

## Balance sheet disclosures

## 12. Intangible assets

## CHANGES IN INTANGIBLE ASSETS IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2017

€ million	Brand names	Goodwill	Capitalized development costs for products under development	Capitalized development costs for products currently in use	Other intangible assets	Total
<b>Cost</b>						
<b>Balance at Jan. 1, 2017</b>	<b>17,024</b>	<b>23,559</b>	<b>7,285</b>	<b>27,366</b>	<b>8,637</b>	<b>83,870</b>
Foreign exchange differences	-30	-91	-44	-183	-192	-539
Changes in consolidated Group	-	-18	-	-	-112	-130
Additions	-	-	4,080	1,180	528	5,788
Transfers	-	-	-4,197	4,197	-7	-7
Disposals	-	7	10	3,607	266	3,890
<b>Balance at Dec. 31, 2017</b>	<b>16,995</b>	<b>23,443</b>	<b>7,115</b>	<b>28,952</b>	<b>8,588</b>	<b>85,093</b>
<b>Amortization and impairment</b>						
<b>Balance at Jan. 1, 2017</b>	<b>84</b>	<b>0</b>	<b>39</b>	<b>15,040</b>	<b>6,109</b>	<b>21,271</b>
Foreign exchange differences	-3	0	0	-122	-138	-263
Changes in consolidated Group	-	0	-	-	-84	-84
Additions to cumulative amortization	3	-	-	3,345	831	4,178
Additions to cumulative impairment losses	-	7	57	332	1	397
Transfers	-	-	-	-	2	2
Disposals	-	7	-	3,595	226	3,827
Reversal of impairment losses	-	-	-	-	-	-
<b>Balance at Dec. 31, 2017</b>	<b>83</b>	<b>0</b>	<b>95</b>	<b>14,999</b>	<b>6,496</b>	<b>21,674</b>
<b>Carrying amount at Dec. 31, 2017</b>	<b>16,911</b>	<b>23,442</b>	<b>7,020</b>	<b>13,953</b>	<b>2,093</b>	<b>63,419</b>

## CHANGES IN INTANGIBLE ASSETS IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2018

€ million	Brand names	Goodwill	Capitalized development costs for products under development	Capitalized development costs for products currently in use	Other intangible assets	Total
<b>Cost</b>						
<b>Balance at Jan. 1, 2018</b>	<b>16,995</b>	<b>23,443</b>	<b>7,115</b>	<b>28,952</b>	<b>8,588</b>	<b>85,093</b>
Foreign exchange differences	-43	-131	-20	-125	-103	-421
Changes in consolidated Group	-	6	-	0	12	18
Additions	-	-	4,192	1,042	581	5,815
Transfers	-	-	-4,040	4,040	41	41
Disposals	-	-	32	1,890	127	2,049
<b>Balance at Dec. 31, 2018</b>	<b>16,952</b>	<b>23,318</b>	<b>7,215</b>	<b>32,020</b>	<b>8,992</b>	<b>88,496</b>
<b>Amortization and impairment</b>						
<b>Balance at Jan. 1, 2018</b>	<b>83</b>	<b>0</b>	<b>95</b>	<b>14,999</b>	<b>6,496</b>	<b>21,674</b>
Foreign exchange differences	-2	0	-1	-55	-79	-137
Changes in consolidated Group	-	0	0	-	-1	-1
Additions to cumulative amortization	3	-	-	3,665	669	4,337
Additions to cumulative impairment losses	-	-	3	41	13	57
Transfers	-	-	-15	15	1	1
Disposals	-	-	-	1,897	109	2,005
Reversal of impairment losses	-	-	42	-	0	42
<b>Balance at Dec. 31, 2018</b>	<b>84</b>	<b>1</b>	<b>42</b>	<b>16,768</b>	<b>6,989</b>	<b>23,883</b>
<b>Carrying amount at Dec. 31, 2018</b>	<b>16,868</b>	<b>23,317</b>	<b>7,173</b>	<b>15,251</b>	<b>2,003</b>	<b>64,613</b>

Other intangible assets comprise in particular concessions, purchased customer lists and dealer relationships, industrial and similar rights, and licenses in such rights and assets.

The allocation of the brand names and goodwill to the operating segments is shown in the following table:

€ million	2018	2017
<b>Brand names by operating segment</b>		
Porsche	13,823	13,823
Scania Vehicles and Services	949	990
MAN Truck & Bus	1,127	1,127
MAN Diesel & Turbo	415	415
Ducati	404	404
Other	150	153
	<b>16,868</b>	<b>16,911</b>
<b>Goodwill by operating segment</b>		
Porsche	18,825	18,825
Scania Vehicles and Services	2,755	2,866
MAN Truck & Bus	587	595
MAN Diesel & Turbo	267	268
Ducati	290	290
ŠKODA	158	159
Porsche Holding Salzburg	156	151
Other	280	289
	<b>23,317</b>	<b>23,442</b>

The impairment test for recognized goodwill is based on value in use. Recoverability is not affected by a variation in the growth forecast with respect to the perpetual annuity or in the discount rate of +/-0.5 percentage points.

Research and development costs developed as follows:

€ million	2018	2017	%
Total research and development costs	13,640	13,141	3.8
of which: capitalized development costs	5,234	5,260	-0.5
Capitalization ratio in %	38.4	40.0	-
Amortization of capitalized development costs	3,710	3,734	-0.6
<b>Research and development costs recognized in profit or loss</b>	<b>12,116</b>	<b>11,614</b>	<b>4.3</b>

## 13. Property, plant and equipment

## CHANGES IN PROPERTY, PLANT AND EQUIPMENT IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2017

€ million	Land, land rights and buildings, including buildings on third-party land	Technical equipment and machinery	Other equipment, operating and office equipment	Payments on account and assets under construction	Total
<b>Cost</b>					
<b>Balance at Jan. 1, 2017</b>	<b>33,534</b>	<b>43,353</b>	<b>64,595</b>	<b>7,008</b>	<b>148,490</b>
Foreign exchange differences	-440	-824	-1,056	-152	-2,473
Changes in consolidated Group	-303	-71	-117	-11	-501
Additions	630	1,355	5,056	5,474	12,516
Transfers	1,063	2,509	1,829	-5,411	-11
Disposals	149	873	1,399	31	2,452
<b>Balance at Dec. 31, 2017</b>	<b>34,335</b>	<b>45,450</b>	<b>68,909</b>	<b>6,876</b>	<b>155,569</b>
<b>Depreciation and impairment</b>					
<b>Balance at Jan. 1, 2017</b>	<b>13,887</b>	<b>30,531</b>	<b>49,999</b>	<b>39</b>	<b>94,456</b>
Foreign exchange differences	-153	-560	-790	-5	-1,508
Changes in consolidated Group	-117	-62	-80	-	-259
Additions to cumulative depreciation	1,058	3,211	5,152	-	9,421
Additions to cumulative impairment losses	3	-9	254	55	303
Transfers	14	-16	-1	0	-3
Disposals	71	807	1,183	7	2,068
Reversal of impairment losses	0	2	0	13	15
<b>Balance at Dec. 31, 2017</b>	<b>14,621</b>	<b>32,286</b>	<b>53,352</b>	<b>69</b>	<b>100,327</b>
<b>Carrying amount at Dec. 31, 2017</b>	<b>19,714</b>	<b>13,164</b>	<b>15,557</b>	<b>6,807</b>	<b>55,243</b>
of which assets leased under finance leases					
Carrying amount at Dec. 31, 2017	286	6	46	-	339

Future finance lease payments due, and their present values, are shown in the following table:

€ million	2018	2019 – 2022	from 2023	Total
Finance lease payments	67	263	390	721
Interest component of finance lease payments	16	87	139	242
<b>Carrying amount of liabilities</b>	<b>51</b>	<b>176</b>	<b>252</b>	<b>479</b>

## CHANGES IN PROPERTY, PLANT AND EQUIPMENT IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2018

€ million	Land, land rights and buildings, including buildings on third-party land	Technical equipment and machinery	Other equipment, operating and office equipment	Payments on account and assets under construction	Total
<b>Cost</b>					
<b>Balance at Jan. 1, 2018</b>	<b>34,335</b>	<b>45,450</b>	<b>68,909</b>	<b>6,876</b>	<b>155,569</b>
Foreign exchange differences	-98	-216	-79	-59	-452
Changes in consolidated Group	168	9	6	6	189
Additions	597	1,103	4,960	6,452	13,112
Transfers	858	1,753	2,048	-4,703	-43
Disposals	117	1,424	1,495	35	3,071
<b>Balance at Dec. 31, 2018</b>	<b>35,743</b>	<b>46,676</b>	<b>74,350</b>	<b>8,537</b>	<b>165,305</b>
<b>Depreciation and impairment</b>					
<b>Balance at Jan. 1, 2018</b>	<b>14,621</b>	<b>32,286</b>	<b>53,352</b>	<b>69</b>	<b>100,327</b>
Foreign exchange differences	-39	-130	-59	-5	-232
Changes in consolidated Group	10	7	1	-	18
Additions to cumulative depreciation	1,062	3,222	5,593	-	9,876
Additions to cumulative impairment losses	22	21	273	258	574
Transfers	-5	47	-25	-18	-1
Disposals	83	1,370	1,318	0	2,770
Reversal of impairment losses	36	26	14	41	117
<b>Balance at Dec. 31, 2018</b>	<b>15,552</b>	<b>34,057</b>	<b>57,803</b>	<b>263</b>	<b>107,675</b>
<b>Carrying amount at Dec. 31, 2018</b>	<b>20,191</b>	<b>12,618</b>	<b>16,546</b>	<b>8,274</b>	<b>57,630</b>
of which assets leased under finance leases					
Carrying amount at Dec. 31, 2018	267	5	41	0	314

Options to purchase buildings and plant leased under the terms of finance leases exist in most cases, and are also expected to be exercised.

