

Disclosures according to Pfandbriefgesetz

Mortgage Pfandbriefe

€m	31.12.2016 ¹			31.12.2015		
	Nominal value	Net present value	Risk-adjusted net present value ²	Nominal value	Net present value	Risk-adjusted net present value ²
Cover calculation mortgage Pfandbriefe						
Liabilities to be covered	14,775.8	16,181.5	13,593.9	4,150.0	4,255.5	4,014.6
of which Pfandbriefe outstanding	14,775.8	16,181.5	13,593.9	4,150.0	4,255.5	4,014.6
of which derivatives	–	–	–	–	–	–
Cover assets	18,752.6	21,074.5	16,247.8	8,678.8	9,850.8	9,274.8
of which cover loans	18,232.6	20,551.1	15,729.8	8,533.8	9,683.8	9,110.6
of which cover assets Art. 19 (1) No. 1, 2, 3 PfandBG	520.0	523.4	518.0	145.0	167.0	164.1
of which derivatives	–	–	–	–	–	–
Risk-adjusted net present value after interest rate stress test			2,653.9			5,260.1
Loss from currency stress test			–			–
Cover surplus	3,976.7	4,893.0	2,653.9	4,528.8	5,595.3	5,260.1

¹ Including Mortgage Pfandbriefe of the former Hypothekenbank Frankfurt Aktiengesellschaft.

² Risk-adjusted net present value including currency stress test.

€m	31.12.2016 ¹	31.12.2015
Mortgage Pfandbriefe outstanding with a residual term of		
up to 6 months	404.3	–
over 6 months up to 12 months	730.6	–
over 12 months up to 18 months	1,066.0	–
over 18 months up to 2 years	76.0	–
over 2 years up to 3 years	3,435.8	–
over 3 years up to 4 years	1,237.4	1,000.0
over 4 years up to 5 years	721.7	1,000.0
over 5 years up to 10 years	6,702.0	2,150.0
over 10 years	402.0	–
Total	14,775.8	4,150.0
Cover assets mortgage Pfandbriefe with a residual fixed interest period of		
up to 6 months	690.8	154.9
over 6 months up to 12 months	712.6	175.7
over 12 months up to 18 months	739.8	204.2
over 18 months up to 2 years	716.6	175.0
over 2 years up to 3 years	1,536.4	581.0
over 3 years up to 4 years	1,922.8	561.5
over 4 years up to 5 years	1,660.6	546.1
over 5 years up to 10 years	10,049.5	6,000.9
over 10 years	723.4	279.3
Total	18,752.6	8,678.6

¹ Including mortgage Pfandbriefe of the former Hypothekenbank Frankfurt Aktiengesellschaft.

Other cover assets €m	31.12.2016 ¹	31.12.2015
Equalisation claims as defined by Art. 19 (1) no. 1 Pfandbriefgesetz		
Germany	-	-
Total	-	-
Loans as defined by Art. 19 (1) no. 2 Pfandbriefgesetz		
Germany	-	-
of which covered bonds as defined by Art. 129 of EU Regulation 575/2013	-	-
Total	-	-
Loans as defined by Art. 19 (1) no. 3 Pfandbriefgesetz		
Germany	520.0	145.0
Total	520.0	145.0
Total	520.0	145.0

¹ Including mortgage Pfandbriefe of the former Hypothekenbank Frankfurt Aktiengesellschaft.

Size categories €m	31.12.2016 ¹	31.12.2015
Up to €0.3m	15,207.6	7,110.7
over €0.3m up to €1m	2,291.1	1,106.1
over €1m up to €10m	610.7	290.0
over €10m	123.1	27.0
Total	18,232.6	8,533.8

¹ Including mortgage Pfandbriefe of the former Hypothekenbank Frankfurt Aktiengesellschaft.

Mortgage Pfandbriefe by country and type of use €m	31.12.2016 ¹		31.12.2015	
	Commercial	Residential	Commercial	Residential
Germany				
Flats	-	4,355.1	-	2,054.4
Single family house	-	11,278.5	-	5,471.7
Multi-dwellings	-	2,321.7	-	1,007.3
Office buildings	51.5	-	0.1	-
Retail buildings	193.0	-	0.2	-
Industrial buildings	0.9	-	-	-
Other commercially used real estate	31.7	-	0.0	-
Unfinished new buildings not yet generating income	-	0.1	-	0.0
Building sites	0.0	0.0	-	0.0
Total	277.1	17,955.5	0.3	8,533.5

¹ Including mortgage Pfandbriefe of the former Hypothekenbank Frankfurt Aktiengesellschaft.

