

# Disclosures according to Pfandbriefgesetz

## Mortgage Pfandbriefe

Art. 28 (1) No. 1, 2, 3 PfandBG   €m	31.12.2018			31.12.2017		
	Nominal value	Net present value	Risk-adjusted net present value <sup>1</sup>	Nominal value	Net present value	Risk-adjusted net present value <sup>1</sup>
<b>Cover calculation mortgage Pfandbriefe</b>						
Liabilities to be covered	18,239.5	19,113.1	18,276.9	15,423.3	16,412.6	15,687.5
of which Pfandbriefe outstanding	18,239.5	19,113.1	18,276.9	15,423.3	16,412.6	15,687.5
of which derivatives	–	–	–	–	–	–
Cover assets	26,335.7	28,660.5	27,234.8	21,835.2	23,915.3	22,745.9
of which cover loans	25,211.3	27,365.3	25,995.0	21,125.7	23,145.8	21,990.0
of which cover assets Art. 19 (1) No. 1, 2, 3 PfandBG	1,124.4	1,295.2	1,239.8	709.5	769.5	755.9
of which derivatives	–	–	–	–	–	–
Risk-adjusted net present value after interest rate stress test			8,957.9			7,058.4
Loss from currency stress test			–			–
<b>Cover surplus</b>	<b>8,096.2</b>	<b>9,547.4</b>	<b>8,957.9</b>	<b>6,411.9</b>	<b>7,502.7</b>	<b>7,058.4</b>

<sup>1</sup> Risk-adjusted net present value including currency stress test.

Art. 28 (1) no. 2 PfandBG   €m	31.12.2018	31.12.2017
<b>Mortgage Pfandbriefe outstanding with a residual term of</b>		
up to 6 months	976.4	1,067.1
over 6 months up to 12 months	2,499.7	104.3
over 12 months up to 18 months	40.3	973.9
over 18 months up to 2 years	1,272.5	2,501.4
over 2 years up to 3 years	803.7	1,287.9
over 3 years up to 4 years	1,857.0	793.7
over 4 years up to 5 years	2,763.0	1,357.0
over 5 years up to 10 years	7,806.0	7,056.0
over 10 years	221.0	282.0
<b>Total</b>	<b>18,239.5</b>	<b>15,423.3</b>
<b>Cover assets mortgage Pfandbriefe with a residual fixed interest period of</b>		
up to 6 months	951.4	830.5
over 6 months up to 12 months	770.7	902.0
over 12 months up to 18 months	1,107.3	1,036.2
over 18 months up to 2 years	1,159.3	759.7
over 2 years up to 3 years	2,066.1	1,968.2
over 3 years up to 4 years	2,590.9	1,884.0
over 4 years up to 5 years	3,026.0	2,262.4
over 5 years up to 10 years	12,856.1	11,295.4
over 10 years	1,807.7	896.8
<b>Total</b>	<b>26,335.7</b>	<b>21,835.2</b>

Art. 28 (1) no. 4, 5, 6 PfandBG Other cover assets   €m	31.12.2018	31.12.2017
<b>Equalisation claims as defined by Art. 19 (1) no. 1 Pfandbriefgesetz</b>		
Germany	-	-
<b>Total</b>	<b>-</b>	<b>-</b>
<b>Loans as defined by Art. 19 (1) no. 2 Pfandbriefgesetz</b>		
Germany	-	-
of which covered bonds as defined by Art. 129 of EU Regulation 575/2013	-	-
<b>Total</b>	<b>-</b>	<b>-</b>
<b>Loans as defined by Art. 19 (1) no. 3 Pfandbriefgesetz</b>		
Belgium	-	164.5
Germany	505.0	545.0
Italy	448.9	-
Austria	84.0	-
Czech Republic	86.5	-
<b>Total</b>	<b>1,124.4</b>	<b>709.5</b>
<b>Total</b>	<b>1,124.4</b>	<b>709.5</b>

Art. 28 (2) no. 1 a PfandBG Size categories   €m	31.12.2018	31.12.2017
Up to €0.3m	19,698.8	17,157.4
over €0.3m up to €1m	4,081.7	3,125.5
over €1m up to €10m	942.0	706.2
over €10m	488.8	136.7
<b>Total</b>	<b>25,211.3</b>	<b>21,125.7</b>