Future finance lease payments due, and their present values, are shown in the following table:

€ million	2019	2020 – 2023	from 2024	Total
Finance lease payments	68	231	360	659
Interest component of finance lease payments	18	73	119	210
<b>Carrying amount of liabilities</b>	<b>51</b>	<b>158</b>	<b>241</b>	<b>449</b>

For assets leased under operating leases, payments recognized in the income statement amounted to €1,690 million (previous year: €1,449 million). With respect to internally used assets, €1,544 million (previous year: €1,302 million) of this figure is attributable to minimum lease payments and €13 million (previous year: €55 million) to contingent lease payments. The payments of €133 million (previous year: €92 million) under subleases primarily relate to minimum lease payments.

Government grants of €207 million (previous year: €135 million) were deducted from the cost of property, plant and equipment and noncash benefits received amounting to €0 million (previous year: €12 million) were not capitalized as the cost of assets.

In connection with land and buildings, real property liens of €1,062 million (previous year: €916 million) are pledged as collateral for partial retirement obligations, financial liabilities and other liabilities.

## 14. Lease assets and investment property

### CHANGES IN LEASE ASSETS AND INVESTMENT PROPERTY IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2017

€ million	Lease assets	Investment property	Total
<b>Cost</b>			
<b>Balance at Jan. 1, 2017</b>	<b>51,483</b>	<b>780</b>	<b>52,262</b>
Foreign exchange differences	-3,093	-36	-3,129
Changes in consolidated Group	-873	-	-873
Additions	21,319	18	21,336
Transfers	6	12	18
Disposals	16,616	26	16,641
<b>Balance at Dec. 31, 2017</b>	<b>52,226</b>	<b>748</b>	<b>52,973</b>
<b>Depreciation and impairment</b>			
<b>Balance at Jan. 1, 2017</b>	<b>13,044</b>	<b>268</b>	<b>13,312</b>
Foreign exchange differences	-803	-5	-808
Changes in consolidated Group	-228	0	-228
Additions to cumulative depreciation	7,327	15	7,343
Additions to cumulative impairment losses	448	3	451
Transfers	0	1	1
Disposals	6,775	4	6,779
Reversal of impairment losses	41	-	41
<b>Balance at Dec. 31, 2017</b>	<b>12,972</b>	<b>279</b>	<b>13,251</b>
<b>Carrying amount at Dec. 31, 2017</b>	<b>39,254</b>	<b>468</b>	<b>39,722</b>

The following payments from noncancelable leases and rental agreements were expected to be received over the coming years:

€ million	2018	2019 – 2022	from 2023	Total
Lease payments	3,392	4,675	46	8,112

## CHANGES IN LEASE ASSETS AND INVESTMENT PROPERTY IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2018

€ million	Lease assets	Investment property	Total
<b>Cost</b>			
<b>Balance at Jan. 1, 2018</b>	<b>52,226</b>	<b>748</b>	<b>52,973</b>
Foreign exchange differences	609	12	621
Changes in consolidated Group	-138	-	-138
Additions	21,256	38	21,294
Transfers	-106	2	-104
Disposals	16,354	13	16,367
<b>Balance at Dec. 31, 2018</b>	<b>57,493</b>	<b>786</b>	<b>58,279</b>
<b>Depreciation and impairment</b>			
<b>Balance at Jan. 1, 2018<sup>1</sup></b>	<b>13,007</b>	<b>279</b>	<b>13,287</b>
Foreign exchange differences	60	2	62
Changes in consolidated Group	-57	-	-57
Additions to cumulative depreciation	7,282	16	7,298
Additions to cumulative impairment losses	510	0	511
Transfers	-8	0	-8
Disposals	6,744	8	6,752
Reversal of impairment losses	103	0	103
<b>Balance at Dec. 31, 2018</b>	<b>13,947</b>	<b>290</b>	<b>14,237</b>
<b>Carrying amount at Dec. 31, 2018</b>	<b>43,545</b>	<b>496</b>	<b>44,042</b>

1 Values in the opening balance adjusted (see disclosures on IFRS 9).

Lease assets include assets leased out under the terms of operating leases and assets covered by long-term buyback agreements.

Investment property includes apartments rented out and leased dealerships with a fair value of €1,106 million (previous year: €993 million). Fair value is estimated using an investment method based on internal calculations (Level 3 of the fair value hierarchy). Operating expenses of €46 million (previous year: €52 million) were incurred for the maintenance of investment property in use. Expenses of €1 million (previous year: €3 million) were incurred for unused investment property.

The following payments from noncancelable leases and rental agreements are expected to be received over the coming years:

€ million	2019	2020 – 2023	from 2024	Total
Lease payments	4,108	5,187	17	9,312

## 15. Equity-accounted investments and other equity investments

**CHANGES IN EQUITY-ACCOUNTED INVESTMENTS AND OTHER EQUITY INVESTMENTS  
IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2017**

€ million	Equity-accounted investments	Other equity investments	Total
<b>Gross carrying amount at Jan. 1, 2017</b>	<b>8,727</b>	<b>1,417</b>	<b>10,143</b>
Foreign exchange differences	-129	-17	-146
Changes in consolidated Group	-13	-90	-104
Additions	348	519	867
Transfers	-	0	0
Assets held for sale	-86	-	-86
Disposals	7	34	40
Changes recognized in profit or loss	3,495	-	3,495
Dividends	-3,640	-	-3,640
Other changes recognized in other comprehensive income	-251	30	-221
<b>Balance at Dec. 31, 2017</b>	<b>8,443</b>	<b>1,825</b>	<b>10,268</b>
<b>Impairment losses</b>			
<b>Balance at Jan. 1, 2017</b>	<b>110</b>	<b>420</b>	<b>531</b>
Foreign exchange differences	-1	-3	-4
Changes in consolidated Group	-	-15	-15
Additions	129	129	258
Transfers	-	-	-
Disposals	-	24	24
Reversal of impairment losses	-	1	1
<b>Balance at Dec. 31, 2017</b>	<b>238</b>	<b>507</b>	<b>745</b>
<b>Carrying amount at Dec. 31, 2017</b>	<b>8,205</b>	<b>1,318</b>	<b>9,523</b>

**CHANGES IN EQUITY-ACCOUNTED INVESTMENTS AND OTHER EQUITY INVESTMENTS  
IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2018**

€ million	Equity-accounted investments	Other equity investments	Total
<b>Gross carrying amount at Jan. 1, 2018<sup>1</sup></b>	<b>8,431</b>	<b>1,827</b>	<b>10,259</b>
Foreign exchange differences	-9	9	0
Changes in consolidated Group	269	-368	-99
Additions	247	693	939
Transfers	-	0	0
Disposals	84	19	103
Changes recognized in profit or loss	3,371	-	3,371
Dividends <sup>2</sup>	-3,460	-	-3,460
Other changes recognized in other comprehensive income	62	1	62
<b>Balance at Dec. 31, 2018</b>	<b>8,826</b>	<b>2,142</b>	<b>10,968</b>
<b>Impairment losses</b>			
<b>Balance at Jan. 1, 2018</b>	<b>238</b>	<b>507</b>	<b>745</b>
Foreign exchange differences	-1	-1	-2
Changes in consolidated Group	-	-4	-4
Additions	155	172	326
Transfers	-	0	0
Disposals	-	5	5
Reversal of impairment losses	-	1	1
<b>Balance at Dec. 31, 2018</b>	<b>392</b>	<b>668</b>	<b>1,060</b>
<b>Carrying amount at Dec. 31, 2018</b>	<b>8,434</b>	<b>1,474</b>	<b>9,908</b>

1 Values in the opening balance adjusted (see disclosures on IFRS 9 and IFRS 15).

2 Dividends before withholding tax.

Equity-accounted investments include joint ventures in the amount of €6,372 million (previous year: €6,459 million) and associates in the amount of €2,062 million (previous year: €1,746 million).

Of the other changes recognized in other comprehensive income, €7 million (previous year: €-249 million) is attributable to joint ventures and €55 million (previous year: €-2 million) to associates. They are mainly the result of foreign exchange differences in the amount of €9 million (previous year: €-327 million), pension plan remeasurements in the amount of €31 million (previous year: €112 million) and fair value measurement of cash flow hedges in the amount of €28 million (previous year: €-30 million).

## 16. Noncurrent and current financial services receivables

€ million	CARRYING AMOUNT			FAIR VALUE	CARRYING AMOUNT			FAIR VALUE
	Current	Noncurrent	Dec. 31, 2018	Dec. 31, 2018	Current	Noncurrent	Dec. 31, 2017	Dec. 31, 2017
Receivables from financing business								
Customer financing	21,487	45,089	66,575	67,500	19,841	40,899	60,739	61,763
Dealer financing	14,781	2,099	16,879	16,839	17,033	2,194	19,227	19,200
Direct banking	284	3	288	288	269	4	272	272
	<b>36,551</b>	<b>47,191</b>	<b>83,742</b>	<b>84,627</b>	<b>37,142</b>	<b>43,096</b>	<b>80,239</b>	<b>81,236</b>
Receivables from operating leases	219	–	219	219	193	–	193	193
Receivables from finance leases	17,446	31,501	48,948	49,572	15,810	30,153	45,963	46,766
	<b>54,216</b>	<b>78,692</b>	<b>132,909</b>	<b>134,418</b>	<b>53,145</b>	<b>73,249</b>	<b>126,395</b>	<b>128,195</b>

The receivables from customer financing and finance leases contained in financial services receivables of €132.9 billion (previous year: €126.4 billion) decreased by €26 million (previous year: €31 million) as a result of a fair value adjustment from portfolio hedging.

