



## Transparency requirements §28 PfandBG Q4/2022

Markets Strategy & Floor Research

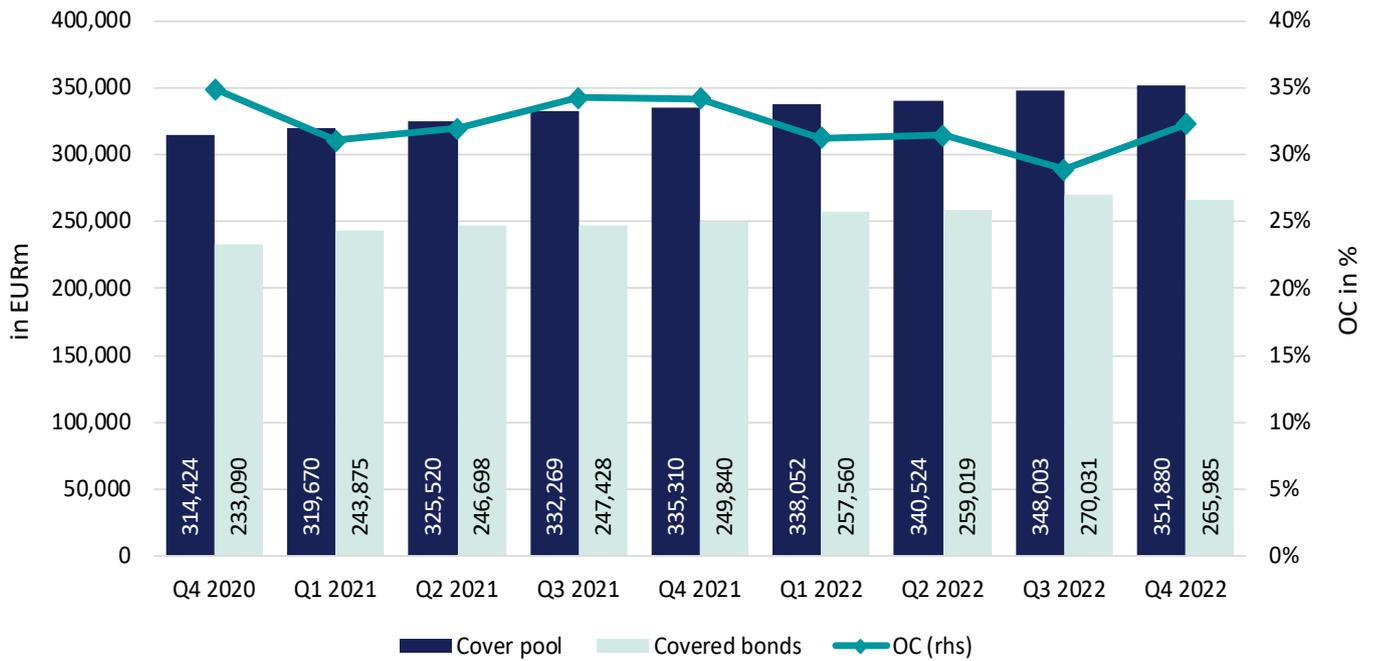
# Agenda

Authors: Melanie Kiene, CIAA // Dr. Frederik Kunze // Stefan Rahaus

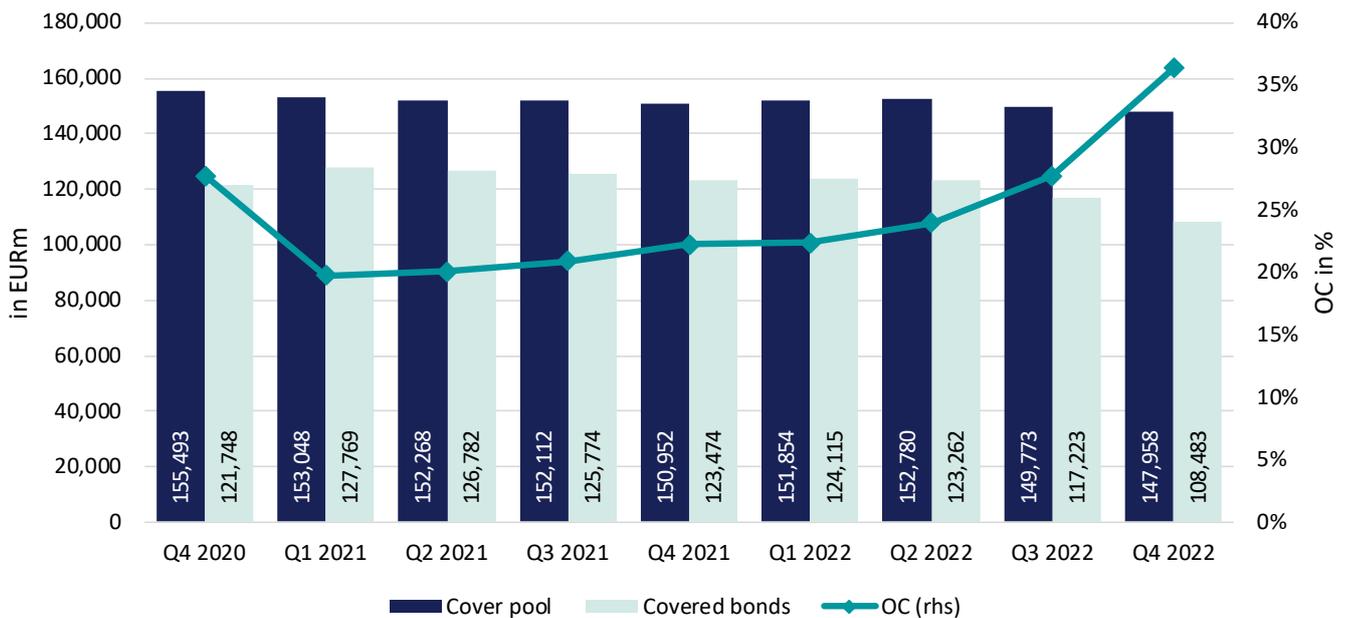
<b>Market Overview</b>	<b>3</b>
<b>Cover Pool Data</b>	
<b>Aareal Bank</b>	<b>8</b>
<b>ALTE LEIPZIGER Bauspar</b>	<b>10</b>
<b>Bausparkasse Mainz</b>	<b>11</b>
<b>Bausparkasse Schwäbisch Hall</b>	<b>12</b>
<b>BBBank</b>	<b>15</b>
<b>BayernLB</b>	<b>13</b>
<b>Berlin Hyp</b>	<b>16</b>
<b>Commerzbank</b>	<b>18</b>
<b>DekaBank</b>	<b>21</b>
<b>Deutsche Apotheker- und Ärztebank</b>	<b>23</b>
<b>Deutsche Bank</b>	<b>24</b>
<b>Deutsche Kreditbank</b>	<b>26</b>
<b>Deutsche Pfandbriefbank</b>	<b>28</b>
<b>DZ HYP</b>	<b>30</b>
<b>Hamburg Commercial Bank</b>	<b>32</b>