Art. 28 (2) no. 1 b and c PfandBG Mortgage Pfandbriefe by country and type of use   €m	31.12.2018		31.12.2017	
	Commercial	Residential	Commercial	Residential
<b>Germany</b>				
Flats	-	6,448.0	-	5,306.0
Single family house	-	15,130.3	-	12,925.1
Multi-dwellings	-	2,974.4	-	2,659.9
Office buildings	379.4	-	49.1	-
Retail buildings	220.3	-	141.7	-
Industrial buildings	0.2	-	0.3	-
Other commercially used real estate	58.6	-	43.6	-
Unfinished new buildings not yet generating income	-	0.0	-	0.0
Building sites	-	0.0	-	0.0
<b>Total</b>	<b>658.5</b>	<b>24,552.8</b>	<b>234.6</b>	<b>20,891.1</b>

<b>Art. 28 (1) no. 10 PfandBG</b> <b>Foreign currency   €m</b>	<b>31.12.2018</b>	<b>31.12.2017</b>
Net present value	–	–
<b>Art. 28 (1) no. 9 PfandBG</b> <b>Interest structure   %</b>	<b>31.12.2018</b>	<b>31.12.2017</b>
Share of fixed-income cover assets	98.1	99.7
Share of fixed-income Pfandbriefe	99.5	99.2
<b>Art. 28 (1) no. 8 PfandBG</b> <b>Limit breaches   €m</b>	<b>31.12.2018</b>	<b>31.12.2017</b>
Total amount of loans that exceed the limits defined by Art. 13 (1) PfandBG	–	–
Total amount of loans that exceed the limits defined by Art. 19 (1) PfandBG	–	–
<b>Art. 28 (1) no. 11 PfandBG</b> <b>Other structural data</b>	<b>31.12.2018</b>	<b>31.12.2017</b>
Average age of the loans weighted by value, in years (seasoning)	4.7	5.0
Average weighted loan-to-value ratio in %	52.8	52.6
<b>Art. 28 (2) no. 2 PfandBG</b> <b>Payments in arrear Germany   €m</b>	<b>31.12.2018</b>	<b>31.12.2017</b>
Total payments overdue by at least 90 days	–	–
Total amount of interest in arrears	–	–
Total amount of these receivables where the arrears represent at least 5% of the receivable concerned	–	–

## Public Pfandbriefe

Art. 28 (1) no. 1 and 3 PfandBG   €m	31.12.2018			31.12.2017		
	Nominal value	Net present value	Risk-adjusted net present value	Nominal value	Net present value	Risk-adjusted net present value
<b>Cover calculation public Pfandbriefe</b>						
Liabilities to be covered	8,042.5	10,281.7	11,024.8	9,816.9	12,400.4	13,235.1
of which Pfandbriefe outstanding	8,042.5	10,281.7	11,024.8	9,816.9	12,400.4	13,235.1
of which derivatives	–	–	–	–	–	–
Cover assets	9,531.0	11,772.6	12,364.0	10,993.7	13,640.1	14,357.2
of which cover loans	1,306.8	1,338.4	1,353.5	180.9	184.2	183.6
of which cover assets Art. 20 (1) PfandBG	9,442.7	11,660.5	12,244.6	10,903.8	13,524.0	14,232.8
of which cover assets Art. 20 (2) PfandBG	88.3	112.1	119.4	89.9	116.1	124.4
of which derivatives	–	–	–	–	–	–
Risk-adjusted net present value after interest rate stress test			1,538.6			1,288.7
Loss from currency stress test			-199.4			-166.6
<b>Cover surplus</b>	<b>1,488.5</b>	<b>1,490.9</b>	<b>1,339.2</b>	<b>1,176.8</b>	<b>1,239.7</b>	<b>1,122.1</b>

