interest	Redemption	Fixed / variable interest	Redemption	Fixed / variable interest	Redemption
NON-DERIVATIVE FINANCIAL LIABILITIES										
Interest-free loans	–	178	–	163	–	469	–	155	–	–
Senior bonds	438	1,900	359	1,940	821	5,441	713	6,669	396	3,666
Commercial paper	–	–	–	–	–	–	–	–	–	–
Bank borrowings	0	240	0	4	–	401	–	1	–	–
EUROFIMA loan	8	–	8	–	8	200	–	–	–	–
Finance lease liabilities	19	44	18	43	42	136	47	140	111	199
Financing liabilities from transport concessions	1	6	1	6	7	20	1	13	–	–
Other financial liabilities	3	196	–	24	–	7	–	1	–	–
Trade liabilities	–	5,157	–	59	–	80	–	20	–	–
Other miscellaneous liabilities	–	3,399	–	13	–	22	–	39	–	–
DERIVATIVE FINANCIAL LIABILITIES (NET/GROSS SETTLED)										
Cross-currency derivatives connected with cash flow hedges	59	30	58	439	124	321	122	1,407	16	448
Interest derivatives not connected with cash flow hedges	–	–	–	–	–	–	–	–	–	–
Interest derivatives connected with cash flow hedges	5	–	5	–	4	–	–	–	–	–
Currency derivatives connected with cash flow hedges	–	463	–	–	–	–	–	–	–	–
Currency derivatives not connected with cash flow hedges	–	1,131	–	2	–	–	–	–	–	–
Energy price derivatives	20	–	12	–	12	–	4	–	–	–
DERIVATIVE FINANCIAL ASSETS (GROSS SETTLED)										
Cross-currency derivatives connected with cash flow hedges	65	301	58	649	108	530	77	1,364	26	506
Interest derivatives not connected with cash flow hedges	–	–	–	–	–	–	–	–	–	–
Interest derivatives connected with cash flow hedges	–	–	–	–	–	–	–	–	–	–
Currency derivatives connected with cash flow hedges	–	339	–	0	–	–	–	–	–	–
Currency derivatives not connected with cash flow hedges	–	726	–	38	–	7	–	–	–	–
Energy price derivatives	–	–	–	–	–	–	–	–	–	–
VOLUNTARY INFORMATION ABOUT DERIVATIVES										
DERIVATIVE FINANCIAL ASSETS (NET SETTLED)										
Cross-currency derivatives connected with cash flow hedges	–	–	–	–	–	–	–	–	–	–
Interest derivatives not connected with cash flow hedges	–	–	–	–	–	–	–	–	–	–
Interest derivatives connected with cash flow hedges	–	–	–	–	–	–	–	–	–	–
Currency derivatives connected with cash flow hedges	–	–	–	–	–	–	–	–	–	–
Currency derivatives not connected with cash flow hedges	–	0	–	0	–	–	–	–	–	–
Energy price derivatives	– 15	–	– 13	–	– 22	–	– 6	–	–	–
INFLOW OF FUNDS FROM DERIVATIVE FINANCIAL INSTRUMENTS (GROSS SETTLED)										
Cross-currency derivatives connected with cash flow hedges	– 116	– 372	– 112	– 1,155	– 272	– 870	– 250	– 2,676	– 63	– 915
Interest derivatives not connected with cash flow hedges	–	–	–	–	–	–	–	–	–	–
Interest derivatives connected with cash flow hedges	–	–	–	–	–	–	–	–	–	–
Currency derivatives connected with cash flow hedges	–	– 800	–	–	–	–	–	–	–	–
Currency derivatives not connected with cash flow hedges	–	– 1,856	–	– 42	–	– 8	–	–	–	–
Energy price derivatives	–	–	–	–	–	–	–	–	–	–
FINANCIAL WARRANTIES										
Financial warranties	–	17	–	–	–	–	–	–	–	–

This includes all instruments which were held as of December 31, 2019 and for which payments had already been agreed. Foreign currency amounts have been translated using the spot rate applicable as of the reference date. The variable interest payments attributable to the financial instruments have been calculated on the basis of the interest rates applicable on December 31, 2019 (previous year on December 31, 2018). Financial liabilities which can be repaid at any time are allocated to the earliest possible time segment.

The financial liabilities are opposed by cash and cash equivalents of € 3,993 million (as of December 31, 2018: € 3,544 million), consisting of positive account balances and current fixed-term deposits.

Additional disclosures relating to the financial instruments

If covered by the scope of IFRS 9, the financial assets and liabilities are categorized and measured in accordance with IFRS 9. Financial assets and liabilities which are not covered by the scope of IFRS 9 are measured in accordance with the relevant standards and not categorized under any measurement category according to IFRS 9.