



## Transparency requirements §28 PfandBG Q4/2020

Markets Strategy & Floor Research

# Agenda

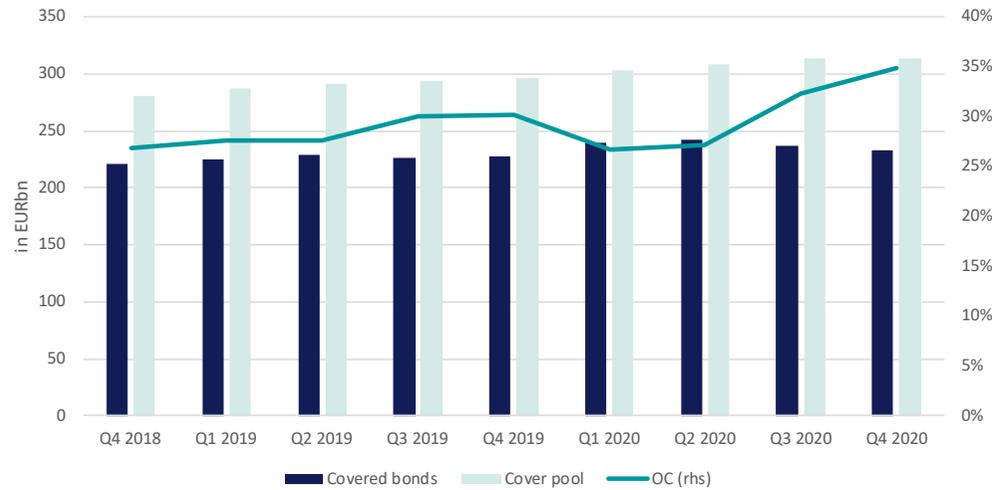
Authors: Dr. Frederik Kunze // Henning Walten, CIIA

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# Market overview

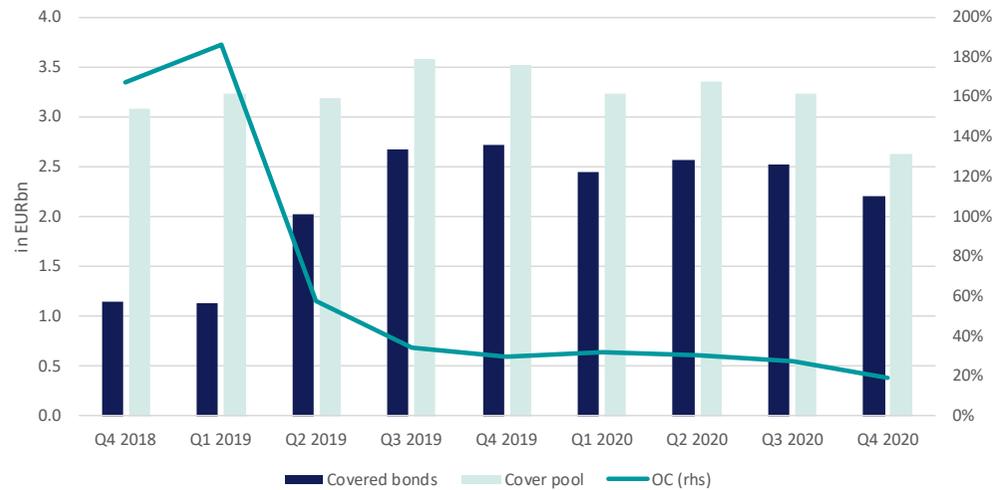
### Market development mortgage covered bonds



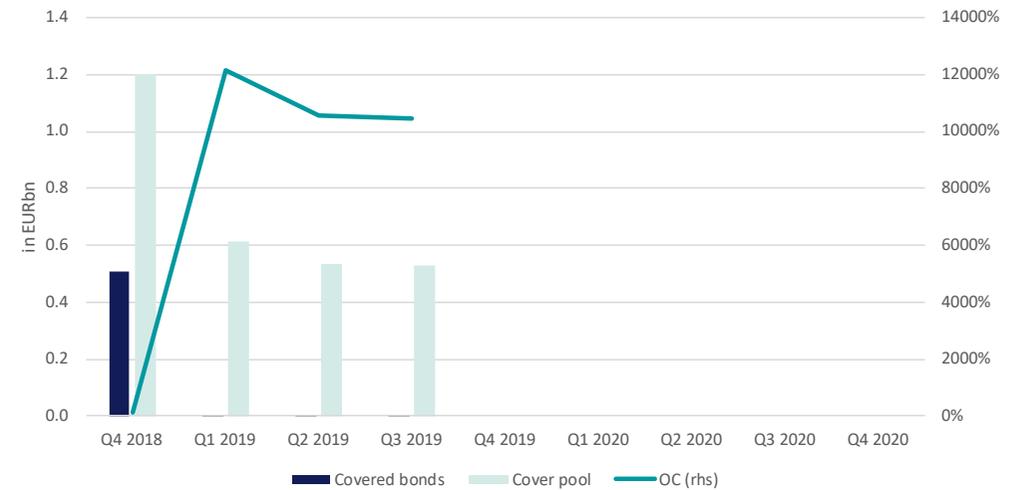
### Market development public sector covered bonds



### 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	10,590.6	12,390.8	1,800.2	17.0	6.8	85.9	7.3	15.9	59.9
Bausparkasse Mainz	46.0	64.8	18.8	40.9	93.8	0.0	6.2	100.0	0.0
Bausparkasse Schwäbisch Hall	506.0	746.0	240.0	47.4	92.7	0.5	6.8	100.0	100.0
Bayerische Landesbank	3,846.7	9,814.0	5,967.4	155.1	14.2	81.6	4.2	61.5	92.7
Berlin Hyp	14,838.7	15,196.2	357.5	2.4	29.9	65.3	4.8	67.8	93.3
Commerzbank	19,724.4	33,522.5	13,798.1	70.0	94.7	2.4	3.0	100.0	49.4
DekaBank	195.0	1,015.9	820.9	421.0	0.0	96.6	3.4	35.6	100.0
Deutsche Apotheker- und Ärztebank	6,710.1	8,604.4	1,894.3	28.2	75.9	18.2	5.9	100.0	90.2
Deutsche Bank	11,972.0	15,980.6	4,008.6	33.5	85.6	7.2	7.2	100.0	98.3
Deutsche Hypothekenbank	8,707.2	9,041.4	334.2	3.8	19.1	73.6	7.3	49.5	47.6
Deutsche Kreditbank	4,283.5	7,196.0	2,912.5	68.0	93.5	2.2	4.3	100.0	100.0
Deutsche Pfandbriefbank	15,124.0	17,545.0	2,421.0	16.0	18.5	78.3	3.2	44.0	77.0
DSK Hyp	152.5	752.4	599.9	393.4	37.0	60.4	2.7	81.1	100.0
DZ HYP	33,013.2	37,750.1	4,736.9	14.3	56.3	41.3	2.4	96.7	100.0
Hamburg Commercial Bank	3,883.2	4,362.8	479.6	12.4	16.1	80.3	3.6	94.7	100.0
Hamburger Sparkasse	5,618.3	8,011.2	2,392.9	42.6	66.4	29.8	3.7	100.0	100.0
ING	3,695.0	6,915.9	3,220.9	87.2	100.0	0.0	3.6	100.0	100.0
Kreissparkasse Köln	1,548.3	5,211.5	3,663.2	236.6	81.0	13.0	6.0	100.0	42.7
Landesbank Baden-Württemberg	10,552.6	14,694.3	4,141.7	39.2	38.0	56.0	6.0	78.8	62.4
Landesbank Berlin	3,475.0	5,609.4	2,134.4	61.4	63.1	32.2	4.6	100.0	94.2
Landesbank Hessen-Thüringen	10,634.3	16,254.7	5,620.4	52.9	25.1	71.2	3.7	52.3	83.5
M.M.Warburg & CO Hypothekenbank	1,107.9	1,268.9	161.0	14.5	19.2	75.5	5.2	91.6	100.0
Münchener Hypothekenbank	28,846.3	30,110.1	1,263.8	4.4	80.7	17.3	2.0	80.0	73.6
Natixis Pfandbriefbank	1,257.5	1,477.7	220.2	17.5	5.8	83.0	11.2	36.3	100.0
Norddeutsche Landesbank	1,988.5	5,133.4	3,144.9	158.2	69.6	28.5	1.9	98.5	74.2
PSD Bank Nürnberg	557.6	839.2	281.6	50.5	97.3	0.0	2.7	100.0	0.0
PSD Bank Rhein-Ruhr	309.0	490.1	181.1	58.6	97.3	0.0	2.7	100.0	100.0
SaarLB	463.3	786.9	323.6	69.8	1.3	93.1	5.5	78.2	100.0
Santander Consumer Bank	1,000.0	1,167.5	167.5	16.7	95.7	0.0	4.3	100.0	100.0
Sparkasse Hannover	1,257.6	1,761.9	504.3	40.1	78.0	18.1	3.9	100.0	100.0
Sparkasse KölnBonn	2,091.1	6,445.6	4,354.5	208.2	74.6	20.1	5.3	100.0	48.6
Stadtsparkasse Düsseldorf	867.0	2,077.6	1,210.6	139.6	68.5	27.4	4.0	100.0	100.0
UniCredit Bank	22,011.2	29,556.6	7,545.4	34.3	68.5	29.3	2.2	100.0	100.0
Wüstenrot Bausparkasse	2,216.6	2,628.8	412.2	18.6	89.4	1.1	9.5	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	1,533.0	1,788.9	255.9	16.7	14.5	63.9	18.1	2.6	0.8	79.0	0.0
Bayerische Landesbank	17,541.1	22,620.5	5,079.4	29.0	7.9	39.6	43.8	7.0	1.8	94.0	100.0
Berlin Hyp	260.0	275.3	15.3	5.9	21.4	78.5	0.1	0.0	0.0	78.6	-
Commerzbank	11,281.2	12,124.1	842.9	7.5	25.3	34.9	34.0	5.2	0.6	58.3	100.0
DekaBank	3,463.8	4,291.0	827.2	23.9	16.3	15.4	49.4	18.8	0.0	82.6	-
Deutsche Bank	90.0	149.0	59.0	65.6	23.5	76.5	0.0	0.0	0.0	76.5	-
Deutsche Hypothekenbank	2,815.0	2,921.9	106.9	3.8	16.5	60.6	1.1	21.8	0.0	59.8	-
Deutsche Kreditbank	4,424.8	8,535.3	4,110.5	92.9	0.2	9.1	90.7	0.0	0.0	100.0	-
Deutsche Pfandbriefbank	10,136.0	12,211.0	2,075.0	20.5	40.0	35.8	9.8	14.3	0.0	27.3	-
DSK Hyp	57.5	229.8	172.3	299.6	15.2	81.9	2.6	0.3	0.0	100.0	-
DZ HYP	12,920.8	15,324.3	2,403.5	18.6	9.9	21.7	63.8	4.6	0.4	80.4	100.0
Hamburg Commercial Bank	1,165.4	1,268.7	103.3	8.9	28.1	51.4	16.6	4.0	0.0	70.3	-
Kreissparkasse Köln	233.4	305.9	72.4	31.0	0.0	9.2	67.8	23.0	0.0	100.0	-
Landesbank Baden-Württemberg	8,922.1	11,651.3	2,729.3	30.6	12.0	21.1	34.6	32.4	0.0	94.5	-
Landesbank Berlin	268.0	703.8	435.8	162.6	0.0	19.9	0.0	80.1	0.0	100.0	-
Landesbank Hessen-Thüringen	27,620.3	34,670.7	7,050.4	25.5	3.3	41.3	42.2	13.1	0.1	92.8	100.0
LIGA Bank	25.0	152.5	127.5	510.1	0.0	3.3	96.7	0.0	0.0	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	1,945.1	1,958.1	13.0	0.7	6.1	78.9	7.3	7.7	0.0	92.1	-
Norddeutsche Landesbank	10,781.8	14,407.3	3,625.5	33.6	6.0	24.4	46.3	19.5	5.0	94.4	89.5
SaarLB	2,233.0	3,319.0	1,086.0	48.6	1.7	7.8	86.4	4.1	0.0	65.4	-
Sparkasse Hannover	738.1	924.5	186.4	25.3	0.0	2.7	89.5	7.8	0.0	100.0	-
Sparkasse KölnBonn	36.2	319.0	282.8	781.3	0.0	3.6	73.2	23.3	0.0	100.0	-
Stadtsparkasse Düsseldorf	45.0	220.8	175.8	390.7	0.0	0.0	67.6	21.1	0.0	100.0	-
UniCredit Bank	3,205.2	5,106.0	1,900.8	59.3	25.4	28.2	46.2	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	210.5	313.0	102.5	48.7
DVB Bank	0.0	22.5	22.5	n/a
Hamburg Commercial Bank	1,968.0	2,258.4	290.4	14.8
Norddeutsche Landesbank	33.1	40.0	6.9	20.8

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

# Mortgage covered bonds

## Aareal Bank

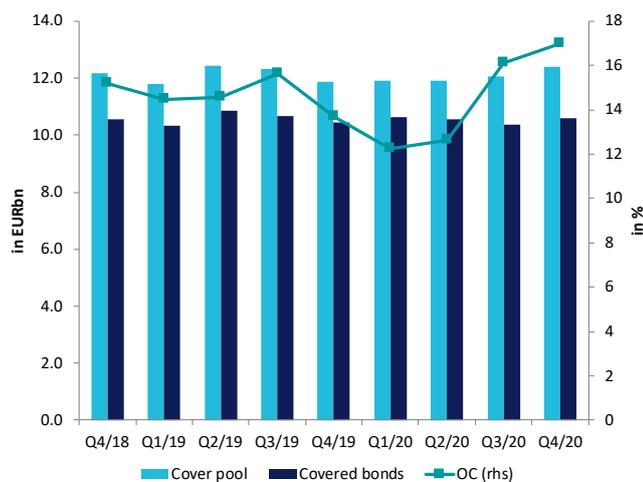
## Mortgage

### Indicators of the cover pool

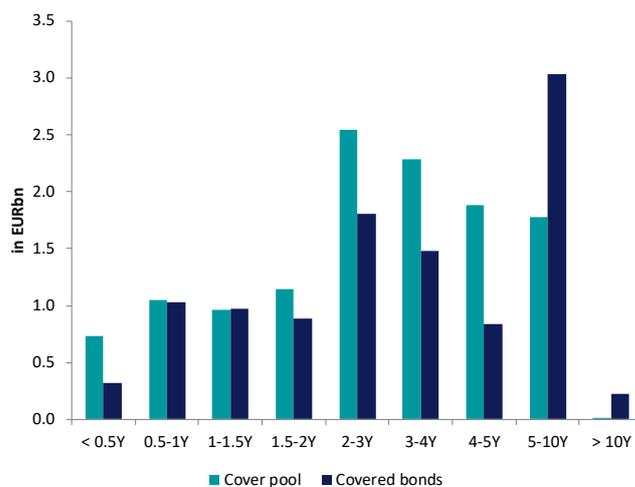
Covered bonds outstanding (EURm)	10,590.6
Cover pool volume (EURm)	12,390.8
of which residential	6.8%
of which commercial	85.9%
of which substitution assets	5.6%
of which derivatives	1.6%
Current OC (EURm)	1,800.2
Current OC	17.0%
Number of loans	4,589
Number of borrowers	4,523
Share of 10 largest borrowers	12.0%
Avg. exposure to borrowers (EUR)	2,539,620
Number of properties	5,456

Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Fixed interest (Cover pool)	52.1%
Fixed interest (Covered bonds)	67.7%
WAL (Cover pool)	3.1y
WAL (Covered bonds)	3.8y
Avg. seasoning	4.7y
LTV (Original value)	55.5%
LTV (Market value)	33.9%
Largest FX-position (NPV in EURm)	USD (571.4)
Share of largest exposure tranche	93.7% (> EUR 10m)
Loans in arrears (> 90 days)	0.00%
LCR level / haircut (Benchmarks)	Level 1 / 7%
Risk weight (Benchmarks)	10%

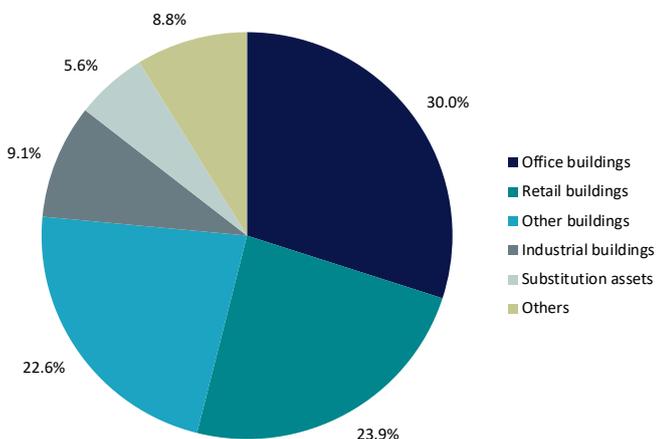
### Past development



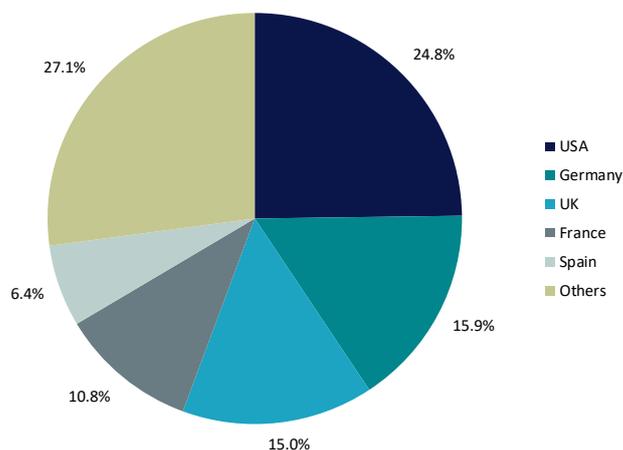
### Maturity structure



### Distribution by borrower type



### Distribution by country



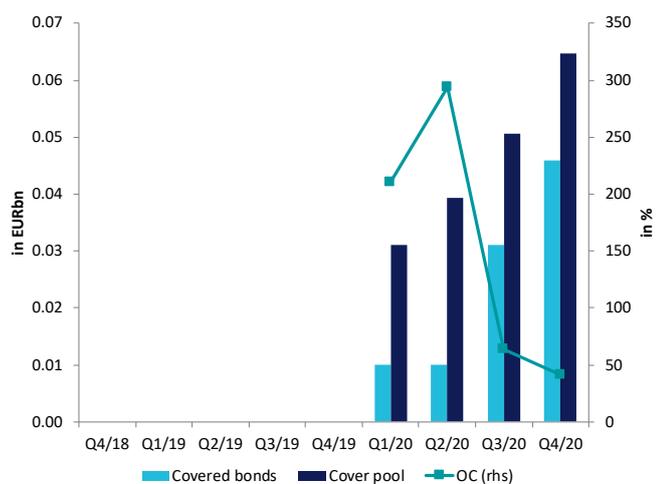
## Bausparkasse Mainz

## Mortgage

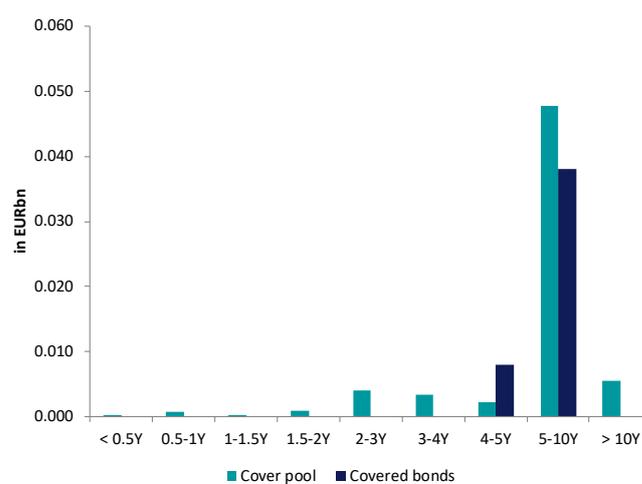
### Indicators of the cover pool

Covered bonds outstanding (EURm)	46.0	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	64.8	Fixed interest (Cover pool)	100.0%
of which residential	93.8%	Fixed interest (Covered bonds)	100.0%
of which commercial	0.0%	WAL (Cover pool)	n/a
of which substitution assets	6.2%	WAL (Covered bonds)	n/a
of which derivatives	0.0%	Avg. seasoning	1.3y
Current OC (EURm)	18.8	LTV (Original value)	55.3%
Current OC	40.9%	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	98.4% (< 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)	-

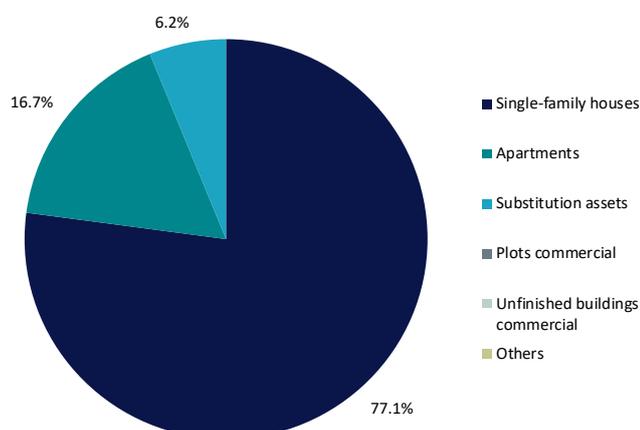
### Past development



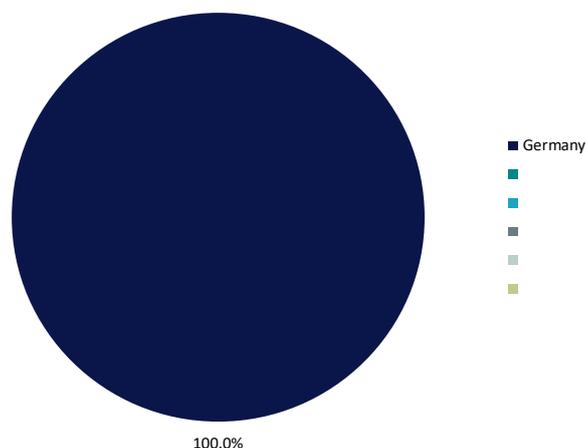
### Maturity structure



### Distribution by borrower type



### Distribution by country



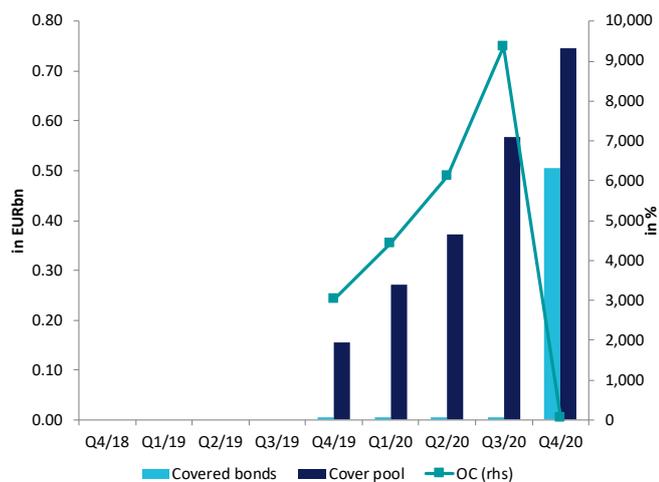
# Bausparkasse Schwäbisch Hall

# Mortgage

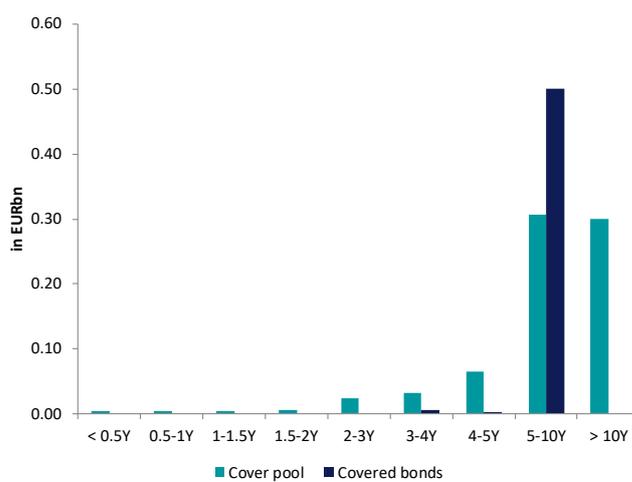
## Indicators of the cover pool

Covered bonds outstanding (EURm)	506.0	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	746.0	Fixed interest (Cover pool)	100.0%
of which residential	92.7%	Fixed interest (Covered bonds)	100.0%
of which commercial	0.5%	WAL (Cover pool)	10.3y
of which substitution assets	6.8%	WAL (Covered bonds)	9.7y
of which derivatives	0.0%	Avg. seasoning	1.4y
Current OC (EURm)	240.0	LTV (Original value)	51.4%
Current OC	47.4%	LTV (Market value)	n/a
Number of loans	5,590	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	8,697	Share of largest exposure tranche	91.3% (< EUR 0.3m)
Share of 10 largest borrowers	0.9%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	79,910	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	4,949	Risk weight (Benchmarks)	10%

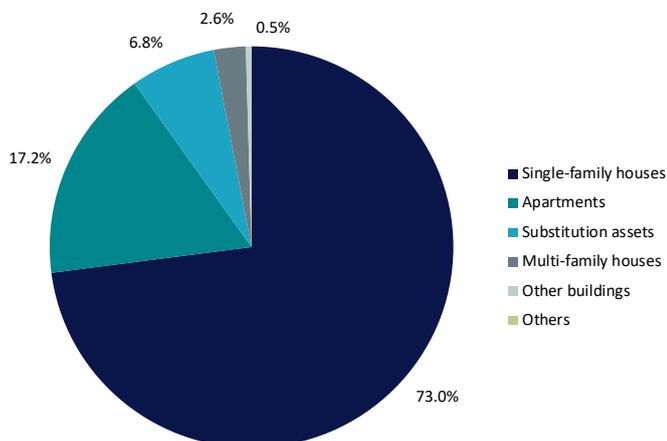
## Past development



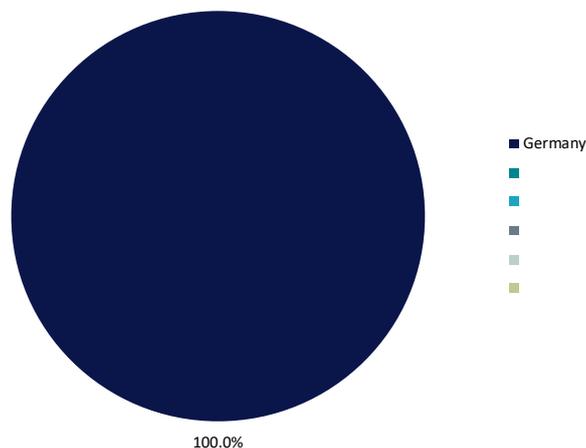
## Maturity structure



## Distribution by borrower type



## Distribution by country



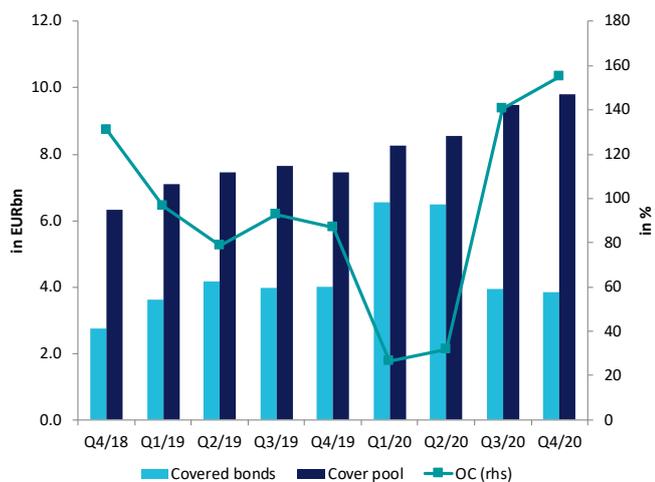
# Bayerische Landesbank

# Mortgage

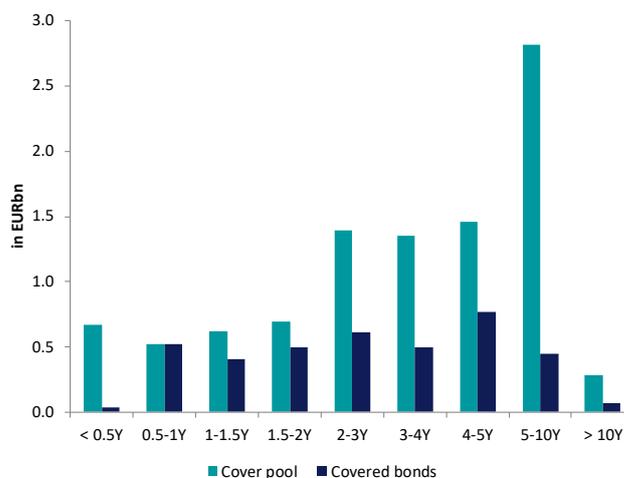
## Indicators of the cover pool

Covered bonds outstanding (EURm)	3,846.7	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	9,814.0	Fixed interest (Cover pool)	71.6%
of which residential	14.2%	Fixed interest (Covered bonds)	77.8%
of which commercial	81.6%	WAL (Cover pool)	5.0y
of which substitution assets	4.2%	WAL (Covered bonds)	3.0y
of which derivatives	0.0%	Avg. seasoning	4.0y
Current OC (EURm)	5,967.4	LTV (Original value)	57.7%
Current OC	155.1%	LTV (Market value)	n/a
Number of loans	607	Largest FX-position (NPV in EURm)	GBP (390.2)
Number of borrowers	442	Share of largest exposure tranche	85.0% (> EUR 10m)
Share of 10 largest borrowers	13.8%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	21,278,373	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	1,082	Risk weight (Benchmarks)	10%

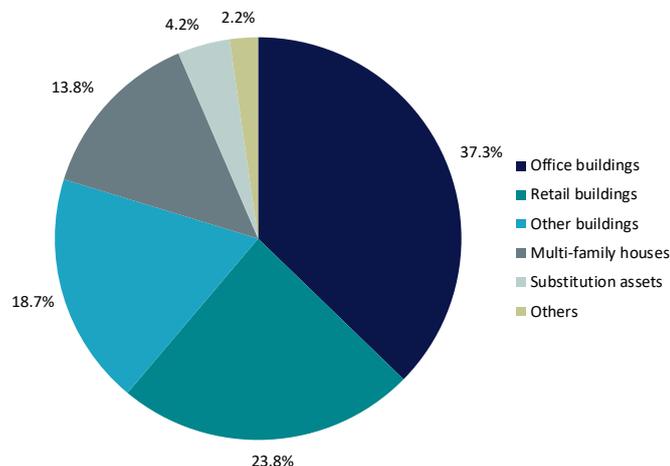
## Past development



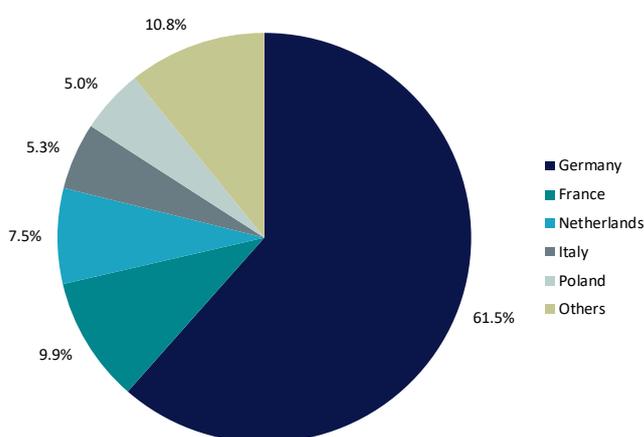
## Maturity structure



## Distribution by borrower type



## Distribution by country



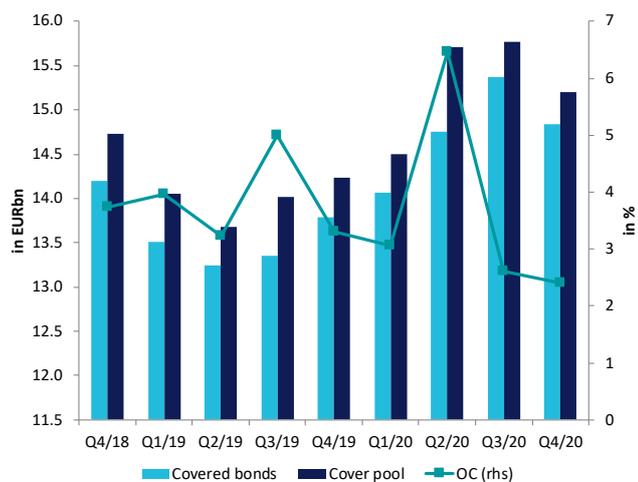
# Berlin Hyp

# Mortgage

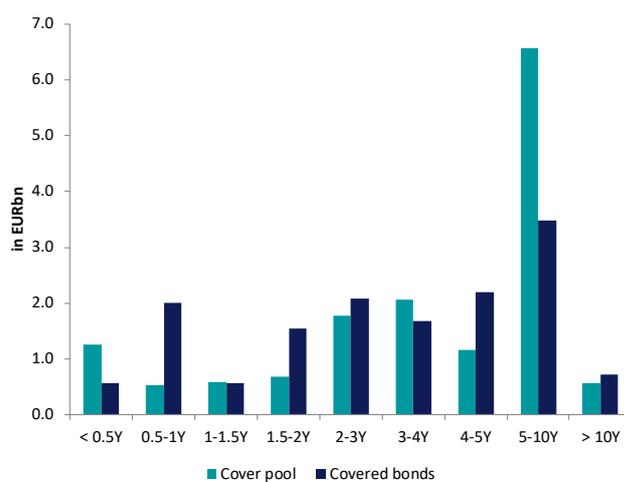
## Indicators of the cover pool

Covered bonds outstanding (EURm)	14,838.7	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	15,196.2	Fixed interest (Cover pool)	73.4%
of which residential	29.9%	Fixed interest (Covered bonds)	80.4%
of which commercial	65.3%	WAL (Cover pool)	5.0y
of which substitution assets	4.8%	WAL (Covered bonds)	4.5y
of which derivatives	0.0%	Avg. seasoning	3.8y
Current OC (EURm)	357.5	LTV (Original value)	56.2%
Current OC	2.4%	LTV (Market value)	n/a
Number of loans	1,642	Largest FX-position (NPV in EURm)	GBP (104.5)
Number of borrowers	1,605	Share of largest exposure tranche	82.3% (> EUR 10m)
Share of 10 largest borrowers	21.1%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	9,014,455	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	5,152	Risk weight (Benchmarks)	10%