<b>Hamburger Sparkasse</b>	<b>35</b>
<b>ING-DiBa</b>	<b>36</b>
<b>Kreissparkasse Köln</b>	<b>37</b>
<b>Landesbank Baden-Württemberg</b>	<b>39</b>
<b>Landesbank Berlin</b>	<b>41</b>
<b>Landesbank Hessen-Thüringen</b>	<b>43</b>
<b>LIGA Bank</b>	<b>45</b>
<b>Münchener Hypothekenbank</b>	<b>47</b>
<b>M.M.Warburg &amp; CO Hypothekenbank</b>	<b>49</b>
<b>NATIXIS Pfandbriefbank</b>	<b>50</b>
<b>Norddeutsche Landesbank</b>	<b>51</b>
<b>Oldenburgische Landesbank</b>	<b>53</b>
<b>PSD Bank Nürnberg</b>	<b>54</b>
<b>PSD Bank Rhein-Ruhr</b>	<b>55</b>
<b>SaarLB</b>	<b>56</b>
<b>Santander Consumer Bank</b>	<b>58</b>
<b>Sparda-Bank Südwest</b>	<b>59</b>
<b>Sparkasse Hannover</b>	<b>60</b>
<b>Sparkasse KölnBonn</b>	<b>62</b>
<b>Stadtsparkasse Düsseldorf</b>	<b>64</b>
<b>UniCredit Bank</b>	<b>66</b>
<b>Wüstenrot Bausparkasse</b>	<b>68</b>