The receivables from customer and dealer financing are secured by vehicles or real property liens. Of the receivables, €175 million (previous year: €287 million) was furnished as collateral for financial liabilities and contingent liabilities.

The receivables from dealer financing include €24 million (previous year: €51 million) receivable from unconsolidated affiliated companies.

The receivables from finance leases – almost all of them for vehicles – were based on the following expected cash flows as of December 31, 2017 and December 31, 2018:

€ million	2018	2019 – 2022	from 2023	Total
Future payments from finance lease receivables	16,952	32,280	145	49,377
Unearned finance income from finance leases (discounting)	-1,142	-2,261	-11	-3,414
<b>Present value of minimum lease payments outstanding at the reporting date</b>	<b>15,810</b>	<b>30,018</b>	<b>135</b>	<b>45,963</b>

€ million	2019	2020 – 2023	from 2024	Total
Future payments from finance lease receivables	18,768	33,611	156	52,534
Unearned finance income from finance leases (discounting)	-1,321	-2,256	-9	-3,586
<b>Present value of minimum lease payments outstanding at the reporting date</b>	<b>17,446</b>	<b>31,355</b>	<b>146</b>	<b>48,948</b>

Accumulated loss allowances for uncollectible minimum lease payments receivable amount to €103 million (previous year: €116 million).

## 17. Noncurrent and current other financial assets

€ million	CARRYING AMOUNT			CARRYING AMOUNT		
	Current	Noncurrent	Dec. 31, 2018	Current	Noncurrent	Dec. 31, 2017
Positive fair value of derivatives	2,047	1,932	3,979	2,845	4,091	6,936
Marketable securities	-	-	-	-	3	3
Receivables from loans, bonds, profit participation rights (excluding interest)	5,513	3,441	8,953	5,367	2,531	7,898
Miscellaneous financial assets	4,026	1,149	5,175	3,786	1,829	5,615
	<b>11,586</b>	<b>6,521</b>	<b>18,107</b>	<b>11,998</b>	<b>8,455</b>	<b>20,453</b>

Other financial assets include receivables from related parties of €8.8 billion (previous year: €7.7 billion). Other financial assets amounting to €89 million (previous year: €75 million) were furnished as collateral for financial liabilities and contingent liabilities. There is no original right of disposal or pledge for the furnished collateral on the part of the collateral taker.

In addition, the miscellaneous financial assets include cash and cash equivalents that serve as collateral (mainly under asset-backed securities transactions).

The positive fair values of derivatives relate to the following items:

€ million	Dec. 31, 2018	Dec. 31, 2017
Transactions for hedging		
foreign currency risk from assets using fair value hedges	109	228
foreign currency risk from liabilities using fair value hedges	77	108
interest rate risk using fair value hedges	561	400
interest rate risk using cash flow hedges	54	86
foreign currency and price risk from future cash flows (cash flow hedges)	2,049	4,401
<b>Hedging transactions Total</b>	<b>2,851</b>	<b>5,224</b>
Assets related to derivatives not included in hedging relationships	1,128	1,712
<b>Total</b>	<b>3,979</b>	<b>6,936</b>

Positive fair values of €24 million (previous year: €17 million) were recognized from transactions for hedging interest rate risk (fair value hedges) used in portfolio hedges.

Further details on derivative financial instruments as a whole are given in the section entitled "Financial risk management and financial instruments".

## 18. Noncurrent and current other receivables

€ million	CARRYING AMOUNT			CARRYING AMOUNT		
	Current	Noncurrent	Dec. 31, 2018	Current	Noncurrent	Dec. 31, 2017
Other recoverable income taxes	4,189	773	4,962	3,881	896	4,777
Miscellaneous receivables	2,015	1,835	3,849	1,465	1,356	2,821
	<b>6,203</b>	<b>2,608</b>	<b>8,811</b>	<b>5,346</b>	<b>2,252</b>	<b>7,598</b>

Miscellaneous receivables include assets to fund post-employment benefits in the amount of €76 million (previous year: €64 million). This item also includes the share of the technical provisions attributable to reinsurers amounting to €60 million (previous year: €73 million).

Current other receivables are predominantly non-interest-bearing.

## 19. Tax assets

€ million	CARRYING AMOUNT			CARRYING AMOUNT		
	Current	Noncurrent	Dec. 31, 2018	Current	Noncurrent	Dec. 31, 2017
Deferred tax assets	–	10,131	10,131	–	9,810	9,810
Tax receivables	1,879	476	2,355	1,339	407	1,746
	<b>1,879</b>	<b>10,606</b>	<b>12,486</b>	<b>1,339</b>	<b>10,217</b>	<b>11,557</b>

€6,036 million (previous year: €7,456 million) of the deferred tax assets are due within one year.

## 20. Inventories

€ million	Dec. 31, 2018	Dec. 31, 2017
Raw materials, consumables and supplies	5,543	4,858
Work in progress	4,382	4,143
Finished goods and purchased merchandise	30,553	26,514
Current lease assets	5,107	4,774
Prepayments	168	127
Hedges on inventories	-8	-
	<b>45,745</b>	<b>40,415</b>

At the same time as the relevant revenue was recognized, inventories in the amount of €179 billion (previous year: €173 billion) were included in cost of sales. Loss allowances (excluding lease assets) recognized as expenses in the reporting period amounted to €902 million (previous year: €878 million). Vehicles amounting to €316 million (previous year: €271 million) were assigned as collateral for partial retirement obligations.

## 21. Trade receivables

€ million	Dec. 31, 2018	Dec. 31, 2017
Trade receivables from		
third parties	13,356	9,667
unconsolidated subsidiaries	206	220
joint ventures	3,958	3,341
associates	51	44
other investees and investors	317	86
	<b>17,888</b>	<b>13,357</b>

The fair values of the trade receivables correspond to the carrying amounts.

In connection with the revised classification of financial instruments required by IFRS 9, receivables from dealer financing of €2.9 billion were reclassified to trade receivables as of January 1, 2018.

The trade receivables include contingent receivables from long-term construction contracts recognized using the percentage of completion (PoC) method. They correspond to the contract assets recognized under contracts with customers; they changed as follows:

€ million	2018
<b>Contingent construction contract receivables Balance at Jan. 1</b>	<b>338</b>
Additions and disposals	4
Changes in consolidated Group	–
Change in loss allowances	10
Changes in estimates and assumptions as well as contract modifications	–
Foreign exchange differences	0
<b>Contingent construction contract receivables at Dec. 31</b>	<b>352</b>

## 22. Marketable securities

The marketable securities serve to safeguard liquidity. They are short-term fixed-income securities and shares. Most securities are measured at fair value. Noncurrent marketable securities amounting to €997 million (previous year: €1,744 million) were pledged as collateral for financial liabilities and contingent liabilities. There is no original right of disposal or pledge for the furnished collateral on the part of the collateral taker.

## 23. Cash, cash equivalents and time deposits

€ million	Dec. 31, 2018	Dec. 31, 2017
Bank balances	28,522	18,343
Checks, cash-in-hand, bills and call deposits	416	114
	<b>28,938</b>	<b>18,457</b>

Bank balances are held at various banks in different currencies and include time deposits, for example.

## 24. Equity

The subscribed capital of Volkswagen AG is composed of no-par value bearer shares with a notional value of €2.56. As well as ordinary shares, there are preferred shares that entitle the bearer to a €0.06 higher dividend than ordinary shares, but do not carry voting rights.

Authorized capital of up to €110 million created by a resolution of the Annual General Meeting on April 19, 2012 for the issue of new ordinary bearer shares or preferred shares expired on April 18, 2017. Apart from an amount of €83 million, the authorized capital was utilized.

The Annual General Meeting on May 5, 2015 resolved to create authorized capital of up to €179 million, expiring on May 4, 2020, to issue new preferred bearer shares.

In June 2017, Volkswagen AG placed unsecured subordinated hybrid notes with an aggregate principal amount of €3.5 billion via a subsidiary, Volkswagen International Finance N.V. Amsterdam, the Netherlands (VIF). The perpetual hybrid notes were issued in two tranches and can be called by VIF. The first call date for the first tranche (€1.5 billion and a coupon of 2.700%) is after 5.5 years, and the first call date for the second tranche (€2.0 billion and a coupon of 3.875%) is after ten years.

In June 2018, Volkswagen AG placed unsecured subordinated hybrid notes with an aggregate principal amount of €2.8 billion via a subsidiary, Volkswagen International Finance N.V. Amsterdam, the Netherlands (VIF). The perpetual hybrid notes were issued in two tranches and can be called by VIF. The first call date for the first tranche (€1.3 billion and a coupon of 3.375%) is after 6 years, and the first call date for the second tranche (€1.5 billion and a coupon of 4.625%) is after ten years.

Interest may be accumulated depending on whether a dividend is paid to Volkswagen AG shareholders. Under IAS 32, these hybrid notes must be classified in their entirety as equity. The capital raised was recognized in equity, less a discount and transaction costs and net of deferred taxes. The interest payments payable to the noteholders will be recognized directly in equity, net of income taxes. IAS 32 only allows these hybrid notes to be classified as debt once the respective hybrid note was called.

In July 2018, Volkswagen AG called the first tranche of hybrid notes with an aggregate principal amount of €1.3 billion placed in 2013 via a subsidiary, Volkswagen International Finance N.V., Amsterdam, the Netherlands, (issuer). In this figure, effects of €14 million were considered in equity.

#### CHANGE IN ORDINARY AND PREFERRED SHARES AND SUBSCRIBED CAPITAL

	SHARES		€	
	2018	2017	2018	2017
Balance at January 1	501,295,263	501,295,263	1,283,315,873	1,283,315,873
Capital increase	-	-	-	-
Balance at December 31	501,295,263	501,295,263	1,283,315,873	1,283,315,873

The capital reserves comprise the share premium totaling €14,225 million (previous year: €14,225 million) from capital increases, the share premium of €219 million from the issuance of bonds with warrants and an amount of €107 million appropriated on the basis of the capital reduction implemented in 2006. No amounts were withdrawn from the capital reserves.