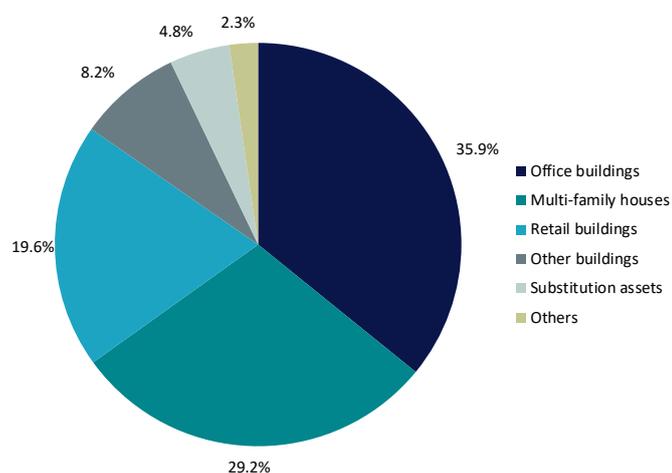
## Past development



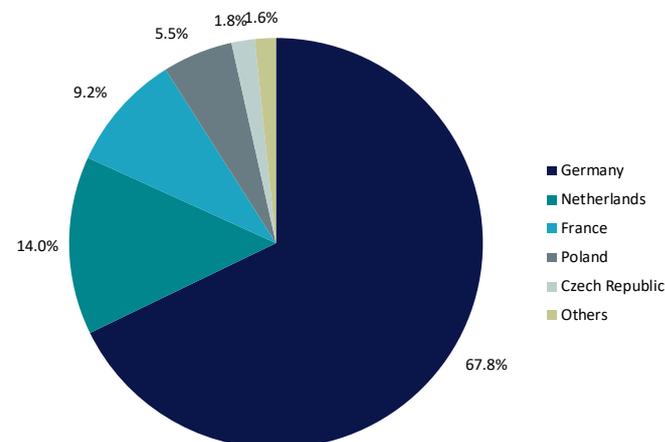
## Maturity structure



## Distribution by borrower type



## Distribution by country



# Commerzbank

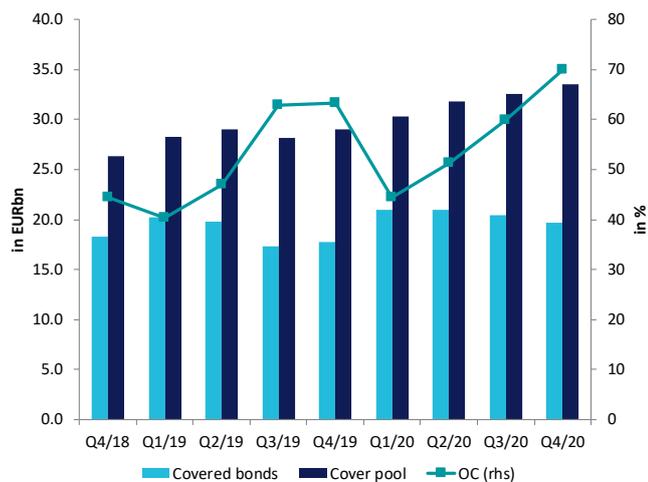
# Mortgage

## Indicators of the cover pool

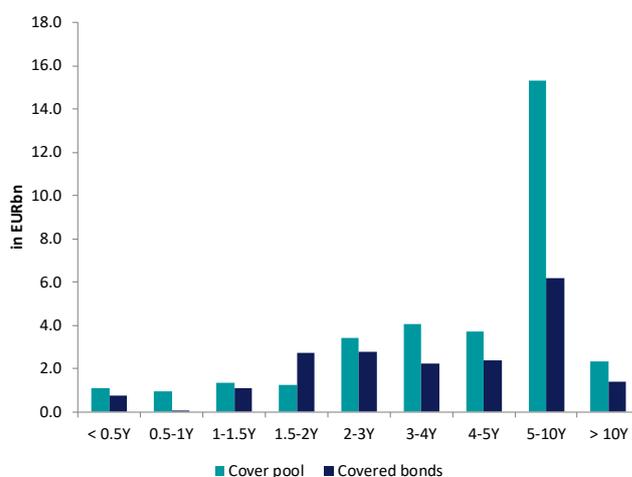
Covered bonds outstanding (EURm)	19,724.4
Cover pool volume (EURm)	33,522.5
of which residential	94.7%
of which commercial	2.4%
of which substitution assets	3.0%
of which derivatives	0.0%
Current OC (EURm)	13,798.1
Current OC	70.0%
Number of loans	261,324
Number of borrowers	209,106
Share of 10 largest borrowers	1.4%
Avg. exposure to borrowers (EUR)	155,568
Number of properties	234,352

Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Fixed interest (Cover pool)	98.7%
Fixed interest (Covered bonds)	89.4%
WAL (Cover pool)	5.3y
WAL (Covered bonds)	5.0y
Avg. seasoning	4.7y
LTV (Original value)	52.6%
LTV (Market value)	n/a
Largest FX-position (NPV in EURm)	n/a
Share of largest exposure tranche	76.7% (< EUR 0.3m)
Loans in arrears (> 90 days)	0.00%
LCR level / haircut (Benchmarks)	Level 1 / 7%
Risk weight (Benchmarks)	10%

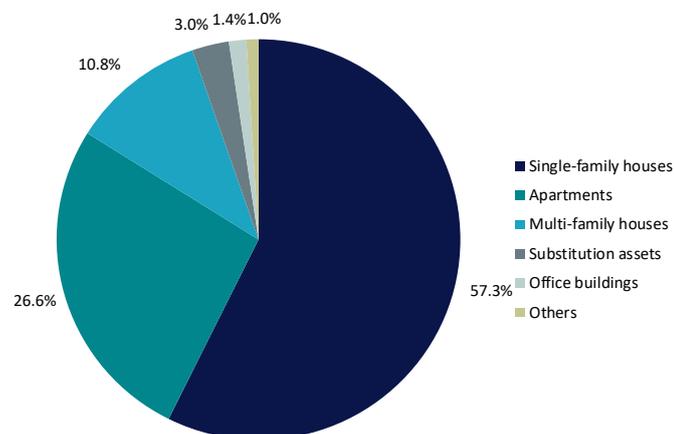
## Past development



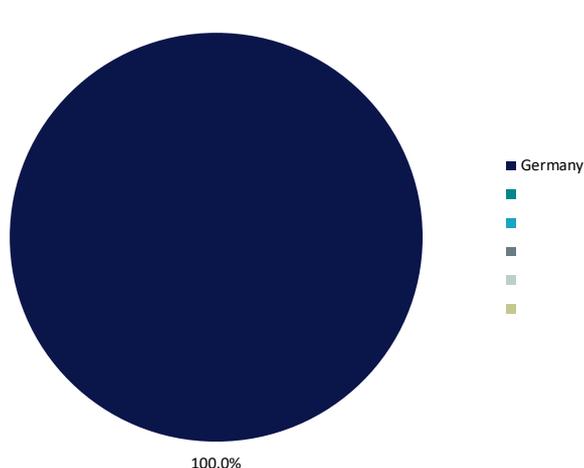
## Maturity structure



## Distribution by borrower type



## Distribution by country



## DekaBank

## Mortgage

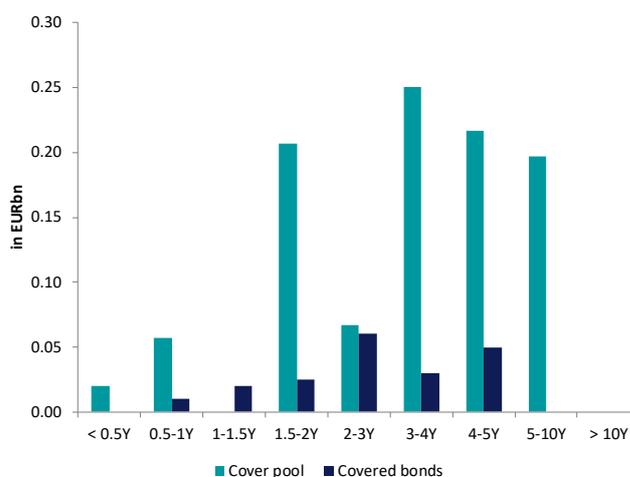
### Indicators of the cover pool

Covered bonds outstanding (EURm)	195.0	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	1,015.9	Fixed interest (Cover pool)	77.1%
of which residential	0.0%	Fixed interest (Covered bonds)	100.0%
of which commercial	96.6%	WAL (Cover pool)	3.7y
of which substitution assets	3.4%	WAL (Covered bonds)	2.9y
of which derivatives	0.0%	Avg. seasoning	3.2y
Current OC (EURm)	820.9	LTV (Original value)	59.3%
Current OC	421.0%	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	54.1%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	33,823,448	LCR level / haircut (Benchmarks)	-
Number of properties	40	Risk weight (Benchmarks)	-

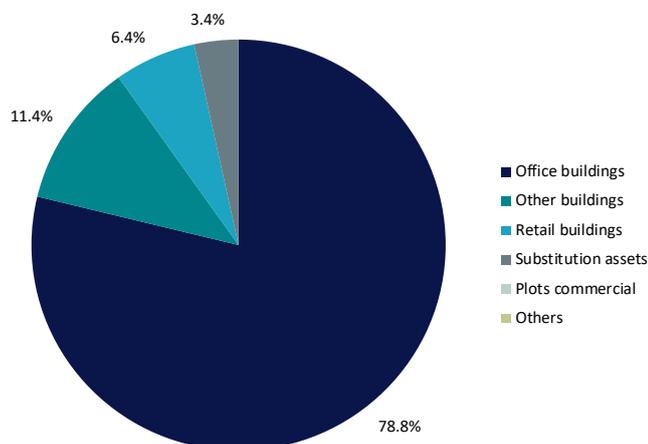
### Past development



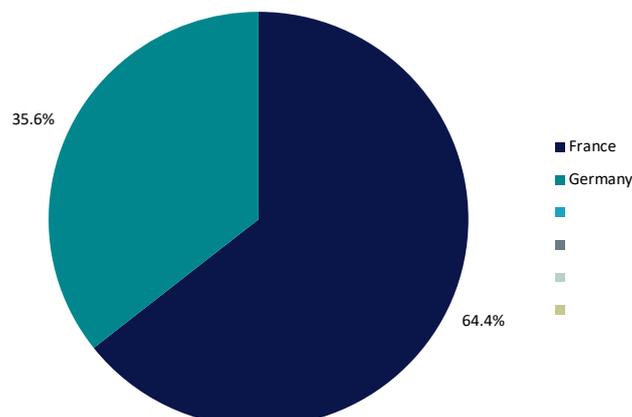
### Maturity structure



### Distribution by borrower type



### Distribution by country



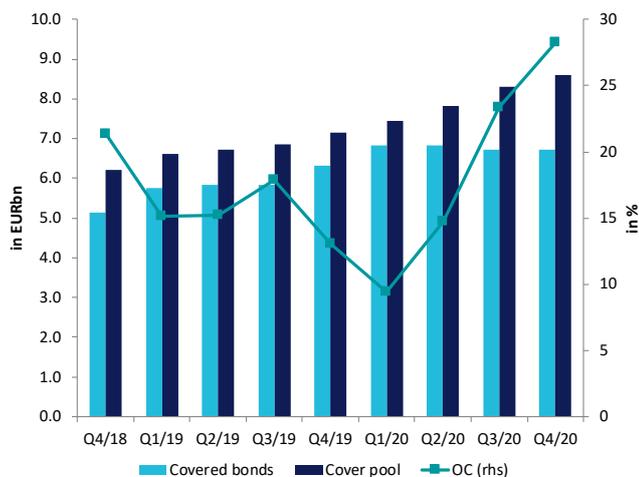
# Deutsche Apotheker- und Ärztebank

# Mortgage

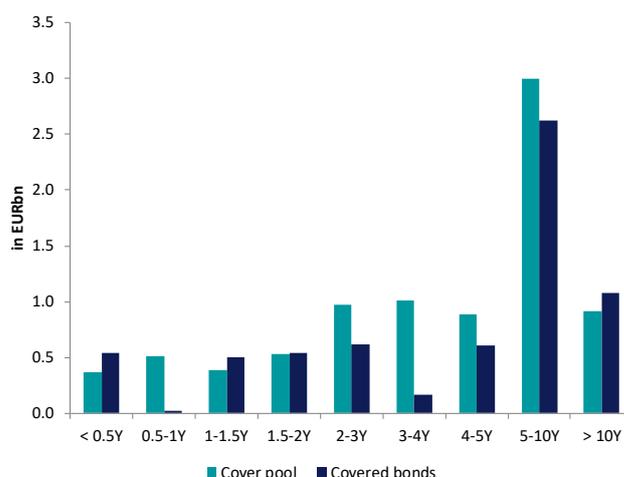
## Indicators of the cover pool

Covered bonds outstanding (EURm)	6,710.1	Rating (Moody's / Fitch / S&P / DBRS)	- / - / AAA / -
Cover pool volume (EURm)	8,604.4	Fixed interest (Cover pool)	92.1%
of which residential	75.9%	Fixed interest (Covered bonds)	90.5%
of which commercial	18.2%	WAL (Cover pool)	5.3y
of which substitution assets	5.9%	WAL (Covered bonds)	7.3y
of which derivatives	0.0%	Avg. seasoning	5.4y
Current OC (EURm)	1,894.3	LTV (Original value)	55.1%
Current OC	28.2%	LTV (Market value)	n/a
Number of loans	81,534	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	46,452	Share of largest exposure tranche	73.9% (< EUR 0.3m)
Share of 10 largest borrowers	5.3%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	174,252	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	60,652	Risk weight (Benchmarks)	10%

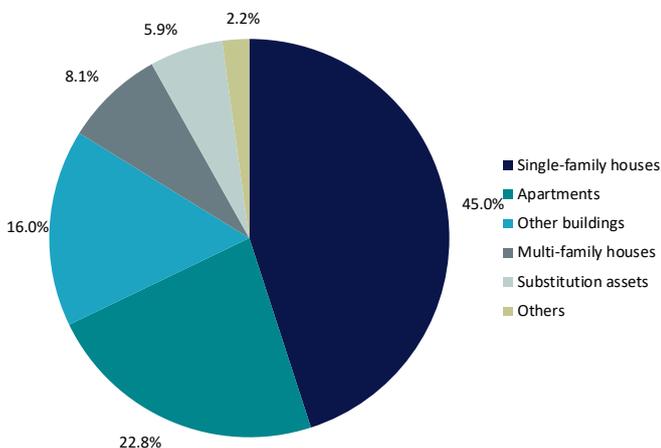
## Past development



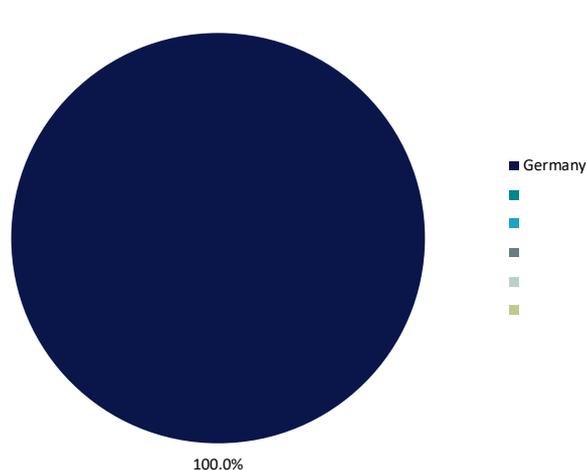
## Maturity structure



## Distribution by borrower type



## Distribution by country



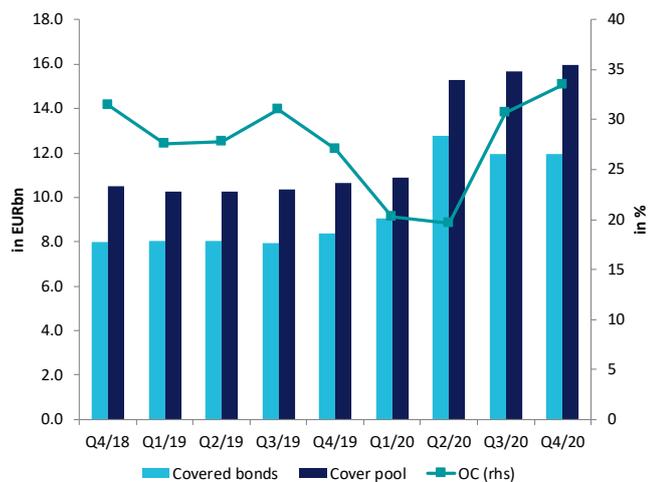
# Deutsche Bank

# Mortgage

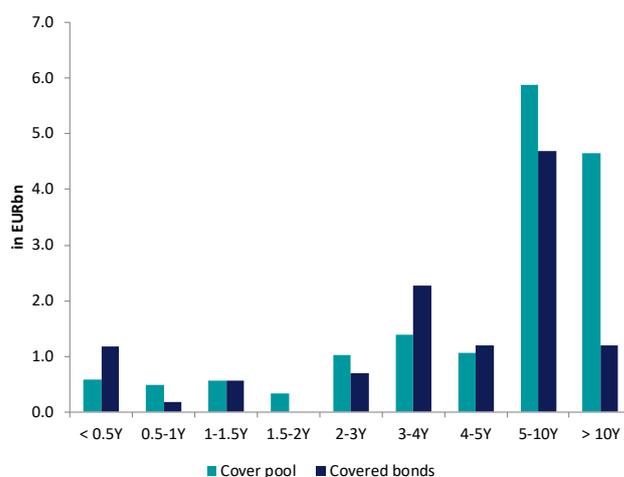
## Indicators of the cover pool

Covered bonds outstanding (EURm)	11,972.0	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	15,980.6	Fixed interest (Cover pool)	99.2%
of which residential	85.6%	Fixed interest (Covered bonds)	77.0%
of which commercial	7.2%	WAL (Cover pool)	n/a
of which substitution assets	7.2%	WAL (Covered bonds)	n/a
of which derivatives	0.0%	Avg. seasoning	5.3y
Current OC (EURm)	4,008.6	LTV (Original value)	53.7%
Current OC	33.5%	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	80.8% (< 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)	Level 1 / 7%
Number of properties	n/a	Risk weight (Benchmarks)	10%

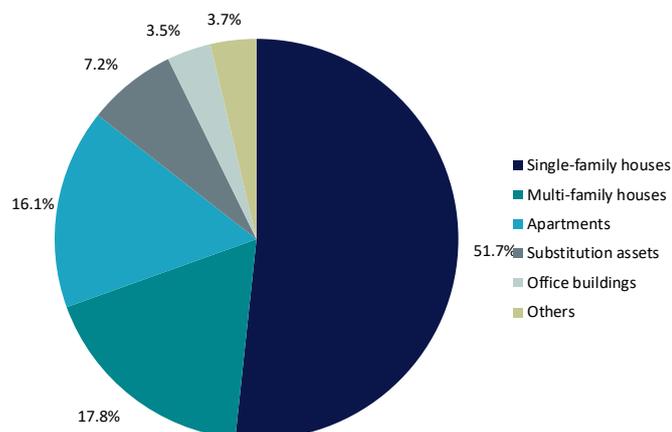
## Past development



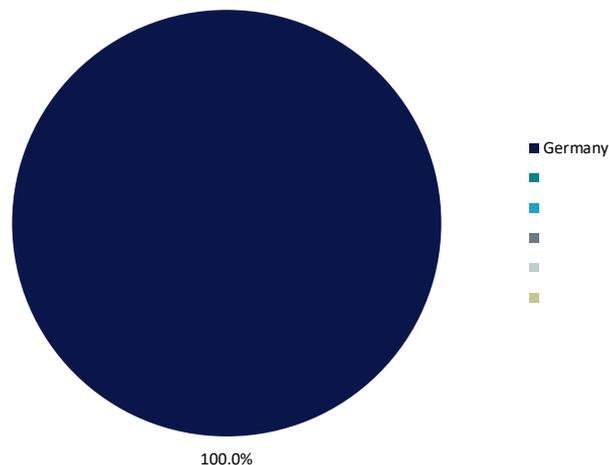
## Maturity structure



## Distribution by borrower type



## Distribution by country



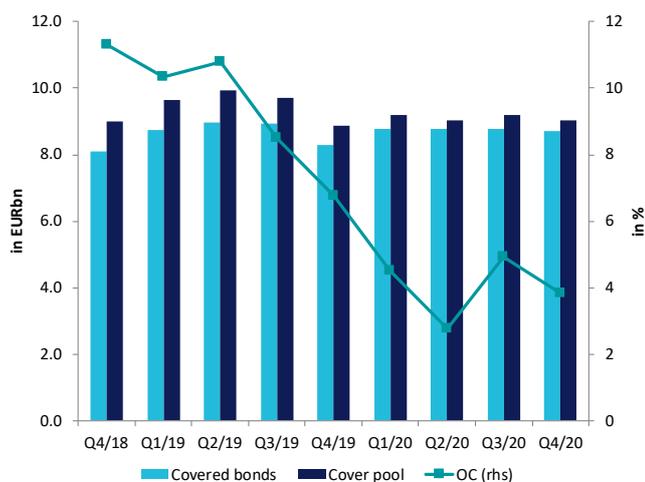
# Deutsche Hypothekenbank

# Mortgage

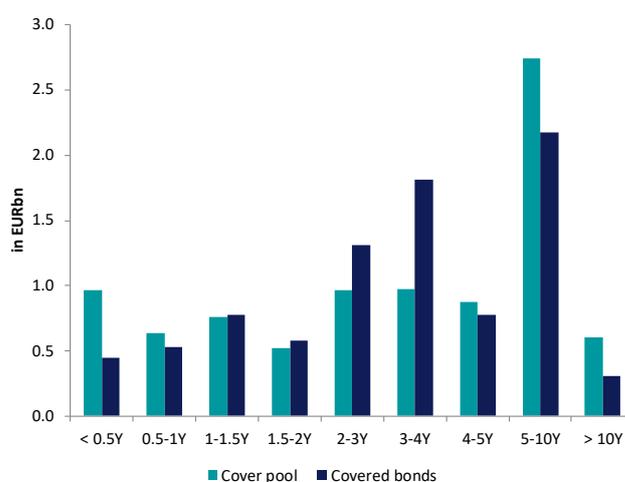
## Indicators of the cover pool

Covered bonds outstanding (EURm)	8,707.2	Rating (Moody's / Fitch / S&P / DBRS)	Aa1 / - / - / -
Cover pool volume (EURm)	9,041.4	Fixed interest (Cover pool)	76.2%
of which residential	19.1%	Fixed interest (Covered bonds)	89.2%
of which commercial	73.6%	WAL (Cover pool)	4.0y
of which substitution assets	7.3%	WAL (Covered bonds)	4.4y
of which derivatives	0.0%	Avg. seasoning	5.3y
Current OC (EURm)	334.2	LTV (Original value)	57.9%
Current OC	3.8%	LTV (Market value)	38.1%
Number of loans	676	Largest FX-position (NPV in EURm)	GBP (451.5)
Number of borrowers	577	Share of largest exposure tranche	87.4% (> EUR 10m)
Share of 10 largest borrowers	15.4%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	14,525,303	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	1,820	Risk weight (Benchmarks)	10%

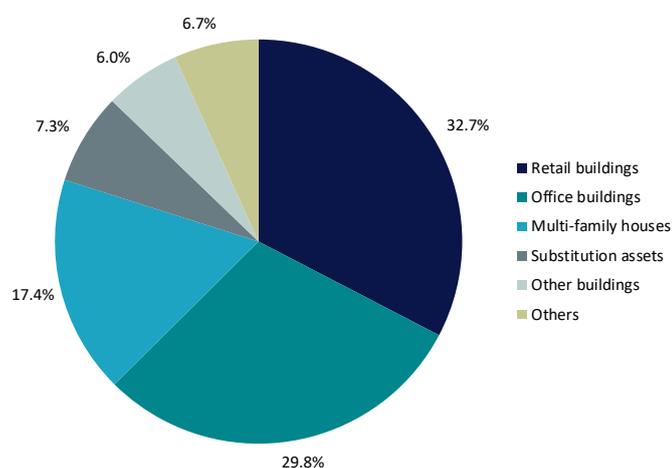
## Past development



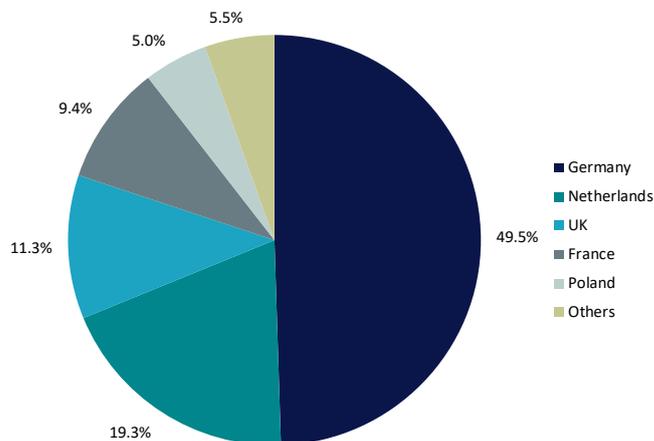
## Maturity structure



## Distribution by borrower type



## Distribution by country



## Deutsche Kreditbank

## Mortgage

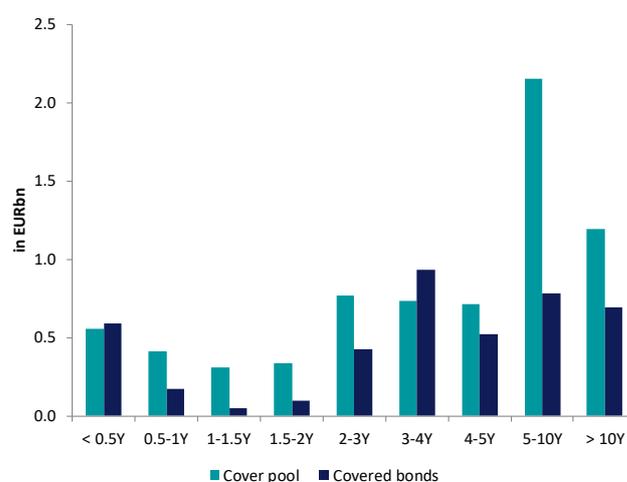
### Indicators of the cover pool

Covered bonds outstanding (EURm)	4,283.5	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	7,196.0	Fixed interest (Cover pool)	95.0%
of which residential	93.5%	Fixed interest (Covered bonds)	98.7%
of which commercial	2.2%	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)	2,912.5	LTV (Original value)	51.4%
Current OC	68.0%	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	44.7% (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%

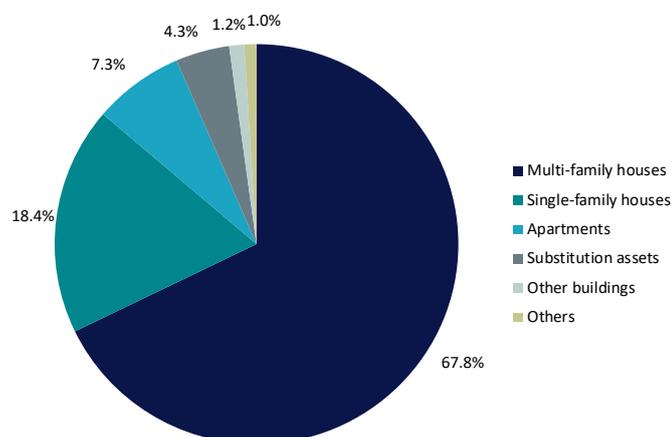
### Past development



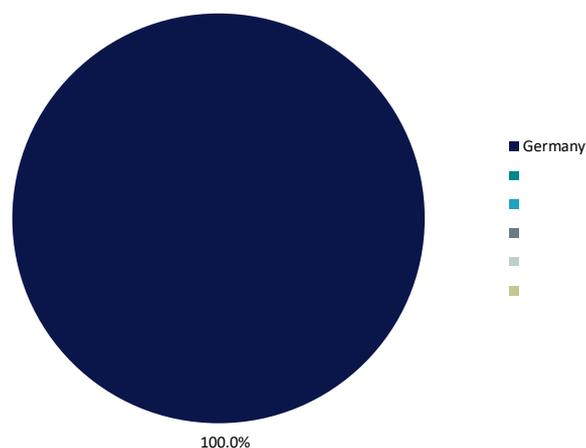
### Maturity structure



### Distribution by borrower type



### Distribution by country



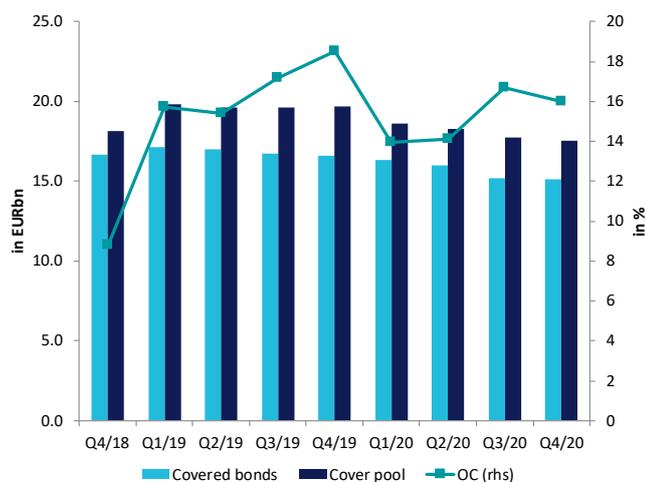
# Deutsche Pfandbriefbank

# Mortgage

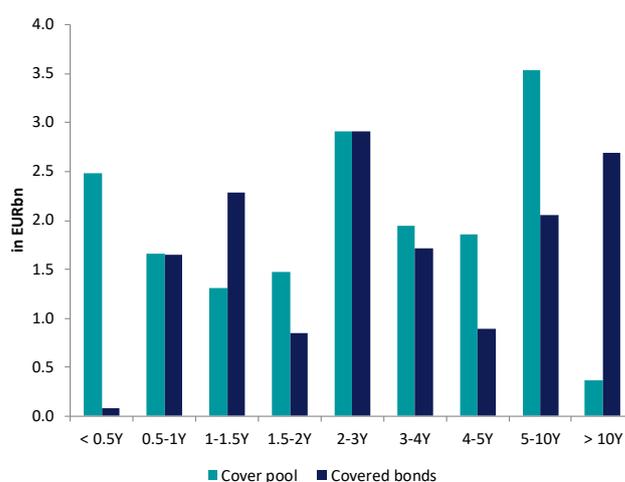
## Indicators of the cover pool

Covered bonds outstanding (EURm)	15,124.0	Rating (Moody's / Fitch / S&P / DBRS)	Aa1 / - / - / -
Cover pool volume (EURm)	17,545.0	Fixed interest (Cover pool)	53.0%
of which residential	18.5%	Fixed interest (Covered bonds)	89.1%
of which commercial	78.3%	WAL (Cover pool)	4.0y
of which substitution assets	3.2%	WAL (Covered bonds)	6.0y
of which derivatives	0.0%	Avg. seasoning	4.0y
Current OC (EURm)	2,421.0	LTV (Original value)	55.0%
Current OC	16.0%	LTV (Market value)	33.0%
Number of loans	1,776	Largest FX-position (NPV in EURm)	GBP (995.0)
Number of borrowers	842	Share of largest exposure tranche	91.0% (> EUR 10m)
Share of 10 largest borrowers	9.3%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	20,173,39	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	7	Risk weight (Benchmarks)	10%

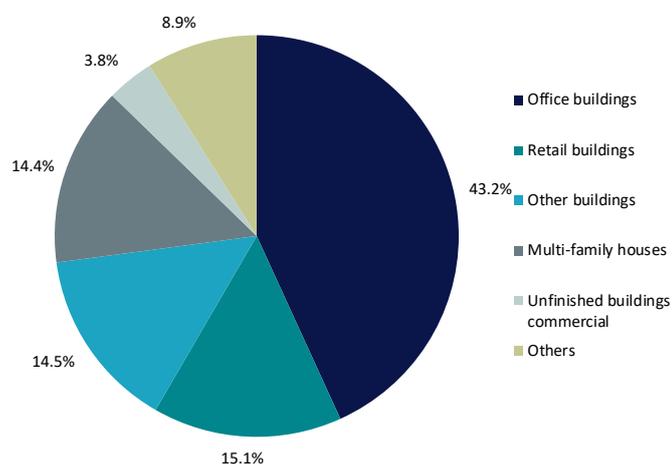
## Past development



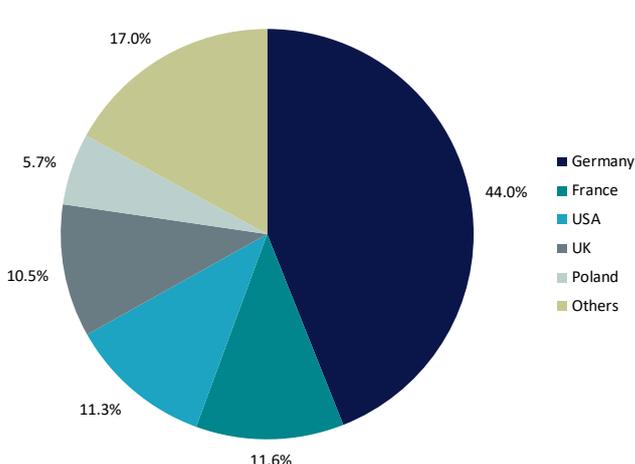
## Maturity structure



## Distribution by borrower type



## Distribution by country



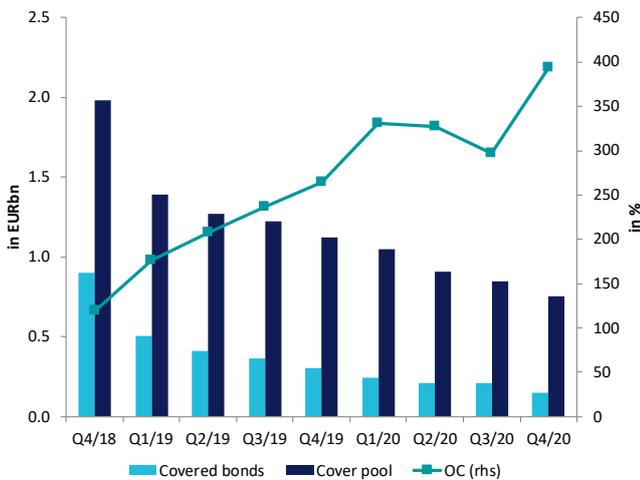
# DSK Hyp

# Mortgage

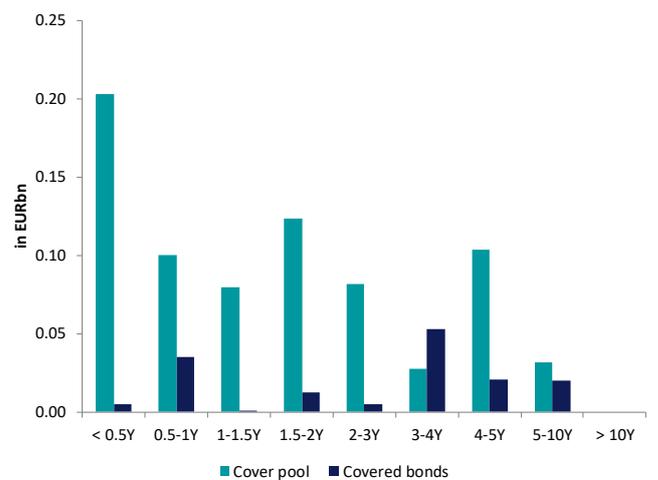
## Indicators of the cover pool

Covered bonds outstanding (EURm)	152.5	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	752.4	Fixed interest (Cover pool)	65.4%
of which residential	37.0%	Fixed interest (Covered bonds)	95.1%
of which commercial	60.4%	WAL (Cover pool)	1.8y
of which substitution assets	2.7%	WAL (Covered bonds)	3.2y
of which derivatives	0.0%	Avg. seasoning	7.5y
Current OC (EURm)	599.9	LTV (Original value)	53.8%
Current OC	393.4%	LTV (Market value)	n/a
Number of loans	75	Largest FX-position (NPV in EURm)	SEK (110.9)
Number of borrowers	26	Share of largest exposure tranche	84.8% (> EUR 10m)
Share of 10 largest borrowers	81.6%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	28,170,654	LCR level / haircut (Benchmarks)	-
Number of properties	238	Risk weight (Benchmarks)	-

