



## Transparency requirements §28 PfandBG Q3/2020

Markets Strategy & Floor Research

# Agenda

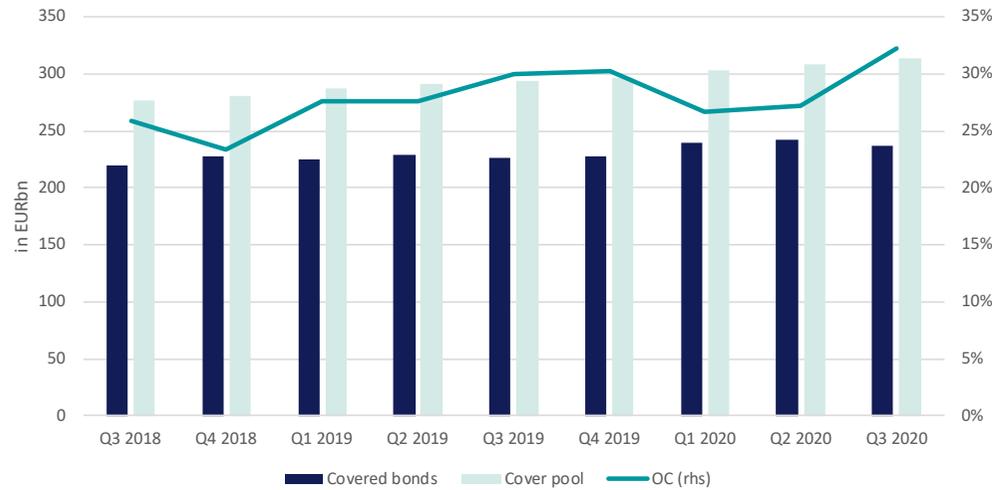
Authors: Dr. Frederik Kunze // Henning Walten, CIIA

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# Market overview

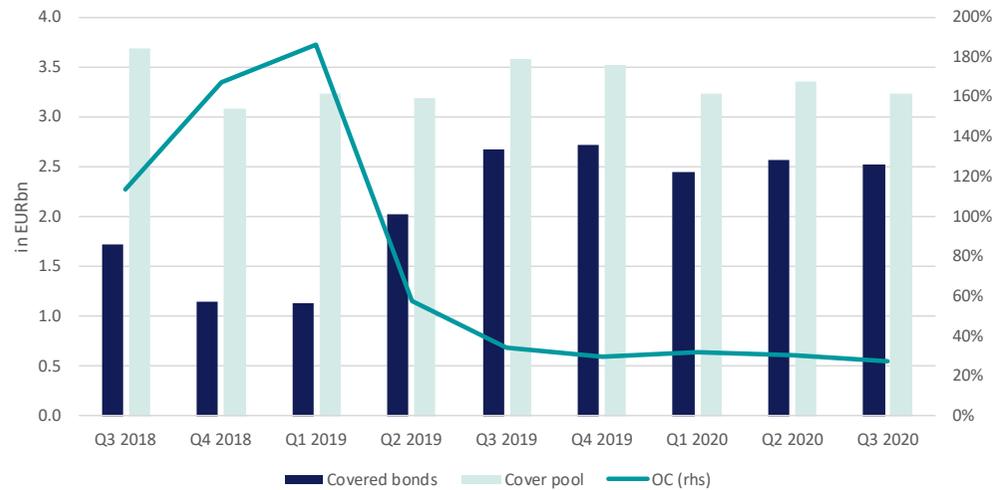
### Market development mortgage covered bonds



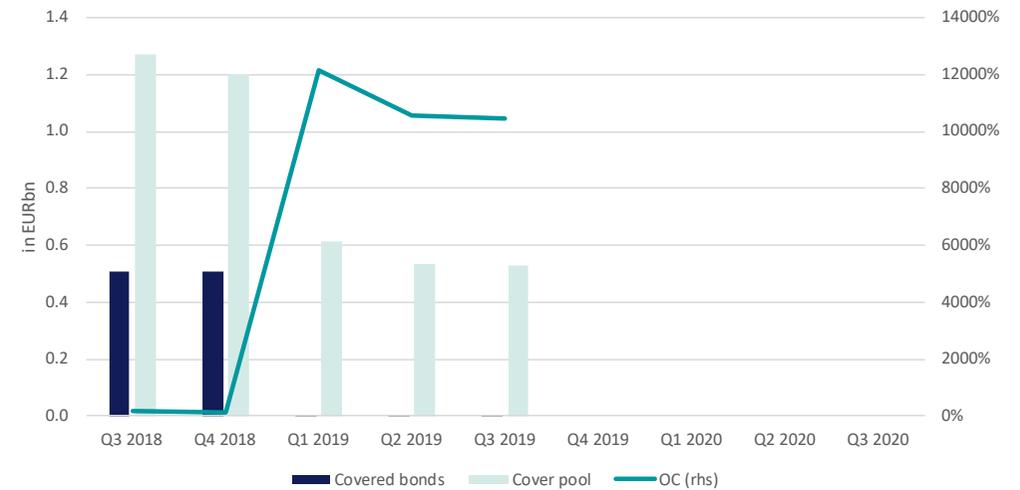
### Market development public sector covered bonds



### Market development ship covered bonds



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## Market overview mortgage covered bonds

Issuer	Amount outstanding	Cover pool	OC		Cover type (in %)			Germany share (in %)	
	in EURm	in EURm	in EURm	in %	Residential	Commercial	Others*	Primary assets	Substitution assets
Aareal Bank	10,386.1	12,061.1	1,675.0	16.1	6.7	86.2	7.2	17.1	55.9
Bausparkasse Mainz	31.0	50.6	19.6	63.4	92.1	0.0	7.9	100.0	0.0
Bausparkasse Schwäbisch Hall	6.0	567.6	561.6	9,360.8	90.6	0.4	9.0	100.0	100.0
Bayerische Landesbank	3,937.0	9,470.4	5,533.5	140.6	14.9	80.8	4.3	67.0	92.7
Berlin Hyp	15,366.1	15,767.2	401.1	2.6	28.2	63.3	8.4	67.2	94.4
Commerzbank	20,408.9	32,614.8	12,205.9	59.8	94.5	2.4	3.0	100.0	49.3
DekaBank	195.0	986.2	791.2	405.8	0.0	96.5	3.5	33.6	100.0
Deutsche Apotheker- und Ärztebank	6,730.1	8,299.4	1,569.3	23.3	75.8	18.7	5.5	100.0	78.0
Deutsche Bank	11,977.0	15,659.0	3,682.0	30.7	86.9	7.4	5.7	100.0	97.8
Deutsche Hypothekenbank	8,768.2	9,201.0	432.8	4.9	18.8	72.1	9.1	49.3	46.5
Deutsche Kreditbank	4,331.5	7,170.0	2,838.5	65.5	93.6	2.1	4.3	100.0	100.0
Deutsche Pfandbriefbank	15,190.0	17,724.0	2,534.0	16.7	18.6	78.8	2.6	45.2	71.8
DSK Hyp	213.0	845.0	632.0	296.7	33.6	64.0	2.4	75.4	100.0
DZ HYP	32,432.8	37,509.7	5,076.9	15.7	56.9	40.7	2.4	96.9	100.0
Hamburg Commercial Bank	4,348.8	4,735.6	386.8	8.9	16.4	80.3	3.3	95.5	100.0
Hamburger Sparkasse	5,669.7	7,901.9	2,232.2	39.4	66.3	29.9	3.8	100.0	100.0
ING	3,695.0	6,272.3	2,577.3	69.8	100.0	0.0	4.0	100.0	100.0
Kreissparkasse Köln	1,603.3	5,141.4	3,538.1	220.7	80.5	13.4	6.1	100.0	42.7
Landesbank Baden-Württemberg	11,747.6	15,389.3	3,641.6	31.0	38.5	55.8	5.7	78.0	62.4
Landesbank Berlin	3,500.0	5,622.4	2,122.4	60.6	62.4	32.1	5.5	100.0	95.2
Landesbank Hessen-Thüringen	12,142.1	17,629.0	5,486.9	45.2	23.5	67.4	9.1	52.3	93.8
M.M. Warburg & CO Hypothekenbank	1,089.9	1,294.7	204.8	18.8	18.0	76.9	5.1	91.8	100.0
Münchener Hypothekenbank	29,033.5	29,803.2	769.7	2.7	80.4	17.3	2.4	79.9	77.4
Natixis Pfandbriefbank	1,297.5	1,458.5	161.0	12.4	5.9	82.8	11.3	35.3	100.0
Norddeutsche Landesbank	2,114.2	5,272.6	3,158.4	149.4	68.8	28.4	2.8	98.5	86.3
PSD Bank Nürnberg	557.6	839.9	282.3	50.6	97.3	0.0	2.7	100.0	0.0
PSD Bank Rhein-Ruhr	304.0	472.5	168.5	55.4	97.5	0.0	2.5	100.0	100.0
SaarLB	474.5	784.9	310.4	65.4	1.4	92.5	6.2	80.3	100.0
Santander Consumer Bank	1,000.0	1,149.8	149.8	15.0	95.7	0.0	4.3	100.0	100.0
Sparkasse Hannover	1,223.1	1,648.5	425.4	34.8	77.7	18.1	4.2	100.0	100.0
Sparkasse KölnBonn	2,095.7	6,375.9	4,280.3	204.2	71.4	19.6	8.9	100.0	83.3
Stadtsparkasse Düsseldorf	867.0	1,942.8	1,075.8	124.1	69.8	27.4	2.8	100.0	100.0
UniCredit Bank	22,573.5	29,393.9	6,820.4	30.2	68.2	29.5	2.3	100.0	100.0
Wüstenrot Bausparkasse	1,751.6	2,530.3	778.7	44.5	92.6	1.1	6.3	100.0	0.0

Source: Issuers, vdp, NORD/LB Markets Strategy &amp; Floor Research

\* Including substitute assets as well as derivatives; excess cover assets might optionally be included.

**Market overview public sector covered bonds**

Issuer	Amount outstanding in EURm	Cover pool in EURm	OC		Cover type (in %)					Germany share (in %)	
			in EURm	in %	Central government	Regional authorities	Local authorities	Other debtors	Substitute cover*	Primary assets	Substitution assets
Aareal Bank	1,696.1	1,886.0	189.9	11.2	13.8	64.5	19.4	1.5	0.8	74.3	0.0
Bayerische Landesbank	17,853.1	22,901.9	5,048.8	28.3	8.2	38.5	43.6	8.0	1.7	94.2	100.0
Berlin Hyp	262.0	275.5	13.5	5.2	21.4	78.5	0.1	0.0	0.0	78.6	-
Commerzbank	11,436.4	12,556.7	1,120.4	9.8	24.3	35.9	34.2	5.1	0.6	59.2	100.0
DekaBank	3,515.8	4,193.1	677.3	19.3	19.2	11.6	48.5	20.7	0.0	80.0	-
Deutsche Bank	90.0	147.0	57.0	63.3	17.0	83.0	0.0	0.0	0.0	100.0	-
Deutsche Hypothekenbank	2,938.7	3,183.9	245.2	8.3	20.3	55.8	1.0	22.9	0.0	57.8	-
Deutsche Kreditbank	4,433.3	9,050.0	4,616.7	104.1	0.2	9.5	88.4	2.0	0.0	100.0	-
Deutsche Pfandbriefbank	10,813.0	12,563.0	1,750.0	16.2	39.4	37.3	8.2	14.7	0.4	28.7	100.0
DSK Hyp	62.5	256.8	194.3	310.9	13.6	83.8	2.3	0.3	0.0	100.0	-
DZ HYP	13,424.1	15,444.7	2,020.6	15.1	9.8	21.9	63.7	4.5	0.4	80.2	100.0
Hamburg Commercial Bank	1,626.1	1,903.7	277.6	17.1	19.3	64.9	12.0	3.7	0.0	80.0	-
Kreissparkasse Köln	238.4	297.7	59.3	24.9	0.0	9.4	66.9	23.7	0.0	100.0	-
Landesbank Baden-Württemberg	9,792.0	11,393.1	1,601.1	16.4	12.3	21.5	35.4	30.8	0.0	94.5	-
Landesbank Berlin	320.0	746.0	426.0	133.1	0.0	22.8	0.0	77.2	0.0	100.0	-
Landesbank Hessen-Thüringen	28,318.7	32,993.8	4,675.1	16.5	3.2	37.4	45.0	14.0	0.4	92.5	100.0
M.M.Warburg & CO Hypothekenbank	6.2	14.0	7.8	125.8	0.0	89.3	10.7	0.0	0.0	100.0	-
Münchener Hypothekenbank	1,975.3	2,058.1	82.8	4.2	5.8	78.7	7.5	7.9	0.0	92.5	-
Norddeutsche Landesbank	11,019.4	14,870.9	3,851.5	35.0	6.6	25.0	41.7	21.3	5.3	94.5	100.0
SaarLB	2,332.3	3,410.9	1,078.6	46.2	1.6	8.8	85.7	3.9	0.0	65.6	-
Sparkasse Hannover	738.1	967.4	229.3	31.1	0.0	2.6	90.0	7.5	0.0	100.0	-
Sparkasse KölnBonn	36.2	335.0	298.8	825.4	0.0	3.4	74.2	22.4	0.0	100.0	-
Stadtsparkasse Düsseldorf	45.0	127.4	82.4	183.0	0.0	0.0	64.8	15.5	0.0	100.0	-
UniCredit Bank	3,549.1	5,150.0	1,600.9	45.1	26.2	26.4	47.2	0.3	0.0	91.7	-

Source: Issuers, vdp, NORD/LB Markets Strategy &amp; Floor Research

\* Some issuers have distributed substitute assets to the respective debtor types.

**Market overview ship covered bonds**

Issuer	Amount outstanding in EURm	Cover pool in EURm	OC	
			in EURm	in %
Commerzbank	267.5	313.0	45.5	17.0
DVB Bank	250.0	597.3	347.3	138.9
Hamburg Commercial Bank	1,978.0	2,280.3	302.3	15.3
Norddeutsche Landesbank	33.1	40.0	6.9	20.8

Source: Issuers, vdp, NORD/LB Markets Strategy & Floor Research

# Mortgage covered bonds

## Aareal Bank

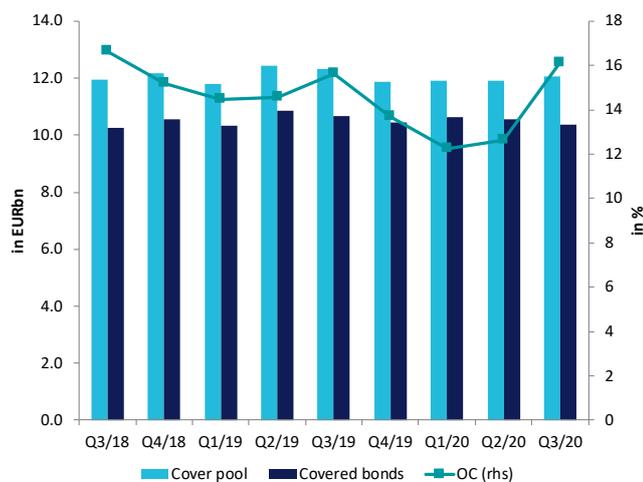
## Mortgage

### Indicators of the cover pool

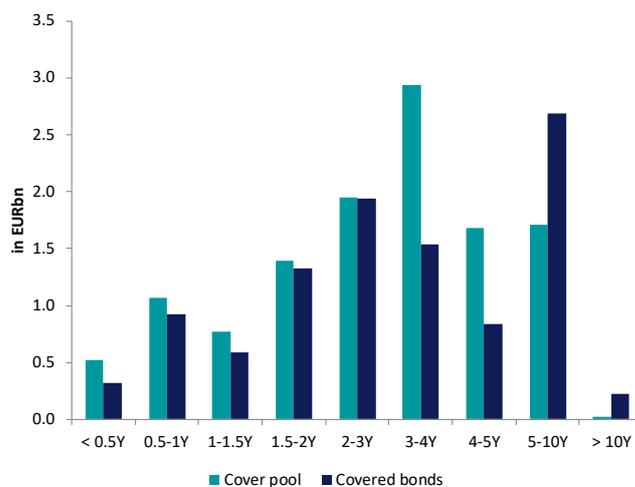
Covered bonds outstanding (EURm)	10,386.1
Cover pool volume (EURm)	12,061.1
of which residential	6.7%
of which commercial	86.2%
of which substitution assets	5.8%
of which derivatives	1.4%
Current OC (EURm)	1,675.0
Current OC	16.1%
Number of loans	4,825
Number of borrowers	4,741
Share of 10 largest borrowers	12.5%
Avg. exposure to borrowers (EUR)	2,361,548
Number of properties	5,706

Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Fixed interest (Cover pool)	51.9%
Fixed interest (Covered bonds)	65.9%
WAL (Cover pool)	3.2y
WAL (Covered bonds)	3.9y
Avg. seasoning	4.9y
LTV (Original value)	55.8%
LTV (Market value)	33.0%
Largest FX-position (NPV in EURm)	USD (886.7)
Share of largest exposure tranche	93.6% (> EUR 10m)
Loans in arrears (> 90 days)	0.00%
LCR level / haircut (Benchmarks)	Level 1 / 7%
Risk weight (Benchmarks)	10%

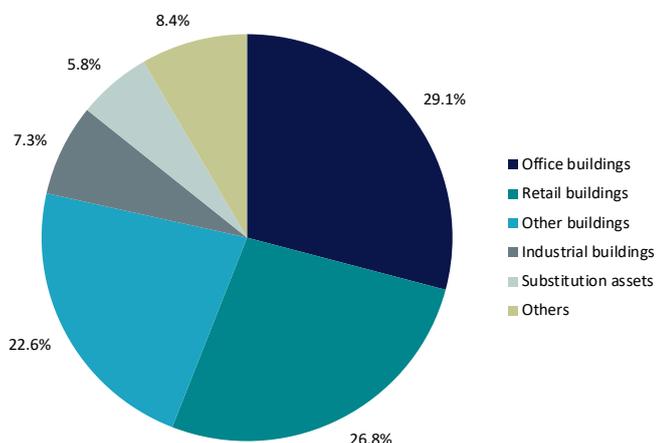
### Past development



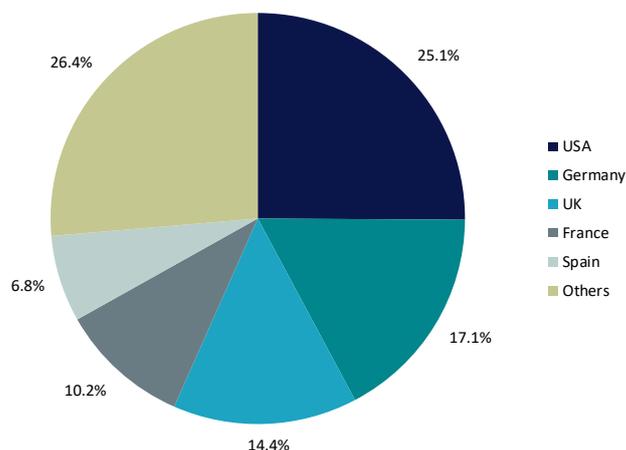
### Maturity structure



### Distribution by borrower type



### Distribution by country



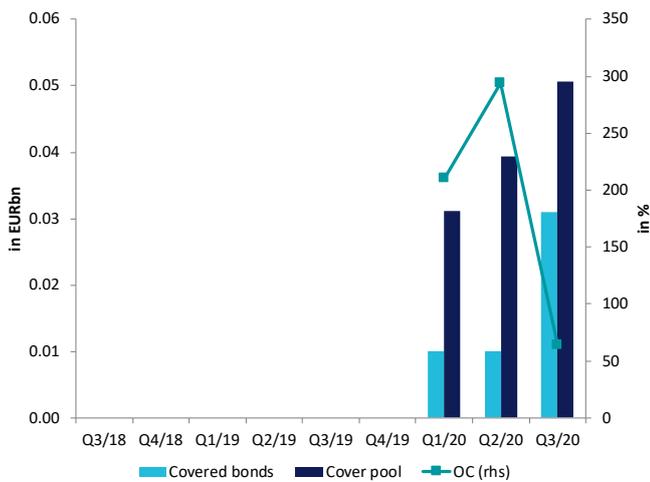
# Bausparkasse Mainz

# Mortgage

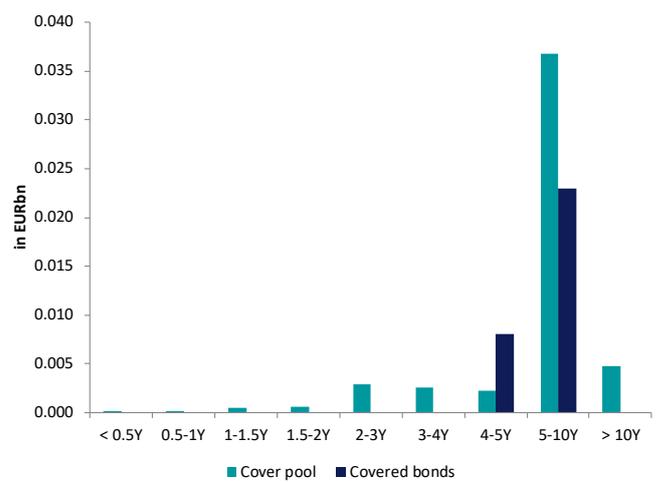
## Indicators of the cover pool

Covered bonds outstanding (EURm)	31.0	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	50.6	Fixed interest (Cover pool)	100.0%
of which residential	92.1%	Fixed interest (Covered bonds)	100.0%
of which commercial	0.0%	WAL (Cover pool)	n/a
of which substitution assets	7.9%	WAL (Covered bonds)	n/a
of which derivatives	0.0%	Avg. seasoning	1.2y
Current OC (EURm)	19.6	LTV (Original value)	55.3%
Current OC	63.4%	LTV (Market value)	n/a
Number of loans	n/a	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	n/a	Share of largest exposure tranche	97.9% (< EUR 0.3m)
Share of 10 largest borrowers	n/a	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	n/a	LCR level / haircut (Benchmarks)	-
Number of properties	n/a	Risk weight (Benchmarks)	-

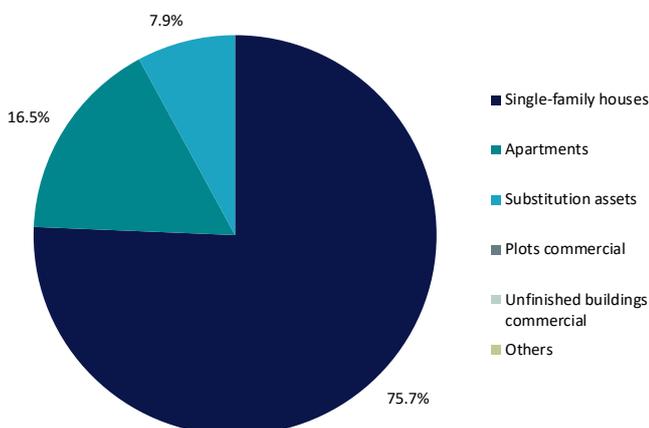
## Past development



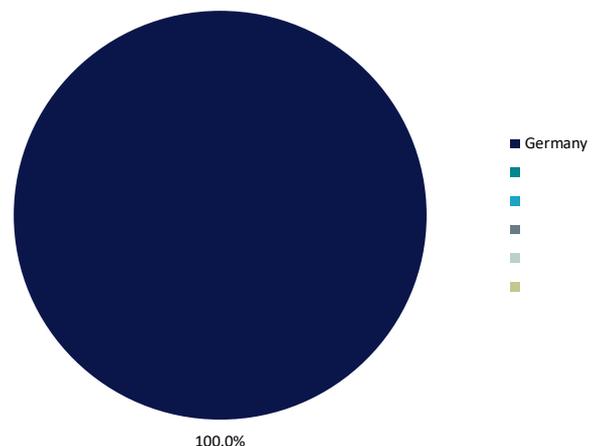
## Maturity structure



## Distribution by borrower type



## Distribution by country



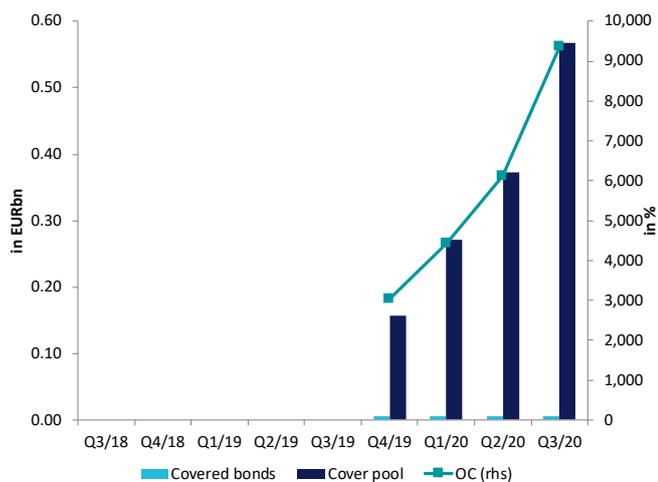
# Bausparkasse Schwäbisch Hall

# Mortgage

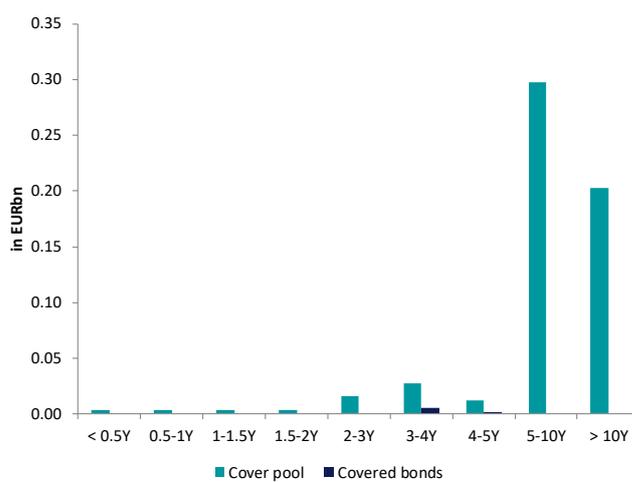
## Indicators of the cover pool

Covered bonds outstanding (EURm)	6.0	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	567.6	Fixed interest (Cover pool)	100.0%
of which residential	90.6%	Fixed interest (Covered bonds)	100.0%
of which commercial	0.4%	WAL (Cover pool)	9.9y
of which substitution assets	9.0%	WAL (Covered bonds)	3.6y
of which derivatives	0.0%	Avg. seasoning	1.3y
Current OC (EURm)	561.6	LTV (Original value)	51.3%
Current OC	9360.8%	LTV (Market value)	n/a
Number of loans	4,361	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	6,737	Share of largest exposure tranche	91.6% (< EUR 0.3m)
Share of 10 largest borrowers	1.2%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	76,688	LCR level / haircut (Benchmarks)	-
Number of properties	3,785	Risk weight (Benchmarks)	-

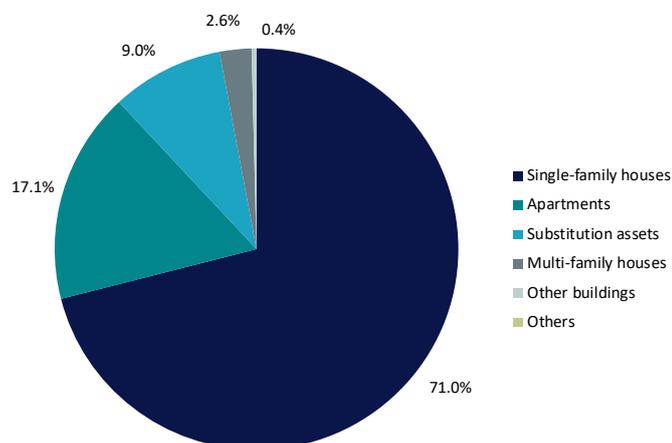
## Past development



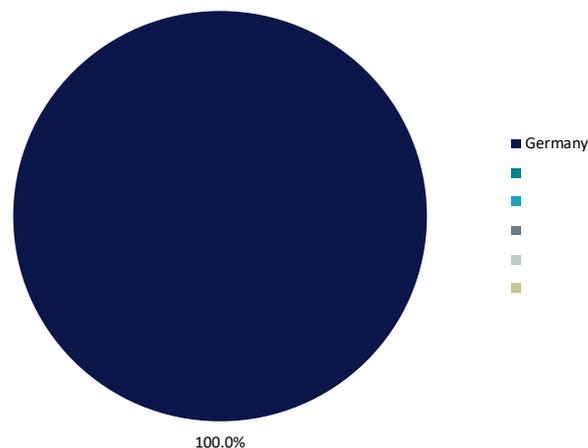
## Maturity structure



## Distribution by borrower type



## Distribution by country



# Bayerische Landesbank

# Mortgage

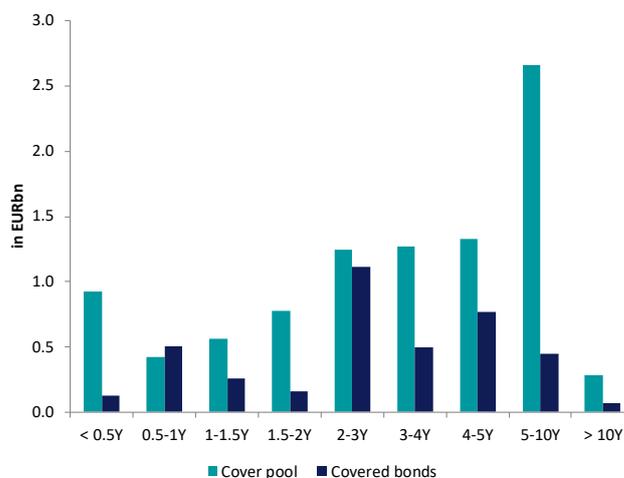
## Indicators of the cover pool

Covered bonds outstanding (EURm)	3,937.0	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	9,470.4	Fixed interest (Cover pool)	70.9%
of which residential	14.9%	Fixed interest (Covered bonds)	78.3%
of which commercial	80.8%	WAL (Cover pool)	4.0y
of which substitution assets	4.3%	WAL (Covered bonds)	3.0y
of which derivatives	0.0%	Avg. seasoning	4.1y
Current OC (EURm)	5,533.5	LTV (Original value)	57.6%
Current OC	140.6%	LTV (Market value)	n/a
Number of loans	571	Largest FX-position (NPV in EURm)	GBP (371.6)
Number of borrowers	402	Share of largest exposure tranche	86.2% (> EUR 10m)
Share of 10 largest borrowers	1.4%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	22,540,881	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	998	Risk weight (Benchmarks)	10%

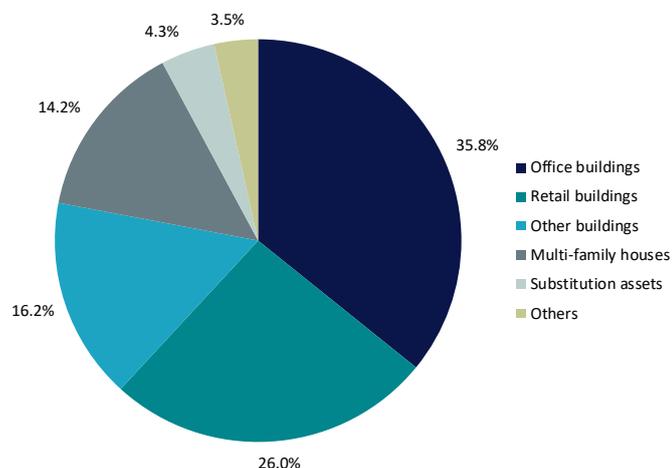
## Past development



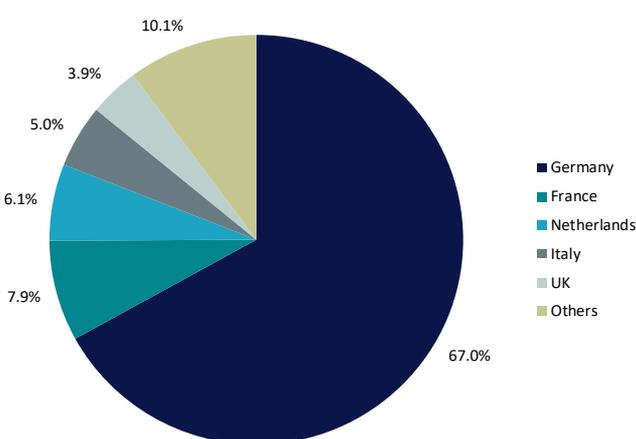
## Maturity structure



## Distribution by borrower type



## Distribution by country



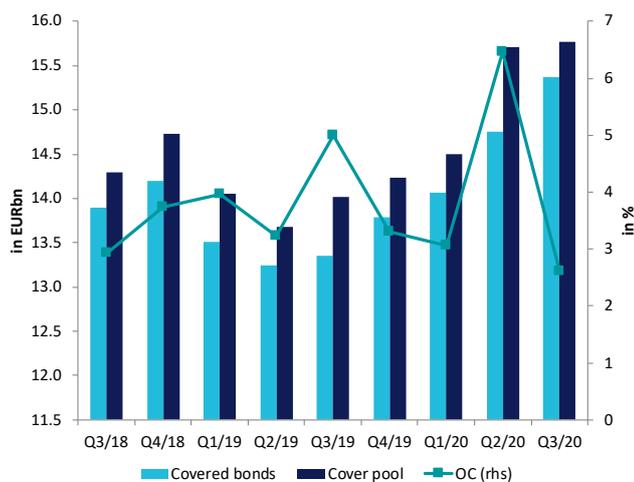
# Berlin Hyp

# Mortgage

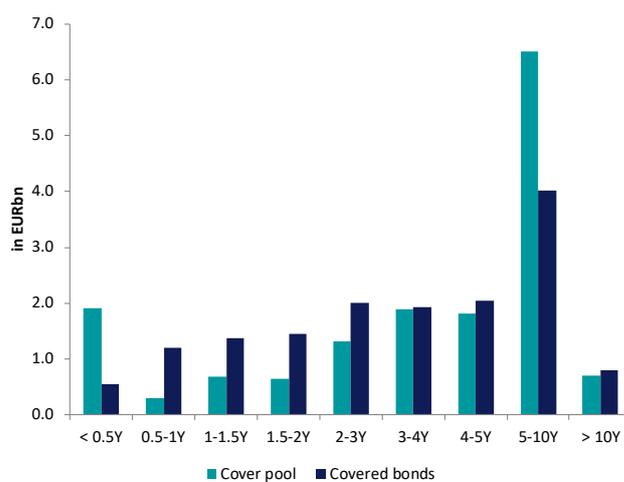
## Indicators of the cover pool

Covered bonds outstanding (EURm)	15,366.1	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	15,767.2	Fixed interest (Cover pool)	73.8%
of which residential	28.2%	Fixed interest (Covered bonds)	81.0%
of which commercial	63.3%	WAL (Cover pool)	4.9y
of which substitution assets	8.4%	WAL (Covered bonds)	4.6y
of which derivatives	0.0%	Avg. seasoning	4.0y
Current OC (EURm)	401.1	LTV (Original value)	56.1%
Current OC	2.6%	LTV (Market value)	n/a
Number of loans	1,696	Largest FX-position (NPV in EURm)	GBP (103.4)
Number of borrowers	1,646	Share of largest exposure tranche	82.2% (> EUR 10m)
Share of 10 largest borrowers	19.6%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	8,772,296	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	5,145	Risk weight (Benchmarks)	10%

