



## Transparency requirements §28 PfandBG Q2/2021

Markets Strategy & Floor Research

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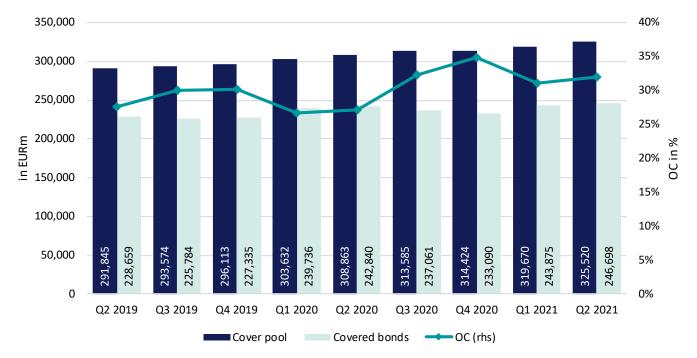


### Agenda Author: Dr. Frederik Kunze

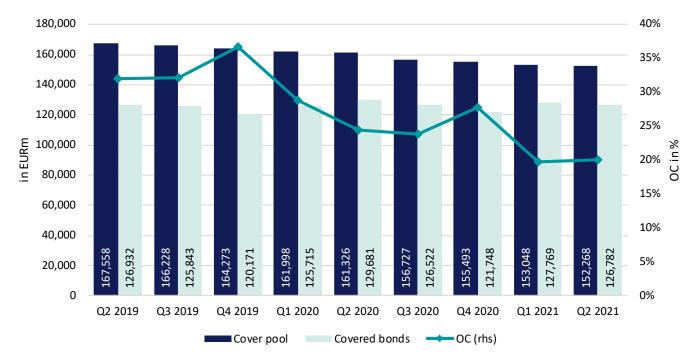
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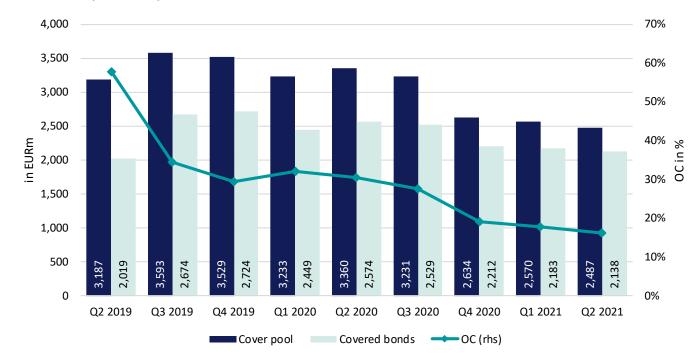
### **Market Overview**

#### Market development: mortgage covered bonds



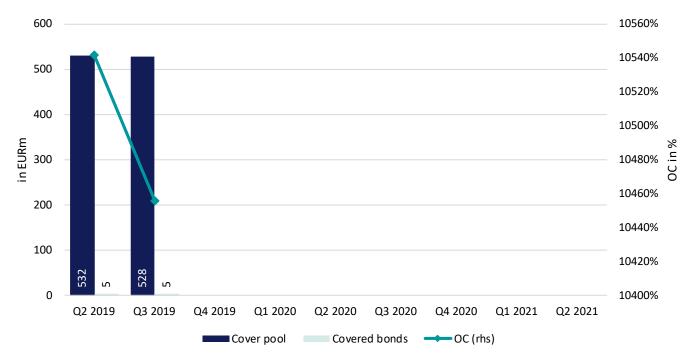
#### Market development: public sector covered bonds





#### Market development: ship covered bonds

#### Market development: aircraft covered bonds



### Market overview: mortgage covered bonds

	Cover pool	Pfandbrief volume	OC		(	Cover type (in %)		DE share (in %)
Issuer	in EURm	in EURm	in EURm	in %	Residential	Commercial	Others	Primary assets
Aareal Bank	12,831	10,769	2,062	19.1	6.9%	86.3%	6.8%	15.0%
ALTE LEIPZIGER Bauspar	29	10	19	185.5	93.0%	0.0%	7.0%	100.0%
Bausparkasse Mainz	102	87	15	17.7	94.1%	0.0%	5.9%	100.0%
Bausparkasse Schwäbisch Hall	1,255	1,006	249	24.7	93.6%	0.3%	6.1%	100.0%
BayernLB	11,111	6,365	4,746	74.6	13.2%	83.6%	3.2%	60.4%
Berlin Hyp	16,755	16,369	386	2.4	31.9%	62.7%	5.4%	68.4%
Commerzbank	35,035	21,873	13,162	60.2	94.7%	2.4%	2.9%	100.0%
DekaBank	995	475	520	109.5	0.0%	97.5%	2.5%	33.8%
apoBank	8,810	7,995	815	10.2	77.7%	18.2%	4.1%	100.0%
Deutsche Bank	15,721	10,787	4,934	45.7	89.8%	7.4%	2.9%	100.0%
Deutsche Hypo	8,677	8,264	412	5.0	20.3%	74.0%	5.7%	49.2%
DZ HYP	38,424	33,631	4,794	14.3	56.2%	41.3%	2.4%	96.4%
DKB	7,310	5,189	2,121	40.9	93.6%	1.9%	4.5%	100.0%
Hamburger Sparkasse	8,124	6,524	1,599	24.5	63.7%	28.9%	7.4%	100.0%
Helaba	16,793	9,936	6,857	69.0	26.5%	70.5%	3.0%	50.8%
Hamburg Commercial Bank	4,288	3,862	426	11.0	16.7%	77.1%	6.2%	94.5%
ING-DiBa	7,792	3,685	4,107	111.4	100.0%	0.0%	0.0%	100.0%
Kreissparkasse Köln	5,690	1,490	4,200	281.9	81.5%	13.4%	5.1%	100.0%
Landesbank Berlin	5,849	3,695	2,154	58.3	64.4%	31.7%	3.9%	100.0%
LBBW	15,454	11,796	3,657	31.0	39.7%	53.9%	6.4%	79.0%
M.M.Warburg & CO Hypothekenbank	1,259	1,108	151	13.6	18.9%	76.1%	5.0%	92.1%
Münchener Hypothekenbank	31,027	30,037	990	3.3	80.2%	17.6%	2.3%	79.7%
Natixis Pfandbriefbank	1,587	1,444	143	9.9	5.3%	82.6%	12.1%	37.3%
NORD/LB	4,777	1,989	2,788	140.2	67.7%	30.4%	1.9%	98.4%
Oldenburgische Landesbank	693	531	162	30.6	94.2%	0.0%	5.8%	100.0%
Deutsche Pfandbriefbank	18,376	16,295	2,081	12.8	16.9%	75.3%	7.8%	43.7%
PSD Bank Nürnberg	959	578	382	66.1	97.6%	0.0%	2.4%	100.0%
PSD Bank Rhein-Ruhr	566	354	212	59.9	96.1%	0.0%	3.9%	100.0%
SaarLB	771	502	269	53.6	1.7%	92.7%	5.6%	70.8%
Santander Consumer Bank	1,185	1,000	185	18.5	95.8%	0.0%	4.2%	100.0%
DSK Hyp	463	143	320	224.8	56.0%	35.3%	8.6%	94.3%
Sparda-Bank Südwest	54	5	49	976.8	81.4%	0.0%	18.6%	100.0%
Sparkasse Hannover	2,008	1,458	550	37.7	78.2%	17.9%	3.8%	100.0%
Stadtsparkasse Düsseldorf	2,061	1,055	1,005	95.3	68.8%	26.4%	4.8%	100.0%
Sparkasse KölnBonn	6,554	2,053	4,501	219.2	75.7%	20.5%	3.7%	100.0%
UniCredit Bank	29,395	22,127	7,268	32.8	69.2%	28.8%	1.9%	100.0%
Wüstenrot Bausparkasse	2,745	2,214	532	24.0	89.6%	1.3%	9.1%	100.0%

### Market overview: public sector covered bonds

	Cover pool	Pfandbrief volume	OC			с	over type (in %)			DE share (in %)
Issuer	in FUD	in FURM	. FUR.	·	Central	Regional	Local	Other	<b>O</b> 1	<b>D</b>
	in EURm	in EURm	in EURm	in %	government	authorities	authorities	debtors	Others	Primary assets
Aareal Bank	1,577	1,488	90	6.0%	19.3%	58.9%	19.7%	1.1%	1.0%	76.4%
BayernLB	22,635	18,998	3,637	19.1%	8.0%	39.5%	43.8%	6.9%	1.8%	93.6%
Berlin Hyp	250	235	15	6.3%	20.0%	76.7%	0.1%	0.0%	3.2%	79.3%
Commerzbank	13,210	12,173	1,037	8.5%	23.3%	32.4%	39.8%	4.0%	0.6%	61.4%
DekaBank	4,158	3,442	716	20.8%	14.3%	13.4%	57.6%	14.7%	0.0%	84.2%
Deutsche Bank	129	90	39	43.3%	14.7%	71.3%	0.0%	14.0%	0.0%	100.0%
Deutsche Hypo	3,058	2,636	422	16.0%	16.5%	56.8%	1.0%	25.7%	0.0%	60.1%
DKB	8,583	6,583	2,000	30.4%	0.2%	10.3%	86.3%	3.3%	0.0%	100.0%
Deutsche Pfandbriefbank	11,772	10,645	1,127	10.6%	40.9%	35.0%	10.5%	13.7%	0.0%	27.3%
DSK Hyp	162	58	105	182.3%	15.4%	80.9%	3.4%	0.4%	0.0%	100.0%
DZ HYP	14,557	12,332	2,225	18.0%	8.6%	23.0%	64.2%	4.3%	0.0%	81.1%
Hamburg Commercial Bank	984	951	33	3.5%	28.1%	55.2%	11.6%	5.1%	0.0%	69.4%
Kreissparkasse Köln	320	208	111	53.4%	16.0%	0.0%	62.1%	21.9%	0.0%	90.3%
LBBW	12,040	10,325	1,715	16.6%	15.5%	20.3%	32.6%	31.5%	0.0%	93.8%
Landesbank Berlin	622	260	362	139.1%	0.0%	12.1%	0.0%	87.9%	0.0%	100.0%
Helaba	32,648	28,722	3,926	13.7%	3.4%	38.5%	44.1%	14.0%	0.1%	92.8%
LIGA Bank	150	80	70	87.9%	0.0%	3.3%	93.3%	3.3%	0.0%	100.0%
M.M.Warburg & CO Hypothekenbank	14	11	3	25.0%	0.0%	89.3%	10.7%	0.0%	0.0%	100.0%
Münchener Hypothekenbank	1,652	1,594	58	3.7%	7.3%	76.0%	7.7%	9.1%	0.0%	90.6%
NORD/LB	13,221	9,428	3,793	40.2%	5.9%	21.5%	44.8%	23.1%	4.7%	94.2%
SaarLB	3,423	2,549	874	34.3%	1.6%	9.1%	84.1%	5.2%	0.0%	67.6%
Sparkasse Hannover	952	738	214	29.0%	0.0%	2.6%	89.8%	7.5%	0.0%	100.0%
Sparkasse KölnBonn	261	36	225	620.7%	0.0%	5.2%	82.3%	12.5%	0.0%	100.0%
Stadtsparkasse Düsseldorf	223	35	188	537.6%	0.0%	0.0%	74.8%	20.7%	4.5%	100.0%
UniCredit Bank	5,666	3,164	2,502	79.1%	23.3%	26.7%	49.8%	0.2%	0.0%	91.5%

### Market overview: ship covered bonds

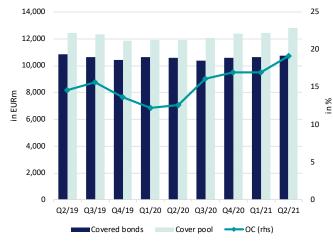
1	Cover pool	Pfandbrief volume	OC	
lssuer	in EURm	in EURm	in EURm	in %
Commerzbank	196	169	27	16.0%
Hamburg Commercial Bank	2,251	1,938	313	16.2%
NORD/LB	40	31	10	31.1%

### Aareal Bank

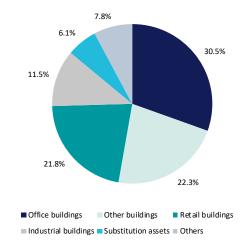
### Cover pool data

Cover pool (EURm)	12,830.5	Number of loans	4,126
of which residential	6.9%	Number of borrowers	4,113
of which commercial	86.3%	Number of properties	5,051
of which substitution assets	6.1%	Avg. exposure to borrowers (EUR)	2,907,586
of which derivatives	0.6%	Share of 10 largest borrowers	11.6%
Covered bonds (EURm)	10,768.7	Share of owner-occupied dwellings	0.9%
OC (EURm)	2,061.8	Share of multi-familiy houses	5.7%
OC	19.1%	EUR share (Cover pool)	78.4%
Fixed interest (Cover pool)	55.8%	EUR share (Covered bonds)	80.5%
Fixed interest (Covered bonds)	86.2%	Largest FX position (NPV in EURm)	SEK (285.2)
WAL (Cover pool)	3.0y	Share of largest exposure tranche	94.3% (> EUR 10m)
WAL (Covered Bonds)	3.1y	Avg. seasoning	4.7y
Avg. LTV (Original value)	55.2%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	33.2%		

#### Development of cover pool data

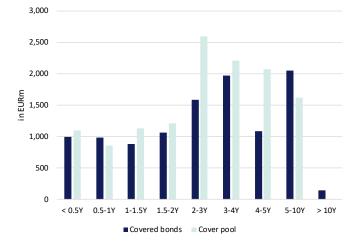


### Composition of cover pool

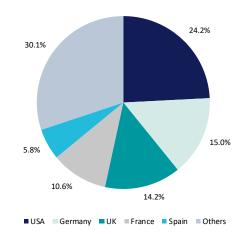


Source: vdp, NORD/LB Markets Strategy & Floor Research

#### **Maturity structure**



### **Regional distribution of properties**



### Mortgage



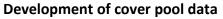
### **Aareal Bank**

### Cover pool data

WAL (Covered Bonds)

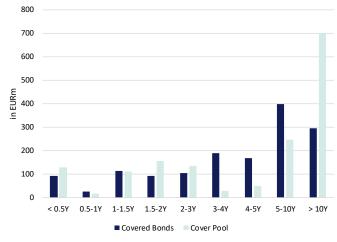
Cover pool (EURm) of which substitution assets of which derivatives Covered bonds (EURm) OC (EURm) OC Fixed interest (Cover pool) Fixed interest (Covered bonds) WAL (Cover pool)

1,577.2	Number of loans	184
1.0%	Number of borrowers	105
0.0%	Share of 10 largest borrowers	77.5%
1,487.7	Avg. exposure to borrowers (EUR)	14,878,095
89.5	EUR share (Cover pool)	100.0%
6.0%	EUR share (Covered bonds)	100.0%
92.0%	Largest FX position (NPV in EURm)	-
85.0%	Share of largest exposure tranche	59.7% (> EUR 100m)
8.1y	Loans in arrears (>90 days)	0.00%
5.6y		

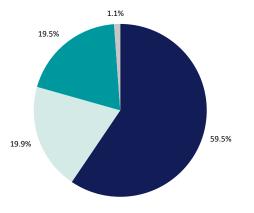




### **Maturity structure**



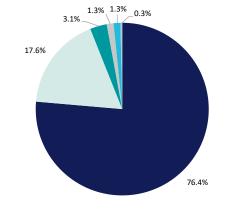
### **Composition of primary assets**



 $\blacksquare$  Regional authorities  $\blacksquare$  Local authorities  $\blacksquare$  Central government  $\blacksquare$  Other public debtors

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

### **Regional distribution of claims**



Germany Austria EU institutions Spain Japan Others

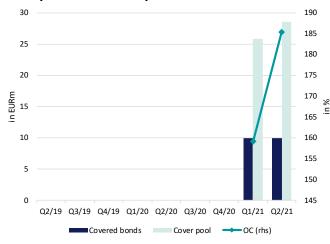
## **Public sector**

### **ALTE LEIPZIGER Bauspar**

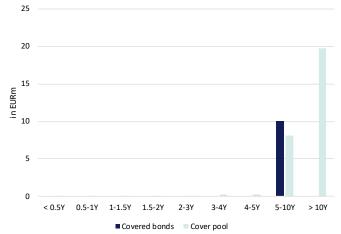
#### Cover pool data

Cover pool (EURm)	28.6	Number of loans	n/a
of which residential	93.0%	Number of borrowers	n/a
of which commercial	0.0%	Number of properties	n/a
of which substitution assets	7.0%	Avg. exposure to borrowers (EUR)	n/a
of which derivatives	0.0%	Share of 10 largest borrowers	n/a
Covered bonds (EURm)	10.0	Share of owner-occupied dwellings	n/a
OC (EURm)	18.6	Share of multi-familiy houses	n/a
OC	185.5%	EUR share (Cover pool)	n/a
Fixed interest (Cover pool)	100.0%	EUR share (Covered bonds)	n/a
Fixed interest (Covered bonds)	100.0%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	n/a	Share of largest exposure tranche	96.2% (< EUR 0.3m)
WAL (Covered Bonds)	n/a	Avg. seasoning	1.6y
Avg. LTV (Original value)	56.9%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