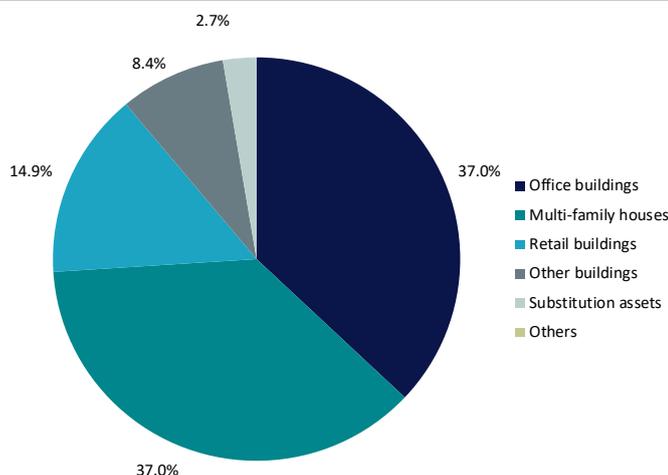
## Past development



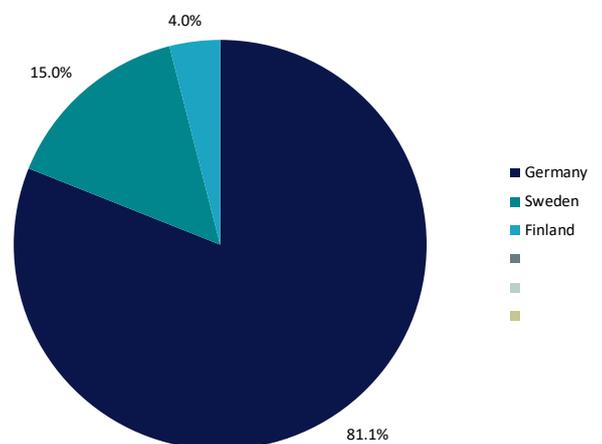
## Maturity structure



## Distribution by borrower type



## Distribution by country



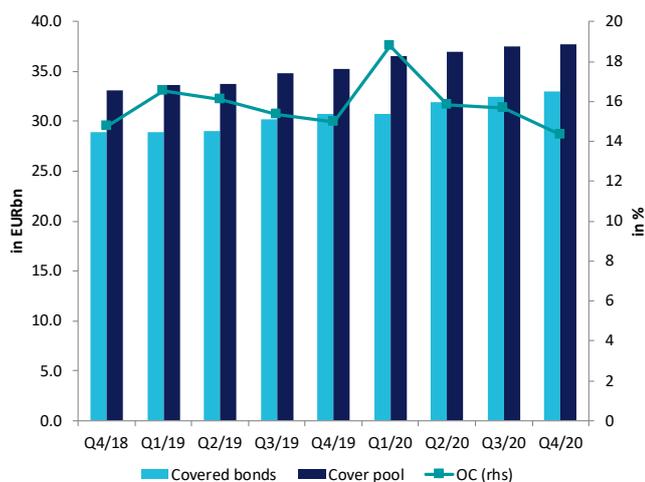
## DZ HYP

## Mortgage

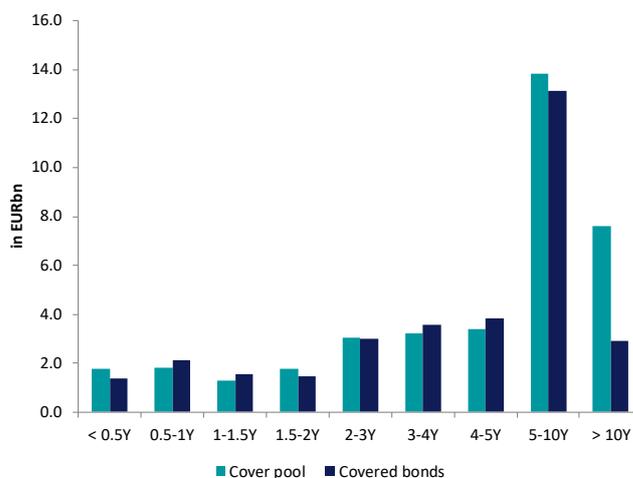
### Indicators of the cover pool

Covered bonds outstanding (EURm)	33,013.2	Rating (Moody's / Fitch / S&P / DBRS)	- / - / AAA / -
Cover pool volume (EURm)	37,750.1	Fixed interest (Cover pool)	88.8%
of which residential	56.3%	Fixed interest (Covered bonds)	98.4%
of which commercial	41.3%	WAL (Cover pool)	7.1y
of which substitution assets	2.4%	WAL (Covered bonds)	5.4y
of which derivatives	0.0%	Avg. seasoning	4.7y
Current OC (EURm)	4,736.9	LTV (Original value)	54.2%
Current OC	14.3%	LTV (Market value)	n/a
Number of loans	110,192	Largest FX-position (NPV in EURm)	GBP (253.8)
Number of borrowers	154,022	Share of largest exposure tranche	39.2% (> EUR 10m)
Share of 10 largest borrowers	5.0%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	239,245	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	109,334	Risk weight (Benchmarks)	10%

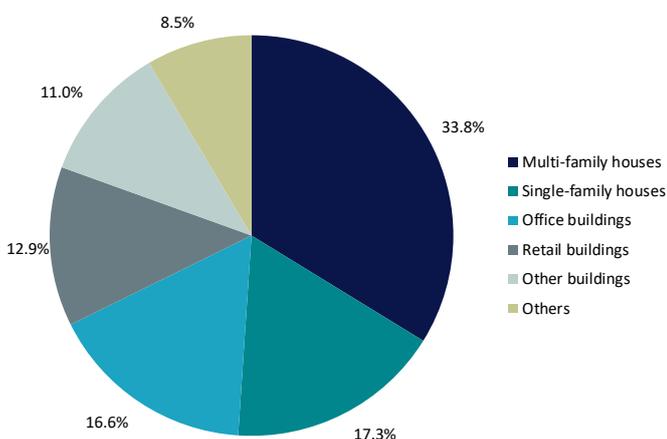
### Past development



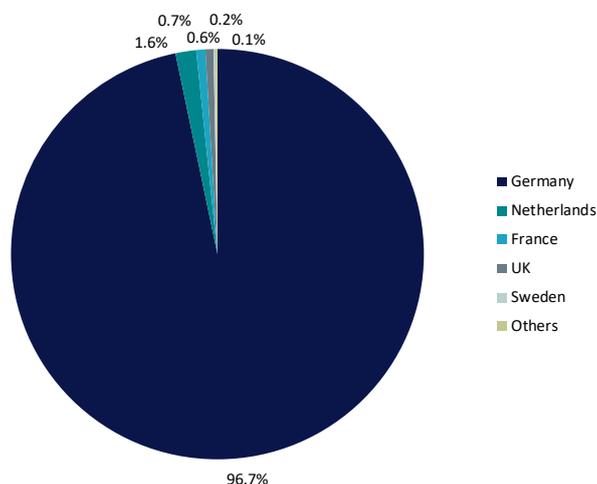
### Maturity structure



### Distribution by borrower type



### Distribution by country



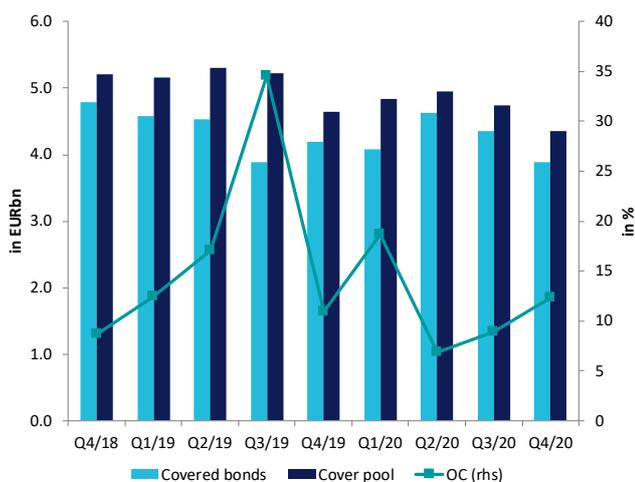
# Hamburg Commercial Bank

# Mortgage

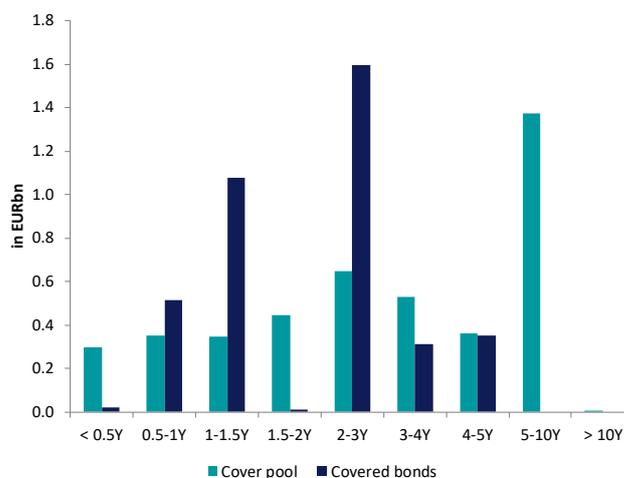
## Indicators of the cover pool

Covered bonds outstanding (EURm)	3,883.2	Rating (Moody's / Fitch / S&P / DBRS)	Aa2 / - / - / -
Cover pool volume (EURm)	4,362.8	Fixed interest (Cover pool)	49.4%
of which residential	16.1%	Fixed interest (Covered bonds)	76.6%
of which commercial	80.3%	WAL (Cover pool)	3.6y
of which substitution assets	3.6%	WAL (Covered bonds)	2.1y
of which derivatives	0.0%	Avg. seasoning	4.0y
Current OC (EURm)	479.6	LTV (Original value)	57.1%
Current OC	12.4%	LTV (Market value)	n/a
Number of loans	520	Largest FX-position (NPV in EURm)	GBP (52.7)
Number of borrowers	294	Share of largest exposure tranche	77.3% (> EUR 10m)
Share of 10 largest borrowers	25.6%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	14,311,905	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	953	Risk weight (Benchmarks)	10%

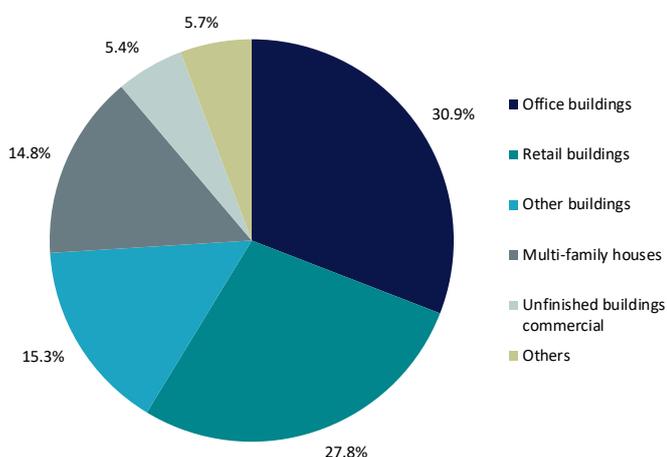
## Past development



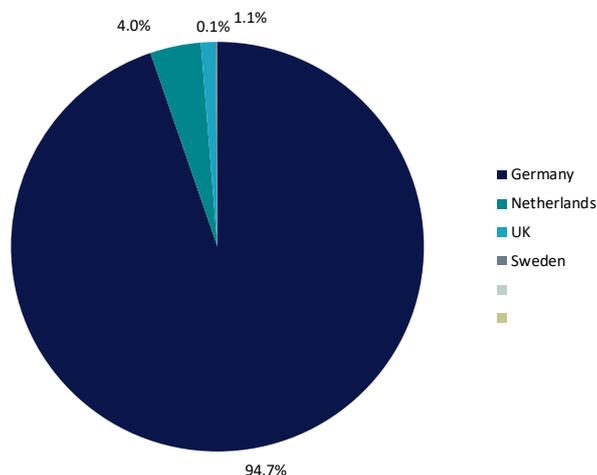
## Maturity structure



## Distribution by borrower type



## Distribution by country



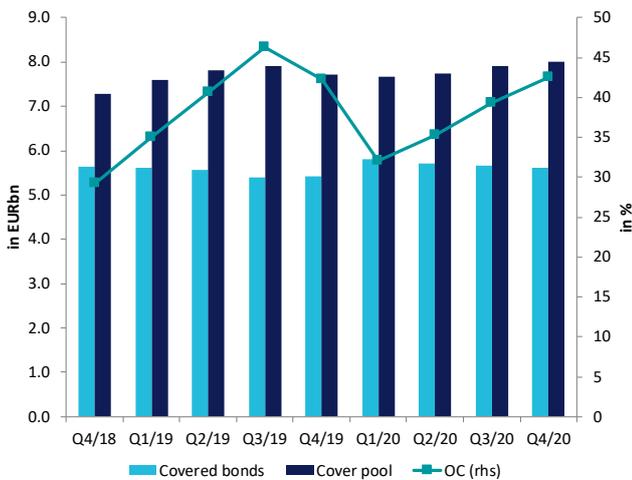
# Hamburger Sparkasse

# Mortgage

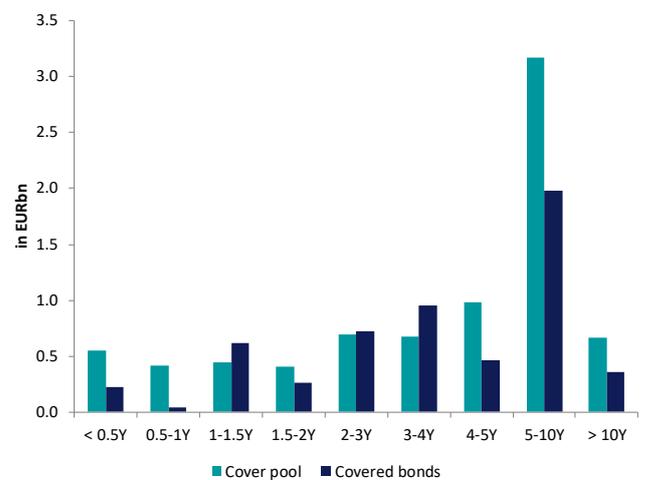
## Indicators of the cover pool

Covered bonds outstanding (EURm)	5,618.3	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	8,011.2	Fixed interest (Cover pool)	84.8%
of which residential	66.4%	Fixed interest (Covered bonds)	99.1%
of which commercial	29.8%	WAL (Cover pool)	n/a
of which substitution assets	3.7%	WAL (Covered bonds)	n/a
of which derivatives	0.0%	Avg. seasoning	7.0y
Current OC (EURm)	2,392.9	LTV (Original value)	52.4%
Current OC	42.6%	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	34.5% (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%

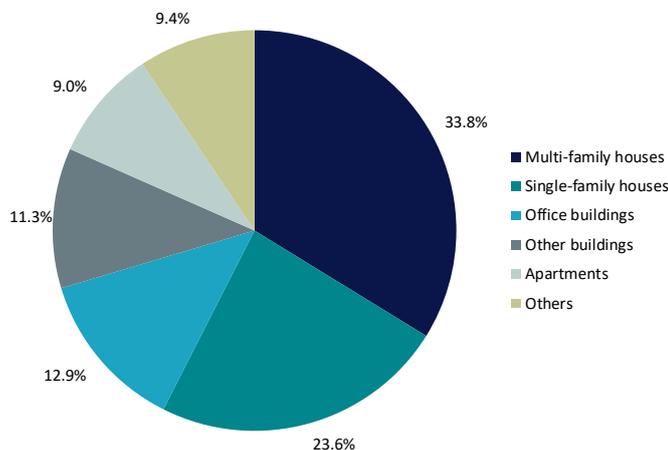
## Past development



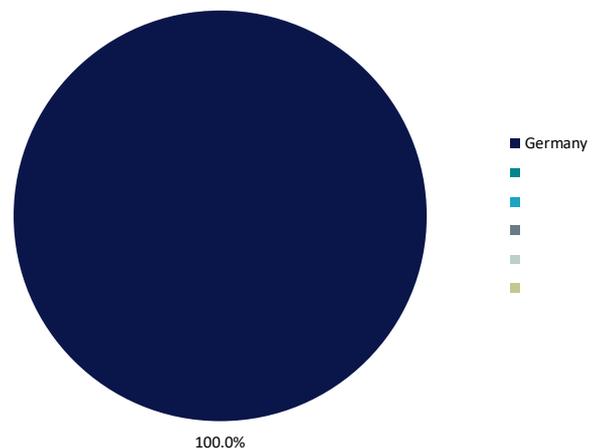
## Maturity structure



## Distribution by borrower type



## Distribution by country



# ING-DiBa

# Mortgage

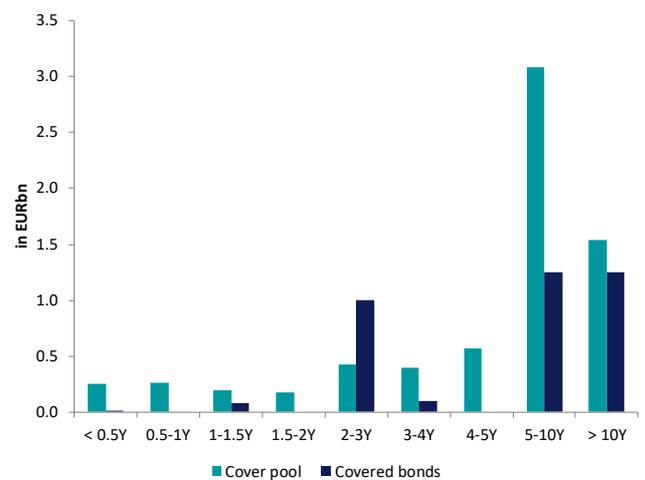
## Indicators of the cover pool

Covered bonds outstanding (EURm)	3,695.0	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	6,915.9	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)	6.9y
of which substitution assets	3.6%	WAL (Covered bonds)	8.4y
of which derivatives	0.0%	Avg. seasoning	5.2y
Current OC (EURm)	3,220.9	LTV (Original value)	47.6%
Current OC	87.2%	LTV (Market value)	n/a
Number of loans	68,084	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	67,327	Share of largest exposure tranche	95.5% (< EUR 0.3m)
Share of 10 largest borrowers	0.2%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	102,722	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	68,084	Risk weight (Benchmarks)	10%

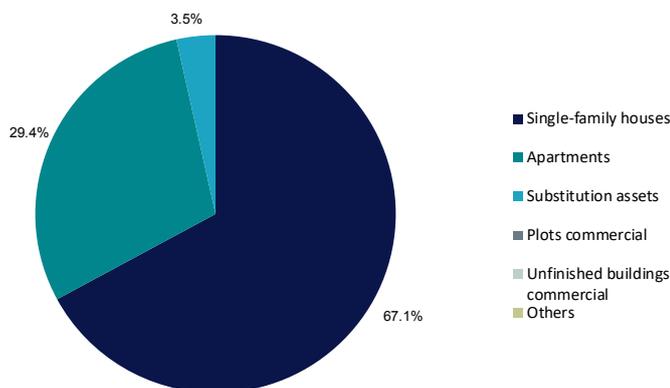
## Past development



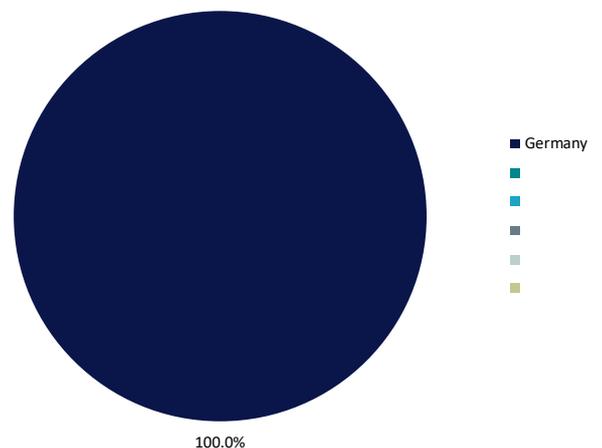
## Maturity structure



## Distribution by borrower type



## Distribution by country



# Kreissparkasse Köln

# Mortgage

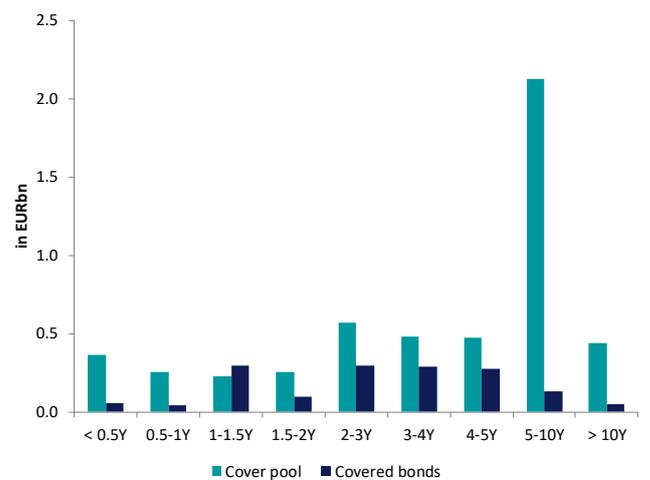
## Indicators of the cover pool

Covered bonds outstanding (EURm)	1,548.3	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	5,211.5	Fixed interest (Cover pool)	100.0%
of which residential	81.0%	Fixed interest (Covered bonds)	98.7%
of which commercial	13.0%	WAL (Cover pool)	5.3y
of which substitution assets	6.0%	WAL (Covered bonds)	3.2y
of which derivatives	0.0%	Avg. seasoning	5.7y
Current OC (EURm)	3,663.2	LTV (Original value)	52.5%
Current OC	236.6%	LTV (Market value)	n/a
Number of loans	42,295	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	32,899	Share of largest exposure tranche	68.6% (< EUR 0.3m)
Share of 10 largest borrowers	2.1%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	148,865	LCR level / haircut (Benchmarks)	-
Number of properties	37,683	Risk weight (Benchmarks)	-

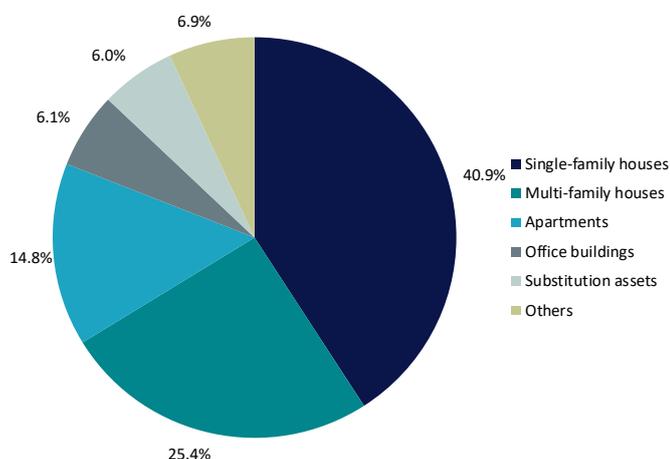
## Past development



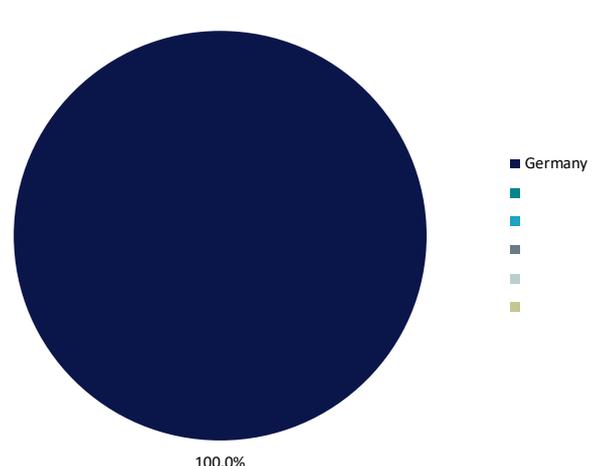
## Maturity structure



## Distribution by borrower type



## Distribution by country



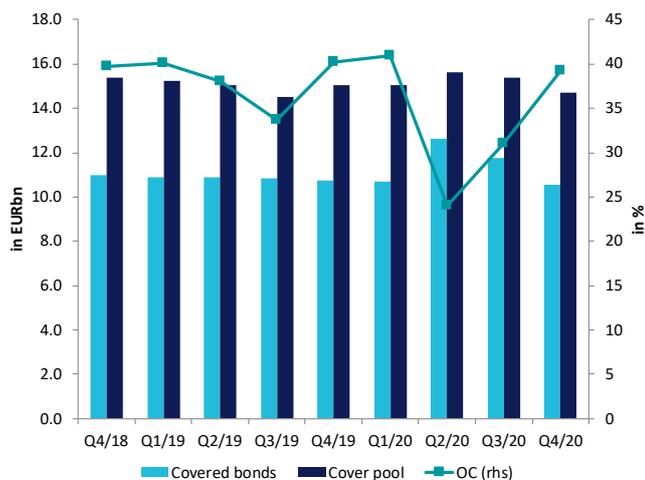
# Landesbank Baden-Württemberg

# Mortgage

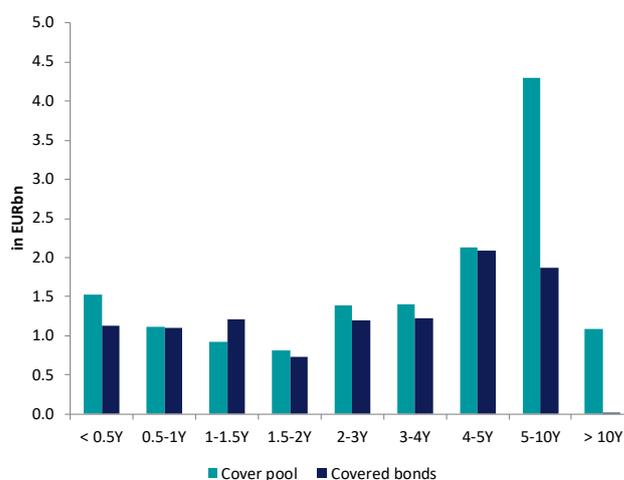
## Indicators of the cover pool

Covered bonds outstanding (EURm)	10,552.6	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	14,694.3	Fixed interest (Cover pool)	78.0%
of which residential	38.0%	Fixed interest (Covered bonds)	82.3%
of which commercial	56.0%	WAL (Cover pool)	4.6y
of which substitution assets	6.0%	WAL (Covered bonds)	2.9y
of which derivatives	0.0%	Avg. seasoning	5.5y
Current OC (EURm)	4,141.7	LTV (Original value)	55.0%
Current OC	39.2%	LTV (Market value)	n/a
Number of loans	35,362	Largest FX-position (NPV in EURm)	USD (540.8)
Number of borrowers	27,021	Share of largest exposure tranche	58.4% (> EUR 10m)
Share of 10 largest borrowers	14.2%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	511,154	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	31,916	Risk weight (Benchmarks)	10%

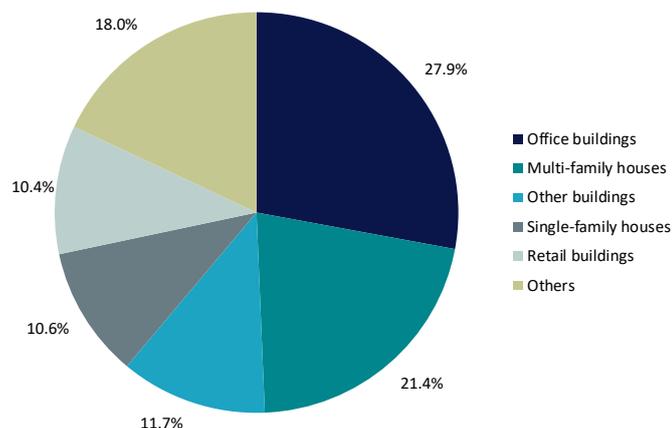
## Past development



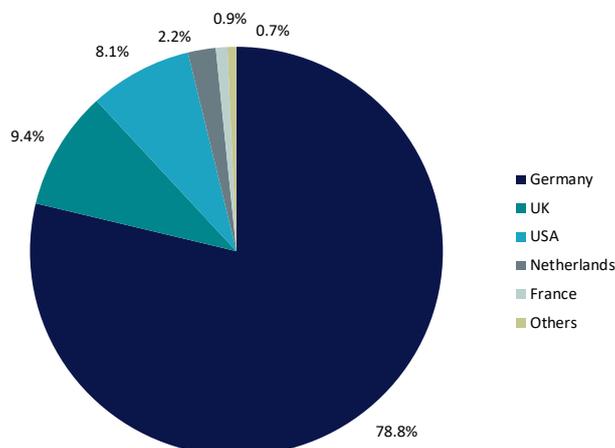
## Maturity structure



## Distribution by borrower type



## Distribution by country



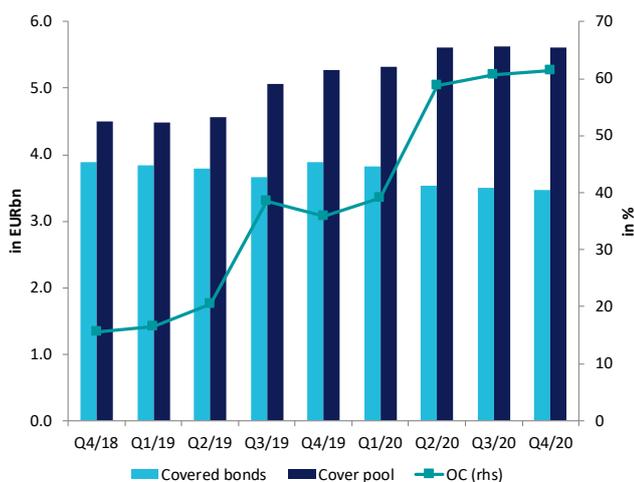
# Landesbank Berlin

# Mortgage

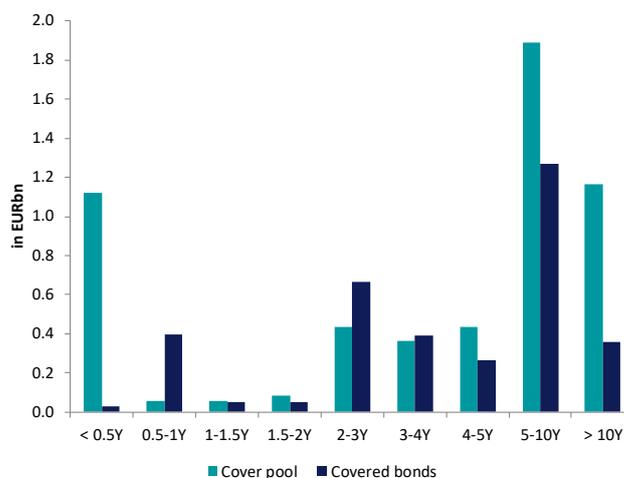
## Indicators of the cover pool

Covered bonds outstanding (EURm)	3,475.0	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	5,609.4	Fixed interest (Cover pool)	86.0%
of which residential	63.1%	Fixed interest (Covered bonds)	96.0%
of which commercial	32.2%	WAL (Cover pool)	8.2y
of which substitution assets	4.6%	WAL (Covered bonds)	5.2y
of which derivatives	0.0%	Avg. seasoning	4.0y
Current OC (EURm)	2,134.4	LTV (Original value)	55.0%
Current OC	61.4%	LTV (Market value)	n/a
Number of loans	6,712	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	6,027	Share of largest exposure tranche	61.9% (> EUR 10m)
Share of 10 largest borrowers	23.7%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	887,579	LCR level / haircut (Benchmarks)	-
Number of properties	7,020	Risk weight (Benchmarks)	-

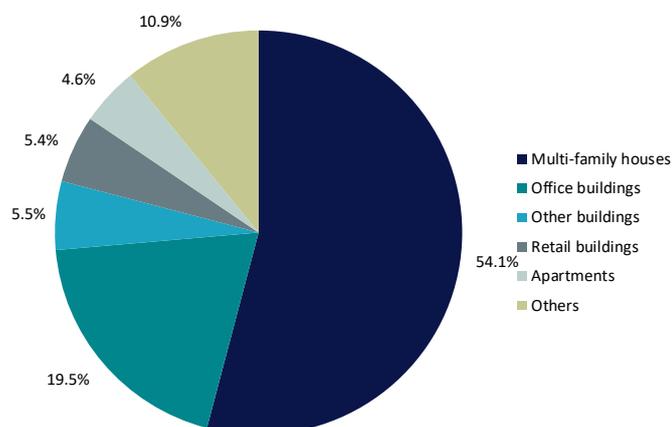
## Past development



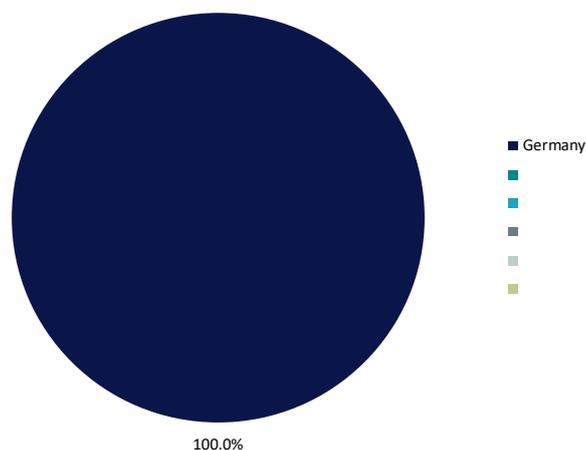
## Maturity structure



## Distribution by borrower type



## Distribution by country



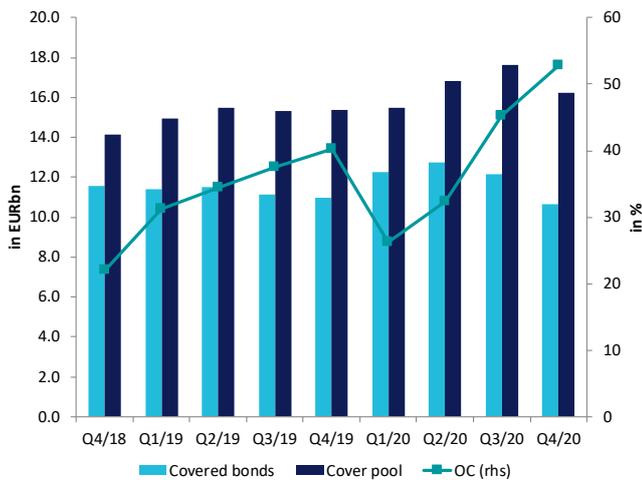
# Landesbank Hessen-Thüringen

# Mortgage

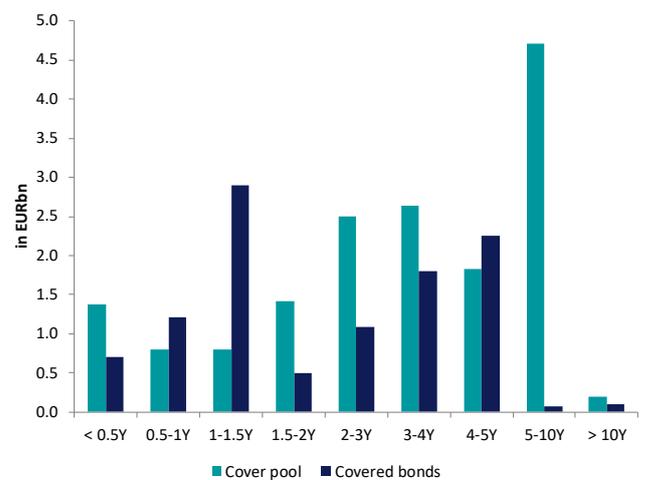
## Indicators of the cover pool

Covered bonds outstanding (EURm)	10,634.3	Rating (Moody's / Fitch / S&P / DBRS)	- / AAA / - / -
Cover pool volume (EURm)	16,254.7	Fixed interest (Cover pool)	61.7%
of which residential	25.1%	Fixed interest (Covered bonds)	81.9%
of which commercial	71.2%	WAL (Cover pool)	3.9y
of which substitution assets	3.7%	WAL (Covered bonds)	2.3y
of which derivatives	0.0%	Avg. seasoning	4.3y
Current OC (EURm)	5,620.4	LTV (Original value)	59.0%
Current OC	52.9%	LTV (Market value)	n/a
Number of loans	7,233	Largest FX-position (NPV in EURm)	USD (2,300.3)
Number of borrowers	5,985	Share of largest exposure tranche	88.6% (> EUR 10m)
Share of 10 largest borrowers	9.3%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	2,614,820	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	8,131	Risk weight (Benchmarks)	10%