Foreign currency €m	31.12.2016¹	31.12.2015
Net present value	-	-
Interest structure %	31.12.2016¹	31.12.2015
Share of fixed-income cover assets	97.2	99.8
Share of fixed-income Pfandbriefe	98.3	100.0
Limit breaches €m	31.12.2016¹	31.12.2015
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	-	-
Other structural data	31.12.2016¹	31.12.2015
Average age of the loans weighted by value, in years (seasoning)	5.3	2.3
Average weighted loan-to-value ratio in %	52.4	55.3
Payments in arrear Germany €m	31.12.2016¹	31.12.2015
Total payments overdue by at least 90 days	-	0.1
Total amount of these receivables where the arrears represent at least 5% of the receivable concerned	-	-

¹ Including mortgage Pfandbriefe of the former Hypothekenbank Frankfurt Aktiengesellschaft.

Public Pfandbriefe

€m	31.12.2016 ¹			31.12.2015		
	Nominal value	Net present value	Risk-adjusted net present value ²	Nominal value	Net present value	Risk-adjusted net present value ²
Cover calculation public Pfandbriefe						
Liabilities to be covered	11,080.4	14,217.4	14,056.5	1,881.5	2,218.5	2,323.7
of which Pfandbriefe outstanding	11,080.4	14,217.4	14,056.5	1,881.5	2,218.5	2,323.7
of which derivatives	–	–	–	–	–	–
Cover assets	12,799.2	15,842.1	15,487.3	2,263.2	2,492.6	2,475.2
of which cover loans	723.6	754.3	746.1	961.3	999.7	999.5
of which cover assets Art. 20 (1) PfandBG	12,451.7	15,480.1	15,125.3	2,263.2	2,492.6	2,475.2
of which cover assets Art. 20 (2) PfandBG	347.5	362.0	362.0	–	–	–
of which derivatives	–	–	–	–	–	–
Risk-adjusted net present value after interest rate stress test			1,624.7			198.4
Loss from currency stress test			–193.9			–46.9
Cover surplus	1,718.7	1,624.7	1,430.8	381.7	274.1	151.5

¹ Risk-adjusted net present value including currency stress test.

² Including public Pfandbriefe of the former Hypothekbank Frankfurt Aktiengesellschaft.

€m	31.12.2016 ¹	31.12.2015
Public Pfandbriefe outstanding with a residual term of		
up to 6 months	486.8	33.0
over 6 months up to 12 months	720.7	10.0
over 12 months up to 18 months	640.2	–
over 18 months up to 2 years	422.2	85.5
over 2 years up to 3 years	1,998.3	510.0
over 3 years up to 4 years	1,005.7	550.0
over 4 years up to 5 years	336.8	42.0
over 5 years up to 10 years	2,582.3	235.5
over 10 years	2,887.6	415.5
Total	11,080.4	1,881.5
Cover assets public Pfandbriefe with a residual fixed interest period of		
up to 6 months	817.9	128.4
over 6 months up to 12 months	1,076.4	147.2
over 12 months up to 18 months	819.9	97.0
over 18 months up to 2 years	707.7	267.7
over 2 years up to 3 years	652.9	632.5
over 3 years up to 4 years	983.8	367.4
over 4 years up to 5 years	362.2	170.2
over 5 years up to 10 years	2,473.6	254.1
over 10 years	4,904.7	198.6
Total	12,799.2	2,263.2

¹ Including public Pfandbriefe of the former Hypothekbank Frankfurt Aktiengesellschaft.

Other cover assets €m	31.12.2016 ¹	31.12.2015
Equalisation claims as defined by Art. 20 (2) no. 1 Pfandbriefgesetz		
Germany	-	-
Total	-	-
Equalisation claims as defined by Art. 20 (2) no. 2 Pfandbriefgesetz		
Germany	247.5	-
of which covered bonds as defined by Art. 129 of EU Regulation 575/2013	-	-
Netherlands	100.0	-
of which covered bonds as defined by Art. 129 of EU Regulation 575/2013	-	-
Total	347.5	-
Total	347.5	-

¹ Including public Pfandbriefe of the former Hypothekenbank Frankfurt Aktiengesellschaft.