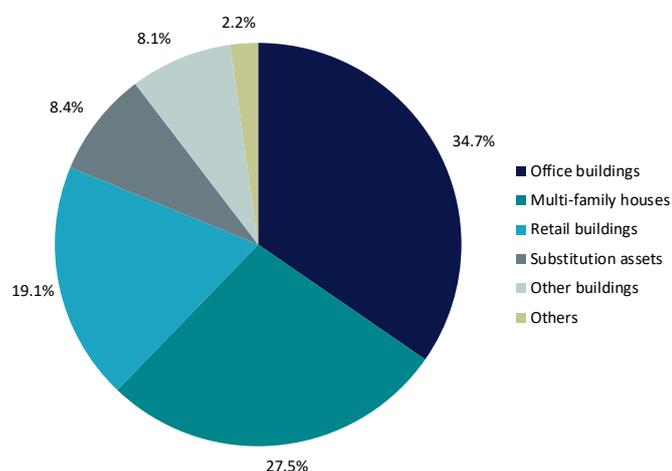
## Past development



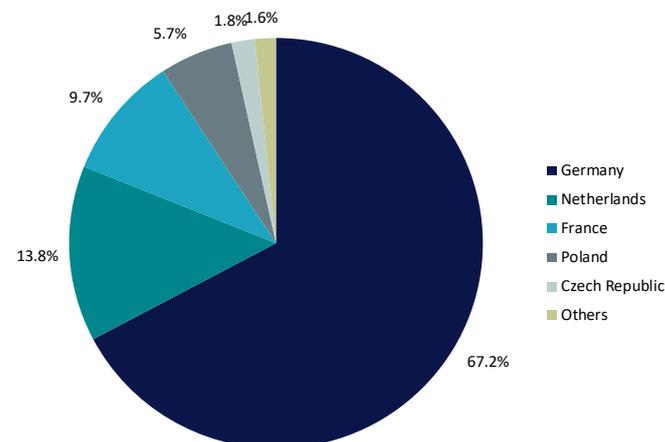
## Maturity structure



## Distribution by borrower type



## Distribution by country



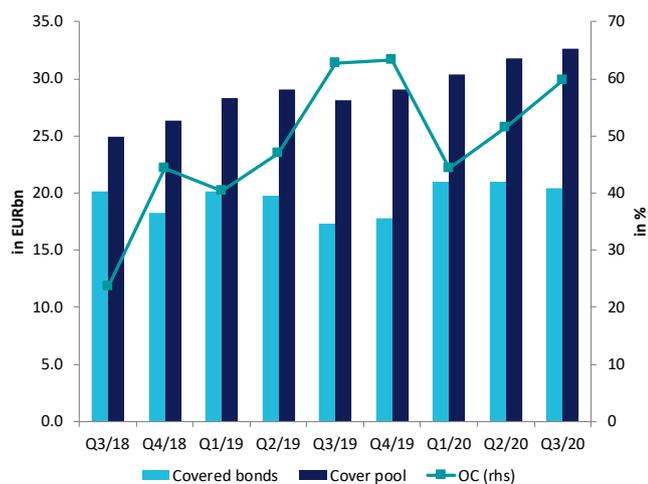
# Commerzbank

# Mortgage

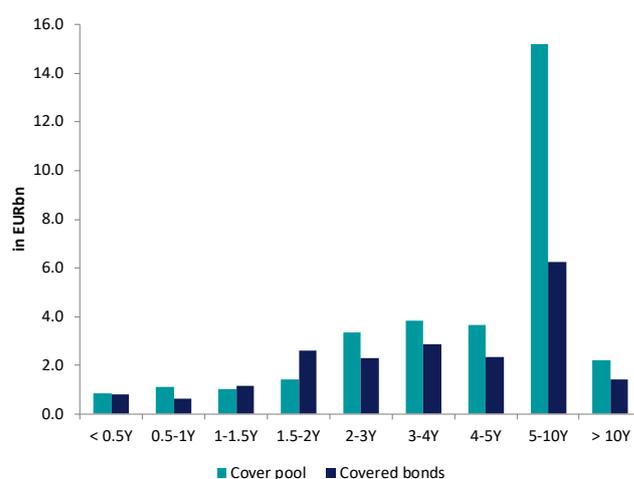
## Indicators of the cover pool

Covered bonds outstanding (EURm)	20,408.9	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	32,614.8	Fixed interest (Cover pool)	98.7%
of which residential	94.5%	Fixed interest (Covered bonds)	89.7%
of which commercial	2.4%	WAL (Cover pool)	5.8y
of which substitution assets	3.0%	WAL (Covered bonds)	5.1y
of which derivatives	0.0%	Avg. seasoning	4.7y
Current OC (EURm)	12,205.9	LTV (Original value)	52.6%
Current OC	59.8%	LTV (Market value)	n/a
Number of loans	254,746	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	204,790	Share of largest exposure tranche	76.9% (< EUR 0.3m)
Share of 10 largest borrowers	1.4%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	154,406	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	229,595	Risk weight (Benchmarks)	10%

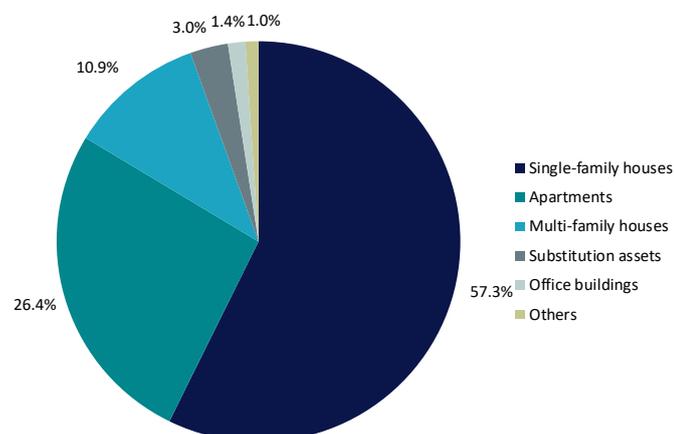
## Past development



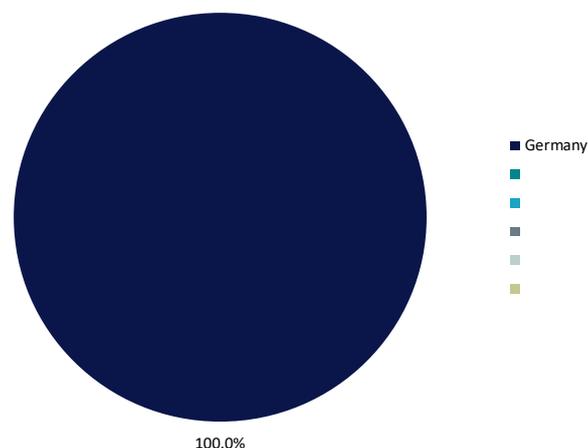
## Maturity structure



## Distribution by borrower type



## Distribution by country



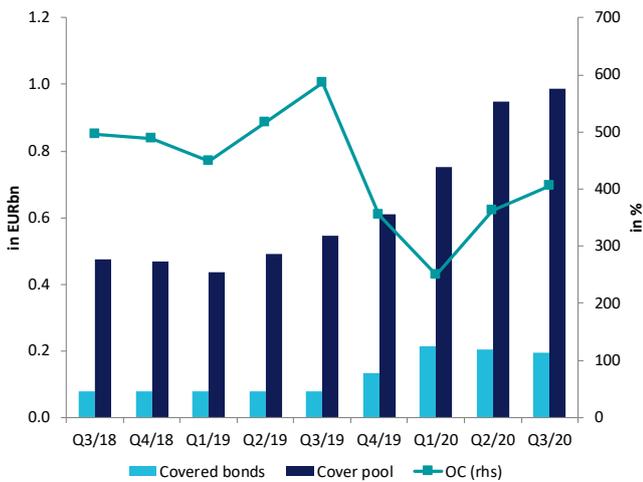
# DekaBank

# Mortgage

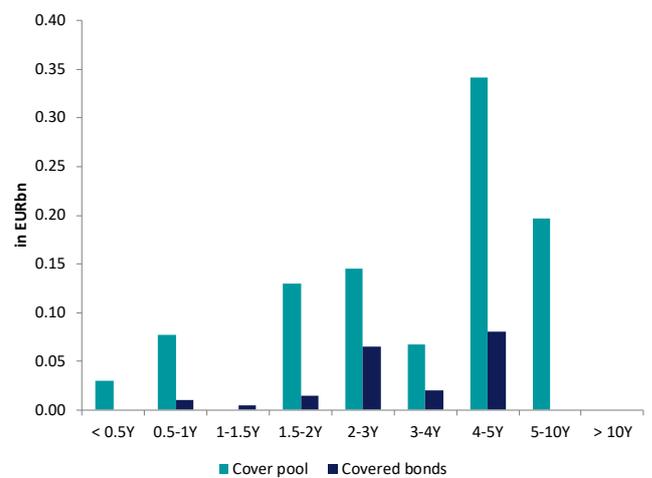
## Indicators of the cover pool

Covered bonds outstanding (EURm)	195.0	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	986.2	Fixed interest (Cover pool)	76.4%
of which residential	0.0%	Fixed interest (Covered bonds)	100.0%
of which commercial	96.5%	WAL (Cover pool)	3.8y
of which substitution assets	3.5%	WAL (Covered bonds)	3.1y
of which derivatives	0.0%	Avg. seasoning	3.2y
Current OC (EURm)	791.2	LTV (Original value)	59.2%
Current OC	405.8%	LTV (Market value)	n/a
Number of loans	26	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	29	Share of largest exposure tranche	100.0% (> EUR 10m)
Share of 10 largest borrowers	54.8%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	32,800,586	LCR level / haircut (Benchmarks)	-
Number of properties	39	Risk weight (Benchmarks)	-

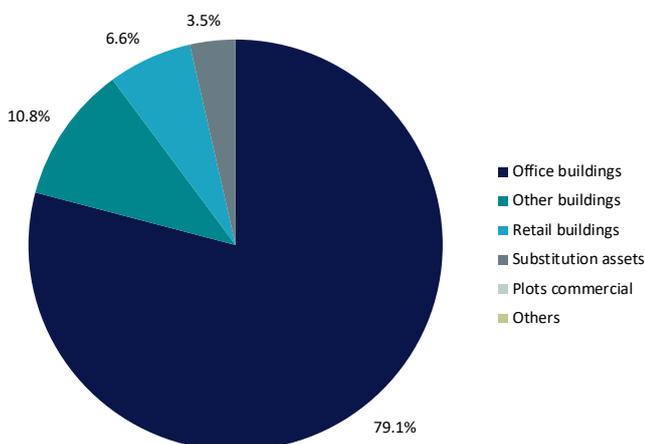
## Past development



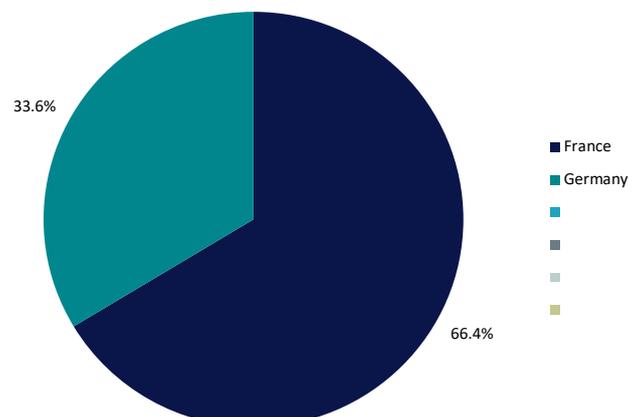
## Maturity structure



## Distribution by borrower type



## Distribution by country



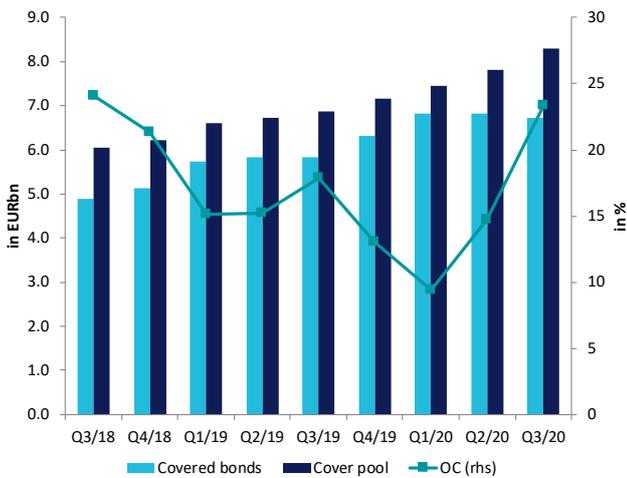
# Deutsche Apotheker- und Ärztebank

# Mortgage

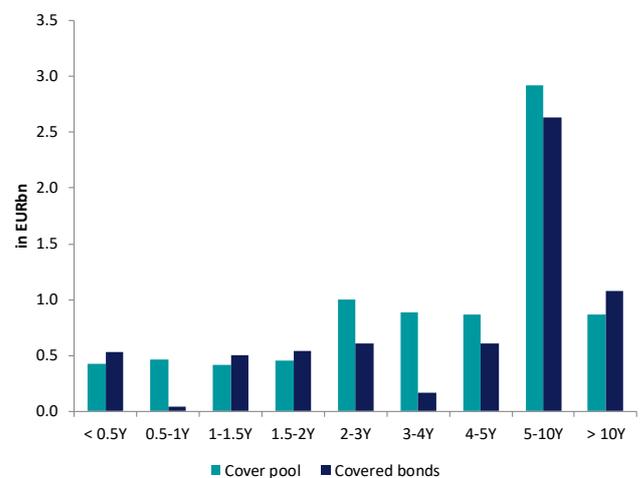
## Indicators of the cover pool

Covered bonds outstanding (EURm)	6,730.1	Rating (Moody's / Fitch / S&P / DBRS)	- / - / AAA / -
Cover pool volume (EURm)	8,299.4	Fixed interest (Cover pool)	91.8%
of which residential	75.8%	Fixed interest (Covered bonds)	90.2%
of which commercial	18.7%	WAL (Cover pool)	5.2y
of which substitution assets	5.5%	WAL (Covered bonds)	7.5y
of which derivatives	0.0%	Avg. seasoning	5.4y
Current OC (EURm)	1,569.3	LTV (Original value)	55.2%
Current OC	23.3%	LTV (Market value)	n/a
Number of loans	79,794	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	45,827	Share of largest exposure tranche	74.0% (< EUR 0.3m)
Share of 10 largest borrowers	5.5%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	171,174	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	59,444	Risk weight (Benchmarks)	10%

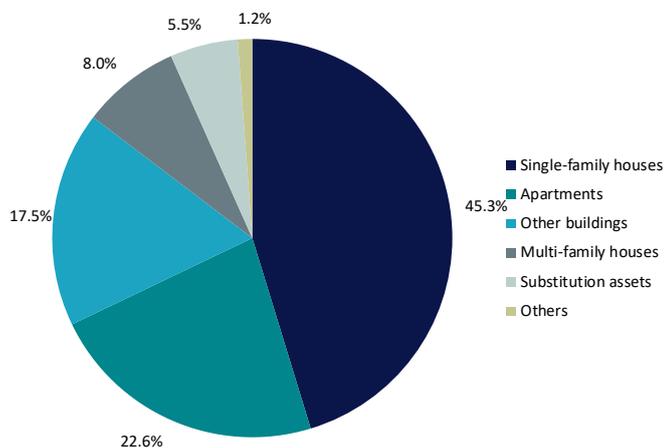
## Past development



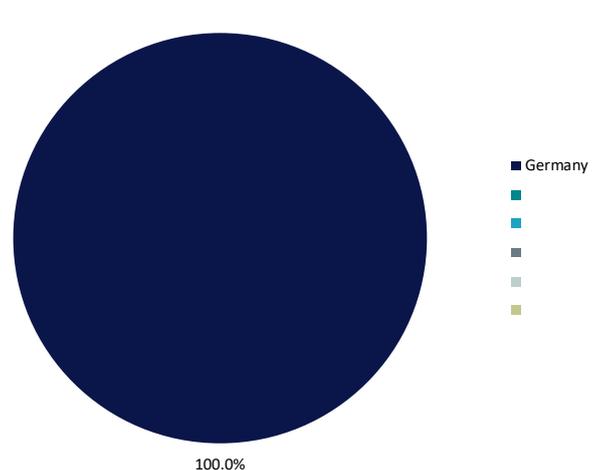
## Maturity structure



## Distribution by borrower type



## Distribution by country



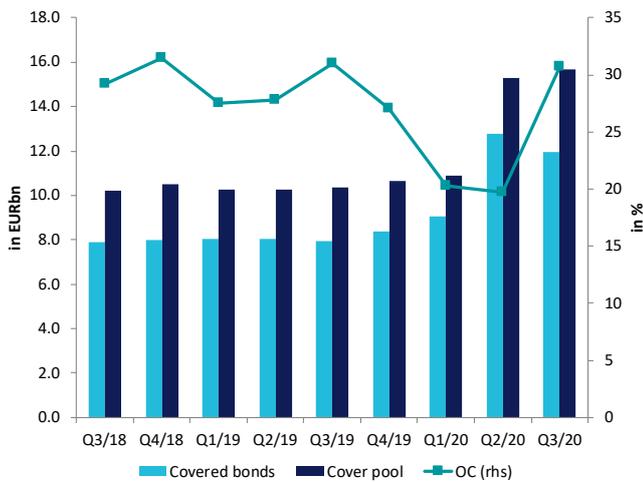
# Deutsche Bank

# Mortgage

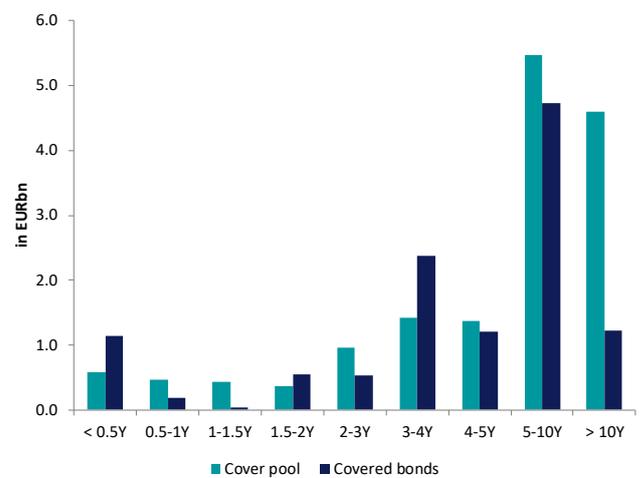
## Indicators of the cover pool

Covered bonds outstanding (EURm)	11,977.0	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	15,659.0	Fixed interest (Cover pool)	99.2%
of which residential	86.9%	Fixed interest (Covered bonds)	77.0%
of which commercial	7.4%	WAL (Cover pool)	n/a
of which substitution assets	5.7%	WAL (Covered bonds)	n/a
of which derivatives	0.0%	Avg. seasoning	5.2y
Current OC (EURm)	3,682.0	LTV (Original value)	53.8%
Current OC	30.7%	LTV (Market value)	n/a
Number of loans	n/a	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	n/a	Share of largest exposure tranche	81.0% (< EUR 0.3m)
Share of 10 largest borrowers	n/a	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	n/a	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	n/a	Risk weight (Benchmarks)	10%

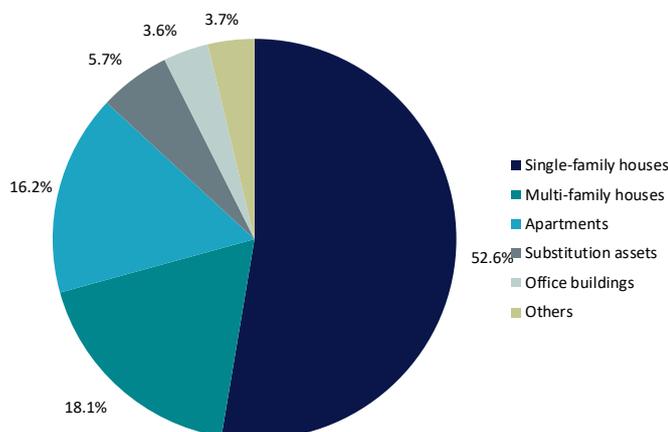
## Past development



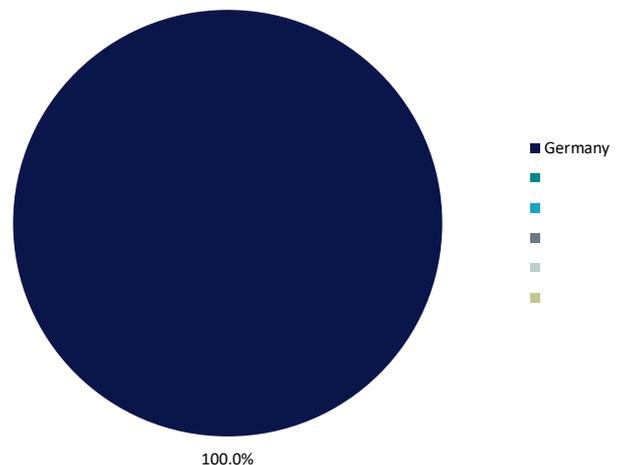
## Maturity structure



## Distribution by borrower type



## Distribution by country



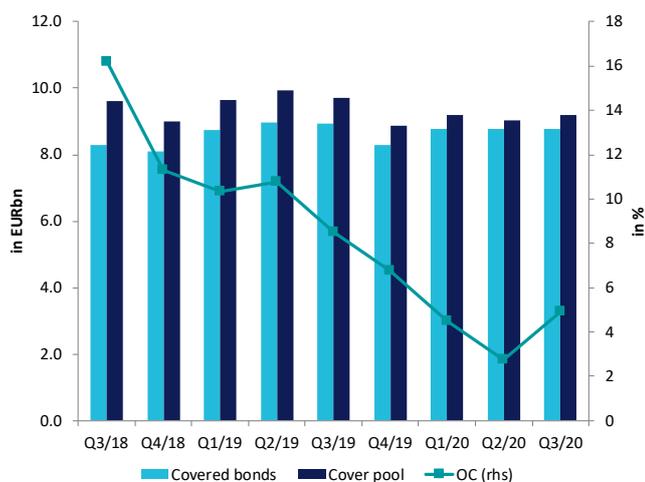
# Deutsche Hypothekenbank

# Mortgage

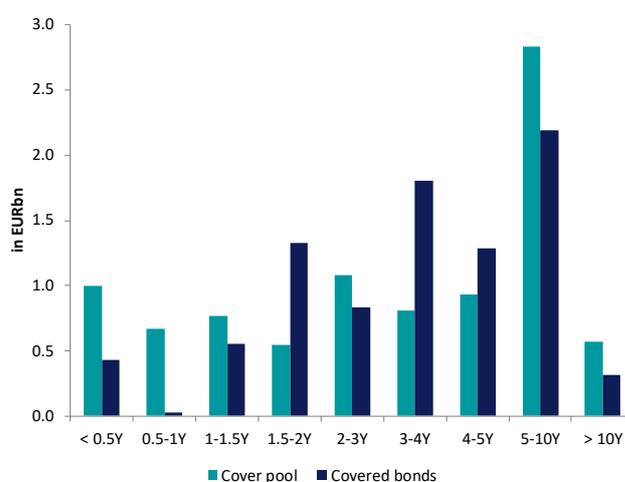
## Indicators of the cover pool

Covered bonds outstanding (EURm)	8,768.2	Rating (Moody's / Fitch / S&P / DBRS)	Aa1 / - / - / -
Cover pool volume (EURm)	9,201.0	Fixed interest (Cover pool)	76.7%
of which residential	18.8%	Fixed interest (Covered bonds)	89.3%
of which commercial	72.1%	WAL (Cover pool)	4.2y
of which substitution assets	9.1%	WAL (Covered bonds)	4.4y
of which derivatives	0.0%	Avg. seasoning	5.3y
Current OC (EURm)	432.8	LTV (Original value)	57.9%
Current OC	4.9%	LTV (Market value)	38.2%
Number of loans	706	Largest FX-position (NPV in EURm)	GBP (485.5)
Number of borrowers	598	Share of largest exposure tranche	87.0% (> EUR 10m)
Share of 10 largest borrowers	15.1%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	13,986,455	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	1,897	Risk weight (Benchmarks)	10%

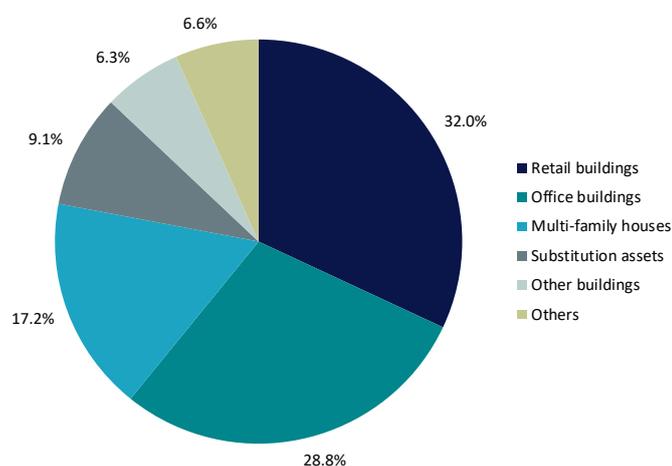
## Past development



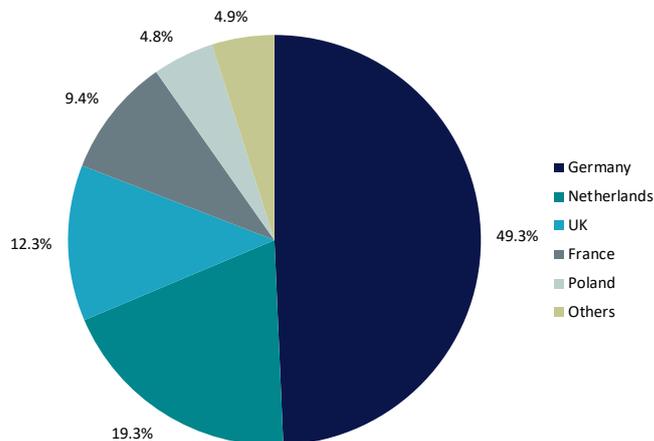
## Maturity structure



## Distribution by borrower type



## Distribution by country



# Deutsche Kreditbank

# Mortgage

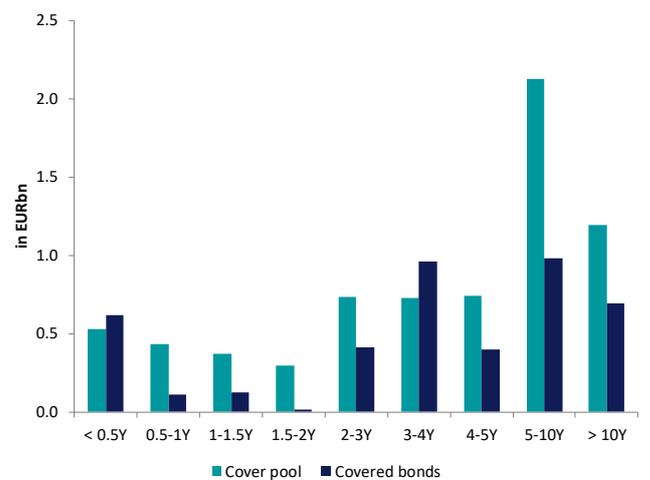
## Indicators of the cover pool

Covered bonds outstanding (EURm)	4,331.5	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	7,170.0	Fixed interest (Cover pool)	95.0%
of which residential	93.6%	Fixed interest (Covered bonds)	98.7%
of which commercial	2.1%	WAL (Cover pool)	n/a
of which substitution assets	4.3%	WAL (Covered bonds)	n/a
of which derivatives	0.0%	Avg. seasoning	9.0y
Current OC (EURm)	2,838.5	LTV (Original value)	51.4%
Current OC	65.5%	LTV (Market value)	n/a
Number of loans	n/a	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	n/a	Share of largest exposure tranche	43.0% (EUR 1-10m)
Share of 10 largest borrowers	n/a	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	n/a	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	n/a	Risk weight (Benchmarks)	10%

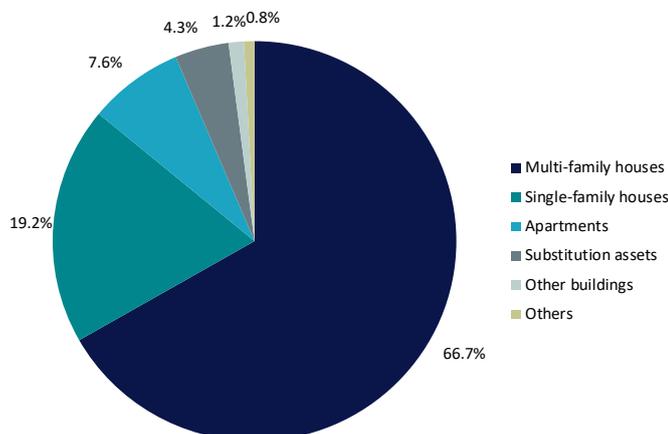
## Past development



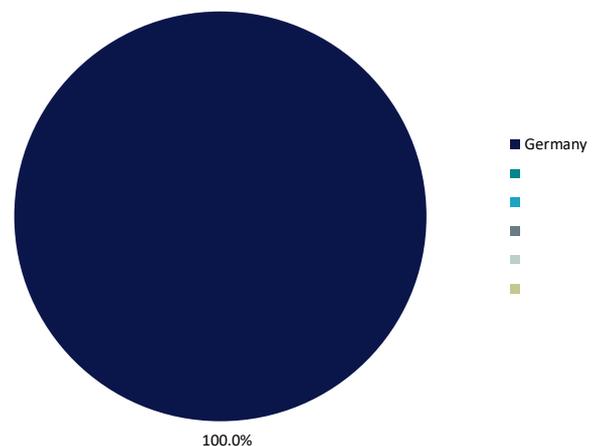
## Maturity structure



## Distribution by borrower type



## Distribution by country



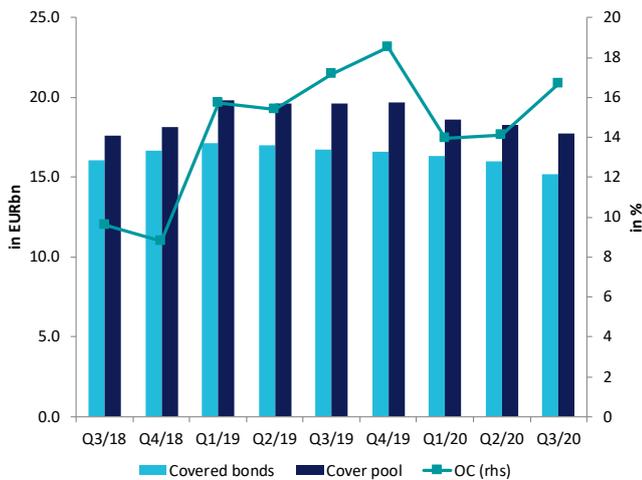
# Deutsche Pfandbriefbank

# Mortgage

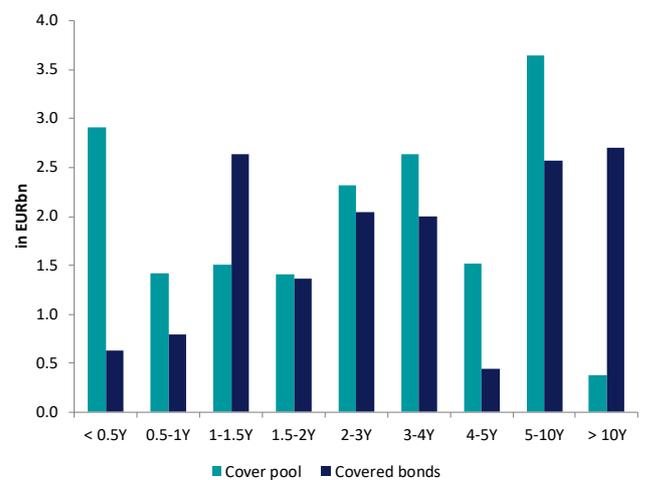
## Indicators of the cover pool

Covered bonds outstanding (EURm)	15,190.0	Rating (Moody's / Fitch / S&P / DBRS)	Aa1 / - / - / -
Cover pool volume (EURm)	17,724.0	Fixed interest (Cover pool)	54.0%
of which residential	18.6%	Fixed interest (Covered bonds)	92.7%
of which commercial	78.8%	WAL (Cover pool)	3.7y
of which substitution assets	2.6%	WAL (Covered bonds)	6.1y
of which derivatives	0.0%	Avg. seasoning	4.0y
Current OC (EURm)	2,534.0	LTV (Original value)	55.0%
Current OC	16.7%	LTV (Market value)	33.0%
Number of loans	1,840	Largest FX-position (NPV in EURm)	GBP (1,064.0)
Number of borrowers	871	Share of largest exposure tranche	90.7% (> EUR 10m)
Share of 10 largest borrowers	n/a	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	19,824,340	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	3,225	Risk weight (Benchmarks)	10%

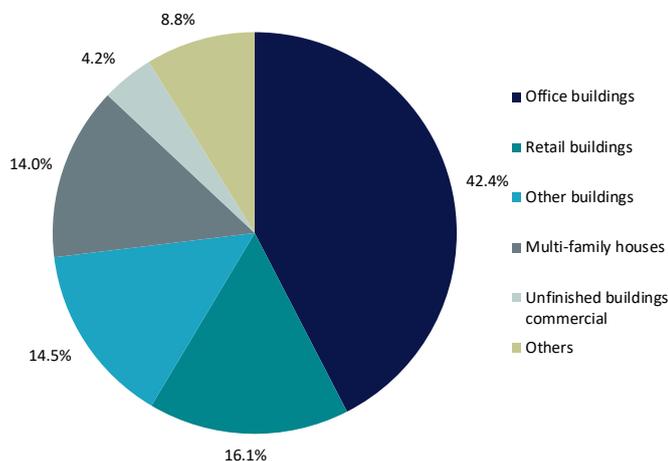
## Past development



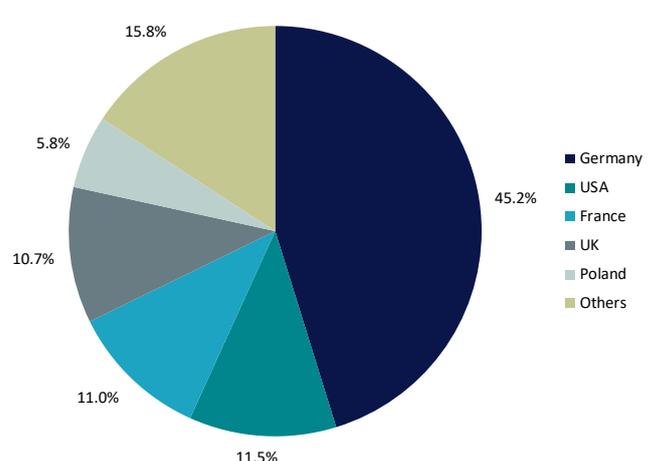
## Maturity structure



## Distribution by borrower type



## Distribution by country



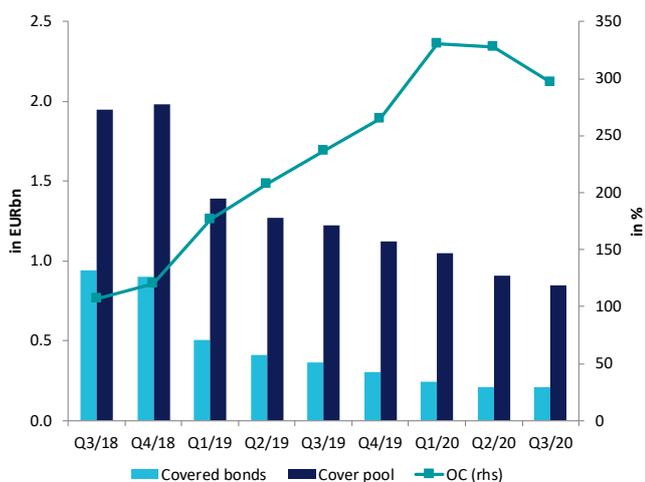
## DSK Hyp

## Mortgage

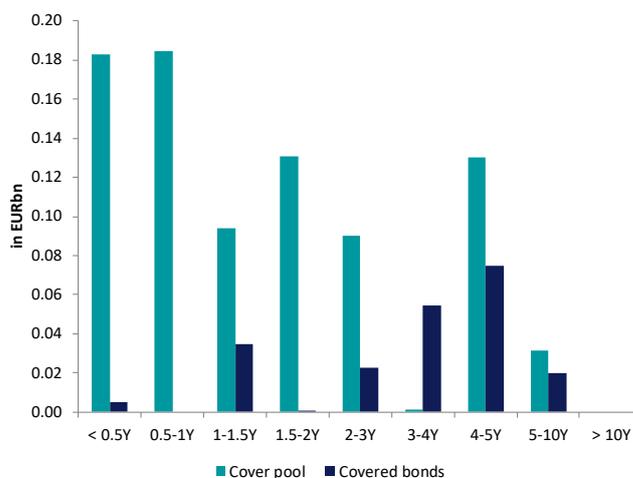
### Indicators of the cover pool

Covered bonds outstanding (EURm)	213.0	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	845.0	Fixed interest (Cover pool)	61.4%
of which residential	33.6%	Fixed interest (Covered bonds)	94.1%
of which commercial	64.0%	WAL (Cover pool)	1.8y
of which substitution assets	2.4%	WAL (Covered bonds)	3.6y
of which derivatives	0.0%	Avg. seasoning	7.2y
Current OC (EURm)	632.0	LTV (Original value)	53.5%
Current OC	296.7%	LTV (Market value)	n/a
Number of loans	83	Largest FX-position (NPV in EURm)	SEK (105.5)
Number of borrowers	30	Share of largest exposure tranche	85.2% (> EUR 10m)
Share of 10 largest borrowers	76.8%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	27,499,667	LCR level / haircut (Benchmarks)	-
Number of properties	257	Risk weight (Benchmarks)	-