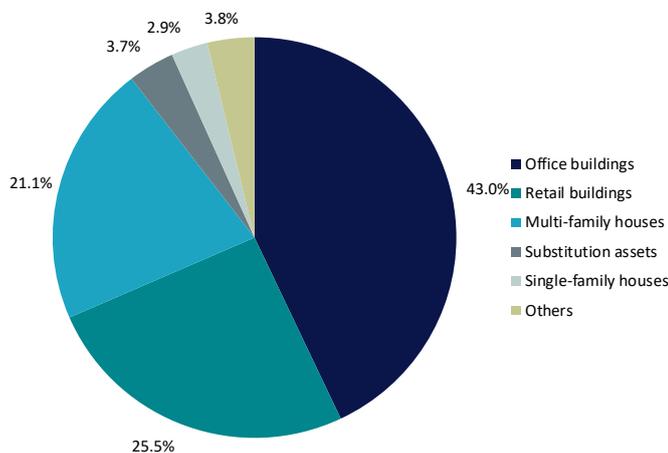
## Past development



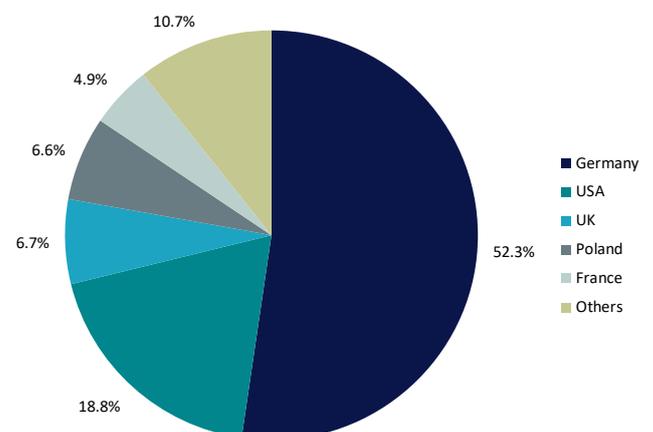
## Maturity structure



## Distribution by borrower type



## Distribution by country



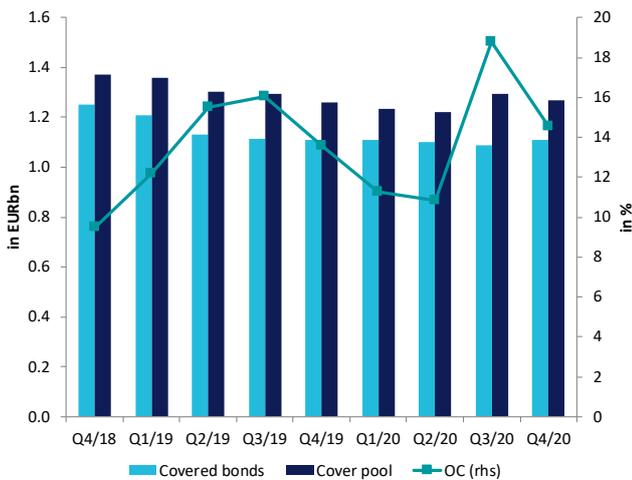
# M.M.Warburg & CO Hypothekenbank

# Mortgage

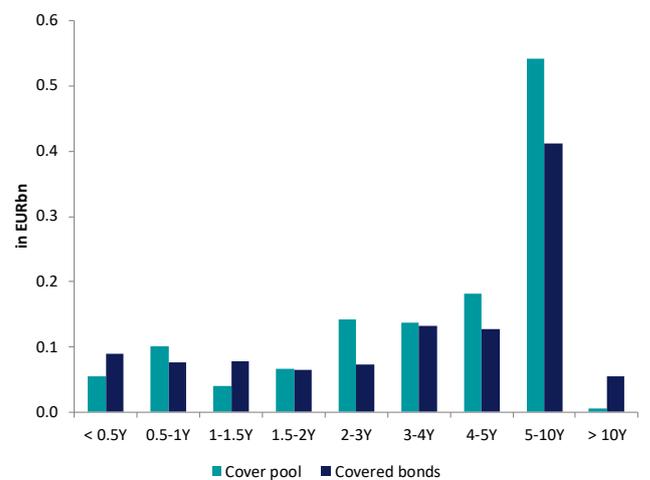
## Indicators of the cover pool

Covered bonds outstanding (EURm)	1,107.9	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	1,268.9	Fixed interest (Cover pool)	94.7%
of which residential	19.2%	Fixed interest (Covered bonds)	97.1%
of which commercial	75.5%	WAL (Cover pool)	4.4y
of which substitution assets	5.2%	WAL (Covered bonds)	4.6y
of which derivatives	0.0%	Avg. seasoning	5.5y
Current OC (EURm)	161.0	LTV (Original value)	56.9%
Current OC	14.5%	LTV (Market value)	n/a
Number of loans	324	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	202	Share of largest exposure tranche	54.7% (EUR 1-10m)
Share of 10 largest borrowers	23.7%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	5,951,980	LCR level / haircut (Benchmarks)	-
Number of properties	356	Risk weight (Benchmarks)	-

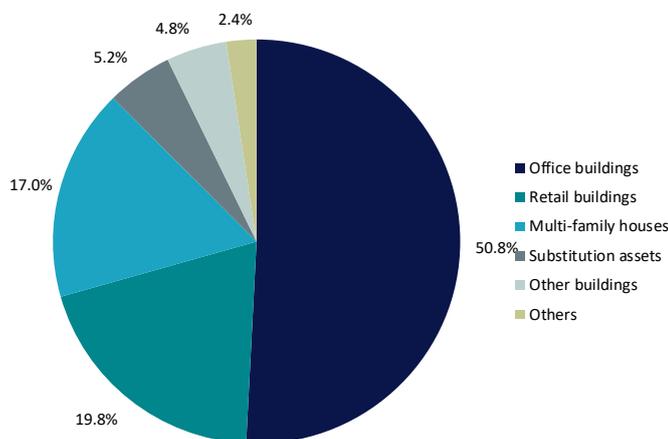
## Past development



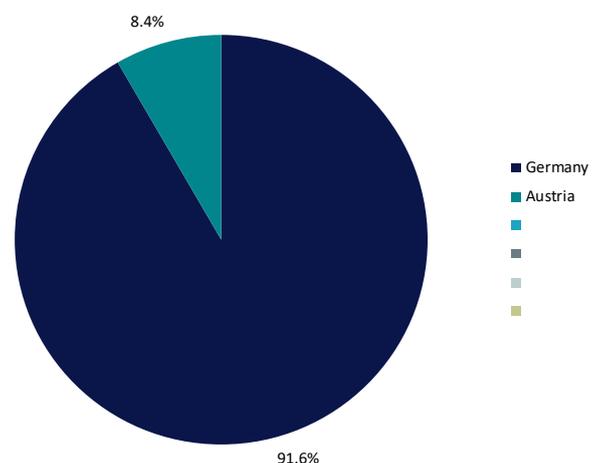
## Maturity structure



## Distribution by borrower type



## Distribution by country



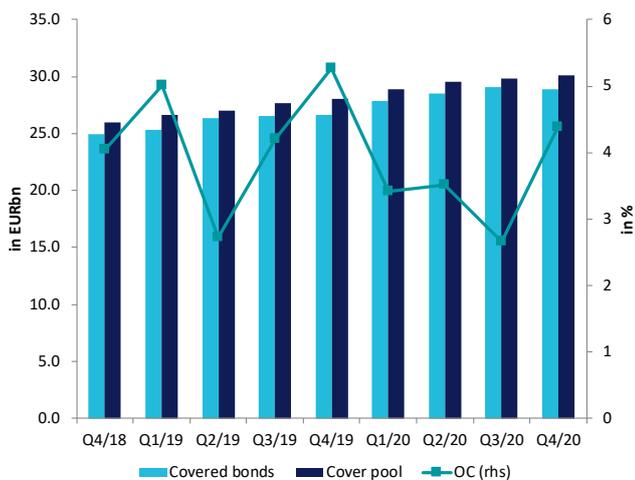
# Münchener Hypothekenbank

# Mortgage

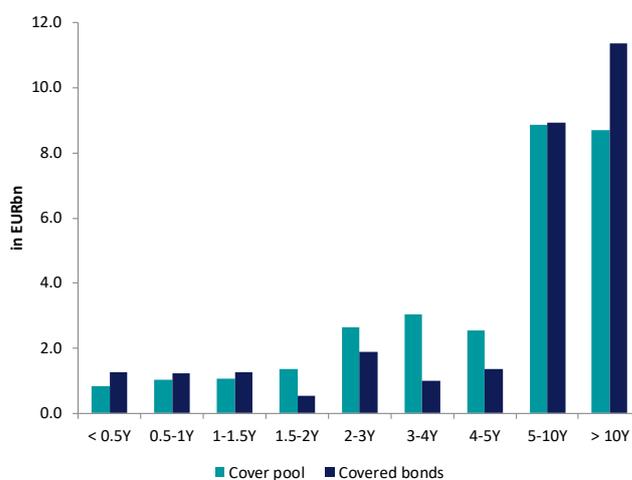
## Indicators of the cover pool

Covered bonds outstanding (EURm)	28,846.3	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	30,110.1	Fixed interest (Cover pool)	96.0%
of which residential	80.7%	Fixed interest (Covered bonds)	86.0%
of which commercial	17.3%	WAL (Cover pool)	8.0y
of which substitution assets	2.0%	WAL (Covered bonds)	8.0y
of which derivatives	0.0%	Avg. seasoning	5.0y
Current OC (EURm)	1,263.8	LTV (Original value)	52.0%
Current OC	4.4%	LTV (Market value)	n/a
Number of loans	191,335	Largest FX-position (NPV in EURm)	CHF (1,267.5)
Number of borrowers	167,808	Share of largest exposure tranche	60.9% (< EUR 0.3m)
Share of 10 largest borrowers	2.4%	Loans in arrears (> 90 days)	0.03%
Avg. exposure to borrowers (EUR)	175,854	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	178,837	Risk weight (Benchmarks)	10%

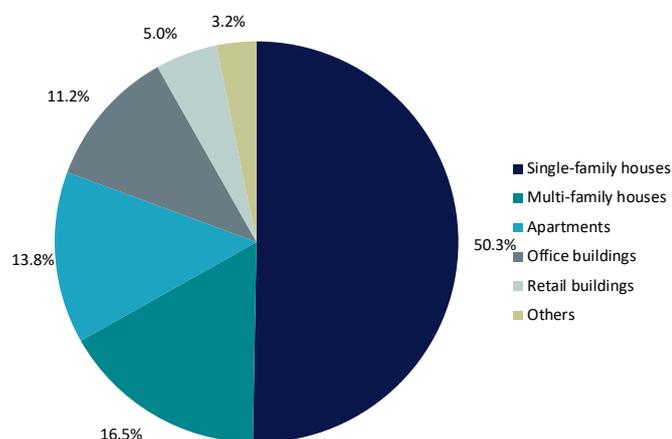
## Past development



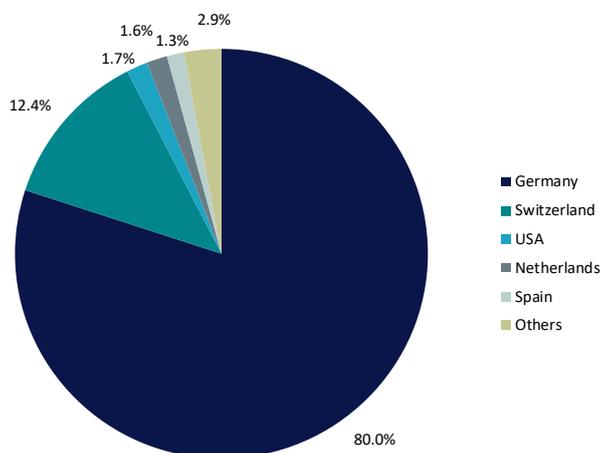
## Maturity structure



## Distribution by borrower type



## Distribution by country



# Natixis Pfandbriefbank

# Mortgage

## Indicators of the cover pool

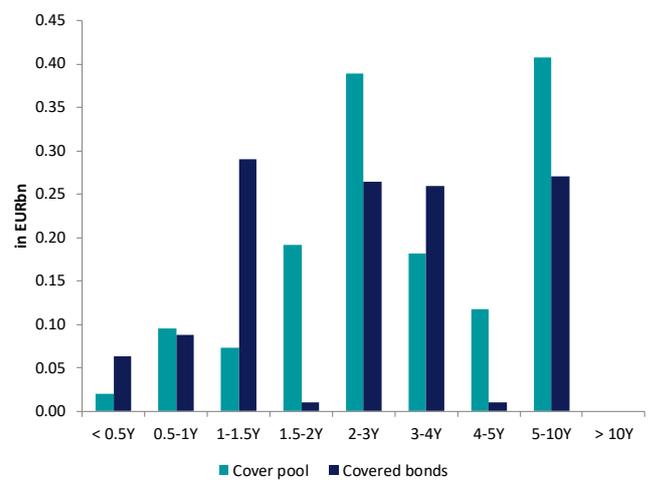
Covered bonds outstanding (EURm)	1,257.5
Cover pool volume (EURm)	1,477.7
of which residential	5.8%
of which commercial	83.0%
of which substitution assets	11.2%
of which derivatives	0.0%
Current OC (EURm)	220.2
Current OC	17.5%
Number of loans	67
Number of borrowers	131
Share of 10 largest borrowers	24.6%
Avg. exposure to borrowers (EUR)	10,020,229
Number of properties	258

Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Fixed interest (Cover pool)	41.8%
Fixed interest (Covered bonds)	97.4%
WAL (Cover pool)	3.6y
WAL (Covered bonds)	2.9y
Avg. seasoning	3.7y
LTV (Original value)	58.2%
LTV (Market value)	n/a
Largest FX-position (NPV in EURm)	n/a
Share of largest exposure tranche	94.1% (> EUR 10m)
Loans in arrears (> 90 days)	0.00%
LCR level / haircut (Benchmarks)	-
Risk weight (Benchmarks)	-

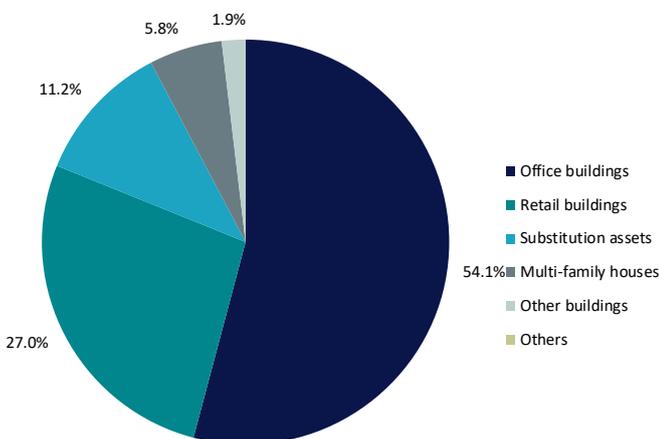
## Past development



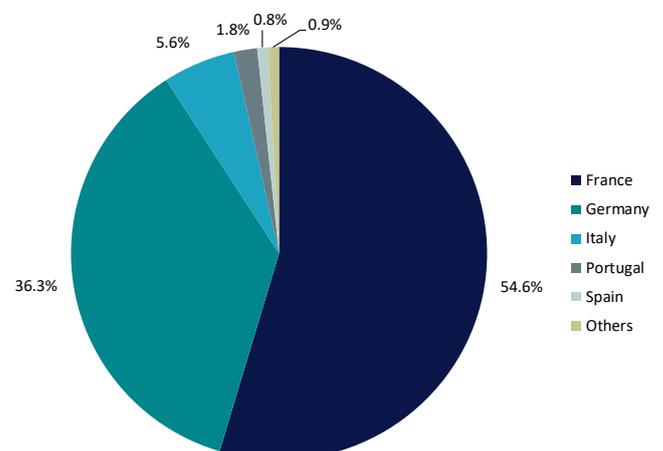
## Maturity structure



## Distribution by borrower type



## Distribution by country



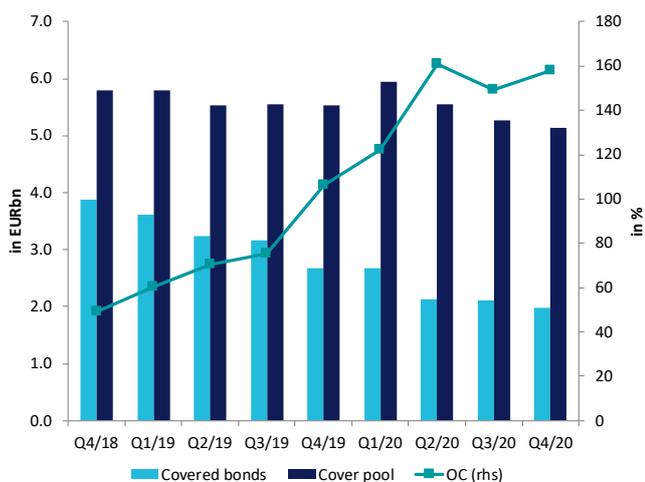
# Norddeutsche Landesbank

# Mortgage

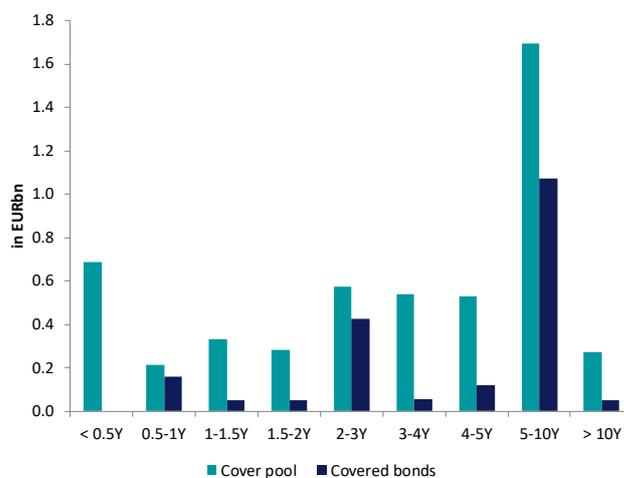
## Indicators of the cover pool

Covered bonds outstanding (EURm)	1,988.5	Rating (Moody's / Fitch / S&P / DBRS)	Aa1 / - / - / -
Cover pool volume (EURm)	5,133.4	Fixed interest (Cover pool)	76.6%
of which residential	69.6%	Fixed interest (Covered bonds)	87.4%
of which commercial	28.5%	WAL (Cover pool)	n/a
of which substitution assets	1.9%	WAL (Covered bonds)	n/a
of which derivatives	0.0%	Avg. seasoning	7.5y
Current OC (EURm)	3,144.9	LTV (Original value)	60.0%
Current OC	158.2%	LTV (Market value)	n/a
Number of loans	n/a	Largest FX-position (NPV in EURm)	CHF (11.8)
Number of borrowers	n/a	Share of largest exposure tranche	40.8% (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%

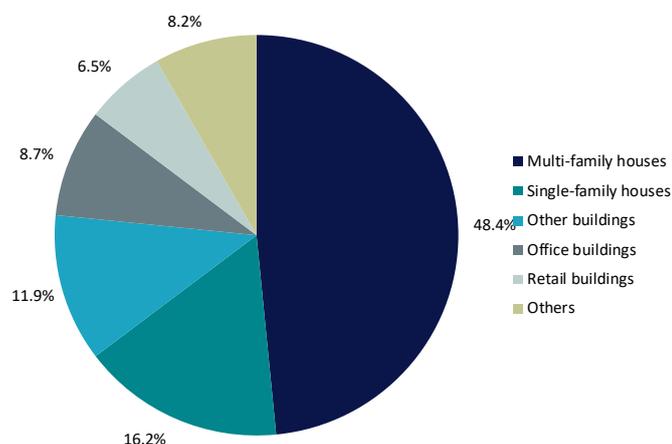
## Past development



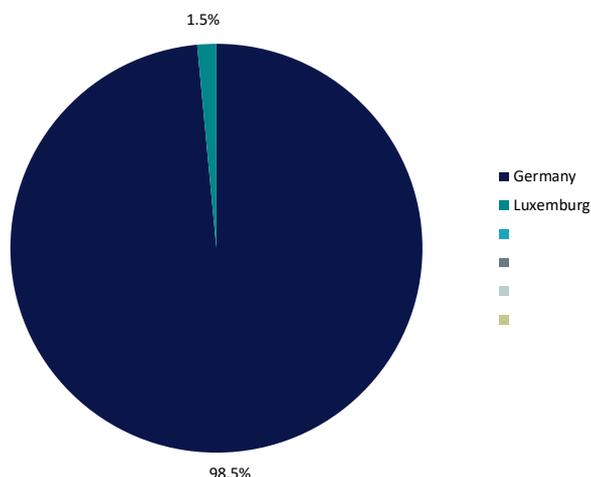
## Maturity structure



## Distribution by borrower type



## Distribution by country



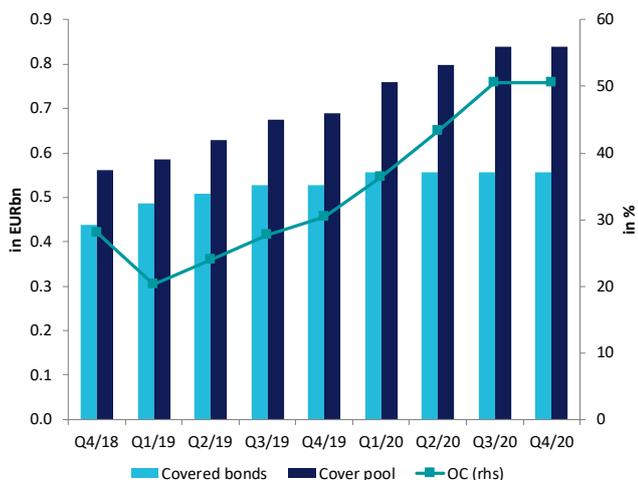
# PSD Bank Nürnberg

# Mortgage

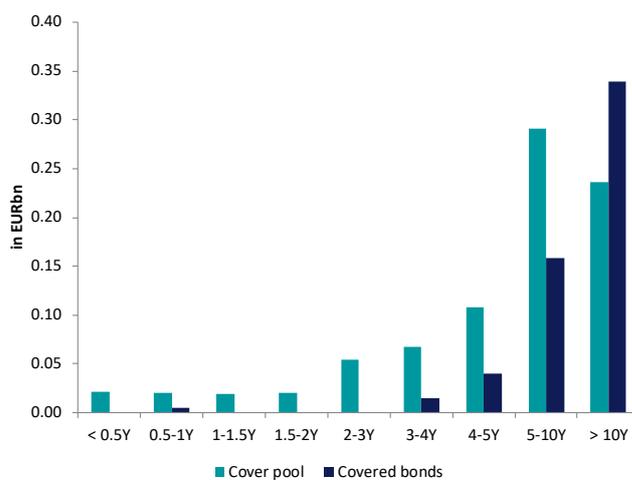
## Indicators of the cover pool

Covered bonds outstanding (EURm)	557.6	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	839.2	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)	7.5y
of which substitution assets	2.7%	WAL (Covered bonds)	12.2y
of which derivatives	0.0%	Avg. seasoning	4.1y
Current OC (EURm)	281.6	LTV (Original value)	51.9%
Current OC	50.5%	LTV (Market value)	n/a
Number of loans	8,738	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	6,998	Share of largest exposure tranche	99.6% (< EUR 0.3m)
Share of 10 largest borrowers	0.5%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	116,639	LCR level / haircut (Benchmarks)	-
Number of properties	8,090	Risk weight (Benchmarks)	-

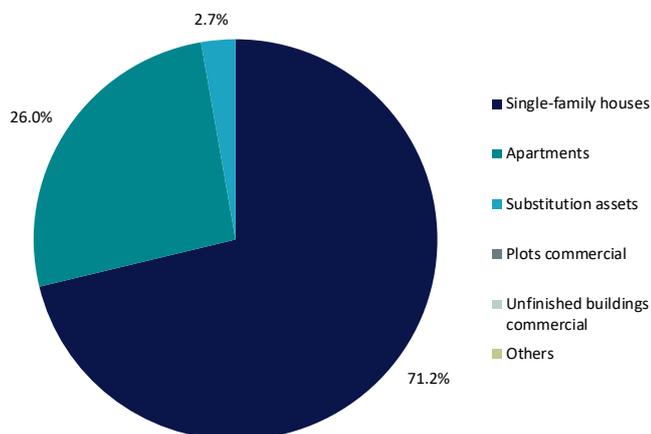
## Past development



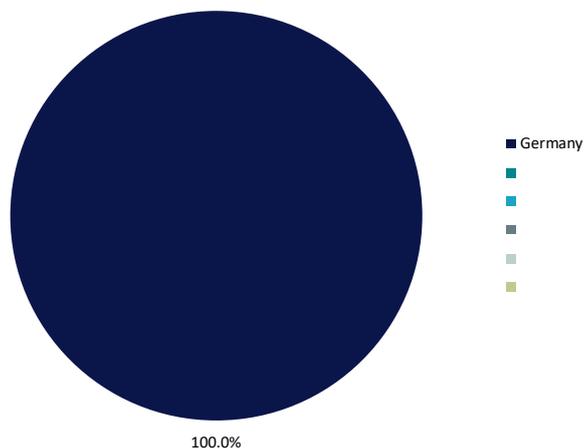
## Maturity structure



## Distribution by borrower type



## Distribution by country



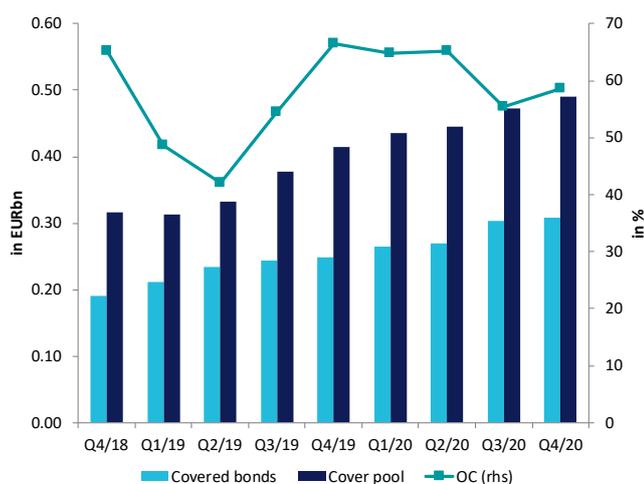
## PSD Bank Rhein-Ruhr

## Mortgage

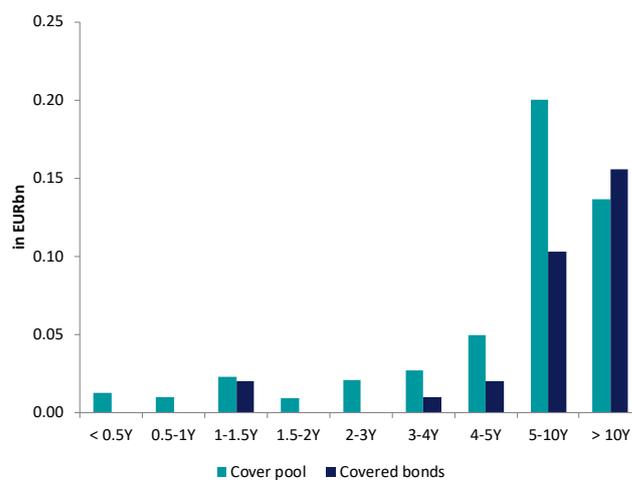
### Indicators of the cover pool

Covered bonds outstanding (EURm)	309.0	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	490.1	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)	7.4y
of which substitution assets	2.7%	WAL (Covered bonds)	9.5y
of which derivatives	0.0%	Avg. seasoning	3.9y
Current OC (EURm)	181.1	LTV (Original value)	50.6%
Current OC	58.6%	LTV (Market value)	n/a
Number of loans	5,071	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	4,185	Share of largest exposure tranche	95.3% (< EUR 0.3m)
Share of 10 largest borrowers	1.3%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	114,006	LCR level / haircut (Benchmarks)	-
Number of properties	4,396	Risk weight (Benchmarks)	-

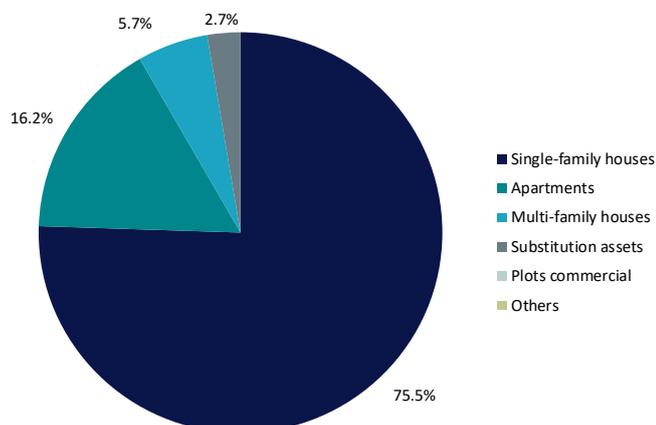
### Past development



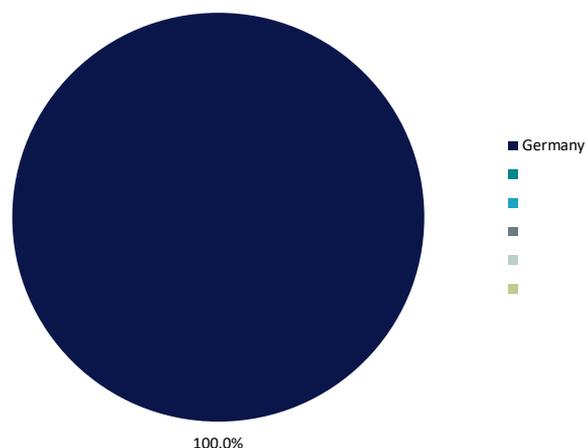
### Maturity structure



### Distribution by borrower type



### Distribution by country



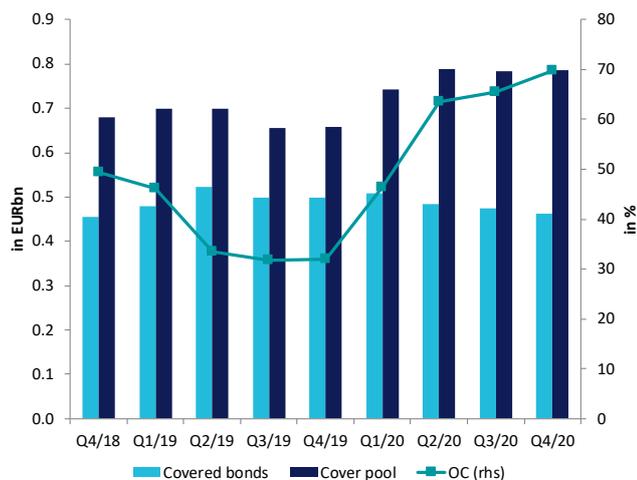
# SaarLB

# Mortgage

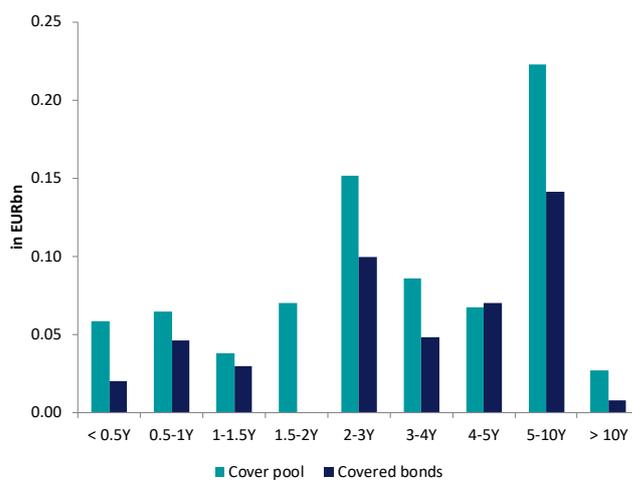
## Indicators of the cover pool

Covered bonds outstanding (EURm)	463.3	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	786.9	Fixed interest (Cover pool)	79.1%
of which residential	1.3%	Fixed interest (Covered bonds)	100.0%
of which commercial	93.1%	WAL (Cover pool)	n/a
of which substitution assets	5.5%	WAL (Covered bonds)	n/a
of which derivatives	0.0%	Avg. seasoning	5.3y
Current OC (EURm)	323.6	LTV (Original value)	51.7%
Current OC	69.8%	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	58.2% (> 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)	-

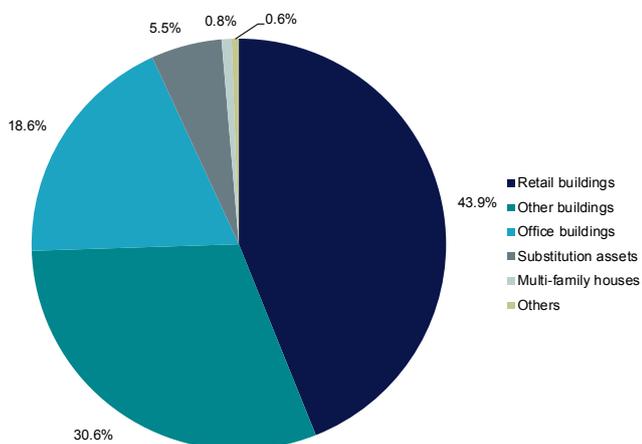
## Past development



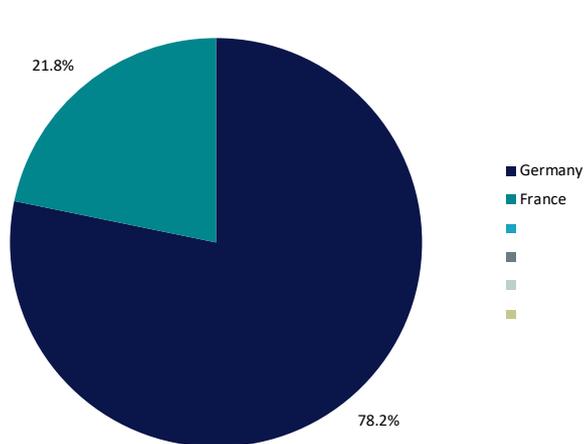
## Maturity structure



## Distribution by borrower type



## Distribution by country



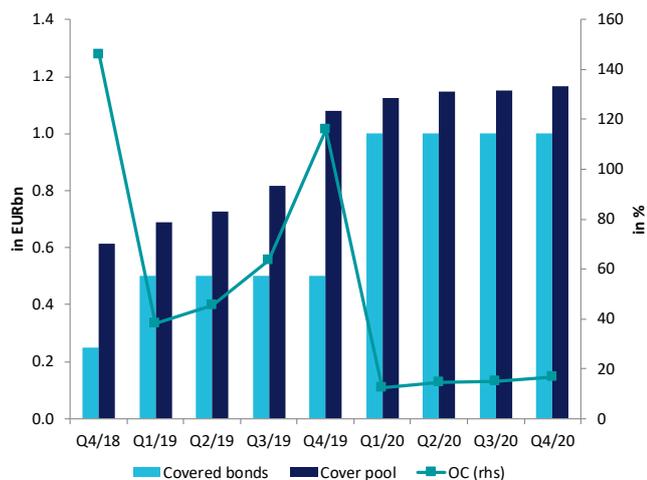
# Santander Consumer Bank

# Mortgage

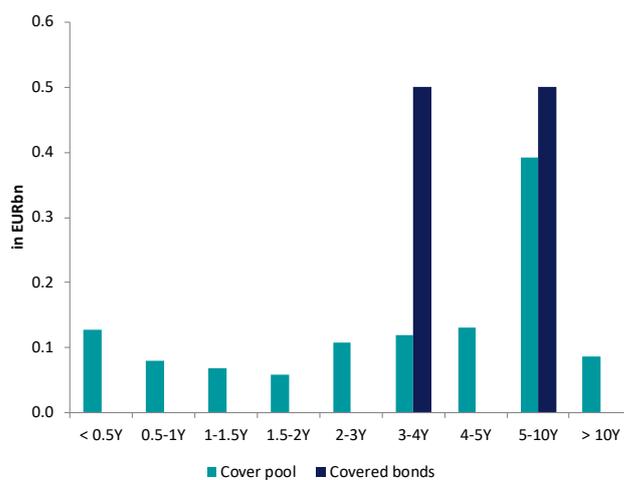
## Indicators of the cover pool

Covered bonds outstanding (EURm)	1,000.0	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / AAA / - / -
Cover pool volume (EURm)	1,167.5	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)	6.5y
of which derivatives	0.0%	Avg. seasoning	7.4y
Current OC (EURm)	167.5	LTV (Original value)	45.0%
Current OC	16.7%	LTV (Market value)	n/a
Number of loans	19,432	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	23,578	Share of largest exposure tranche	98.2% (< EUR 0.3m)
Share of 10 largest borrowers	0.4%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	47,394	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	13,941	Risk weight (Benchmarks)	10%