#### DIVIDEND PROPOSAL

In accordance with section 58(2) of the Aktiengesetz (AktG – German Stock Corporation Act), the dividend payment by Volkswagen AG is based on the net retained profits reported in the annual financial statements of Volkswagen AG prepared in accordance with the German Commercial Code. Based on these annual financial statements of Volkswagen AG, net retained profits of €2,419 million are eligible for distribution following the transfer of €2,204 million to the revenue reserves. The Board of Management and Supervisory Board will propose to the Annual General Meeting that a total dividend of €2,419 million, i.e. €4.80 per ordinary share and €4.86 per preferred share, be paid from the net retained profits. Shareholders are not entitled to a dividend payment until it has been resolved by the Annual General Meeting.

A dividend of €3.90 per ordinary share and €3.96 per preferred share was distributed in fiscal year 2018.

#### NONCONTROLLING INTERESTS

As of December 31, 2018, total noncontrolling interests amounted to €225 million (previous year: €229 million). The noncontrolling interests in equity are attributable primarily to shareholders of RENK AG and AUDI AG and are immaterial individually and in the aggregate.

## 25. Noncurrent and current financial liabilities

The details of noncurrent and current financial liabilities are presented in the following table:

€ million	CARRYING AMOUNT			CARRYING AMOUNT		
	Current	Noncurrent	Dec. 31, 2018	Current	Noncurrent	Dec. 31, 2017
Bonds	19,132	62,416	81,549	14,146	48,971	63,118
Commercial paper and notes	22,381	18,975	41,356	22,506	13,399	35,905
Liabilities to banks	18,455	15,447	33,903	14,487	15,357	29,844
Deposits business	28,555	1,455	30,010	29,291	2,114	31,405
Loans and miscellaneous liabilities	1,183	2,433	3,617	1,363	1,358	2,721
Finance lease liabilities	51	399	449	51	428	479
	<b>89,757</b>	<b>101,126</b>	<b>190,883</b>	<b>81,844</b>	<b>81,628</b>	<b>163,472</b>

## 26. Noncurrent and current other financial liabilities

€ million	CARRYING AMOUNT			CARRYING AMOUNT		
	Current	Noncurrent	Dec. 31, 2018	Current	Noncurrent	Dec. 31, 2017
Negative fair values of derivative financial instruments	1,439	1,134	2,573	1,212	1,034	2,246
Interest payable	661	113	774	570	44	614
Miscellaneous financial liabilities	7,316	1,972	9,288	6,788	1,586	8,374
	<b>9,416</b>	<b>3,219</b>	<b>12,635</b>	<b>8,570</b>	<b>2,665</b>	<b>11,234</b>

The negative fair values of derivatives relate to the following items:

€ million	Dec. 31, 2018	Dec. 31, 2017
Transactions for hedging		
foreign currency risk from assets using fair value hedges	65	58
foreign currency risk from liabilities using fair value hedges	10	19
interest rate risk using fair value hedges	61	64
interest rate risk using cash flow hedges	17	24
foreign currency and price risk from future cash flows (cash flow hedges)	936	542
<b>Hedging transactions Total</b>	<b>1,088</b>	<b>706</b>
Liabilities related to derivatives not included in hedging relationships	1,484	1,540
<b>Total</b>	<b>2,573</b>	<b>2,246</b>

Negative fair values of €22 million (previous year: €22 million) were recognized from transactions for hedging interest rate risk (fair value hedges) used in portfolio hedges.

Further details on derivative financial instruments as a whole are given in the section entitled "Financial risk management and financial instruments".

## 27. Noncurrent and current other liabilities

€ million	CARRYING AMOUNT			CARRYING AMOUNT		
	Current	Noncurrent	Dec. 31, 2018	Current	Noncurrent	Dec. 31, 2017
Payments received on account of orders	6,936	4,300	11,235	5,427	2,789	8,216
Liabilities relating to						
other taxes	2,273	112	2,384	2,301	249	2,550
social security	546	43	589	564	38	601
wages and salaries	5,299	947	6,247	4,941	844	5,785
Miscellaneous liabilities	2,539	1,046	3,585	2,728	2,280	5,009
	<b>17,593</b>	<b>6,448</b>	<b>24,041</b>	<b>15,961</b>	<b>6,199</b>	<b>22,160</b>

The liabilities from payments on account received under contracts with customers correspond to contract liabilities under contracts with customers.

During the implementation of IFRS 15, adjustments were made to the structure of payments received on account within noncurrent and current other liabilities. In this context, amounts were reclassified from "miscellaneous liabilities" to "payments received on account of orders". The prior-year figures were adjusted by an amount of €3,437 million.

The “payments received on account of orders” item includes liabilities from payments on account received under contracts with customers. They changed as follows:

#### CHANGES IN LIABILITIES FROM PAYMENTS ON ACCOUNT RECEIVED UNDER CONTRACTS WITH CUSTOMERS IN 2018

€ million	2018
<b>Liabilities from advance payments received under contracts with customers at Jan. 1</b>	<b>7,261</b>
Additions and disposals	2,395
Changes in consolidated Group	4
Changes in estimates and assumptions as well as contract modifications	–
Foreign exchange differences	8
<b>Liabilities from advance payments received under contracts with customers at Dec. 31</b>	<b>9,669</b>

## 28. Tax liabilities

€ million	CARRYING AMOUNT			CARRYING AMOUNT		
	Current	Noncurrent	Dec. 31, 2018	Current	Noncurrent	Dec. 31, 2017
Deferred tax liabilities	–	5,030	5,030	–	5,636	5,636
Provisions for taxes	1,412	3,047	4,458	1,397	3,030	4,427
Tax payables	456	–	456	430	–	430
	<b>1,867</b>	<b>8,077</b>	<b>9,944</b>	<b>1,827</b>	<b>8,666</b>	<b>10,492</b>

€407 million (previous year: €320 million) of the deferred tax liabilities are due within one year.

## 29. Provisions for pensions and other post-employment benefits

Provisions for pensions are recognized for commitments in the form of retirement, invalidity and dependents' benefits payable under pension plans. The benefits provided by the Group vary according to the legal, tax and economic circumstances of the country concerned, and usually depend on the length of service and remuneration of the employees.

Volkswagen Group companies provide occupational pensions under both defined contribution and defined benefit plans. In the case of defined contribution plans, the Company makes contributions to state or private pension schemes based on legal or contractual requirements, or on a voluntary basis. Once the contributions have been paid, there are no further obligations for the Volkswagen Group. Current contributions are recognized as pension expenses of the period concerned. In 2018, they amounted to a total of €2,385 million (previous year: €2,214 million) in the Volkswagen Group. Of this figure, contributions to the compulsory state pension system in Germany amounted to €1,745 million (previous year: €1,634 million).

In the case of defined benefit plans, a distinction is made between pensions funded by provisions and externally funded plans.

The pension provisions for defined benefits are measured by independent actuaries using the internationally accepted projected unit credit method in accordance with IAS 19, under which the future obligations are measured on the basis of the ratable benefit entitlements earned as of the balance sheet date. Measurement reflects actuarial assumptions as to discount rates, salary and pension trends, employee turnover rates, longevity and increases in healthcare costs, which were determined for each Group company depending on the economic environment. Remeasurements arise from differences between what has actually occurred and the prior-

year assumptions as well as from changes in assumptions. They are recognized in other comprehensive income, net of deferred taxes, in the period in which they arise.

Multi-employer pension plans exist in the Volkswagen Group in the United Kingdom, Switzerland, Sweden and the Netherlands. These plans are defined benefit plans. A small proportion of them are accounted for as defined contribution plans, as the Volkswagen Group is not authorized to receive the information required in order to account for them as defined benefit plans. Under the terms of the multi-employer plans, the Volkswagen Group is not liable for the obligations of the other employers. In the event of its withdrawal from the plans or their winding-up, the proportionate share of the surplus of assets attributable to the Volkswagen Group will be credited or the proportionate share of the deficit attributable to the Volkswagen Group will have to be funded. In the case of the defined benefit plans accounted for as defined contribution plans, the Volkswagen Group's share of the obligations represents a small proportion of the total obligations. No probable significant risks arising from multi-employer defined benefit pension plans that are accounted for as defined contribution plans have been identified. The expected contributions to those plans will amount to €20 million for fiscal year 2019.

Owing to their benefit character, the obligations of the US Group companies in respect of post-employment medical care in particular are also carried under provisions for pensions and other post-employment benefits. These post-employment benefit provisions take into account the expected long-term rise in the cost of healthcare. In fiscal year 2018, €14 million (previous year: €17 million) was recognized as an expense for health care costs. The related carrying amount as of December 31, 2018 was €231 million (previous year: €210 million).

The following amounts were recognized in the balance sheet for defined benefit plans:

€ million	Dec. 31, 2018	Dec. 31, 2017
Present value of funded obligations	15,606	15,605
Fair value of plan assets	10,920	11,192
Funded status (net)	4,686	4,413
Present value of unfunded obligations	28,312	28,224
Amount not recognized as an asset because of the ceiling in IAS 19	23	29
<b>Net liability recognized in the balance sheet</b>	<b>33,022</b>	<b>32,666</b>
of which provisions for pensions	33,097	32,730
of which other assets	76	64

#### SIGNIFICANT PENSION ARRANGEMENTS IN THE VOLKSWAGEN GROUP

For the period after their active working life, the Volkswagen Group offers its employees benefits under attractive, modern occupational pension arrangements. Most of the arrangements in the Volkswagen Group are pension plans for employees in Germany classified as defined benefit plans under IAS 19. The majority of these obligations are funded solely by recognized provisions. These plans are now largely closed to new members. To reduce the risks associated with defined benefit plans, in particular longevity, salary increases and inflation, the Volkswagen Group has introduced new defined benefit plans in recent years whose benefits are funded by appropriate external plan assets. The above-mentioned risks have been largely reduced in these pension plans. The proportion of the total defined benefit obligation attributable to pension obligations funded by plan assets will continue to rise in the future. The significant pension plans are described in the following.