Size categories €m	31.12.2016 ¹	31.12.2015
up to €10m	119.0	19.5
over €10m up to €100m	2,256.5	581.4
over €100m	10,076.2	1,662.3
Total	12,451.7	2,263.2

¹ Including public Pfandbriefe of the former Hypothekenbank Frankfurt Aktiengesellschaft.

Foreign currency €m	31.12.2016 ¹	31.12.2015
Net present value in Australian dollars	-	-
Net present value in Canadian dollars	40.3	-
Net present value in Swiss francs	664.1	149.0
Net present value in British pound	566.5	-
Net present value in Japanese yen	-	-
Net present value in Norwegian crowns	-	-
Net present value in US dollars	384.4	88.6

Interest structure %	31.12.2016 ¹	31.12.2015
Share of fixed-income cover assets	68.1	40.2
Share of fixed-income Pfandbriefe	84.1	97.6

Limit breaches €m	31.12.2016 ¹	31.12.2015
Total amount of loans that exceed the limits defined by Art. 20 (2) PfandBG	-	-

Payments in arrear €m	31.12.2016 ¹	31.12.2015
Total payments overdue by at least 90 days	-	-
Total amount of these receivables where the arrears represent at least 5% of the receivable concerned	-	-

¹ Including public Pfandbriefe of the former Hypothekenbank Frankfurt Aktiengesellschaft.

Registered office of borrowers or guarantors €m	31.12.2016 ¹	31.12.2015
Total	12,451.7	2,421.2
of which borrowers have a registered office in		
Countries	1,708.3	120.3
Germany	306.8	120.3
Great Britain/North Ireland/Channel Islands/Isle of Man	347.5	-
Iceland	97.4	-
Italy	43.0	-
Canada	16.3	-
Austria	622.3	-
Portugal	275.0	-
Regional authorities	5,820.7	1,060.8
Belgium	-	69.0
Germany	4,087.0	709.6
France including Monaco	52.9	48.8
Italy	520.1	-
Japan	42.0	-
Canada	67.7	-
Switzerland	754.3	138.4
Spain	296.7	95.0
Local authorities	1,355.8	12.0
Germany	83.1	-
Estonia	6.9	-
Finland	89.6	-
France including Monaco	26.2	12.0
Great Britain/North Ireland/Channel Islands/Isle of Man	7.6	-
Iceland	26.9	-
Italy	478.3	-
Canada	38.8	-
Switzerland	126.6	-
USA	471.9	-
Other borrowers with a registered office in	1,837.8	108.8
Belgium	-	25.0
Germany	458.3	25.0
France including Monaco	380.8	-
Austria	812.0	49.0
Switzerland	100.0	-
Supranational organisations	5.9	9.8
USA	80.9	-
Total	10,722.5	1,301.8
of which guarantors have a registered office in		
Countries	749.1	961.3
Germany	749.1	961.3
of which receivables from export credit agencies	723.6	961.3
Regional authorities	124.0	n.a.
Germany	-	n.a.
Belgium	124.0	n.a.
Local authorities	-	n.a.
Germany	-	n.a.
Other borrowers	856.0	n.a.
Germany	856.0	n.a.
Total	1,729.1	961.3
Other cover assets as defined by Art. 20 (2) Pfandbriefgesetz	347.5	-
Total	12,799.2	2,263.2

¹ Including public Pfandbriefe of the former Hypothekenbank Frankfurt Aktiengesellschaft.

Ship Pfandbriefe

€m	31.12.2016			31.12.2015		
	Nominal value	Net present value	Risk-adjusted net present value ¹	Nominal value	Net present value	Risk-adjusted net present value ¹
Cover calculation ship Pfandbriefe						
Liabilities to be covered	1,135.4	1,290.9	1,281.2	1,496.6	1,694.5	1,694.9
of which Pfandbriefe outstanding	1,095.3	1,243.5	1,233.4	1,377.3	1,574.4	1,573.5
of which derivatives ¹	40.2	47.4	47.8	119.4	120.1	121.4
Cover assets	1,687.8	1,767.5	1,767.2	1,898.7	1,992.7	1,996.2
of which cover loans	1,407.8	1,475.7	1,478.9	1,823.7	1,917.5	1,920.9
of which Cover assets as defined by Art. 26 (1) no. 2, 3, 4 PfandBG	280.0	291.8	288.3	75.0	75.3	75.3
of which derivatives ¹	–	–	–	–	–	–
Risk-adjusted net present value after interest rate stress test			486.0			301.3
Loss from currency stress test			–168.8			–142.0
Cover surplus	552.3	476.6	317.2	402.1	298.3	159.3

¹ Exclusively to cover currency risks.