## Market Overview

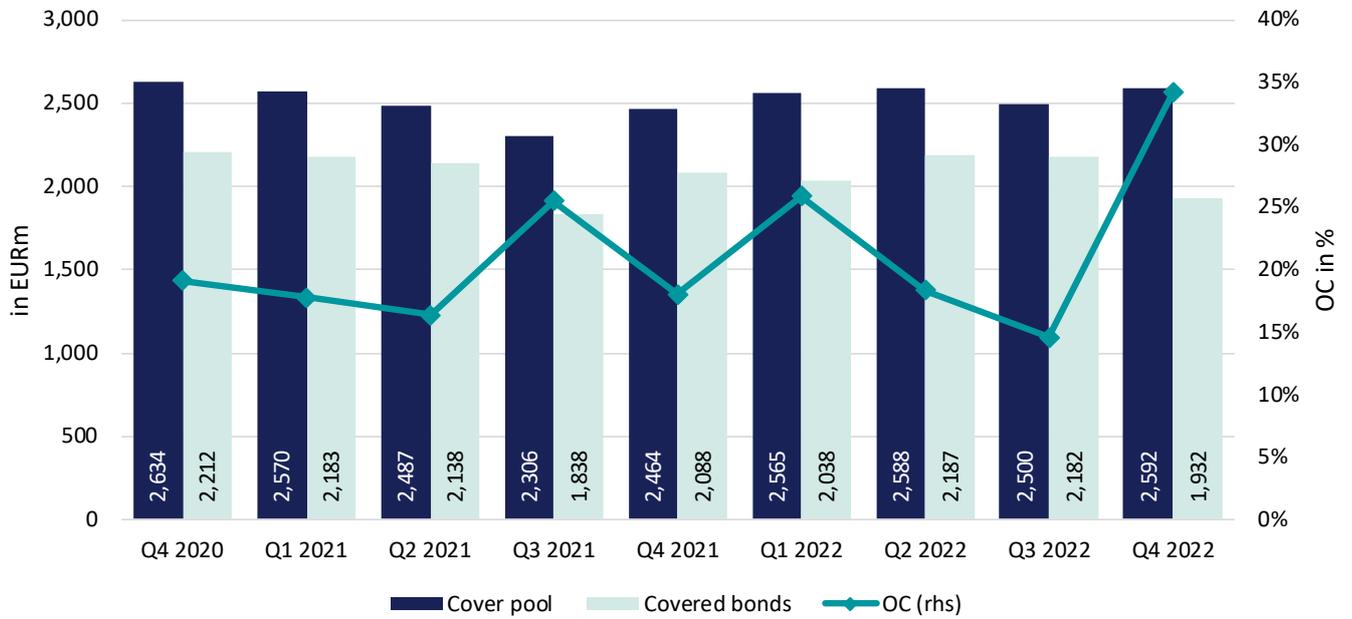
### Market development: mortgage covered bonds