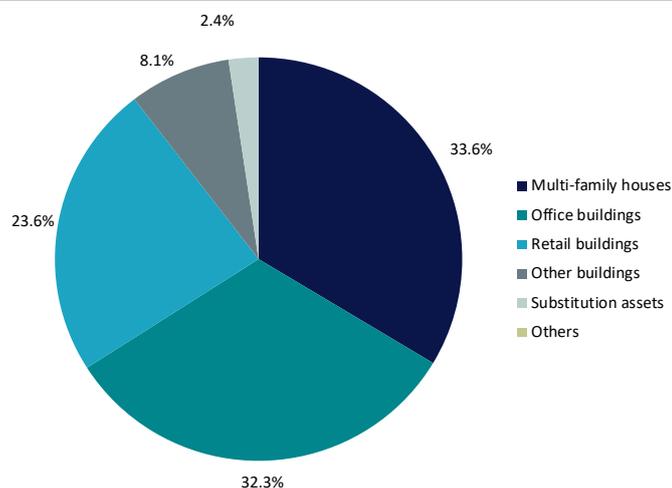
### Past development



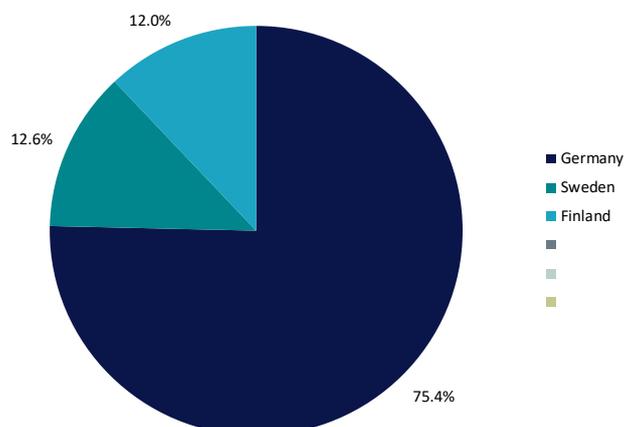
### Maturity structure



### Distribution by borrower type



### Distribution by country



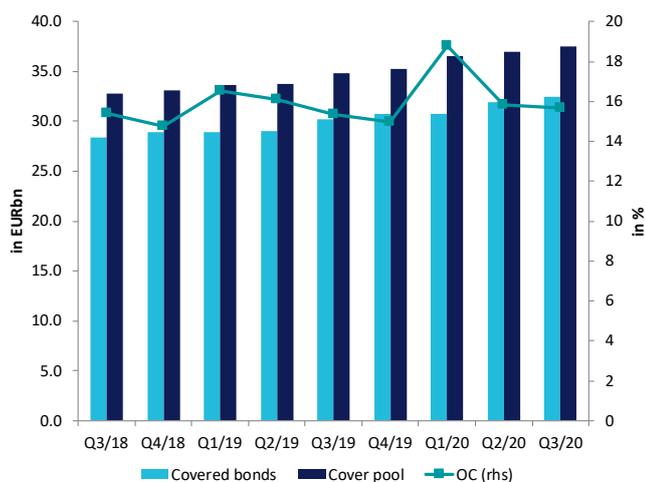
## DZ HYP

## Mortgage

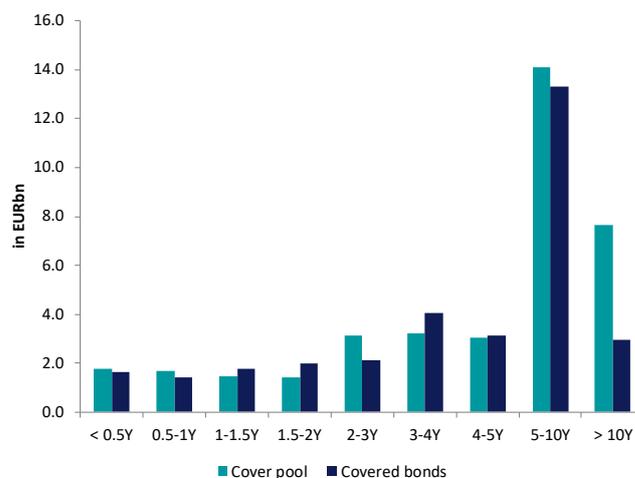
### Indicators of the cover pool

Covered bonds outstanding (EURm)	32,432.8	Rating (Moody's / Fitch / S&P / DBRS)	- / - / AAA / -
Cover pool volume (EURm)	37,509.7	Fixed interest (Cover pool)	88.7%
of which residential	56.9%	Fixed interest (Covered bonds)	98.3%
of which commercial	40.7%	WAL (Cover pool)	7.2y
of which substitution assets	2.4%	WAL (Covered bonds)	5.5y
of which derivatives	0.0%	Avg. seasoning	4.7y
Current OC (EURm)	5,076.9	LTV (Original value)	54.2%
Current OC	15.7%	LTV (Market value)	n/a
Number of loans	110,779	Largest FX-position (NPV in EURm)	GBP (228.8)
Number of borrowers	154,891	Share of largest exposure tranche	38.7% (> EUR 10m)
Share of 10 largest borrowers	5.0%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	236,351	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	109,757	Risk weight (Benchmarks)	10%

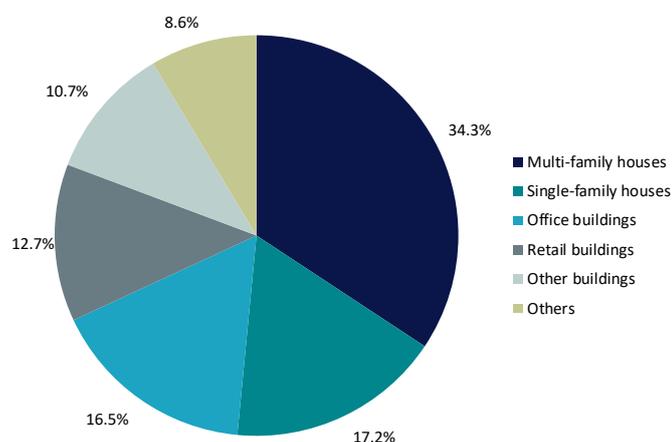
### Past development



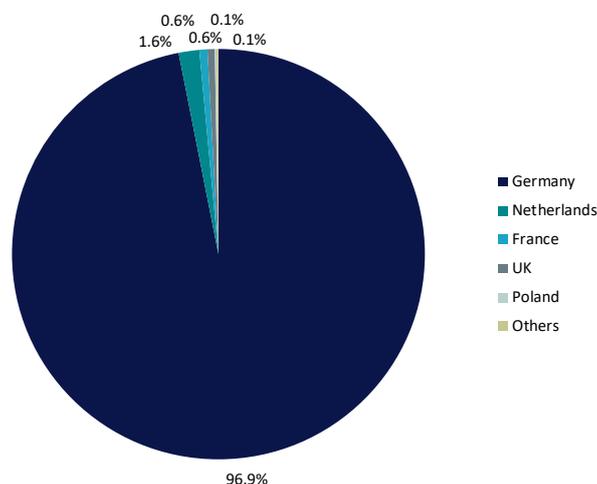
### Maturity structure



### Distribution by borrower type



### Distribution by country



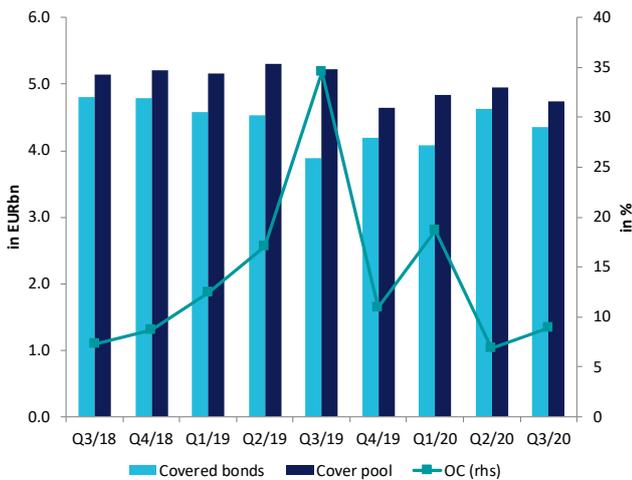
# Hamburg Commercial Bank

# Mortgage

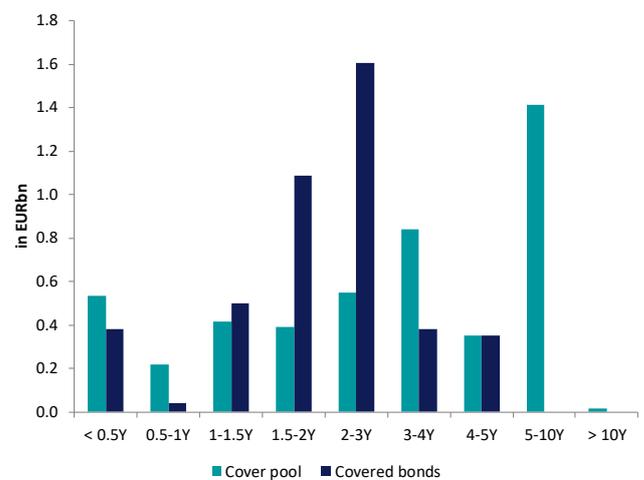
## Indicators of the cover pool

Covered bonds outstanding (EURm)	4,348.8	Rating (Moody's / Fitch / S&P / DBRS)	Aa2 / - / - / -
Cover pool volume (EURm)	4,735.6	Fixed interest (Cover pool)	47.8%
of which residential	16.4%	Fixed interest (Covered bonds)	79.1%
of which commercial	80.3%	WAL (Cover pool)	3.6y
of which substitution assets	3.3%	WAL (Covered bonds)	2.2y
of which derivatives	0.0%	Avg. seasoning	4.1y
Current OC (EURm)	386.8	LTV (Original value)	56.9%
Current OC	8.9%	LTV (Market value)	n/a
Number of loans	589	Largest FX-position (NPV in EURm)	GBP (55.8)
Number of borrowers	350	Share of largest exposure tranche	76.3% (> EUR 10m)
Share of 10 largest borrowers	23.8%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	13,087,429	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	1,097	Risk weight (Benchmarks)	10%

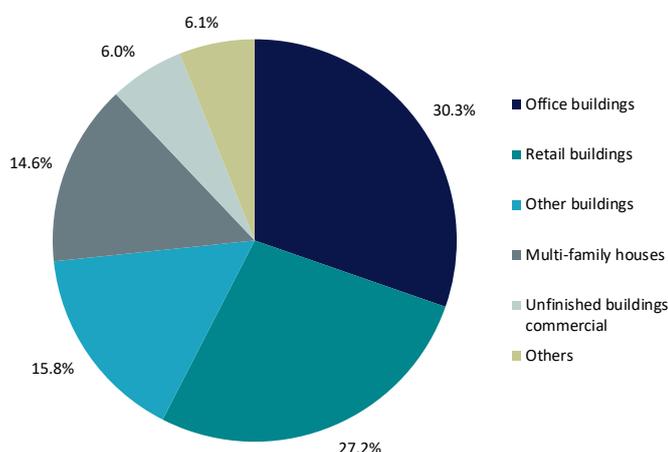
## Past development



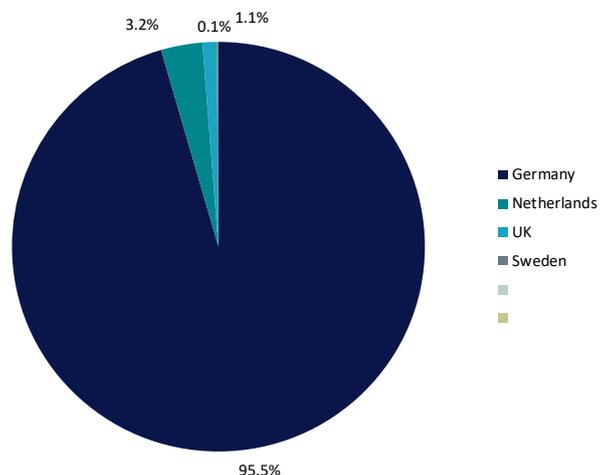
## Maturity structure



## Distribution by borrower type



## Distribution by country



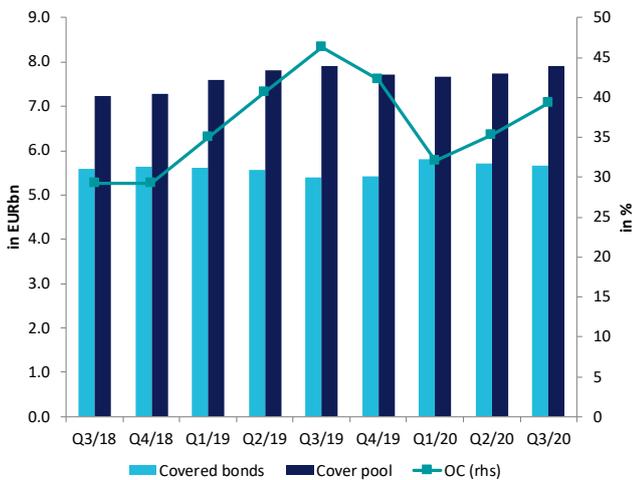
# Hamburger Sparkasse

# Mortgage

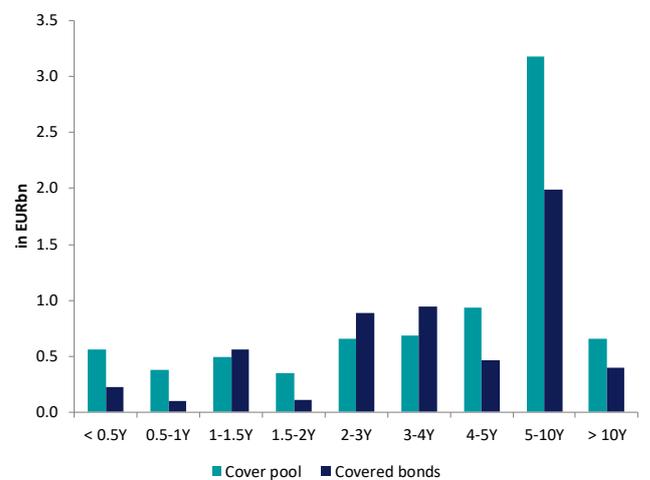
## Indicators of the cover pool

Covered bonds outstanding (EURm)	5,669.7	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	7,901.9	Fixed interest (Cover pool)	84.3%
of which residential	66.3%	Fixed interest (Covered bonds)	99.1%
of which commercial	29.9%	WAL (Cover pool)	n/a
of which substitution assets	3.8%	WAL (Covered bonds)	n/a
of which derivatives	0.0%	Avg. seasoning	6.9y
Current OC (EURm)	2,232.2	LTV (Original value)	52.4%
Current OC	39.4%	LTV (Market value)	n/a
Number of loans	n/a	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	n/a	Share of largest exposure tranche	35.1% (EUR 1-10m)
Share of 10 largest borrowers	n/a	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	n/a	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	n/a	Risk weight (Benchmarks)	10%

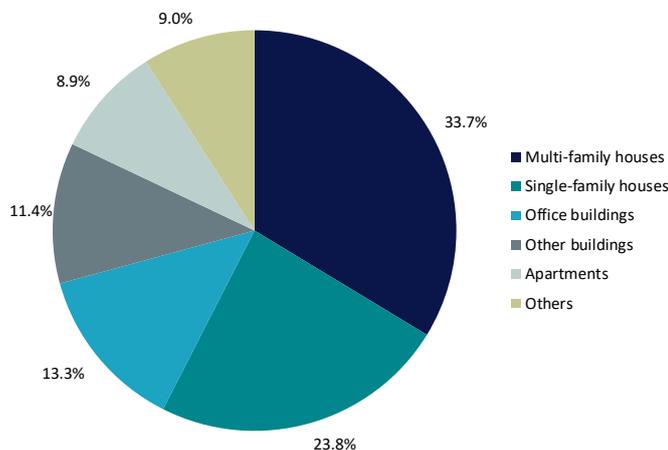
## Past development



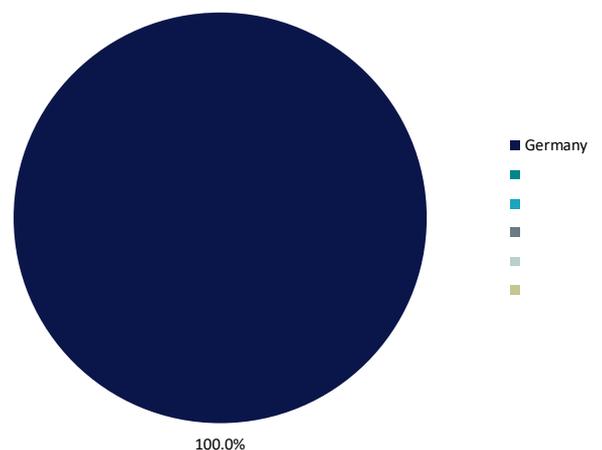
## Maturity structure



## Distribution by borrower type



## Distribution by country



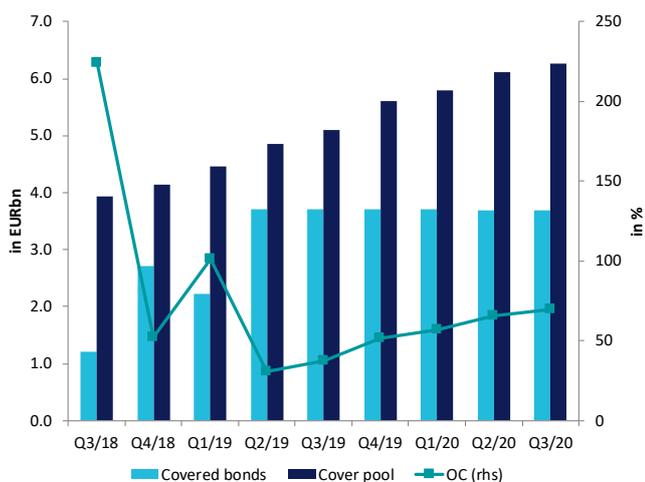
# ING-DiBa

# Mortgage

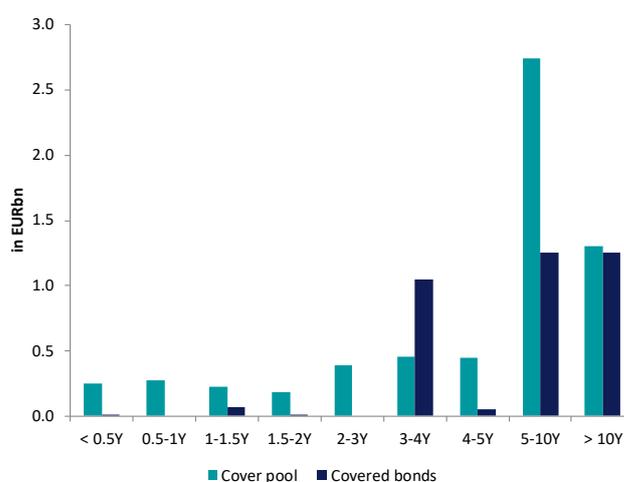
## Indicators of the cover pool

Covered bonds outstanding (EURm)	3,695.0	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	6,272.3	Fixed interest (Cover pool)	100.0%
of which residential	100.0%	Fixed interest (Covered bonds)	97.3%
of which commercial	0.0%	WAL (Cover pool)	6.5y
of which substitution assets	4.0%	WAL (Covered bonds)	8.7y
of which derivatives	0.0%	Avg. seasoning	5.4y
Current OC (EURm)	2,577.3	LTV (Original value)	47.3%
Current OC	69.8%	LTV (Market value)	n/a
Number of loans	65,274	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	64,569	Share of largest exposure tranche	99.2% (< EUR 0.3m)
Share of 10 largest borrowers	0.1%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	97,141	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	65,274	Risk weight (Benchmarks)	10%

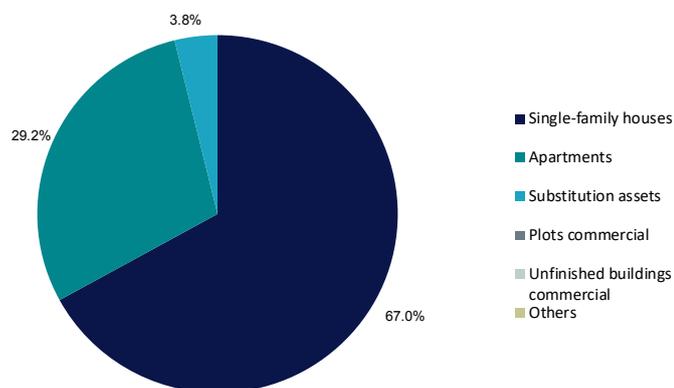
## Past development



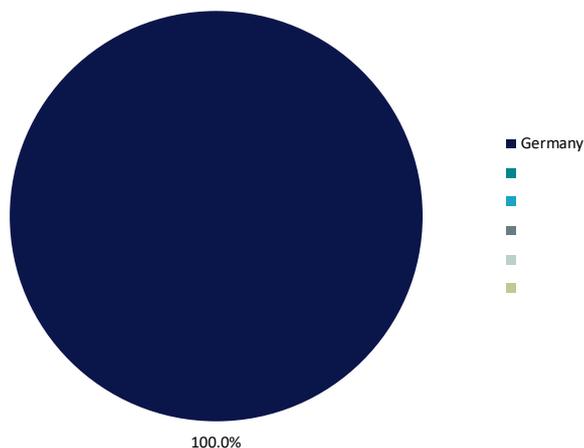
## Maturity structure



## Distribution by borrower type



## Distribution by country



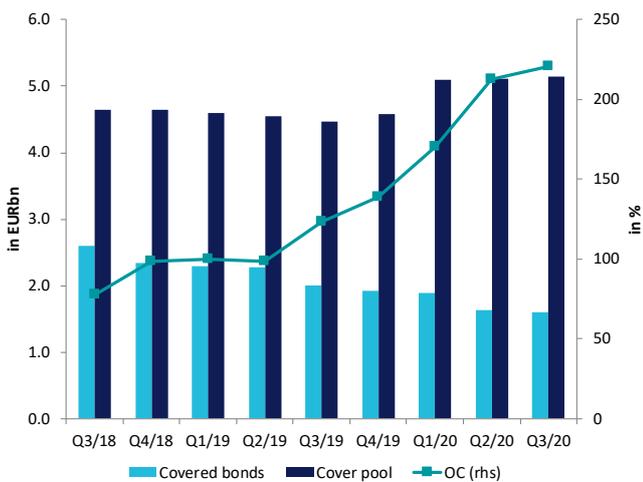
# Kreissparkasse Köln

# Mortgage

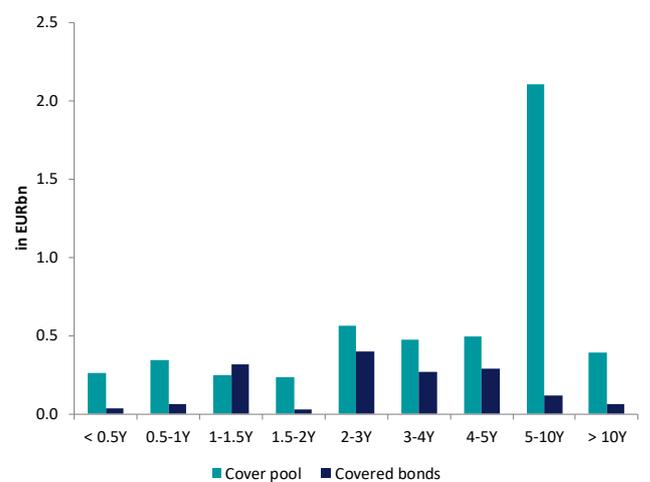
## Indicators of the cover pool

Covered bonds outstanding (EURm)	1,603.3	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	5,141.4	Fixed interest (Cover pool)	100.0%
of which residential	80.5%	Fixed interest (Covered bonds)	96.9%
of which commercial	13.4%	WAL (Cover pool)	5.2y
of which substitution assets	6.1%	WAL (Covered bonds)	3.4y
of which derivatives	0.0%	Avg. seasoning	5.7y
Current OC (EURm)	3,538.1	LTV (Original value)	52.4%
Current OC	220.7%	LTV (Market value)	n/a
Number of loans	42,267	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	32,665	Share of largest exposure tranche	68.9% (< EUR 0.3m)
Share of 10 largest borrowers	2.1%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	147,785	LCR level / haircut (Benchmarks)	-
Number of properties	37,251	Risk weight (Benchmarks)	-

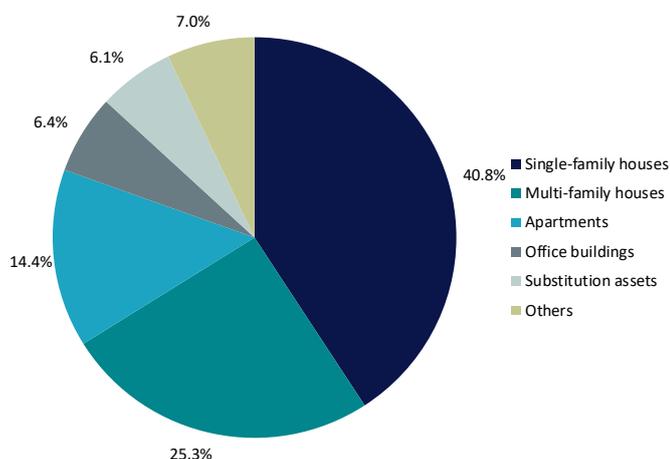
## Past development



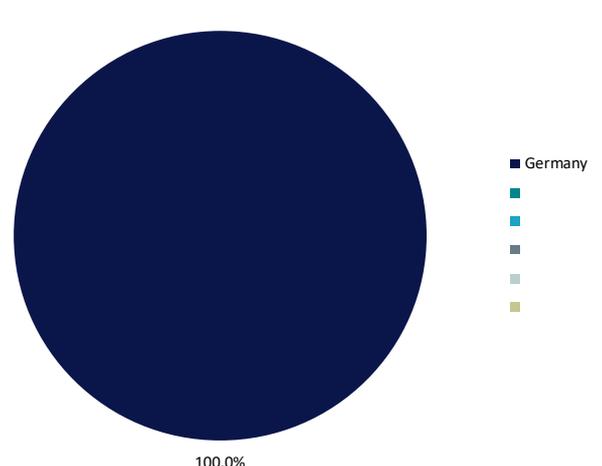
## Maturity structure



## Distribution by borrower type



## Distribution by country



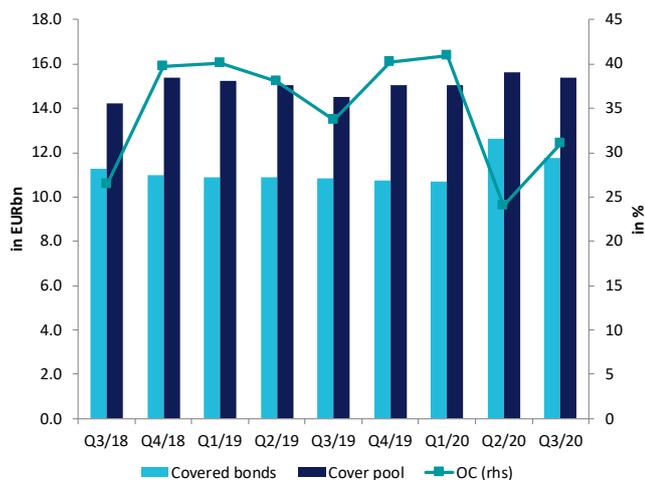
# Landesbank Baden-Württemberg

# Mortgage

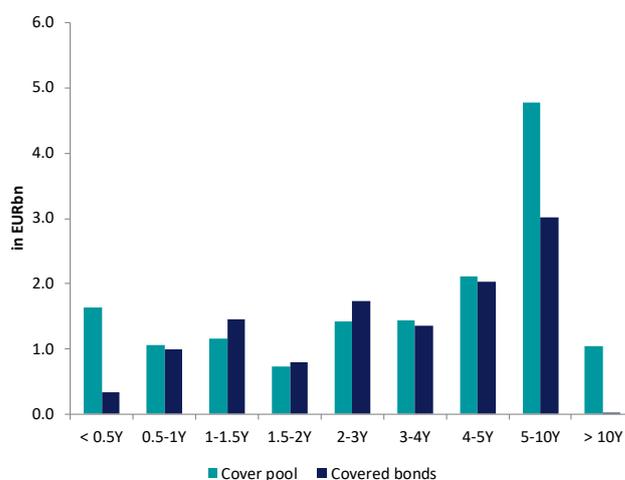
## Indicators of the cover pool

Covered bonds outstanding (EURm)	11,747.6	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	15,389.3	Fixed interest (Cover pool)	75.0%
of which residential	38.5%	Fixed interest (Covered bonds)	74.8%
of which commercial	55.8%	WAL (Cover pool)	4.6y
of which substitution assets	5.7%	WAL (Covered bonds)	3.6y
of which derivatives	0.0%	Avg. seasoning	5.5y
Current OC (EURm)	3,641.6	LTV (Original value)	55.2%
Current OC	31.0%	LTV (Market value)	n/a
Number of loans	36,495	Largest FX-position (NPV in EURm)	USD (844.1)
Number of borrowers	27,778	Share of largest exposure tranche	59.4% (> EUR 10m)
Share of 10 largest borrowers	14.2%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	522,243	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	32,811	Risk weight (Benchmarks)	10%

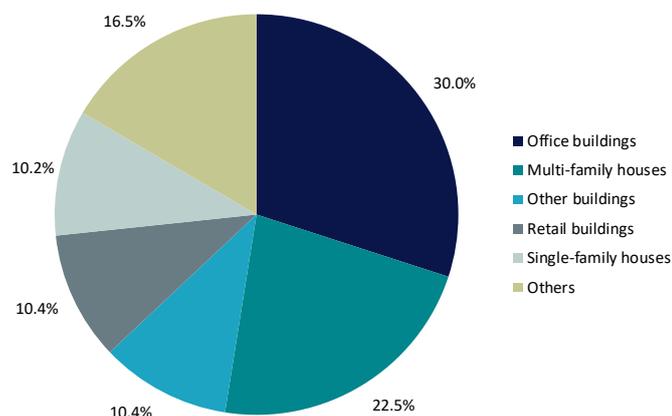
## Past development



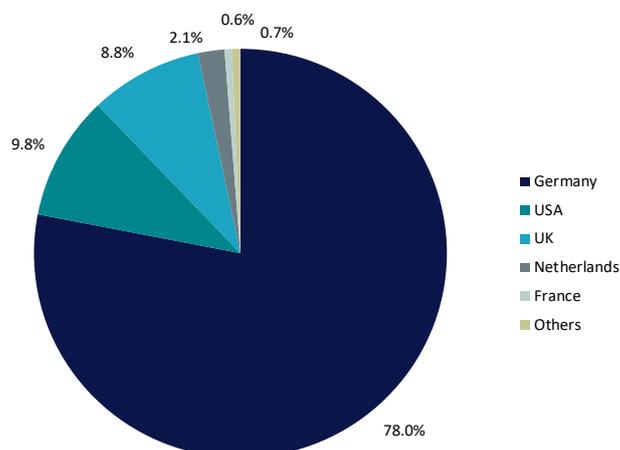
## Maturity structure



## Distribution by borrower type



## Distribution by country



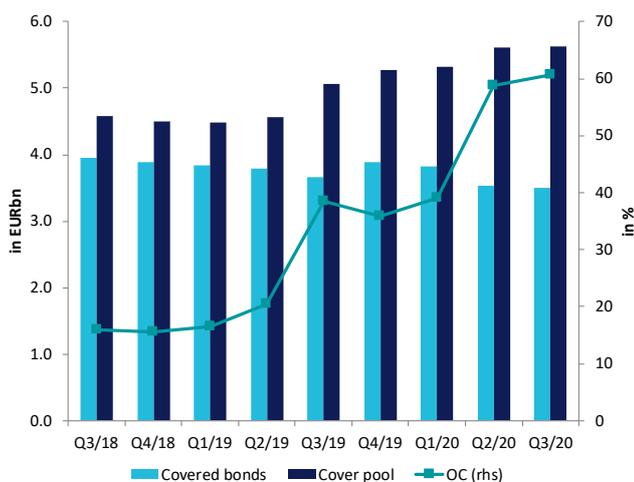
# Landesbank Berlin

# Mortgage

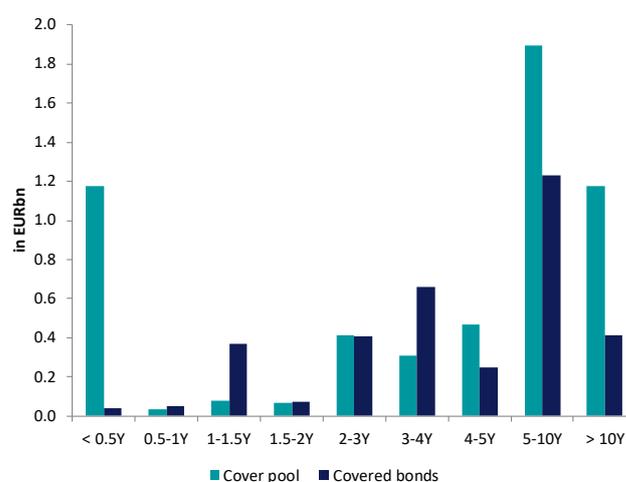
## Indicators of the cover pool

Covered bonds outstanding (EURm)	3,500.0	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	5,622.4	Fixed interest (Cover pool)	86.0%
of which residential	62.4%	Fixed interest (Covered bonds)	96.0%
of which commercial	32.1%	WAL (Cover pool)	8.1y
of which substitution assets	5.5%	WAL (Covered bonds)	5.4y
of which derivatives	0.0%	Avg. seasoning	4.0y
Current OC (EURm)	2,122.4	LTV (Original value)	55.0%
Current OC	60.6%	LTV (Market value)	n/a
Number of loans	6,501	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	5,837	Share of largest exposure tranche	62.9% (> EUR 10m)
Share of 10 largest borrowers	23.0%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	910,129	LCR level / haircut (Benchmarks)	-
Number of properties	6,883	Risk weight (Benchmarks)	-

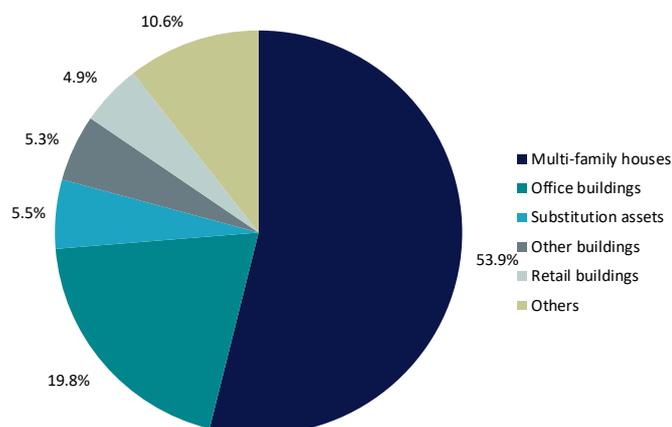
## Past development



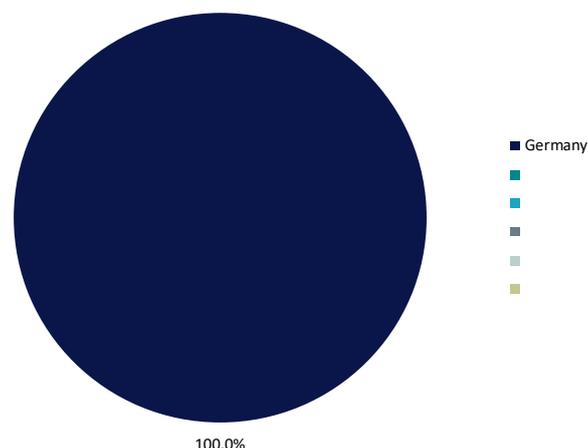
## Maturity structure



## Distribution by borrower type



## Distribution by country



# Landesbank Hessen-Thüringen

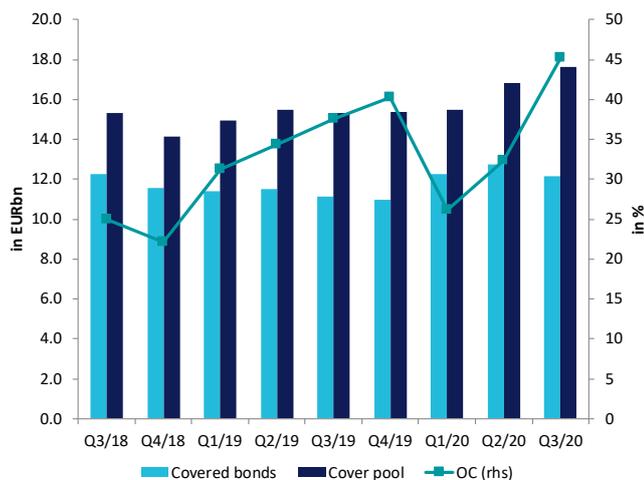
# Mortgage

## Indicators of the cover pool

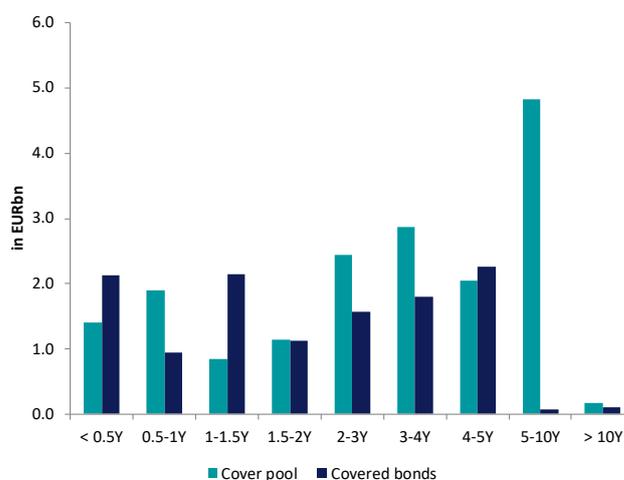
Covered bonds outstanding (EURm)	12,142.1
Cover pool volume (EURm)	17,629.0
of which residential	23.5%
of which commercial	67.4%
of which substitution assets	9.1%
of which derivatives	0.0%
Current OC (EURm)	5,486.9
Current OC	45.2%
Number of loans	6,857
Number of borrowers	5,619
Share of 10 largest borrowers	8.8%
Avg. exposure to borrowers (EUR)	2,852,500
Number of properties	7,935