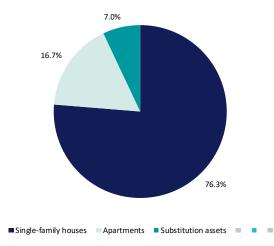
#### Development of cover pool data



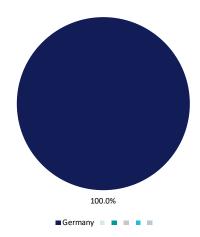
### **Maturity structure**



### **Composition of cover pool**



### **Regional distribution of properties**



### Mortgage

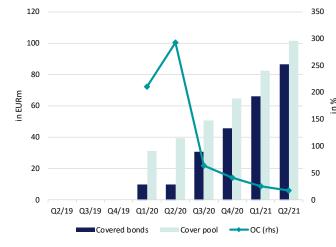


### **Bausparkasse Mainz**

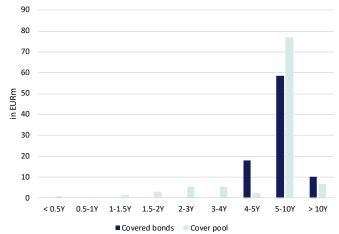
#### Cover pool data

Cover pool (EURm)	101.8	Number of loans	n/a
of which residential	94.1%	Number of borrowers	n/a
of which commercial	0.0%	Number of properties	n/a
of which substitution assets	5.9%	Avg. exposure to borrowers (EUR)	n/a
of which derivatives	0.0%	Share of 10 largest borrowers	n/a
Covered bonds (EURm)	86.5	Share of owner-occupied dwellings	n/a
OC (EURm)	15.3	Share of multi-familiy houses	n/a
OC	17.7%	EUR share (Cover pool)	n/a
Fixed interest (Cover pool)	100.0%	EUR share (Covered bonds)	n/a
Fixed interest (Covered bonds)	100.0%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	n/a	Share of largest exposure tranche	98.0% (< EUR 0.3m)
WAL (Covered Bonds)	n/a	Avg. seasoning	1.5y
Avg. LTV (Original value)	55.5%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

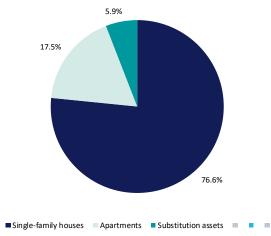
#### Development of cover pool data



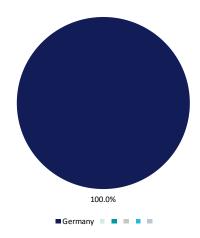
### **Maturity structure**



### **Composition of cover pool**



**Regional distribution of properties** 



### Mortgage

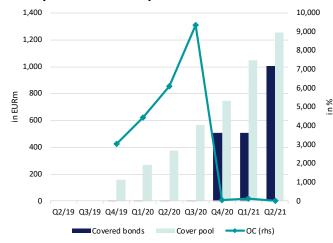
NORD/LB

### Bausparkasse Schwäbisch Hall

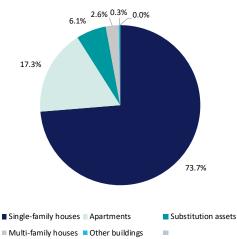
### Cover pool data

Cover pool (EURm)	1,254.9	Number of loans	8,855
of which residential	93.6%	Number of borrowers	13,998
of which commercial	0.3%	Number of properties	8,449
of which substitution assets	6.1%	Avg. exposure to borrowers (EUR)	84,219
of which derivatives	0.0%	Share of 10 largest borrowers	0.5%
Covered bonds (EURm)	1,006.0	Share of owner-occupied dwellings	83.9%
OC (EURm)	248.9	Share of multi-familiy houses	2.6%
OC	24.7%	EUR share (Cover pool)	100.0%
Fixed interest (Cover pool)	100.0%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	100.0%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	10.6y	Share of largest exposure tranche	91.7% (< EUR 0.3m)
WAL (Covered Bonds)	10.5y	Avg. seasoning	1.6y
Avg. LTV (Original value)	51.0%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

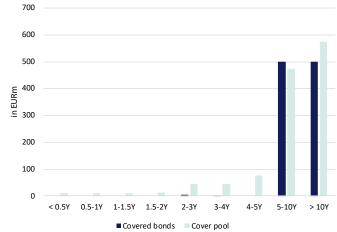
### Development of cover pool data



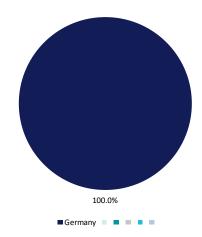
### Composition of cover pool



### **Maturity structure**



### **Regional distribution of properties**



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

### Mortgage

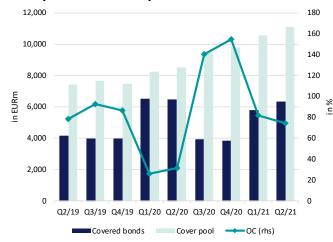


### BayernLB

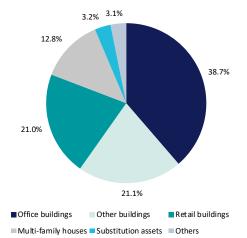
### Cover pool data

Cover pool (EURm)	11,110.7	Number of loans	684
of which residential	13.2%	Number of borrowers	496
of which commercial	83.6%	Number of properties	1,185
of which substitution assets	3.2%	Avg. exposure to borrowers (EUR)	21,676,782
of which derivatives	0.0%	Share of 10 largest borrowers	12.1%
Covered bonds (EURm)	6,365.2	Share of owner-occupied dwellings	0.1%
OC (EURm)	4,745.5	Share of multi-familiy houses	12.8%
OC	74.6%	EUR share (Cover pool)	92.1%
Fixed interest (Cover pool)	70.9%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	56.0%	Largest FX position (NPV in EURm)	USD (474.5)
WAL (Cover pool)	4.0y	Share of largest exposure tranche	85.9% (> EUR 10m)
WAL (Covered Bonds)	3.0y	Avg. seasoning	4.0y
Avg. LTV (Original value)	57.9%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

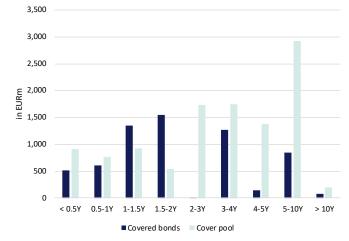
#### Development of cover pool data



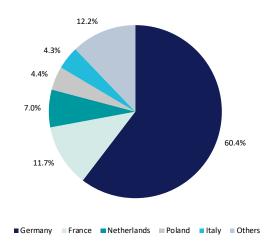
### Composition of cover pool



### Maturity structure



### **Regional distribution of properties**



### Mortgage

NORD/LB

**Public sector** 

### BayernLB

### Cover pool data

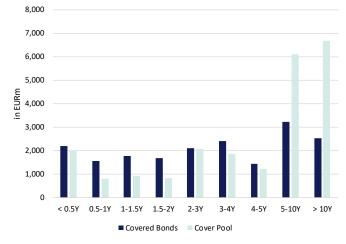
Cover pool (EURm) of which substitution assets of which derivatives Covered bonds (EURm) OC (EURm) OC Fixed interest (Cover pool) Fixed interest (Covered bonds) WAL (Covered Bonds)

22,635.4	Number of loans	83,716
1.8%	Number of borrowers	54,414
0.0%	Share of 10 largest borrowers	23.3%
18,998.4	Avg. exposure to borrowers (EUR)	408,624
3,637.0	EUR share (Cover pool)	96.1%
19.1%	EUR share (Covered bonds)	97.7%
91.1%	Largest FX position (NPV in EURm)	GBP (481.5)
87.5%	Share of largest exposure tranche	57.5% (> EUR 100m)
9.0y	Loans in arrears (>90 days)	0.01%
5.0y		

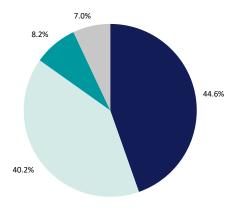
### Development of cover pool data



### Maturity structure



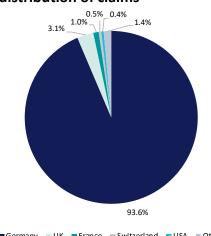
### Composition of primary assets



 $\blacksquare$  Local authorities  $\blacksquare$  Regional authorities  $\blacksquare$  Central government  $\blacksquare$  Other public debtors

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

### **Regional distribution of claims**



Germany UK France Switzerland USA Others

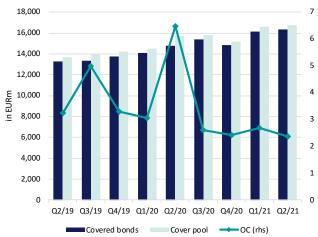
### **Berlin Hyp**

### Cover pool data

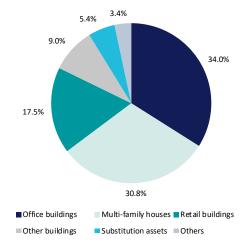
Cover pool (EURm)	16,754.6	Number of loans	1,608
of which residential	31.9%	Number of borrowers	1,516
of which commercial	62.7%	Number of properties	5,112
of which substitution assets	5.4%	Avg. exposure to borrowers (EUR)	10,454,876
of which derivatives	0.0%	Share of 10 largest borrowers	19.0%
Covered bonds (EURm)	16,368.7	Share of owner-occupied dwellings	0.0%
OC (EURm)	385.8	Share of multi-familiy houses	30.8%
OC	2.4%	EUR share (Cover pool)	99.1%
Fixed interest (Cover pool)	75.5%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	82.2%	Largest FX position (NPV in EURm)	GBP (94.2)
WAL (Cover pool)	4.9y	Share of largest exposure tranche	84.2% (> EUR 10m)
WAL (Covered Bonds)	5.4y	Avg. seasoning	3.8y
Avg. LTV (Original value)	56.5%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

in %

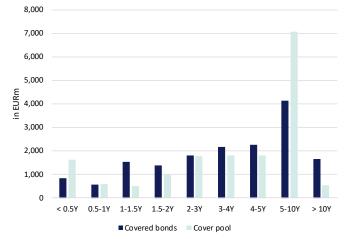
#### Development of cover pool data



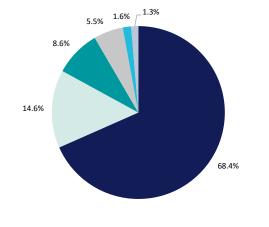
### Composition of cover pool



### **Maturity structure**



### **Regional distribution of properties**



Germany Netherlands France Poland Czech Republic Others

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

### Mortgage

# **Public sector**

NORD/LB

### **Berlin Hyp**

### Cover pool data

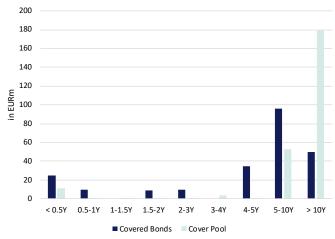
Cover pool (EURm) of which substitution assets of which derivatives Covered bonds (EURm) OC (EURm) OC Fixed interest (Cover pool) Fixed interest (Covered bonds) WAL (Cover pool) WAL (Covered Bonds)

249.9	Number of loans	47
3.2%	Number of borrowers	52
0.0%	Share of 10 largest borrowers	96.2%
235.0	Avg. exposure to borrowers (EUR)	4,651,718
14.8	EUR share (Cover pool)	100.0%
6.3%	EUR share (Covered bonds)	100.0%
100.0%	Largest FX position (NPV in EURm)	-
100.0%	Share of largest exposure tranche	95.1% (EUR 10-100m)
13.3y	Loans in arrears (>90 days)	0.00%
6.1y		

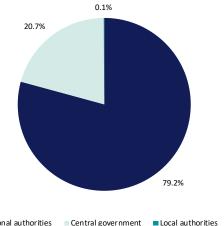
#### Development of cover pool data



### **Maturity structure**



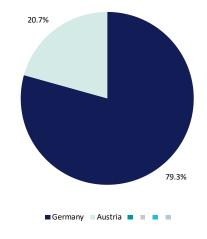
### **Composition of primary assets**



#### ■ Regional authorities ■ Central government ■ Local authorities ■

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

### **Regional distribution of claims**

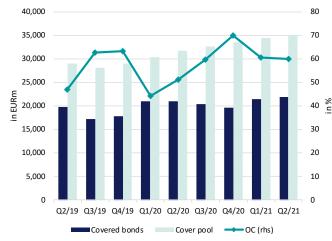


### Commerzbank

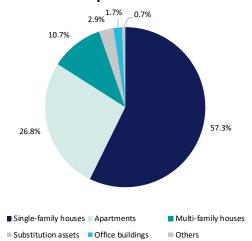
### Cover pool data

Cover pool (EURm)	35,034.5	Number of loans	273,072
of which residential	94.7%	Number of borrowers	217,089
of which commercial	2.4%	Number of properties	243,449
of which substitution assets	2.9%	Avg. exposure to borrowers (EUR)	156,636
of which derivatives	0.0%	Share of 10 largest borrowers	1.5%
Covered bonds (EURm)	21,872.7	Share of owner-occupied dwellings	16.2%
OC (EURm)	13,161.9	Share of multi-familiy houses	10.7%
OC	60.2%	EUR share (Cover pool)	100.0%
Fixed interest (Cover pool)	98.4%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	77.1%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	5.7y	Share of largest exposure tranche	76.6% (< EUR 0.3m)
WAL (Covered Bonds)	4.7y	Avg. seasoning	4.8y
Avg. LTV (Original value)	52.3%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

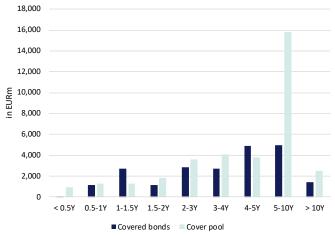
#### Development of cover pool data



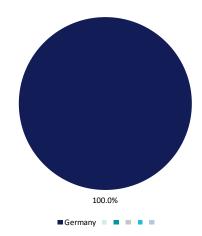
### Composition of cover pool



Maturity structure



### **Regional distribution of properties**



## Mortgage

### Commerzbank

#### Cover pool data

Cover pool (EURm) of which substitution assets of which derivatives Covered bonds (EURm) OC (EURm) OC Fixed interest (Cover pool) Fixed interest (Covered bonds) WAL (Covere pool) WAL (Covered Bonds)

### Development of cover pool data





13,210.3

12,172.9

1,037.4

8.5%

74.0%

40.0%

11.4y

4.9y

%

0.6%

0.0%

Number of loans

Number of borrowers

EUR share (Cover pool)

EUR share (Covered bonds)

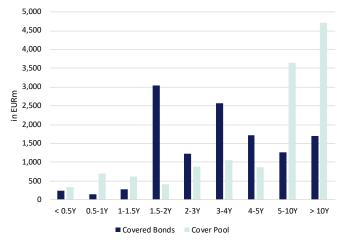
Loans in arrears (>90 days)

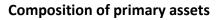
Share of 10 largest borrowers

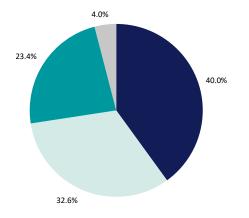
Avg. exposure to borrowers (EUR)

Largest FX position (NPV in EURm)

Share of largest exposure tranche



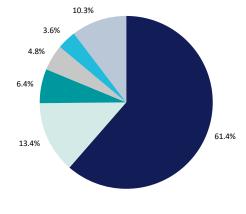




■Local authorities ■ Regional authorities ■ Central government ■ Other public debtors

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

### **Regional distribution of claims**



Germany UK Switzerland Italy Spain Others

### Public sector

1,024
544
30.5%
24,147,898
75.9%
97.9%
GBP (2,585.0)
62.6% (> EUR 100m)
0.00%



### Commerzbank

### Cover pool data

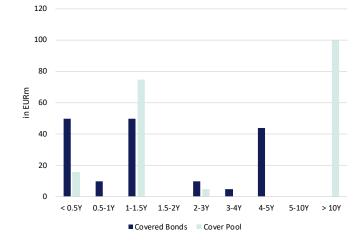
Cover pool (EURm)	196.0
of which substitution assets	100.0%
of which derivatives	0.0%
Covered bonds (EURm)	169.0
OC (EURm)	27.0
OC	16.0%
Fixed interest (Cover pool)	100.0%
Fixed interest (Covered bonds)	61.7%
WAL (Cover pool)	8.0y
WAL (Covered Bonds)	1.9y

196.0	Number of loans	0
0.0%	Number of borrowers	0
0.0%	Avg. exposure to borrowers (EUR)	n/a
169.0	Largest FX position (NPV in EURm)	-
27.0	Share of largest exposure tranche	n/a
16.0%	Loans in arrears (>90 days)	0.00%
0.0%		

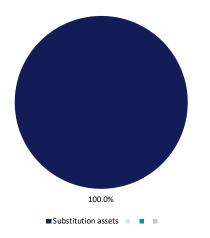
### Development of cover pool data



### Maturity structure



### Composition of cover pool



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

### **Regional distribution of primary assets**



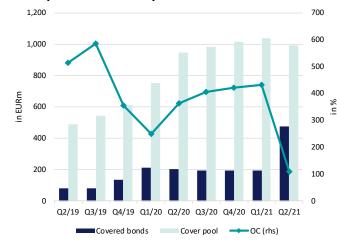
### Ship

### DekaBank

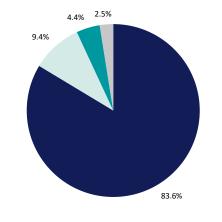
#### Cover pool data . / . . . .