€m	31.12.2016	31.12.2015
Ship Pfandbriefe outstanding with a residual term of		
up to 6 months	260.0	133.2
over 6 months up to 12 months	140.0	96.9
over 12 months up to 18 months	18.0	260.0
over 18 months up to 2 years	30.0	140.0
over 2 years up to 3 years	121.2	78.0
over 3 years up to 4 years	187.5	121.2
over 4 years up to 5 years	153.5	187.5
over 5 years up to 10 years	179.9	310.9
over 10 years	5.2	49.6
Total	1,095.3	1,377.3
Cover assets ship Pfandbriefe with a residual fixed interest period of		
up to 6 months	1,482.8	1,898.7
over 6 months up to 12 months	165.0	–
over 12 months up to 18 months	40.0	–
Total	1,687.8	1,898.7

Other cover assets €m	31.12.2016	31.12.2015
Germany		
Equalisation claims as defined by Art. 26 (1) no. 2 Pfandbriefgesetz	-	-
Loans as defined by Art. 26 (1) no. 3 Pfandbriefgesetz	-	-
of which covered bonds as defined by Art. 129 of EU Regulation 575/2013	-	-
Loans as defined by Art. 26 (1) no. 4 Pfandbriefgesetz	115.0	75.0
Portugal		
Equalisation claims as defined by Art. 26 (1) no. 2 Pfandbriefgesetz	-	-
Loans as defined by Art. 26 (1) no. 3 Pfandbriefgesetz	-	-
of which covered bonds as defined by Art. 129 of EU Regulation 575/2013	-	-
Loans as defined by Art. 26 (1) no. 4 Pfandbriefgesetz	165.0	-
Total	280.0	75.0
Size categories €m	31.12.2016	31.12.2015
Up to €0.5m	1.0	2.2
over €0.5m up to €5m	355.0	433.5
over €5m	1,051.8	1,388.0
Total	1,407.8	1,823.7
Country in which the mortgaged vessel or vessel under construction is registered €m	31.12.2016	31.12.2015
Ocean going vessels	1,407.8	1,823.7
Antigua and Barbuda	5.4	6.1
Bahamas	61.2	99.2
Germany	737.0	805.3
Gibraltar	0.7	0.9
Greece	76.7	115.3
Great Britain	11.7	20.7
Hong Kong	31.2	55.1
Isle of Man	47.4	54.9
Liberia	95.3	138.1
Malta	114.5	186.2
Marshall Islands	109.1	188.0
Netherlands	17.8	26.8
Norway	7.6	20.0
Panama	23.2	29.1
Singapore	13.0	14.3
Turkey	5.6	6.6
Cyprus	50.4	57.1
Inland waterway vessels	-	-
Total	1,407.8	1,823.7

Foreign currency €m	31.12.2016	31.12.2015
Net present value in Swiss francs	9.4	13.9
Net present value in Japanese yen	38.7	43.3
Net present value in US dollars	826.9	715.2
Total	875.0	772.4

Interest structure %	31.12.2016	31.12.2015
Share of fixed-income cover assets	0.3	0.7
Share of fixed-income Pfandbriefe	89.0	87.8

Limit breaches €m	31.12.2016	31.12.2015
Total amount of loans that exceed the limits defined by Art. 26 (1) PfandBG	–	–

Payments in arrears

The nominal value of the loan receivables used to cover for ship Pfandbriefe was €1,407.8m (previous year: €1,823.7m). This does not include arrears of principal and interest, as principal payments cease to be included in the cover calculation, and interest is not treated as a cover asset, after the due date.

Payments in arrears in excess of the cover amount stood at €17.1m (previous year: €21.3m). Receivables where the arrears represented at least 5% of the receivable concerned amounted to €63.4m in total (previous year: €98.5m).