Rating (Moody's / Fitch / S&P / DBRS)	- / AAA / - / -
Fixed interest (Cover pool)	61.0%
Fixed interest (Covered bonds)	82.3%
WAL (Cover pool)	3.7y
WAL (Covered bonds)	2.3y
Avg. seasoning	4.2y
LTV (Original value)	59.0%
LTV (Market value)	n/a
Largest FX-position (NPV in EURm)	USD (2,249.3)
Share of largest exposure tranche	89.2% (> EUR 10m)
Loans in arrears (> 90 days)	0.00%
LCR level / haircut (Benchmarks)	Level 1 / 7%
Risk weight (Benchmarks)	10%

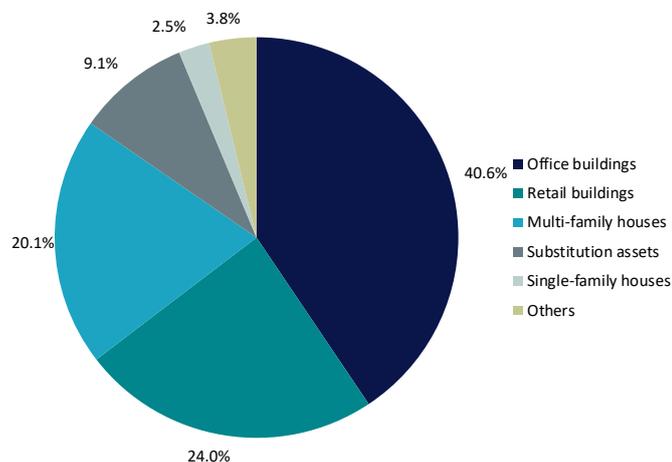
## Past development



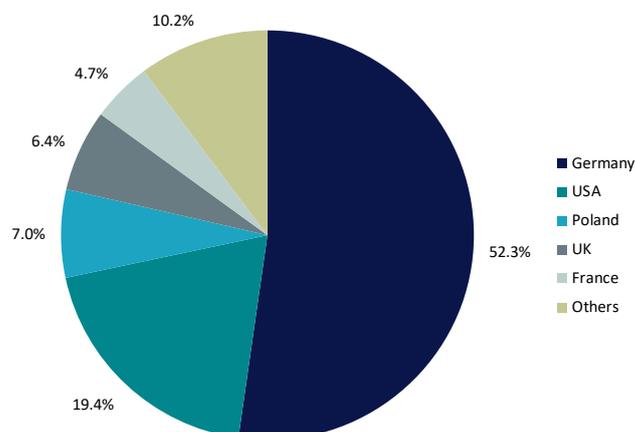
## Maturity structure



## Distribution by borrower type



## Distribution by country



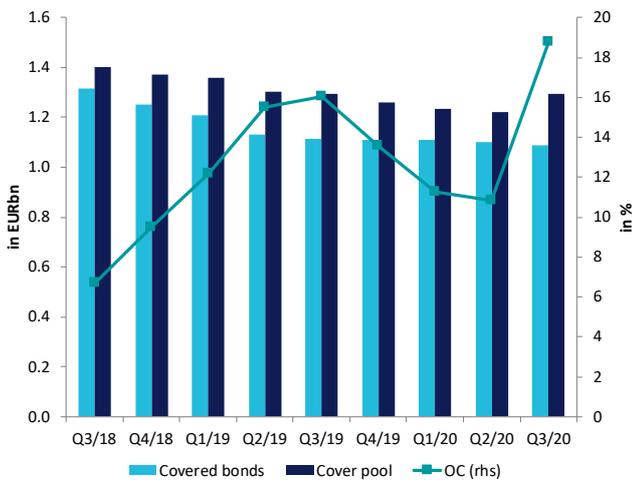
# M.M.Warburg & CO Hypothekenbank

# Mortgage

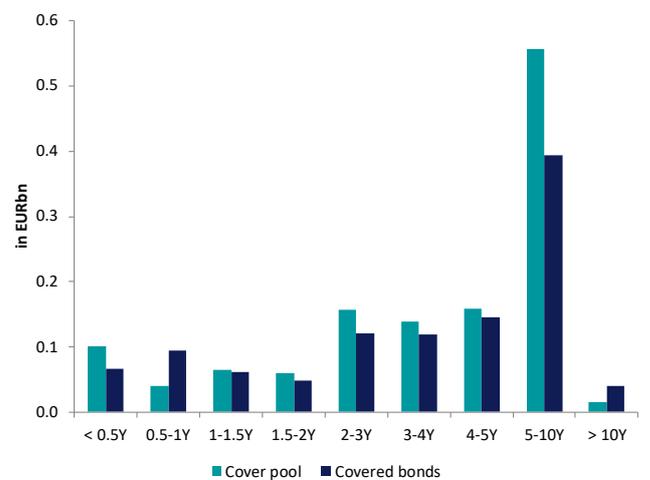
## Indicators of the cover pool

Covered bonds outstanding (EURm)	1,089.9	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	1,294.7	Fixed interest (Cover pool)	94.9%
of which residential	18.0%	Fixed interest (Covered bonds)	97.0%
of which commercial	76.9%	WAL (Cover pool)	4.5y
of which substitution assets	5.1%	WAL (Covered bonds)	4.6y
of which derivatives	0.0%	Avg. seasoning	5.3y
Current OC (EURm)	204.8	LTV (Original value)	56.7%
Current OC	18.8%	LTV (Market value)	n/a
Number of loans	324	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	203	Share of largest exposure tranche	54.3% (EUR 1-10m)
Share of 10 largest borrowers	23.5%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	6,049,754	LCR level / haircut (Benchmarks)	-
Number of properties	359	Risk weight (Benchmarks)	-

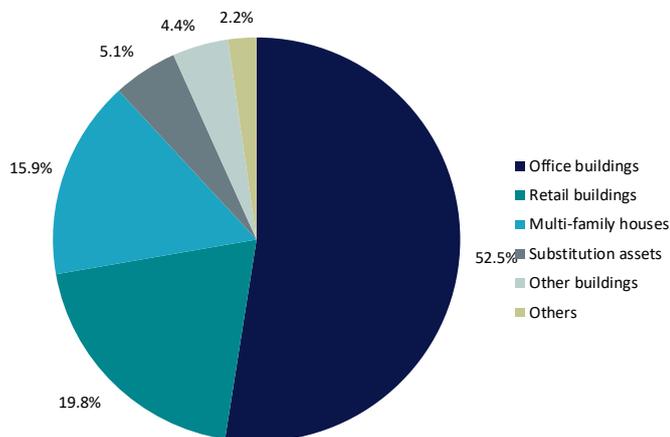
## Past development



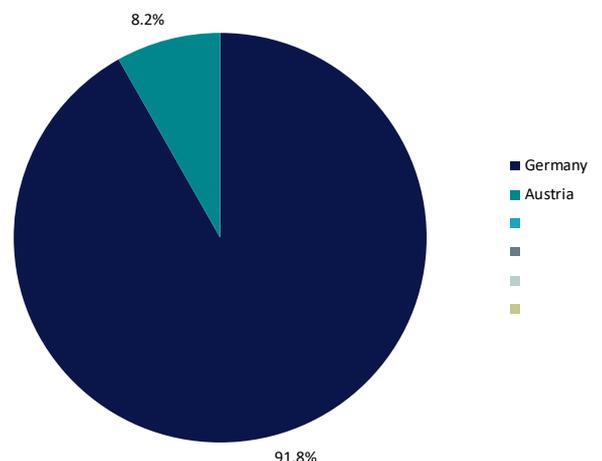
## Maturity structure



## Distribution by borrower type



## Distribution by country



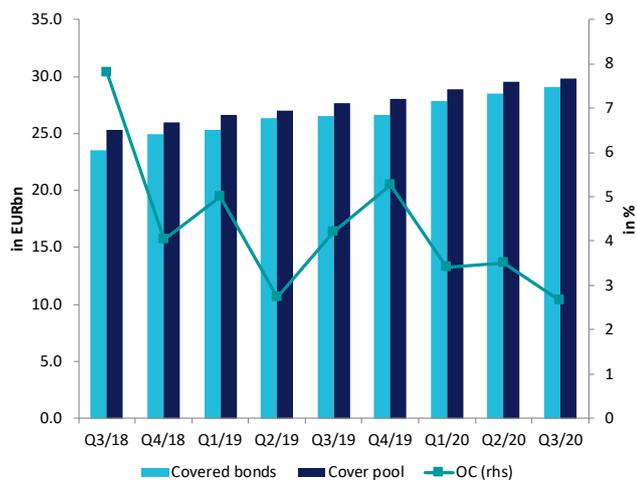
# Münchener Hypothekenbank

# Mortgage

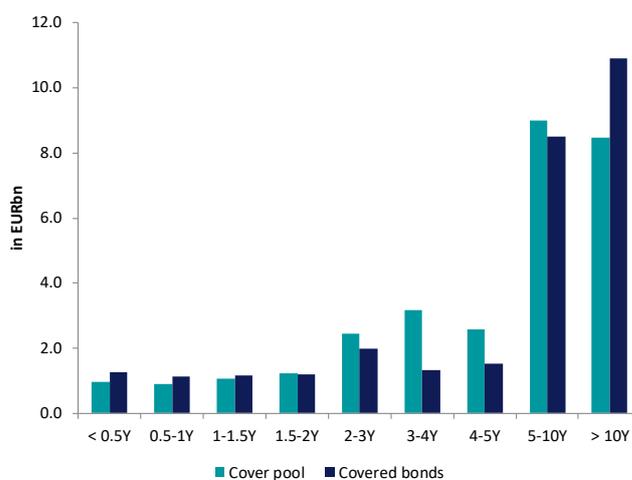
## Indicators of the cover pool

Covered bonds outstanding (EURm)	29,033.5	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	29,803.2	Fixed interest (Cover pool)	96.0%
of which residential	80.4%	Fixed interest (Covered bonds)	87.0%
of which commercial	17.3%	WAL (Cover pool)	8.0y
of which substitution assets	2.4%	WAL (Covered bonds)	8.0y
of which derivatives	0.0%	Avg. seasoning	5.0y
Current OC (EURm)	769.7	LTV (Original value)	52.0%
Current OC	2.7%	LTV (Market value)	n/a
Number of loans	189,836	Largest FX-position (NPV in EURm)	CHF (1,216.9)
Number of borrowers	166,459	Share of largest exposure tranche	60.8% (< EUR 0.3m)
Share of 10 largest borrowers	2.4%	Loans in arrears (> 90 days)	0.04%
Avg. exposure to borrowers (EUR)	174,835	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	177,424	Risk weight (Benchmarks)	10%

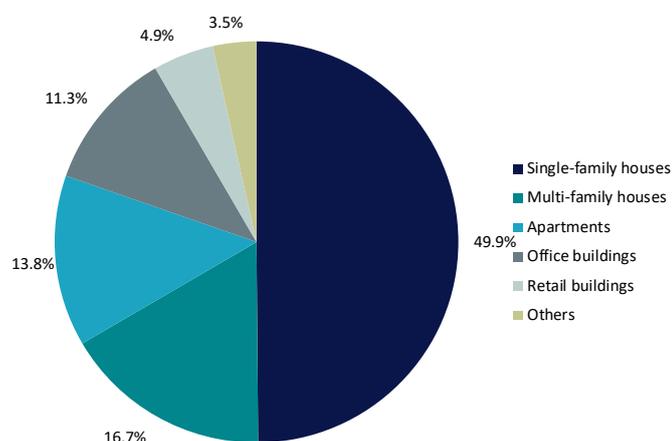
## Past development



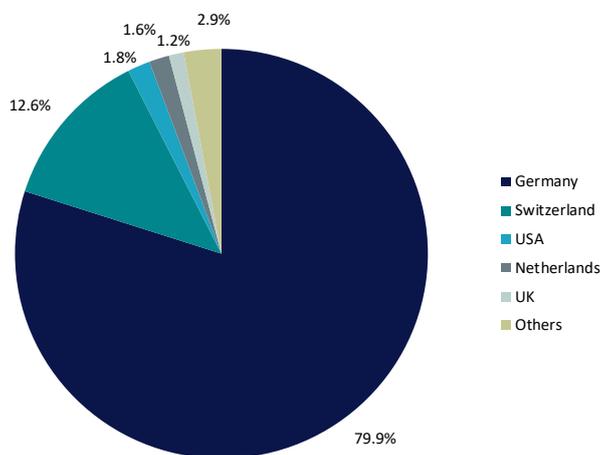
## Maturity structure



## Distribution by borrower type



## Distribution by country



# Natixis Pfandbriefbank

# Mortgage

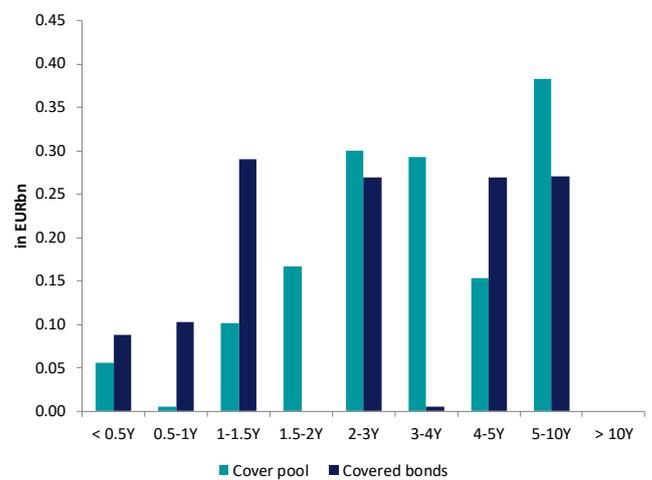
## Indicators of the cover pool

Covered bonds outstanding (EURm)	1,297.5	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	1,458.5	Fixed interest (Cover pool)	41.2%
of which residential	5.9%	Fixed interest (Covered bonds)	95.1%
of which commercial	82.8%	WAL (Cover pool)	3.7y
of which substitution assets	11.3%	WAL (Covered bonds)	3.1y
of which derivatives	0.0%	Avg. seasoning	3.6y
Current OC (EURm)	161.0	LTV (Original value)	58.1%
Current OC	12.4%	LTV (Market value)	n/a
Number of loans	63	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	121	Share of largest exposure tranche	93.7% (> EUR 10m)
Share of 10 largest borrowers	24.9%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	10,689,835	LCR level / haircut (Benchmarks)	-
Number of properties	222	Risk weight (Benchmarks)	-

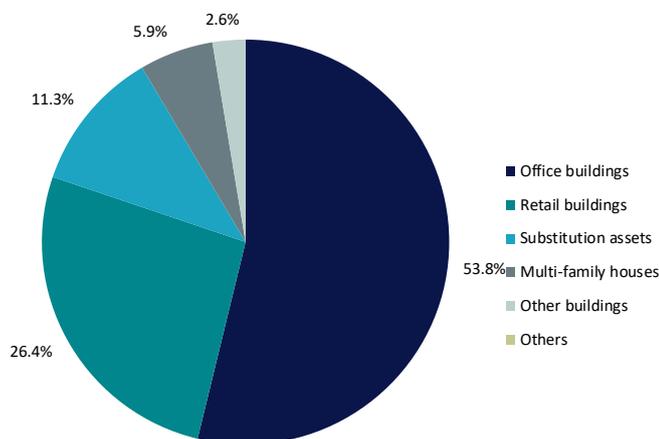
## Past development



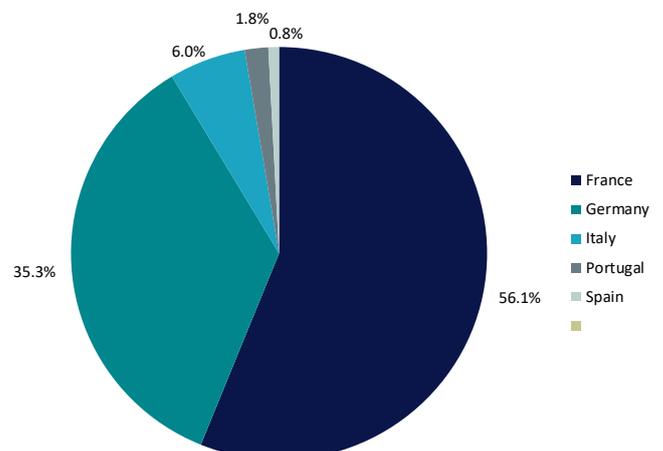
## Maturity structure



## Distribution by borrower type



## Distribution by country



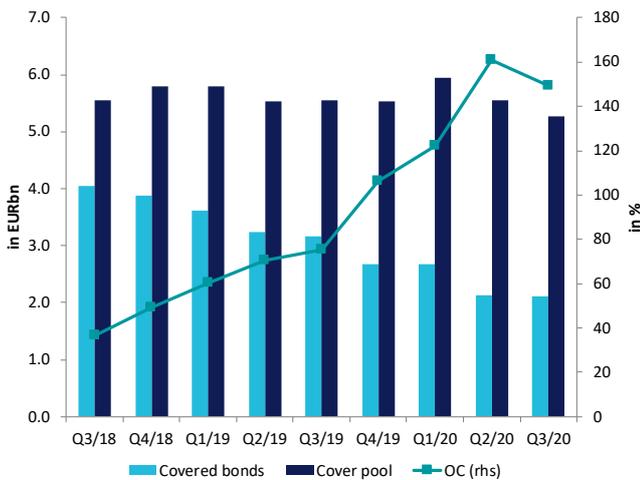
# Norddeutsche Landesbank

# Mortgage

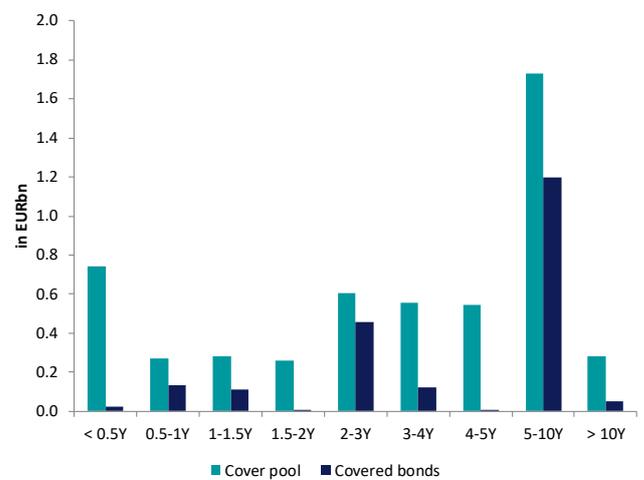
## Indicators of the cover pool

Covered bonds outstanding (EURm)	2,114.2	Rating (Moody's / Fitch / S&P / DBRS)	Aa1 / - / - / -
Cover pool volume (EURm)	5,272.6	Fixed interest (Cover pool)	76.9%
of which residential	68.8%	Fixed interest (Covered bonds)	83.3%
of which commercial	28.4%	WAL (Cover pool)	n/a
of which substitution assets	2.8%	WAL (Covered bonds)	n/a
of which derivatives	0.0%	Avg. seasoning	7.4y
Current OC (EURm)	3,158.4	LTV (Original value)	60.0%
Current OC	149.4%	LTV (Market value)	n/a
Number of loans	n/a	Largest FX-position (NPV in EURm)	CHF (16.5)
Number of borrowers	n/a	Share of largest exposure tranche	41.1% (EUR 1-10m)
Share of 10 largest borrowers	n/a	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	n/a	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	n/a	Risk weight (Benchmarks)	10%

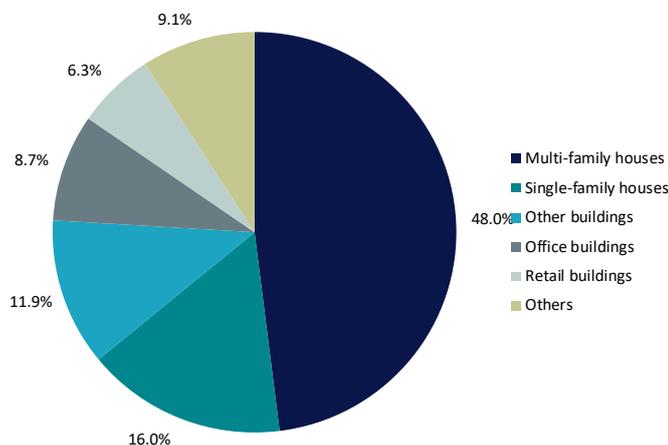
## Past development



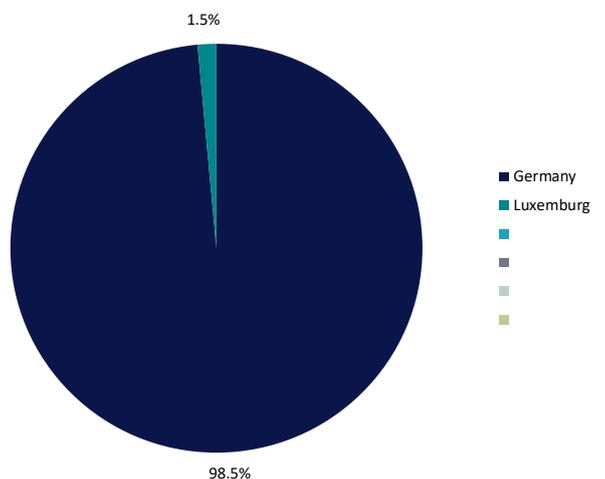
## Maturity structure



## Distribution by borrower type



## Distribution by country



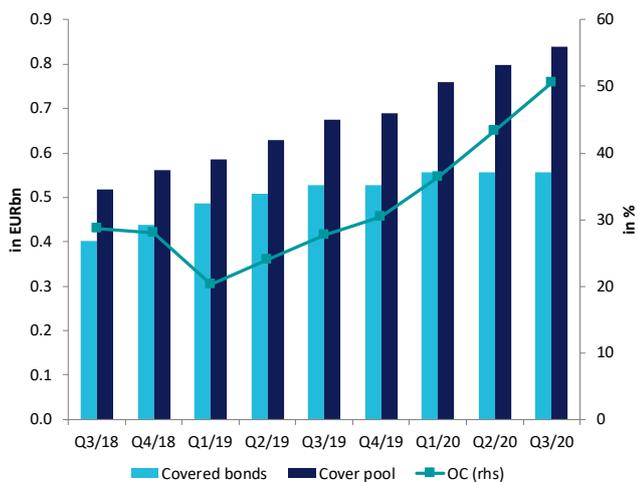
# PSD Bank Nürnberg

# Mortgage

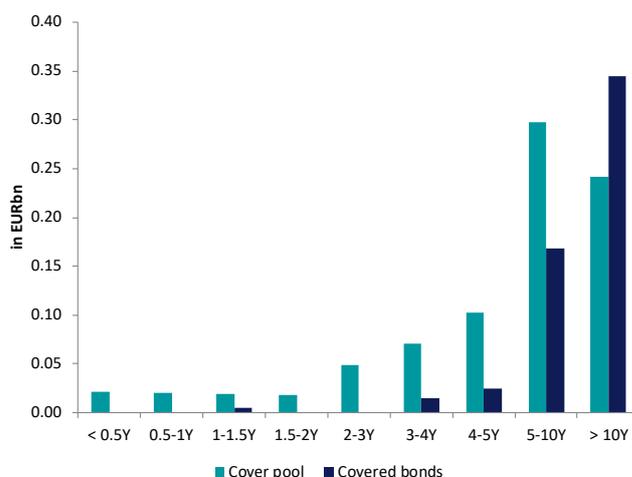
## Indicators of the cover pool

Covered bonds outstanding (EURm)	557.6	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	839.9	Fixed interest (Cover pool)	100.0%
of which residential	97.3%	Fixed interest (Covered bonds)	100.0%
of which commercial	0.0%	WAL (Cover pool)	7.6y
of which substitution assets	2.7%	WAL (Covered bonds)	12.5y
of which derivatives	0.0%	Avg. seasoning	3.9y
Current OC (EURm)	282.3	LTV (Original value)	51.9%
Current OC	50.6%	LTV (Market value)	n/a
Number of loans	8,675	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	6,930	Share of largest exposure tranche	99.6% (< EUR 0.3m)
Share of 10 largest borrowers	0.6%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	117,882	LCR level / haircut (Benchmarks)	-
Number of properties	8,004	Risk weight (Benchmarks)	-

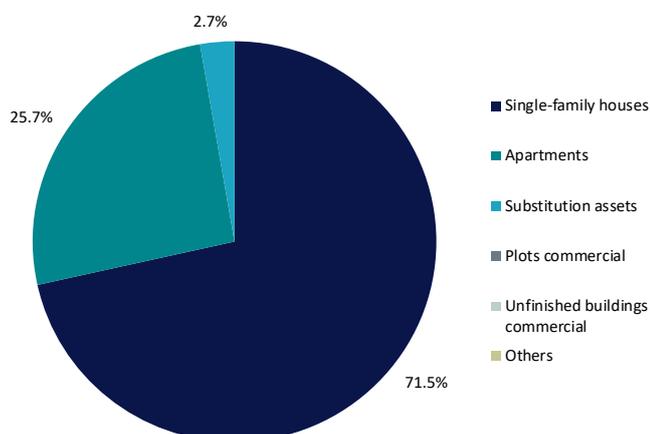
## Past development



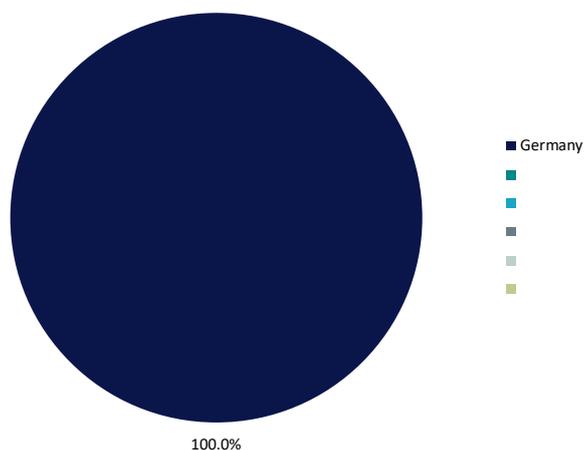
## Maturity structure



## Distribution by borrower type



## Distribution by country



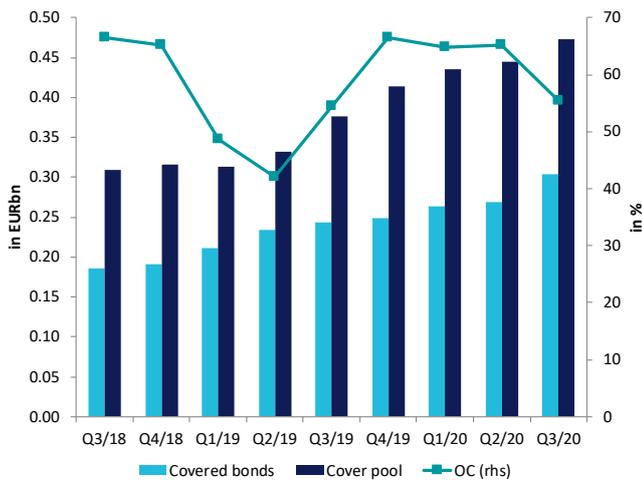
# PSD Bank Rhein-Ruhr

# Mortgage

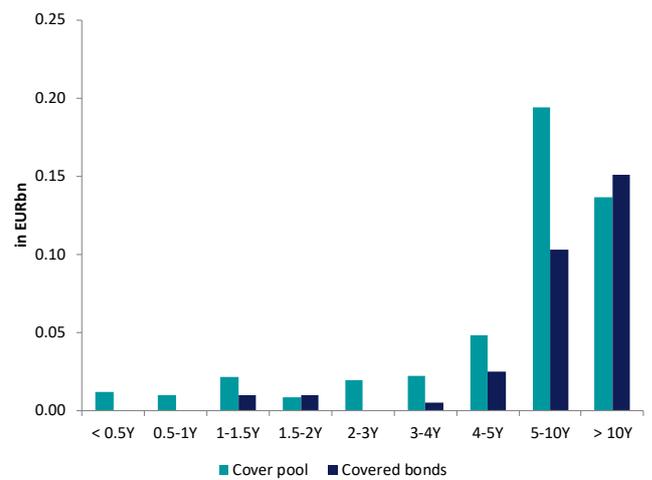
## Indicators of the cover pool

Covered bonds outstanding (EURm)	304.0	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	472.5	Fixed interest (Cover pool)	100.0%
of which residential	97.5%	Fixed interest (Covered bonds)	100.0%
of which commercial	0.0%	WAL (Cover pool)	7.5y
of which substitution assets	2.5%	WAL (Covered bonds)	9.6y
of which derivatives	0.0%	Avg. seasoning	3.8y
Current OC (EURm)	168.5	LTV (Original value)	50.7%
Current OC	55.4%	LTV (Market value)	n/a
Number of loans	4,865	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	4,011	Share of largest exposure tranche	94.9% (< EUR 0.3m)
Share of 10 largest borrowers	1.4%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	114,800	LCR level / haircut (Benchmarks)	-
Number of properties	4,220	Risk weight (Benchmarks)	-

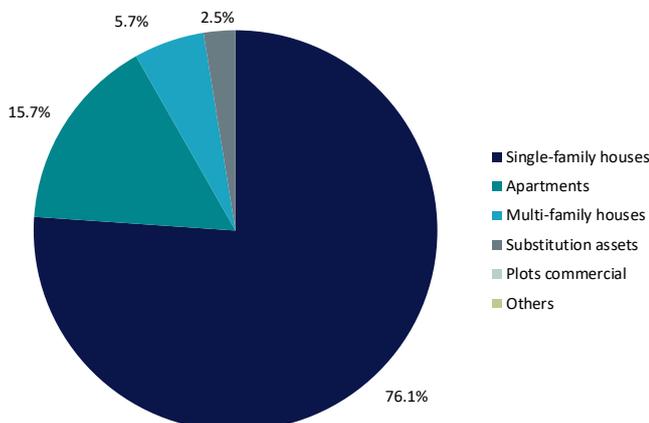
## Past development



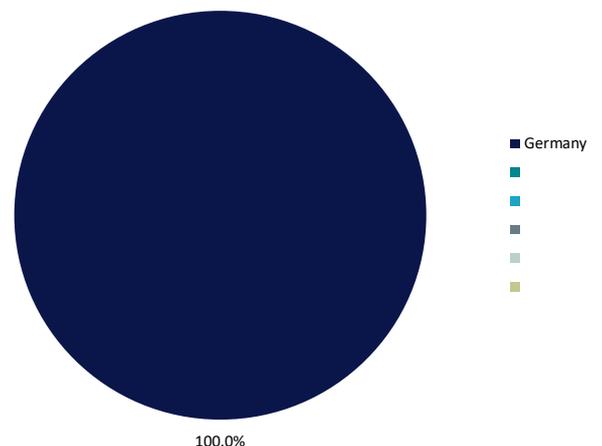
## Maturity structure



## Distribution by borrower type



## Distribution by country



# SaarLB

# Mortgage

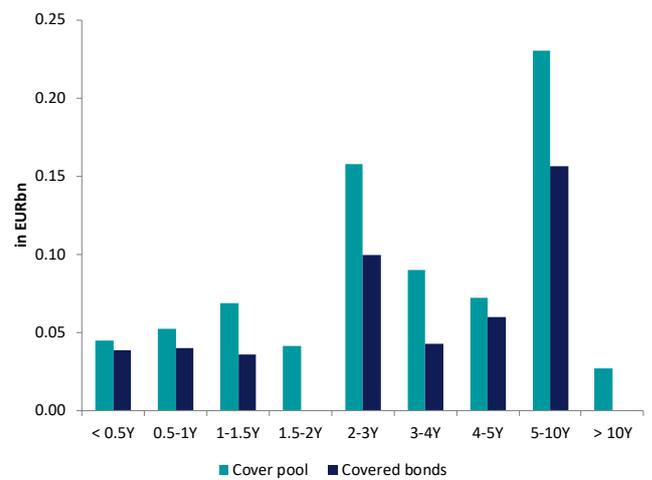
## Indicators of the cover pool

Covered bonds outstanding (EURm)	474.5	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	784.9	Fixed interest (Cover pool)	78.6%
of which residential	1.4%	Fixed interest (Covered bonds)	100.0%
of which commercial	92.5%	WAL (Cover pool)	n/a
of which substitution assets	6.2%	WAL (Covered bonds)	n/a
of which derivatives	0.0%	Avg. seasoning	5.3y
Current OC (EURm)	310.4	LTV (Original value)	52.8%
Current OC	65.4%	LTV (Market value)	n/a
Number of loans	n/a	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	n/a	Share of largest exposure tranche	55.4% (> EUR 10m)
Share of 10 largest borrowers	n/a	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	n/a	LCR level / haircut (Benchmarks)	-
Number of properties	n/a	Risk weight (Benchmarks)	-

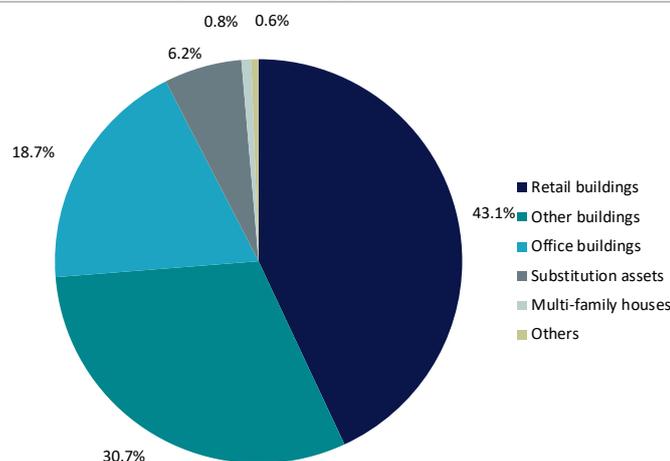
## Past development



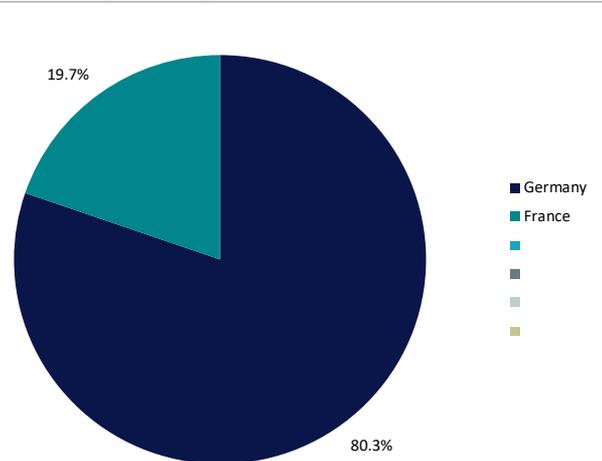
## Maturity structure



## Distribution by borrower type



## Distribution by country



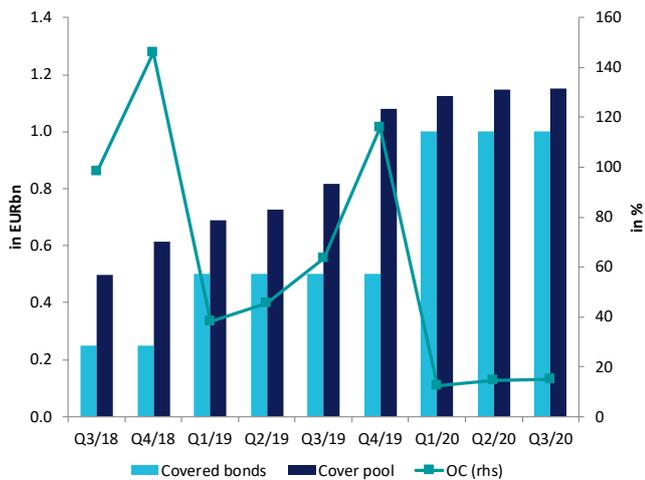
# Santander Consumer Bank

# Mortgage

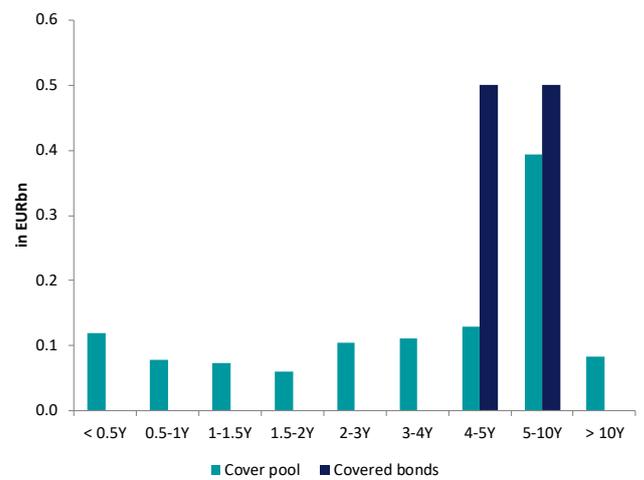
## Indicators of the cover pool

Covered bonds outstanding (EURm)	1,000.0	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / AAA / - / -
Cover pool volume (EURm)	1,149.8	Fixed interest (Cover pool)	100.0%
of which residential	95.7%	Fixed interest (Covered bonds)	100.0%
of which commercial	0.0%	WAL (Cover pool)	4.6y
of which substitution assets	4.3%	WAL (Covered bonds)	6.8y
of which derivatives	0.0%	Avg. seasoning	7.3y
Current OC (EURm)	149.8	LTV (Original value)	45.0%
Current OC	15.0%	LTV (Market value)	n/a
Number of loans	19,132	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	23,145	Share of largest exposure tranche	98.3% (< EUR 0.3m)
Share of 10 largest borrowers	0.4%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	47,518	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	13,677	Risk weight (Benchmarks)	10%