Cover pool (EURm)	995.2	Number of loans	24
of which residential	0.0%	Number of borrowers	27
of which commercial	97.5%	Number of properties	38
of which substitution assets	2.5%	Avg. exposure to borrowers (EUR)	35,933,296
of which derivatives	0.0%	Share of 10 largest borrowers	56.9%
Covered bonds (EURm)	475.0	Share of owner-occupied dwellings	0.0%
OC (EURm)	520.2	Share of multi-familiy houses	0.0%
OC	109.5%	EUR share (Cover pool)	100.0%
Fixed interest (Cover pool)	76.6%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	100.0%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	3.5y	Share of largest exposure tranche	100.0% (> EUR 10m)
WAL (Covered Bonds)	3.7y	Avg. seasoning	3.4y
Avg. LTV (Original value)	59.3%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

#### Development of cover pool data

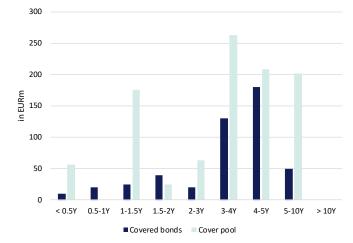


### **Composition of cover pool**

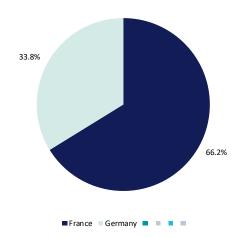


■ Office buildings ■ Other buildings ■ Retail buildings ■ Substitution assets ■

#### **Maturity structure**



### **Regional distribution of properties**

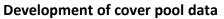


### Mortgage

Ν	0	R	D/	L	B

### Duk

4,157.7	Number of loans	251
0.0%	Number of borrowers	86
0.0%	Share of 10 largest borrowers	36.9%
3,441.9	Avg. exposure to borrowers (EUR)	48,344,860
715.7	EUR share (Cover pool)	97.3%
20.8%	EUR share (Covered bonds)	100.0%
76.9%	Largest FX position (NPV in EURm)	USD (122.6)
100.0%	Share of largest exposure tranche	49.0% (EUR 10-100m)
6.2y	Loans in arrears (>90 days)	0.00%
4.9y		



of which substitution assets

of which derivatives

**DekaBank** 

Cover pool data Cover pool (EURm)

Covered bonds (EURm)

Fixed interest (Cover pool)

Fixed interest (Covered bonds)

OC (EURm)

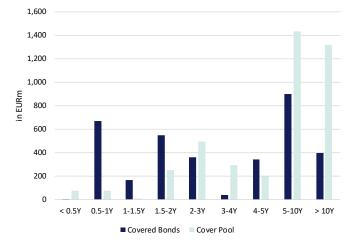
WAL (Cover pool)

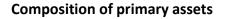
WAL (Covered Bonds)

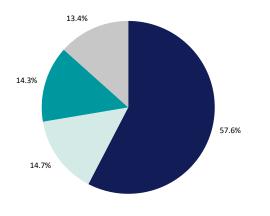
OC



#### Maturity structure



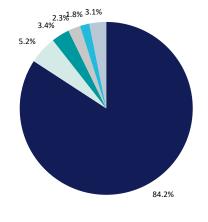




■Local authorities ■ Other public debtors ■ Central government ■ Regional authorities

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

### **Regional distribution of claims**



■ Germany ■ UK ■ Netherlands ■ Latvia ■ USA ■ Others

# Public sector



## Deutsche Apotheker- und Ärztebank

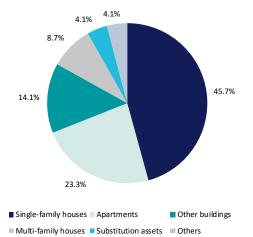
### Cover pool data

#### 8,810.1 Number of loans 83,141 77.7% Number of borrowers 46.664 18.2% Number of properties 61,579 Avg. exposure to borrowers (EUR) 4.1% 181,083 0.0% Share of 10 largest borrowers 5.3% 7,995.1 Share of owner-occupied dwellings 54.2% 815.0 Share of multi-familiy houses 8.7% 10.2% EUR share (Cover pool) 100.0% 92.8% EUR share (Covered bonds) 100.0% Largest FX position (NPV in EURm) 68.3% 5.2v Share of largest exposure tranche 73.0% (< EUR 0.3m) Avg. seasoning 6.2y 5.4y 55.0% Loans in arrears (>90 days) 0.00% n/a

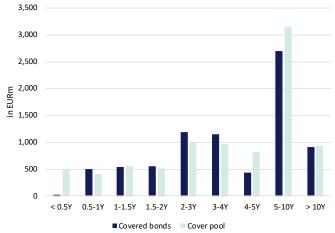
### Development of cover pool data



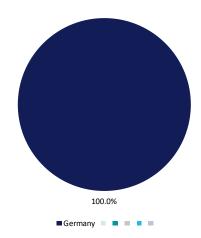
### Composition of cover pool



### Maturity structure



### **Regional distribution of properties**



### Mortgage



### **Deutsche Bank**

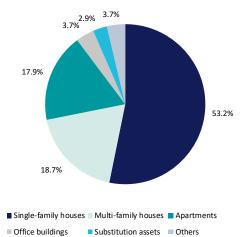
### Cover pool data

Cover pool (EURm)	15,721.3	Number of loans	n/a
of which residential	89.8%	Number of borrowers	n/a
of which commercial	7.4%	Number of properties	n/a
of which substitution assets	2.9%	Avg. exposure to borrowers (EUR)	n/a
of which derivatives	0.0%	Share of 10 largest borrowers	n/a
Covered bonds (EURm)	10,787.0	Share of owner-occupied dwellings	n/a
OC (EURm)	4,934.3	Share of multi-familiy houses	n/a
OC	45.7%	EUR share (Cover pool)	n/a
Fixed interest (Cover pool)	99.3%	EUR share (Covered bonds)	n/a
Fixed interest (Covered bonds)	74.5%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	n/a	Share of largest exposure tranche	80.2% (< EUR 0.3m)
WAL (Covered Bonds)	n/a	Avg. seasoning	5.3y
Avg. LTV (Original value)	53.7%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

#### Development of cover pool data

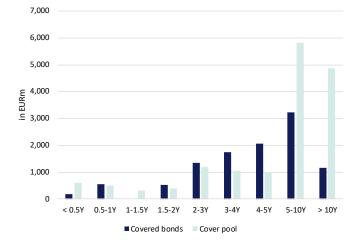


### Composition of cover pool

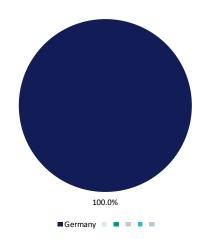


-

#### Maturity structure



### **Regional distribution of properties**



### Mortgage

NORD/LB

### **Deutsche Bank**

#### Cover pool data

- Cover pool (EURm)
- of which substitution assets of which derivatives
- Covered bonds (EURm)
- OC (EURm)
- OC

### Fixed interest (Cover pool)

- Fixed interest (Covered bonds) WAL (Cover pool)
- WAL (Cover pool) WAL (Covered Bonds)

### Development of cover pool data



#### **Maturity structure**

129.0

0.0%

0.0%

90.0

39.0

43.3%

100.0%

100.0%

n/a

n/a

Number of loans

Number of borrowers

EUR share (Cover pool)

EUR share (Covered bonds)

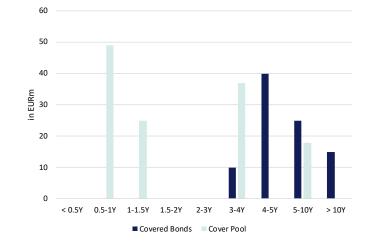
Loans in arrears (>90 days)

Share of 10 largest borrowers

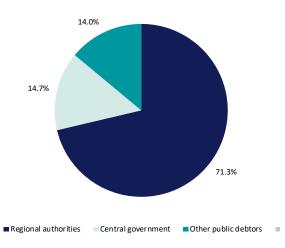
Avg. exposure to borrowers (EUR)

Largest FX position (NPV in EURm)

Share of largest exposure tranche

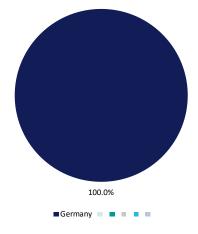


### **Composition of primary assets**



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

### **Regional distribution of claims**



### **Public sector**

100.0% (EUR 10-100m)

n/a

n/a

n/a

n/a

n/a

n/a

0.00%

\_

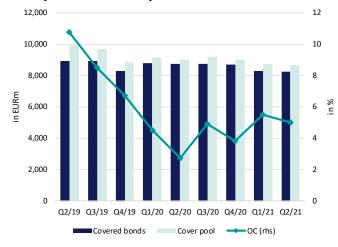
### Deutsche Hypothekenbank

### Cover pool data

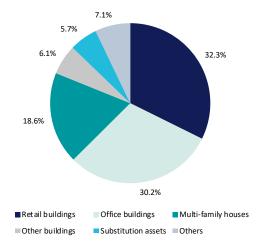
Cover pool (EURm)
of which residential
of which commercial
of which substitution assets
of which derivatives
Covered bonds (EURm)
OC (EURm)
OC
Fixed interest (Cover pool)
Fixed interest (Covered bonds)
WAL (Cover pool)
WAL (Covered Bonds)
Avg. LTV (Original value)
Avg. LTV (Market value)

#### 8,676.5 Number of loans 506 20.3% Number of borrowers 439 74.0% Number of properties 1,586 5.7% Avg. exposure to borrowers (EUR) 18,641,230 0.0% Share of 10 largest borrowers 16.0% 8,264.1 Share of owner-occupied dwellings 0.0% 412.4 Share of multi-familiy houses 18.6% 5.0% EUR share (Cover pool) 89.4% 76.7% EUR share (Covered bonds) 100.0% Largest FX position (NPV in EURm) 93.7% GBP (844.5) 3.7v Share of largest exposure tranche 88.3% (> EUR 10m) 4.3y Avg. seasoning 5.5y 57.9% Loans in arrears (>90 days) 0.00% n/a

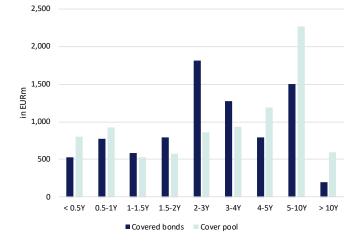
#### Development of cover pool data



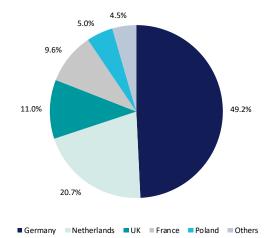
### Composition of cover pool



#### Maturity structure



### **Regional distribution of properties**



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

### Mortgage



## Public sector

NORD/LB

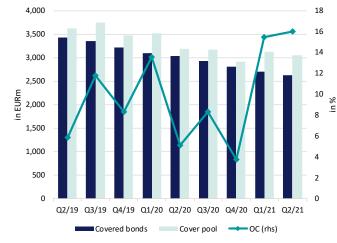
### **Deutsche Hypothekenbank**

#### Cover pool data

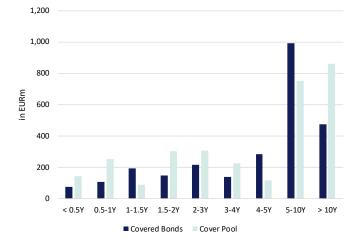
Cover pool (EURm)	3,058.0	Numbe
of which substitution assets	0.0%	Numbe
of which derivatives	0.0%	Share o
Covered bonds (EURm)	2,636.1	Avg. ex
OC (EURm)	421.9	EUR sha
OC	16.0%	EUR sha
Fixed interest (Cover pool)	84.5%	Largest
Fixed interest (Covered bonds)	87.1%	Share o
WAL (Cover pool)	6.3y	Loans ir
WAL (Covered Bonds)	7.4y	

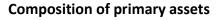
8.0	Number of loans	125
0%	Number of borrowers	67
0%	Share of 10 largest borrowers	60.2%
5.1	Avg. exposure to borrowers (EUR)	45,641,791
1.9	EUR share (Cover pool)	89.0%
0%	EUR share (Covered bonds)	98.1%
5%	Largest FX position (NPV in EURm)	GBP (133.2)
1%	Share of largest exposure tranche	94.7% (EUR 10-100m)
.3y	Loans in arrears (>90 days)	0.00%
1.		

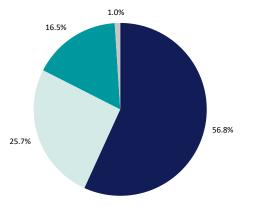
### Development of cover pool data



#### Maturity structure



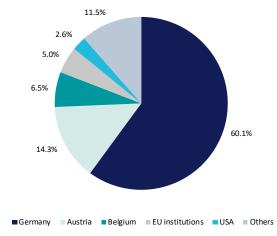




 $\blacksquare$  Regional authorities  $\blacksquare$  Other public debtors  $\blacksquare$  Central government  $\blacksquare$  Local authorities

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

### **Regional distribution of claims**

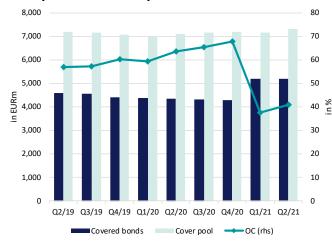


### **Deutsche Kreditbank**

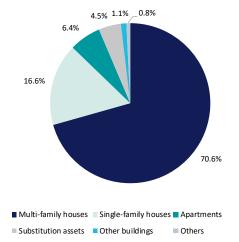
### Cover pool data

Cover pool (EURm)	7,309.6	Numb
of which residential	93.6%	Numb
of which commercial	1.9%	Numb
of which substitution assets	4.5%	Avg. ex
of which derivatives	0.0%	Share
Covered bonds (EURm)	5,188.5	Share
OC (EURm)	2,121.1	Share
OC	40.9%	EUR sh
Fixed interest (Cover pool)	94.8%	EUR sh
Fixed interest (Covered bonds)	98.9%	Larges
WAL (Cover pool)	n/a	Share
WAL (Covered Bonds)	n/a	Avg. se
Avg. LTV (Original value)	50.2%	Loans
Avg. LTV (Market value)	n/a	

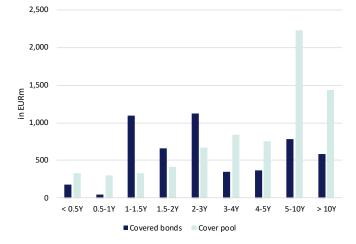
### Development of cover pool data



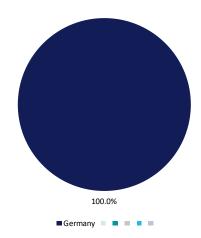
### Composition of cover pool



### Maturity structure



### **Regional distribution of properties**



### Mortgage

309.6	Number of loans	n/a
93.6%	Number of borrowers	n/a
1.9%	Number of properties	n/a
4.5%	Avg. exposure to borrowers (EUR)	n/a
0.0%	Share of 10 largest borrowers	n/a
188.5	Share of owner-occupied dwellings	n/a
121.1	Share of multi-familiy houses	n/a
40.9%	EUR share (Cover pool)	n/a
94.8%	EUR share (Covered bonds)	n/a
98.9%	Largest FX position (NPV in EURm)	-
n/a	Share of largest exposure tranche	43.2% (EUR 1-10m)
n/a	Avg. seasoning	8.7y
50.2%	Loans in arrears (>90 days)	0.00%
,		

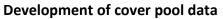
Source: vdp, NORD/LB Markets Strategy & Floor Research

### **Deutsche Kreditbank**

#### Cover pool data

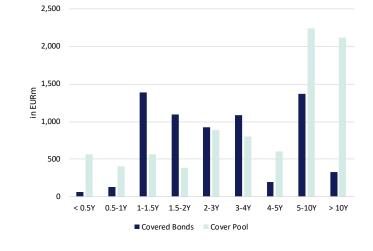
Cover pool (EURm) of which substitution assets of which derivatives Covered bonds (EURm) OC (EURm) OC Fixed interest (Cover pool) Fixed interest (Covered bonds) WAL (Cover pool) WAL (Covered Bonds)

#### 8,583.0 Number of loans 0.0% Number of borrowers 0.0% Share of 10 largest borrowers 6,582.8 Avg. exposure to borrowers (EUR) 2,000.2 EUR share (Cover pool) 30.4% EUR share (Covered bonds) 95.5% Largest FX position (NPV in EURm) 96.2% Share of largest exposure tranche 48.7% (EUR 10-100m) n/a Loans in arrears (>90 days) 0.00% n/a

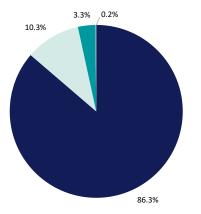




#### **Maturity structure**



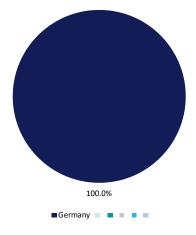
### **Composition of primary assets**



■Local authorities ■ Regional authorities ■ Other public debtors ■ Central government

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

### **Regional distribution of claims**



### **Public sector**

n/a

n/a

n/a

n/a

n/a

n/a

### **Deutsche Pfandbriefbank**

### Cover pool data

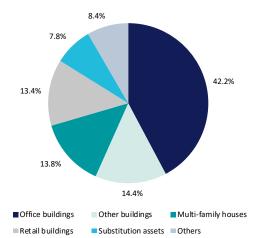
Cover pool (EURm)
of which residential
of which commercial
of which substitution assets
of which derivatives
Covered bonds (EURm)
OC (EURm)
OC
Fixed interest (Cover pool)
Fixed interest (Covered bonds)
WAL (Cover pool)
WAL (Covered Bonds)
Avg. LTV (Original value)
Avg. LTV (Market value)