### Market development: public sector covered bonds



**Market development: ship covered bonds**



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

## Market overview: mortgage covered bonds

Issuer	Cover pool in EURm	Pfandbrief volume in EURm	OC		Cover type (in %)			DE share (in %)
			in EURm	in %	Residential	Commercial	Others	Primary assets
Aareal Bank	15,173	13,337	1,836	13.8	6.0%	86.6%	7.3%	11.4%
ALTE LEIPZIGER Bauspar	65	15	50	335.0	96.9%	0.0%	3.1%	100.0%
Bausparkasse Mainz	182	149	33	22.4	95.6%	0.0%	4.4%	100.0%
Bausparkasse Schwäbisch Hall	3,515	2,511	1,004	40.0	96.4%	0.5%	3.2%	100.0%
BayernLB	12,529	8,702	3,827	44.0	12.5%	74.0%	13.6%	57.3%
BBBank	28	5	23	467.4	93.0%	0.0%	7.0%	100.0%
Berlin Hyp	17,188	16,046	1,142	7.1	30.7%	62.7%	6.7%	66.1%
Commerzbank	40,108	27,633	12,475	45.1	94.7%	2.2%	3.1%	100.0%
DekaBank	1,194	691	503	72.8	0.0%	91.7%	8.3%	45.2%
apoBank	9,243	4,949	4,294	86.8	75.6%	17.6%	6.8%	100.0%
Deutsche Bank	16,193	13,038	3,155	24.2	89.6%	6.3%	4.1%	100.0%
DKB	5,864	3,868	1,997	51.6	92.7%	1.9%	5.4%	100.0%
DZ HYP	39,429	33,425	6,004	18.0	56.0%	41.6%	2.4%	96.6%
Hamburger Sparkasse	7,961	6,412	1,549	24.2	65.1%	27.9%	6.9%	100.0%
Helaba	17,544	11,654	5,891	50.5	28.6%	64.7%	6.7%	49.2%
Hamburger Commercial Bank	4,038	3,267	771	23.6	13.9%	67.4%	18.6%	92.3%
ING-DiBa	11,785	7,355	4,430	60.2	95.6%	0.0%	4.4%	100.0%
Kreissparkasse Köln	6,466	1,143	5,323	465.9	83.7%	0.0%	4.7%	100.0%
Landesbank Berlin	5,862	4,098	1,764	43.1	66.0%	29.0%	5.0%	100.0%
LBBW	17,335	12,558	4,777	38.0	41.4%	53.9%	4.7%	81.2%
LIGA Bank	279	122	157	129.1	96.4%	0.0%	3.6%	100.0%
M.M.Warburg & CO Hypothekenbank	1,326	1,157	170	14.7	21.4%	73.7%	4.9%	94.6%
Münchener Hypothekenbank	34,377	31,694	2,683	8.5	80.8%	17.5%	1.7%	79.0%
Natixis Pfandbriefbank	1,600	1,306	294	22.5	3.5%	81.2%	15.3%	40.8%
NORD/LB	11,801	9,100	2,701	29.7	38.5%	55.3%	6.2%	69.0%
Oldenburgische Landesbank	1,190	1,061	129	12.2	89.6%	2.0%	8.4%	100.0%
Deutsche Pfandbriefbank	19,773	15,981	3,792	23.7	15.4%	77.9%	6.7%	41.5%
PSD Bank Nürnberg	1,096	651	445	68.4	97.7%	0.0%	2.3%	100.0%
PSD Bank Rhein-Ruhr	709	439	270	61.4	97.2%	0.0%	2.8%	100.0%
SaarLB	1,070	631	438	69.4	1.8%	94.4%	3.8%	65.3%
Santander Consumer Bank	1,191	1,025	166	16.2	95.7%	0.0%	4.3%	100.0%
Sparda-Bank Südwest	83	15	68	456.0	88.0%	0.0%	12.0%	100.0%
Sparkasse Hannover	2,617	1,398	1,220	87.3	77.3%	18.6%	4.1%	100.0%
Stadtsparkasse Düsseldorf	1,900	1,171	729	62.2	71.0%	23.8%	5.2%	100.0%
Sparkasse KölnBonn	6,812	1,438	5,374	373.6	78.8%	20.1%	1.1%	100.0%
UniCredit Bank	31,112	25,117	5,995	23.9	69.6%	28.6%	1.8%	100.0%
Wüstenrot Bausparkasse	3,241	2,827	415	14.7	89.2%	1.2%	9.6%	100.0%