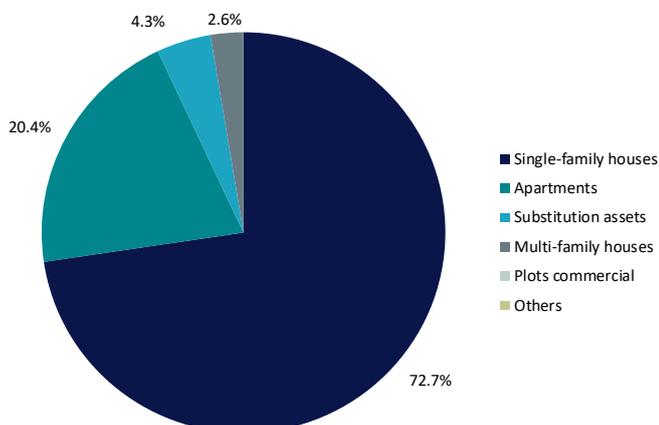
## Past development



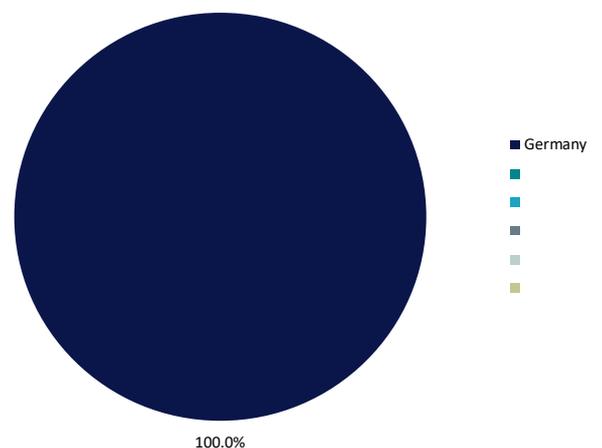
## Maturity structure



## Distribution by borrower type



## Distribution by country



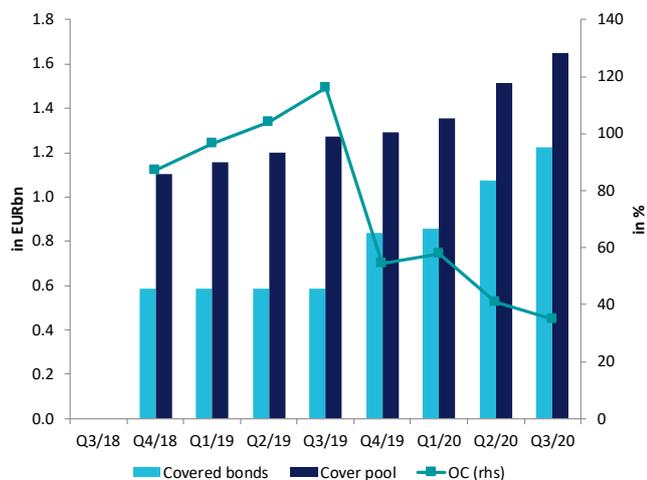
# Sparkasse Hannover

# Mortgage

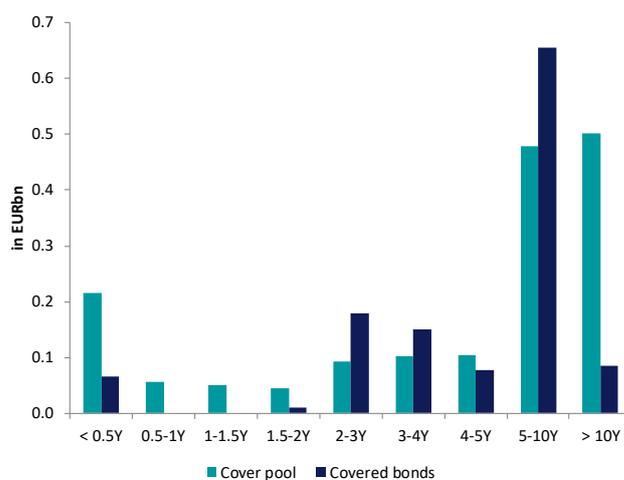
## Indicators of the cover pool

Covered bonds outstanding (EURm)	1,223.1	Rating (Moody's / Fitch / S&P / DBRS)	- / AAA / - / -
Cover pool volume (EURm)	1,648.5	Fixed interest (Cover pool)	89.4%
of which residential	77.7%	Fixed interest (Covered bonds)	100.0%
of which commercial	18.1%	WAL (Cover pool)	n/a
of which substitution assets	4.2%	WAL (Covered bonds)	n/a
of which derivatives	0.0%	Avg. seasoning	4.2y
Current OC (EURm)	425.4	LTV (Original value)	56.4%
Current OC	34.8%	LTV (Market value)	n/a
Number of loans	n/a	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	n/a	Share of largest exposure tranche	62.9% (< EUR 0.3m)
Share of 10 largest borrowers	n/a	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	n/a	LCR level / haircut (Benchmarks)	-
Number of properties	n/a	Risk weight (Benchmarks)	-

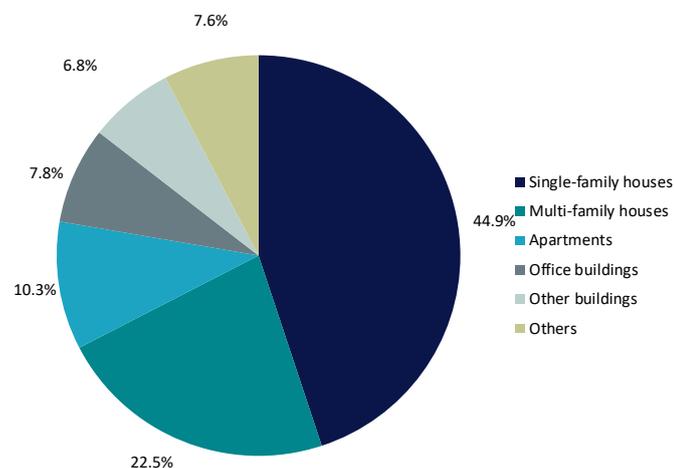
## Past development



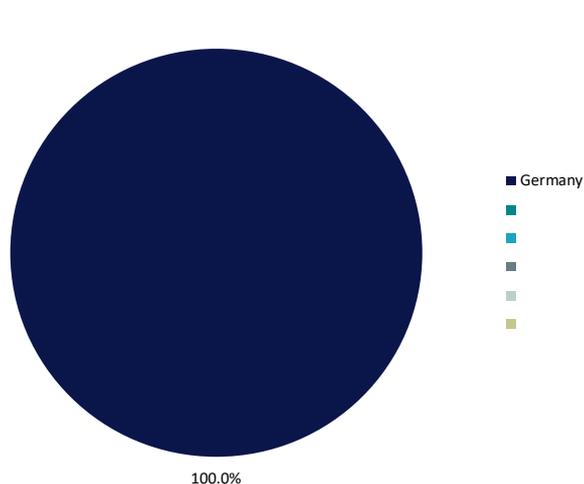
## Maturity structure



## Distribution by borrower type



## Distribution by country



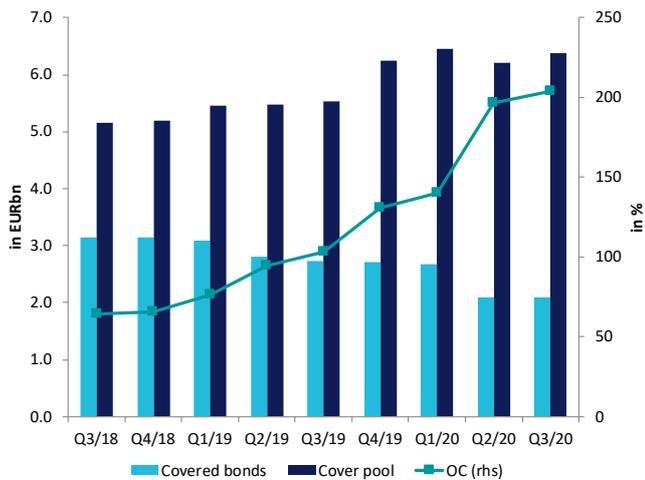
# Sparkasse KölnBonn

# Mortgage

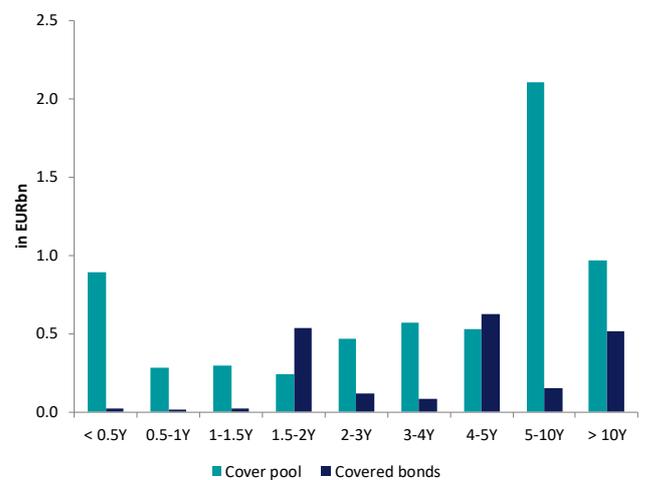
## Indicators of the cover pool

Covered bonds outstanding (EURm)	2,095.7	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	6,375.9	Fixed interest (Cover pool)	0.0%
of which residential	71.4%	Fixed interest (Covered bonds)	0.0%
of which commercial	19.6%	WAL (Cover pool)	n/a
of which substitution assets	8.9%	WAL (Covered bonds)	n/a
of which derivatives	0.0%	Avg. seasoning	n/a
Current OC (EURm)	4,280.3	LTV (Original value)	0.0%
Current OC	204.2%	LTV (Market value)	n/a
Number of loans	n/a	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	n/a	Share of largest exposure tranche	51.3% (< EUR 0.3m)
Share of 10 largest borrowers	n/a	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	n/a	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	n/a	Risk weight (Benchmarks)	10%

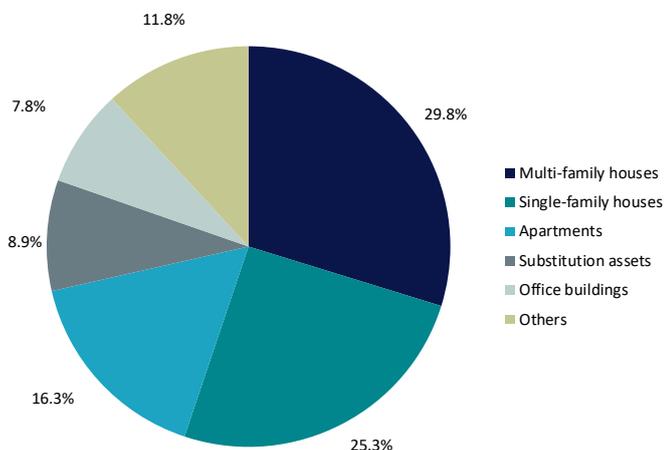
## Past development



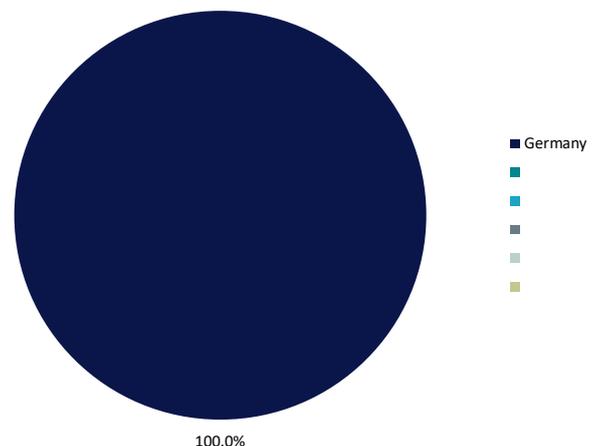
## Maturity structure



## Distribution by borrower type



## Distribution by country



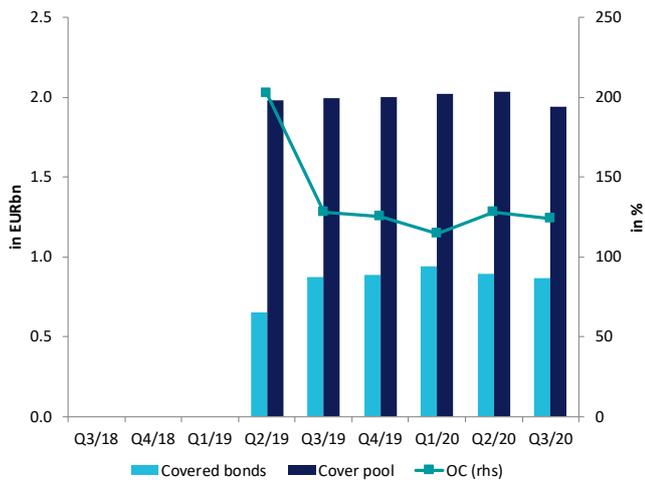
# Stadtsparkasse Düsseldorf

# Mortgage

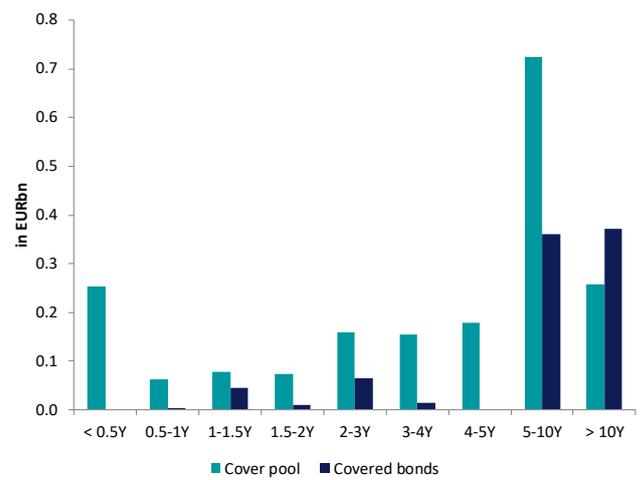
## Indicators of the cover pool

Covered bonds outstanding (EURm)	867.0	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	1,942.8	Fixed interest (Cover pool)	93.1%
of which residential	69.8%	Fixed interest (Covered bonds)	100.0%
of which commercial	27.4%	WAL (Cover pool)	n/a
of which substitution assets	2.8%	WAL (Covered bonds)	n/a
of which derivatives	0.0%	Avg. seasoning	6.2y
Current OC (EURm)	1,075.8	LTV (Original value)	56.0%
Current OC	124.1%	LTV (Market value)	n/a
Number of loans	n/a	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	n/a	Share of largest exposure tranche	43.8% (< EUR 0.3m)
Share of 10 largest borrowers	n/a	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	n/a	LCR level / haircut (Benchmarks)	-
Number of properties	n/a	Risk weight (Benchmarks)	-

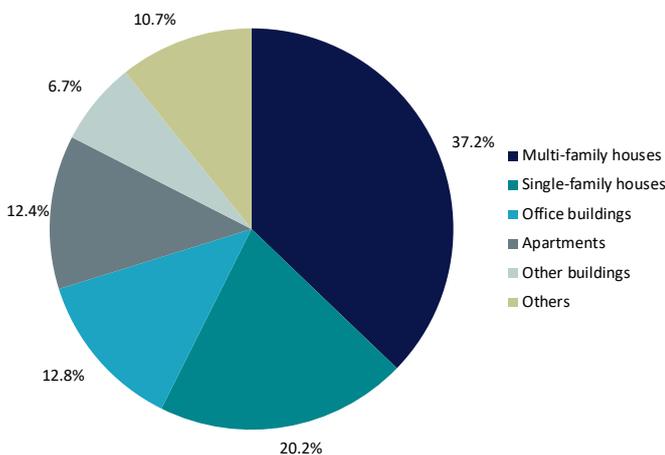
## Past development



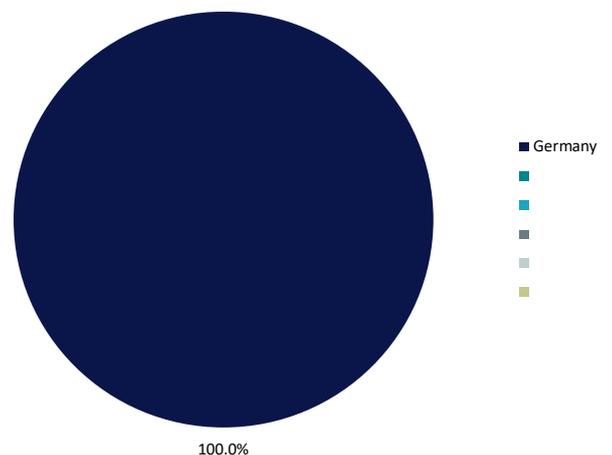
## Maturity structure



## Distribution by borrower type



## Distribution by country



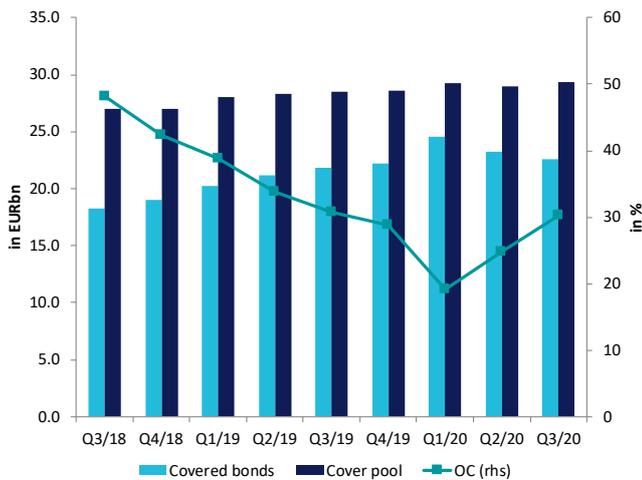
# UniCredit Bank

# Mortgage

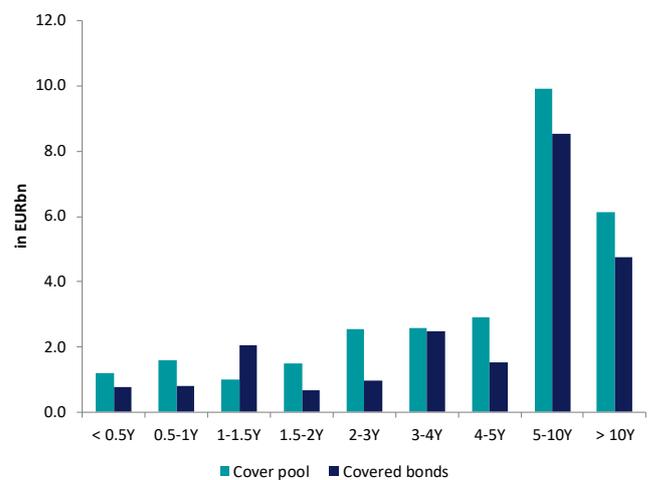
## Indicators of the cover pool

Covered bonds outstanding (EURm)	22,573.5	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / AAA / - / -
Cover pool volume (EURm)	29,393.9	Fixed interest (Cover pool)	80.9%
of which residential	68.2%	Fixed interest (Covered bonds)	95.4%
of which commercial	29.5%	WAL (Cover pool)	6.8y
of which substitution assets	2.3%	WAL (Covered bonds)	6.9y
of which derivatives	0.0%	Avg. seasoning	7.0y
Current OC (EURm)	6,820.4	LTV (Original value)	42.1%
Current OC	30.2%	LTV (Market value)	n/a
Number of loans	151,592	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	114,902	Share of largest exposure tranche	37.9% (< EUR 0.3m)
Share of 10 largest borrowers	7.9%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	250,023	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	139,869	Risk weight (Benchmarks)	10%

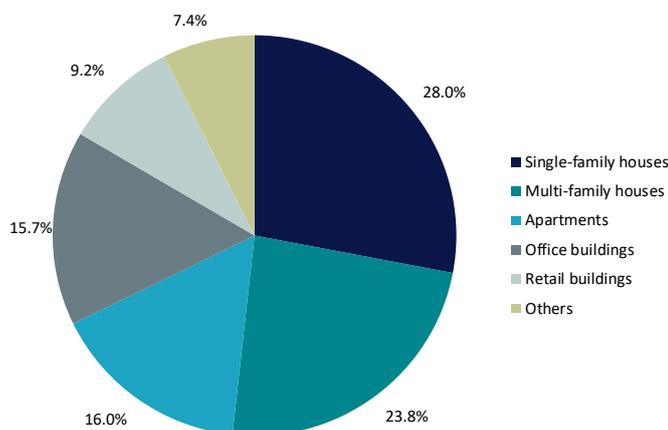
## Past development



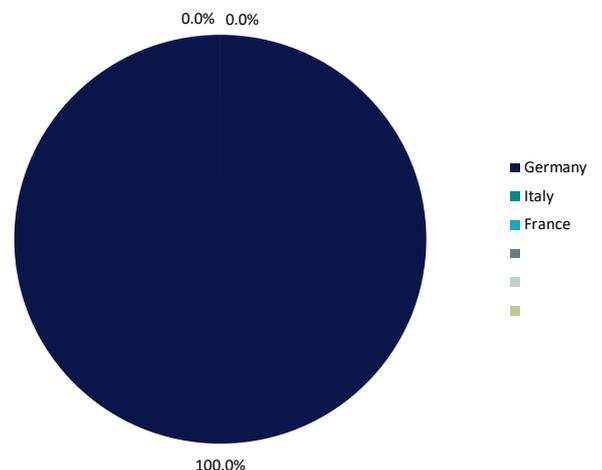
## Maturity structure



## Distribution by borrower type



## Distribution by country



# Wüstenrot Bausparkasse

# Mortgage

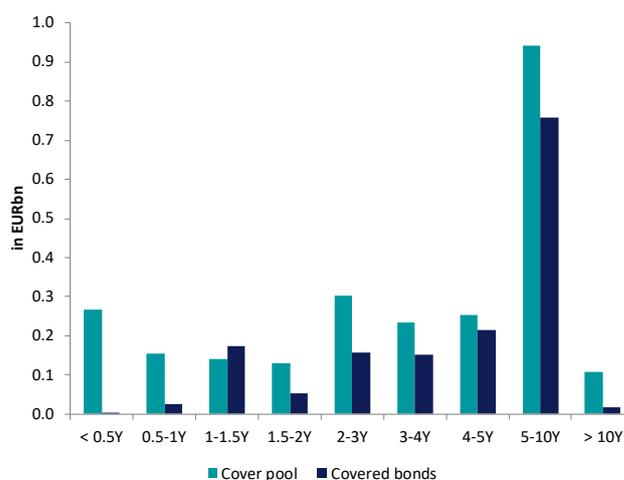
## Indicators of the cover pool

Covered bonds outstanding (EURm)	1,751.6	Rating (Moody's / Fitch / S&P / DBRS)	- / - / AAA / -
Cover pool volume (EURm)	2,530.3	Fixed interest (Cover pool)	99.3%
of which residential	92.6%	Fixed interest (Covered bonds)	97.7%
of which commercial	1.1%	WAL (Cover pool)	4.5y
of which substitution assets	6.3%	WAL (Covered bonds)	5.1y
of which derivatives	0.0%	Avg. seasoning	11.4y
Current OC (EURm)	778.7	LTV (Original value)	44.4%
Current OC	44.5%	LTV (Market value)	n/a
Number of loans	35,448	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	31,809	Share of largest exposure tranche	88.5% (< EUR 0.3m)
Share of 10 largest borrowers	2.3%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	74,516	LCR level / haircut (Benchmarks)	-
Number of properties	33,740	Risk weight (Benchmarks)	-

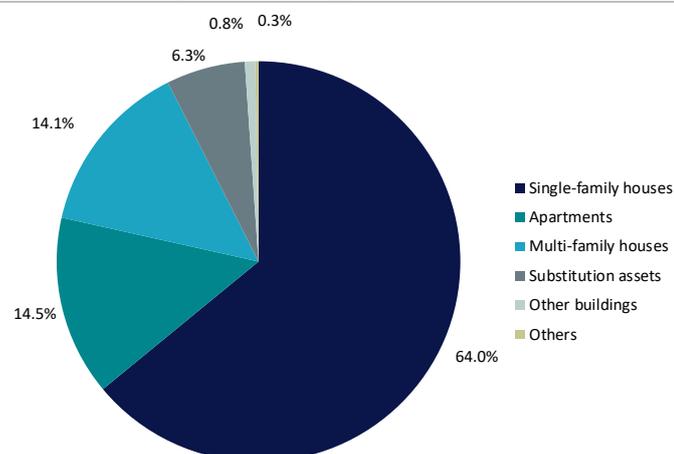
## Past development



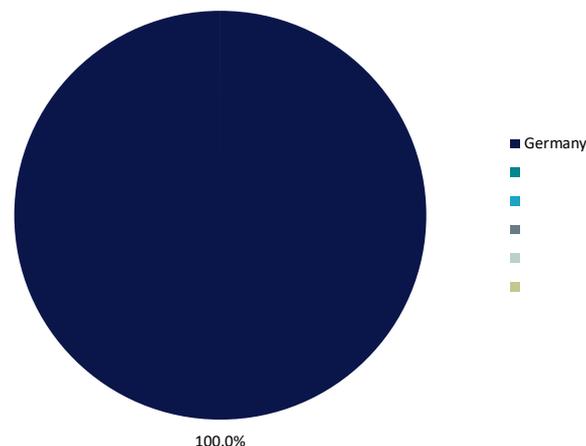
## Maturity structure



## Distribution by borrower type



## Distribution by country



# Public sector covered bonds

## Aareal Bank

## Public sector

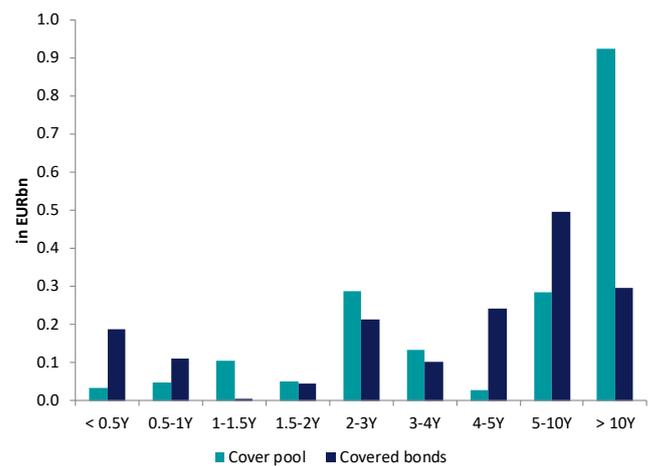
### Indicators of the cover pool

Covered bonds outstanding (EURm)	1,696.1	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	1,886.0	Fixed interest (Cover pool)	88.5%
of which substitution assets	0.8%	Fixed interest (Covered bonds)	86.4%
of which derivatives	0.0%	WAL (Cover pool)	9.1y
Current OC (EURm)	189.9	WAL (Covered bonds)	5.6y
Current OC	11.2%	Largest FX-position (NPV in EURm)	n/a
Number of loans	198	Share of largest exposure tranche	62.6% (> EUR 100m)
Number of borrowers	109	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	76.1%	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	17,165,138	Risk weight (Benchmarks)	-

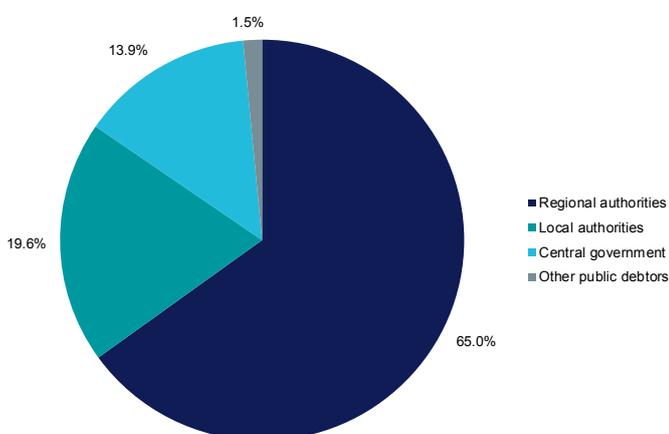
### Past development



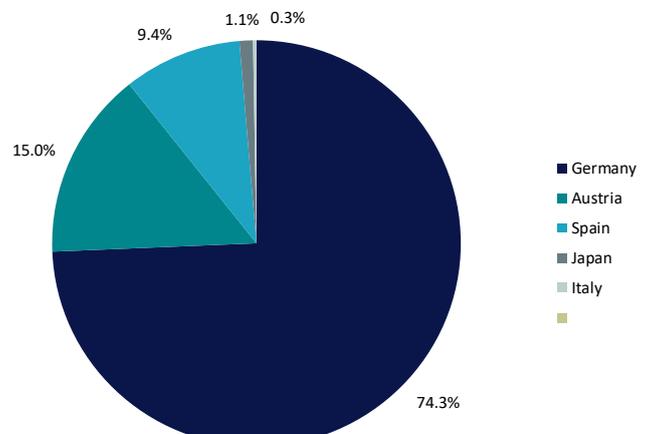
### Maturity structure



### Distribution by borrower type



### Distribution by country



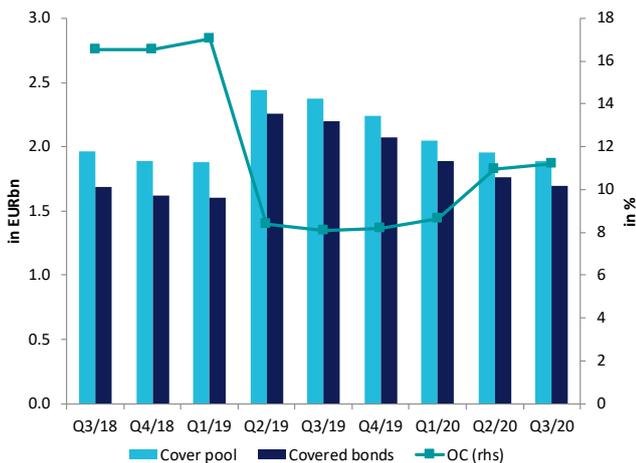
# Bayerische Landesbank

# Public sector

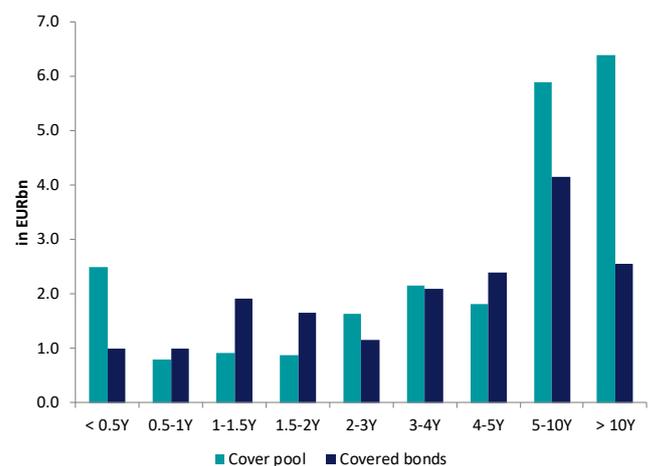
## Indicators of the cover pool

Covered bonds outstanding (EURm)	17,853.1	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / AAA / - / -
Cover pool volume (EURm)	22,901.9	Fixed interest (Cover pool)	92.4%
of which substitution assets	1.7%	Fixed interest (Covered bonds)	92.3%
of which derivatives	0.0%	WAL (Cover pool)	9.0y
Current OC (EURm)	5,048.8	WAL (Covered bonds)	6.0y
Current OC	28.3%	Largest FX-position (NPV in EURm)	GBP (669.4)
Number of loans	84,787	Share of largest exposure tranche	58.7% (> EUR 100m)
Number of borrowers	56,267	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	24.3%	LCR level / haircut (Benchmarks)	Level 1 / 7%
Avg. exposure to borrowers (EUR)	400,046	Risk weight (Benchmarks)	10%

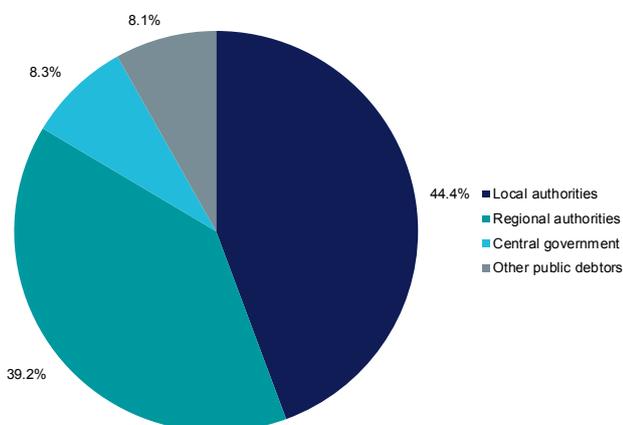
## Past development



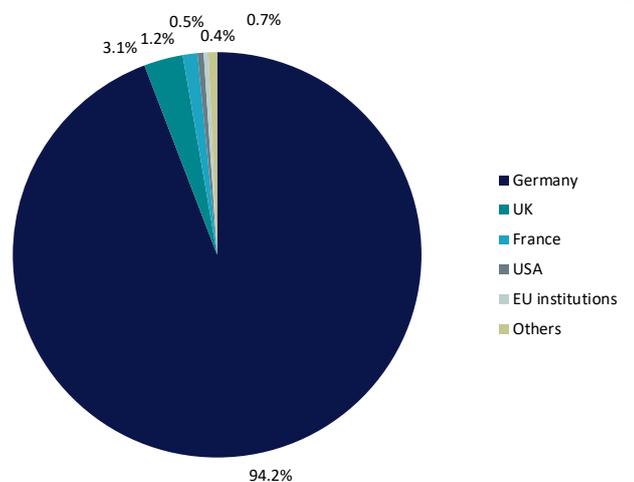
## Maturity structure



## Distribution by borrower type



## Distribution by country



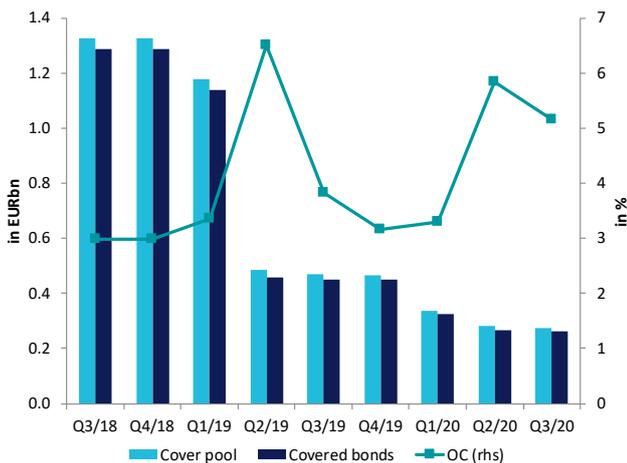
# Berlin Hyp

# Public sector

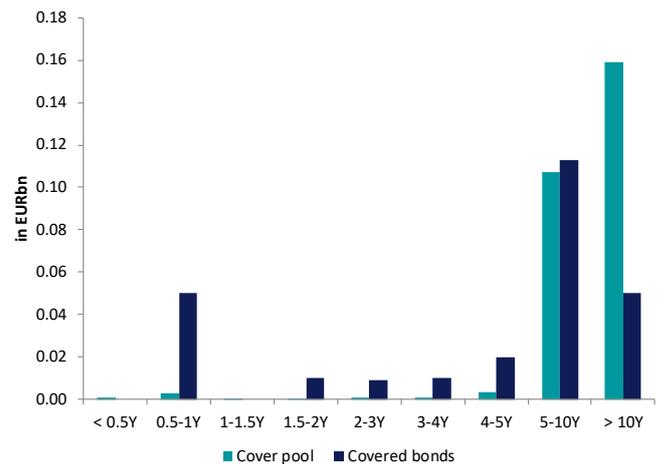
## Indicators of the cover pool

Covered bonds outstanding (EURm)	262.0	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	275.5	Fixed interest (Cover pool)	100.0%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	100.0%
of which derivatives	0.0%	WAL (Cover pool)	12.7y
Current OC (EURm)	13.5	WAL (Covered bonds)	6.2y
Current OC	5.2%	Largest FX-position (NPV in EURm)	n/a
Number of loans	57	Share of largest exposure tranche	96.0% (EUR 10-100m)
Number of borrowers	67	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	95.5%	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	4,111,940	Risk weight (Benchmarks)	-