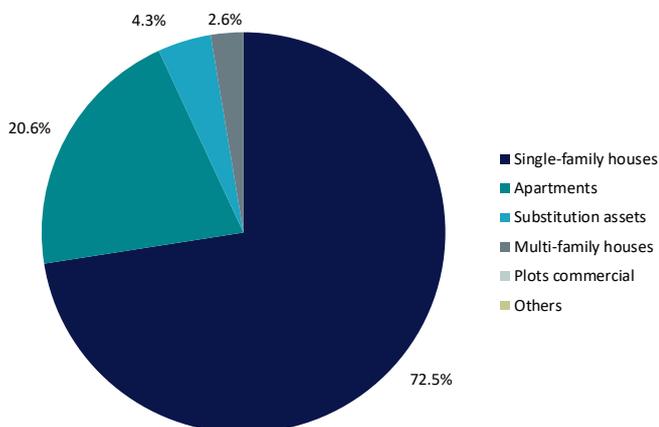
## Past development



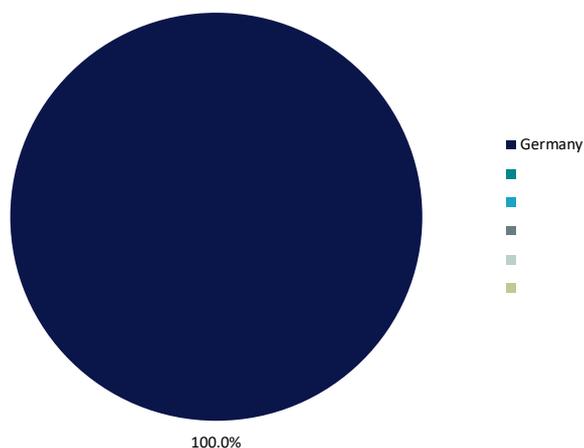
## Maturity structure



## Distribution by borrower type



## Distribution by country



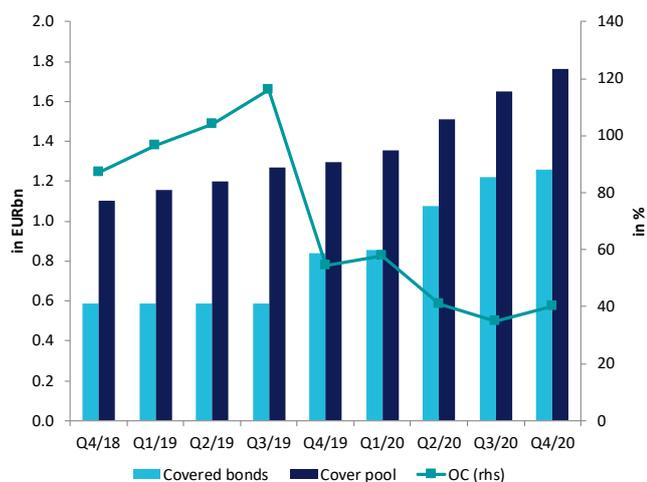
# Sparkasse Hannover

# Mortgage

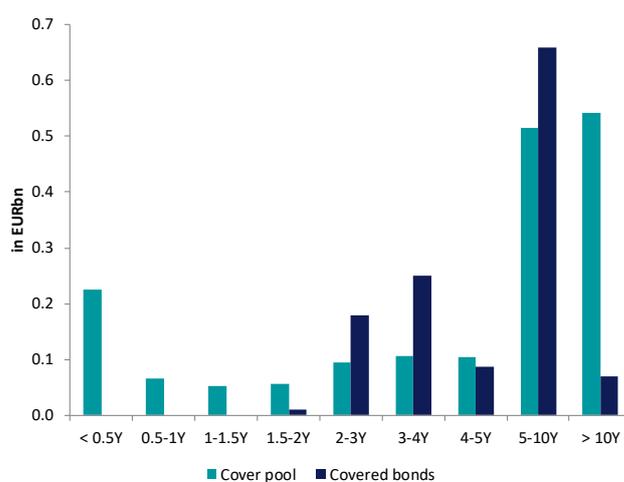
## Indicators of the cover pool

Covered bonds outstanding (EURm)	1,257.6	Rating (Moody's / Fitch / S&P / DBRS)	- / AAA / - / -
Cover pool volume (EURm)	1,761.9	Fixed interest (Cover pool)	89.2%
of which residential	78.0%	Fixed interest (Covered bonds)	100.0%
of which commercial	18.1%	WAL (Cover pool)	n/a
of which substitution assets	3.9%	WAL (Covered bonds)	n/a
of which derivatives	0.0%	Avg. seasoning	4.3y
Current OC (EURm)	504.3	LTV (Original value)	56.3%
Current OC	40.1%	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	62.7% (< 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)	-

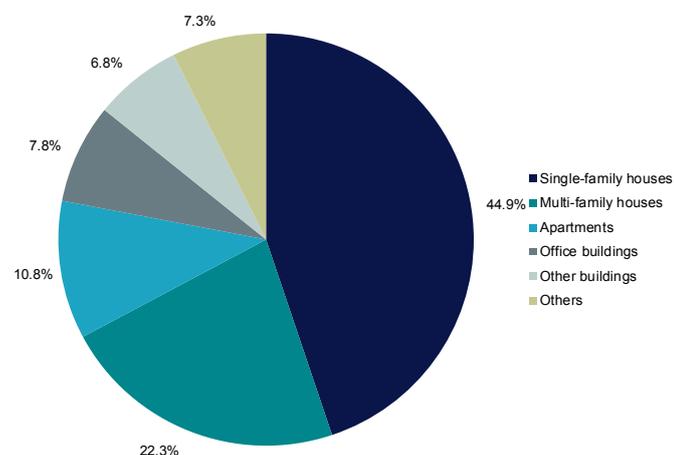
## Past development



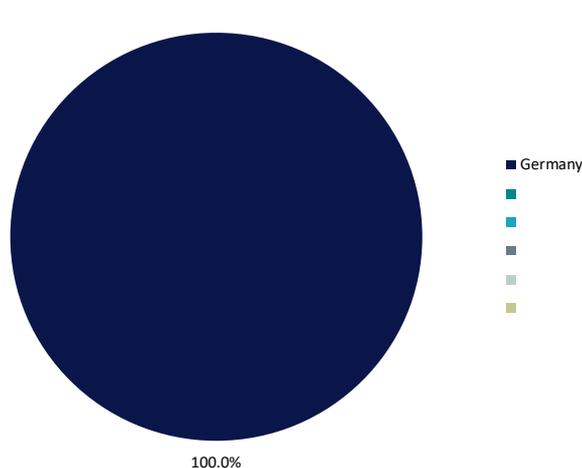
## Maturity structure



## Distribution by borrower type



## Distribution by country



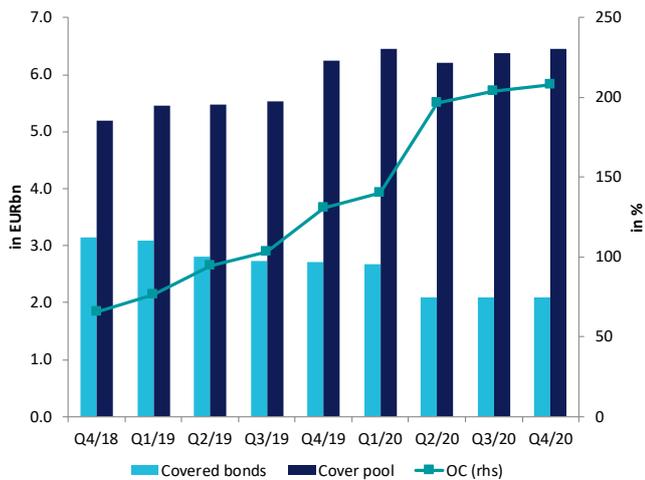
# Sparkasse KölnBonn

# Mortgage

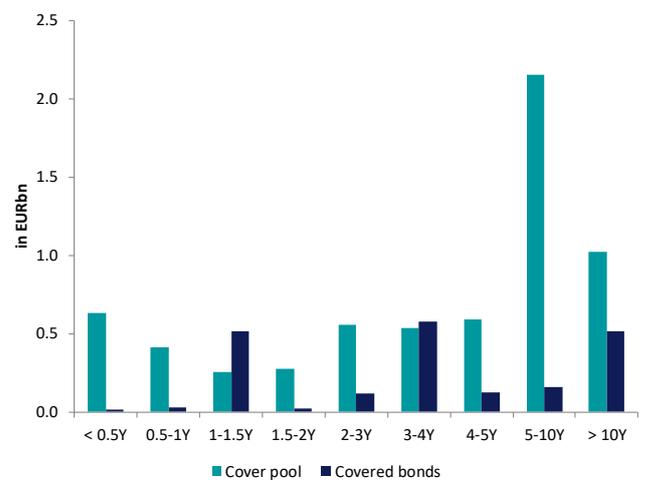
## Indicators of the cover pool

Covered bonds outstanding (EURm)	2,091.1	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	6,445.6	Fixed interest (Cover pool)	91.5%
of which residential	74.6%	Fixed interest (Covered bonds)	100.0%
of which commercial	20.1%	WAL (Cover pool)	n/a
of which substitution assets	5.3%	WAL (Covered bonds)	n/a
of which derivatives	0.0%	Avg. seasoning	5.6y
Current OC (EURm)	4,354.5	LTV (Original value)	52.7%
Current OC	208.2%	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	50.1% (< 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%

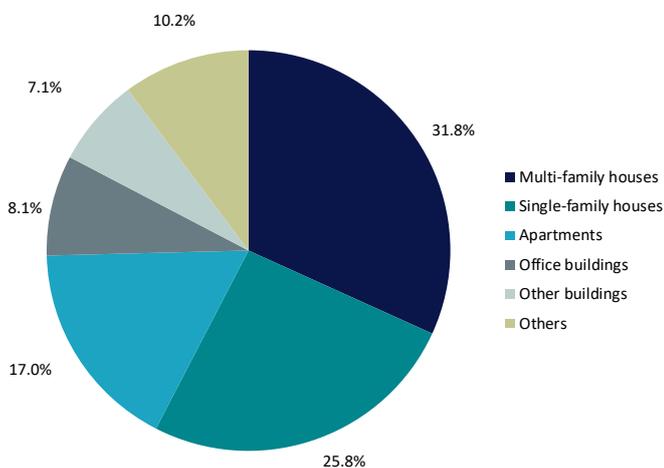
## Past development



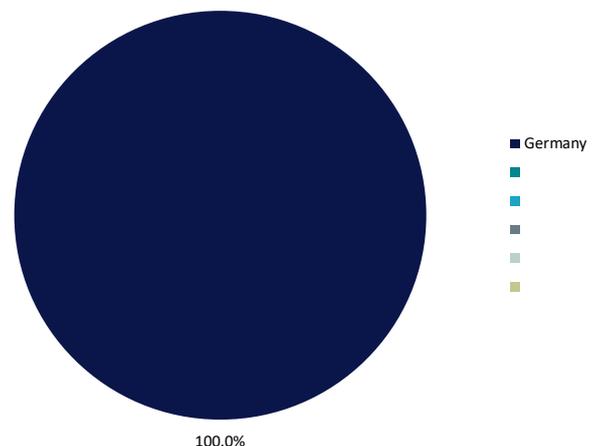
## Maturity structure



## Distribution by borrower type



## Distribution by country



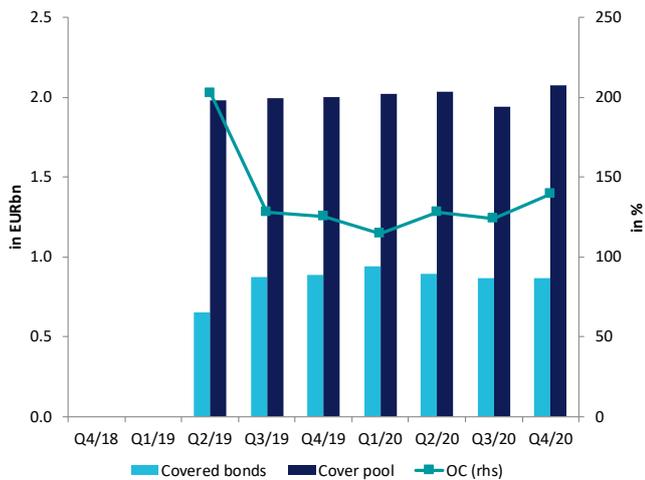
# Stadtsparkasse Düsseldorf

# Mortgage

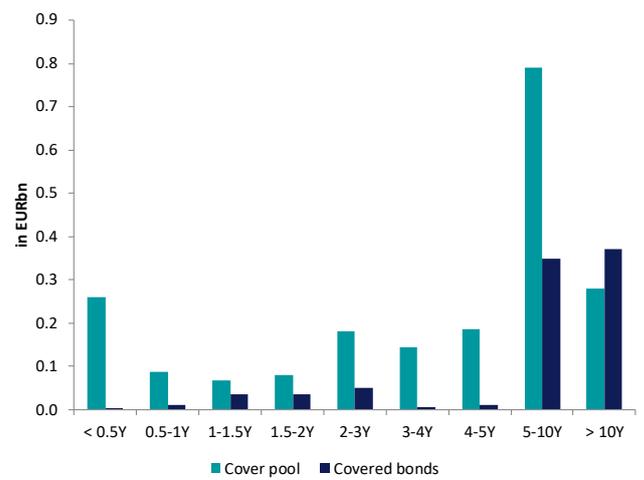
## Indicators of the cover pool

Covered bonds outstanding (EURm)	867.0	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	2,077.6	Fixed interest (Cover pool)	93.2%
of which residential	68.5%	Fixed interest (Covered bonds)	100.0%
of which commercial	27.4%	WAL (Cover pool)	n/a
of which substitution assets	4.0%	WAL (Covered bonds)	n/a
of which derivatives	0.0%	Avg. seasoning	6.2y
Current OC (EURm)	1,210.6	LTV (Original value)	56.2%
Current OC	139.6%	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	43.3% (< 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)	-
Number of properties	n/a	Risk weight (Benchmarks)	-

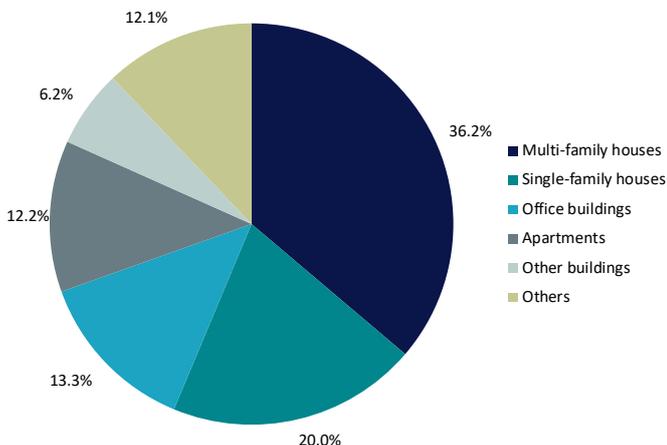
## Past development



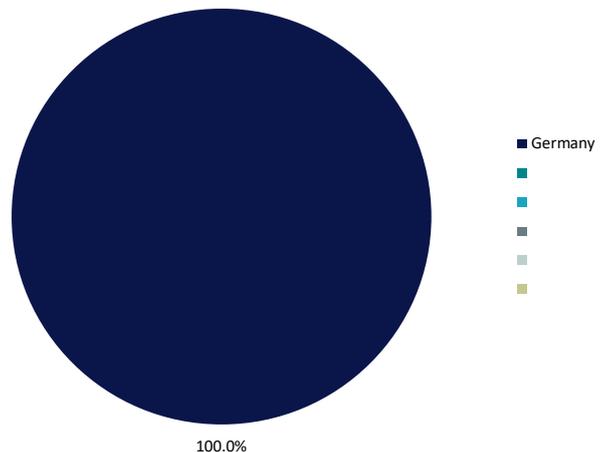
## Maturity structure



## Distribution by borrower type



## Distribution by country



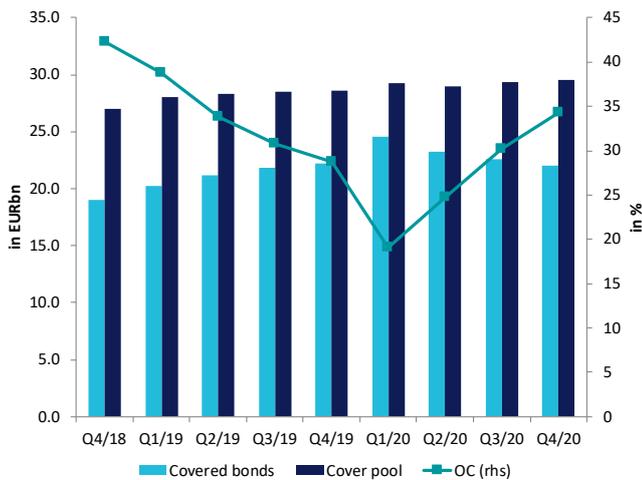
# UniCredit Bank

# Mortgage

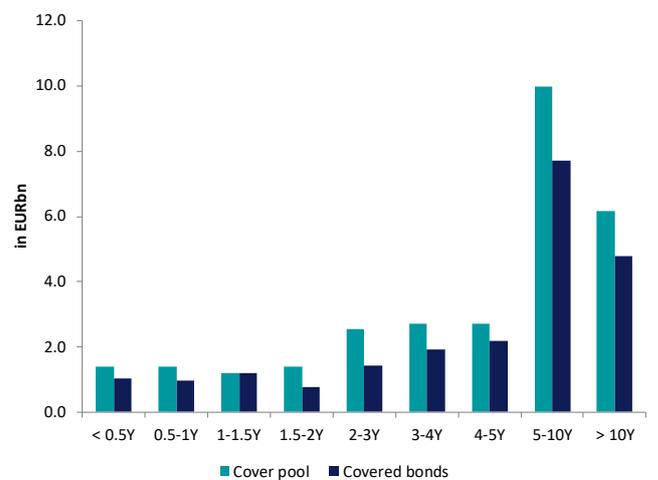
## Indicators of the cover pool

Covered bonds outstanding (EURm)	22,011.2	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	29,556.6	Fixed interest (Cover pool)	81.0%
of which residential	68.5%	Fixed interest (Covered bonds)	95.3%
of which commercial	29.3%	WAL (Cover pool)	6.8y
of which substitution assets	2.2%	WAL (Covered bonds)	6.9y
of which derivatives	0.0%	Avg. seasoning	7.0y
Current OC (EURm)	7,545.4	LTV (Original value)	42.1%
Current OC	34.3%	LTV (Market value)	n/a
Number of loans	150,235	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	114,202	Share of largest exposure tranche	38.0% (< EUR 0.3m)
Share of 10 largest borrowers	8.1%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	253,137	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	138,924	Risk weight (Benchmarks)	10%

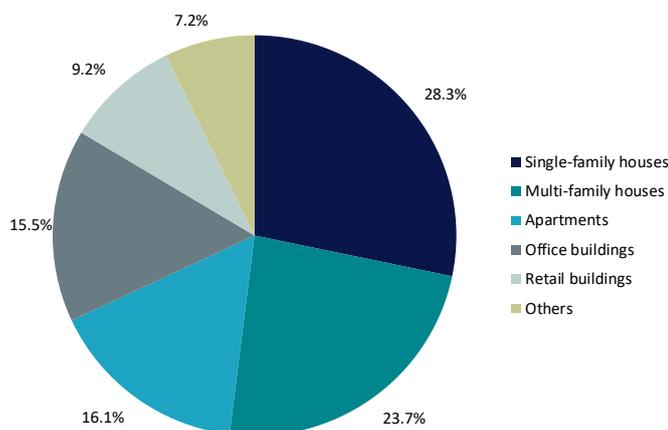
## Past development



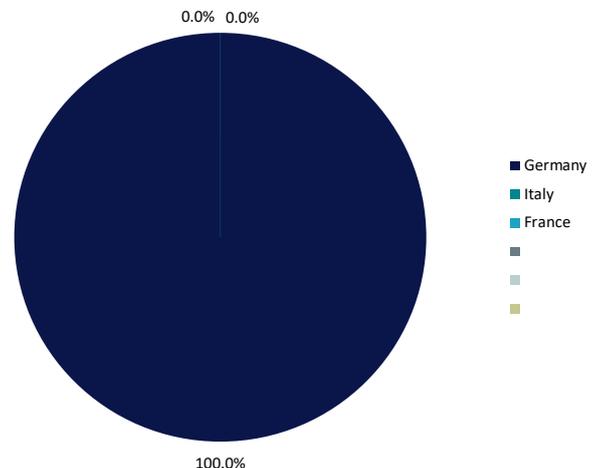
## Maturity structure



## Distribution by borrower type



## Distribution by country



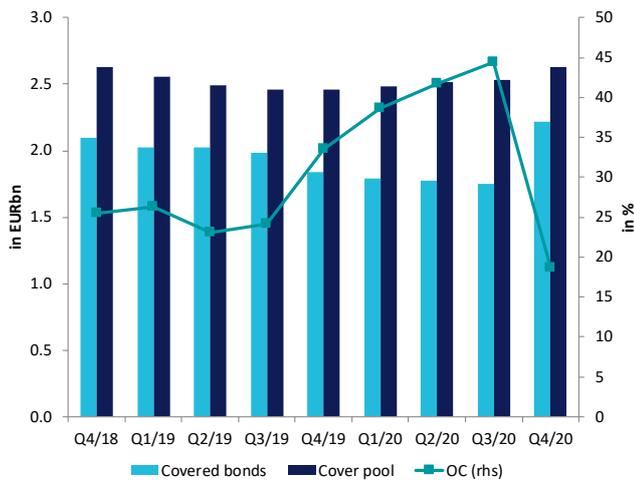
# Wüstenrot Bausparkasse

# Mortgage

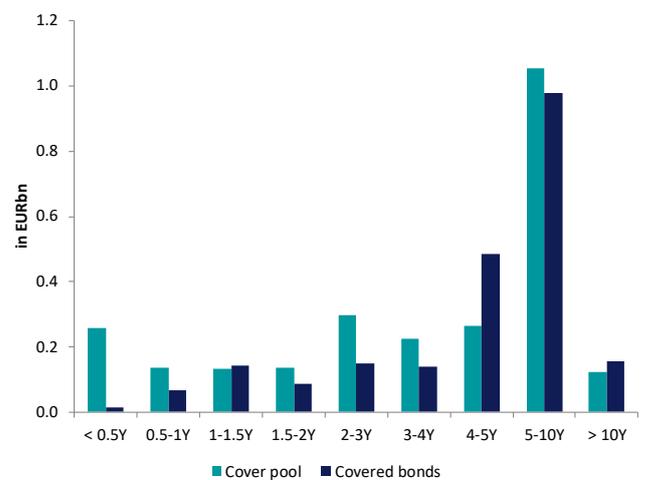
## Indicators of the cover pool

Covered bonds outstanding (EURm)	2,216.6	Rating (Moody's / Fitch / S&P / DBRS)	- / - / AAA / -
Cover pool volume (EURm)	2,628.8	Fixed interest (Cover pool)	99.3%
of which residential	89.4%	Fixed interest (Covered bonds)	98.2%
of which commercial	1.1%	WAL (Cover pool)	4.7y
of which substitution assets	9.5%	WAL (Covered bonds)	5.4y
of which derivatives	0.0%	Avg. seasoning	11.2y
Current OC (EURm)	412.2	LTV (Original value)	44.7%
Current OC	18.6%	LTV (Market value)	n/a
Number of loans	34,894	Largest FX-position (NPV in EURm)	n/a
Number of borrowers	31,275	Share of largest exposure tranche	87.6% (< EUR 0.3m)
Share of 10 largest borrowers	2.3%	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	76,058	LCR level / haircut (Benchmarks)	Level 1 / 7%
Number of properties	33,155	Risk weight (Benchmarks)	10%

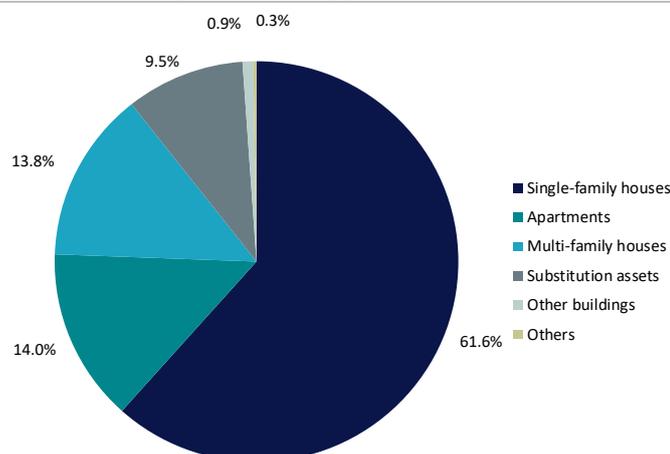
## Past development



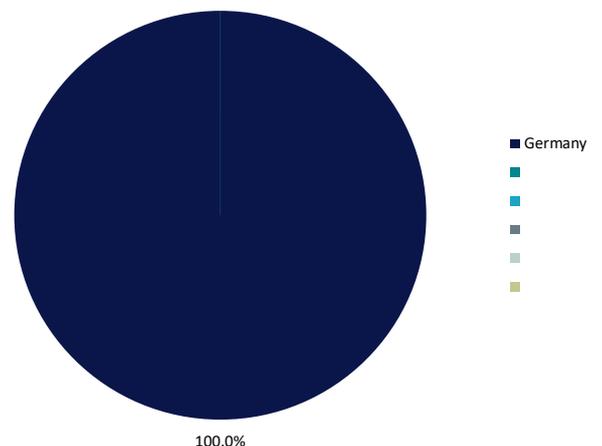
## Maturity structure



## Distribution by borrower type



## Distribution by country



# Public sector covered bonds

## Aareal Bank

## Public sector

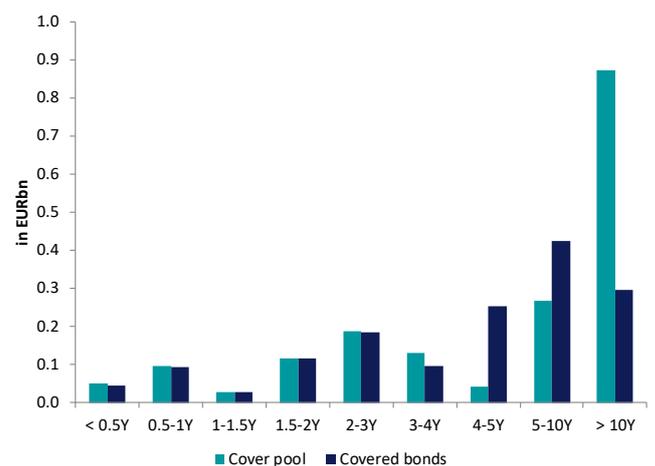
### Indicators of the cover pool

Covered bonds outstanding (EURm)	1,533.0	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	1,788.9	Fixed interest (Cover pool)	90.0%
of which substitution assets	0.8%	Fixed interest (Covered bonds)	84.9%
of which derivatives	0.0%	WAL (Cover pool)	8.8y
Current OC (EURm)	255.9	WAL (Covered bonds)	5.9y
Current OC	16.7%	Largest FX-position (NPV in EURm)	n/a
Number of loans	198	Share of largest exposure tranche	63.5% (> EUR 100m)
Number of borrowers	109	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	75.6%	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	16,274,312	Risk weight (Benchmarks)	-

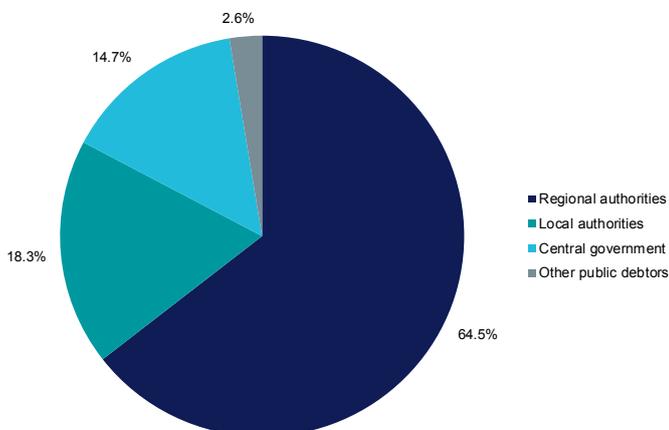
### Past development



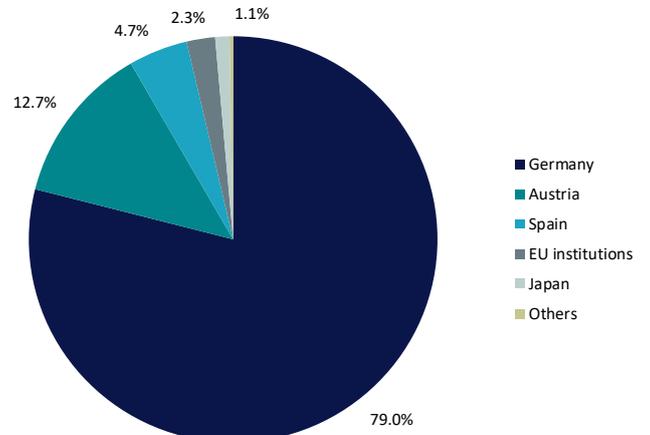
### Maturity structure



### Distribution by borrower type



### Distribution by country



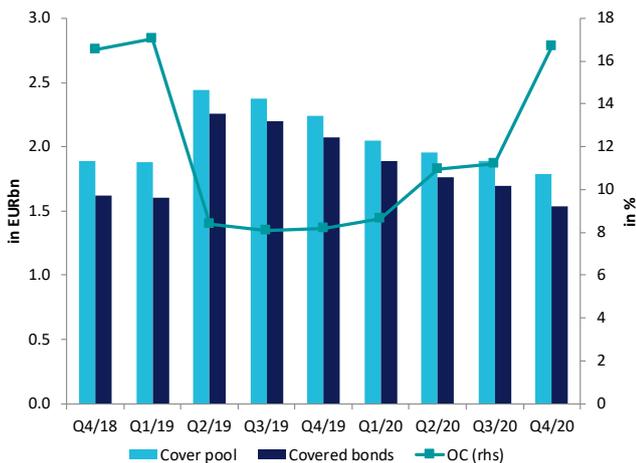
# Bayerische Landesbank

# Public sector

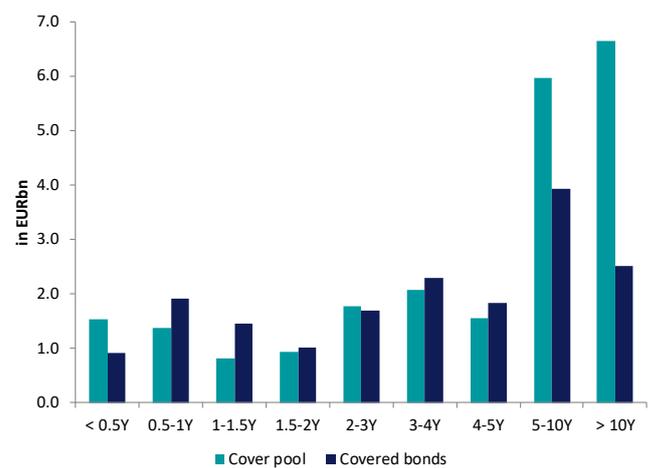
## Indicators of the cover pool

Covered bonds outstanding (EURm)	17,541.1	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / AAA / - / -
Cover pool volume (EURm)	22,620.5	Fixed interest (Cover pool)	92.0%
of which substitution assets	1.8%	Fixed interest (Covered bonds)	93.3%
of which derivatives	0.0%	WAL (Cover pool)	9.0y
Current OC (EURm)	5,079.4	WAL (Covered bonds)	6.0y
Current OC	29.0%	Largest FX-position (NPV in EURm)	GBP (630.5)
Number of loans	84,471	Share of largest exposure tranche	59.8% (> EUR 100m)
Number of borrowers	55,959	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	24.9%	LCR level / haircut (Benchmarks)	Level 1 / 7%
Avg. exposure to borrowers (EUR)	396,933	Risk weight (Benchmarks)	10%

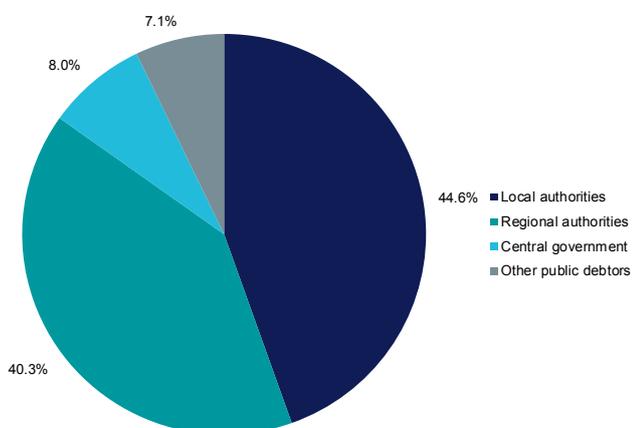
## Past development



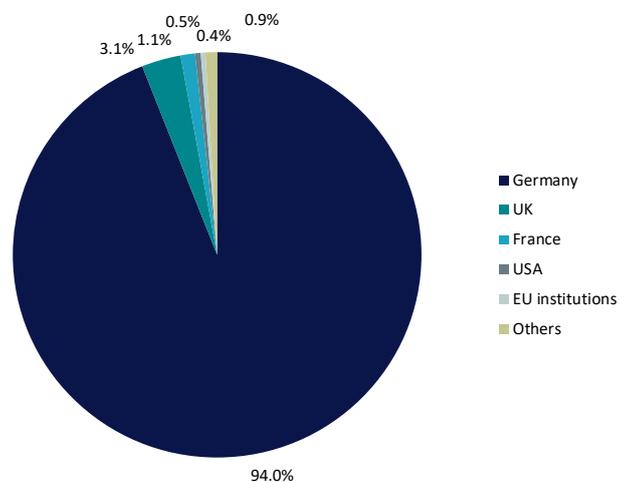
## Maturity structure



## Distribution by borrower type



## Distribution by country



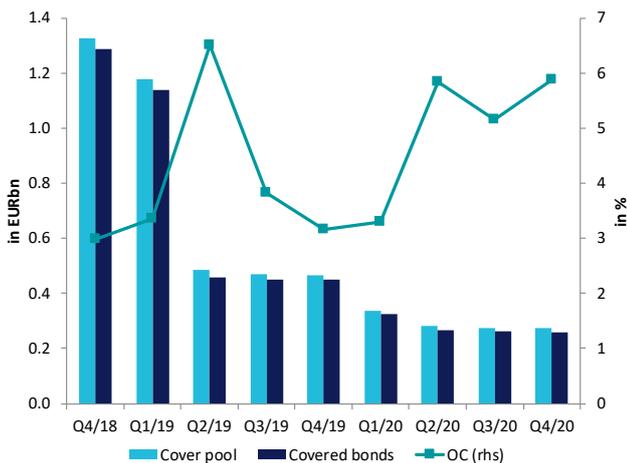
# Berlin Hyp

# Public sector

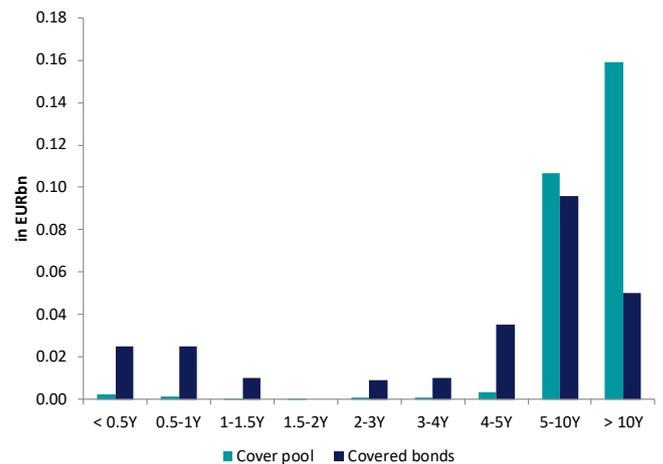
## Indicators of the cover pool

Covered bonds outstanding (EURm)	260.0	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	275.3	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)	12.5y
Current OC (EURm)	15.3	WAL (Covered bonds)	6.0y
Current OC	5.9%	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	95.6%	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	4,108,955	Risk weight (Benchmarks)	-

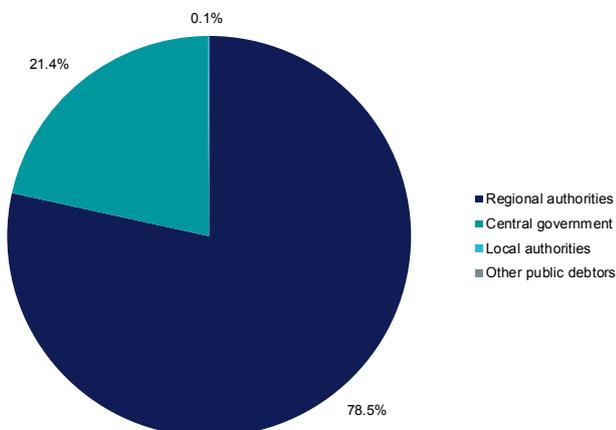
## Past development



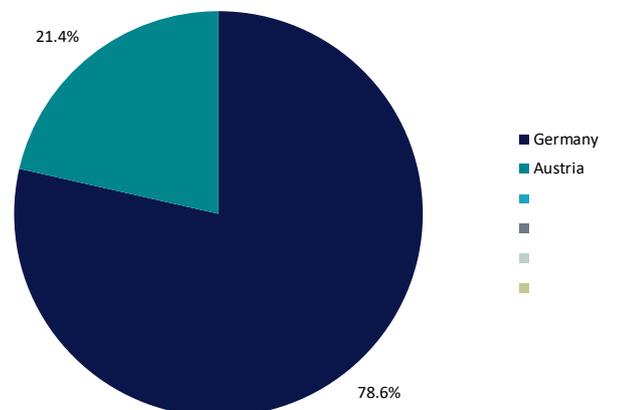
## Maturity structure



## Distribution by borrower type



## Distribution by country



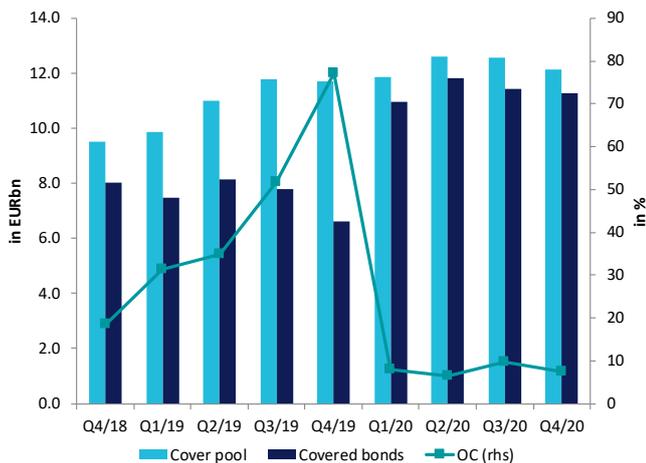
## Commerzbank

## Public sector

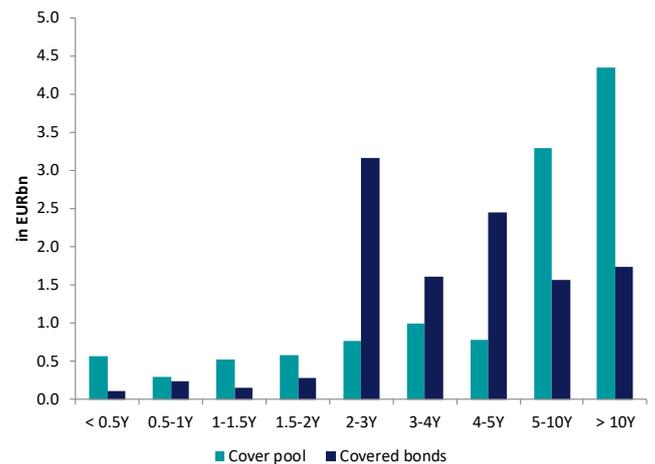
### Indicators of the cover pool

Covered bonds outstanding (EURm)	11,281.2	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	12,124.1	Fixed interest (Cover pool)	71.2%
of which substitution assets	0.6%	Fixed interest (Covered bonds)	43.7%
of which derivatives	0.0%	WAL (Cover pool)	9.8y
Current OC (EURm)	842.9	WAL (Covered bonds)	5.3y
Current OC	7.5%	Largest FX-position (NPV in EURm)	GBP (3,124.0)
Number of loans	756	Share of largest exposure tranche	63.3% (> EUR 100m)
Number of borrowers	392	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	33.4%	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	30,738,239	Risk weight (Benchmarks)	-