**German pension plans funded solely by recognized provisions**

The pension plans funded solely by recognized provisions comprise both contribution-based plans with guarantees and final salary plans. For contribution-based plans, an annual pension expense dependent on income and status is converted into a lifelong pension entitlement using annuity factors (guaranteed modular pension entitlements). The annuity factors include a guaranteed rate of interest. At retirement, the modular pension entitlements earned annually are added together. For final salary plans, the underlying salary is multiplied at retirement by a percentage that depends on the years of service up until the retirement date.

The present value of the guaranteed obligation rises as interest rates fall and is therefore exposed to interest rate risk.

The pension system provides for lifelong pension payments. The companies bear the longevity risk in this respect. This is accounted for by calculating the annuity factors and the present value of the guaranteed obligation using the latest generational mortality tables – the “Heubeck 2018 G” (previous year: “Heubeck 2005 G”) mortality tables – which already reflect future increases in life expectancy.

To reduce the inflation risk from adjusting the regular pension payments by the rate of inflation, a pension adjustment that is not indexed to inflation was introduced for pension plans where this is permitted by law.

**German pension plans funded by external plan assets**

The pension plans funded by external plan assets are contribution-based plans with guarantees. In this case, an annual pension expense dependent on income and status is either converted into a lifelong pension entitlement using annuity factors (guaranteed modular pension entitlement) or paid out in a single lump sum or in installments. In some cases, employees also have the opportunity to provide for their own retirement through deferred compensation. The annuity factors include a guaranteed rate of interest. At retirement, the modular pension entitlements earned annually are added together. The pension expense is contributed on an ongoing basis to a separate pool of assets that is administered independently of the Company in trust and invested in the capital markets. If the plan assets exceed the present value of the obligations calculated using the guaranteed rate of interest, surpluses are allocated (modular pension bonuses).

Since the assets administered in trust meet the IAS 19 criteria for classification as plan assets, they are deducted from the obligations.

The amount of the pension assets is exposed to general market risk. The investment strategy and its implementation are therefore continuously monitored by the trusts’ governing bodies, on which the companies are also represented. For example, investment policies are stipulated in investment guidelines with the aim of limiting market risk and its impact on plan assets. In addition, asset-liability management studies are conducted if required so as to ensure that investments are in line with the obligations that need to be covered. The pension assets are currently invested primarily in fixed-income or equity funds. The main risks are therefore interest rate and equity price risk. To mitigate market risk, the pension system also provides for cash funds to be set aside in an equalization reserve before any surplus is allocated.

The present value of the obligation is the present value of the guaranteed obligation after deducting the plan assets. If the plan assets fall below the present value of the guaranteed obligation, a provision must be recognized in that amount. The present value of the guaranteed obligation rises as interest rates fall and is therefore exposed to interest rate risk.

In the case of lifelong pension payments, the Volkswagen Group bears the longevity risk. This is accounted for by calculating the annuity factors and the present value of the guaranteed obligation using the latest generational mortality tables – the “Heubeck 2018 G” (previous year: “Heubeck 2005 G”) mortality tables – which already reflect future increases in life expectancy. In addition, the independent actuaries carry out annual risk monitoring as part of the review of the assets administered by the trusts.

To reduce the inflation risk from adjusting the regular pension payments by the rate of inflation, a pension adjustment that is not indexed to inflation was introduced for pension plans where this is permitted by law.

Calculation of the pension provisions was based on the following actuarial assumptions:

%	GERMANY		ABROAD	
	2018	2017	2018	2017
Discount rate at December 31	1.97	1.88	3.16	3.52
Payroll trend	3.48	3.56	2.66	3.00
Pension trend	1.50	1.50	2.41	2.48
Employee turnover rate	1.17	1.15	3.93	3.25
Annual increase in healthcare costs	–	–	5.50	4.98

These assumptions are averages that were weighted using the present value of the defined benefit obligation.

With regard to life expectancy, consideration is given to the latest mortality tables in each country.

The discount rates are generally defined to reflect the yields on prime-rated corporate bonds with matching maturities and currencies. The iBoxx AA 10+ Corporates index was taken as the basis for the obligations of German Group companies. Similar indices were used for foreign pension obligations.

The payroll trends cover expected wage and salary trends, which also include increases attributable to career development.

The pension trends either reflect the contractually guaranteed pension adjustments or are based on the rules on pension adjustments in force in each country.

The employee turnover rates are based on past experience and future expectations.

The following table shows changes in the net defined benefit liability recognized in the balance sheet:

€ million	2018	2017
<b>Net liability recognized in the balance sheet at January 1</b>	<b>32,666</b>	<b>32,967</b>
Current service cost	1,410	1,372
Net interest expense	620	600
Actuarial gains (-)/losses (+) arising from changes in demographic assumptions	399	33
Actuarial gains (-)/losses (+) arising from changes in financial assumptions	-957	-616
Actuarial gains (-)/losses (+) arising from experience adjustments	-105	-88
Income/expenses from plan assets not included in interest income	-530	117
Change in amount not recognized as an asset because of the ceiling in IAS 19	3	-6
Employer contributions to plan assets	708	582
Employee contributions to plan assets	-9	-8
Pension payments from company assets	842	841
Past service cost (including plan curtailments)	24	7
Gains (-) or losses (+) arising from plan settlements	2	-1
Changes in consolidated Group	10	0
Other changes	-5	-44
Foreign exchange differences from foreign plans	-30	-37
<b>Net liability recognized in the balance sheet at December 31</b>	<b>33,022</b>	<b>32,666</b>

The change in the amount not recognized as an asset because of the ceiling in IAS 19 contains an interest component, part of which was recognized in the financial result in profit or loss, and part of which was recognized outside profit or loss directly in equity.

The change in the present value of the defined benefit obligation is attributable to the following factors:

€ million	2018	2017
<b>Present value of obligations at January 1</b>	<b>43,829</b>	<b>43,689</b>
Current service cost	1,410	1,372
Interest cost	901	883
Actuarial gains(-)/losses (+) arising from changes in demographic assumptions	399	33
Actuarial gains(-)/losses (+) arising from changes in financial assumptions	-957	-616
Actuarial gains(-)/losses (+) arising from experience adjustments	-105	-88
Employee contributions to plan assets	19	33
Pension payments from company assets	842	841
Pension payments from plan assets	237	307
Past service cost (including plan curtailments)	24	7
Gains (-) or losses (+) arising from plan settlements	0	-3
Changes in consolidated Group	10	0
Other changes	-460	-41
Foreign exchange differences from foreign plans	-73	-290
<b>Present value of obligations at December 31</b>	<b>43,918</b>	<b>43,829</b>

Actuarial gains/losses arising from changes in demographic assumptions are mainly the result of the first-time application of the "Heubeck 2018 G" (previous year: "Heubeck 2005 G") mortality tables.

Following the regular review of our pension plans, one plan used by South American subsidiaries had to be classified as a defined contribution plan in fiscal year 2018, and this led to a change in the pension obligation reported in the above table. The decrease in the present value of the defined benefit obligation in the amount of €460 million is shown under other changes. This does not have any effect on the amount recognized in the balance sheet, because the present value of plan assets goes down by the same amount.

Changes in the relevant actuarial assumptions would have had the following effects on the defined benefit obligation:

Present value of defined benefit obligation if		DEC. 31, 2018		DEC. 31, 2017	
		€ million	Change in percent	€ million	Change in percent
Discount rate	is 0.5 percentage points higher	40,048	-8.81	39,979	-8.79
	is 0.5 percentage points lower	48,398	10.20	48,290	10.18
Pension trend	is 0.5 percentage points higher	46,147	5.07	46,055	5.08
	is 0.5 percentage points lower	41,892	-4.61	41,801	-4.63
Payroll trend	is 0.5 percentage points higher	44,382	1.05	44,398	1.30
	is 0.5 percentage points lower	43,507	-0.94	43,304	-1.20
Longevity	increases by one year	45,311	3.17	45,106	2.91

The sensitivity analysis shown above considers the change in one assumption at a time, leaving the other assumptions unchanged versus the original calculation, i.e. any correlation effects between the individual assumptions are ignored.

To examine the sensitivity of the defined benefit obligation to a change in assumed longevity, the estimates of mortality were reduced as part of a comparative calculation to the extent that doing so increases life expectancy by approximately one year.

The average duration of the defined benefit obligation weighted by the present value of the defined benefit obligation (Macaulay duration) is 19 years (previous year: 19 years).

The present value of the defined benefit obligation is attributable as follows to the members of the plan:

€ million	2018	2017
Active members with pension entitlements	25,783	26,067
Members with vested entitlements who have left the Company	2,580	2,233
Pensioners	15,555	15,530
	<b>43,918</b>	<b>43,829</b>

The maturity profile of payments attributable to the defined benefit obligation is presented in the following table, which classifies the present value of the obligation by the maturity of the underlying payments:

€ million	2018	2017
Payments due within the next fiscal year	1,160	1,151
Payments due between two and five years	5,251	4,994
Payments due in more than five years	37,508	37,685
	<b>43,918</b>	<b>43,829</b>

Changes in plan assets are shown in the following table:

€ million	2018	2017
<b>Fair value of plan assets at January 1</b>	<b>11,192</b>	<b>10,749</b>
Interest income on plan assets determined using the discount rate	281	283
Income/expenses from plan assets not included in interest income	-530	117
Employer contributions to plan assets	708	582
Employee contributions to plan assets	9	25
Pension payments from plan assets	237	307
Gains (+) or losses (-) arising from plan settlements	2	2
Changes in consolidated Group	0	-1
Other changes	-455	3
Foreign exchange differences from foreign plans	-46	-258
<b>Fair value of plan assets at December 31</b>	<b>10,920</b>	<b>11,192</b>

Other changes are attributable to the change in the presentation of a plan used by South American subsidiaries.