Art. 28 (1) no. 2 PfandBG   €m	31.12.2018	31.12.2017
<b>Public Pfandbriefe outstanding with a residual term of</b>		
up to 6 months	835.0	623.4
over 6 months up to 12 months	606.7	402.2
over 12 months up to 18 months	539.7	957.6
over 18 months up to 2 years	461.0	1,003.9
over 2 years up to 3 years	339.4	859.7
over 3 years up to 4 years	420.5	296.0
over 4 years up to 5 years	314.8	370.5
over 5 years up to 10 years	2,110.3	2,394.8
over 10 years	2,415.2	2,908.8
<b>Total</b>	<b>8,042.5</b>	<b>9,816.9</b>
<b>Cover assets public Pfandbriefe with a residual fixed interest period of</b>		
up to 6 months	257.2	867.2
over 6 months up to 12 months	484.9	812.7
over 12 months up to 18 months	419.6	175.6
over 18 months up to 2 years	503.3	472.9
over 2 years up to 3 years	464.0	839.1
over 3 years up to 4 years	768.0	307.9
over 4 years up to 5 years	475.2	613.3
over 5 years up to 10 years	2,705.1	2,275.3
over 10 years	3,453.7	4,629.9
<b>Total</b>	<b>9,531.0</b>	<b>10,993.7</b>

Art. 28 (1) no. 4 and 5 PfandBG Other cover assets   €m	31.12.2018	31.12.2017
<b>Equalisation claims as defined by Art. 20 (2) no. 1 Pfandbriefgesetz</b>		
Germany	-	-
<b>Total</b>	<b>-</b>	<b>-</b>
<b>Loans as defined by Art. 20 (2) no. 2 Pfandbriefgesetz</b>		
Germany	88.3	89.9
of which covered bonds as defined by Art. 129 of EU Regulation 575/2013	-	-
Netherlands	-	-
of which covered bonds as defined by Art. 129 of EU Regulation 575/2013	-	-
<b>Total</b>	<b>88.3</b>	<b>89.9</b>
<b>Total</b>	<b>88.3</b>	<b>89.9</b>
<b>Art. 28 (3) no.1 PfandBG Size categories   €m</b>	<b>31.12.2018</b>	<b>31.12.2017</b>
up to €10m	120.6	133.5
over €10m up to €100m	1,551.3	1,865.2
over €100m	7,770.8	8,905.1
<b>Total</b>	<b>9,442.7</b>	<b>10,903.8</b>
<b>Art. 28 (1) no. 10 PfandBG Foreign currency   €m</b>	<b>31.12.2018</b>	<b>31.12.2017</b>
Net present value in Swiss francs	581.1	852.7
Net present value in British pounds	729.0	514.1
Net present value in US dollars	731.3	453.6
<b>Art. 28 (1) no. 9 PfandBG Interest structure   %</b>	<b>31.12.2018</b>	<b>31.12.2017</b>
Share of fixed-income cover assets	69.9	75.9
Share of fixed-income Pfandbriefe	89.2	84.1
<b>Art. 28 (1) no. 8 PfandBG Limit breaches   €m</b>	<b>31.12.2018</b>	<b>31.12.2017</b>
Total amount of loans that exceed the limits defined by Art. 20 (2) PfandBG	-	-
<b>Art. 28 (3) no. 3 PfandBG Payments in arrear   €m</b>	<b>31.12.2018</b>	<b>31.12.2017</b>
Total payments overdue by at least 90 days	-	-
Total amount of these receivables where the arrears represent at least 5% of the receivable concerned	-	-