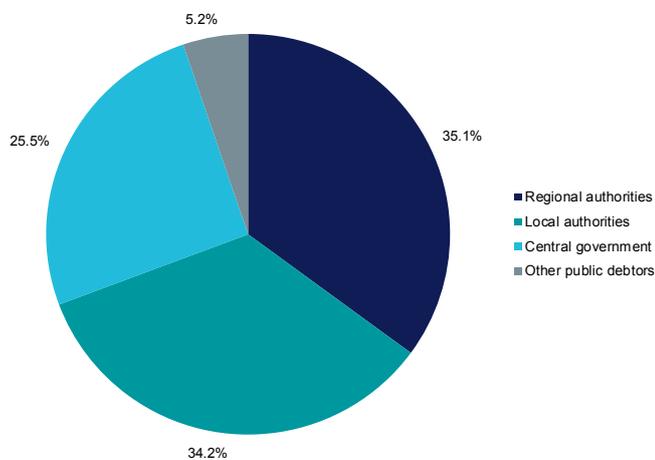
### Past development



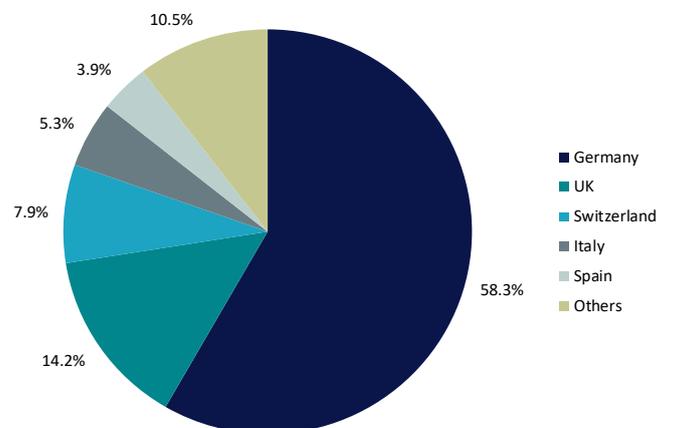
### Maturity structure



### Distribution by borrower type



### Distribution by country



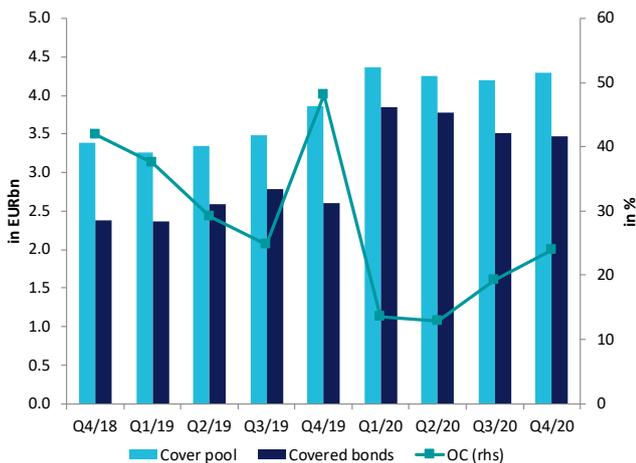
# DekaBank

# Public sector

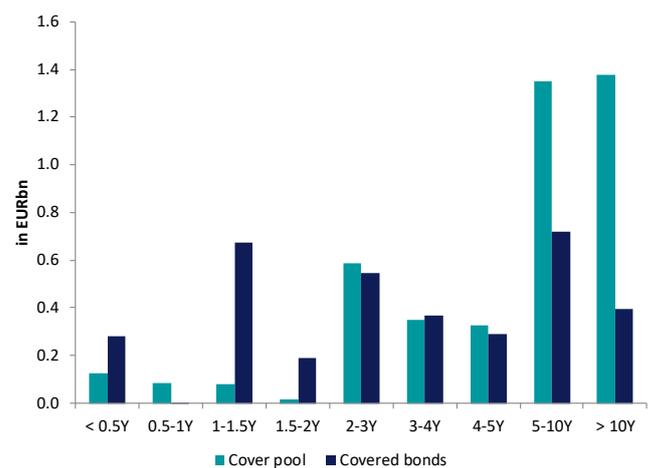
## Indicators of the cover pool

Covered bonds outstanding (EURm)	3,463.8	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	4,291.0	Fixed interest (Cover pool)	70.7%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	100.0%
of which derivatives	0.0%	WAL (Cover pool)	6.3y
Current OC (EURm)	827.2	WAL (Covered bonds)	4.6y
Current OC	23.9%	Largest FX-position (NPV in EURm)	USD (130.7)
Number of loans	249	Share of largest exposure tranche	55.9% (> EUR 100m)
Number of borrowers	85	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	36.0%	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	50,481,859	Risk weight (Benchmarks)	-

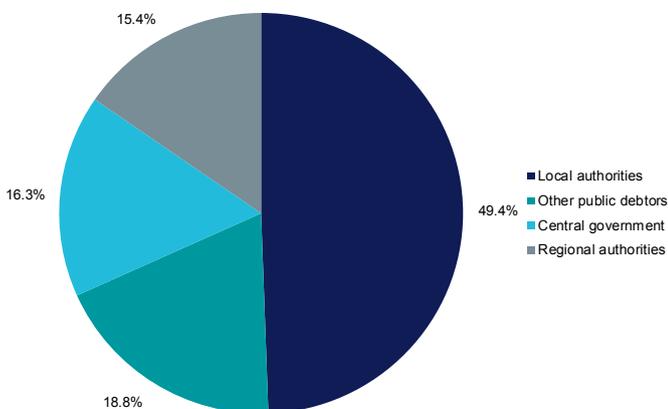
## Past development



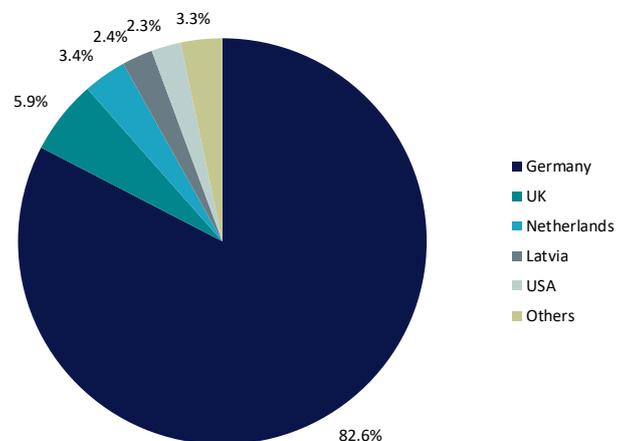
## Maturity structure



## Distribution by borrower type



## Distribution by country



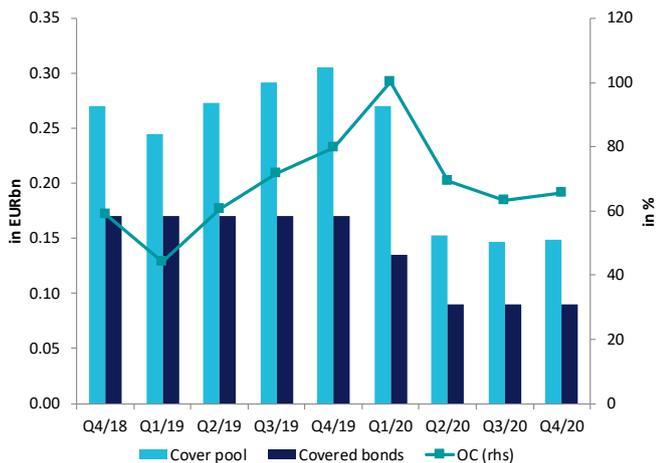
# Deutsche Bank

# Public sector

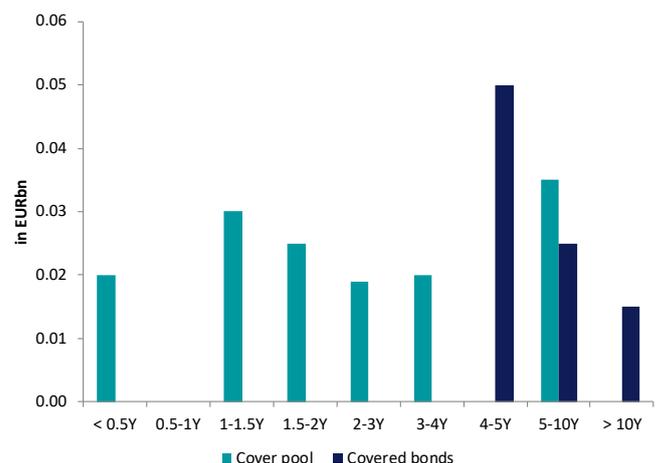
## Indicators of the cover pool

Covered bonds outstanding (EURm)	90.0	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	149.0	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)	59.0	WAL (Covered bonds)	n/a
Current OC	65.6%	Largest FX-position (NPV in EURm)	n/a
Number of loans	n/a	Share of largest exposure tranche	100.0% (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)	-

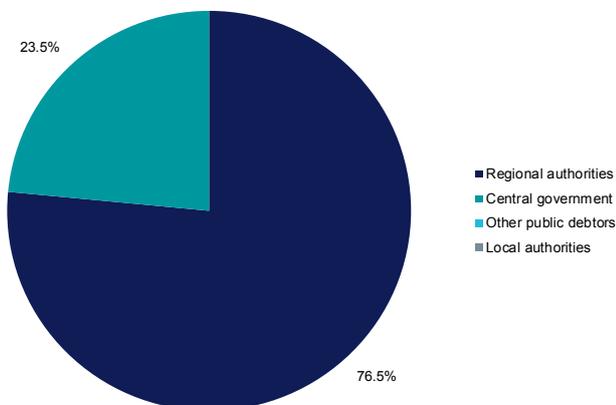
## Past development



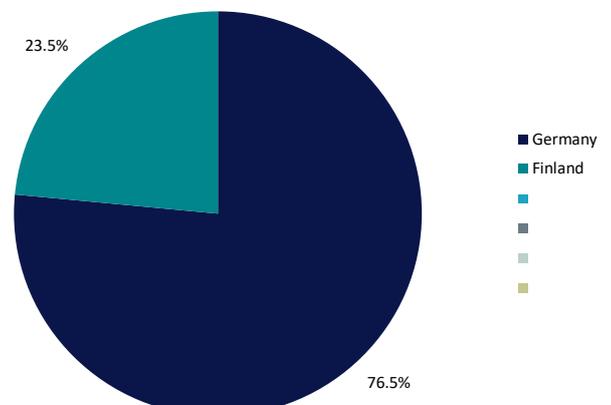
## Maturity structure



## Distribution by borrower type



## Distribution by country



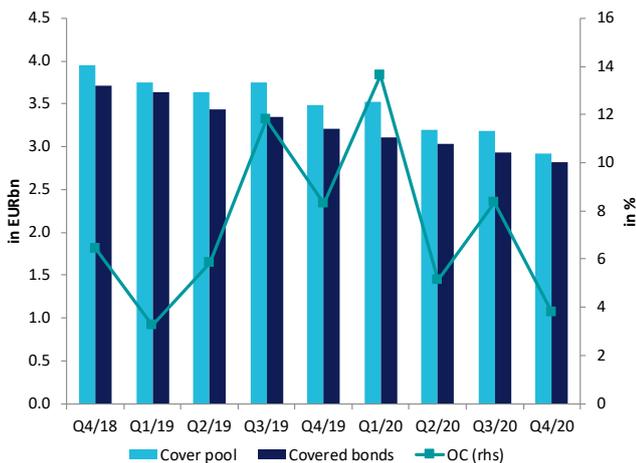
# Deutsche Hypothekbank

# Public sector

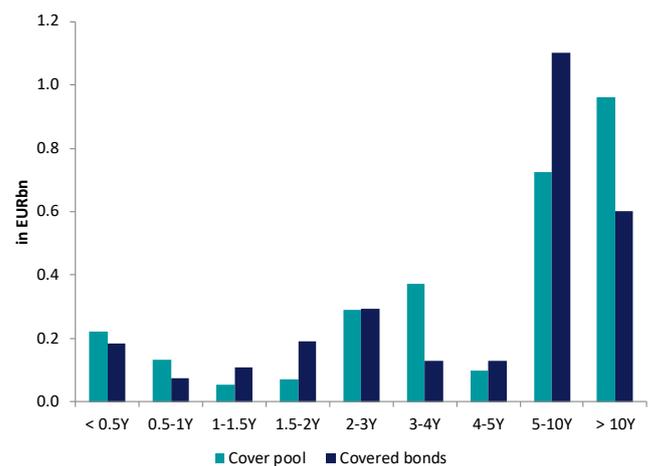
## Indicators of the cover pool

Covered bonds outstanding (EURm)	2,815.0	Rating (Moody's / Fitch / S&P / DBRS)	Aa1 / - / - / -
Cover pool volume (EURm)	2,921.9	Fixed interest (Cover pool)	81.9%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	88.2%
of which derivatives	0.0%	WAL (Cover pool)	6.4y
Current OC (EURm)	106.9	WAL (Covered bonds)	8.3y
Current OC	3.8%	Largest FX-position (NPV in EURm)	GBP (132.9)
Number of loans	n/a	Share of largest exposure tranche	93.8% (EUR 10-100m)
Number of borrowers	64	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	62.3%	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	45,654,688	Risk weight (Benchmarks)	-

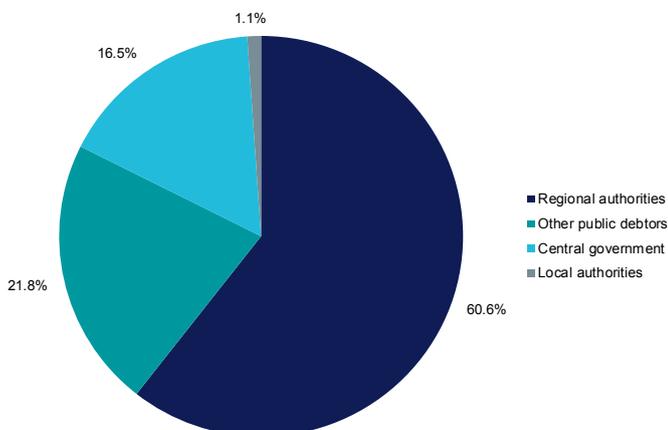
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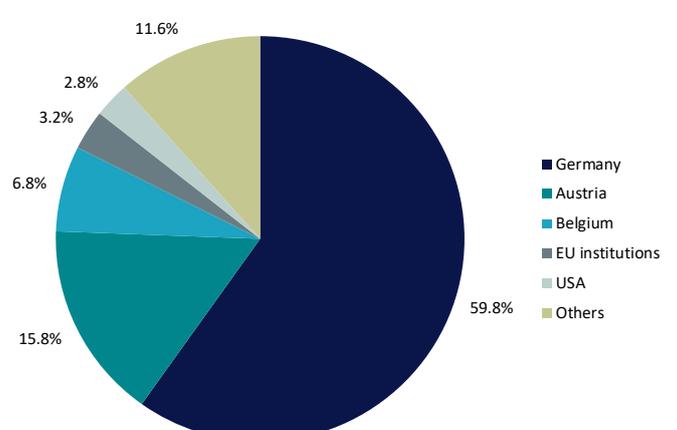
## Maturity structure



## Distribution by borrower type



## Distribution by country



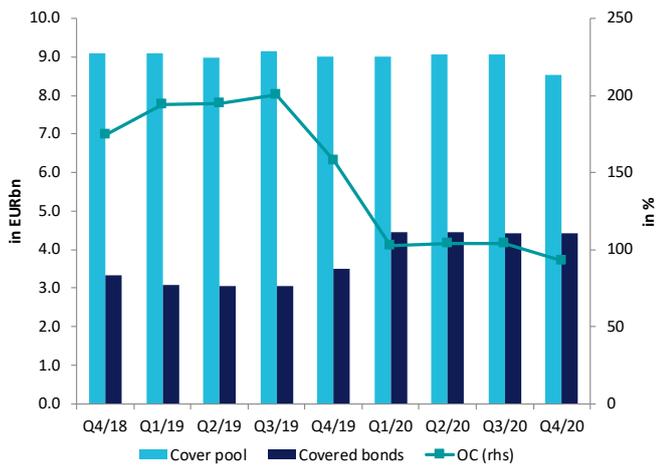
# Deutsche Kreditbank

# Public sector

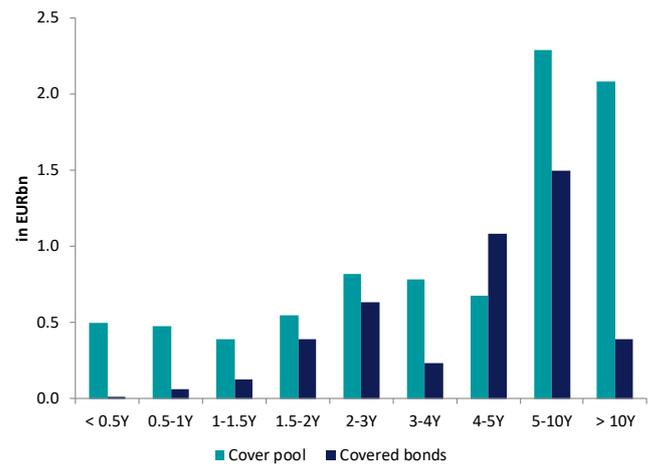
## Indicators of the cover pool

Covered bonds outstanding (EURm)	4,424.8	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	8,535.3	Fixed interest (Cover pool)	95.6%
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)	4,110.5	WAL (Covered bonds)	n/a
Current OC	92.9%	Largest FX-position (NPV in EURm)	n/a
Number of loans	n/a	Share of largest exposure tranche	47.9% (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%

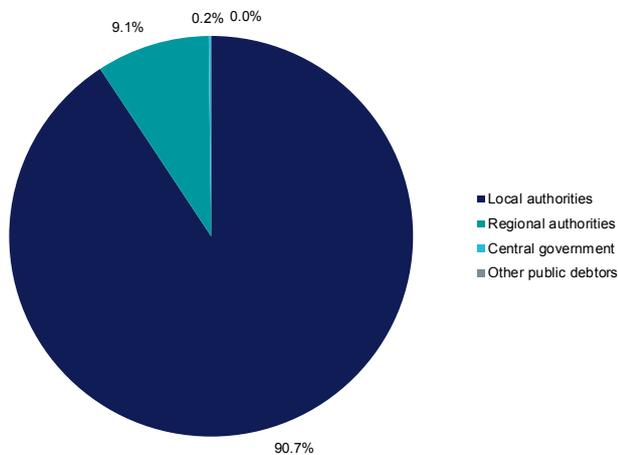
## Past development



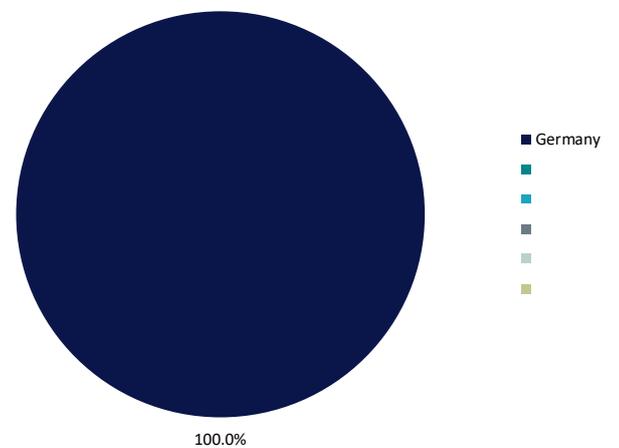
## Maturity structure



## Distribution by borrower type



## Distribution by country



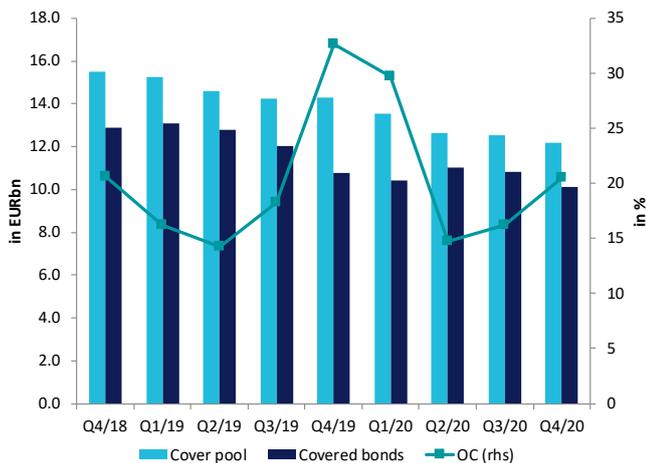
# Deutsche Pfandbriefbank

# Public sector

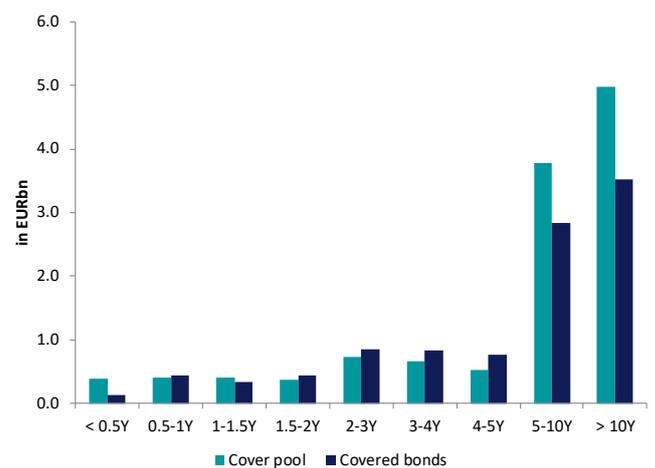
## Indicators of the cover pool

Covered bonds outstanding (EURm)	10,136.0	Rating (Moody's / Fitch / S&P / DBRS)	Aa1 / - / - / -
Cover pool volume (EURm)	12,211.0	Fixed interest (Cover pool)	70.0%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	78.2%
of which derivatives	0.0%	WAL (Cover pool)	9.0y
Current OC (EURm)	2,075.0	WAL (Covered bonds)	8.0y
Current OC	20.5%	Largest FX-position (NPV in EURm)	USD (576.0)
Number of loans	549	Share of largest exposure tranche	65.7% (> EUR 100m)
Number of borrowers	232	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	53.9%	LCR level / haircut (Benchmarks)	Level 1 / 7%
Avg. exposure to borrowers (EUR)	52,620,690	Risk weight (Benchmarks)	10%

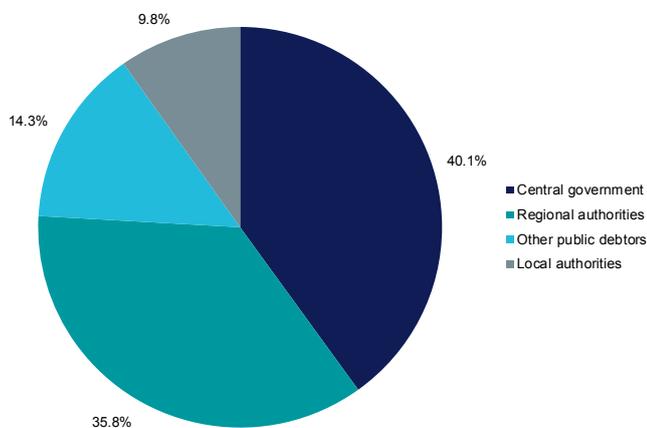
## Past development



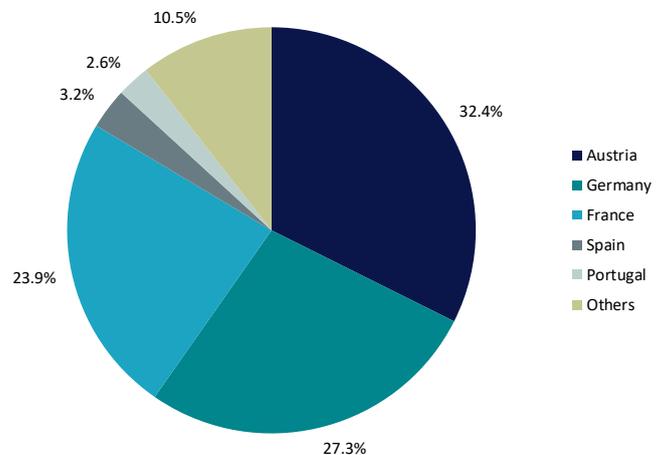
## Maturity structure



## Distribution by borrower type



## Distribution by country



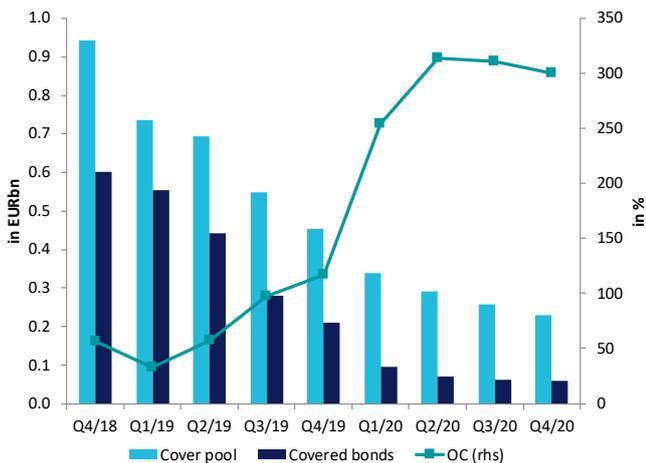
# DSK Hyp

# Public sector

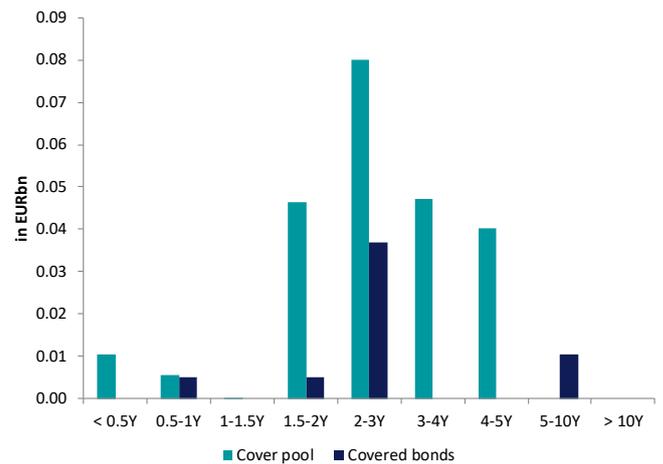
## Indicators of the cover pool

Covered bonds outstanding (EURm)	57.5	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	229.8	Fixed interest (Cover pool)	78.2%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	100.0%
of which derivatives	0.0%	WAL (Cover pool)	2.7y
Current OC (EURm)	172.3	WAL (Covered bonds)	3.1y
Current OC	299.6%	Largest FX-position (NPV in EURm)	n/a
Number of loans	6	Share of largest exposure tranche	79.8% (EUR 10-100m)
Number of borrowers	5	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	45.6%	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	45,957,800	Risk weight (Benchmarks)	-

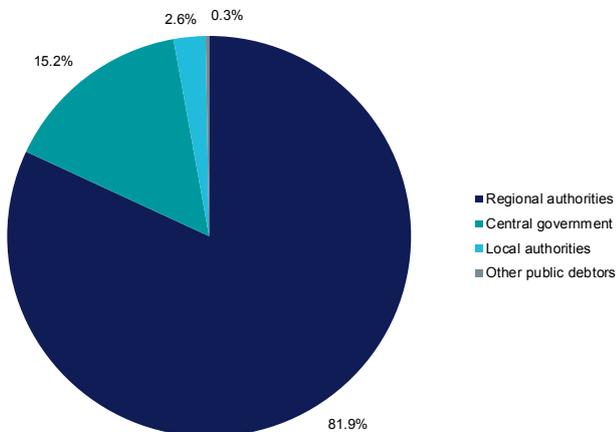
## Past development



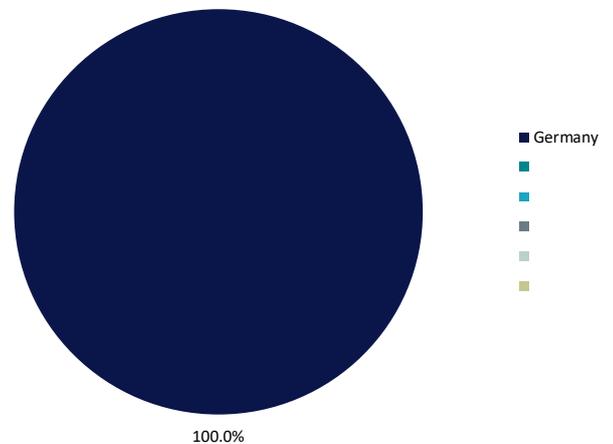
## Maturity structure



## Distribution by borrower type



## Distribution by country



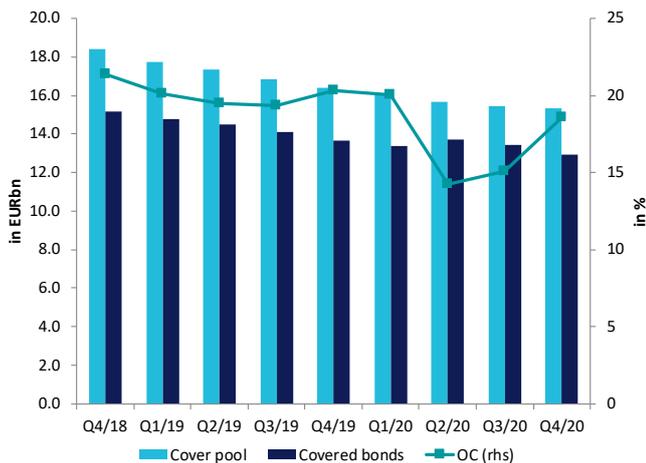
# DZ HYP

# Public sector

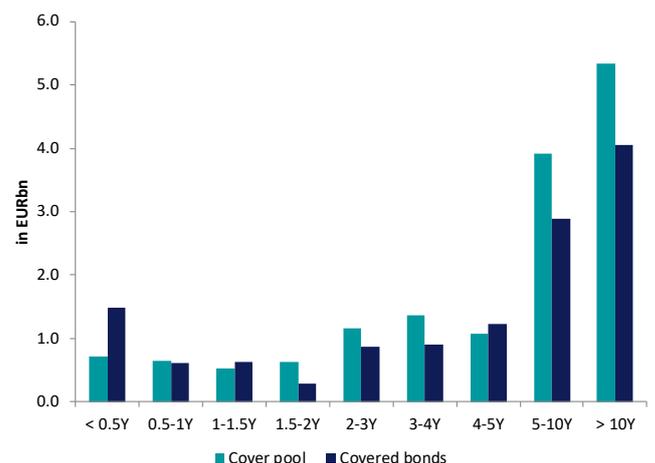
## Indicators of the cover pool

Covered bonds outstanding (EURm)	12,920.8	Rating (Moody's / Fitch / S&P / DBRS)	- / - / AAA / -
Cover pool volume (EURm)	15,324.3	Fixed interest (Cover pool)	96.2%
of which substitution assets	0.4%	Fixed interest (Covered bonds)	95.5%
of which derivatives	0.0%	WAL (Cover pool)	8.5y
Current OC (EURm)	2,403.5	WAL (Covered bonds)	7.5y
Current OC	18.6%	Largest FX-position (NPV in EURm)	USD (139.9)
Number of loans	17,999	Share of largest exposure tranche	38.7% (< EUR 10m)
Number of borrowers	5,223	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	15.8%	LCR level / haircut (Benchmarks)	Level 1 / 7%
Avg. exposure to borrowers (EUR)	2,933,997	Risk weight (Benchmarks)	10%

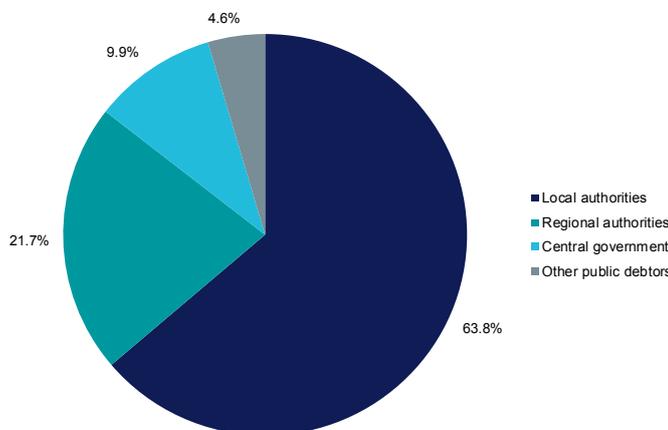
## Past development



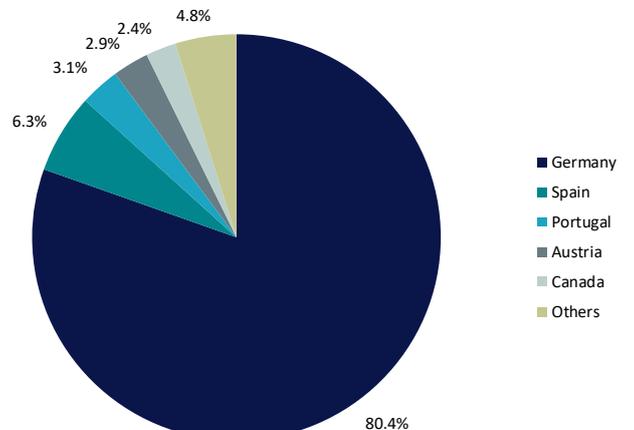
## Maturity structure



## Distribution by borrower type



## Distribution by country



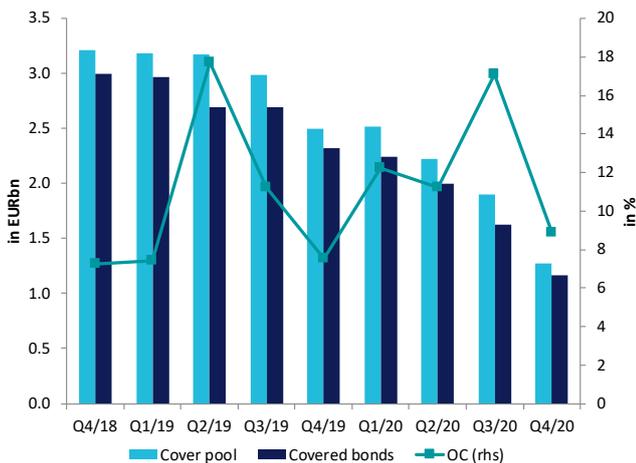
# Hamburg Commercial Bank

# Public sector

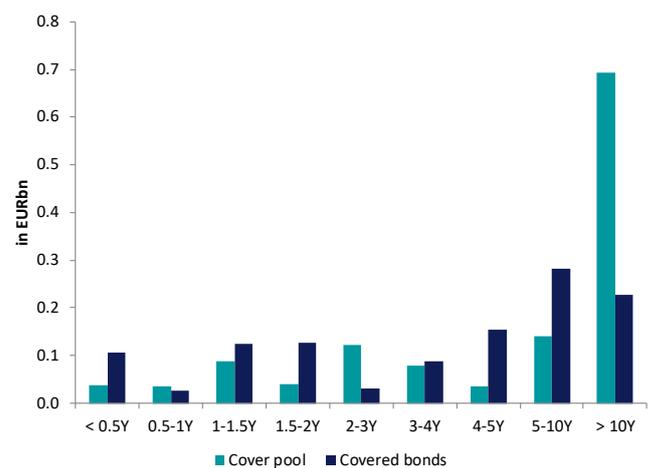
## Indicators of the cover pool

Covered bonds outstanding (EURm)	1,165.4	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	1,268.7	Fixed interest (Cover pool)	94.3%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	92.3%
of which derivatives	0.0%	WAL (Cover pool)	10.6y
Current OC (EURm)	103.3	WAL (Covered bonds)	5.5y
Current OC	8.9%	Largest FX-position (NPV in EURm)	CHF (109.2)
Number of loans	93	Share of largest exposure tranche	51.2% (> EUR 100m)
Number of borrowers	55	Loans in arrears (> 90 days)	0.02%
Share of 10 largest borrowers	80.1%	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	23,067,273	Risk weight (Benchmarks)	-