#### 18,376.0 Number of loans 1,737 16.9% Number of borrowers 824 75.3% Number of properties 3,211 Avg. exposure to borrowers (EUR) 20,566,748 7.8% 0.0% Share of 10 largest borrowers 8.3% 16,295.0 Share of owner-occupied dwellings 0.0% 2,081.0 Share of multi-familiy houses 13.8% 12.8% EUR share (Cover pool) 75.5% 57.0% EUR share (Covered bonds) 76.9% Largest FX position (NPV in EURm) 85.4% USD (465.0) 3.7v Share of largest exposure tranche 90.9% (> EUR 10m) Avg. seasoning 5.1y 3.0y 54.0% Loans in arrears (>90 days) 0.00% 32.0%

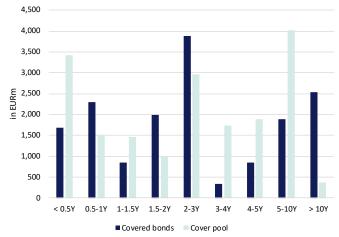




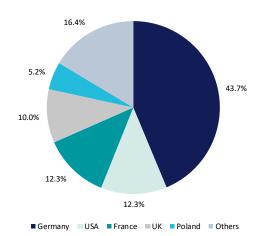
### Composition of cover pool



### Maturity structure



### **Regional distribution of properties**



# Mortgage

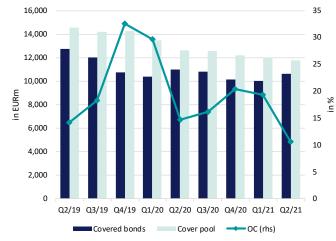
NORD/LB

### **Deutsche Pfandbriefbank**

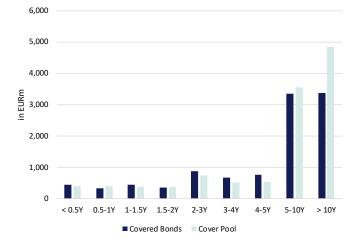
### Cover pool data

11,772.0	0 Number of loans	
0.0%	Number of borrowers	220
0.0%	Share of 10 largest borrowers	55.2%
10,645.0	Avg. exposure to borrowers (EUR)	53,504,545
1,127.0	EUR share (Cover pool)	91.7%
10.6%	EUR share (Covered bonds)	99.4%
70.0%	Largest FX position (NPV in EURm)	USD (539.0)
72.6%	Share of largest exposure tranche	67.8% (> EUR 100m)
9.0y	Loans in arrears (>90 days)	0.00%
7.4y		
	0.0% 0.0% 10,645.0 1,127.0 10.6% 70.0% 72.6% 9.0y	<ul> <li>0.0% Number of borrowers</li> <li>0.0% Share of 10 largest borrowers</li> <li>10,645.0 Avg. exposure to borrowers (EUR)</li> <li>1,127.0 EUR share (Cover pool)</li> <li>10.6% EUR share (Covered bonds)</li> <li>70.0% Largest FX position (NPV in EURm)</li> <li>72.6% Share of largest exposure tranche</li> <li>9.0y Loans in arrears (&gt;90 days)</li> </ul>

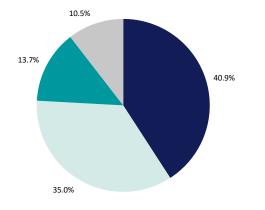
### Development of cover pool data



#### Maturity structure



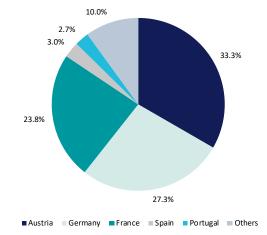
### Composition of primary assets



Central government Regional authorities Other public debtors Local authorities

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

### **Regional distribution of claims**



### **Public sector**

### DSK Hyp

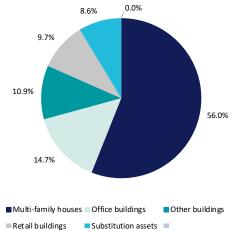
### Cover pool data

Cover pool (EURm)	462.8	Number of loans	48
of which residential	56.0%	Number of borrowers	14
of which commercial	35.3%	Number of properties	194
of which substitution assets	8.6%	Avg. exposure to borrowers (EUR)	30,199,786
of which derivatives	0.0%	Share of 10 largest borrowers	99.1%
Covered bonds (EURm)	142.5	Share of owner-occupied dwellings	0.0%
OC (EURm)	320.3	Share of multi-familiy houses	56.0%
OC	224.8%	EUR share (Cover pool)	100.0%
Fixed interest (Cover pool)	81.2%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	94.7%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	2.0y	Share of largest exposure tranche	83.8% (> EUR 10m)
WAL (Covered Bonds)	2.6y	Avg. seasoning	7.1y
Avg. LTV (Original value)	54.6%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

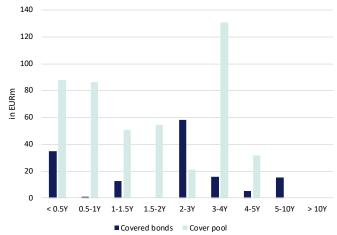
### Development of cover pool data



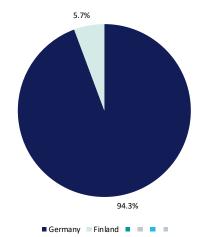
### Composition of cover pool



### **Maturity structure**



### **Regional distribution of properties**



### Mortgage

NORD/LB

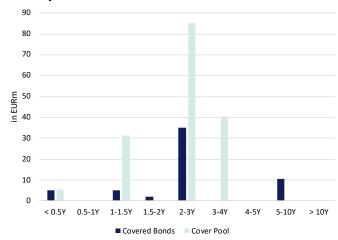
Cover pool data			
Cover pool (EURm)	162.3	Number of loans	4
of which substitution assets	0.0%	Number of borrowers	4
of which derivatives	0.0%	Share of 10 largest borrowers	41.5%
Covered bonds (EURm)	57.5	Avg. exposure to borrowers (EUR)	40,587,250
OC (EURm)	104.8	EUR share (Cover pool)	100.0%
OC	182.3%	EUR share (Covered bonds)	100.0%
Fixed interest (Cover pool)	81.5%	Largest FX position (NPV in EURm)	-
Fixed interest (Covered bonds)	100.0%	Share of largest exposure tranche	77.8% (EUR 10-100m)
WAL (Cover pool)	2.4y	Loans in arrears (>90 days)	0.00%
WAL (Covered Bonds)	2.6y		

### Development of cover pool data

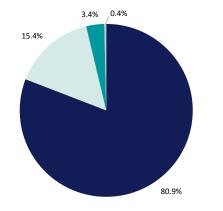
**DSK Hyp** 



#### **Maturity structure**



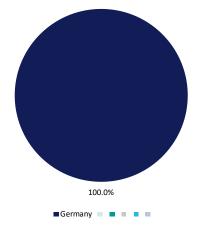
### **Composition of primary assets**



■Regional authorities ■ Central government ■Local authorities ■ Other public debtors

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

### **Regional distribution of claims**



**Public sector** 



### DZ HYP

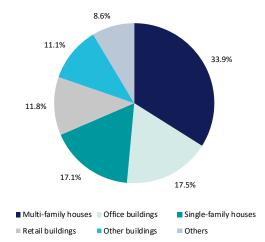
### Cover pool data

Cover pool (EURm)	38,424.5	Number of loans	109,140
of which residential	56.2%	Number of borrowers	152,579
of which commercial	41.3%	Number of properties	n/a
of which substitution assets	2.4%	Avg. exposure to borrowers (EUR)	245,666
of which derivatives	0.0%	Share of 10 largest borrowers	n/a
Covered bonds (EURm)	33,630.7	Share of owner-occupied dwellings	21.4%
OC (EURm)	4,793.8	Share of multi-familiy houses	33.9%
OC	14.3%	EUR share (Cover pool)	99.0%
Fixed interest (Cover pool)	89.0%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	98.7%	Largest FX position (NPV in EURm)	GBP (274.8)
WAL (Cover pool)	6.8y	Share of largest exposure tranche	40.6% (> EUR 10m)
WAL (Covered Bonds)	5.4y	Avg. seasoning	4.9y
Avg. LTV (Original value)	54.2%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

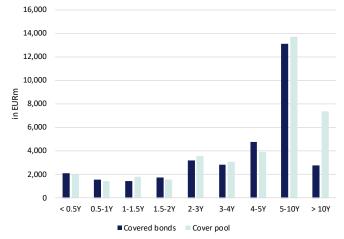
### Development of cover pool data



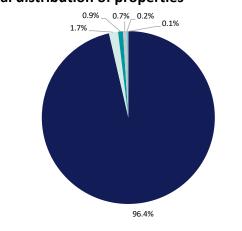
### Composition of cover pool



Maturity structure



### **Regional distribution of properties**



Germany Netherlands France UK Sweden Others

## Mortgage

NORD/LB

### DZ HYP

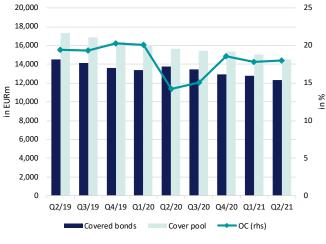
### Cover pool data

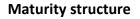
Cover pool (EURm) 14,556.8 of which substitution assets of which derivatives Covered bonds (EURm) 12,332.1 OC (EURm) 2,224.7 OC 18.0% Fixed interest (Cover pool) 97.7% Fixed interest (Covered bonds) 95.2% WAL (Cover pool) WAL (Covered Bonds)

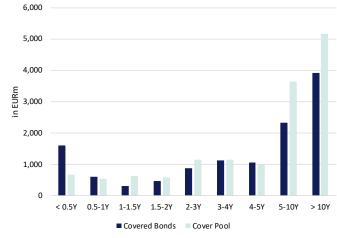
#### Number of loans 17,733 0.0% Number of borrowers 5,200 0.0% Share of 10 largest borrowers 16.1% Avg. exposure to borrowers (EUR) 2,799,386 EUR share (Cover pool) 95.8% EUR share (Covered bonds) 96.4% Largest FX position (NPV in EURm) USD (99.4) Share of largest exposure tranche 40.5% (< EUR 10m) 8.4y Loans in arrears (>90 days) 0.00% 7.3y

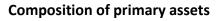


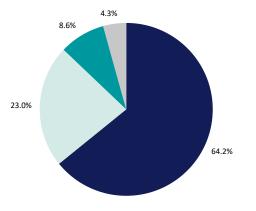
### Development of cover pool data







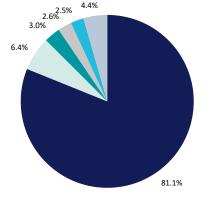




■Local authorities ■ Regional authorities ■ Central government ■ Other public debtors

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

### **Regional distribution of claims**



■Germany Spain ■Austria ■Canada ■Italy ■Others

## **Public sector**



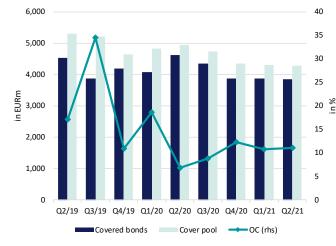
### Hamburg Commercial Bank

### Cover pool data

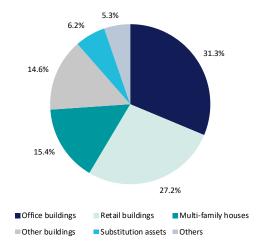
•			
Cover pool (EURm)			
of which residential			
of which commercial			
of which substitution assets			
of which derivatives			
Covered bonds (EURm)			
OC (EURm)			
oc			
Fixed interest (Cover pool)			
Fixed interest (Covered bonds)			
WAL (Cover pool)			
WAL (Covered Bonds)			
Avg. LTV (Original value)			
Avg. LTV (Market value)			

#### 4,287.7 Number of loans 470 16.7% Number of borrowers 280 77.1% Number of properties 907 Avg. exposure to borrowers (EUR) 14,366,429 6.2% 0.0% Share of 10 largest borrowers 26.0% 3,862.2 Share of owner-occupied dwellings 0.0% 425.5 Share of multi-familiy houses 15.4% 11.0% EUR share (Cover pool) 99.1% 50.2% EUR share (Covered bonds) 100.0% Largest FX position (NPV in EURm) 76.4% GBP (36.2) 3.2v Share of largest exposure tranche 77.4% (> EUR 10m) 1.7y Avg. seasoning 4.2y 57.3% Loans in arrears (>90 days) 0.00% n/a

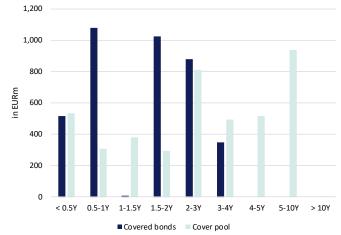
#### Development of cover pool data



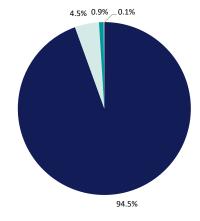
### **Composition of cover pool**



Maturity structure



### **Regional distribution of properties**



Germany Netherlands UK Sweden

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

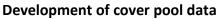
## Mortgage

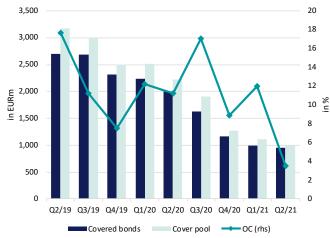
## Hamburg Commercial Bank

#### Cover pool data

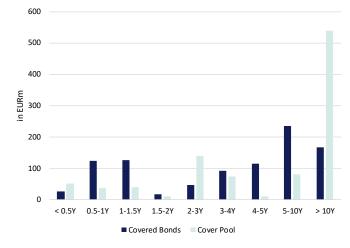
Cover pool (EURm) 984.3 of which substitution assets 0.0% of which derivatives 0.0% Covered bonds (EURm) 951.1 OC (EURm) 33.2 OC 3.5% Fixed interest (Cover pool) 93.2% Fixed interest (Covered bonds) 93.7% WAL (Cover pool) 10.1y WAL (Covered Bonds) 5.3y

3	Number of loans	76
6	Number of borrowers	46
6	Share of 10 largest borrowers	82.7%
1	Avg. exposure to borrowers (EUR)	21,397,826
2	EUR share (Cover pool)	90.3%
6	EUR share (Covered bonds)	100.0%
6	Largest FX position (NPV in EURm)	CHF (106.1)
6	Share of largest exposure tranche	50.8% (> EUR 100m)
У	Loans in arrears (>90 days)	0.03%

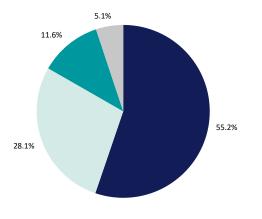




#### Maturity structure



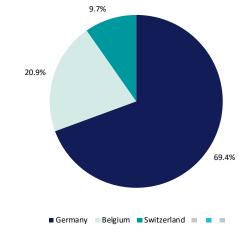
### **Composition of primary assets**



■Regional authorities ■ Central government ■Local authorities ■ Other public debtors

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

### **Regional distribution of claims**



### **Public sector**

## **Hamburg Commercial Bank**

#### Cover pool data

Cover pool (EURm)	2
of which substitution assets	
of which derivatives	
Covered bonds (EURm)	1
OC (EURm)	
OC	
Fixed interest (Cover pool)	
Fixed interest (Covered bonds)	
WAL (Cover pool)	
WAL (Covered Bonds)	

2,251.0 Number of loans 16.1% Number of borrowers 0.0% Avg. exposure to borrowers (EUR) 1,938.0 Largest FX position (NPV in EURm) 313.0 Share of largest exposure tranche 16.2% Loans in arrears (>90 days)

3.0% 15.8% 2.0y 1.9y



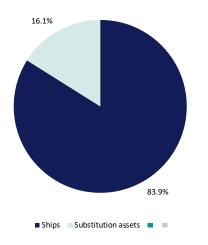
#### 122 15,486,066 USD (1,971.4) 84.1% (> EUR 5m) 0.00%

#### Development of cover pool data



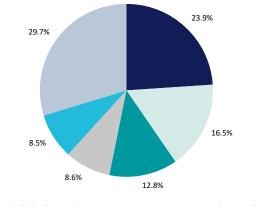
#### 700 600 500 400 in EURm 300 200 100 0 5-10Y < 0.5Y 0.5-1Y 1-1.5Y 1.5-2Y 2-3Y 3-4Y 4-5Y > 10Y Covered Bonds Cover Pool

#### **Composition of cover pool**



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

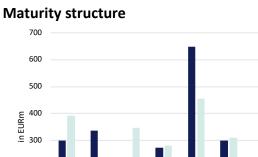
#### **Regional distribution of primary assets**