The investment of the plan assets to cover future pension obligations resulted in expenses in the amount of €250 million (previous year: income of €400 million).

Employer contributions to plan assets are expected to amount to €769 million (previous year: €617 million) in the next fiscal year.

Plan assets are invested in the following asset classes:

€ million	DEC. 31, 2018			DEC. 31, 2017		
	Quoted prices in active markets	No quoted prices in active markets	Total	Quoted prices in active markets	No quoted prices in active markets	Total
Cash and cash equivalents	666	2	669	585	5	590
Equity instruments	375	–	375	337	–	337
Debt instruments	1,041	4	1,044	1,578	0	1,578
Direct investments in real estate	11	100	112	2	101	104
Derivatives	–21	–17	–38	38	–60	–23
Equity funds	1,433	26	1,459	1,532	34	1,567
Bond funds	5,443	118	5,561	5,233	114	5,348
Real estate funds	193	–	193	207	–	207
Other funds	890	6	896	864	4	868
Other instruments	80	568	648	40	577	617

53.3% (previous year: 49.1%) of the plan assets are invested in German assets, 27.4% (previous year: 27.6%) in other European assets and 19.3% (previous year: 23.4%) in assets in other regions.

Plan assets include €3 million (previous year: €15 million) invested in Volkswagen Group assets and €12 million (previous year: €18 million) in Volkswagen Group debt instruments.

The following amounts were recognized in the income statement:

€ million	2018	2017
Current service cost	1,410	1,372
Net interest on the net defined benefit liability	623	602
Past service cost (including plan curtailments)	24	7
Gains (–) or losses (+) arising from plan settlements	2	–1
<b>Net income (–) and expenses (+) recognized in profit or loss</b>	<b>2,059</b>	<b>1,981</b>

The above amounts are generally included in the personnel costs of the functional areas in the income statement. Net interest on the net defined benefit liability is reported in interest expenses.

## 30. Noncurrent and current other provisions

€ million	Obligations arising from sales	Employee expenses	Litigation and legal risks	Miscellaneous provisions	Total
<b>Balance at Jan. 1, 2017</b>	<b>33,027</b>	<b>4,546</b>	<b>11,717</b>	<b>7,904</b>	<b>57,193</b>
Foreign exchange differences	-689	-61	-119	-169	-1,038
Changes in consolidated Group	13	3	-13	-27	-24
Utilization	17,546	1,450	7,444	2,334	28,774
Additions/New provisions	14,990	2,030	2,190	3,217	22,426
Unwinding of discount/effect of change in discount rate	-50	11	-25	6	-57
Reversals	1,881	193	504	962	3,540
<b>Balance at Dec. 31, 2017</b>	<b>27,865</b>	<b>4,886</b>	<b>5,802</b>	<b>7,634</b>	<b>46,186</b>
of which current	14,821	2,069	2,999	5,458	25,347
of which noncurrent	13,044	2,817	2,802	2,176	20,839
<b>Balance at Jan. 1, 2018<sup>1</sup></b>	<b>27,867</b>	<b>4,886</b>	<b>5,802</b>	<b>7,631</b>	<b>46,185</b>
Foreign exchange differences	39	-17	-88	-21	-88
Changes in consolidated Group	-2	-7	-1	-44	-53
Utilization	10,437	1,632	2,396	2,415	16,880
Additions/New provisions	12,179	2,019	2,131	3,153	19,483
Unwinding of discount/effect of change in discount rate	-108	5	-19	9	-114
Reversals	2,503	99	516	662	3,780
<b>Balance at Dec. 31, 2018</b>	<b>27,035</b>	<b>5,155</b>	<b>4,913</b>	<b>7,651</b>	<b>44,754</b>
of which current	13,986	2,248	2,349	5,291	23,874
of which noncurrent	13,050	2,906	2,563	2,360	20,879

1 Value in the opening balance adjusted (see disclosures on IFRS 9 and IFRS 15).

The obligations arising from sales contain provisions covering all risks relating to the sale of vehicles, components and genuine parts through to the disposal of end-of-life vehicles. They primarily comprise warranty obligations, calculated on the basis of losses to date and estimated future losses. They also include provisions for discounts, bonuses and similar allowances which are incurred after the balance sheet date, but for which there is a legal or constructive obligation attributable to sales revenue before the balance sheet date.

Provisions for employee expenses are recognized for long-service awards, time credits, partial retirement arrangements, severance payments and similar obligations, among other things.

The decline in provisions for obligations regarding litigation and legal risks result primarily from the utilization of the provisions recognized in connection with the diesel issue. In addition to residual provisions relating to the diesel issue, the provisions for litigation and legal risks contain amounts related to a large number of legal disputes and official proceedings in which Volkswagen Group companies become involved in Germany and internationally in the course of their operating activities. In particular, such legal disputes and other proceedings may occur in relation to suppliers, dealers, customers, employees, or investors. Please refer to the "Litigation" section for a discussion of the legal risks.

Miscellaneous provisions relate to a wide range of identifiable specific risks, price risks and uncertain obligations, which are measured in the amount of the expected settlement value.

Miscellaneous provisions additionally include provisions amounting to €562 million (previous year: €534 million) relating to the insurance business.

### 31. Put options and compensation rights granted to noncontrolling interest shareholders

This balance sheet item consists primarily of the present value of the cash settlement of €90.29 per share in accordance with section 305 of the Aktiengesetz (AktG – German Stock Corporation Act) offered to MAN shareholders in connection with the control and profit and loss transfer agreement.

Further information can be found in the “Litigation” section.

### 32. Trade payables

€ million	Dec. 31, 2018	Dec. 31, 2017
Trade payables to		
third parties	22,928	22,661
unconsolidated subsidiaries	235	187
joint ventures	327	64
associates	113	127
other investees and investors	4	7
	<b>23,607</b>	<b>23,046</b>

## Additional balance sheet disclosures in accordance with IFRS 7 (Financial Instruments)

The tables below show the carrying amounts of financial instruments by measurement category:

### CARRYING AMOUNT OF FINANCIAL INSTRUMENTS BY IAS 39 MEASUREMENT CATEGORY IN 2017

€ million	Dec. 31, 2017
Financial assets at fair value through profit or loss	1,712
Loans and receivables	125,550
Available-for-sale financial assets	16,182
Financial liabilities at fair value through profit or loss	1,540
Financial liabilities measured at amortized cost	198,821

### CARRYING AMOUNT OF FINANCIAL INSTRUMENTS BY IFRS 9 MEASUREMENT CATEGORY IN 2018

€ million	Dec. 31, 2018
Financial assets at fair value through profit or loss	15,556
Financial assets at fair value through other comprehensive income (debt instruments)	3,542
Financial assets at fair value through other comprehensive income (equity instruments)	148
Financial assets measured at amortized cost	143,466
Financial liabilities at fair value through profit or loss	1,484
Financial liabilities measured at amortized cost	225,989

#### CLASSES OF FINANCIAL INSTRUMENTS

Financial instruments are divided into the following classes at the Volkswagen Group:

- > financial instruments measured at fair value;
- > financial instruments measured at amortized cost;
- > derivative financial instruments within hedge accounting;
- > not allocated to any measurement category; and
- > credit commitments and financial guarantees (off-balance sheet).

#### RECONCILIATION OF BALANCE SHEET ITEMS TO CLASSES OF FINANCIAL INSTRUMENTS

The following table shows the reconciliation of the balance sheet items to the relevant classes of financial instruments, broken down by the carrying amount and fair value of the financial instruments.

The fair value of financial instruments measured at amortized cost, such as receivables and liabilities, is calculated by discounting using a market rate of interest for a similar risk and matching maturity. For reasons of materiality, the fair value of current balance sheet items is generally deemed to be their carrying amount.

As a result of the initial application of IFRS 9 and IFRS 15, the carrying amounts of contract assets, lease receivables and liabilities and equity-accounted associates and joint ventures have been classified as “not allocated to any measurement category” since fiscal year 2018. Apart from those, other amounts (excluding financial instruments) may also be included here for reconciliation to the carrying amounts.

The risk variables governing the fair value of the receivables are risk-adjusted interest rates. Financial instruments measured at fair value also include shares in partnerships and corporations.