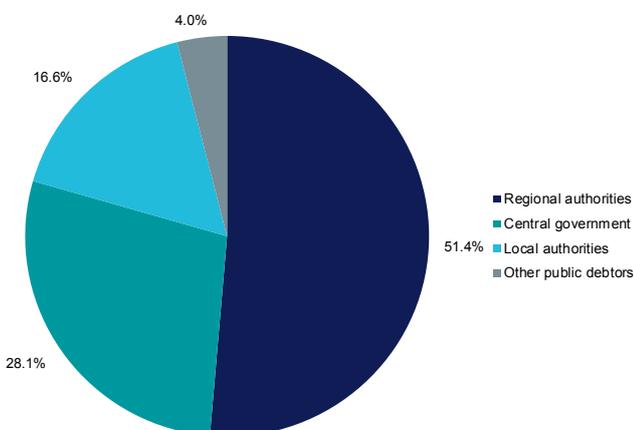
## Past development



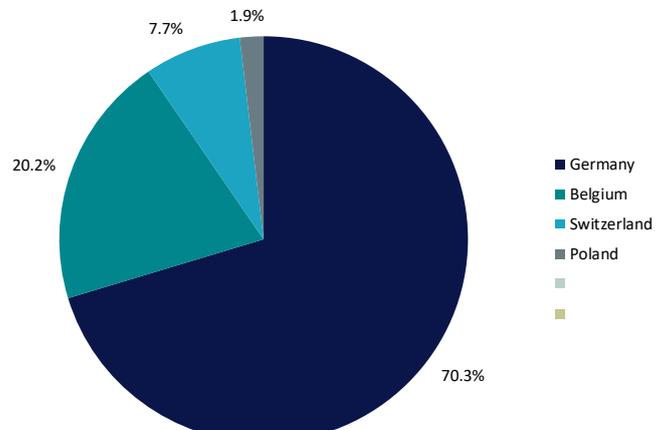
## Maturity structure



## Distribution by borrower type



## Distribution by country



# Kreissparkasse Köln

# Public sector

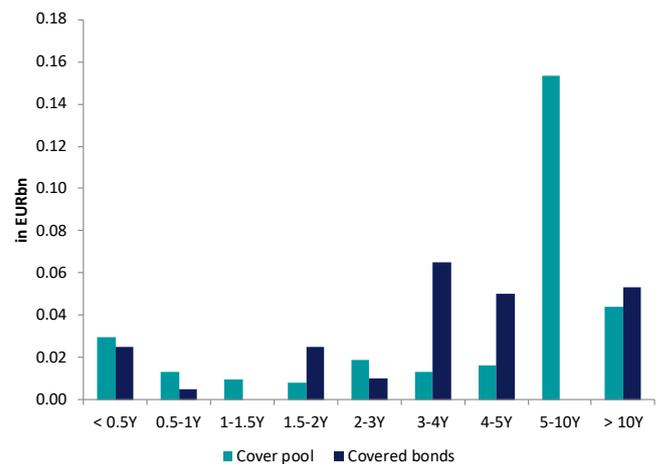
## Indicators of the cover pool

Covered bonds outstanding (EURm)	233.4	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	305.9	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)	72.4	WAL (Covered bonds)	4.8y
Current OC	31.0%	Largest FX-position (NPV in EURm)	n/a
Number of loans	155	Share of largest exposure tranche	51.2% (EUR 10-100m)
Number of borrowers	49	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	67.4%	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	6,241,878	Risk weight (Benchmarks)	-

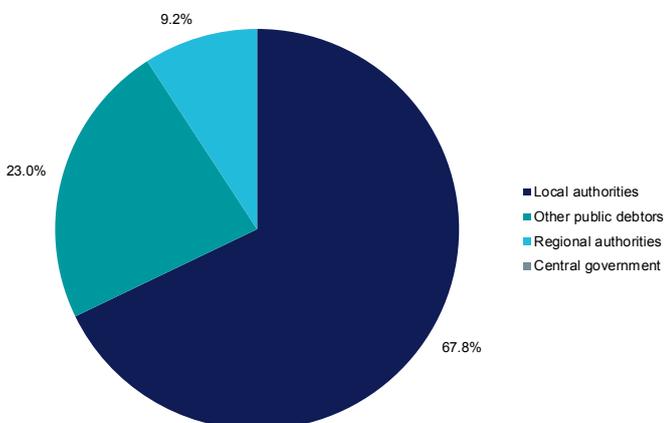
## Past development



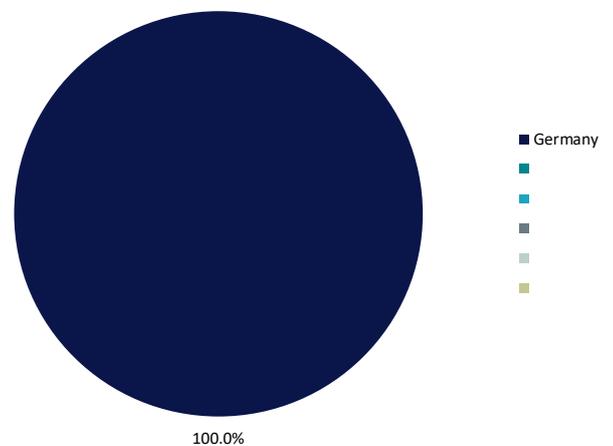
## Maturity structure



## Distribution by borrower type



## Distribution by country



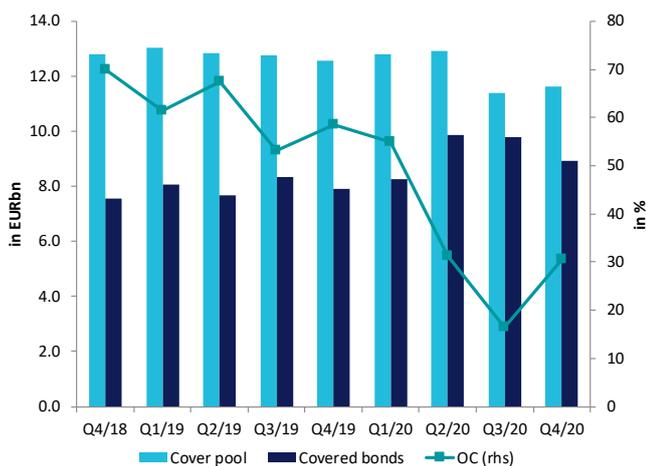
# Landesbank Baden-Württemberg

# Public sector

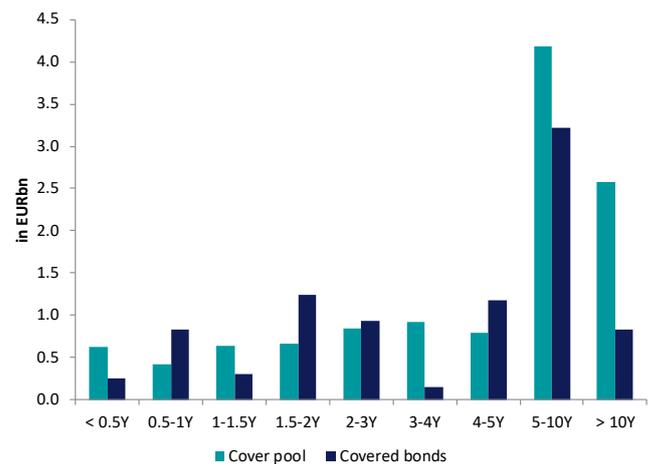
## Indicators of the cover pool

Covered bonds outstanding (EURm)	8,922.1	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	11,651.3	Fixed interest (Cover pool)	83.6%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	80.4%
of which derivatives	0.0%	WAL (Cover pool)	6.9y
Current OC (EURm)	2,729.3	WAL (Covered bonds)	5.2y
Current OC	30.6%	Largest FX-position (NPV in EURm)	USD (-1.9)
Number of loans	7,195	Share of largest exposure tranche	46.8% (> EUR 100m)
Number of borrowers	2,829	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	27.9%	LCR level / haircut (Benchmarks)	Level 1 / 7%
Avg. exposure to borrowers (EUR)	4,118,529	Risk weight (Benchmarks)	10%

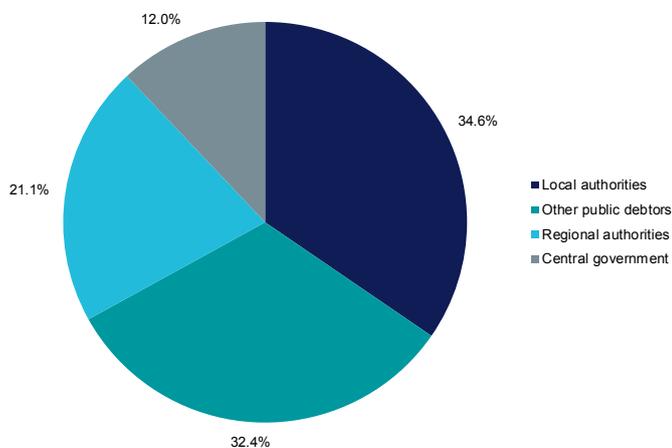
## Past development



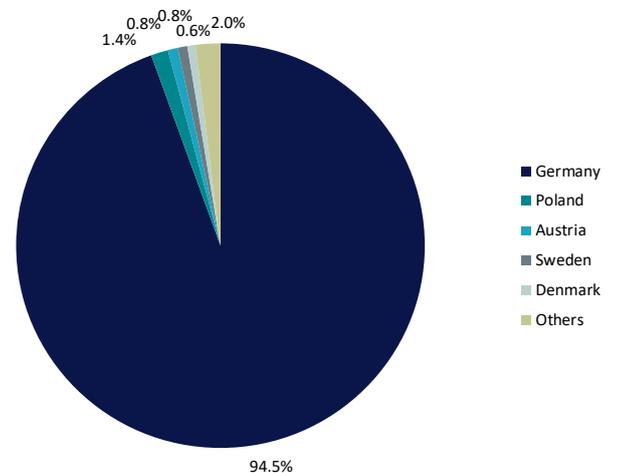
## Maturity structure



## Distribution by borrower type



## Distribution by country



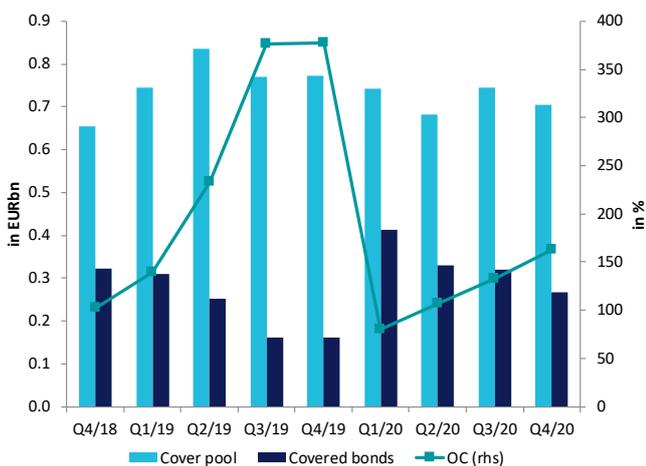
# Landesbank Berlin

# Public sector

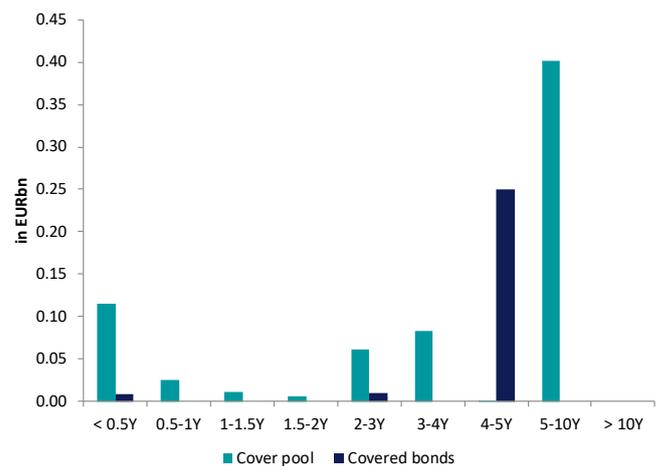
## Indicators of the cover pool

Covered bonds outstanding (EURm)	268.0	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	703.8	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)	5.5y
Current OC (EURm)	435.8	WAL (Covered bonds)	4.3y
Current OC	162.6%	Largest FX-position (NPV in EURm)	n/a
Number of loans	26	Share of largest exposure tranche	74.9% (> EUR 100m)
Number of borrowers	13	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	99.5%	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	54,142,231	Risk weight (Benchmarks)	-

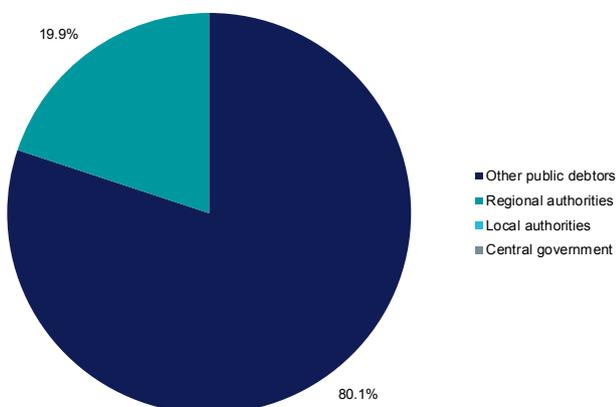
## Past development



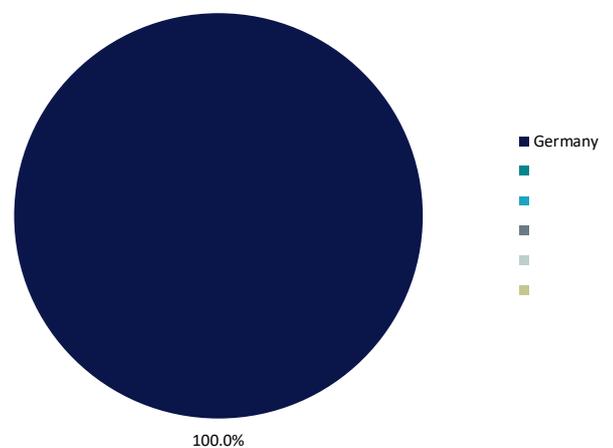
## Maturity structure



## Distribution by borrower type



## Distribution by country



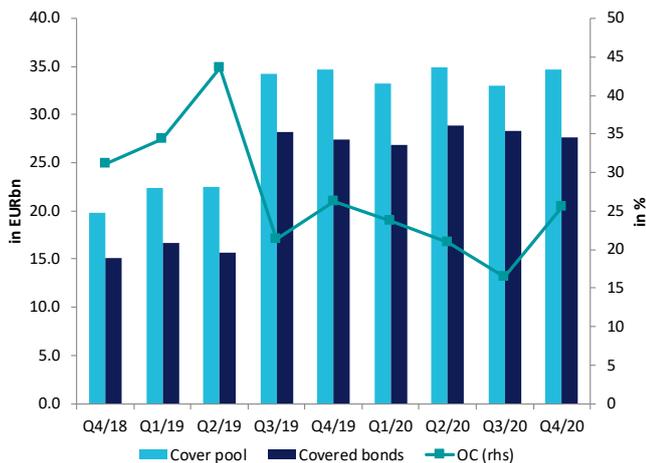
# Landesbank Hessen-Thüringen

# Public sector

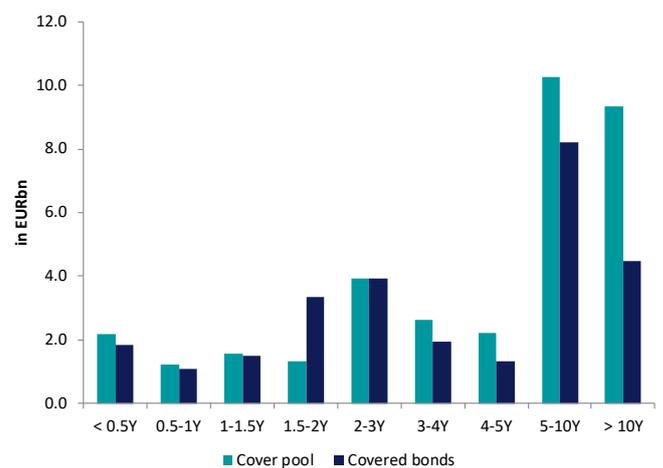
## Indicators of the cover pool

Covered bonds outstanding (EURm)	27,620.3	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / AAA / - / -
Cover pool volume (EURm)	34,670.7	Fixed interest (Cover pool)	95.0%
of which substitution assets	0.1%	Fixed interest (Covered bonds)	88.9%
of which derivatives	0.0%	WAL (Cover pool)	7.6y
Current OC (EURm)	7,050.4	WAL (Covered bonds)	6.0y
Current OC	25.5%	Largest FX-position (NPV in EURm)	USD (357.7)
Number of loans	20,206	Share of largest exposure tranche	64.7% (> EUR 100m)
Number of borrowers	5,041	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	35.0%	LCR level / haircut (Benchmarks)	Level 1 / 7%
Avg. exposure to borrowers (EUR)	6,867,844	Risk weight (Benchmarks)	10%

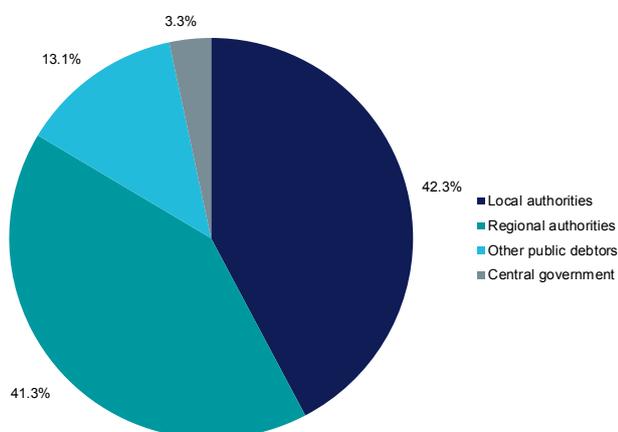
## Past development



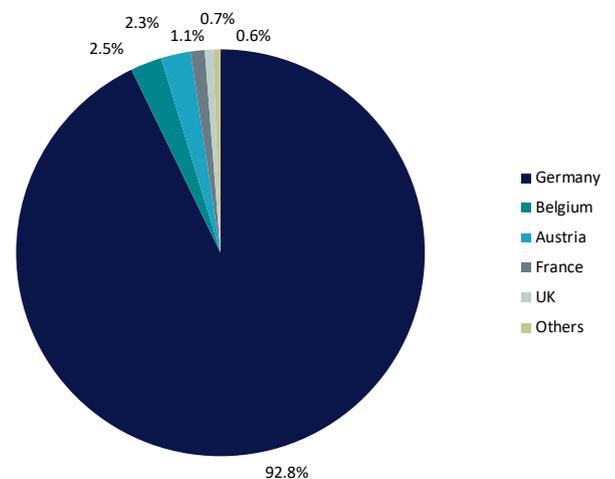
## Maturity structure



## Distribution by borrower type



## Distribution by country



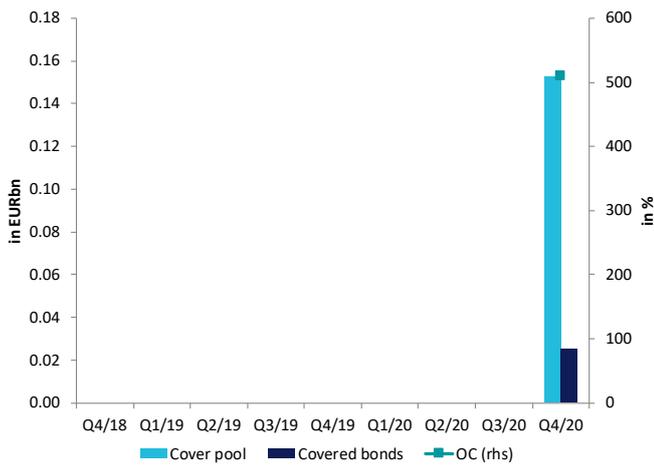
# LIGA Bank

# Public sector

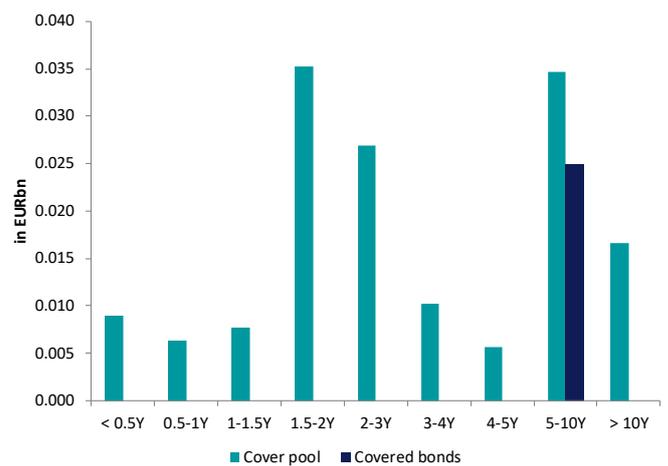
## Indicators of the cover pool

Covered bonds outstanding (EURm)	25.0	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	152.5	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)	n/a
Current OC (EURm)	127.5	WAL (Covered bonds)	n/a
Current OC	510.1%	Largest FX-position (NPV in EURm)	n/a
Number of loans	n/a	Share of largest exposure tranche	66.3% (< EUR 10m)
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)	-

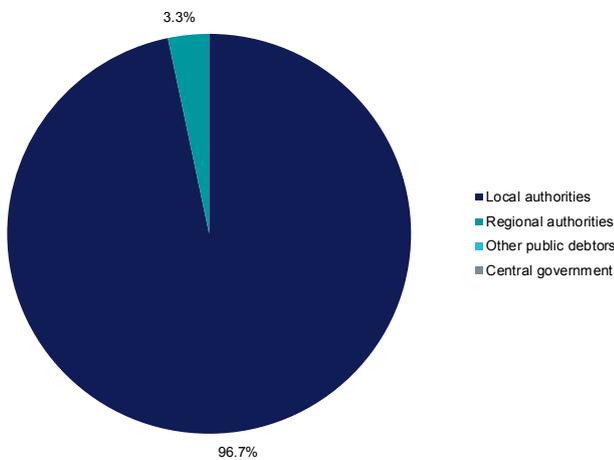
## Past development



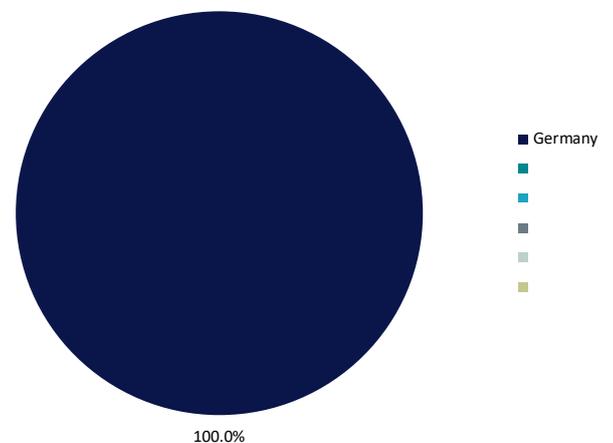
## Maturity structure



## Distribution by borrower type



## Distribution by country



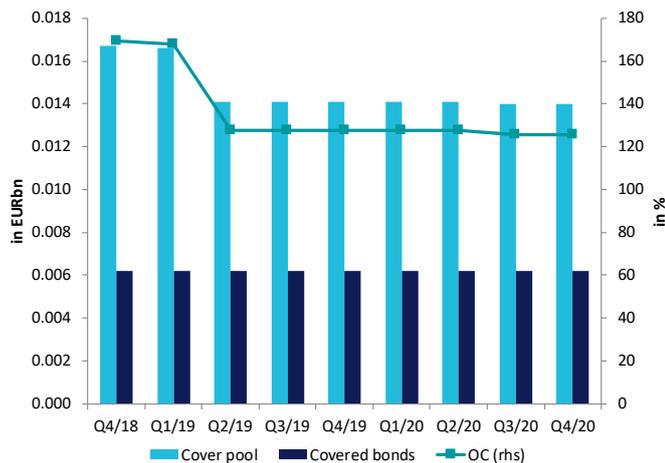
# M.M. Warburg & CO Hypothekenbank

# Public sector

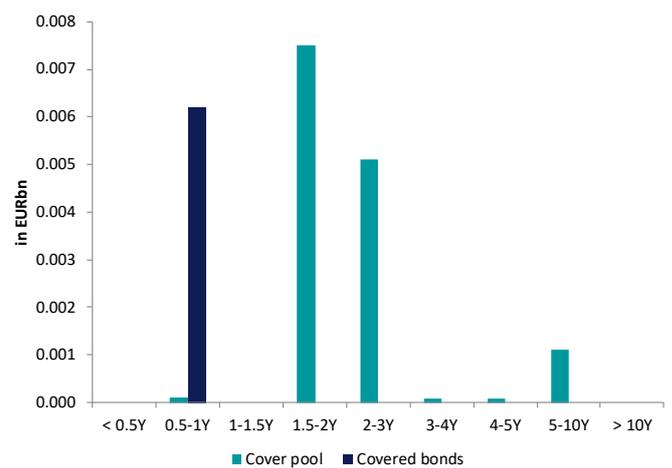
## Indicators of the cover pool

Covered bonds outstanding (EURm)	6.2	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	14.0	Fixed interest (Cover pool)	64.3%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	100.0%
of which derivatives	0.0%	WAL (Cover pool)	2.2y
Current OC (EURm)	7.8	WAL (Covered bonds)	0.6y
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)	-

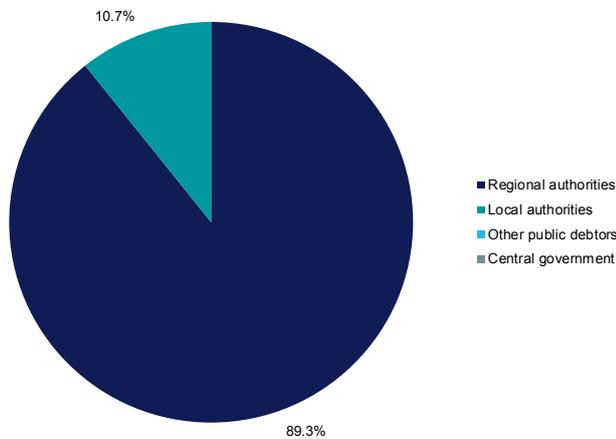
## Past development



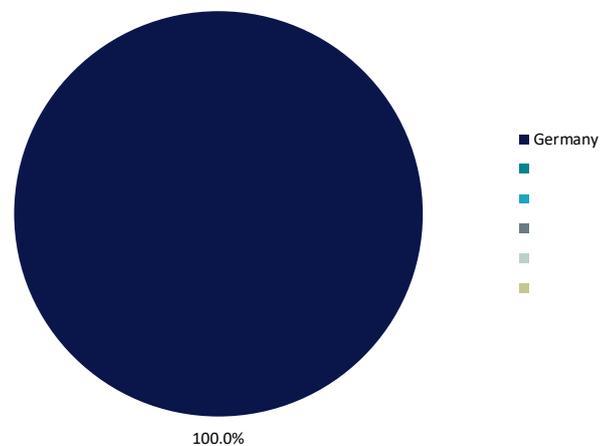
## Maturity structure



## Distribution by borrower type



## Distribution by country



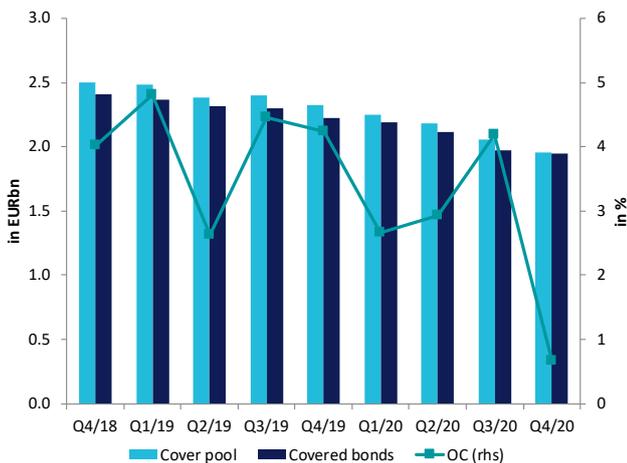
# Münchener Hypothekbank

# Public sector

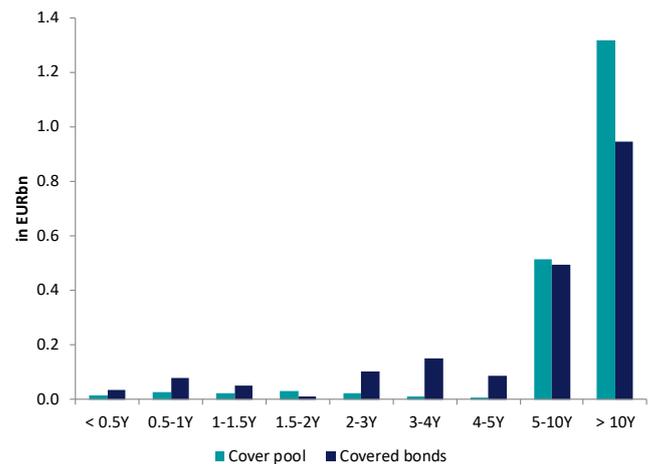
## Indicators of the cover pool

Covered bonds outstanding (EURm)	1,945.1	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	1,958.1	Fixed interest (Cover pool)	92.0%
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)	13.0	WAL (Covered bonds)	8.0y
Current OC	0.7%	Largest FX-position (NPV in EURm)	n/a
Number of loans	627	Share of largest exposure tranche	70.5% (> EUR 100m)
Number of borrowers	460	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	87.1%	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	4,256,828	Risk weight (Benchmarks)	-

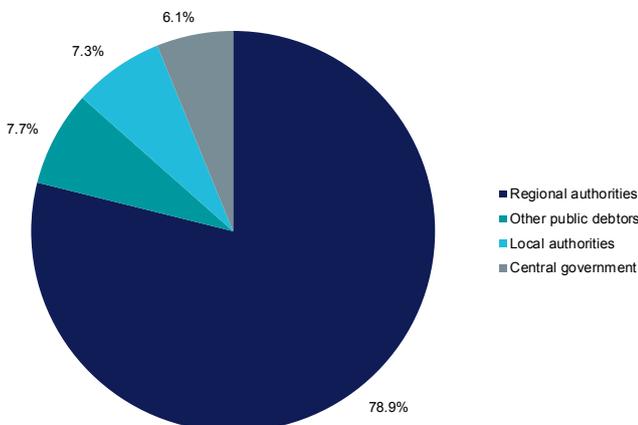
## Past development



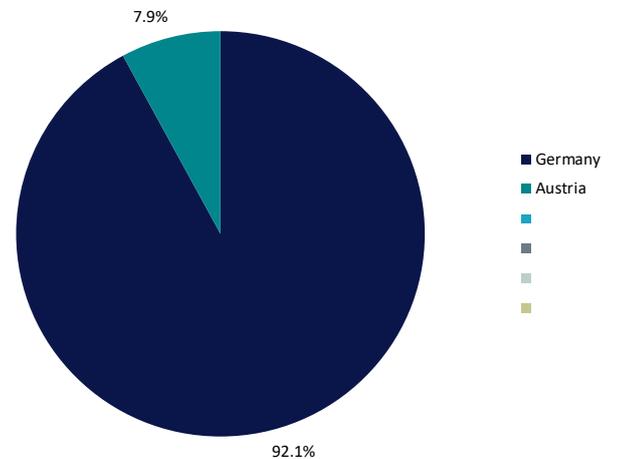
## Maturity structure



## Distribution by borrower type



## Distribution by country



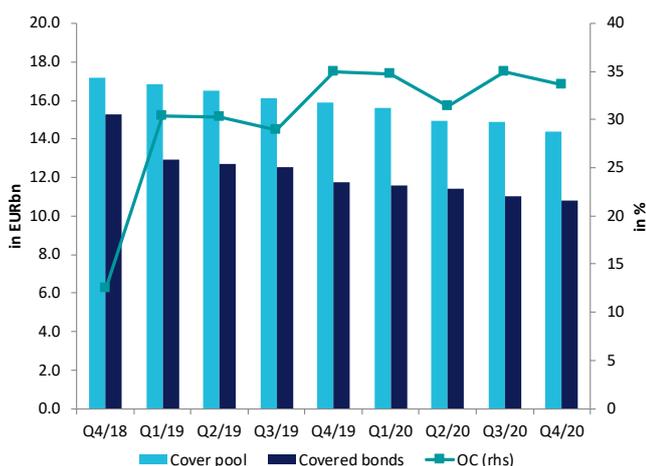
# Norddeutsche Landesbank

# Public sector

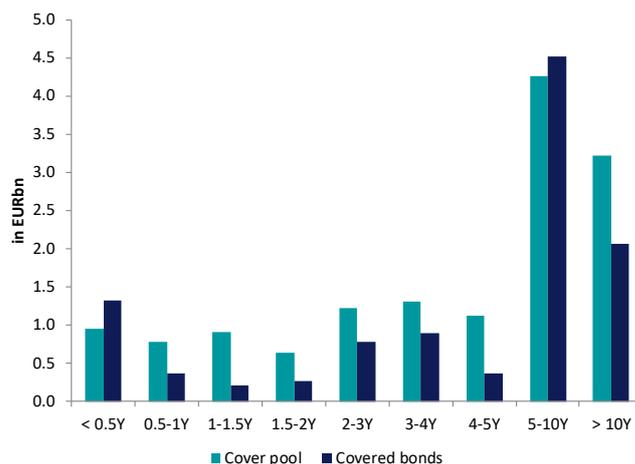
## Indicators of the cover pool

Covered bonds outstanding (EURm)	10,781.8	Rating (Moody's / Fitch / S&P / DBRS)	Aa1 / - / - / -
Cover pool volume (EURm)	14,407.3	Fixed interest (Cover pool)	89.4%
of which substitution assets	5.0%	Fixed interest (Covered bonds)	96.4%
of which derivatives	0.0%	WAL (Cover pool)	6.6y
Current OC (EURm)	3,625.5	WAL (Covered bonds)	6.3y
Current OC	33.6%	Largest FX-position (NPV in EURm)	USD (153.9)
Number of loans	4,140	Share of largest exposure tranche	40.6% (> EUR 100m)
Number of borrowers	1,465	Loans in arrears (> 90 days)	0.03%
Share of 10 largest borrowers	23.2%	LCR level / haircut (Benchmarks)	Level 1 / 7%
Avg. exposure to borrowers (EUR)	9,459,659	Risk weight (Benchmarks)	10%