Art. 28 (3) no. 2 PfandBG Registered office of borrowers or guarantors   €m	31.12.2018	31.12.2017
<b>Total</b>	<b>9,442.7</b>	<b>10,903.8</b>
<b>of which borrowers have a registered office in</b>		
<b>Countries</b>	<b>1,039.6</b>	<b>1,810.8</b>
Belgium	–	–
Germany	–	204.5
Great Britain/North Ireland/Channel Islands/Isle of Man	186.8	261.6
Iceland	93.7	91.7
Italy	44.0	44.2
Canada	15.0	14.3
Austria	425.0	632.9
Portugal	275.0	475.0
Czech Republic	–	86.5
<b>Regional authorities</b>	<b>4,859.9</b>	<b>6,059.6</b>
Germany	3,569.4	4,227.4
France including Monaco	41.4	47.2
Italy	222.7	495.1
Japan	42.0	42.0
Canada	62.3	59.5
Austria	–	60.0
Switzerland	676.9	897.3
Spain	245.1	231.1
<b>Local authorities</b>	<b>897.4</b>	<b>1,217.6</b>
Belgium	–	30.0
Germany	10.4	80.7
Estonia	4.1	5.5
Finland	79.7	84.6
France including Monaco	20.4	23.3
Great Britain/North Ireland/Channel Islands/Isle of Man	7.2	7.3
Iceland	24.0	22.2
Italy	296.5	477.4
Canada	–	–
Switzerland	101.2	98.1
USA	353.9	388.3
<b>Other borrowers with a registered office in</b>	<b>593.8</b>	<b>730.2</b>
Germany	195.0	274.9
France including Monaco	361.1	367.4
Switzerland	–	50.0
Supranational organisations <sup>1</sup>	–	2.0
USA	37.6	35.9
<b>Total</b>	<b>7,390.6</b>	<b>9,818.2</b>
<b>of which guarantors have a registered office in</b>		
<b>Countries</b>	<b>1,332.4</b>	<b>206.5</b>
Germany	1,265.5	206.5
of which receivables from export credit agencies	1,239.9	180.9
Finland	66.9	–
of which receivables from export credit agencies	66.9	–
<b>Regional authorities</b>	<b>109.9</b>	<b>145.3</b>
Germany	–	–
Belgium	109.9	145.3
<b>Local authorities</b>	<b>–</b>	<b>–</b>
Germany	–	–
<b>Other borrowers</b>	<b>609.8</b>	<b>733.8</b>
Germany	609.8	733.8
<b>Total</b>	<b>2,052.1</b>	<b>1,085.6</b>
Other cover assets as defined by Art. 20 (2) Pfandbriefgesetz	88.3	89.9
<b>Total</b>	<b>9,531.0</b>	<b>10,993.7</b>

<sup>1</sup> Cover assets issued by European institutions.

## Shipping Pfandbriefe

Commerzbank surrendered its licence to operate shipping Pfandbrief business with effect from 31 May 2017. As of 1 June 2017 the Federal Financial Supervisory Authority granted an exception to the cap set for further cover assets under the Pfandbrief Act Art. 26 (1) no. 4. Shipping Pfandbriefs issued are fully secured by addi-

tional assets that satisfy the requirements for covering public-sector Pfandbriefs and (to the extent that they exceed the cap on other cover assets under the Pfandbrief Act) also the credit rating criteria set by the Federal Financial Supervisory Authority.

Art. 28 (1) no. 1 and 3   €m	31.12.2018			31.12.2017		
	Nominal value	Net present value	Risk-adjusted net present value	Nominal value	Net present value	Risk-adjusted net present value
<b>Cover calculation ship Pfandbriefe</b>						
Liabilities to be covered	417.5	471.3	458.5	460.9	536.2	555.9
of which Pfandbriefe outstanding	417.5	471.3	458.5	460.9	536.2	555.9
of which derivatives <sup>1</sup>	–	–	–	–	–	–
Cover assets	473.0	501.0	486.1	573.7	587.8	599.2
of which cover loans	–	–	–	–	–	–
of which cover assets as defined by Art. 26 (1) no. 2, 3, 4 PfandBG	473.0	501.0	486.1	573.7	587.8	599.2
of which derivatives <sup>1</sup>	–	–	–	–	–	–
Risk-adjusted net present value after interest rate stress test			–			43.3
Loss from currency stress test			–			–
<b>Cover surplus</b>	<b>55.5</b>	<b>29.7</b>	<b>27.6</b>	<b>112.8</b>	<b>51.6</b>	<b>43.3</b>

<sup>1</sup> Exclusively to cover currency risks.

Art. 28 (1) no. 2 PfandBG   €m	31.12.2018	31.12.2017
<b>Ship Pfandbriefe outstanding with a residual term of</b>		
up to 6 months	45.0	18.0
over 6 months up to 12 months	35.0	–
over 12 months up to 18 months	25.0	45.0
over 18 months up to 2 years	102.0	35.0
over 2 years up to 3 years	71.5	137.0
over 3 years up to 4 years	60.0	71.5
over 4 years up to 5 years	10.0	70.2
over 5 years up to 10 years	69.0	79.0
over 10 years	–	5.3
<b>Total</b>	<b>417.5</b>	<b>460.9</b>
<b>Cover assets ship Pfandbriefe with a residual fixed interest period of</b>		
up to 6 months	–	–
over 6 months up to 12 months	50.0	300.7
over 12 months up to 18 months	140.0	–
over 18 months up to 2 years	–	50.0
over 2 years up to 3 years	70.0	50.0
over 3 years up to 4 years	173.0	–
over 4 years up to 5 years	–	173.0
over 5 years up to 10 years	–	–
over 10 years	40.0	–
<b>Total</b>	<b>473.0</b>	<b>573.7</b>