## RECONCILIATION OF BALANCE SHEET ITEMS TO CLASSES OF FINANCIAL INSTRUMENTS AS OF DECEMBER 31, 2017

€ million	MEASURED AT FAIR VALUE	MEASURED AT AMORTIZED COST		DERIVATIVE FINANCIAL INSTRUMENTS WITHIN HEDGE ACCOUNTING	NOT ALLOCATED TO A MEASUREMENT CATEGORY	BALANCE SHEET ITEM AT DEC. 31, 2017
	Carrying amount	Carrying amount	Fair value	Carrying amount	Carrying amount	
<b>Noncurrent assets</b>						
Equity-accounted investments	–	–	–	–	8,205	8,205
Other equity investments	243	–	–	–	1,075	1,318
Financial services receivables	–	43,096	44,093	–	30,153	73,249
Other financial assets	776	4,364	4,391	3,315	–	8,455
<b>Current assets</b>						
Trade receivables	–	13,357	13,357	–	–	13,357
Financial services receivables	–	37,142	37,142	–	16,003	53,145
Other financial assets	936	9,153	9,153	1,909	–	11,998
Marketable securities	15,939	–	–	–	–	15,939
Cash, cash equivalents and time deposits	–	18,457	18,457	–	–	18,457
Assets held for sale	–	–	–	–	90	90
<b>Noncurrent liabilities</b>						
Noncurrent financial liabilities	–	81,200	82,108	–	428	81,628
Other noncurrent financial liabilities	774	1,630	1,633	261	–	2,665
<b>Current liabilities</b>						
Put options and compensation rights granted to noncontrolling interest shareholders	–	3,795	3,811	–	–	3,795
Current financial liabilities	–	81,793	81,793	–	51	81,844
Trade payables	–	23,046	23,046	–	–	23,046
Other current financial liabilities	766	7,358	7,358	446	–	8,570

The classes of financial instruments have been added as part of the implementation of IFRS 9 (see the section on “Accounting policies”). The principal movement in this context was the reclassification of lease receivables and liabilities in the “measured at amortized cost” category to “not allocated to any measurement category”. Prior-year values under financial services receivables and financial liabilities have been restated. The carrying amount of lease receivables was €49,166 million (previous year: €46,156 million) and their fair value (fair value hierarchy level 3) was €49,791 million (previous year: €46,959 million). The carrying amount of lease liabilities was €449 million (previous year: €479 million) and their fair value (fair value hierarchy level 2) was €466 million (previous year: €510 million).

## RECONCILIATION OF BALANCE SHEET ITEMS TO CLASSES OF FINANCIAL INSTRUMENTS AS OF DECEMBER 31, 2018

€ million	MEASURED AT FAIR VALUE	MEASURED AT AMORTIZED COST		DERIVATIVE FINANCIAL INSTRUMENTS WITHIN HEDGE ACCOUNTING	NOT ALLOCATED TO A MEASUREMENT CATEGORY	BALANCE SHEET ITEM AT DEC. 31, 2018
	Carrying amount	Carrying amount	Fair value	Carrying amount	Carrying amount	
<b>Noncurrent assets</b>						
Equity-accounted investments	–	–	–	–	8,434	8,434
Other equity investments	134	–	–	–	1,340	1,474
Financial services receivables	286	46,905	47,789	–	31,501	78,692
Other financial assets	772	4,240	4,252	1,510	–	6,521
<b>Current assets</b>						
Trade receivables	–	17,537	17,537	–	352	17,888
Financial services receivables	22	36,529	36,529	–	17,665	54,216
Other financial assets	1,094	9,179	9,179	1,341	1	11,615
Marketable securities	16,940	140	140	–	–	17,080
Cash, cash equivalents and time deposits	–	28,938	28,938	–	–	28,938
<b>Noncurrent liabilities</b>						
Noncurrent financial liabilities	–	100,727	100,964	–	399	101,126
Other noncurrent financial liabilities	767	2,085	2,087	368	–	3,219
<b>Current liabilities</b>						
Put options and compensation rights granted to noncontrolling interest shareholders	–	1,853	1,853	–	–	1,853
Current financial liabilities	–	89,707	89,707	–	51	89,757
Trade payables	–	23,607	23,607	–	–	23,607
Other current financial liabilities	718	8,010	8,010	721	–	9,449

Uniform valuation techniques and inputs are used to measure fair value. The fair value of Level 2 and 3 financial instruments is measured in the individual divisions on the basis of Group-wide specifications. The measurement techniques used are explained in the section on “Accounting policies”. The fair value of Level 3 receivables was measured by reference to individual expectations of losses; these are based to a significant extent on the Company’s assumptions about counterparty credit quality. The inputs used are not observable in an active market.

Other financial assets include receivables from tax allocations of €29 million, and other financial liabilities include liabilities from tax allocations of €33 million.

The following tables contain an overview of the financial assets and liabilities measured at fair value by level:

**FINANCIAL ASSETS AND LIABILITIES MEASURED AT FAIR VALUE BY LEVEL**

€ million	Dec. 31, 2017	Level 1	Level 2	Level 3
<b>Noncurrent assets</b>				
Other equity investments	243	103	–	140
Other financial assets	776	–	705	71
<b>Current assets</b>				
Other financial assets	936	–	933	3
Marketable securities	15,939	15,939	–	–
<b>Noncurrent liabilities</b>				
Other noncurrent financial liabilities	774	–	242	532
<b>Current liabilities</b>				
Other current financial liabilities	766	–	533	233

€ million	Dec. 31, 2018	Level 1	Level 2	Level 3
<b>Noncurrent assets</b>				
Other equity investments	134	56	25	53
Financial services receivables	286	–	–	286
Other financial assets	772	–	357	415
<b>Current assets</b>				
Financial services receivables	22	–	–	22
Other financial assets	1,094	–	880	214
Marketable securities	16,940	16,940	–	–
<b>Noncurrent liabilities</b>				
Other noncurrent financial liabilities	767	–	250	516
<b>Current liabilities</b>				
Other current financial liabilities	718	–	419	299

## FAIR VALUE OF FINANCIAL ASSETS AND LIABILITIES MEASURED AT AMORTIZED COST BY LEVEL

€ million	Dec. 31, 2017	Level 1	Level 2	Level 3
Fair value of financial assets measured at amortized cost				
Financial services receivables <sup>1</sup>	81,236	–	–	81,236
Trade receivables	13,357	–	13,184	173
Other financial assets	13,544	170	5,925	7,449
Cash, cash equivalents and time deposits	18,457	18,043	414	–
<b>Fair value of financial assets measured at amortized cost</b>	<b>126,594</b>	<b>18,213</b>	<b>19,523</b>	<b>88,858</b>
Fair value of financial liabilities measured at amortized cost				
Put options and compensation rights granted to noncontrolling interest shareholders	3,811	–	–	3,811
Trade payables	23,046	–	23,046	–
Financial liabilities <sup>1</sup>	163,901	50,970	111,096	1,835
Other financial liabilities	8,992	596	8,184	212
<b>Fair value of financial liabilities measured at amortized cost</b>	<b>199,749</b>	<b>51,566</b>	<b>142,326</b>	<b>5,857</b>

1 Prior-year figures adjusted.

€ million	Dec. 31, 2018	Level 1	Level 2	Level 3
Fair value of financial assets measured at amortized cost				
Financial services receivables	84,319	–	–	84,319
Trade receivables	17,537	–	17,537	–
Other financial assets	13,432	378	5,033	8,020
Cash, cash equivalents and time deposits	28,938	28,115	823	–
<b>Fair value of financial assets measured at amortized cost</b>	<b>144,226</b>	<b>28,493</b>	<b>23,394</b>	<b>92,339</b>
Fair value of financial liabilities measured at amortized cost				
Put options and compensation rights granted to noncontrolling interest shareholders	1,853	–	–	1,853
Trade payables	23,607	–	23,607	–
Financial liabilities	190,671	59,089	131,316	266
Other financial liabilities	10,097	1,297	8,568	233
<b>Fair value of financial liabilities measured at amortized cost</b>	<b>226,228</b>	<b>60,386</b>	<b>163,491</b>	<b>2,352</b>

Other financial assets include receivables from tax allocations of €29 million, and other financial liabilities include liabilities from tax allocations of €33 million.

## DERIVATIVE FINANCIAL INSTRUMENTS WITHIN HEDGE ACCOUNTING BY LEVEL

€ million	Dec. 31, 2017	Level 1	Level 2	Level 3
<b>Noncurrent assets</b>				
Other financial assets	3,315	–	3,315	–
<b>Current assets</b>				
Other financial assets	1,909	–	1,909	–
<b>Noncurrent liabilities</b>				
Other noncurrent financial liabilities	261	–	261	–
<b>Current liabilities</b>				
Other current financial liabilities	446	–	445	0

€ million	Dec. 31, 2018	Level 1	Level 2	Level 3
<b>Noncurrent assets</b>				
Other financial assets	1,510	–	1,510	–
<b>Current assets</b>				
Other financial assets	1,341	–	1,341	–
<b>Noncurrent liabilities</b>				
Other noncurrent financial liabilities	368	–	368	0
<b>Current liabilities</b>				
Other current financial liabilities	721	–	721	–

The allocation of fair values to the three levels in the fair value hierarchy is based on the availability of observable market prices. Level 1 is used to report the fair value of financial instruments for which a price is directly available in an active market. Examples include marketable securities and other equity investments measured at fair value that are listed and traded on a public market. Fair values in Level 2, for example of derivatives, are measured on the basis of market inputs using market-based valuation techniques. In particular, the inputs used include exchange rates, yield curves and commodity prices that are observable in the relevant markets and obtained through pricing services. Fair Values in Level 3 are calculated using valuation techniques that incorporate inputs that are not directly observable in active markets. In the Volkswagen Group, long-term commodity futures are allocated to Level 3 because the prices available on the market must be extrapolated for measurement purposes. This is done on the basis of observable inputs obtained for the different commodities through pricing services. Options on equity instruments, residual value protection models, customer financing receivables, receivables from vehicle financing programs and other equity investments are also reported in Level 3. Equity instruments are measured primarily using the relevant business plans and entity-specific discount rates. The significant inputs used to measure fair value for the residual value protection models include forecasts and estimates of used vehicle residual values for the appropriate models. The measurement of vehicle financing programs requires in particular the use of the corresponding vehicle price.