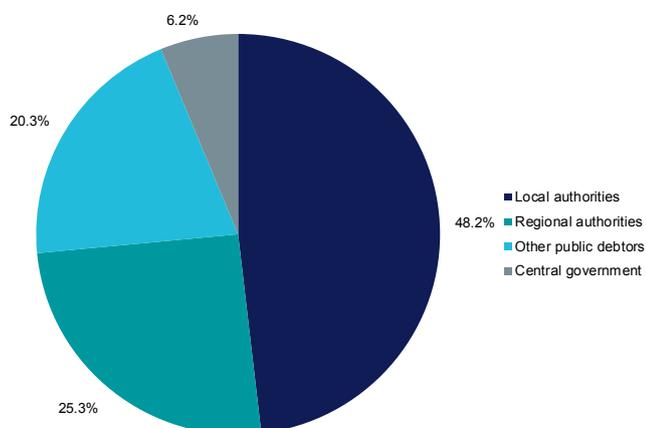
## Past development



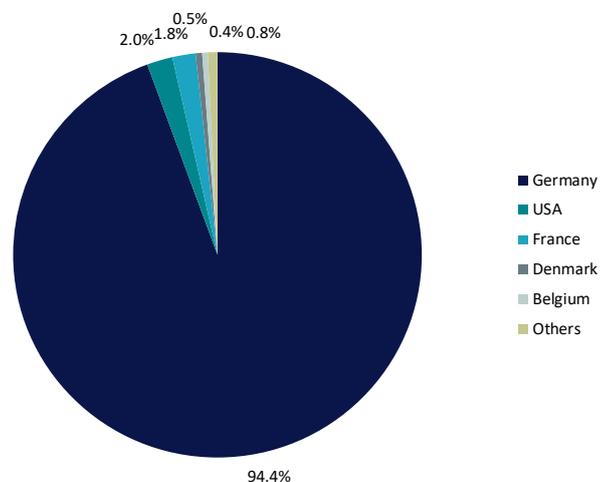
## Maturity structure



## Distribution by borrower type



## Distribution by country



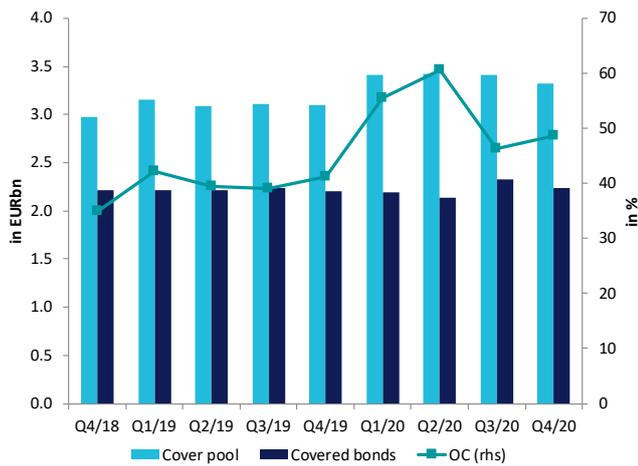
# SaarLB

# Public sector

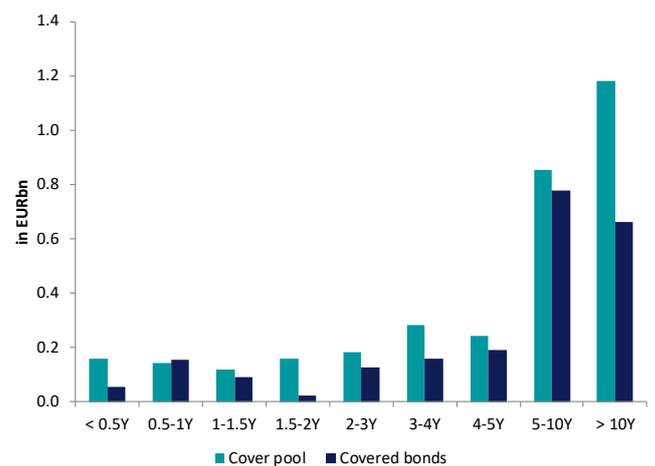
## Indicators of the cover pool

Covered bonds outstanding (EURm)	2,233.0	Rating (Moody's / Fitch / S&P / DBRS)	- / AAA / - / -
Cover pool volume (EURm)	3,319.0	Fixed interest (Cover pool)	75.8%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	95.7%
of which derivatives	0.0%	WAL (Cover pool)	n/a
Current OC (EURm)	1,086.0	WAL (Covered bonds)	n/a
Current OC	48.6%	Largest FX-position (NPV in EURm)	n/a
Number of loans	n/a	Share of largest exposure tranche	62.6% (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)	-

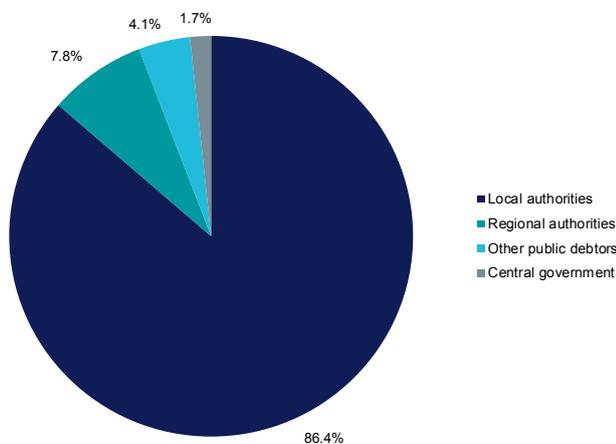
## Past development



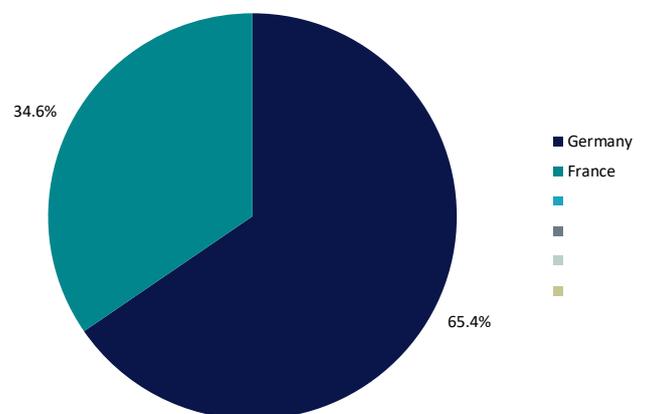
## Maturity structure



## Distribution by borrower type



## Distribution by country



# Sparkasse Hannover

# Public sector

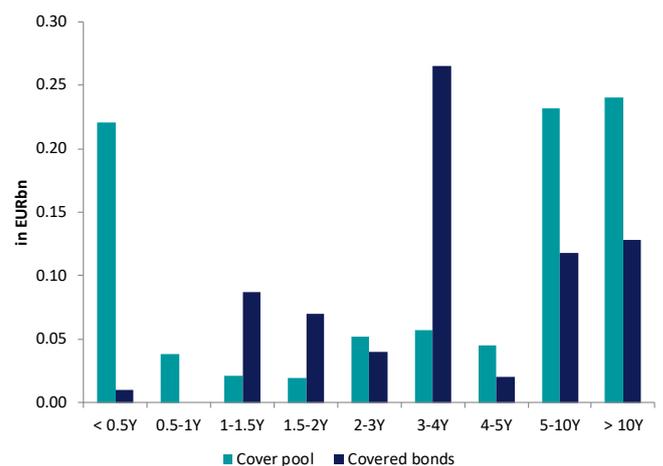
## Indicators of the cover pool

Covered bonds outstanding (EURm)	738.1	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	924.5	Fixed interest (Cover pool)	97.5%
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)	186.4	WAL (Covered bonds)	n/a
Current OC	25.3%	Largest FX-position (NPV in EURm)	n/a
Number of loans	n/a	Share of largest exposure tranche	55.1% (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)	-

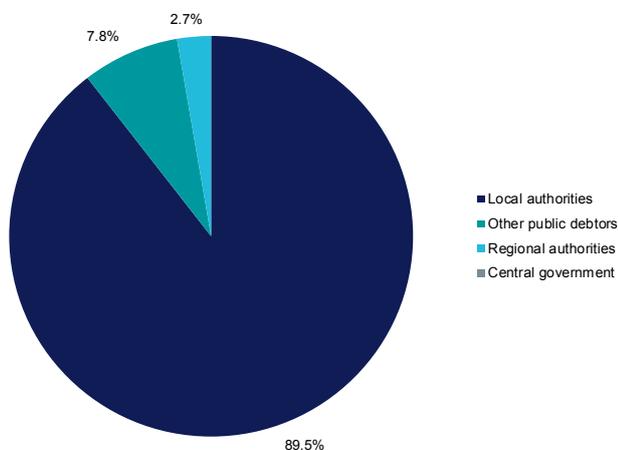
## Past development



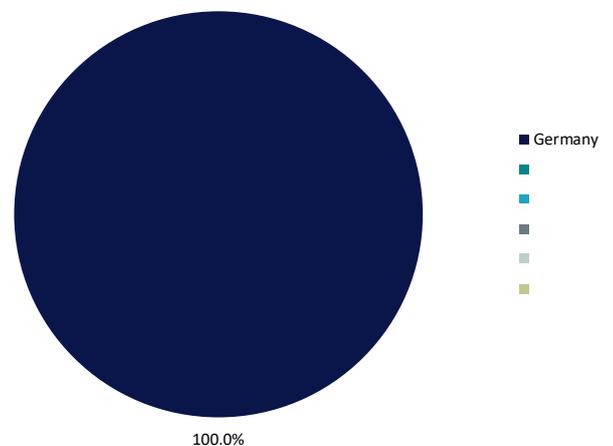
## Maturity structure



## Distribution by borrower type



## Distribution by country



# Sparkasse KölnBonn

# Public sector

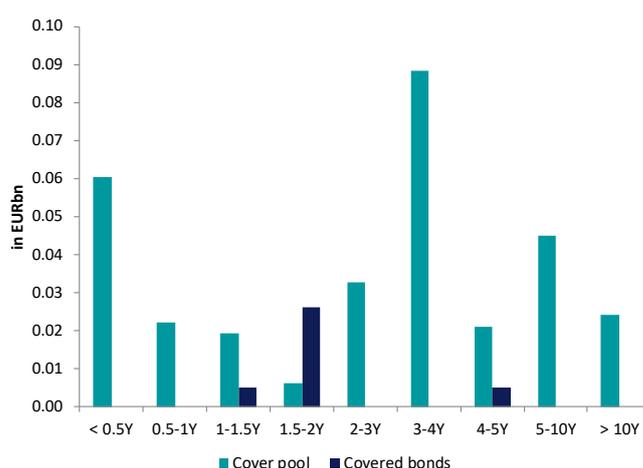
## Indicators of the cover pool

Covered bonds outstanding (EURm)	36.2	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	319.0	Fixed interest (Cover pool)	79.0%
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)	282.8	WAL (Covered bonds)	n/a
Current OC	781.3%	Largest FX-position (NPV in EURm)	n/a
Number of loans	n/a	Share of largest exposure tranche	84.8% (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)	-

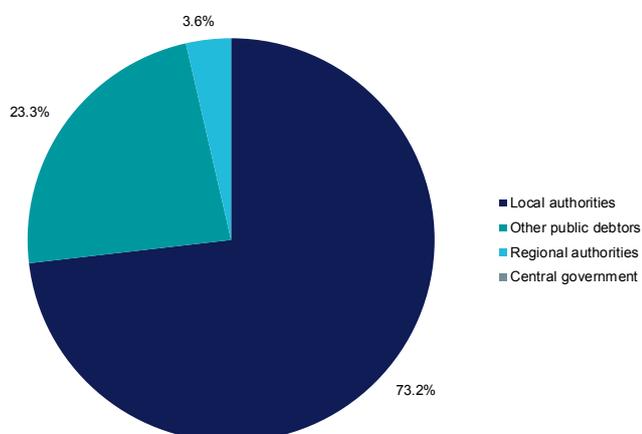
## Past development



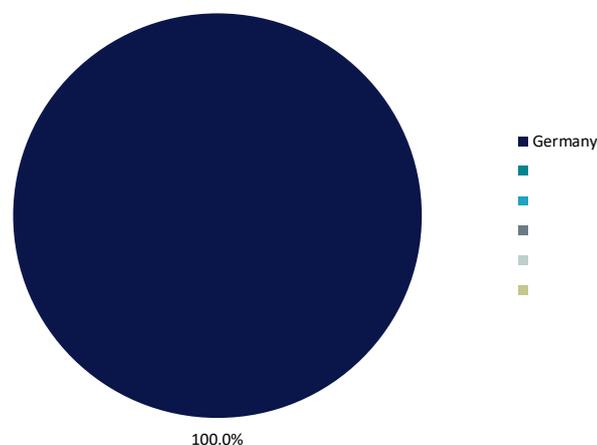
## Maturity structure



## Distribution by borrower type



## Distribution by country



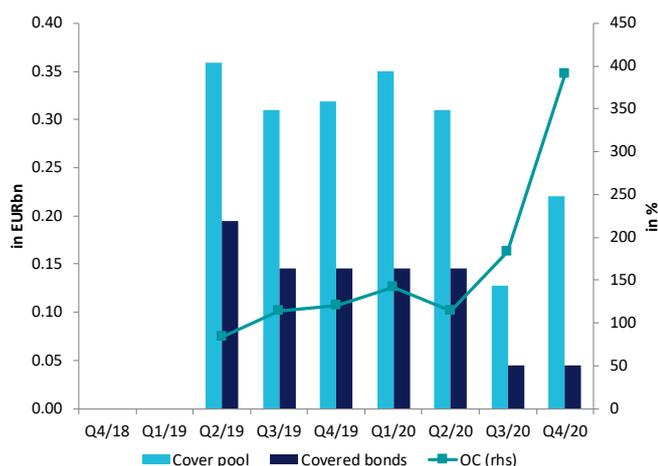
# Stadtsparkasse Düsseldorf

# Public sector

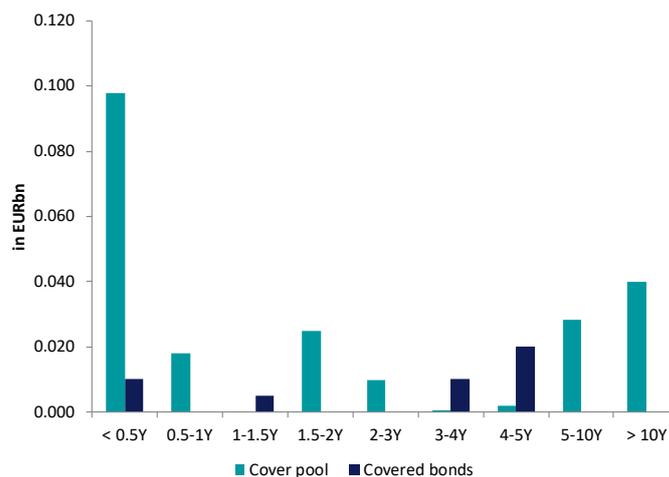
## Indicators of the cover pool

Covered bonds outstanding (EURm)	45.0	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	220.8	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)	175.8	WAL (Covered bonds)	n/a
Current OC	390.7%	Largest FX-position (NPV in EURm)	n/a
Number of loans	n/a	Share of largest exposure tranche	67.9% (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)	-

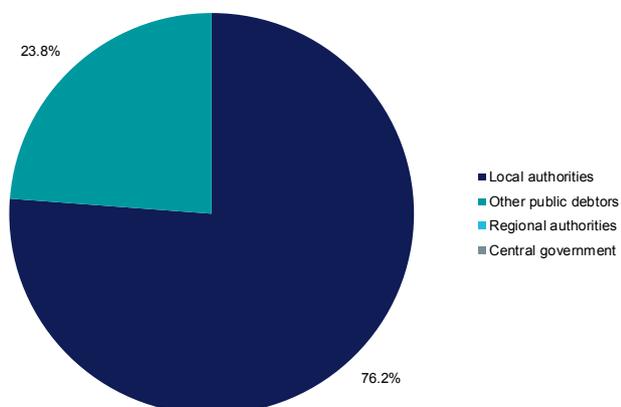
## Past development



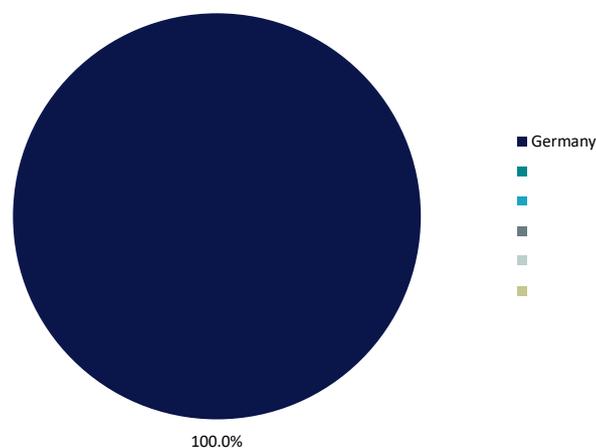
## Maturity structure



## Distribution by borrower type



## Distribution by country



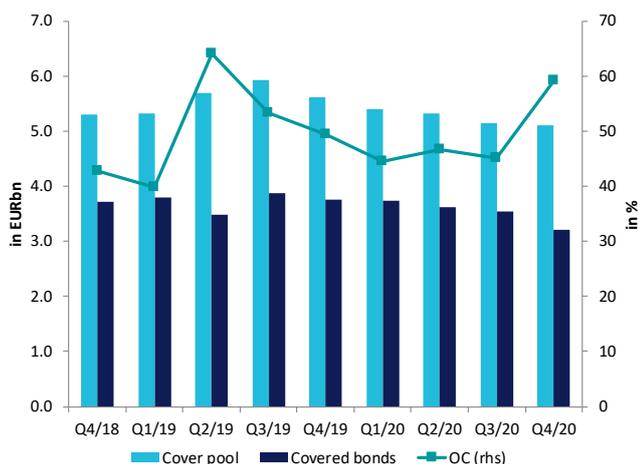
# UniCredit Bank

# Public sector

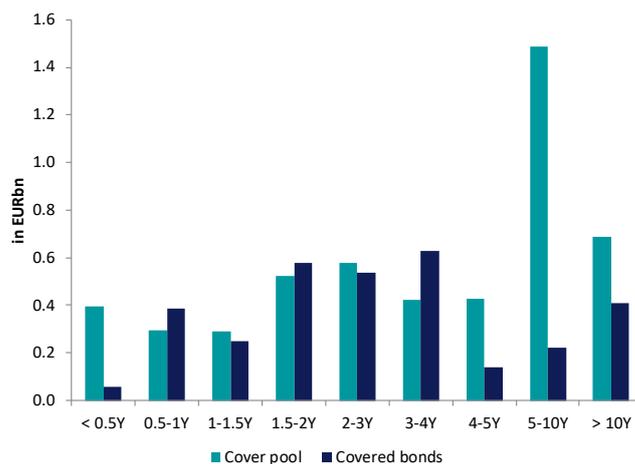
## Indicators of the cover pool

Covered bonds outstanding (EURm)	3,205.2	Rating (Moody's / Fitch / S&P / DBRS)	Aaa / - / - / -
Cover pool volume (EURm)	5,106.0	Fixed interest (Cover pool)	64.9%
of which substitution assets	0.0%	Fixed interest (Covered bonds)	99.8%
of which derivatives	0.0%	WAL (Cover pool)	5.5y
Current OC (EURm)	1,900.8	WAL (Covered bonds)	4.9y
Current OC	59.3%	Largest FX-position (NPV in EURm)	USD (-59.2)
Number of loans	1,681	Share of largest exposure tranche	45.0% (> EUR 100m)
Number of borrowers	920	Loans in arrears (> 90 days)	0.00%
Share of 10 largest borrowers	34.5%	LCR level / haircut (Benchmarks)	-
Avg. exposure to borrowers (EUR)	5,550,000	Risk weight (Benchmarks)	-

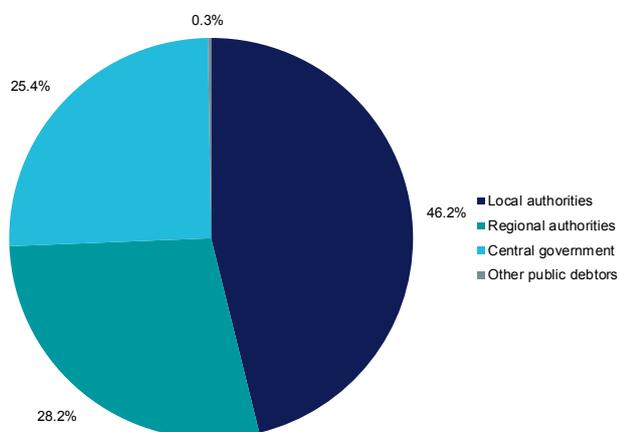
## Past development



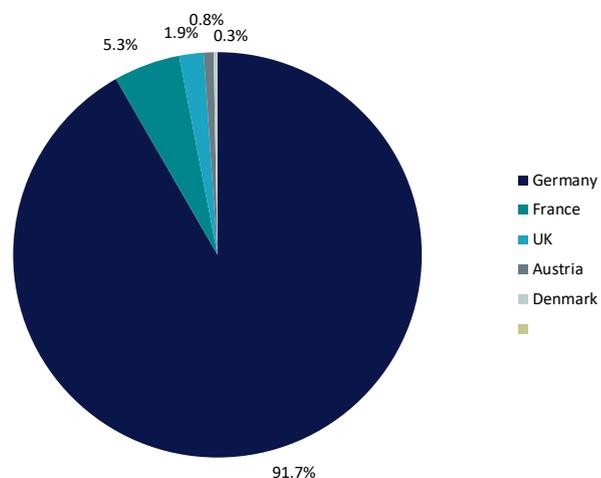
## Maturity structure



## Distribution by borrower type



## Distribution by country



# Ship covered bonds

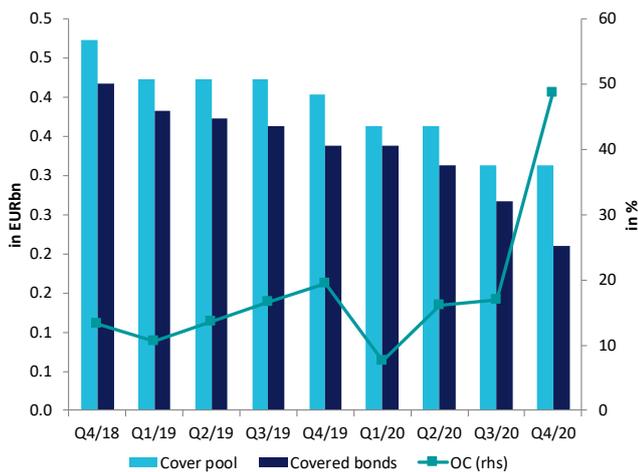
# Commerzbank

# Ship

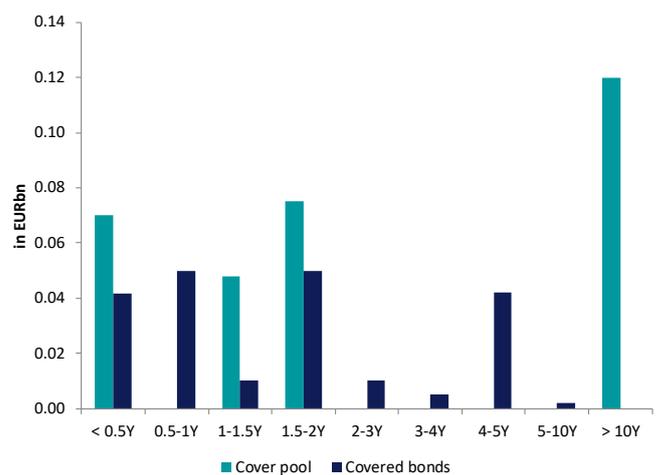
## Indicators of the cover pool

Covered bonds outstanding (EURm)	210.5	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)	76.0%
of which derivatives	0.0%	WAL (Cover pool)	6.5y
Current OC (EURm)	102.5	WAL (Covered bonds)	2.0y
Current OC	48.7%	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)	-

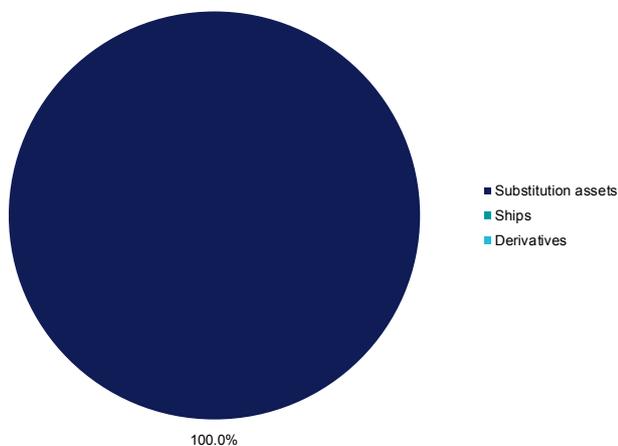
## Past development



## Maturity structure



## Distribution by borrower type



## Ships by country

n/a

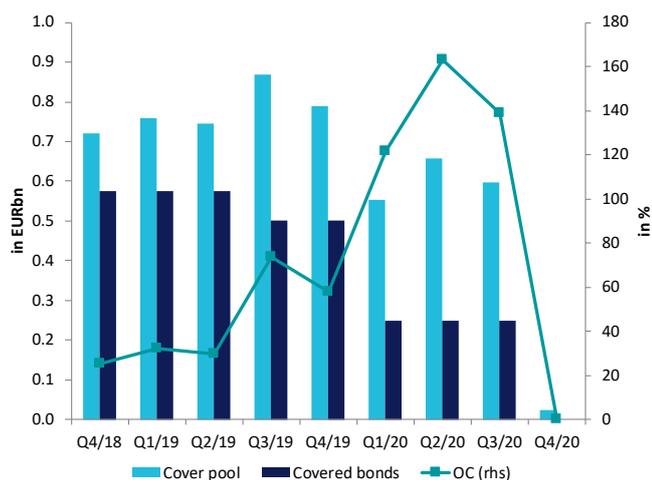
## DVB Bank

## Ship

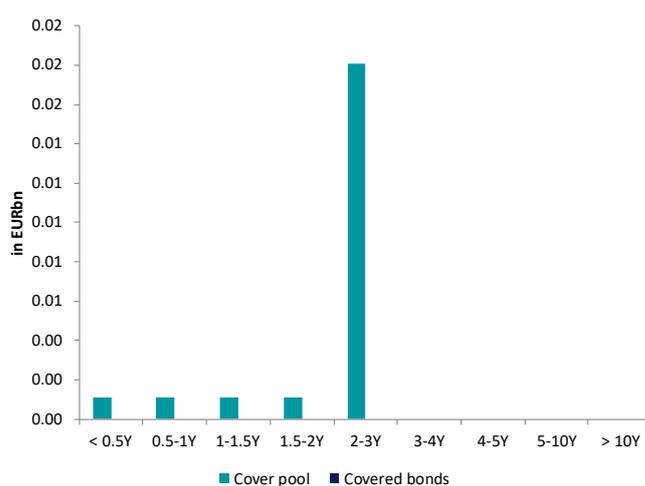
## Indicators of the cover pool

Covered bonds outstanding (EURm)	0.0	Rating (Moody's / Fitch / S&P / DBRS)	- / - / - / -
Cover pool volume (EURm)	22.5	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)	2.0y
Current OC (EURm)	22.5	WAL (Covered bonds)	n/a
Current OC	0.0%	Largest FX-position (NPV in EURm)	USD (20.9)
Number of loans	1	Share of largest exposure tranche	100.0% (> EUR 5m)
Number of borrowers	1	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	22,464,000	LCR level / haircut (Benchmarks)	-
		Risk weight (Benchmarks)	-

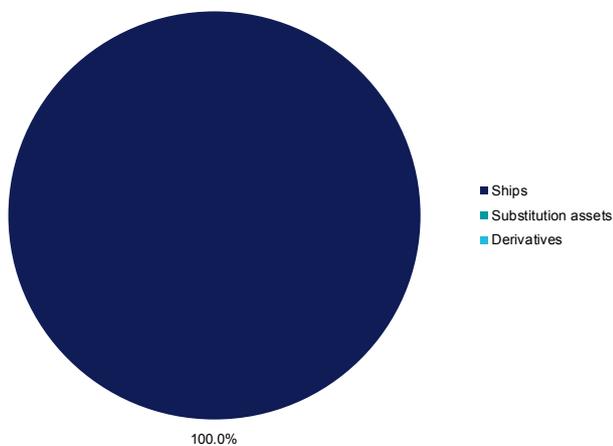
## Past development



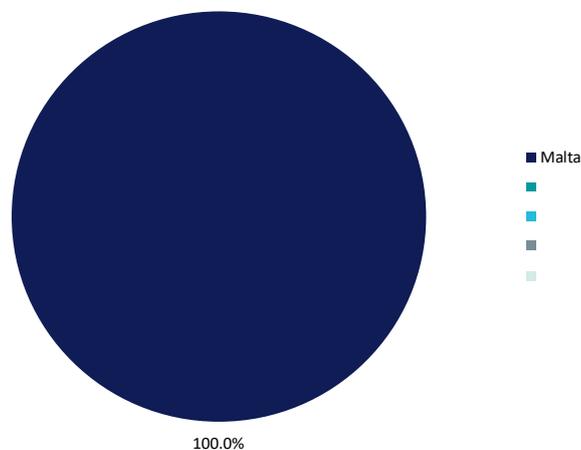
## Maturity structure



## Distribution by borrower type



## Ships by country



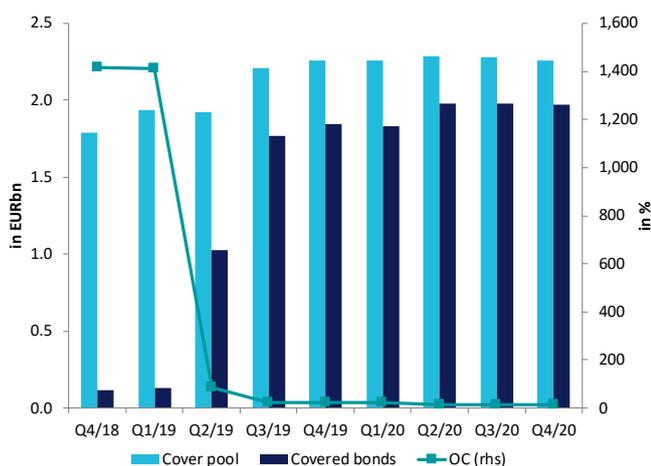
# Hamburg Commercial Bank

# Ship

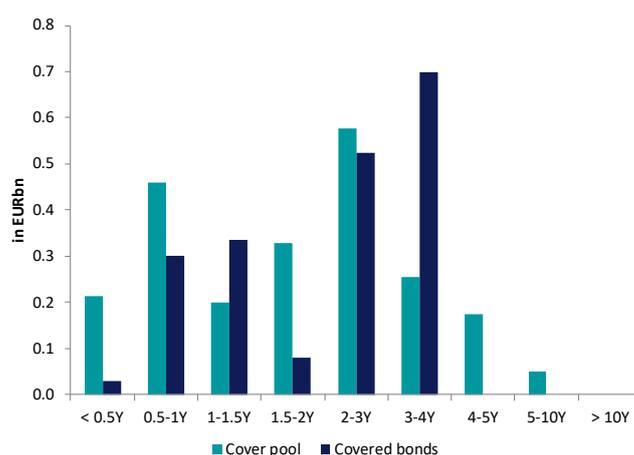
## Indicators of the cover pool

Covered bonds outstanding (EURm)	1,968.0	Rating (Moody's / Fitch / S&P / DBRS)	A3 / - / - / -
Cover pool volume (EURm)	2,258.4	Fixed interest (Cover pool)	3.2%
of which substitution assets	16.7%	Fixed interest (Covered bonds)	16.4%
of which derivatives	0.0%	WAL (Cover pool)	2.1y
Current OC (EURm)	290.4	WAL (Covered bonds)	2.3y
Current OC	14.8%	Largest FX-position (NPV in EURm)	USD (1,974.5)
Number of loans	228	Share of largest exposure tranche	83.6% (> EUR 5m)
Number of borrowers	124	Loans in arrears (> 90 days)	0.00%
Avg. exposure to borrowers (EUR)	15,174,194	LCR level / haircut (Benchmarks)	-
		Risk weight (Benchmarks)	-

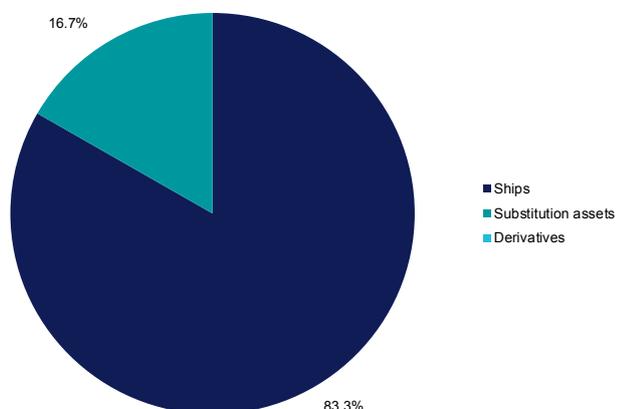
## Past development



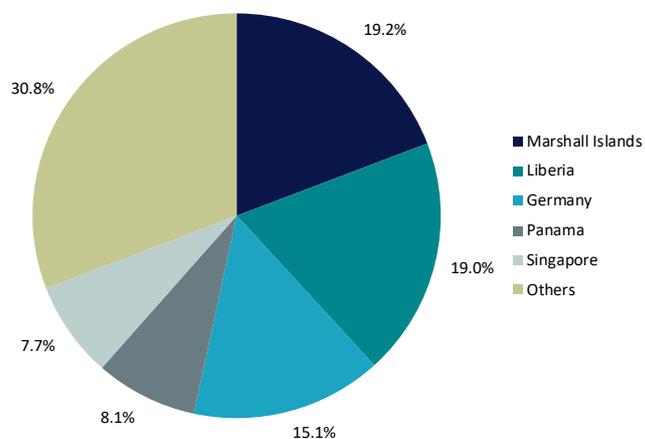
## Maturity structure



## Distribution by borrower type



## Ships by country



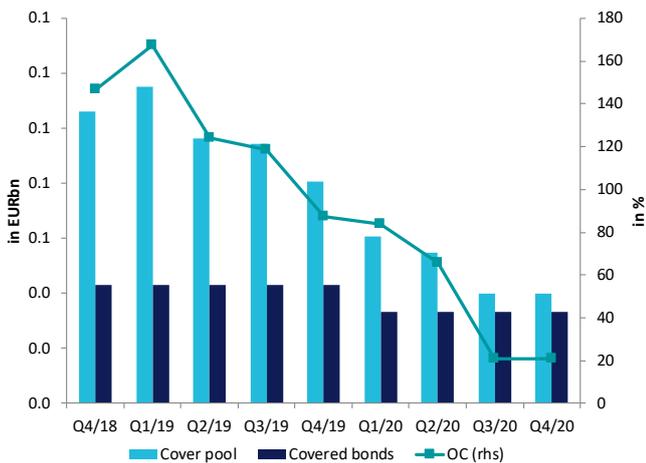
# Norddeutsche Landesbank

# Ship

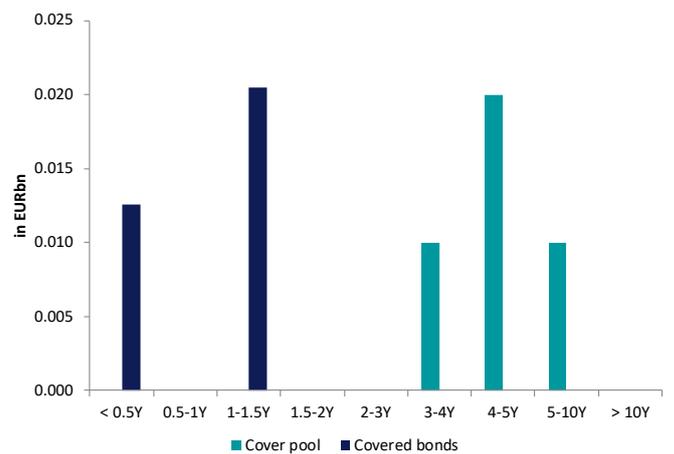
## Indicators of the cover pool

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)	-

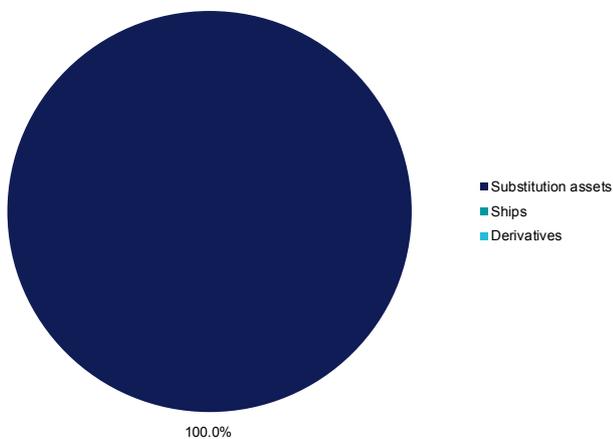
## Past development



## Maturity structure



## Distribution by borrower type



## Ships by country

n/a

## Appendix

### Contacts at NORD/LB

#### Markets Strategy & Floor Research



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**Henning Walten**

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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

#### Sales Wholesale Customers

Firmenkunden	+49 511 361-4003
Asset Finance	+49 511 361-8150

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