■ Marshall Islands Liberia ■ Germany ■ Singapore ■ Malta ■ Others

# 233

Ship



## Hamburger Sparkasse

#### Cover pool data

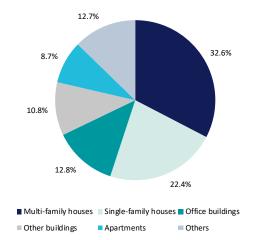
Cover pool (EURm)	8,123.5	Number of loans
of which residential	63.7%	Number of borrowers
of which commercial	28.9%	Number of properties
of which substitution assets	7.4%	Avg. exposure to borr
of which derivatives	0.0%	Share of 10 largest bo
Covered bonds (EURm)	6,524.1	Share of owner-occup
OC (EURm)	1,599.4	Share of multi-familiy
OC	24.5%	EUR share (Cover poo
Fixed interest (Cover pool)	82.0%	EUR share (Covered b
Fixed interest (Covered bonds)	99.7%	Largest FX position (N
WAL (Cover pool)	n/a	Share of largest expos
WAL (Covered Bonds)	n/a	Avg. seasoning
Avg. LTV (Original value)	52.0%	Loans in arrears (>90
Avg. LTV (Market value)	n/a	

#### n/a ٢S s n/a rowers (EUR) n/a orrowers n/a pied dwellings n/a y houses n/a ol) n/a bonds) n/a NPV in EURm) sure tranche 33.7% (EUR 1-10m) 7.2y days) 0.00%

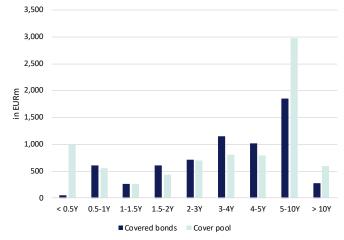
#### Development of cover pool data



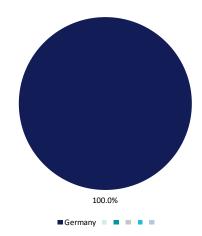
#### Composition of cover pool



#### Maturity structure



#### **Regional distribution of properties**



### Mortgage

n/a

## ING-DiBa

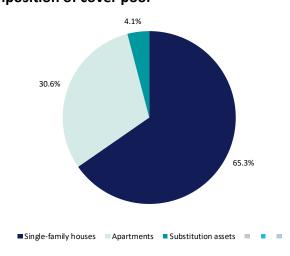
### Cover pool data

Cover pool (EURm)	7,791.9	Number of loans	73,201
of which residential	100.0%	Number of borrowers	72,315
of which commercial	0.0%	Number of properties	73,201
of which substitution assets	4.2%	Avg. exposure to borrowers (EUR)	107,750
of which derivatives	0.0%	Share of 10 largest borrowers	0.2%
Covered bonds (EURm)	3,685.0	Share of owner-occupied dwellings	82.7%
OC (EURm)	4,106.9	Share of multi-familiy houses	0.0%
OC	111.4%	EUR share (Cover pool)	n/a
Fixed interest (Cover pool)	100.0%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	97.3%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	7.4y	Share of largest exposure tranche	94.3% (< EUR 0.3m)
WAL (Covered Bonds)	8.0y	Avg. seasoning	5.1y
Avg. LTV (Original value)	47.7%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

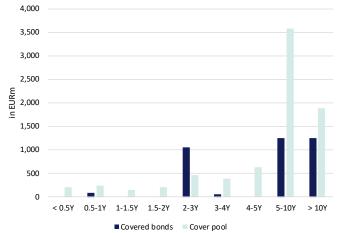
#### Development of cover pool data



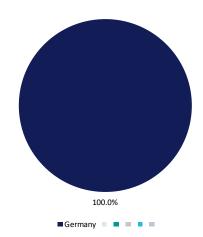
## Composition of cover pool



#### Maturity structure

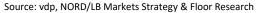


#### **Regional distribution of properties**



## Mortgage

NORD/I	B
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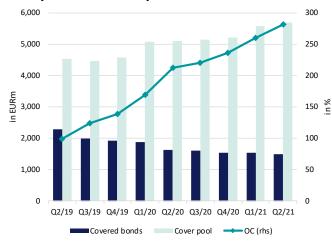


## Kreissparkasse Köln

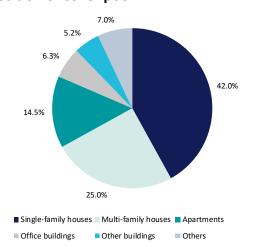
#### Cover pool data

Cover pool (EURm)	5,690.2	Number of loans	44,025
of which residential	81.5%	Number of borrowers	34,570
of which commercial	13.4%	Number of properties	39,918
of which substitution assets	5.1%	Avg. exposure to borrowers (EUR)	156,149
of which derivatives	0.0%	Share of 10 largest borrowers	1.9%
Covered bonds (EURm)	1,489.8	Share of owner-occupied dwellings	n/a
OC (EURm)	4,200.4	Share of multi-familiy houses	25.0%
OC	281.9%	EUR share (Cover pool)	n/a
Fixed interest (Cover pool)	100.0%	EUR share (Covered bonds)	n/a
Fixed interest (Covered bonds)	98.7%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	5.6y	Share of largest exposure tranche	66.9% (< EUR 0.3m)
WAL (Covered Bonds)	2.9y	Avg. seasoning	5.4y
Avg. LTV (Original value)	52.8%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

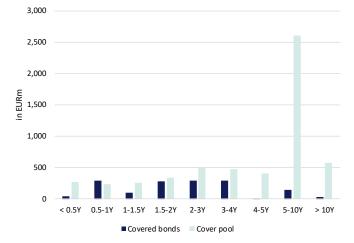
#### Development of cover pool data



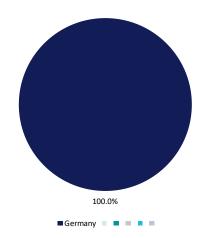
### Composition of cover pool



#### Maturity structure



#### **Regional distribution of properties**



## Mortgage

N	0	R	D	R
N	U	K	μ	D

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

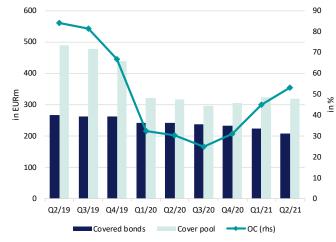
## Kreissparkasse Köln

#### Cover pool data

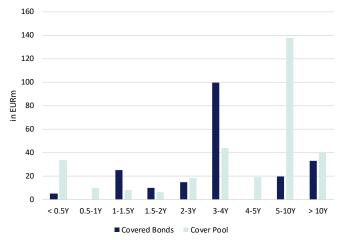
Cover pool (EURm) of which substitution assets of which derivatives Covered bonds (EURm) OC (EURm) OC Fixed interest (Cover pool) Fixed interest (Covered bonds) WAL (Cover pool) WAL (Covered Bonds)

319.7	Number of loans	152
0.0%	Number of borrowers	49
0.0%	Share of 10 largest borrowers	70.6%
208.4	Avg. exposure to borrowers (EUR)	6,525,044
111.3	EUR share (Cover pool)	n/a
53.4%	EUR share (Covered bonds)	n/a
100.0%	Largest FX position (NPV in EURm)	-
100.0%	Share of largest exposure tranche	58.8% (EUR 10-100m)
5.6y	Loans in arrears (>90 days)	0.00%
4.8y		

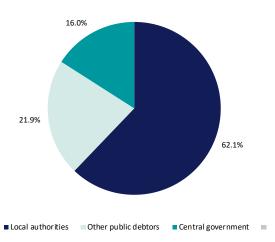
#### Development of cover pool data



#### **Maturity structure**

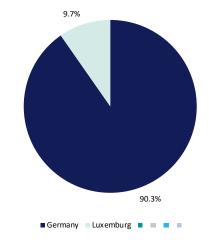


#### **Composition of primary assets**



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

#### **Regional distribution of claims**



## **Public sector**

## Landesbank Baden-Württemberg

15,453.6

39.7%

53.9%

6.4%

0.0%

11,796.2

3,657.3

31.0%

79.2%

71.3%

4.6v

3.7y

n/a

54.9%

Number of loans

Number of borrowers

Number of properties

Avg. exposure to borrowers (EUR)

Share of owner-occupied dwellings

Largest FX position (NPV in EURm)

Share of largest exposure tranche

Share of 10 largest borrowers

Share of multi-familiy houses

EUR share (Covered bonds)

Loans in arrears (>90 days)

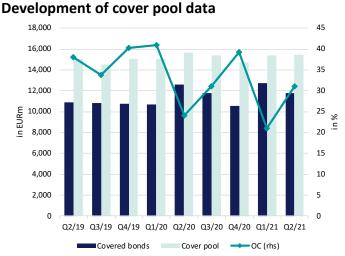
EUR share (Cover pool)

Avg. seasoning

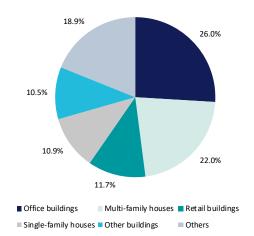
#### Cover pool data

#### Cover pool (EURm) of which residential

of which commercial of which substitution assets of which derivatives Covered bonds (EURm) OC (EURm) OC Fixed interest (Cover pool) Fixed interest (Covered bonds) WAL (Cover pool) WAL (Covered Bonds) Avg. LTV (Original value) Avg. LTV (Market value)

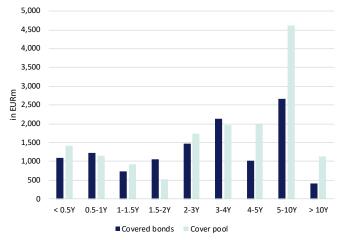


#### Composition of cover pool

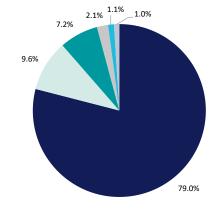


Source: vdp, NORD/LB Markets Strategy & Floor Research

#### **Maturity structure**



#### **Regional distribution of properties**



Germany USA UK Netherlands Canada Others

### 39,619 29,959

Mortgage

36,573

482,590

13.8%

17.1%

22.0%

83.1%

94.6%

5.8y

0.00%

GBP (1,056.1)

56.7% (> EUR 10m)

## NORD/LB

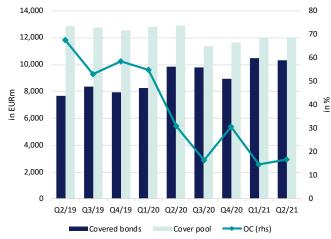
**Public sector** 

## Landesbank Baden-Württemberg

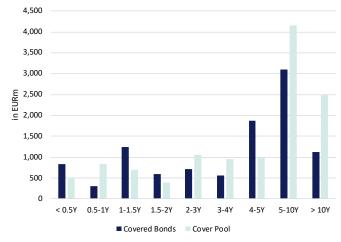
#### Cover pool data

Cover pool (EURm)	12,040.5	Number of loans	7,268
of which substitution assets	0.0%	Number of borrowers	2,863
of which derivatives	0.0%	Share of 10 largest borrowers	26.9%
Covered bonds (EURm)	10,325.5	Avg. exposure to borrowers (EUR)	4,205,547
OC (EURm)	1,715.0	EUR share (Cover pool)	98.6%
OC	16.6%	EUR share (Covered bonds)	99.8%
Fixed interest (Cover pool)	80.7%	Largest FX position (NPV in EURm)	USD (145.6)
Fixed interest (Covered bonds)	67.1%	Share of largest exposure tranche	47.9% (> EUR 100m)
WAL (Cover pool)	6.6y	Loans in arrears (>90 days)	0.00%
WAL (Covered Bonds)	5.1y		

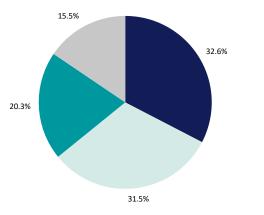
#### Development of cover pool data



#### Maturity structure



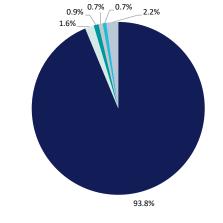
#### Composition of primary assets



■Local authorities ■ Other public debtors ■ Regional authorities ■ Central government

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

#### **Regional distribution of claims**



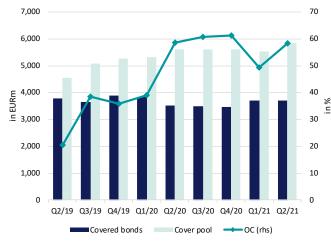
■Germany ■Poland ■Austria ■Denmark ■Sweden ■Others

## Landesbank Berlin

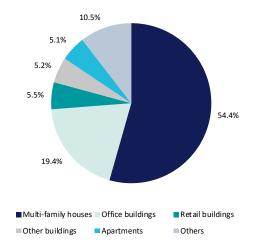
#### Cover pool data

Cover pool (EURm)	5,848.8	Number of loans	7,221
of which residential	64.4%	Number of borrowers	6,466
of which commercial	31.7%	Number of properties	7,536
of which substitution assets	3.9%	Avg. exposure to borrowers (EUR)	868,983
of which derivatives	0.0%	Share of 10 largest borrowers	26.3%
Covered bonds (EURm)	3,695.0	Share of owner-occupied dwellings	3.0%
OC (EURm)	2,153.8	Share of multi-familiy houses	54.4%
OC	58.3%	EUR share (Cover pool)	100.0%
Fixed interest (Cover pool)	87.0%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	96.0%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	9.1y	Share of largest exposure tranche	61.0% (> EUR 10m)
WAL (Covered Bonds)	5.1y	Avg. seasoning	4.0y
Avg. LTV (Original value)	55.0%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

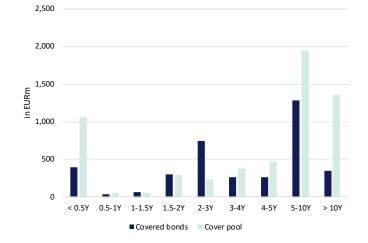
#### Development of cover pool data



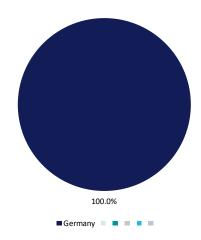
#### **Composition of cover pool**



#### **Maturity structure**



#### **Regional distribution of properties**



## Mortgage

NORD/LB

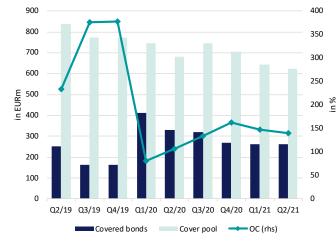
Source: vdp, NORD/LB Markets Strategy & Floor Research

## Landesbank Berlin

#### Cover pool data

- Cover pool (EURm) of which substitution assets of which derivatives Covered bonds (EURm) OC (EURm) OC Fixed interest (Cover pool)
- Fixed interest (Covered bonds) WAL (Cover pool)
- WAL (Covered Bonds)

#### Development of cover pool data



#### Maturity structure

621.6

0.0%

0.0%

260.0

361.6

139.1%

100.0%

100.0%

5.7y

4.0y

Number of loans

Number of borrowers

EUR share (Cover pool)

EUR share (Covered bonds)

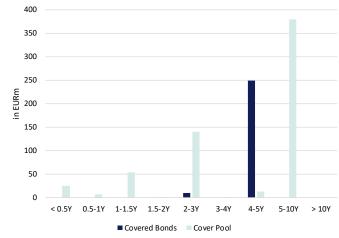
Loans in arrears (>90 days)

Share of 10 largest borrowers

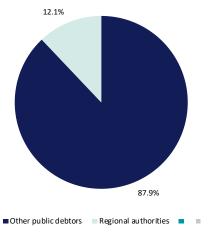
Avg. exposure to borrowers (EUR)

Largest FX position (NPV in EURm)

Share of largest exposure tranche

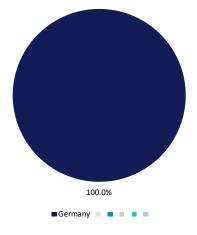


#### Composition of primary assets



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

#### **Regional distribution of claims**



Public	sector
--------	--------

22

12

\_

99.8%

100.0%

100.0%

0.00%

51,800,917

82.6% (> EUR 100m)

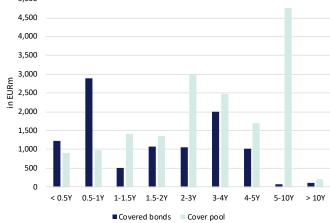
## Landesbank Hessen-Thüringen

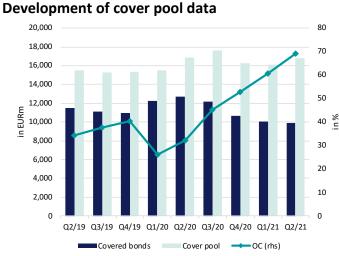
#### Cover pool data

Cover pool (EURm)	16,792.5	Number of loans
of which residential	26.5%	Number of borrowers
of which commercial	70.5%	Number of properties
of which substitution assets	3.0%	Avg. exposure to borrowers (EUR)
of which derivatives	0.0%	Share of 10 largest borrowers
Covered bonds (EURm)	9,936.0	Share of owner-occupied dwellings
OC (EURm)	6,856.5	Share of multi-familiy houses
OC	69.0%	EUR share (Cover pool)
Fixed interest (Cover pool)	62.5%	EUR share (Covered bonds)
Fixed interest (Covered bonds)	84.9%	Largest FX position (NPV in EURm)
WAL (Cover pool)	3.9y	Share of largest exposure tranche
WAL (Covered Bonds)	2.0y	Avg. seasoning
Avg. LTV (Original value)	59.1%	Loans in arrears (>90 days)
Avg. LTV (Market value)	n/a	