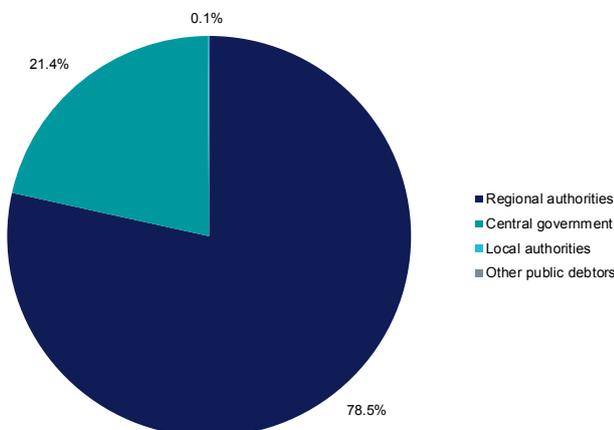
## Past development



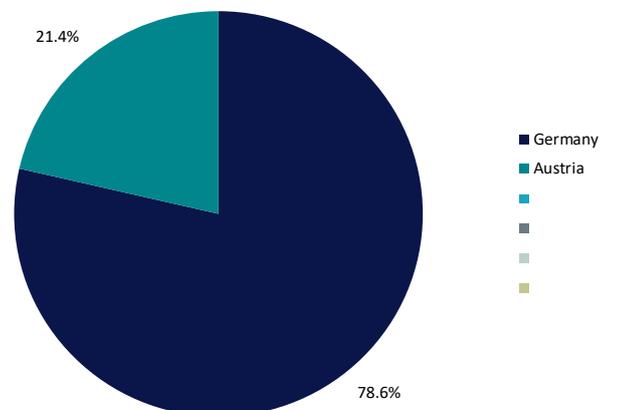
## Maturity structure



## Distribution by borrower type



## Distribution by country



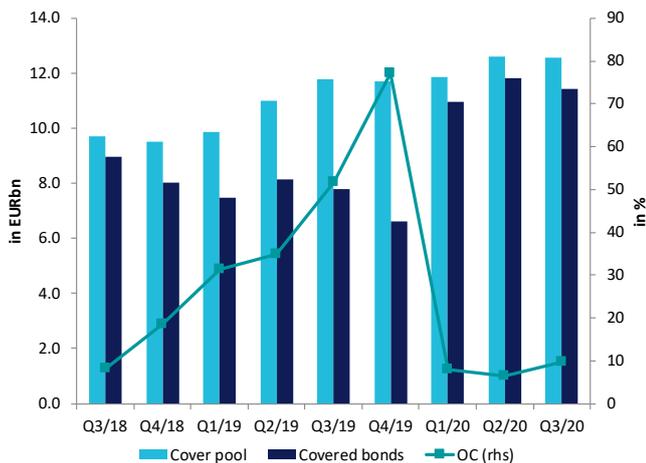
## Commerzbank

## Public sector

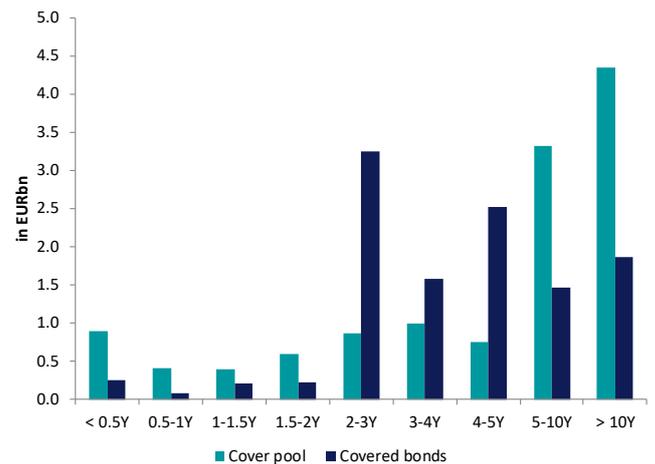
### Indicators of the cover pool

Covered bonds outstanding (EURm)	11,436.4	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	12,556.7	Fixed interest (Cover pool)	72.3%
of which substitution assets	0.6%	Fixed interest (Covered bonds)	44.5%
of which derivatives	0.0%	WAL (Cover pool)	11.3y
Current OC (EURm)	1,120.4	WAL (Covered bonds)	5.5y
Current OC	9.8%	Largest FX-position (NPV in EURm)	GBP (3,203.5)
Number of loans	752	Share of largest exposure tranche	66.0% (> EUR 100m)
Number of borrowers	377	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	32.3%	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	33,107,626	Risk weight (Benchmarks)	-

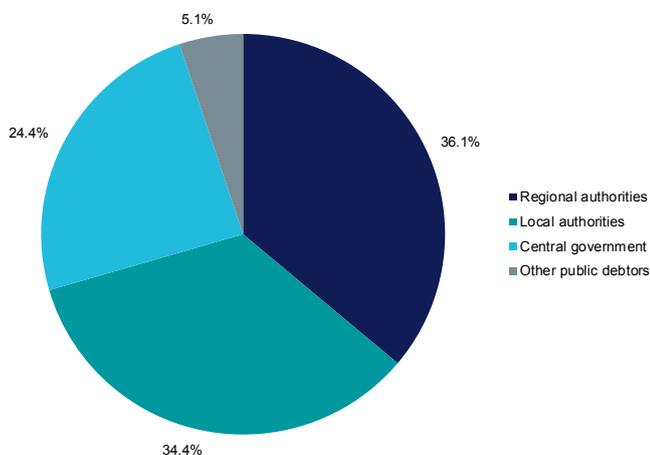
### Past development



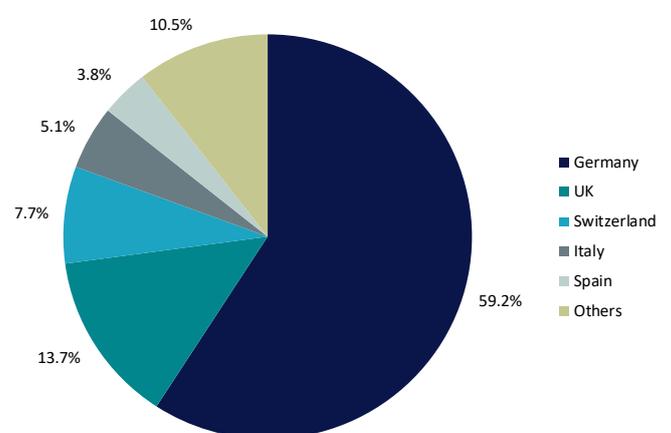
### Maturity structure



### Distribution by borrower type



### Distribution by country



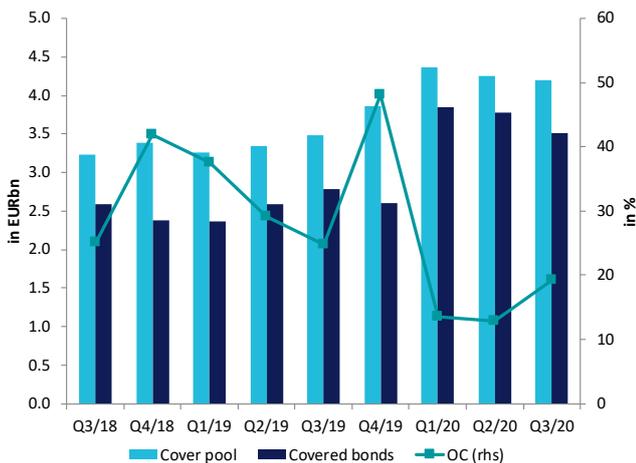
# DekaBank

# Public sector

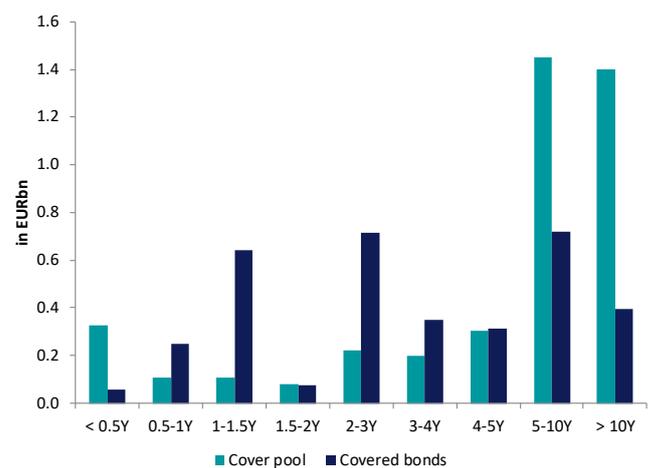
## Indicators of the cover pool

Covered bonds outstanding (EURm)	3,515.8	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	4,193.1	Fixed interest (Cover pool)	80.7%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	100.0%
of which derivatives	0.0%	WAL (Cover pool)	6.4y
Current OC (EURm)	677.3	WAL (Covered bonds)	4.8y
Current OC	19.3%	Largest FX-position (NPV in EURm)	USD (149.1)
Number of loans	248	Share of largest exposure tranche	55.6% (> EUR 100m)
Number of borrowers	87	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	36.4%	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	48,196,644	Risk weight (Benchmarks)	-

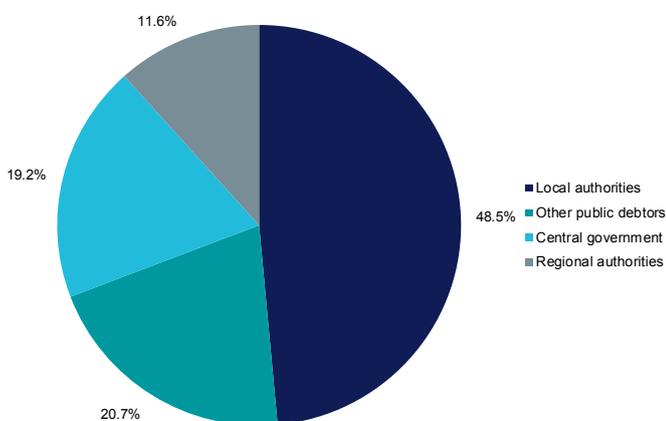
## Past development



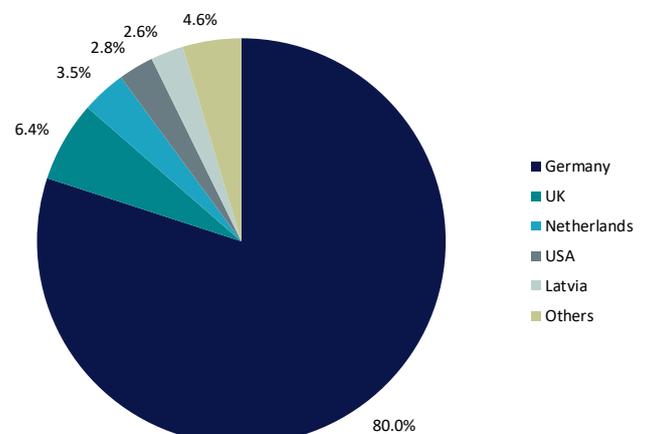
## Maturity structure



## Distribution by borrower type



## Distribution by country



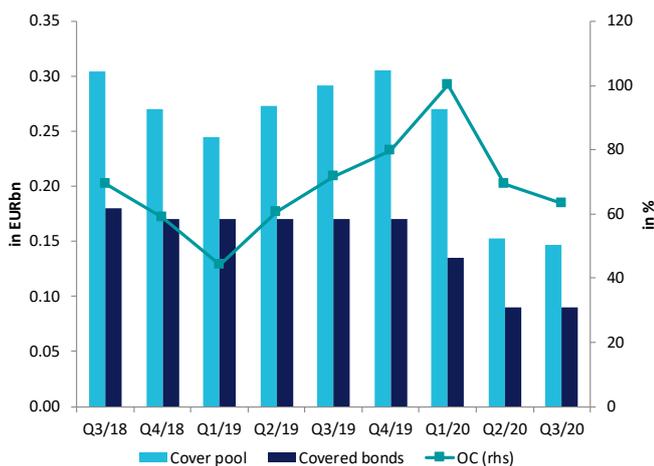
# Deutsche Bank

# Public sector

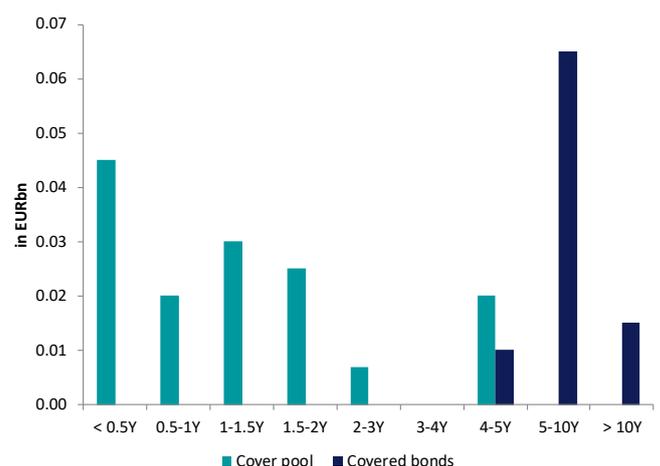
## Indicators of the cover pool

Covered bonds outstanding (EURm)	90.0	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	147.0	Fixed interest (Cover pool)	100.0%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	100.0%
of which derivatives	0.0%	WAL (Cover pool)	n/a
Current OC (EURm)	57.0	WAL (Covered bonds)	n/a
Current OC	63.3%	Largest FX-position (NPV in EURm)	n/a
Number of loans	n/a	Share of largest exposure tranche	95.2% (EUR 10-100m)
Number of borrowers	n/a	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	n/a	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	n/a	Risk weight (Benchmarks)	-

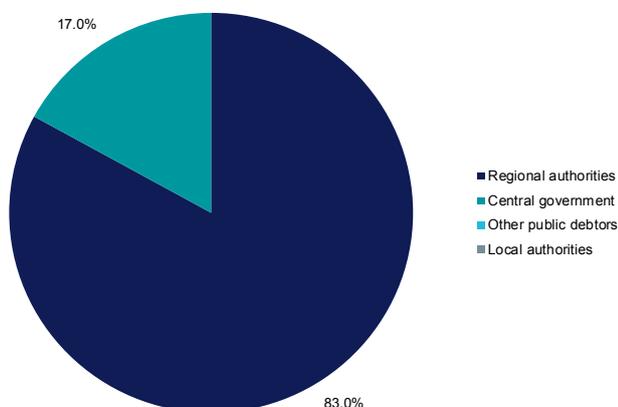
## Past development



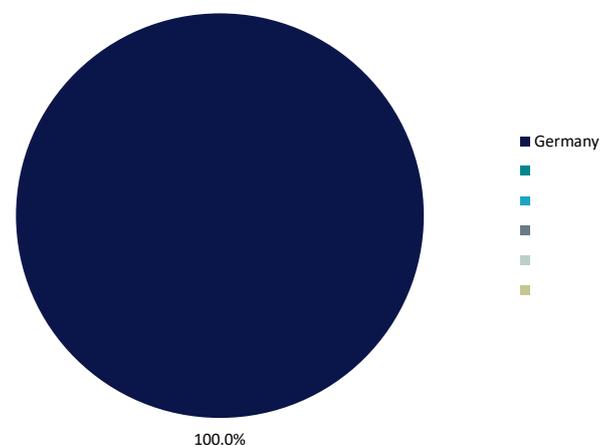
## Maturity structure



## Distribution by borrower type



## Distribution by country



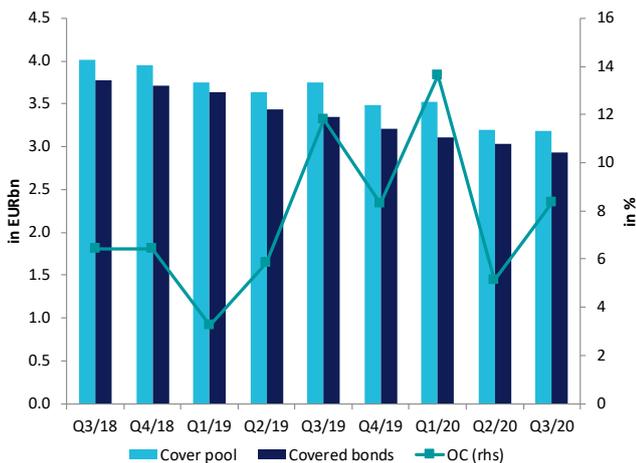
# Deutsche Hypothekbank

# Public sector

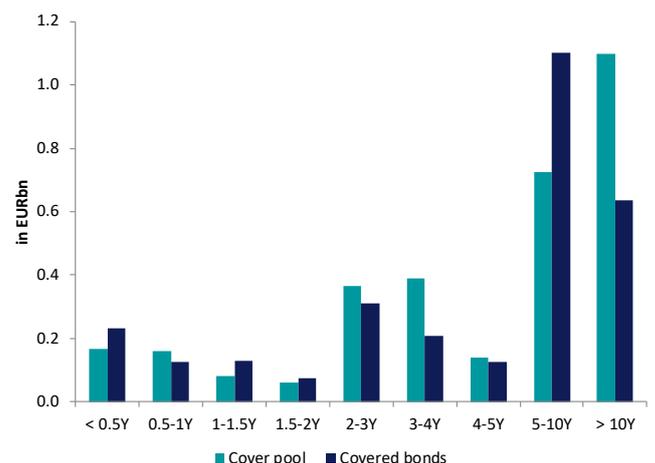
## Indicators of the cover pool

Covered bonds outstanding (EURm)	2,938.7	Rating (Moody's / Fitch / S&P / DBRS)	Aa1 / - / - / -
Cover pool volume (EURm)	3,183.9	Fixed interest (Cover pool)	83.3%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	88.7%
of which derivatives	0.0%	WAL (Cover pool)	8.5y
Current OC (EURm)	245.2	WAL (Covered bonds)	6.4y
Current OC	8.3%	Largest FX-position (NPV in EURm)	GBP (119.4)
Number of loans	126	Share of largest exposure tranche	90.3% (EUR 10-100m)
Number of borrowers	65	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	62.0%	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	48,983,077	Risk weight (Benchmarks)	-

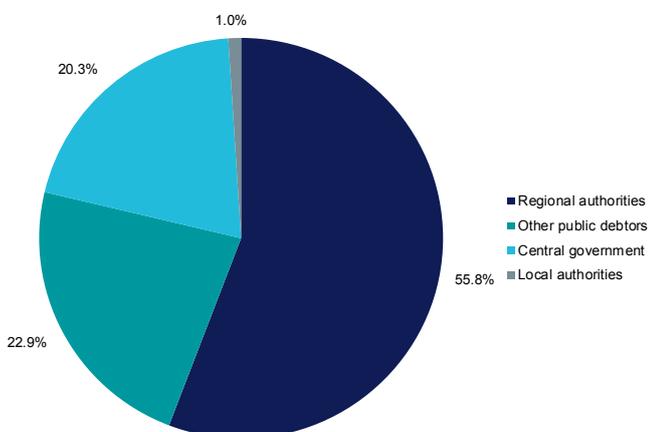
## Past development



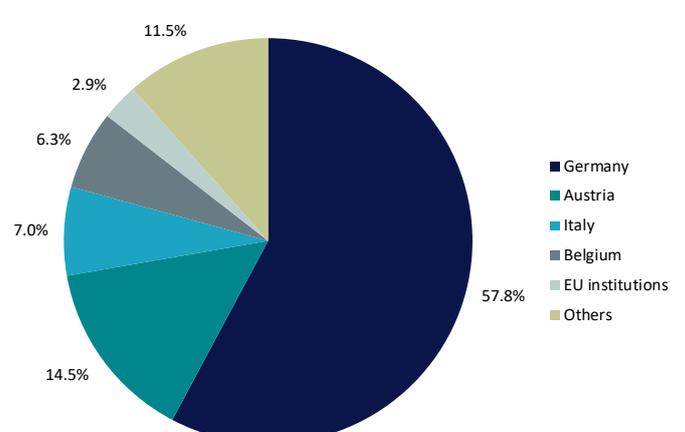
## Maturity structure



## Distribution by borrower type



## Distribution by country



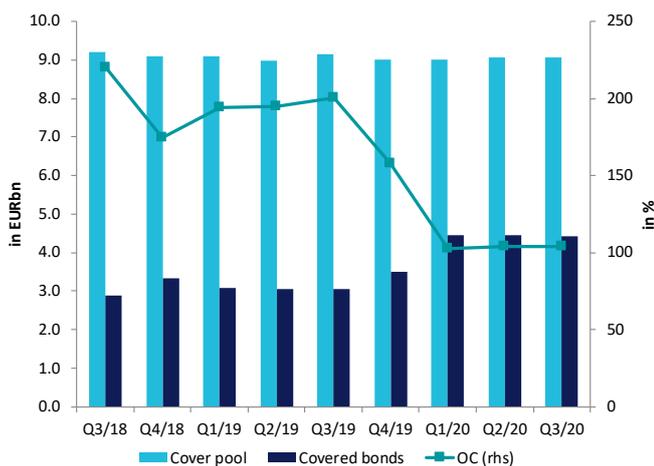
# Deutsche Kreditbank

# Public sector

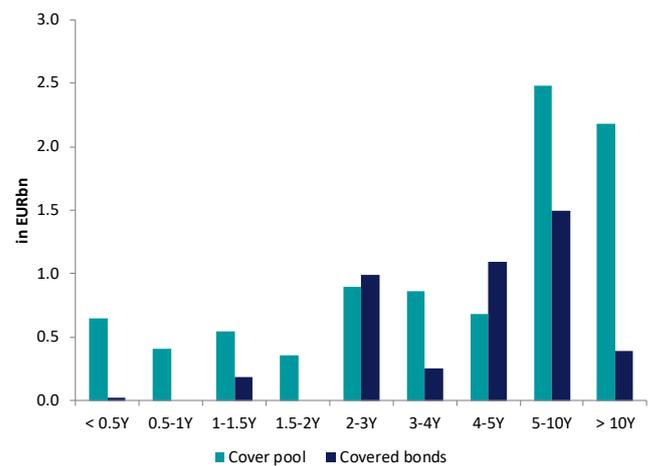
## Indicators of the cover pool

Covered bonds outstanding (EURm)	4,433.3	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	9,050.0	Fixed interest (Cover pool)	95.2%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	98.2%
of which derivatives	0.0%	WAL (Cover pool)	n/a
Current OC (EURm)	4,616.7	WAL (Covered bonds)	n/a
Current OC	104.1%	Largest FX-position (NPV in EURm)	n/a
Number of loans	n/a	Share of largest exposure tranche	48.7% (EUR 10-100m)
Number of borrowers	n/a	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	n/a	LCR level / haircut (Benchmarks)	Level 1 / 7%
Avg. exposure to borrowers (EUR)	n/a	Risk weight (Benchmarks)	10%

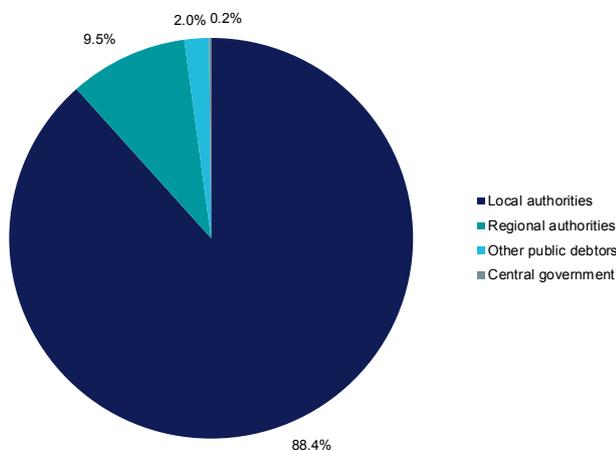
## Past development



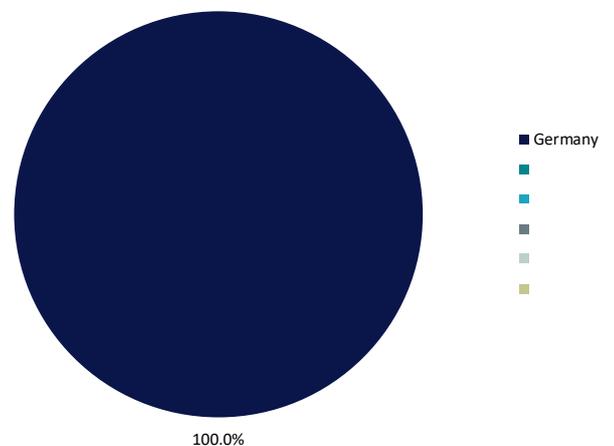
## Maturity structure



## Distribution by borrower type



## Distribution by country



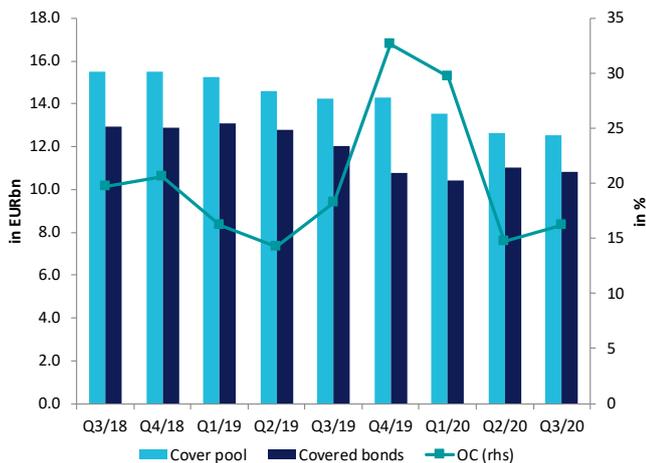
# Deutsche Pfandbriefbank

# Public sector

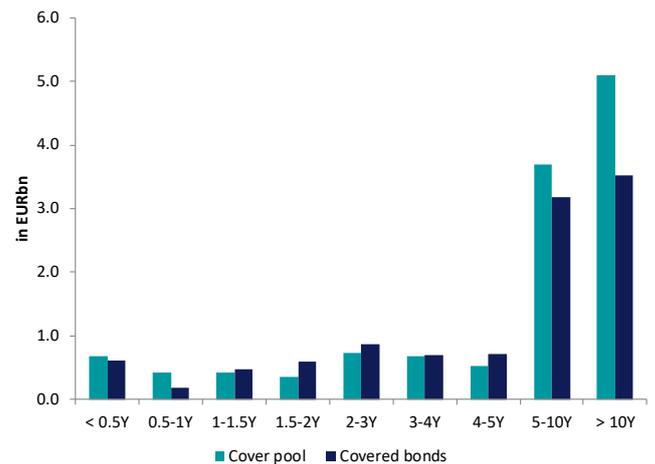
## Indicators of the cover pool

Covered bonds outstanding (EURm)	10,813.0	Rating (Moody's / Fitch / S&P / DBRS)	Aa1 / - / - / -
Cover pool volume (EURm)	12,563.0	Fixed interest (Cover pool)	69.0%
of which substitution assets	0.4%	Fixed interest (Covered bonds)	79.6%
of which derivatives	0.0%	WAL (Cover pool)	9.0y
Current OC (EURm)	1,750.0	WAL (Covered bonds)	7.7y
Current OC	16.2%	Largest FX-position (NPV in EURm)	USD (622.0)
Number of loans	569	Share of largest exposure tranche	66.4% (> EUR 100m)
Number of borrowers	238	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	53.2%	LCR level / haircut (Benchmarks)	Level 1 / 7%
Avg. exposure to borrowers (EUR)	52,584,034	Risk weight (Benchmarks)	10%

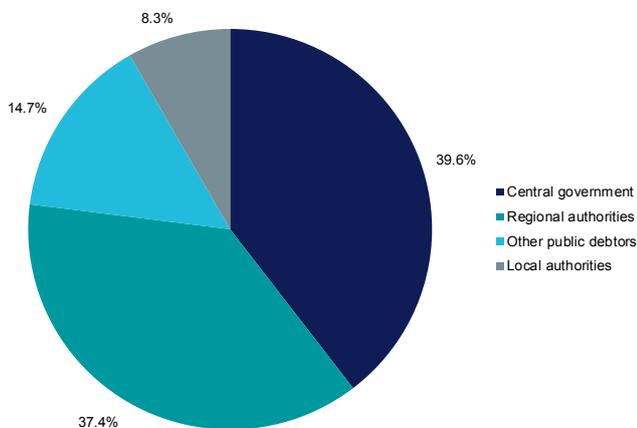
## Past development



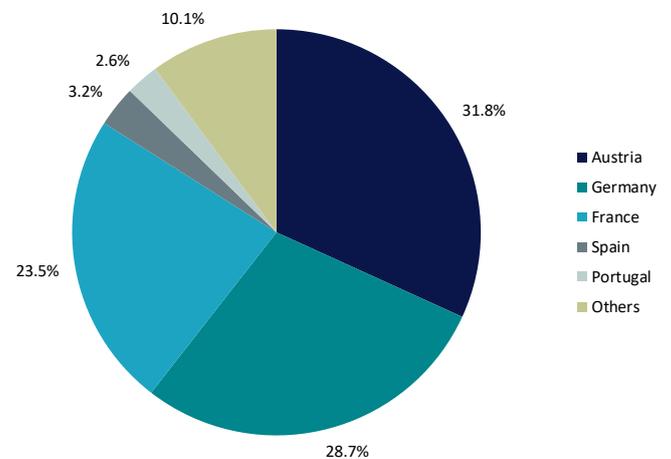
## Maturity structure



## Distribution by borrower type



## Distribution by country



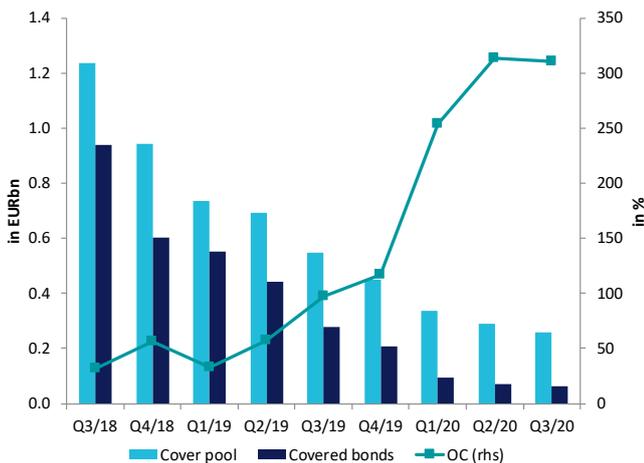
# DSK Hyp

# Public sector

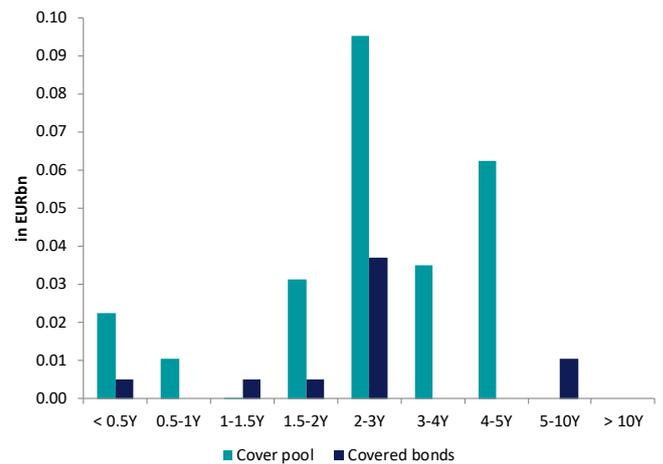
## Indicators of the cover pool

Covered bonds outstanding (EURm)	62.5	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	256.8	Fixed interest (Cover pool)	80.5%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	100.0%
of which derivatives	0.0%	WAL (Cover pool)	2.8y
Current OC (EURm)	194.3	WAL (Covered bonds)	3.1y
Current OC	310.9%	Largest FX-position (NPV in EURm)	n/a
Number of loans	6	Share of largest exposure tranche	76.0% (EUR 10-100m)
Number of borrowers	5	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	40.8%	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	51,362,400	Risk weight (Benchmarks)	-

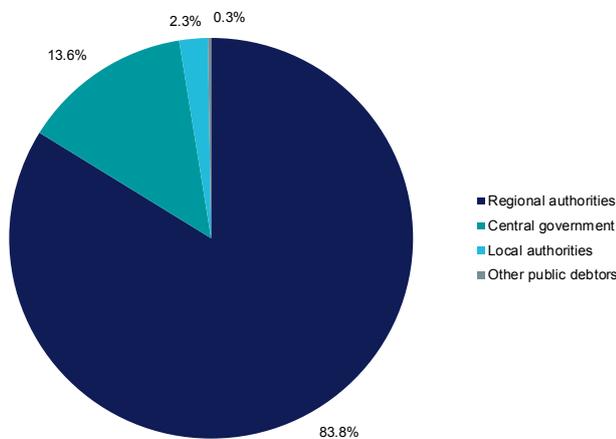
## Past development



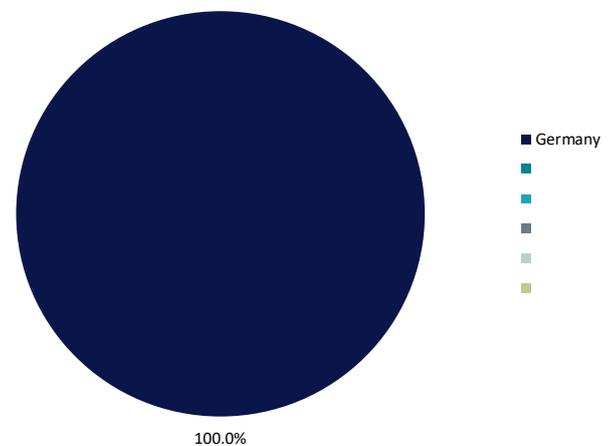
## Maturity structure



## Distribution by borrower type



## Distribution by country



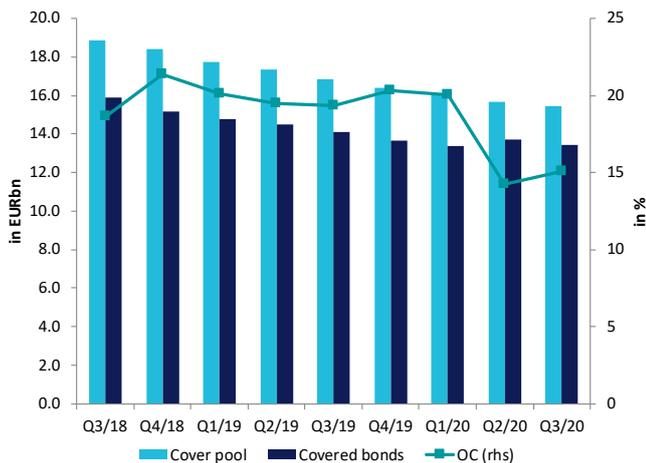
# DZ HYP

# Public sector

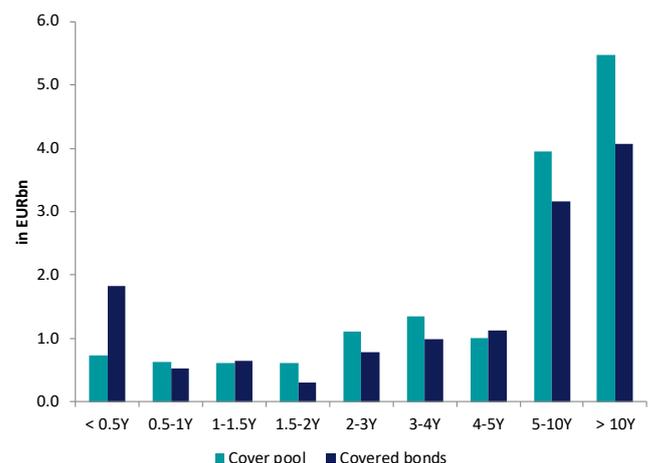
## Indicators of the cover pool

Covered bonds outstanding (EURm)	13,424.1	Rating (Moody's / Fitch / S&P / DBRS)	- / - / AAA / -
Cover pool volume (EURm)	15,444.7	Fixed interest (Cover pool)	96.1%
of which substitution assets	0.4%	Fixed interest (Covered bonds)	95.6%
of which derivatives	0.0%	WAL (Cover pool)	8.5y
Current OC (EURm)	2,020.6	WAL (Covered bonds)	7.4y
Current OC	15.1%	Largest FX-position (NPV in EURm)	USD (147.6)
Number of loans	18,090	Share of largest exposure tranche	38.5% (< EUR 10m)
Number of borrowers	5,221	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	15.7%	LCR level / haircut (Benchmarks)	Level 1 / 7%
Avg. exposure to borrowers (EUR)	2,958,190	Risk weight (Benchmarks)	10%