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

**Market overview: public sector covered bonds**

Issuer	Cover pool	Pfandbrief volume in EURm	OC		Cover type (in %)					DE share (in %)
	in EURm		in EURm	in EURm	in %	Central government	Regional authorities	Local authorities	Other debtors	Others
Aareal Bank	1,349	1,204	145	12.0	18.5%	60.9%	19.0%	1.6%	0.0%	76.6%
BayernLB	24,279	16,130	8,148	50.5	7.2%	39.6%	43.2%	8.0%	2.0%	93.8%
Berlin Hyp	232	200	32	16.2	21.5%	74.2%	0.0%	4.3%	0.0%	78.5%
Commerzbank	13,958	8,689	5,269	60.6	20.5%	28.2%	48.2%	3.1%	0.0%	66.2%
DekaBank	4,572	3,807	765	20.1	9.5%	11.5%	58.7%	19.7%	0.6%	87.8%
Deutsche Bank	143	90	53	58.7	62.0%	25.9%	0.0%	0.0%	12.1%	29.5%
DKB	7,050	4,153	2,898	69.8	0.9%	10.4%	65.6%	23.1%	0.0%	99.3%
Deutsche Pfandbriefbank	10,913	8,771	2,142	24.4	46.0%	32.6%	10.5%	11.0%	0.0%	30.4%
DZ HYP	12,523	9,612	2,911	30.3	5.5%	20.2%	69.5%	4.8%	0.0%	87.1%
Hamburg Commercial Bank	791	657	133	20.3	28.9%	59.7%	11.4%	0.0%	0.0%	64.8%
Kreissparkasse Köln	293	178	114	64.1	17.4%	0.0%	59.0%	23.6%	0.0%	89.4%
LBBW	12,465	10,142	2,323	22.9	23.0%	19.0%	45.3%	12.7%	0.0%	93.2%
Landesbank Berlin	787	260	527	202.8	0.0%	3.0%	0.6%	96.5%	0.0%	100.0%
Helaba	31,781	24,879	6,902	27.7	4.2%	33.9%	46.7%	15.2%	0.0%	93.6%
LIGA Bank	144	90	54	60.3	0.0%	0.0%	93.1%	6.9%	0.0%	100.0%
Münchener Hypothekenbank	1,457	1,308	149	11.4	8.2%	82.4%	3.6%	5.8%	0.0%	89.4%
NORD/LB	13,627	11,696	1,931	16.5	6.6%	24.4%	44.7%	22.0%	2.4%	87.8%
SaarLB	4,100	3,105	995	32.0	2.2%	6.6%	81.9%	9.2%	0.0%	60.7%
Sparkasse Hannover	1,306	586	720	122.8	0.0%	5.0%	85.0%	10.0%	0.0%	100.0%
Sparkasse KölnBonn	126	0	126	0.0	0.2%	43.5%	29.0%	27.3%	0.0%	100.0%
Stadtsparkasse Düsseldorf	93	30	63	210.5	0.0%	0.0%	88.1%	1.2%	10.7%	100.0%
UniCredit Bank	5,970	2,894	3,076	106.3	20.8%	26.1%	52.5%	0.6%	0.0%	91.8%

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

**Market overview: ship covered bonds**

Issuer	Cover pool	Pfandbrief volume	OC	
	in EURm	in EURm	in EURm	in %
Commerzbank AG	85	59	26	44.2
Hamburg Commercial Bank AG	2,507	1,873	634	33.9