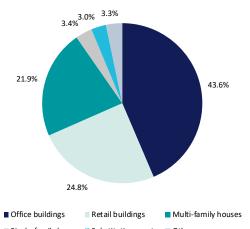
## 5,000

**Maturity structure** 





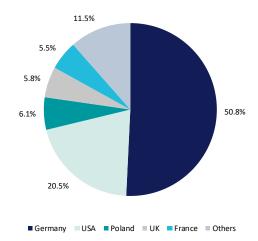
#### Composition of cover pool



Single-family houses Substitution assets Others

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

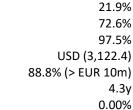
**Regional distribution of properties** 

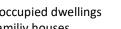


## Mortgage

7,989 6,746 8,816

	7,505
	6,746
	8,816
vers (EUR)	2,414,394
owers	9.1%
d dwellings	4.0%
ouses	21.9%
	72.6%
nds)	97.5%
/ in EURm)	USD (3,122.4)





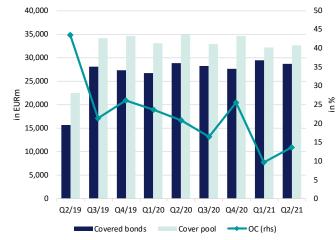


## Landesbank Hessen-Thüringen

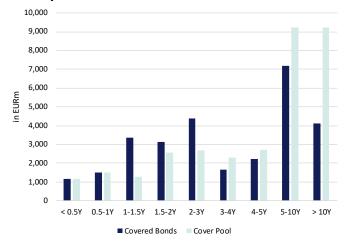
#### Cover pool data

Cover pool (EURm)	32,647.7	Number of loans	
of which substitution assets	0.1%	Number of borrowers	5,092
of which derivatives	0.0%	Share of 10 largest borrowers	32.9%
Covered bonds (EURm)	28,721.9	Avg. exposure to borrowers (EUR)	6,405,058
OC (EURm)	3,925.8	EUR share (Cover pool)	96.9%
OC	13.7%	EUR share (Covered bonds)	100.0%
Fixed interest (Cover pool)	95.0%	Largest FX position (NPV in EURm)	JPY (694.1)
Fixed interest (Covered bonds)	78.9%	Share of largest exposure tranche	63.1% (> EUR 100m)
WAL (Cover pool)	7.7y	Loans in arrears (>90 days)	0.00%
WAL (Covered Bonds)	5.5y		

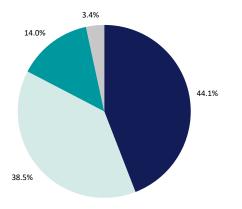
#### Development of cover pool data



#### Maturity structure



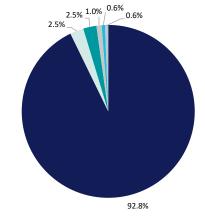
#### **Composition of primary assets**



■Local authorities ■ Regional authorities ■ Other public debtors ■ Central government

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

#### **Regional distribution of claims**



Germany Belgium Austria France UK Others

## **Public sector**

## LIGA Bank

#### Cover pool data

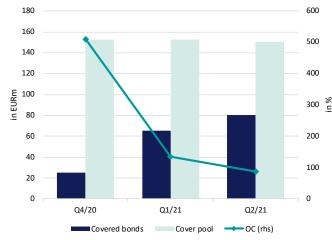
Cover pool (EURm) of which substitution assets of which derivatives Covered bonds (EURm) OC (EURm) OC

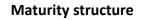
#### Fixed interest (Cover pool) Fixed interest (Covered bonds)

### WAL (Cover pool)

WAL (Covered Bonds)

#### Development of cover pool data





Number of loans

Number of borrowers

EUR share (Cover pool)

EUR share (Covered bonds)

Loans in arrears (>90 days)

Share of 10 largest borrowers

Avg. exposure to borrowers (EUR)

Largest FX position (NPV in EURm)

Share of largest exposure tranche

150.3

0.0%

0.0%

80.0

70.3

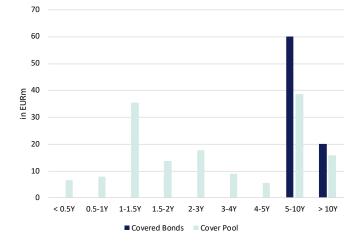
87.9%

100.0%

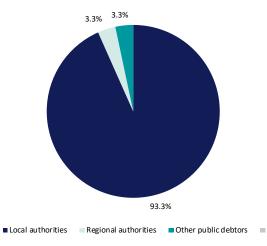
100.0%

n/a

n/a

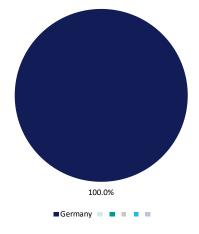


#### **Composition of primary assets**



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

#### **Regional distribution of claims**



## **Public sector**

71.1% (< EUR 10m)

n/a

n/a

n/a

n/a

n/a

n/a

0.00%

\_

## Münchener Hypothekenbank

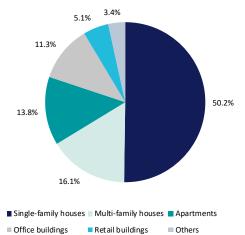
#### Cover pool data

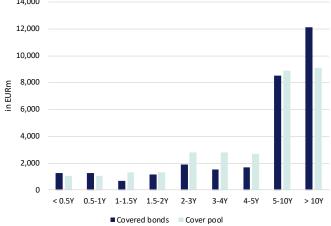
Cover pool (EURm)	31,027.3	Number of loans	193,928
of which residential	80.2%	Number of borrowers	170,271
of which commercial	17.6%	Number of properties	181,335
of which substitution assets	2.3%	Avg. exposure to borrowers (EUR)	178,110
of which derivatives	0.0%	Share of 10 largest borrowers	3.2%
Covered bonds (EURm)	30,036.9	Share of owner-occupied dwellings	52.0%
OC (EURm)	990.5	Share of multi-familiy houses	16.1%
OC	3.3%	EUR share (Cover pool)	82.8%
Fixed interest (Cover pool)	96.0%	EUR share (Covered bonds)	88.3%
Fixed interest (Covered bonds)	84.0%	Largest FX position (NPV in EURm)	CHF (1,131.1)
WAL (Cover pool)	8.0y	Share of largest exposure tranche	60.7% (< EUR 0.3m)
WAL (Covered Bonds)	9.0y	Avg. seasoning	5.0y
Avg. LTV (Original value)	52.0%	Loans in arrears (>90 days)	0.03%
Avg. LTV (Market value)	n/a		

#### Development of cover pool data

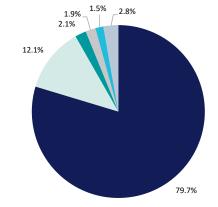


#### **Composition of cover pool**





#### **Regional distribution of properties**



■ Germany ■ Switzerland ■ USA ■ Netherlands ■ Spain ■ Others



## NORD/LB

Mortgage

## NORD/LB

**Public sector** 

## Münchener Hypothekenbank

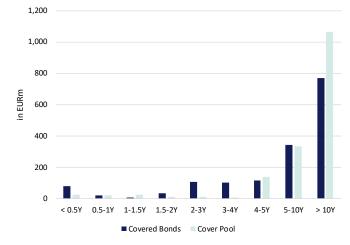
#### Cover pool data

Cover pool (EURm)	1,652.5	Number of loans	565
of which substitution assets	0.0%	Number of borrowers	421
of which derivatives	0.0%	Share of 10 largest borrowers	85.7%
Covered bonds (EURm)	1,594.2	Avg. exposure to borrowers (EUR)	3,925,135
OC (EURm)	58.3	EUR share (Cover pool)	100.0%
OC	3.7%	EUR share (Covered bonds)	100.0%
Fixed interest (Cover pool)	91.0%	Largest FX position (NPV in EURm)	-
Fixed interest (Covered bonds)	90.0%	Share of largest exposure tranche	66.0% (> EUR 100m)
WAL (Cover pool)	13.0y	Loans in arrears (>90 days)	0.00%
WAL (Covered Bonds)	7.0y		

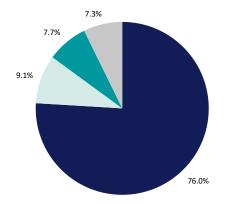
#### Development of cover pool data



#### Maturity structure



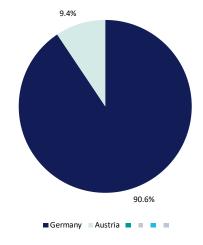
#### **Composition of primary assets**



 $\blacksquare$  Regional authorities  $\blacksquare$  Other public debtors  $\blacksquare$  Local authorities  $\blacksquare$  Central government

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

#### **Regional distribution of claims**



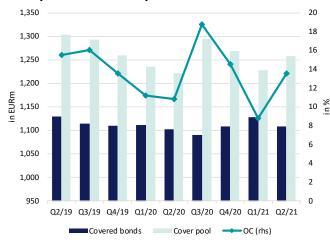
## M.M.Warburg & CO Hypothekenbank

### Cover pool data

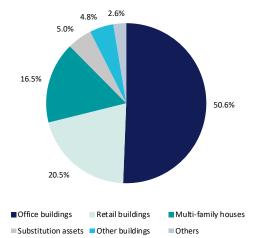
Cover pool (EURm)
of which residential
of which commercial
of which substitution assets
of which derivatives
Covered bonds (EURm)
OC (EURm)
OC
Fixed interest (Cover pool)
Fixed interest (Covered bonds)
WAL (Cover pool)
WAL (Covered Bonds)
Avg. LTV (Original value)
Avg. LTV (Market value)

#### 1,258.7 Number of loans 323 18.9% Number of borrowers 197 76.1% Number of properties 352 Avg. exposure to borrowers (EUR) 6,069,543 5.0% 0.0% Share of 10 largest borrowers 24.5% Share of owner-occupied dwellings 1,108.2 0.1% 150.5 Share of multi-familiy houses 16.5% EUR share (Cover pool) 100.0% 13.6% 95.7% EUR share (Covered bonds) 100.0% Largest FX position (NPV in EURm) 98.2% 4.2v Share of largest exposure tranche 55.7% (EUR 1-10m) 4.7y Avg. seasoning 5.8y 56.6% Loans in arrears (>90 days) 0.00% n/a

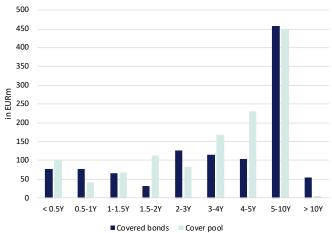
#### Development of cover pool data



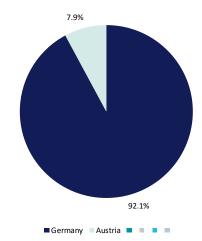
#### Composition of cover pool



#### Maturity structure



#### **Regional distribution of properties**



## g & CO Hypothekenbalk

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

## Mortgage

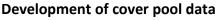


## NORD/LB

## M.M.Warburg & CO Hypothekenbank

#### Cover pool data

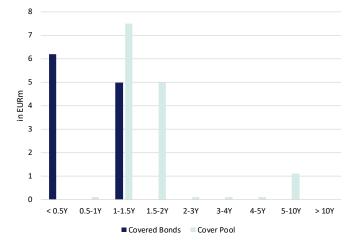
- Cover pool (EURm) of which substitution assets of which derivatives Covered bonds (EURm) OC (EURm) OC Fixed interest (Cover pool) Fixed interest (Covered bonds) WAL (Cover pool) WAL (Covered Bonds)
- Number of loans 14.0 0.0% Number of borrowers 0.0% Share of 10 largest borrowers Avg. exposure to borrowers (EUR) 11.2 2.8 EUR share (Cover pool) 25.0% EUR share (Covered bonds) 10.6% Largest FX position (NPV in EURm) 100.0% Share of largest exposure tranche 1.7y Loans in arrears (>90 days) 0.6y



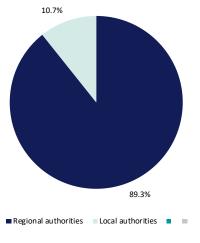


#### **Maturity structure**

in %

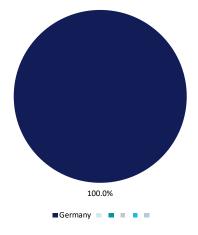


#### **Composition of primary assets**



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

#### **Regional distribution of claims**



### **Public sector**

1

1

n/a 14,000,000 100.0% 100.0% \_ 100.0% (< EUR 10m) 0.00%

## **NATIXIS Pfandbriefbank**

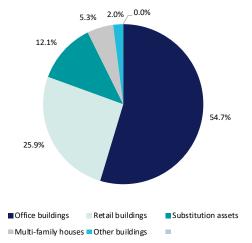
#### Cover pool data

Cover pool (EURm)	1,586.8	Number of loans	
of which residential	5.3%	Number of borrowers	134
of which commercial	82.6%	Number of properties	253
of which substitution assets	12.1%	Avg. exposure to borrowers (EUR)	10,405,075
of which derivatives	0.0%	Share of 10 largest borrowers	22.6%
Covered bonds (EURm)	1,443.5	Share of owner-occupied dwellings	0.0%
OC (EURm)	143.3	Share of multi-familiy houses	5.3%
OC	9.9%	EUR share (Cover pool)	100.0%
Fixed interest (Cover pool)	46.9%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	99.3%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	3.6y	Share of largest exposure tranche	94.3% (> EUR 10m)
WAL (Covered Bonds)	3.8y	Avg. seasoning	3.8y
Avg. LTV (Original value)	58.3%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

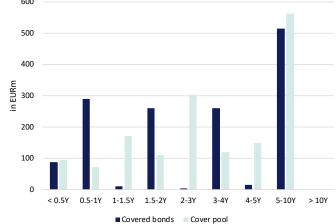
#### Development of cover pool data



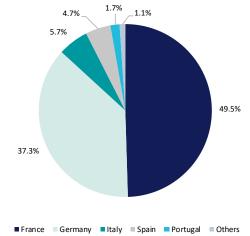
#### **Composition of cover pool**



#### **Maturity structure**



#### **Regional distribution of properties**



30 600

## Mortgage

NORD/LB

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

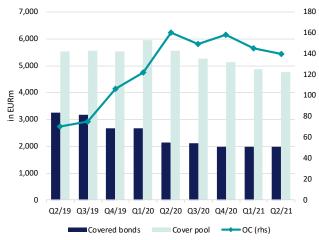
## Norddeutsche Landesbank

#### Cover pool data

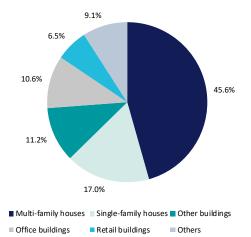
Cover pool (EURm)	4,776.5	Number of loans	n/a
of which residential	67.7%	Number of borrowers	n/a
of which commercial	30.4%	Number of properties	n/a
of which substitution assets	1.9%	Avg. exposure to borrowers (EUR)	n/a
of which derivatives	0.0%	Share of 10 largest borrowers	n/a
Covered bonds (EURm)	1,988.5	Share of owner-occupied dwellings	n/a
OC (EURm)	2,788.0	Share of multi-familiy houses	n/a
OC	140.2%	EUR share (Cover pool)	n/a
Fixed interest (Cover pool)	76.1%	EUR share (Covered bonds)	n/a
Fixed interest (Covered bonds)	87.4%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	n/a	Share of largest exposure tranche	38.8% (EUR 1-10m)
WAL (Covered Bonds)	n/a	Avg. seasoning	7.6y
Avg. LTV (Original value)	60.0%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

> 2

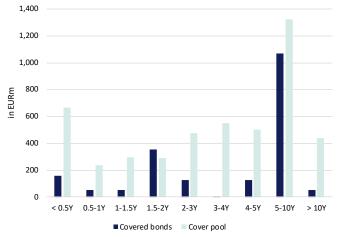
#### Development of cover pool data



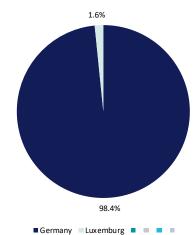
#### **Composition of cover pool**



#### **Maturity structure**



#### **Regional distribution of properties**



## Mortgage



## NORD/LB

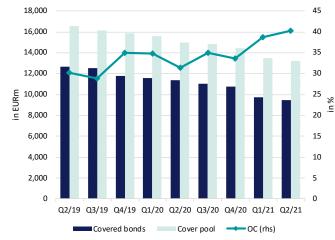
**Public sector** 

## Norddeutsche Landesbank

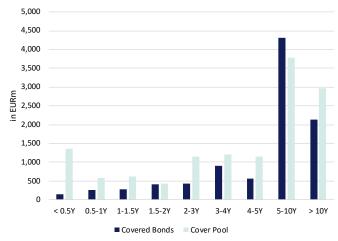
#### Cover pool data

Cover pool (EURm)	13,220.6	Number of loans	4,034
of which substitution assets	4.7%	Number of borrowers	1,423
of which derivatives	0.0%	Share of 10 largest borrowers	22.2%
Covered bonds (EURm)	9,428.1	Avg. exposure to borrowers (EUR)	8,852,987
OC (EURm)	3,792.5	EUR share (Cover pool)	98.8%
OC	40.2%	EUR share (Covered bonds)	100.0%
Fixed interest (Cover pool)	89.1%	Largest FX position (NPV in EURm)	USD (142.0)
Fixed interest (Covered bonds)	96.3%	Share of largest exposure tranche	40.4% (EUR 10-100m)
WAL (Cover pool)	6.6y	Loans in arrears (>90 days)	0.04%
WAL (Covered Bonds)	7.0y		