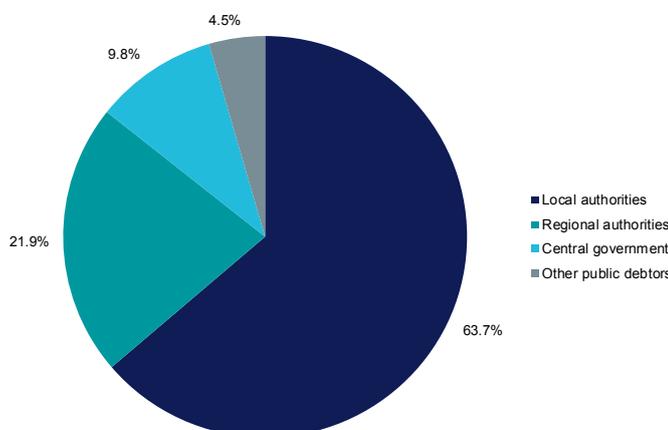
## Past development



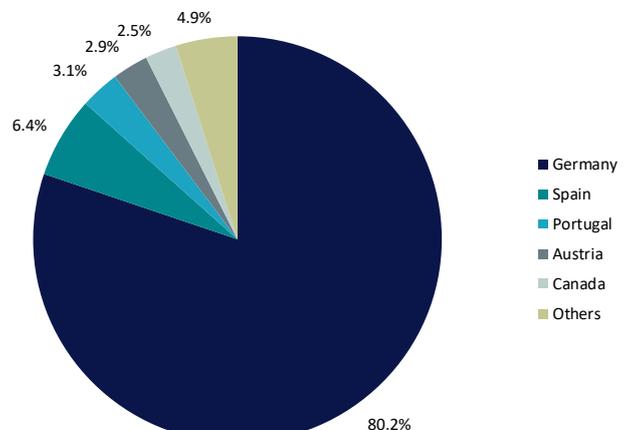
## Maturity structure



## Distribution by borrower type



## Distribution by country



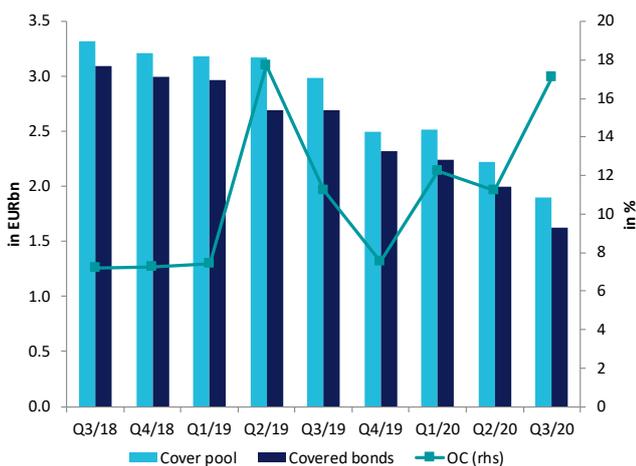
# Hamburg Commercial Bank

# Public sector

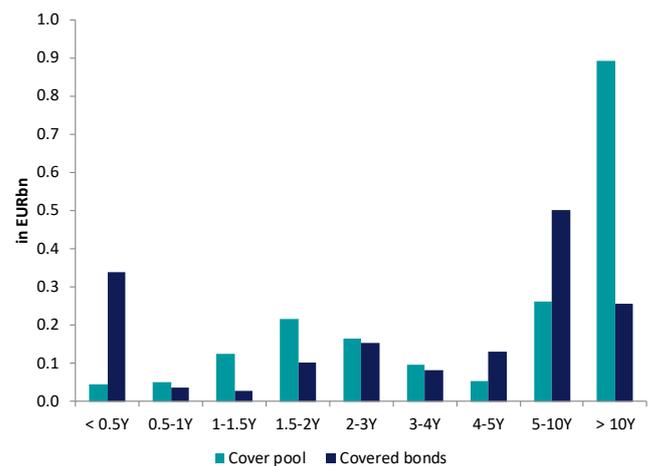
## Indicators of the cover pool

Covered bonds outstanding (EURm)	1,626.1	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	1,903.7	Fixed interest (Cover pool)	91.6%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	94.5%
of which derivatives	0.0%	WAL (Cover pool)	9.7y
Current OC (EURm)	277.6	WAL (Covered bonds)	5.3y
Current OC	17.1%	Largest FX-position (NPV in EURm)	CHF (109.2)
Number of loans	115	Share of largest exposure tranche	53.7% (> EUR 100m)
Number of borrowers	66	Loans in arrears (> 90 days)	0.01%
Share of 10 largest borrowers	75.8%	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	28,842,424	Risk weight (Benchmarks)	-

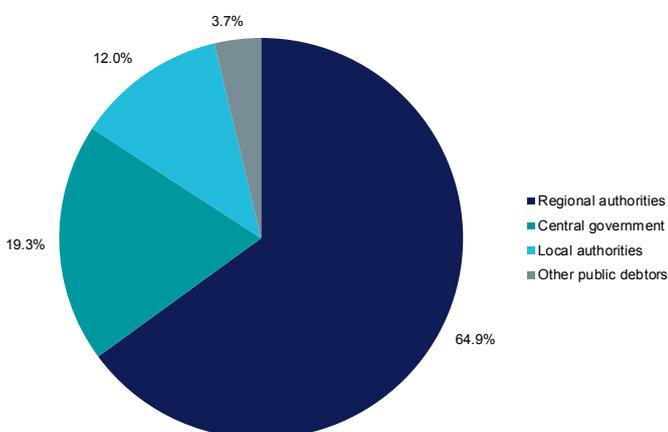
## Past development



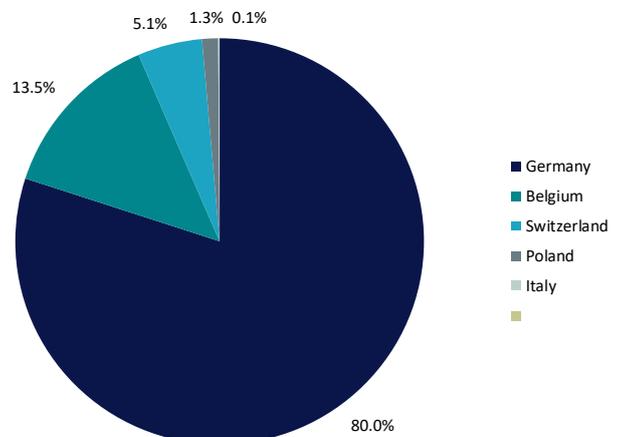
## Maturity structure



## Distribution by borrower type



## Distribution by country



# Kreissparkasse Köln

# Public sector

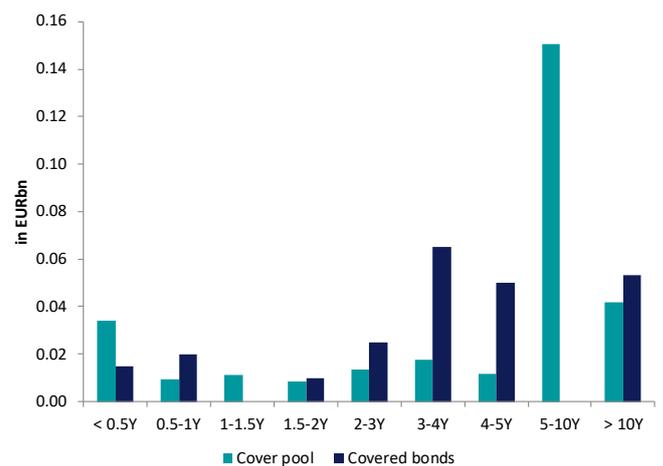
## Indicators of the cover pool

Covered bonds outstanding (EURm)	238.4	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	297.7	Fixed interest (Cover pool)	100.0%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	100.0%
of which derivatives	0.0%	WAL (Cover pool)	6.1y
Current OC (EURm)	59.3	WAL (Covered bonds)	5.0y
Current OC	24.9%	Largest FX-position (NPV in EURm)	n/a
Number of loans	145	Share of largest exposure tranche	51.5% (EUR 10-100m)
Number of borrowers	47	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	68.9%	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	6,334,860	Risk weight (Benchmarks)	-

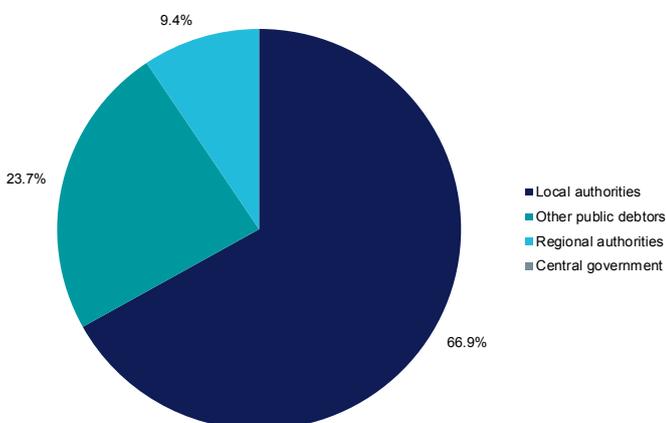
## Past development



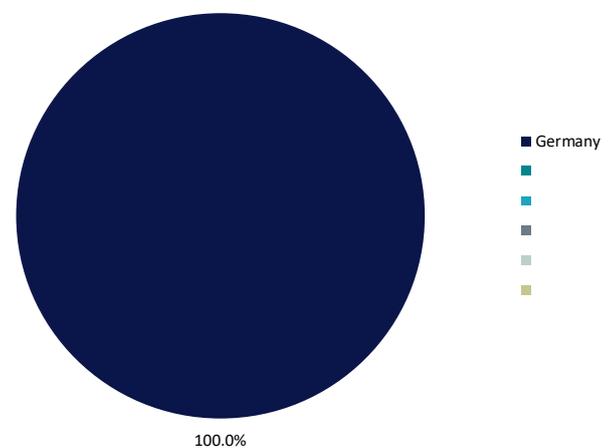
## Maturity structure



## Distribution by borrower type



## Distribution by country



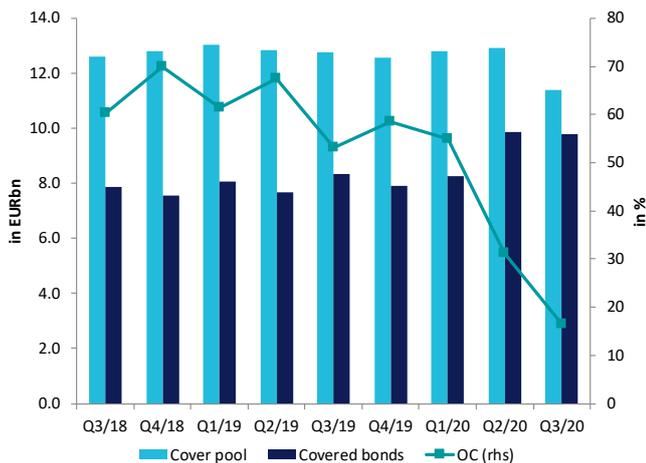
# Landesbank Baden-Württemberg

# Public sector

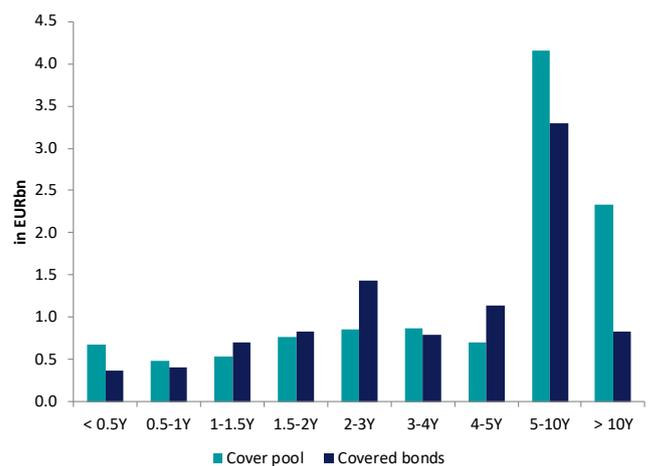
## Indicators of the cover pool

Covered bonds outstanding (EURm)	9,792.0	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	11,393.1	Fixed interest (Cover pool)	82.7%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	76.0%
of which derivatives	0.0%	WAL (Cover pool)	6.6y
Current OC (EURm)	1,601.1	WAL (Covered bonds)	5.2y
Current OC	16.4%	Largest FX-position (NPV in EURm)	USD (-2.9)
Number of loans	7,097	Share of largest exposure tranche	46.4% (> EUR 100m)
Number of borrowers	2,809	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	28.4%	LCR level / haircut (Benchmarks)	Level 1 / 7%
Avg. exposure to borrowers (EUR)	4,055,936	Risk weight (Benchmarks)	10%

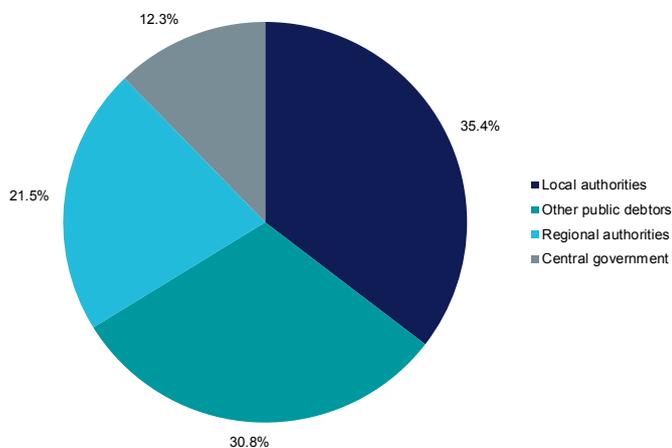
## Past development



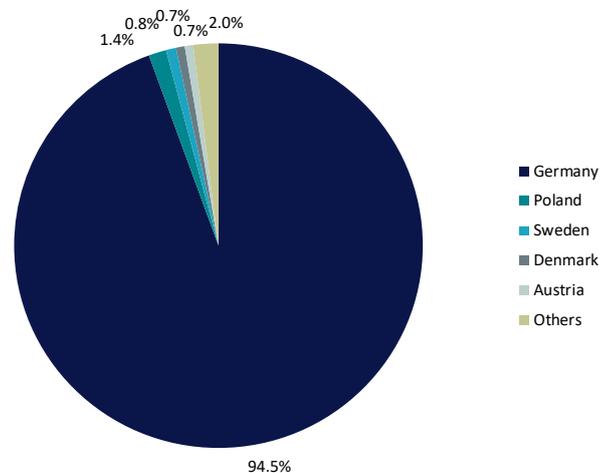
## Maturity structure



## Distribution by borrower type



## Distribution by country



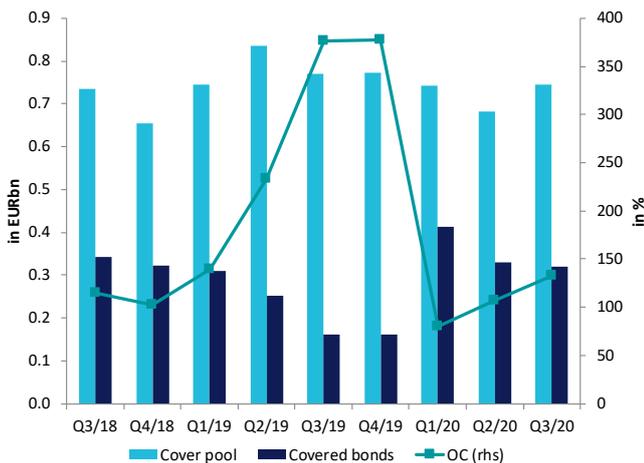
# Landesbank Berlin

# Public sector

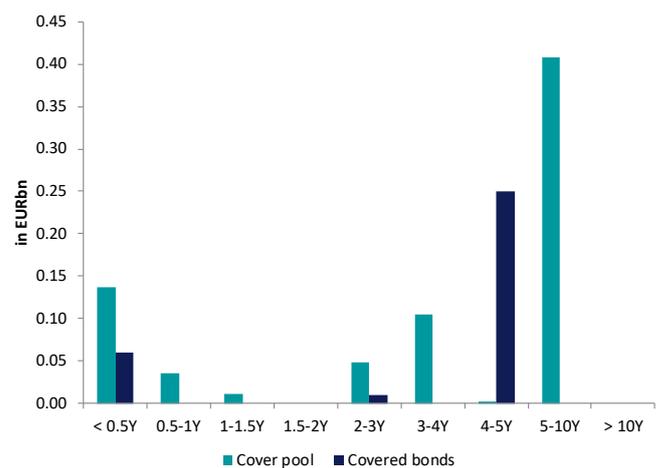
## Indicators of the cover pool

Covered bonds outstanding (EURm)	320.0	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	746.0	Fixed interest (Cover pool)	100.0%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	92.0%
of which derivatives	0.0%	WAL (Cover pool)	5.6y
Current OC (EURm)	426.0	WAL (Covered bonds)	3.8y
Current OC	133.1%	Largest FX-position (NPV in EURm)	n/a
Number of loans	32	Share of largest exposure tranche	71.9% (> EUR 100m)
Number of borrowers	16	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	99.0%	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	46,625,500	Risk weight (Benchmarks)	-

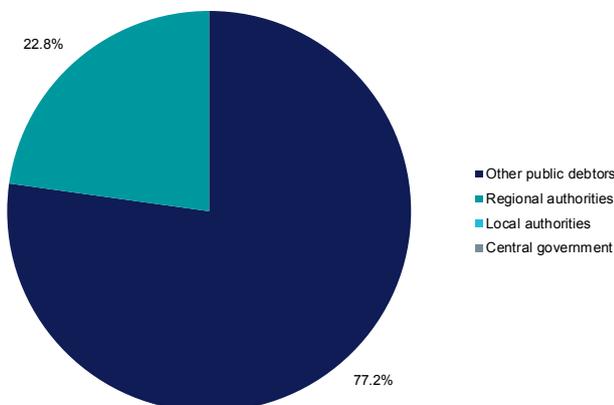
## Past development



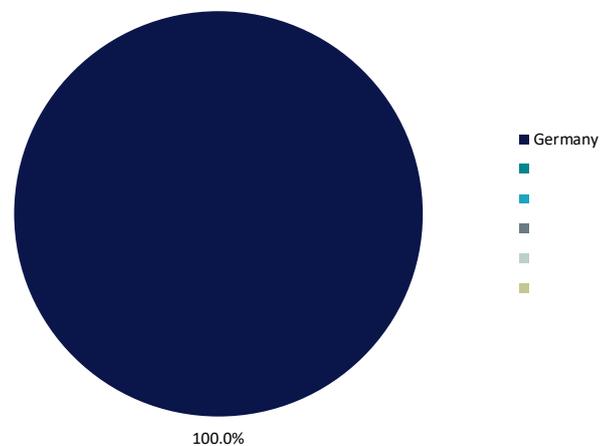
## Maturity structure



## Distribution by borrower type



## Distribution by country



# Landesbank Hessen-Thüringen

# Public sector

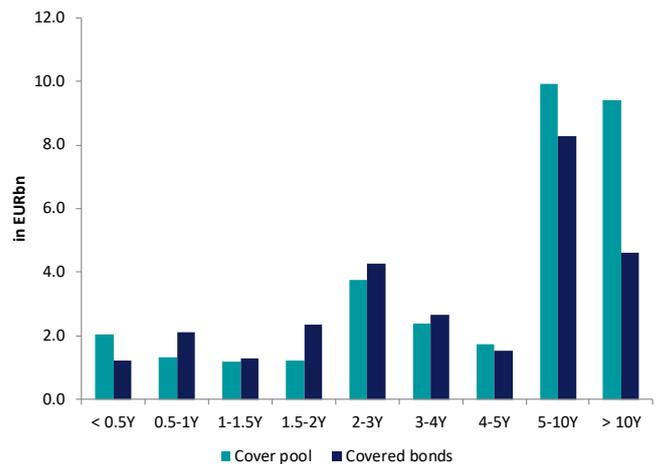
## Indicators of the cover pool

Covered bonds outstanding (EURm)	28,318.7	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / AAA / - / -
Cover pool volume (EURm)	32,993.8	Fixed interest (Cover pool)	94.5%
of which substitution assets	0.4%	Fixed interest (Covered bonds)	89.2%
of which derivatives	0.0%	WAL (Cover pool)	7.8y
Current OC (EURm)	4,675.1	WAL (Covered bonds)	6.1y
Current OC	16.5%	Largest FX-position (NPV in EURm)	CHF (137.6)
Number of loans	20,692	Share of largest exposure tranche	62.4% (> EUR 100m)
Number of borrowers	5,308	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	32.0%	LCR level / haircut (Benchmarks)	Level 1 / 7%
Avg. exposure to borrowers (EUR)	6,189,959	Risk weight (Benchmarks)	10%

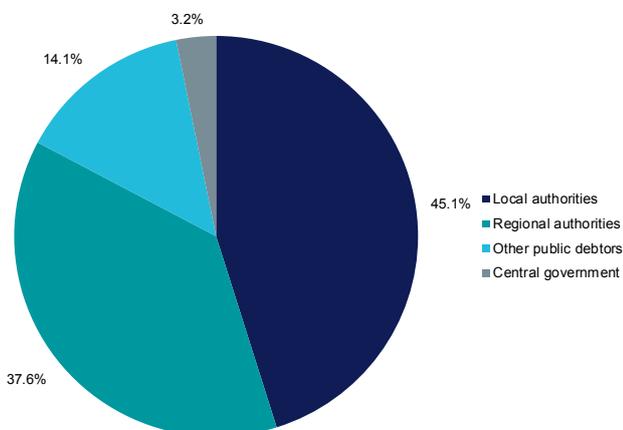
## Past development



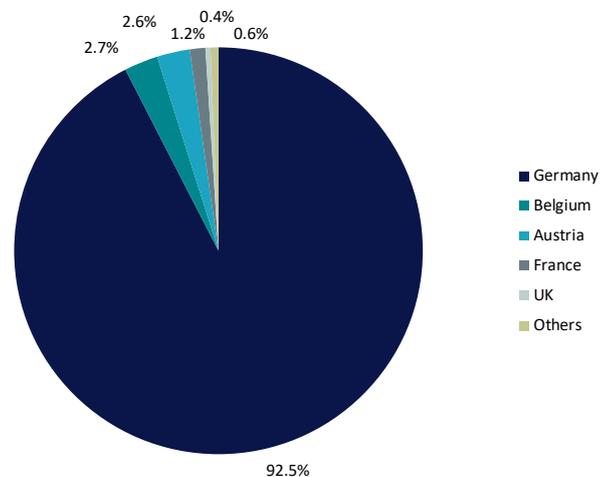
## Maturity structure



## Distribution by borrower type



## Distribution by country



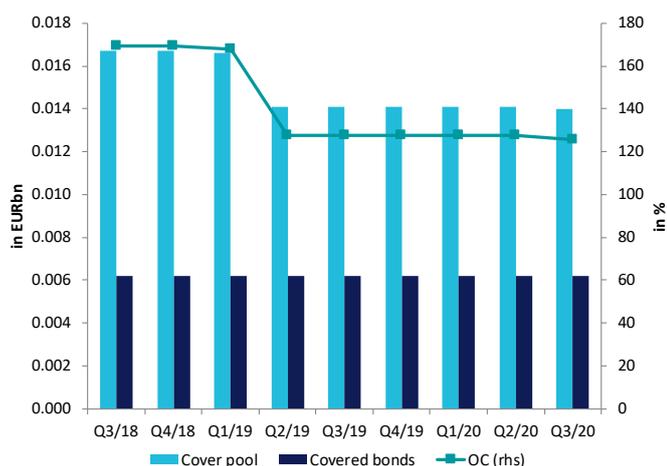
# M.M. Warburg & CO Hypothekenbank

# Public sector

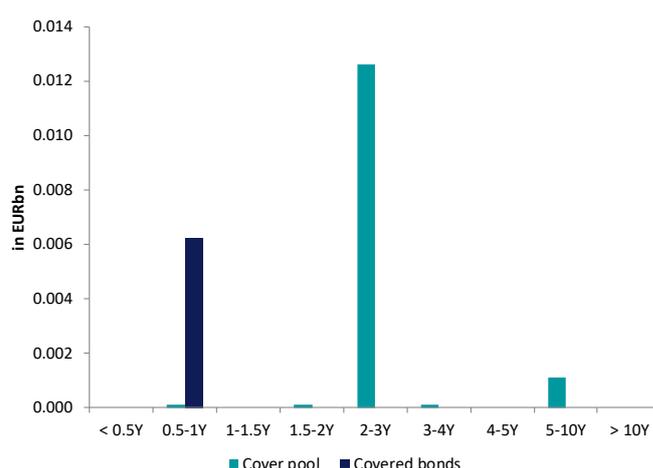
## Indicators of the cover pool

Covered bonds outstanding (EURm)	6.2	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	14.0	Fixed interest (Cover pool)	64.4%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	100.0%
of which derivatives	0.0%	WAL (Cover pool)	2.4y
Current OC (EURm)	7.8	WAL (Covered bonds)	0.8y
Current OC	125.8%	Largest FX-position (NPV in EURm)	n/a
Number of loans	1	Share of largest exposure tranche	100.0% (< EUR 10m)
Number of borrowers	1	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	n/a	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	14,000,000	Risk weight (Benchmarks)	-

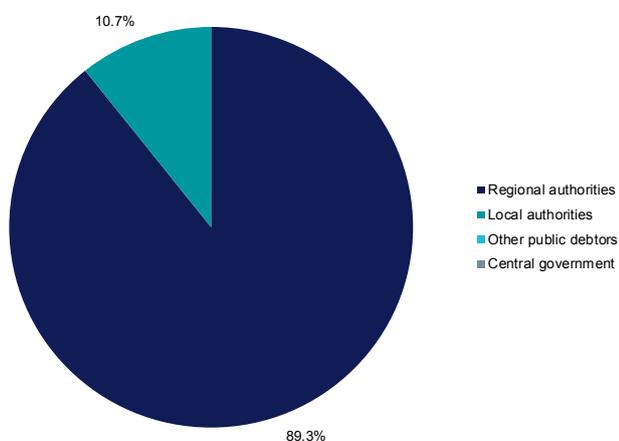
## Past development



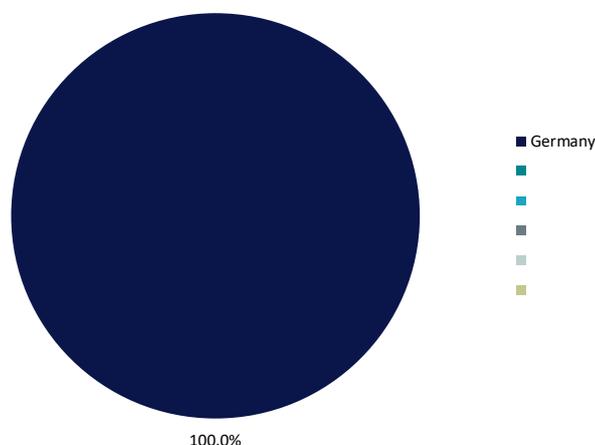
## Maturity structure



## Distribution by borrower type



## Distribution by country



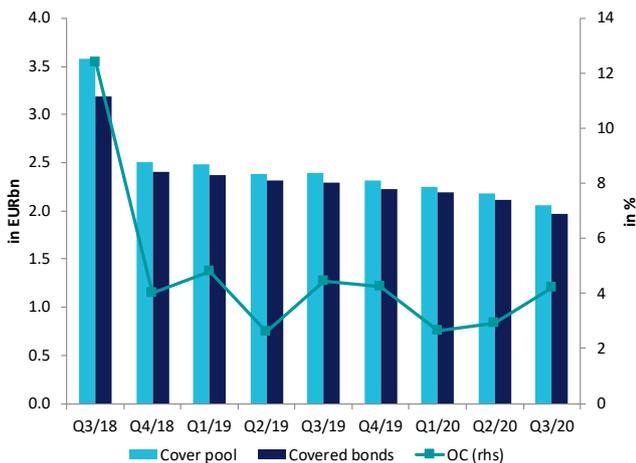
# Münchener Hypothekbank

# Public sector

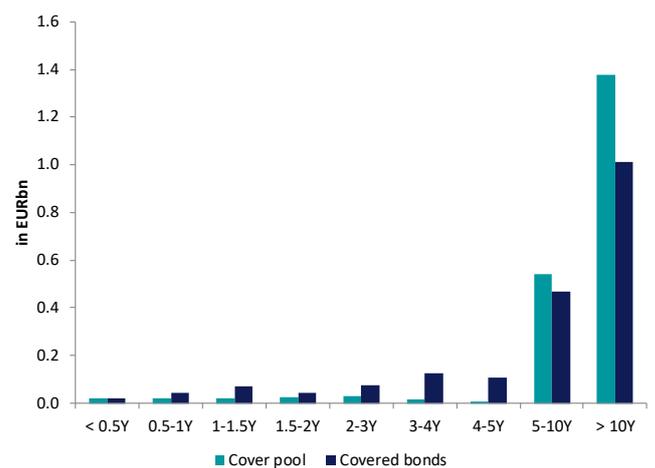
## Indicators of the cover pool

Covered bonds outstanding (EURm)	1,975.3	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	2,058.1	Fixed interest (Cover pool)	93.0%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	91.0%
of which derivatives	0.0%	WAL (Cover pool)	14.0y
Current OC (EURm)	82.8	WAL (Covered bonds)	8.0y
Current OC	4.2%	Largest FX-position (NPV in EURm)	JPY (13.5)
Number of loans	682	Share of largest exposure tranche	70.7% (> EUR 100m)
Number of borrowers	496	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	86.5%	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	4,149,401	Risk weight (Benchmarks)	-

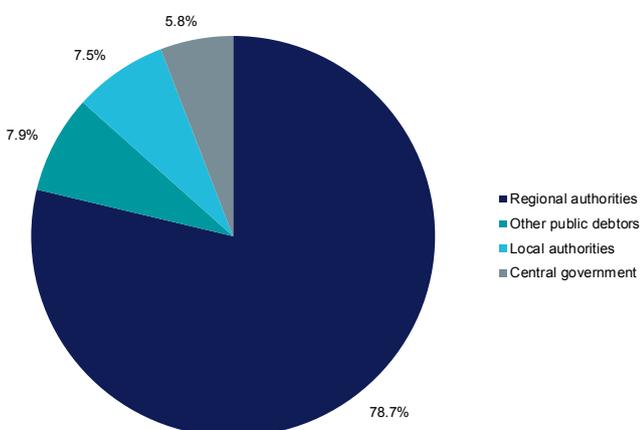
## Past development



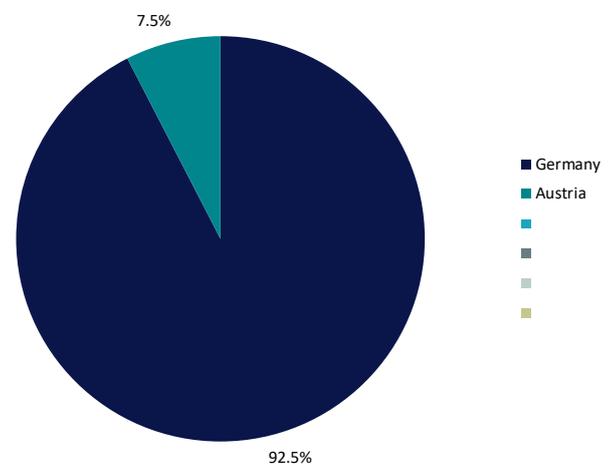
## Maturity structure



## Distribution by borrower type



## Distribution by country



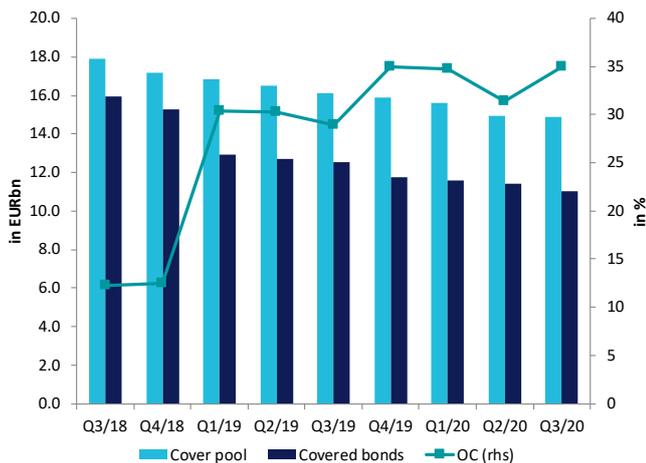
## Norddeutsche Landesbank

## Public sector

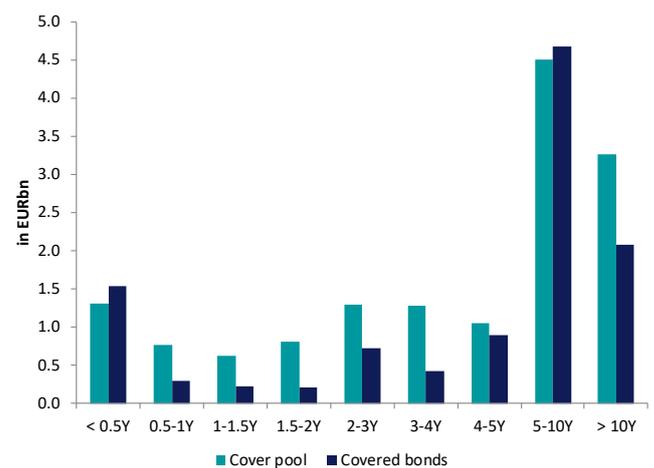
### Indicators of the cover pool

Covered bonds outstanding (EURm)	11,019.4	Rating (Moody's / Fitch / S&P / DBRS)	Aa1 / - / - / -
Cover pool volume (EURm)	14,870.9	Fixed interest (Cover pool)	89.6%
of which substitution assets	5.3%	Fixed interest (Covered bonds)	96.4%
of which derivatives	0.0%	WAL (Cover pool)	6.6y
Current OC (EURm)	3,851.5	WAL (Covered bonds)	6.4y
Current OC	35.0%	Largest FX-position (NPV in EURm)	USD (164.4)
Number of loans	4,187	Share of largest exposure tranche	42.4% (> EUR 100m)
Number of borrowers	1,474	Loans in arrears (> 90 days)	0.02%
Share of 10 largest borrowers	22.7%	LCR level / haircut (Benchmarks)	Level 1 / 7%
Avg. exposure to borrowers (EUR)	9,553,460	Risk weight (Benchmarks)	10%

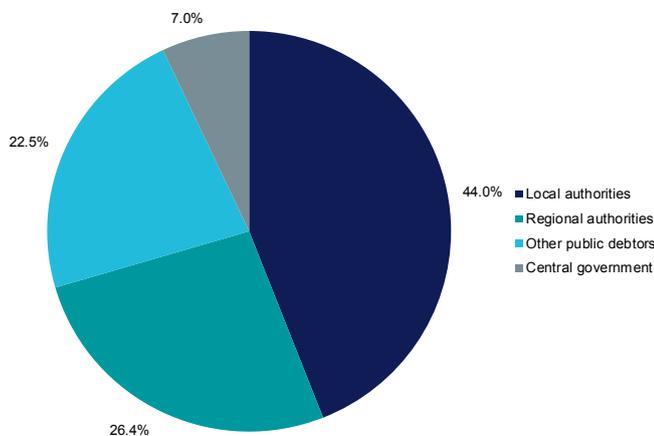
### Past development



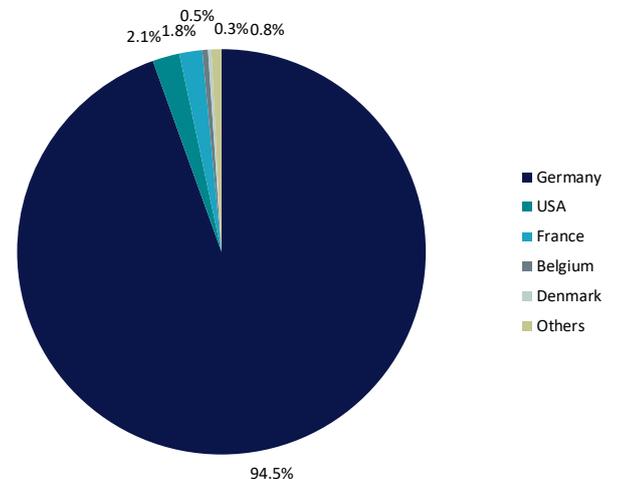
### Maturity structure



### Distribution by borrower type



### Distribution by country



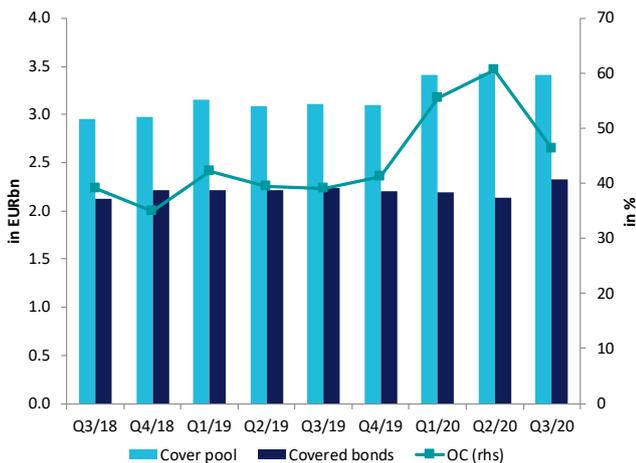
# SaarLB

# Public sector

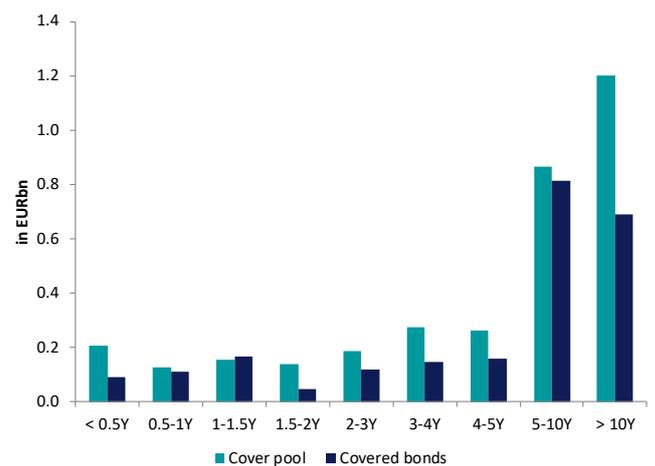
## Indicators of the cover pool

Covered bonds outstanding (EURm)	2,332.3	Rating (Moody's / Fitch / S&P / DBRS)	- / AAA / - / -
Cover pool volume (EURm)	3,410.9	Fixed interest (Cover pool)	75.5%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	94.2%
of which derivatives	0.0%	WAL (Cover pool)	n/a
Current OC (EURm)	1,078.6	WAL (Covered bonds)	n/a
Current OC	46.2%	Largest FX-position (NPV in EURm)	n/a
Number of loans	n/a	Share of largest exposure tranche	62.5% (EUR 10-100m)
Number of borrowers	n/a	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	n/a	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	n/a	Risk weight (Benchmarks)	-