Art. 28 (1) no. 4, 5 and 6 PfandBG Other cover assets   €m	31.12.2018	31.12.2017
<b>Germany</b>		
Equalisation claims as defined by Art. 26 (1) no. 2 Pfandbriefgesetz	-	-
Loans as defined by Art. 26 (1) no. 3 Pfandbriefgesetz	-	75.0
of which covered bonds as defined by Art. 129 of EU Regulation 575/2013	-	-
Loans as defined by Art. 26 (1) no. 4 Pfandbriefgesetz <sup>1</sup>	433.0	498.7
Claims from derivatives to cover currency risks as defined by Art. 26 (1) no. 5 sentence 2 Pfandbriefgesetz	-	-
<b>Portugal</b>		
Equalisation claims as defined by Art. 26 (1) no. 2 Pfandbriefgesetz	-	-
Loans as defined by Art. 26 (1) no. 3 Pfandbriefgesetz	40.0	-
of which covered bonds as defined by Art. 129 of EU Regulation 575/2013	-	-
Loans as defined by Art. 26 (1) no. 4 Pfandbriefgesetz <sup>1</sup>	-	-
<b>Total</b>	<b>473.0</b>	<b>573.7</b>

<sup>1</sup> Commerzbank surrendered its licence to operate shipping Pfandbrief business with effect from 31 May 2017. In this context the Federal Financial Supervisory Authority granted an exception to the cap set for further cover assets under the Pfandbrief Act by Art. 26 (1) no.4 PfandBG as of 1 June 2017.

Art. 28 (4) no. 1 a Size categories   €m	31.12.2018	31.12.2017
Up to €0.5m	-	-
over €0.5m up to €5m	-	-
More than €5m	-	-
<b>Total</b>	<b>-</b>	<b>-</b>

<sup>1</sup> Commerzbank surrendered its licence to operate shipping Pfandbrief business with effect from 31 May 2017. In this context the Federal Financial Supervisory Authority granted an exception to the cap set for further cover assets under the Pfandbrief Act by Art. 26 (1) no.4 PfandBG as of 1 June 2017.



Art. 28 (4) no. 1 b PfandBG Country in which the mortgaged vessel or vessel under construction is registered   €m	31.12.2018	31.12.2017
Ocean going vessels	-	-
Inland waterway vessels	-	-
<b>Total</b>	-	-

<sup>1</sup> Commerzbank surrendered its licence to operate shipping Pfandbrief business with effect from 31 May 2017. In this context the Federal Financial Supervisory Authority granted an exception to the cap set for further cover assets under the Pfandbrief Act. by Art. 26 (1) no.4 PfandBG as of 1 June 2017.

Art. 28 (4) no. 1 b PfandBG Foreign currency   €m	31.12.2018	31.12.2017
Net present value in Swiss francs	-	-
Net present value in Japanese yen	-	-
Net present value in US dollars	-	-
<b>Total</b>	-	-

Art. 28 (1) no. 9 PfandBG Interest structure   %	31.12.2018	31.12.2017
Share of fixed-income cover assets	84.1	86.9
Share of fixed-income Pfandbriefe	97.6	97.2

Art. 28 (1) no. 8 PfandBG Limit breaches   €m	31.12.2018	31.12.2017
Total amount of loans that exceed the limits defined by Art. 26 (1) PfandBG <sup>1</sup>	-	-

<sup>1</sup> Commerzbank surrendered its licence to operate shipping Pfandbrief business with effect from 31 May 2017. In this context the Federal Financial Supervisory Authority granted an exception to the cap set for further cover assets under the Pfandbrief Act. by Art. 26 (1) no.4 PfandBG as of 1 June 2017.

## Payments in arrears

The nominal value of the loan receivables used to cover for ship Pfandbriefe was €0.0m; consequently no arrears of principal and interest existed.

In the previous year the nominal value of the loan receivables used to cover for ship Pfandbriefe was €0.0m. This did not include arrears of principal and interest, as principal payments cease to be included in the cover calculation and interest was not treated as a cover asset after the due date.

Payments in arrears in excess of the cover amount stood at €0.0m in the previous year. Receivables where the arrears represented at least 5% of the receivable concerned amounted to €0.0m in total in the previous year.