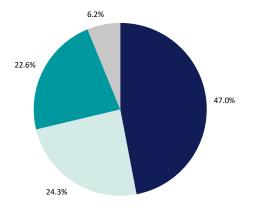
#### Development of cover pool data



#### Maturity structure



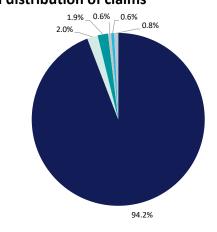
#### **Composition of primary assets**



■Local authorities ■ Other public debtors ■ Regional authorities ■ Central government

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

#### **Regional distribution of claims**



■ Germany ■ France ■ USA ■ Belgium ■ Denmark ■ Others

## Norddeutsche Landesbank

#### Cover pool data

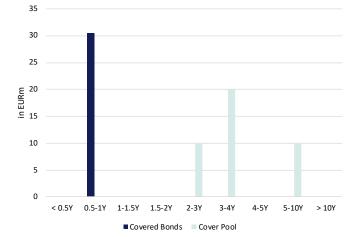
Cover pool (EURm)	40.0
of which substitution assets	100.0%
of which derivatives	0.0%
Covered bonds (EURm)	30.5
OC (EURm)	9.5
OC	31.1%
Fixed interest (Cover pool)	67.2%
Fixed interest (Covered bonds)	57.5%
WAL (Cover pool)	n/a
WAL (Covered Bonds)	n/a

0	Number of loans	n/a
%	Number of borrowers	n/a
%	Avg. exposure to borrowers (EUR)	n/a
5	Largest FX position (NPV in EURm)	-
5	Share of largest exposure tranche	n/a
%	Loans in arrears (>90 days)	0.00%
7		

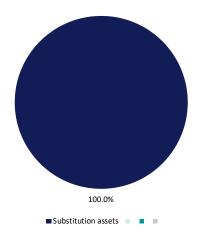
#### Development of cover pool data



#### Maturity structure



#### Composition of cover pool



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

#### Regional distribution of primary assets



## Ship

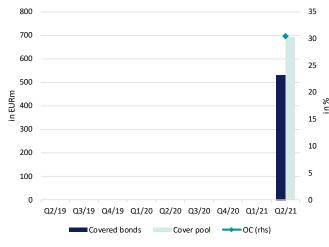
## **Oldenburgische Landesbank**

#### Cover pool data

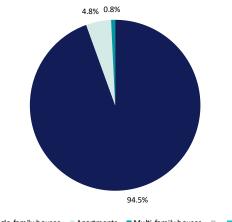
Cover pool (EURm)	693.3	Number of loans	n/a
of which residential	94.2%	Number of borrowers	n/a
of which commercial	0.0%	Number of properties	n/a
of which substitution assets	0.0%	Avg. exposure to borrowers (EUR)	n/a
of which derivatives	0.0%	Share of 10 largest borrowers	n/a
Covered bonds (EURm)	531.0	Share of owner-occupied dwellings	n/a
OC (EURm)	162.3	Share of multi-familiy houses	n/a
OC	30.6%	EUR share (Cover pool)	n/a
Fixed interest (Cover pool)	94.2%	EUR share (Covered bonds)	n/a
Fixed interest (Covered bonds)	100.0%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	n/a	Share of largest exposure tranche	98.9% (< EUR 0.3m)
WAL (Covered Bonds)	n/a	Avg. seasoning	3.7y
Avg. LTV (Original value)	55.9%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

**Maturity structure** 

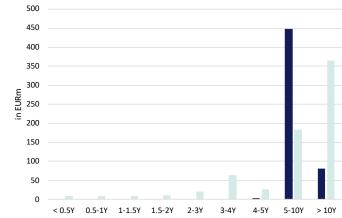
#### Development of cover pool data



#### **Composition of cover pool**

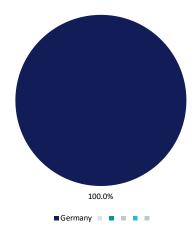


Single-family houses Apartments Multi-family houses



Covered bonds Cover pool

#### **Regional distribution of properties**



## Mortgage

NORD/LB

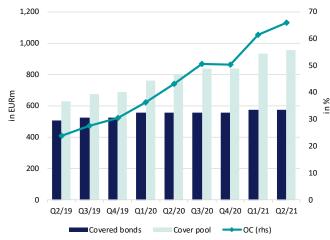
Source: vdp, NORD/LB Markets Strategy & Floor Research

## **PSD Bank Nürnberg**

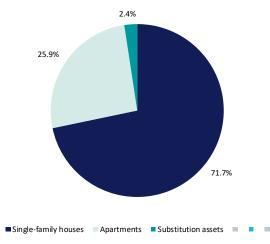
#### Cover pool data

Cover pool (EURm)	959.2	Number of loans	9 <i>,</i> 855
of which residential	97.6%	Number of borrowers	7,869
of which commercial	0.0%	Number of properties	9,080
of which substitution assets	2.4%	Avg. exposure to borrowers (EUR)	118,979
of which derivatives	0.0%	Share of 10 largest borrowers	0.5%
Covered bonds (EURm)	577.6	Share of owner-occupied dwellings	84.9%
OC (EURm)	381.6	Share of multi-familiy houses	0.0%
OC	66.1%	EUR share (Cover pool)	100.0%
Fixed interest (Cover pool)	100.0%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	100.0%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	7.6y	Share of largest exposure tranche	99.4% (< EUR 0.3m)
WAL (Covered Bonds)	11.7y	Avg. seasoning	4.2y
Avg. LTV (Original value)	51.7%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

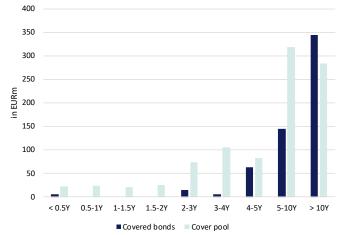
#### Development of cover pool data



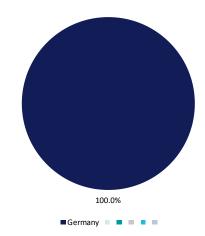
#### **Composition of cover pool**



#### **Maturity structure**

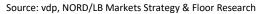


#### **Regional distribution of properties**



## Mortgage

Ν	0	R	D	/L	B



## **PSD Bank Rhein-Ruhr**

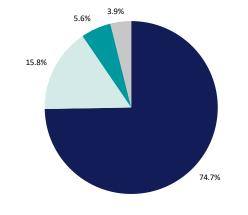
#### Cover pool data

Cover pool (EURm)	566.0	Number of loans
of which residential	96.1%	Number of borrowers
of which commercial	0.0%	Number of properties
of which substitution assets	3.9%	Avg. exposure to borrowers (EU
of which derivatives	0.0%	Share of 10 largest borrowers
Covered bonds (EURm)	354.0	Share of owner-occupied dwelli
OC (EURm)	212.0	Share of multi-familiy houses
OC	59.9%	EUR share (Cover pool)
Fixed interest (Cover pool)	100.0%	EUR share (Covered bonds)
Fixed interest (Covered bonds)	100.0%	Largest FX position (NPV in EUR
WAL (Cover pool)	7.6y	Share of largest exposure tranch
WAL (Covered Bonds)	9.4y	Avg. seasoning
Avg. LTV (Original value)	50.8%	Loans in arrears (>90 days)
Avg. LTV (Market value)	n/a	

#### Development of cover pool data

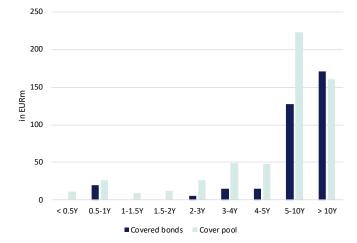


#### Composition of cover pool

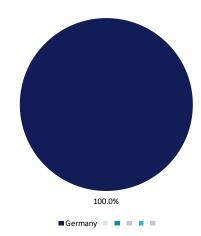


Single-family houses Apartments Multi-family houses Substitution assets

#### **Maturity structure**



#### **Regional distribution of properties**



## Mortgage

Number of loans	5,780
Number of borrowers	4,649
Number of properties	4,896
Avg. exposure to borrowers (EUR)	117,007
Share of 10 largest borrowers	1.2%
Share of owner-occupied dwellings	87.9%
Share of multi-familiy houses	5.6%
EUR share (Cover pool)	100.0%
EUR share (Covered bonds)	0.1%
Largest FX position (NPV in EURm)	-
Share of largest exposure tranche	93.1% (< EUR 0.3m)
Avg. seasoning	4.2y
Loans in arrears (>90 days)	0.00%

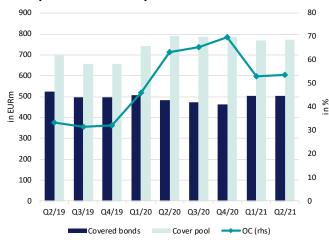


## SaarLB

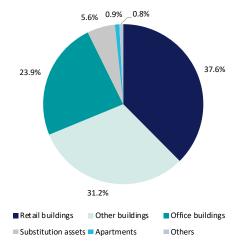
#### Cover pool data

Cover pool (EURm)	771.4	Number of loans	n/a
of which residential	1.7%	Number of borrowers	n/a
of which commercial	92.7%	Number of properties	n/a
of which substitution assets	5.6%	Avg. exposure to borrowers (EUR)	n/a
of which derivatives	0.0%	Share of 10 largest borrowers	n/a
Covered bonds (EURm)	502.3	Share of owner-occupied dwellings	n/a
OC (EURm)	269.1	Share of multi-familiy houses	n/a
OC	53.6%	EUR share (Cover pool)	n/a
Fixed interest (Cover pool)	79.6%	EUR share (Covered bonds)	n/a
Fixed interest (Covered bonds)	100.0%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	n/a	Share of largest exposure tranche	56.3% (> EUR 10m)
WAL (Covered Bonds)	n/a	Avg. seasoning	5.6y
Avg. LTV (Original value)	51.2%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

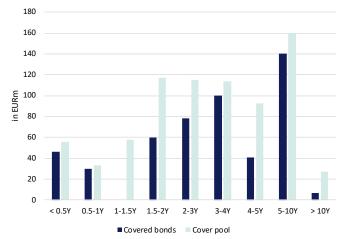
#### Development of cover pool data



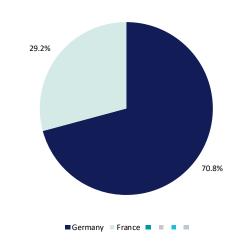
#### Composition of cover pool



#### Maturity structure



#### **Regional distribution of properties**



## Mortgage

NORD/LB

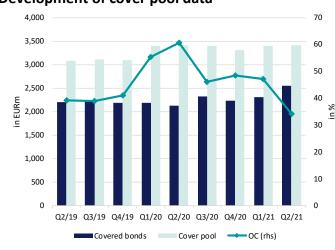
Source: vdp, NORD/LB Markets Strategy & Floor Research

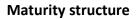
## SaarLB

#### Cover pool data

- Cover pool (EURm) of which substitution assets of which derivatives
- Covered bonds (EURm)
- OC (EURm)
- OC
- Fixed interest (Cover pool)
- Fixed interest (Covered bonds)
- WAL (Cover pool) WAL (Covered Bonds)

### Development of cover pool data





3,423.0

2,549.0

874.0

34.3%

77.5%

96.2%

n/a

n/a

0.0%

0.0%

Number of loans

Number of borrowers

EUR share (Cover pool)

EUR share (Covered bonds)

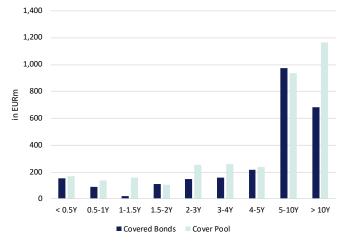
Loans in arrears (>90 days)

Share of 10 largest borrowers

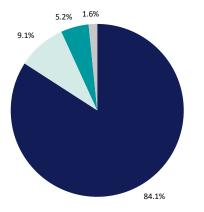
Avg. exposure to borrowers (EUR)

Largest FX position (NPV in EURm)

Share of largest exposure tranche



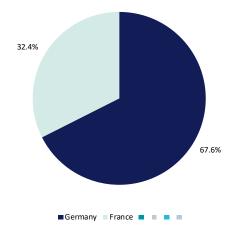
#### Composition of primary assets



■Local authorities ■ Regional authorities ■ Other public debtors ■ Central government

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

#### **Regional distribution of claims**



## **Public sector**

62.7% (EUR 10-100m)

n/a

n/a

n/a

n/a

n/a

n/a

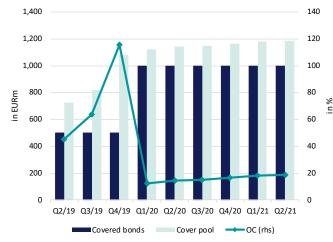
0.00%

## Santander Consumer Bank

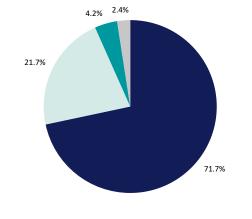
#### Cover pool data

Cover pool (EURm)	1,184.7	Number of loans	19,452
of which residential	95.8%	Number of borrowers	23,806
of which commercial	0.0%	Number of properties	14,152
of which substitution assets	4.2%	Avg. exposure to borrowers (EUR)	47,665
of which derivatives	0.0%	Share of 10 largest borrowers	0.4%
Covered bonds (EURm)	1,000.0	Share of owner-occupied dwellings	85.1%
OC (EURm)	184.7	Share of multi-familiy houses	2.4%
OC	18.5%	EUR share (Cover pool)	100.0%
Fixed interest (Cover pool)	100.0%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	100.0%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	4.7y	Share of largest exposure tranche	97.8% (< EUR 0.3m)
WAL (Covered Bonds)	6.0y	Avg. seasoning	7.2y
Avg. LTV (Original value)	45.0%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

#### Development of cover pool data

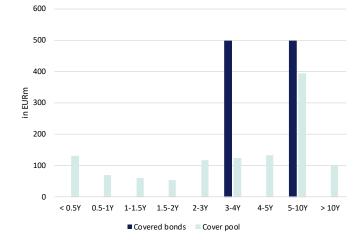


#### Composition of cover pool

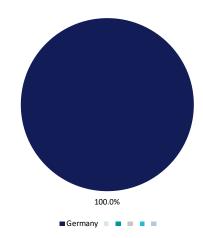


Single-family houses Apartments Substitution assets Multi-family houses

#### Maturity structure



#### Regional distribution of properties





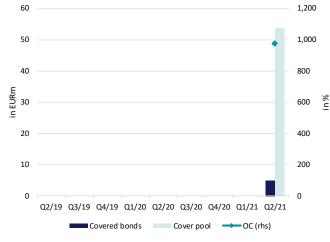


## Sparda-Bank Südwest

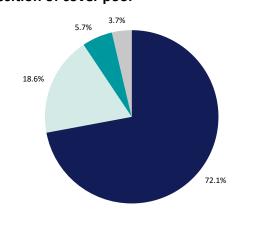
### Cover pool data

Cover pool (EURm)	53.8	Number of loans	
of which residential	81.4%	Number of borrowers	
of which commercial	0.0%	Number of properties	
of which substitution assets	18.6%	Avg. exposure to borrowers (EUR)	
of which derivatives	0.0%	Share of 10 largest borrowers	
Covered bonds (EURm)	5.0	Share of owner-occupied dwellings	
OC (EURm)	48.8	Share of multi-familiy houses	
OC	976.8%	EUR share (Cover pool)	
Fixed interest (Cover pool)	100.0%	EUR share (Covered bonds)	
Fixed interest (Covered bonds)	100.0%	Largest FX position (NPV in EURm)	
WAL (Cover pool)	n/a	Share of largest exposure tranche	88.1% (< EUR (
WAL (Covered Bonds)	n/a	Avg. seasoning	
Avg. LTV (Original value)	58.2%	Loans in arrears (>90 days)	C
Avg. LTV (Market value)	n/a		

#### Development of cover pool data



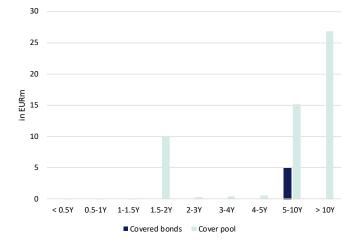
## Composition of cover pool

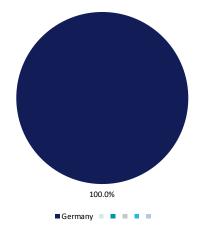


Single-family houses Substitution assets Apartments Multi-family houses

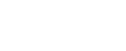
Source: vdp, NORD/LB Markets Strategy & Floor Research