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

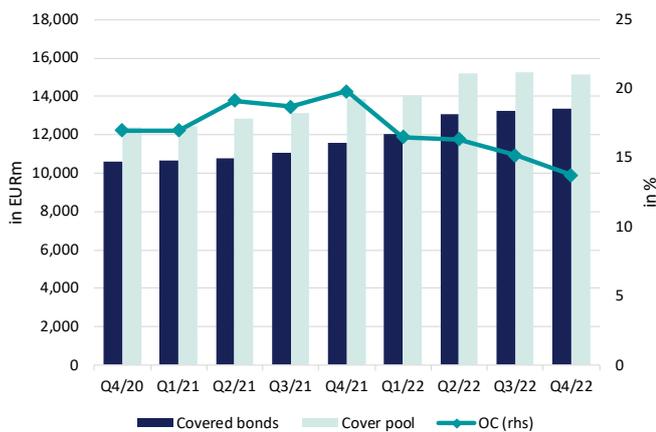
## Aareal Bank

## Mortgage

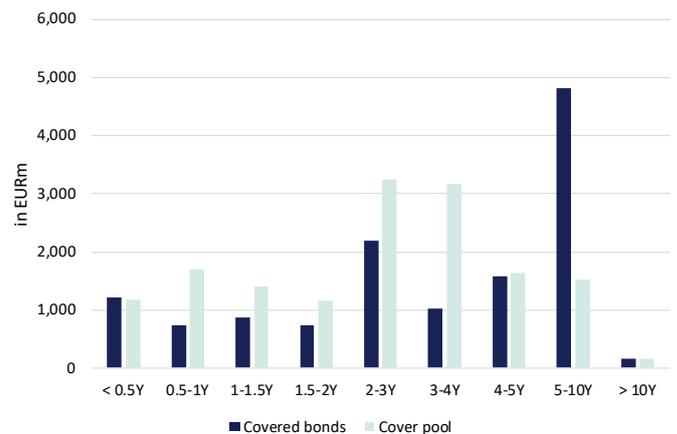
### Cover pool data

Cover pool (EURm)	15,172.7	Number of loans	3,055
of which residential	6.0%	Number of borrowers	3,202
of which commercial	86.6%	Number of properties	4,069
of which substitution assets	7.3%	Avg. exposure to borrowers (EUR)	4,390,381
of which derivatives	0.0%	Share of 10 largest borrowers	9.6%
Covered bonds (EURm)	13,336.9	Share of owner-occupied dwellings	0.5%
OC (EURm)	1,835.8	Share of multi-family houses	5.4%
OC	13.8%	EUR share (Cover pool)	77.7%
Fixed interest (Cover pool)	50.5%	EUR share (Covered bonds)	88.6%
Fixed interest (Covered bonds)	74.1%	Largest FX position (NPV in EURm)	USD (1,175.5)
WAL (Cover pool)	3.0y	Share of largest exposure tranche	96.3% (> EUR 10m)
WAL (Covered Bonds)	3.9y	Avg. seasoning	4.6y
Avg. LTV (Original value)	55.5%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	32.0%		

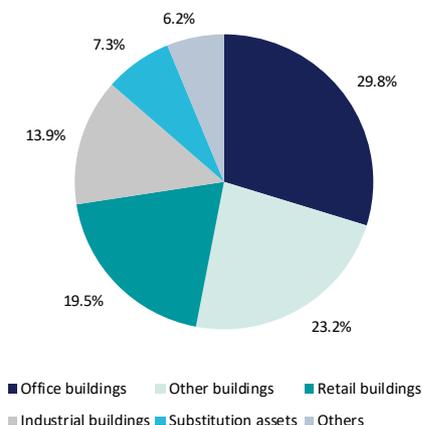
### Development of cover pool data



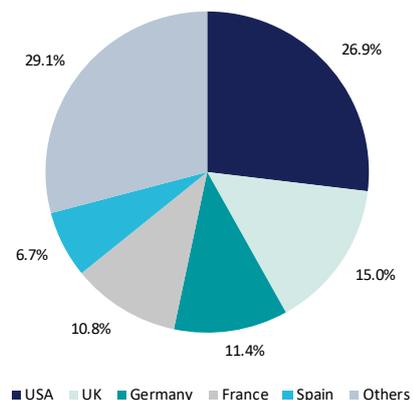
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## Aareal Bank