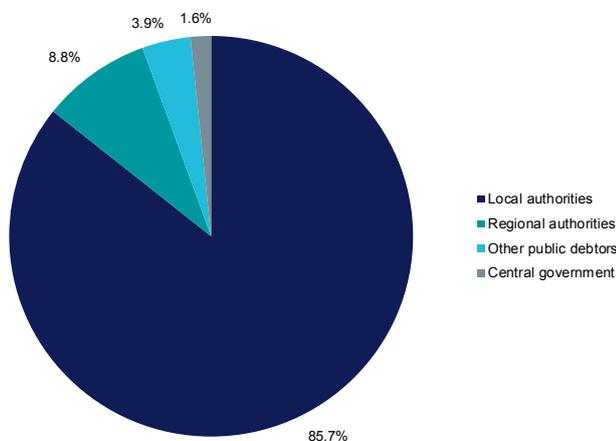
## Past development



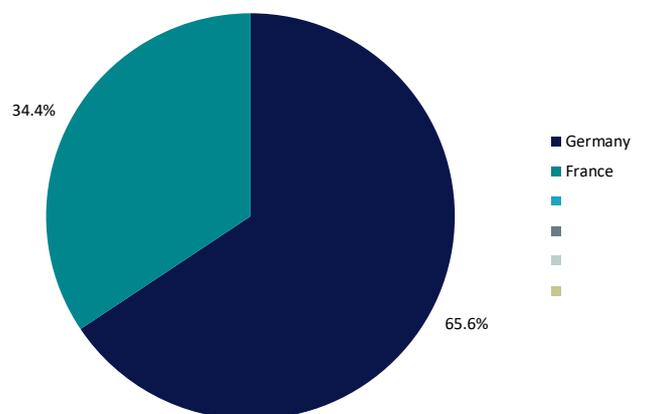
## Maturity structure



## Distribution by borrower type



## Distribution by country



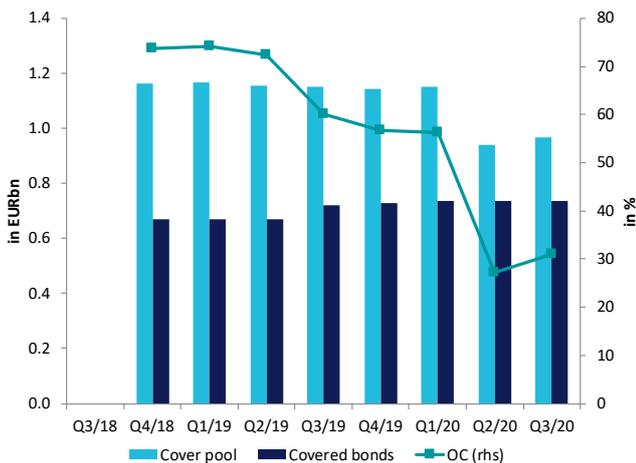
# Sparkasse Hannover

# Public sector

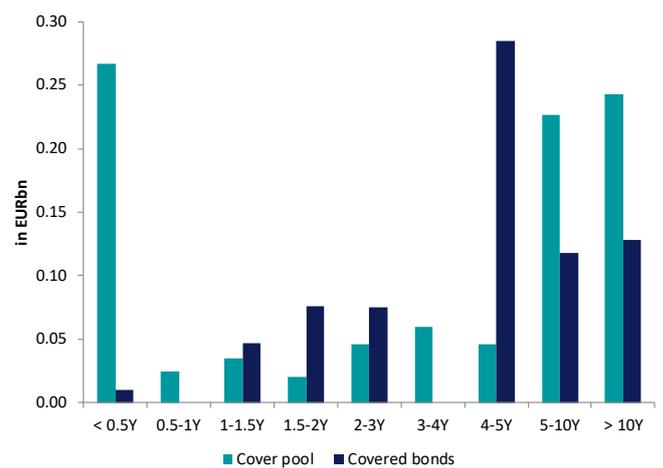
## Indicators of the cover pool

Covered bonds outstanding (EURm)	738.1	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	967.4	Fixed interest (Cover pool)	97.6%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	100.0%
of which derivatives	0.0%	WAL (Cover pool)	n/a
Current OC (EURm)	229.3	WAL (Covered bonds)	n/a
Current OC	31.1%	Largest FX-position (NPV in EURm)	n/a
Number of loans	n/a	Share of largest exposure tranche	45.8% (EUR 10-100m)
Number of borrowers	n/a	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	n/a	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	n/a	Risk weight (Benchmarks)	-

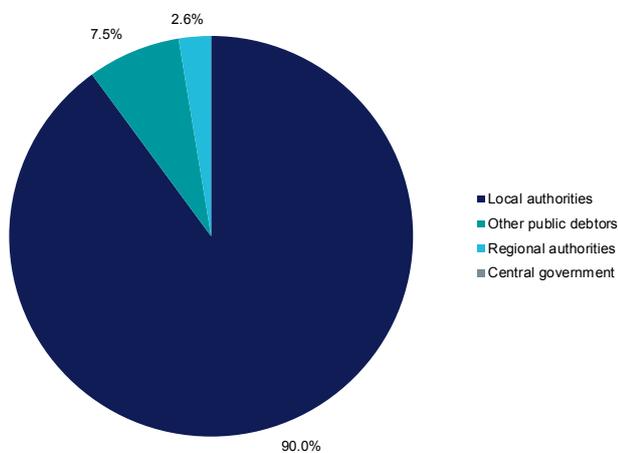
## Past development



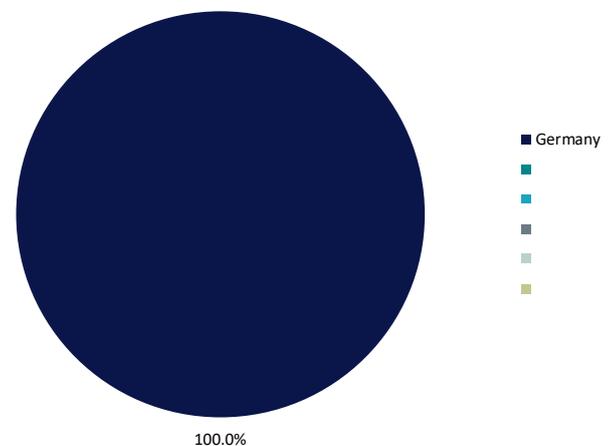
## Maturity structure



## Distribution by borrower type



## Distribution by country



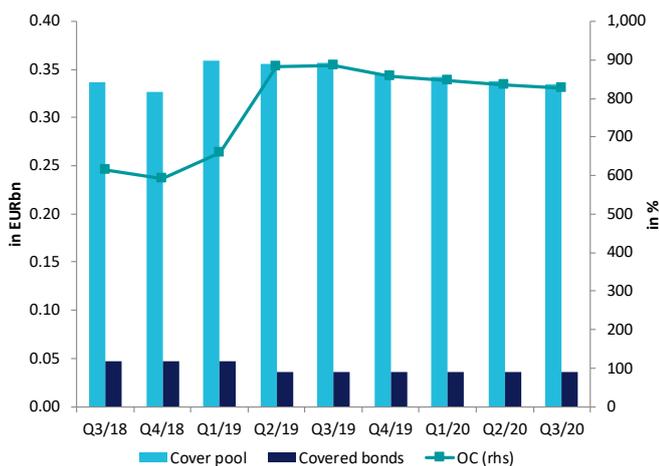
# Sparkasse KölnBonn

# Public sector

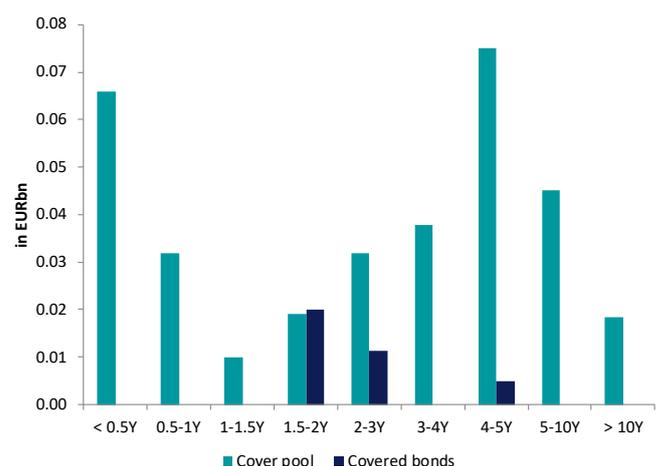
## Indicators of the cover pool

Covered bonds outstanding (EURm)	36.2	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	335.0	Fixed interest (Cover pool)	0.0%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	0.0%
of which derivatives	0.0%	WAL (Cover pool)	n/a
Current OC (EURm)	298.8	WAL (Covered bonds)	n/a
Current OC	825.4%	Largest FX-position (NPV in EURm)	n/a
Number of loans	n/a	Share of largest exposure tranche	85.3% (EUR 10-100m)
Number of borrowers	n/a	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	n/a	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	n/a	Risk weight (Benchmarks)	-

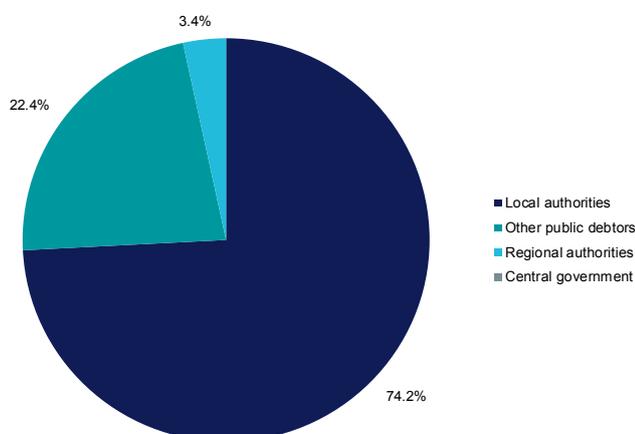
## Past development



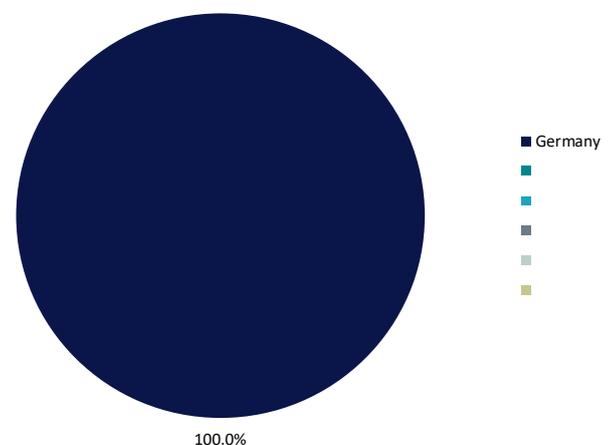
## Maturity structure



## Distribution by borrower type



## Distribution by country



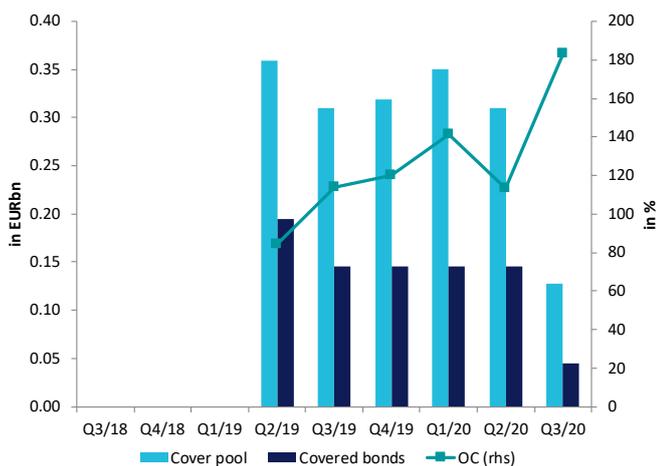
# Stadtparkasse Düsseldorf

# Public sector

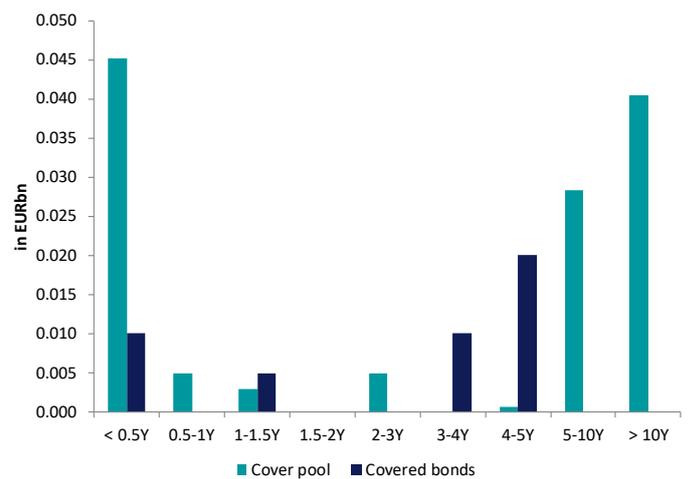
## Indicators of the cover pool

Covered bonds outstanding (EURm)	45.0	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	127.4	Fixed interest (Cover pool)	100.0%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	100.0%
of which derivatives	0.0%	WAL (Cover pool)	n/a
Current OC (EURm)	82.4	WAL (Covered bonds)	n/a
Current OC	183.0%	Largest FX-position (NPV in EURm)	n/a
Number of loans	n/a	Share of largest exposure tranche	60.4% (EUR 10-100m)
Number of borrowers	n/a	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	n/a	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	n/a	Risk weight (Benchmarks)	-

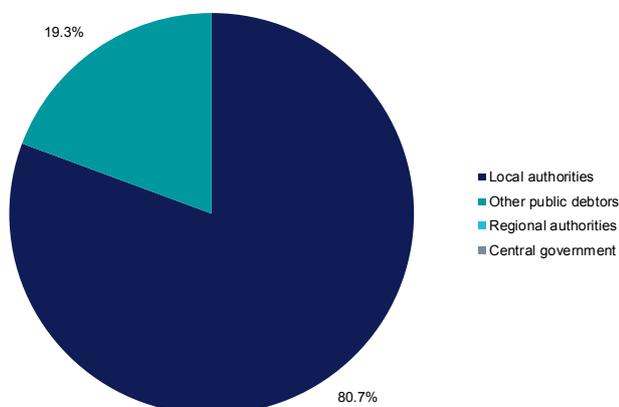
## Past development



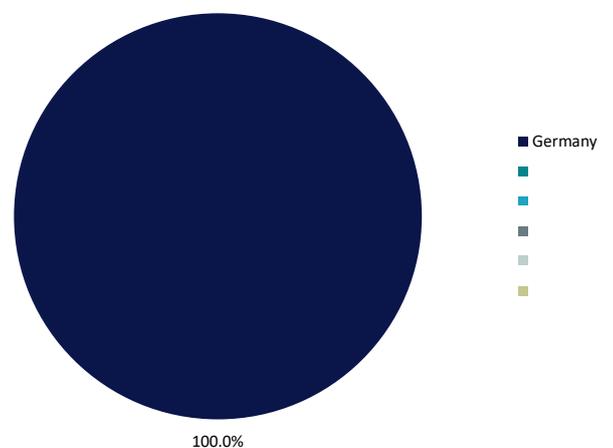
## Maturity structure



## Distribution by borrower type



## Distribution by country



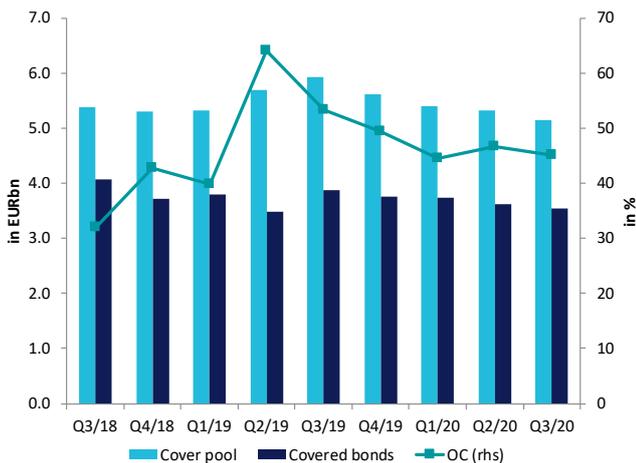
## UniCredit Bank

## Public sector

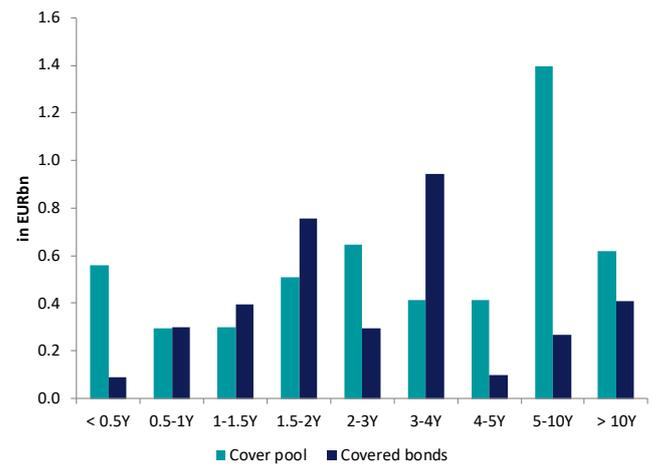
### Indicators of the cover pool

Covered bonds outstanding (EURm)	3,549.1	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / AAA / - / -
Cover pool volume (EURm)	5,150.0	Fixed interest (Cover pool)	63.3%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	92.8%
of which derivatives	0.0%	WAL (Cover pool)	5.1y
Current OC (EURm)	1,600.9	WAL (Covered bonds)	4.7y
Current OC	45.1%	Largest FX-position (NPV in EURm)	USD (-48.5)
Number of loans	1,729	Share of largest exposure tranche	47.4% (> EUR 100m)
Number of borrowers	946	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	31.8%	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	5,443,975	Risk weight (Benchmarks)	-

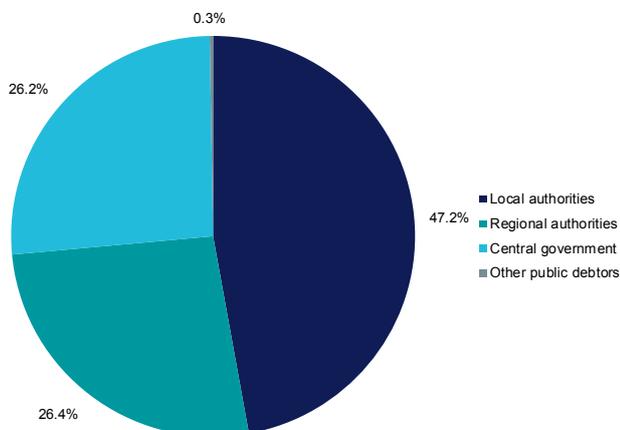
### Past development



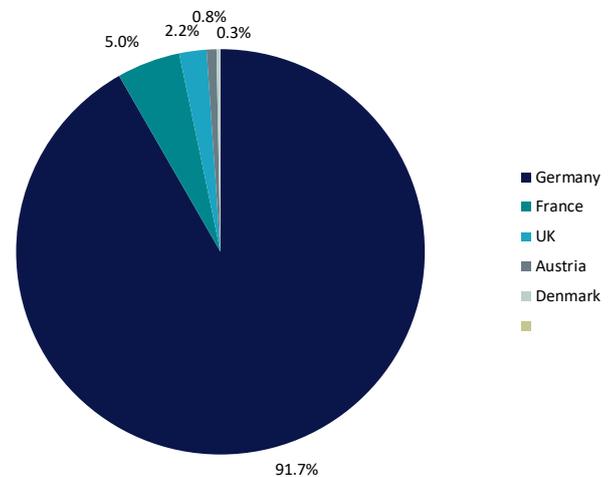
### Maturity structure



### Distribution by borrower type



### Distribution by country



# Ship covered bonds

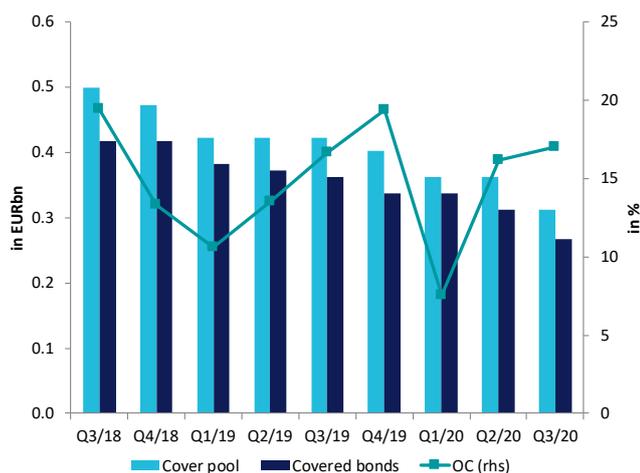
## Commerzbank

## Ship

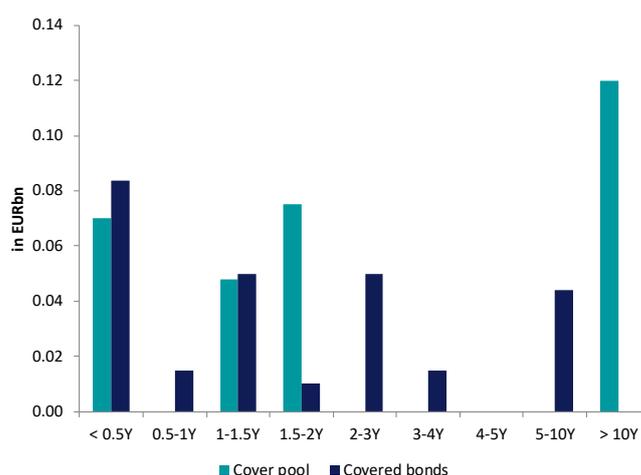
## Indicators of the cover pool

Covered bonds outstanding (EURm)	267.5	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	313.0	Fixed interest (Cover pool)	100.0%
of which substitution assets	100.0%	Fixed interest (Covered bonds)	79.3%
of which derivatives	0.0%	WAL (Cover pool)	6.7y
Current OC (EURm)	45.5	WAL (Covered bonds)	1.8y
Current OC	17.0%	Largest FX-position (NPV in EURm)	n/a
Number of loans	n/a	Share of largest exposure tranche	n/a
Number of borrowers	n/a	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	n/a	LCR level / haircut (Benchmarks)	-
		Risk weight (Benchmarks)	-

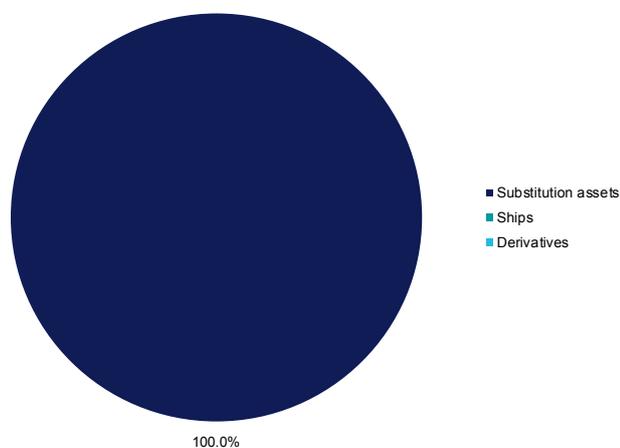
## Past development



## Maturity structure



## Distribution by borrower type



## Ships by country

n/a

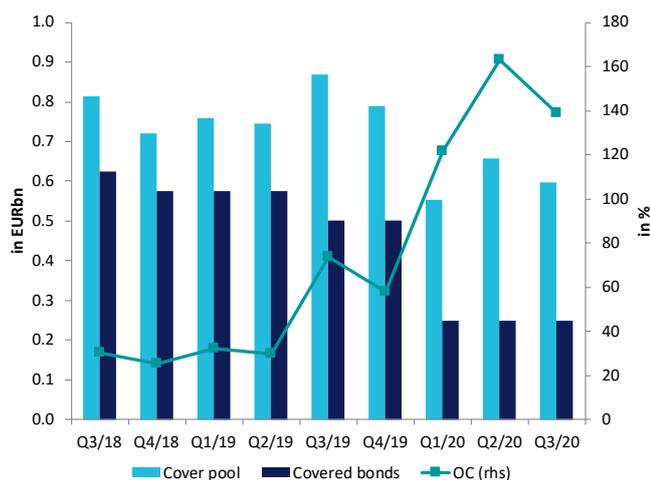
## DVB Bank

## Ship

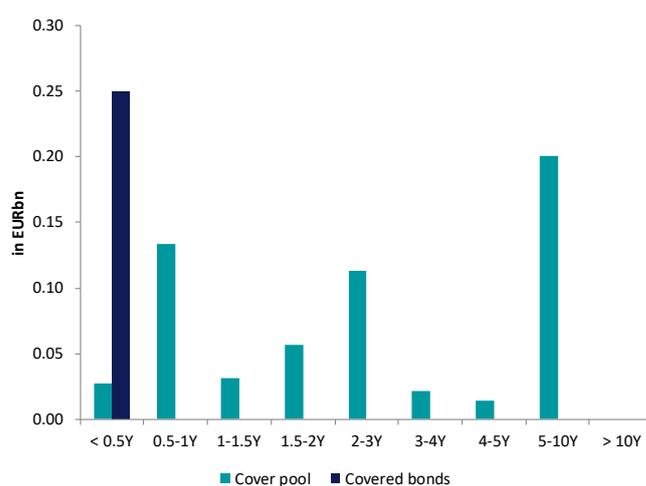
## Indicators of the cover pool

Covered bonds outstanding (EURm)	250.0	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	597.3	Fixed interest (Cover pool)	0.0%
of which substitution assets	36.1%	Fixed interest (Covered bonds)	37.6%
of which derivatives	0.0%	WAL (Cover pool)	3.1y
Current OC (EURm)	347.3	WAL (Covered bonds)	n/a
Current OC	138.9%	Largest FX-position (NPV in EURm)	USD (355.4)
Number of loans	22	Share of largest exposure tranche	99.1% (> EUR 5m)
Number of borrowers	22	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	17,352,682	LCR level / haircut (Benchmarks)	-
		Risk weight (Benchmarks)	-

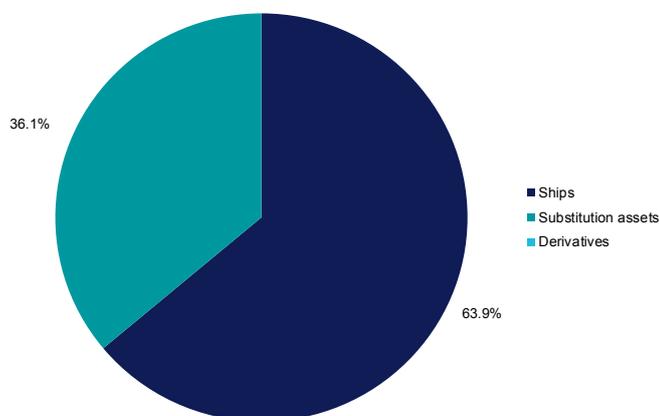
## Past development



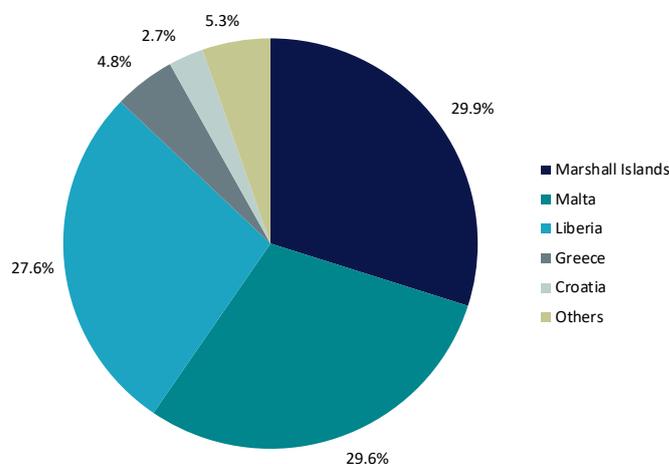
## Maturity structure



## Distribution by borrower type



## Ships by country



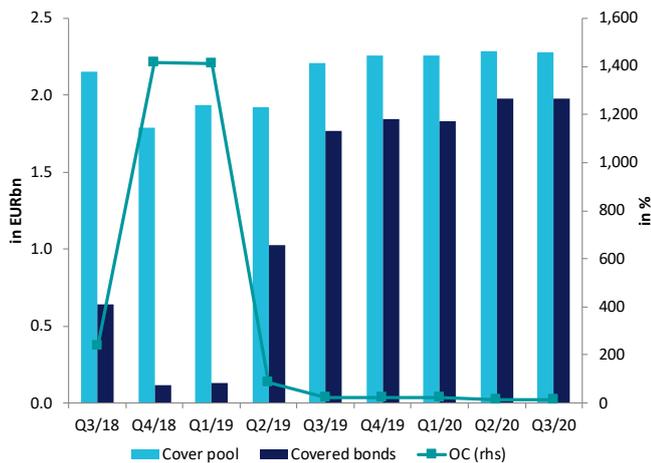
## Hamburg Commercial Bank

## Ship

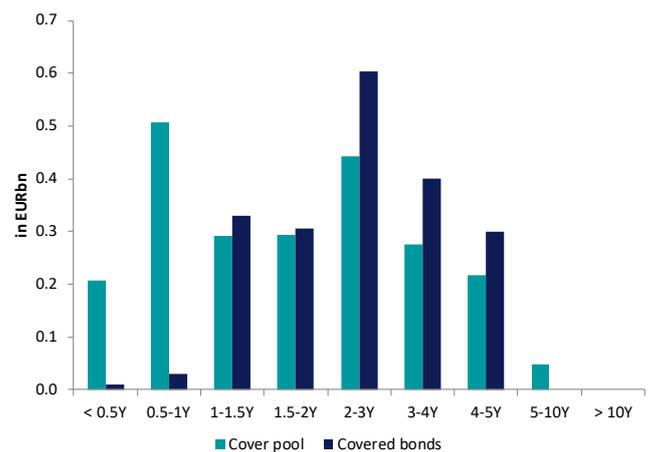
### Indicators of the cover pool

Covered bonds outstanding (EURm)	1,978.0	Rating (Moody's / Fitch / S&P / DBRS)	A3 / - / - / -
Cover pool volume (EURm)	2,280.3	Fixed interest (Cover pool)	3.7%
of which substitution assets	14.8%	Fixed interest (Covered bonds)	14.6%
of which derivatives	0.0%	WAL (Cover pool)	2.0y
Current OC (EURm)	302.3	WAL (Covered bonds)	2.6y
Current OC	15.3%	Largest FX-position (NPV in EURm)	USD (2,043.8)
Number of loans	224	Share of largest exposure tranche	81.6% (> EUR 5m)
Number of borrowers	131	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	14,836,641	LCR level / haircut (Benchmarks)	-
		Risk weight (Benchmarks)	-

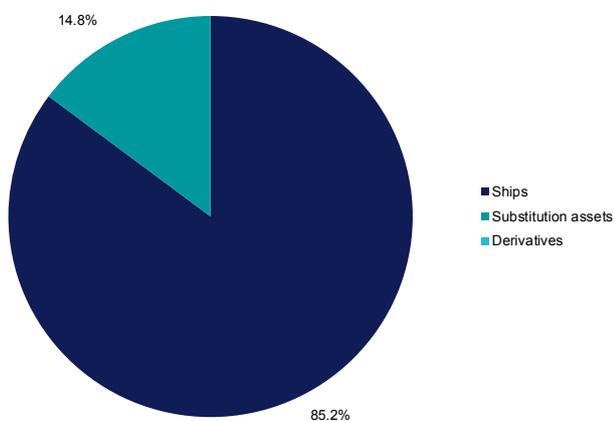
### Past development



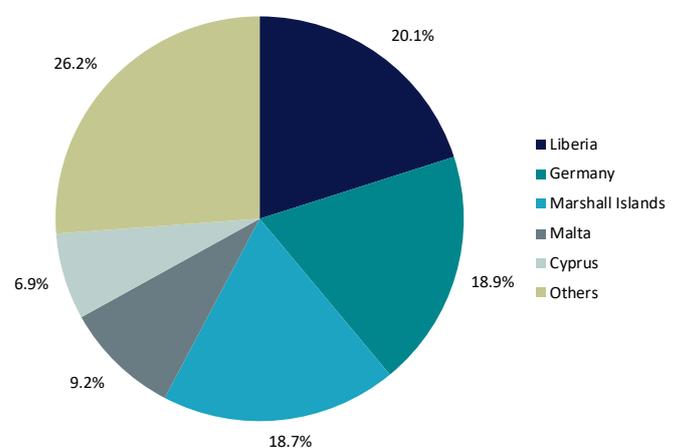
### Maturity structure



### Distribution by borrower type



### Ships by country



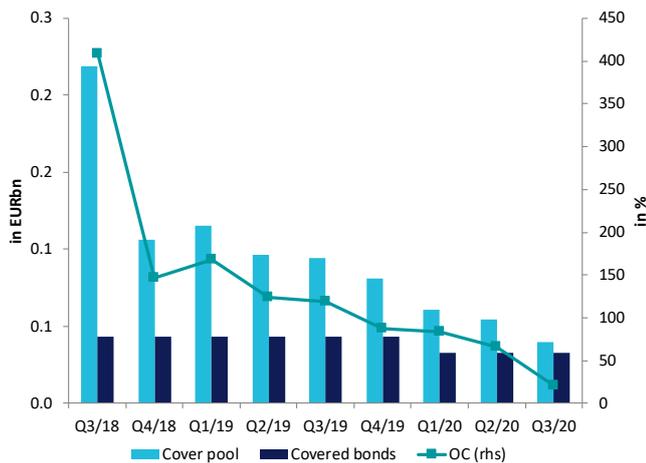
# Norddeutsche Landesbank

# Ship

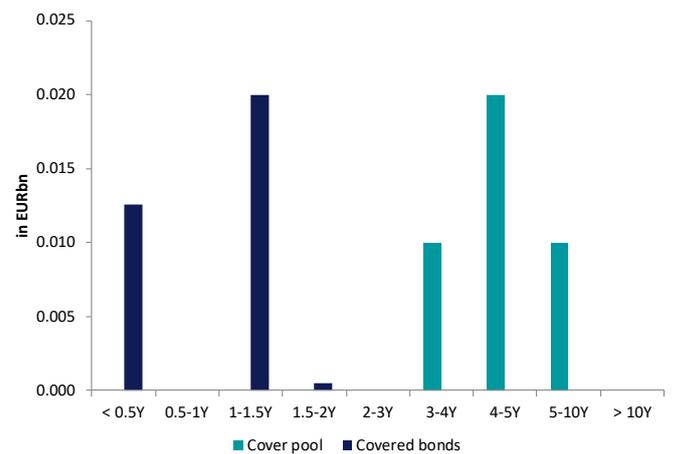
## Indicators of the cover pool

Covered bonds outstanding (EURm)	33.1	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	40.0	Fixed interest (Cover pool)	69.8%
of which substitution assets	100.0%	Fixed interest (Covered bonds)	57.5%
of which derivatives	0.0%	WAL (Cover pool)	n/a
Current OC (EURm)	6.9	WAL (Covered bonds)	n/a
Current OC	20.8%	Largest FX-position (NPV in EURm)	n/a
Number of loans	n/a	Share of largest exposure tranche	n/a
Number of borrowers	n/a	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	n/a	LCR level / haircut (Benchmarks)	-
		Risk weight (Benchmarks)	-

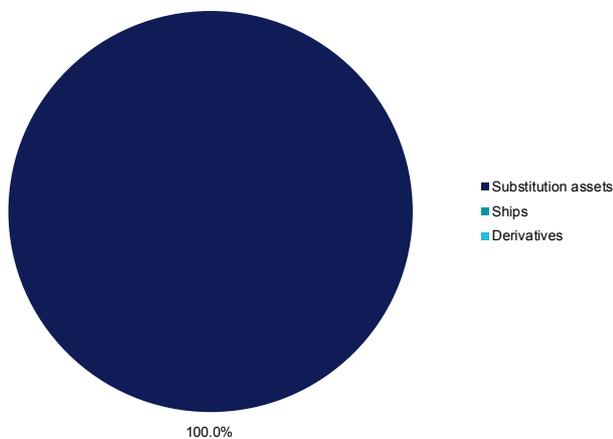
## Past development



## Maturity structure



## Distribution by borrower type



## Ships by country

n/a

## Appendix

### Contacts at NORD/LB

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#### Sales

Institutional Sales	+49 511 9818-9440
Sales Sparkassen & Regionalbanken	+49 511 9818-9400
Sales MM/FX	+49 511 9818-9460
Sales Europe	+352 452211-515

#### Origination & Syndicate

Origination FI	+49 511 9818-6600
Origination Corporates	+49 511 361-2911

#### Treasury

Collat. Management/Repos	+49 511 9818-9200
Liquidity Management	+49 511 9818-9620 +49 511 9818-9650

#### Trading

Covereds/SSA	+49 511 9818-8040
Financials	+49 511 9818-9490
Governments	+49 511 9818-9660
Länder/Regionen	+49 511 9818-9550
Frequent Issuers	+49 511 9818-9640

#### Corporate Sales

Schiffe/Flugzeuge	+49 511 9818-9440
Immobilien/Strukturierte Finanzierung	+49 511 9818-8150
Firmenkunden 1	+49 511 9818-4006
Firmenkunden 2	+49 511 9818-4003

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