#### Maturity structure





**Regional distribution of properties** 



NORD/LB

## Mortgage

n/a n/a n/a n/a n/a n/a n/a

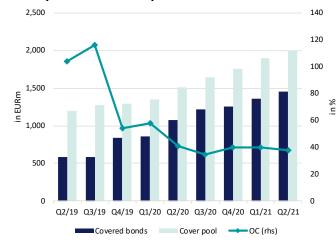
0.3m) 2.8y 0.00%

## **Sparkasse Hannover**

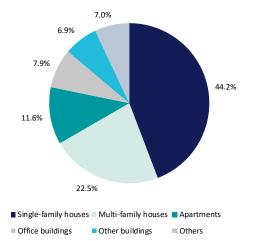
#### Cover pool data

Cover pool (EURm)	2,007.6	Number of loans	n/a
of which residential	78.2%	Number of borrowers	n/a
of which commercial	17.9%	Number of properties	n/a
of which substitution assets	3.8%	Avg. exposure to borrowers (EUR)	n/a
of which derivatives	0.0%	Share of 10 largest borrowers	n/a
Covered bonds (EURm)	1,457.6	Share of owner-occupied dwellings	n/a
OC (EURm)	550.0	Share of multi-familiy houses	n/a
OC	37.7%	EUR share (Cover pool)	n/a
Fixed interest (Cover pool)	90.2%	EUR share (Covered bonds)	n/a
Fixed interest (Covered bonds)	100.0%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	n/a	Share of largest exposure tranche	61.4% (< EUR 0.3m)
WAL (Covered Bonds)	n/a	Avg. seasoning	4.3y
Avg. LTV (Original value)	56.4%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

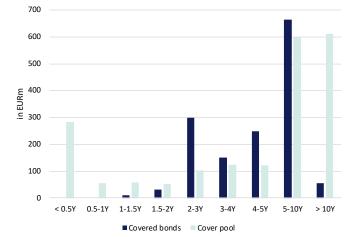
#### Development of cover pool data



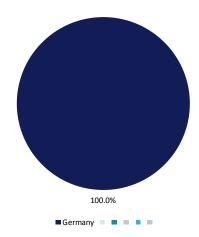
#### **Composition of cover pool**



#### **Maturity structure**



#### **Regional distribution of properties**



## Mortgage



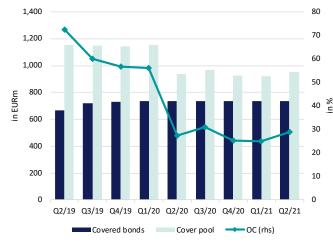


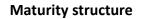
## Sparkasse Hannover

#### Cover pool data

- Cover pool (EURm)
- of which substitution assets of which derivatives
- Covered bonds (EURm)
- OC (EURm)
- OC
- Fixed interest (Cover pool)
- Fixed interest (Covered bonds)
- WAL (Cover pool)
- WAL (Covered Bonds)

#### Development of cover pool data





952.1

0.0%

0.0%

738.1

214.0

29.0%

99.4%

n/a

n/a

100.0%

Number of loans

Number of borrowers

EUR share (Cover pool)

EUR share (Covered bonds)

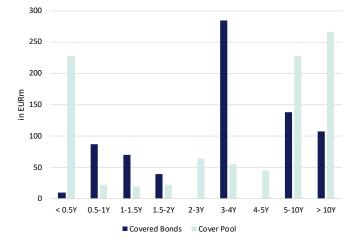
Loans in arrears (>90 days)

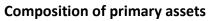
Share of 10 largest borrowers

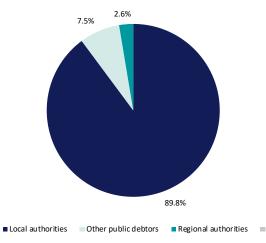
Avg. exposure to borrowers (EUR)

Largest FX position (NPV in EURm)

Share of largest exposure tranche

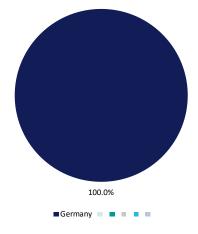






Source: vdp, NORD/LB Markets Strategy & Floor Research

#### **Regional distribution of claims**



## **Public sector**

55.1% (EUR 10-100m)

n/a

n/a

n/a

n/a

n/a

n/a

0.00%

## Sparkasse KölnBonn

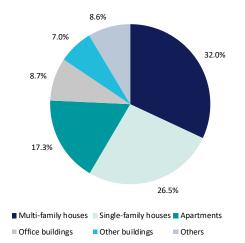
#### Cover pool data

Cover pool (EURm)	6,553.7	Number of loans	n/a
of which residential	75.7%	Number of borrowers	n/a
of which commercial	20.5%	Number of properties	n/a
of which substitution assets	3.7%	Avg. exposure to borrowers (EUR)	n/a
of which derivatives	0.0%	Share of 10 largest borrowers	n/a
Covered bonds (EURm)	2,052.9	Share of owner-occupied dwellings	n/a
OC (EURm)	4,500.8	Share of multi-familiy houses	n/a
OC	219.2%	EUR share (Cover pool)	n/a
Fixed interest (Cover pool)	91.4%	EUR share (Covered bonds)	n/a
Fixed interest (Covered bonds)	100.0%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	n/a	Share of largest exposure tranche	49.7% (< EUR 0.3m)
WAL (Covered Bonds)	n/a	Avg. seasoning	5.7y
Avg. LTV (Original value)	52.9%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

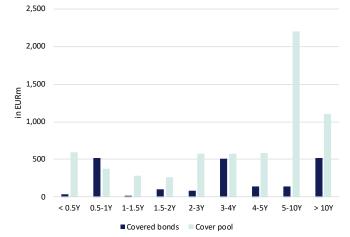
#### Development of cover pool data



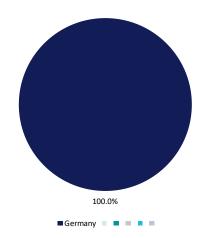
#### Composition of cover pool



### Maturity structure



#### **Regional distribution of properties**



## Mortgage

N	0	R	D		R
N	U	K	Ρ	/ L	D

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

## Sparkasse KölnBonn

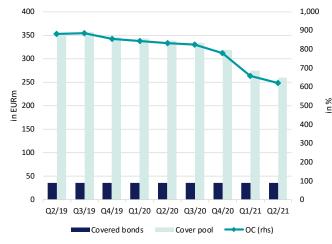
#### Cover pool data

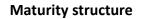
- Cover pool (EURm)
- of which substitution assets of which derivatives
- Covered bonds (EURm)
- OC (EURm) OC

### Fixed interest (Cover pool)

- Fixed interest (Covered bonds) WAL (Cover pool)
- WAL (Covered Bonds)

#### Development of cover pool data





260.9

0.0%

0.0%

36.2

224.7

620.7%

89.1%

n/a

n/a

100.0%

Number of loans

Number of borrowers

EUR share (Cover pool)

EUR share (Covered bonds)

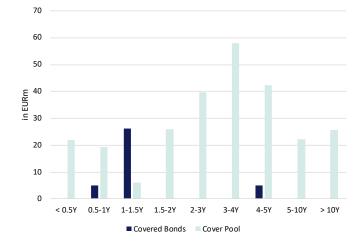
Loans in arrears (>90 days)

Share of 10 largest borrowers

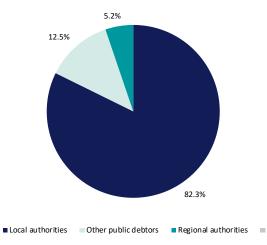
Avg. exposure to borrowers (EUR)

Largest FX position (NPV in EURm)

Share of largest exposure tranche

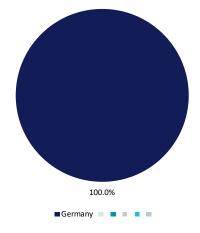


#### **Composition of primary assets**



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

#### **Regional distribution of claims**



## **Public sector**

77.5% (EUR 10-100m)

n/a

n/a

n/a

n/a

n/a

n/a

0.00%

\_

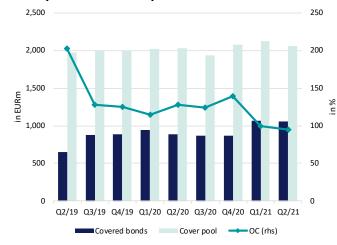
NORD/I	LB
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## Stadtsparkasse Düsseldorf

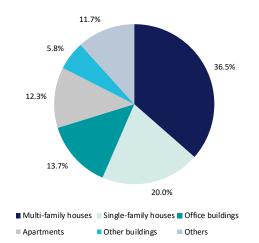
#### Cover pool data

Cover pool (EURm)	2,060.7	Number of loans	n/a
of which residential	68.8%	Number of borrowers	n/a
of which commercial	26.4%	Number of properties	n/a
of which substitution assets	4.8%	Avg. exposure to borrowers (EUR)	n/a
of which derivatives	0.0%	Share of 10 largest borrowers	n/a
Covered bonds (EURm)	1,055.3	Share of owner-occupied dwellings	n/a
OC (EURm)	1,005.4	Share of multi-familiy houses	n/a
OC	95.3%	EUR share (Cover pool)	n/a
Fixed interest (Cover pool)	93.4%	EUR share (Covered bonds)	n/a
Fixed interest (Covered bonds)	100.0%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	n/a	Share of largest exposure tranche	43.4% (< EUR 0.3m)
WAL (Covered Bonds)	n/a	Avg. seasoning	6.4y
Avg. LTV (Original value)	55.9%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

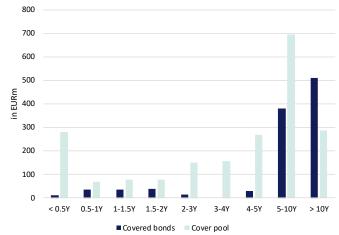
#### Development of cover pool data



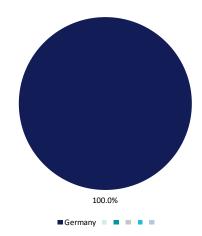
#### Composition of cover pool



#### Maturity structure



#### **Regional distribution of properties**



### Mortgage



## Stadtsparkasse Düsseldorf

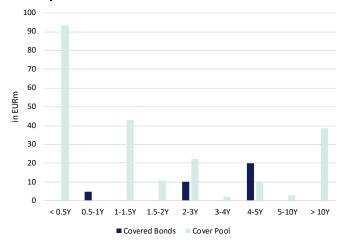
#### Cover pool data

Cover pool (EURm)	223.2	Number of loans	n/a
of which substitution assets	0.0%	Number of borrowers	n/a
of which derivatives	0.0%	Share of 10 largest borrowers	n/a
Covered bonds (EURm)	35.0	Avg. exposure to borrowers (EUR)	n/a
OC (EURm)	188.2	EUR share (Cover pool)	n/a
OC	537.6%	EUR share (Covered bonds)	n/a
Fixed interest (Cover pool)	100.0%	Largest FX position (NPV in EURm)	-
Fixed interest (Covered bonds)	100.0%	Share of largest exposure tranche	67.4% (EUR 10-100m)
WAL (Cover pool)	n/a	Loans in arrears (>90 days)	0.00%
WAL (Covered Bonds)	n/a		

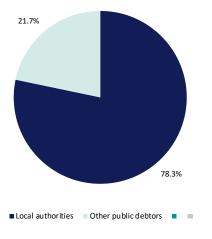
#### Development of cover pool data



#### Maturity structure

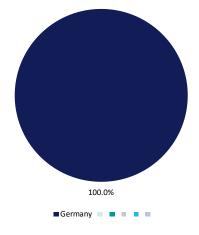


#### **Composition of primary assets**



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

#### **Regional distribution of claims**



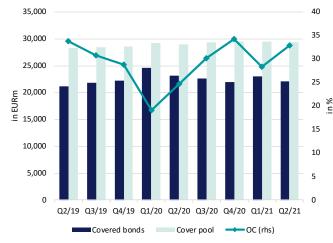
## **Public sector**

## **UniCredit Bank**

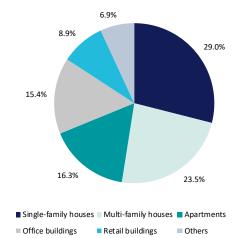
#### Cover pool data

Cover pool (EURm)	29,394.8	Number of loans	146,325
of which residential	69.2%	Number of borrowers	111,744
of which commercial	28.8%	Number of properties	135,830
of which substitution assets	1.9%	Avg. exposure to borrowers (EUR)	257,992
of which derivatives	0.0%	Share of 10 largest borrowers	8.3%
Covered bonds (EURm)	22,127.3	Share of owner-occupied dwellings	33.6%
OC (EURm)	7,267.5	Share of multi-familiy houses	23.5%
OC	32.8%	EUR share (Cover pool)	100.0%
Fixed interest (Cover pool)	81.6%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	98.8%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	6.9y	Share of largest exposure tranche	38.0% (< EUR 0.3m)
WAL (Covered Bonds)	7.2y	Avg. seasoning	7.0y
Avg. LTV (Original value)	41.9%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

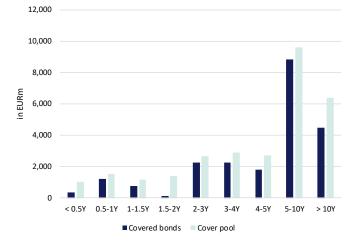
#### Development of cover pool data



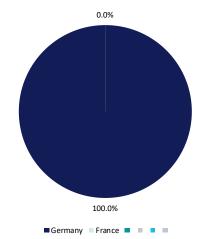
#### Composition of cover pool



#### Maturity structure



#### **Regional distribution of properties**



Mortgage



## **UniCredit Bank**

#### Cover pool data

Cover pool (EURm) of which substitution assets of which derivatives Covered bonds (EURm) OC (EURm) OC

Fixed interest (Cover pool) Fixed interest (Covered bonds)

WAL (Cover pool) WAL (Covered Bonds)

#### Development of cover pool data



#### Maturity structure

5,666.3

0.0%

0.0%

3,164.0

2,502.3

79.1%

66.6%

99.8%

5.5y

4.5y

in %

Number of loans

Number of borrowers

EUR share (Cover pool)

EUR share (Covered bonds)

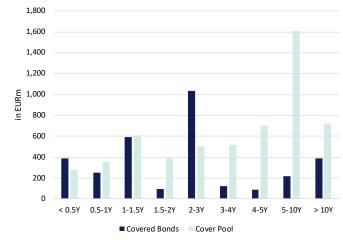
Loans in arrears (>90 days)

Share of 10 largest borrowers

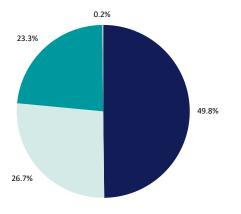
Avg. exposure to borrowers (EUR)

Largest FX position (NPV in EURm)

Share of largest exposure tranche



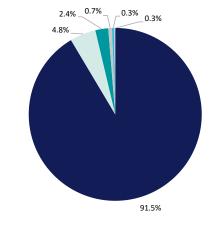
#### **Composition of primary assets**



■Local authorities ■ Regional authorities ■ Central government ■ Other public debtors

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

#### **Regional distribution of claims**



Germany France UK Austria Switzerland Others

## **Public sector**

1,650
886
37.4%
6,395,372
93.7%
86.7%
USD (-64.9)
48.3% (> EUR 100m)
0.00%



## Wüstenrot Bausparkasse

#### Cover pool data .....

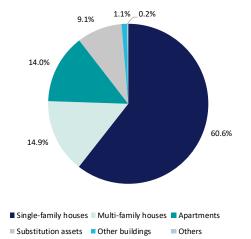
Cover pool (EURm)	2,745.5	Number of loans
of which residential	89.6%	Number of borrowers
of which commercial	1.3%	Number of properties
of which substitution assets	9.1%	Avg. exposure to borro
of which derivatives	0.0%	Share of 10 largest bor
Covered bonds (EURm)	2,213.6	Share of owner-occupi
OC (EURm)	531.9	Share of multi-familiy h
OC	24.0%	EUR share (Cover pool)
Fixed interest (Cover pool)	99.2%	EUR share (Covered bo
Fixed interest (Covered bonds)	98.2%	Largest FX position (NP
WAL (Cover pool)	5.1y	Share of largest exposu
WAL (Covered Bonds)	5.0y	Avg. seasoning
Avg. LTV (Original value)	45.4%	Loans in arrears (>90 d
Avg. LTV (Market value)	n/a	

#### vg. exposure to borrowers (EUR) 81,502 nare of 10 largest borrowers nare of owner-occupied dwellings nare of multi-familiy houses JR share (Cover pool) 100.0% JR share (Covered bonds) 100.0% rgest FX position (NPV in EURm) nare of largest exposure tranche 84.3% (< EUR 0.3m) /g. seasoning ans in arrears (>90 days)

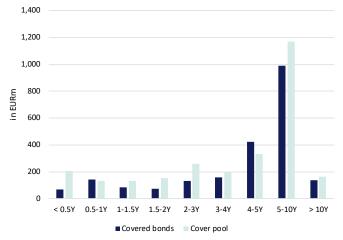
#### Development of cover pool data



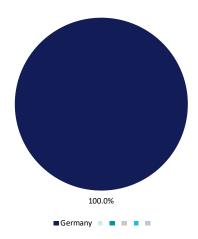
#### **Composition of cover pool**



#### Maturity structure



#### **Regional distribution of properties**



## Mortgage

34,257

30,619 32,442

2.6%

68.9%

14.9%

10.5y

0.00%





## Appendix Contacts at NORD/LB

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Sales		Trading	
Institutional Sales	+49 511 9818-9440	Covereds/SSA	+49 511 9818-8040
Sales Sparkassen & Regionalbanken	+49 511 9818-9400	Financials	+49 511 9818-9490
Sales MM/FX	+49 511 9818-9460	Governments	+49 511 9818-9660
Sales Europe	+352 452211-515	Länder/Regionen	+49 511 9818-9550
		Frequent Issuers	+49 511 9818-9640

#### **Origination & Syndicate**

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

Sales	Wholesa	le Customers

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

#### Treasury

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



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