## Public sector

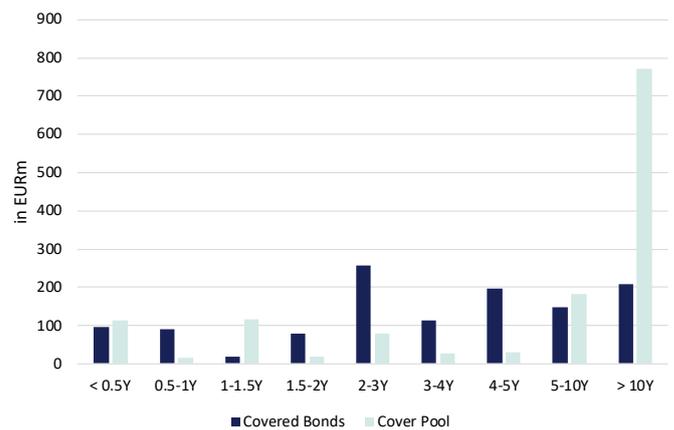
### Cover pool data

Cover pool (EURm)	1,349.0	Number of loans	162
of which substitution assets	0.0%	Number of borrowers	90
of which derivatives	0.0%	Share of 10 largest borrowers	79.6%
Covered bonds (EURm)	1,204.4	Avg. exposure to borrowers (EUR)	14,988,889
OC (EURm)	144.6	EUR share (Cover pool)	100.0%
OC	12.0%	EUR share (Covered bonds)	100.0%
Fixed interest (Cover pool)	93.1%	Largest FX position (NPV in EURm)	-
Fixed interest (Covered bonds)	97.9%	Share of largest exposure tranche	56.4% (> EUR 100m)
WAL (Cover pool)	8.6y	Loans in arrears (>90 days)	0.00%
WAL (Covered Bonds)	4.6y		

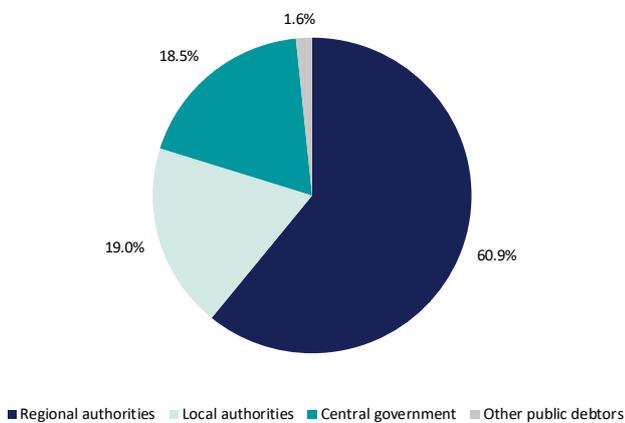
### Development of cover pool data



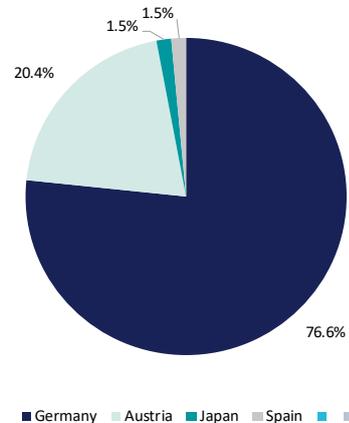
### Maturity structure



### Composition of primary assets



### Regional distribution of claims



## ALTE LEIPZIGER Bauspar

## Mortgage

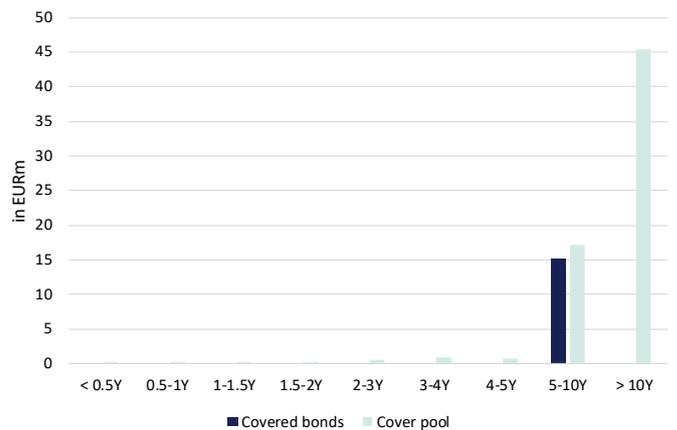
### Cover pool data

Cover pool (EURm)	65.3	Number of loans	n/a
of which residential	96.9%	Number of borrowers	n/a
of which commercial	0.0%	Number of properties	n/a
of which substitution assets	3.1%	Avg. exposure to borrowers (EUR)	n/a
of which derivatives	0.0%	Share of 10 largest borrowers	n/a
Covered bonds (EURm)	15.0	Share of owner-occupied dwellings	n/a
OC (EURm)	50.3	Share of multi-family houses	n/a
OC	335.0%	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	93.7% (< EUR 0.3m)
WAL (Covered Bonds)	n/a	Avg. seasoning	2.2y
Avg. LTV (Original value)	56.7%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