The table below provides a summary of changes in level 3 balance sheet items measured at fair value:

**CHANGES IN BALANCE SHEET ITEMS MEASURED AT FAIR VALUE BASED ON LEVEL 3**

€ million	Financial assets measured at fair value	Financial liabilities measured at fair value
<b>Balance at Jan. 1, 2017</b>	<b>152</b>	<b>230</b>
Foreign exchange differences	-9	-1
Total comprehensive income	68	526
recognized in profit or loss	72	526
recognized in other comprehensive income	-4	0
Additions (purchases)	47	115
Sales and settlements	-11	-104
Transfers into Level 2	-31	-2
<b>Balance at Dec. 31, 2017</b>	<b>215</b>	<b>765</b>
<b>Total gains or losses recognized in profit or loss</b>	<b>72</b>	<b>-526</b>
Net other operating expense/income	-	-
of which attributable to assets/liabilities held at the reporting date	-	-
Financial result	72	-526
of which attributable to assets/liabilities held at the reporting date	32	-525
<hr/>		
€ million	Financial assets measured at fair value	Financial liabilities measured at fair value
<b>Balance at Jan. 1, 2018</b>	<b>823<sup>1</sup></b>	<b>765</b>
Foreign exchange differences	-33	-3
Changes in consolidated Group	-184	-
Total comprehensive income	78	204
recognized in profit or loss	27	204
recognized in other comprehensive income	51	-
Additions (purchases)	339	28
Sales and settlements	-2	-183
Transfers into Level 2	-32	5
<b>Balance at Dec. 31, 2018</b>	<b>990</b>	<b>816</b>
<b>Total gains or losses recognized in profit or loss</b>	<b>27</b>	<b>-204</b>
Net other operating expense/income	31	-203
of which attributable to assets/liabilities held at the reporting date	58	-235
Financial result	-4	0
of which attributable to assets/liabilities held at the reporting date	-5	-

1 Value in the opening balance adjusted (see disclosures on IFRS 9).

The transfers between the levels of the fair value hierarchy are reported at the respective reporting dates. The transfers out of Level 3 into Level 2 comprise commodity futures for which observable quoted prices are now available for measurement purposes due to the decline in their remaining maturities; consequently, no extrapolation is required. There were no transfers between other levels of the fair value hierarchy.

Commodity prices are the key risk variable for the fair value of commodity futures. Sensitivity analyses are used to present the effect of changes in commodity prices on earnings after tax and equity.

If commodity prices for commodity futures classified as Level 3 had been 10% higher (lower) as of December 31, 2018, earnings after tax would have been €59 million (previous year: €10 million) higher (lower). The equity is not affected.

The key risk variable for measuring options on equity instruments held by the Company is the relevant enterprise value. Sensitivity analyses are used to present the effect of changes in risk variables on earnings after tax.

If the assumed enterprise values at December 31, 2018 had been 10% higher, earnings after tax would have been €3 million (previous year: €3 million) higher. If the assumed enterprise values at December 31, 2018 had been 10% lower, earnings after tax would have been €3 million (previous year: €3 million) lower.

Residual value risks result from hedging agreements with dealers under which earnings effects caused by market-related fluctuations in residual values that arise from buyback obligations under leases are borne in part by the Volkswagen Group.

The key risk variable influencing the fair value of the options relating to residual value risks is used car prices. Sensitivity analyses are used to quantify the effects of changes in used car prices on earnings after tax.

If the prices of the used cars covered by the residual value protection model had been 10% higher as of December 31, 2018, earnings after tax would have been €325 million (previous year: €319 million) higher. If the prices of the used cars covered by the residual value protection model had been 10% lower as of December 31, 2018, earnings after tax would have been €352 million (previous year: €333 million) lower.

If the risk-adjusted interest rates applied to receivables measured at fair value had been 100 basis points higher as of December 31, 2018, earnings after tax would have been €1 million lower. If the risk-adjusted interest rates as of December 31, 2018 had been 100 basis points lower, earnings after tax would have been €4 million higher.

If the corresponding vehicle price used in the vehicle financing programs had been 10% higher as of December 31, 2018, earnings after tax would have been €8 million higher. If the corresponding vehicle prices used in the vehicle financing programs had been 10% lower as of December 31, 2018, earnings after tax would have been €8 million lower.

If the result of operations of equity investments measured at fair value had been 10% better as of December 31, 2018, the equity would have been €3 million higher. If the result of operations had been 10% worse, the equity would have been €3 million lower.

**OFFSETTING OF FINANCIAL ASSETS AND LIABILITIES**

The following tables contain information about the effects of offsetting in the balance sheet and the potential financial effects of offsetting in the case of instruments that are subject to a legally enforceable master netting arrangement or a similar agreement.

€ million	Gross amounts of recognized financial assets	Gross amounts of recognized financial liabilities set off in the balance sheet	Net amounts of financial assets presented in the balance sheet	AMOUNTS THAT ARE NOT SET OFF IN THE BALANCE SHEET		Net amount at Dec. 31, 2017
				Financial instruments	Collateral received	
Derivatives	6,936	0	6,936	-1,036	-197	5,704
Financial services receivables	126,877	-482	126,395	-	-67	126,328
Trade receivables	13,356	0	13,356	0	-1	13,355
Marketable securities	15,939	-	15,939	-	-	15,939
Cash, cash equivalents and time deposits	18,457	-	18,457	-	-	18,457
Other financial assets	13,780	-20	13,760	-	-	13,760

€ million	Gross amounts of recognized financial assets	Gross amounts of recognized financial liabilities set off in the balance sheet	Net amounts of financial assets presented in the balance sheet	AMOUNTS THAT ARE NOT SET OFF IN THE BALANCE SHEET		Net amount at Dec. 31, 2018
				Financial instruments	Collateral received	
Derivatives	3,979	0	3,979	-1,819	-171	1,989
Financial services receivables	132,909	-	132,909	-	-77	132,831
Trade receivables	17,537	0	17,537	0	-	17,536
Marketable securities	17,080	-	17,080	-	-	17,080
Cash, cash equivalents and time deposits	28,938	-	28,938	-	-	28,938
Other financial assets	14,307	-15	14,291	-	-	14,291

Other financial assets include receivables from tax allocations of €29 million.

€ million	Gross amounts of recognized financial liabilities	Gross amounts of recognized financial assets set off in the balance sheet	Net amounts of financial liabilities presented in the balance sheet	AMOUNTS THAT ARE NOT SET OFF IN THE BALANCE SHEET		Net amount at Dec. 31, 2017
				Financial instruments	Collateral pledged	
Put options and compensation rights granted to noncontrolling interest shareholders	3,795	–	3,795	–	–	3,795
Derivatives	2,254	–7	2,246	–904	–12	1,330
Financial liabilities	163,472	–	163,472	–	–2,795	160,677
Trade payables	23,046	0	23,046	0	–	23,045
Other financial liabilities	9,483	–495	8,988	–	–	8,988

€ million	Gross amounts of recognized financial liabilities	Gross amounts of recognized financial assets set off in the balance sheet	Net amounts of financial liabilities presented in the balance sheet	AMOUNTS THAT ARE NOT SET OFF IN THE BALANCE SHEET		Net amount at Dec. 31, 2018
				Financial instruments	Collateral pledged	
Put options and compensation rights granted to noncontrolling interest shareholders	1,853	–	1,853	–	–	1,853
Derivatives	2,573	0	2,573	–1,738	–1	834
Financial liabilities	190,883	–	190,883	–	–1,953	188,931
Trade payables	23,607	0	23,607	0	–	23,607
Other financial liabilities	10,111	–15	10,095	–	–	10,095

The Financial instruments column shows the amounts that are subject to a master netting arrangement but were not set off because they do not meet the criteria for offsetting in the balance sheet. The Collateral received and Collateral pledged columns show the amounts of cash collateral and collateral in the form of financial instruments received and pledged for the total assets and liabilities that do not meet the criteria for offsetting in the balance sheet.

Other financial liabilities include receivables from tax allocations of €33 million.

**ASSET-BACKED SECURITIES TRANSACTIONS**

Asset-backed securities transactions with financial assets amounting to €27,906 million (previous year: €24,561 million) entered into to refinance the financial services business are included in bonds, commercial paper and notes, and liabilities from loans. The corresponding carrying amount of the receivables from the customer and dealer financing and the finance lease business amounted to €32,669 million (previous year: €26,689 million). Collateral of €47,884 million (previous year: €41,799 million) in total was furnished as part of asset-backed securities transactions. The expected payments were assigned to structured entities and the equitable liens in the financed vehicles were transferred. These asset-backed securities transactions did not result in the receivables from financial services business being derecognized, as the Group retains nonpayment and late payment risks. The difference between the assigned receivables and the related liabilities is the result of different terms and conditions and the share of the securitized paper and notes held by the Volkswagen Group itself, as well as the proportion of vehicles financed within the Group.

Most of the public and private asset-backed securities transactions of the Volkswagen Group can be repaid in advance (clean-up call) if less than 9% or 10%, as appropriate, of the original transaction volume is outstanding. The assigned receivables cannot be assigned again or pledged elsewhere as collateral. The claims of the holders of commercial paper and notes are limited to the assigned receivables and the receipts from those receivables are earmarked for the repayment of the corresponding liability.

As of December 31, 2018, the fair value of the assigned receivables still recognized in the balance sheet was €32,944 million (previous year: €27,089 million). The fair value of the related liabilities was €30,122 million (previous year: €24,511 million) at that reporting date.

Companies of the Volkswagen Financial Services subgroup are contractually obliged, under certain conditions, to transfer funds to the structured entities that are included in its financial statements. Since the receivables are transferred to the special purpose entity by way of undisclosed assignment, the situation may occur in which the receivable has already been reduced in a legally binding manner at the originator, for example if the obligor effectively offsets it against receivables owed to it by a company belonging to the Volkswagen Group. In this case, collateral must be furnished for the resulting compensation claims against the special purpose entity, for example if the rating of the Group company concerned declines to a contractually agreed reference value.