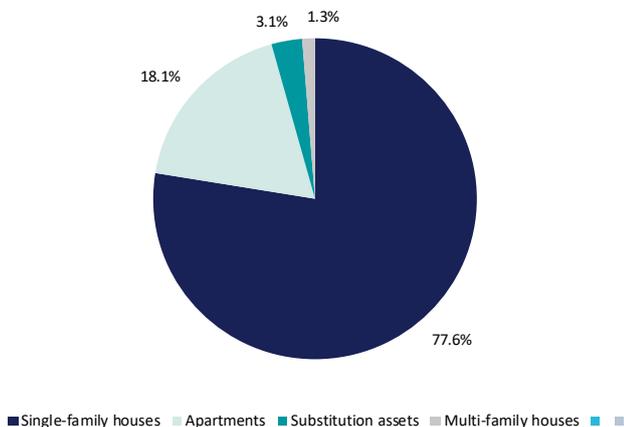
### Development of cover pool data



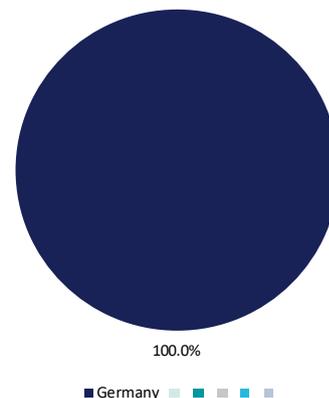
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## Bausparkasse Mainz

## Mortgage

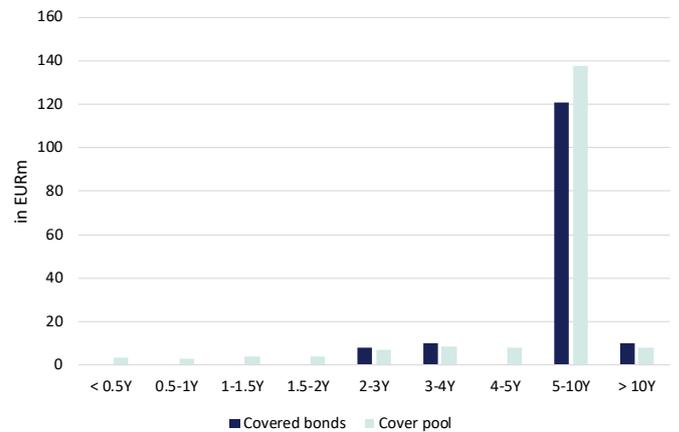
### Cover pool data

Cover pool (EURm)	182.0	Number of loans	n/a
of which residential	95.6%	Number of borrowers	n/a
of which commercial	0.0%	Number of properties	n/a
of which substitution assets	4.4%	Avg. exposure to borrowers (EUR)	n/a
of which derivatives	0.0%	Share of 10 largest borrowers	n/a
Covered bonds (EURm)	148.7	Share of owner-occupied dwellings	n/a
OC (EURm)	33.3	Share of multi-family houses	n/a
OC	22.4%	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	98.5% (< EUR 0.3m)
WAL (Covered Bonds)	n/a	Avg. seasoning	2.3y
Avg. LTV (Original value)	55.2%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

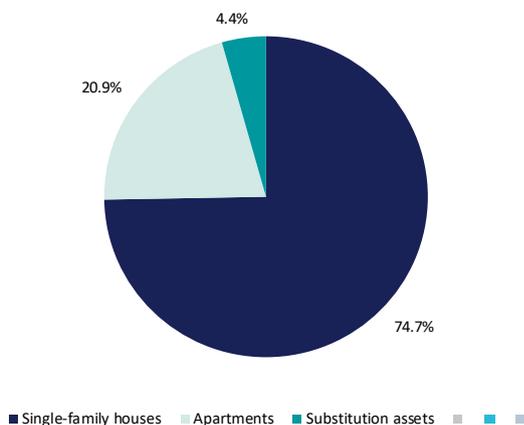
### Development of cover pool data



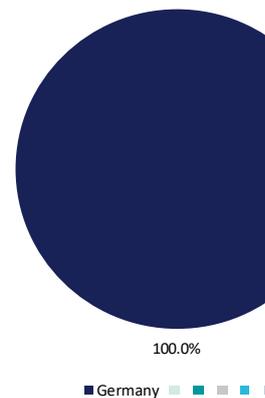
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



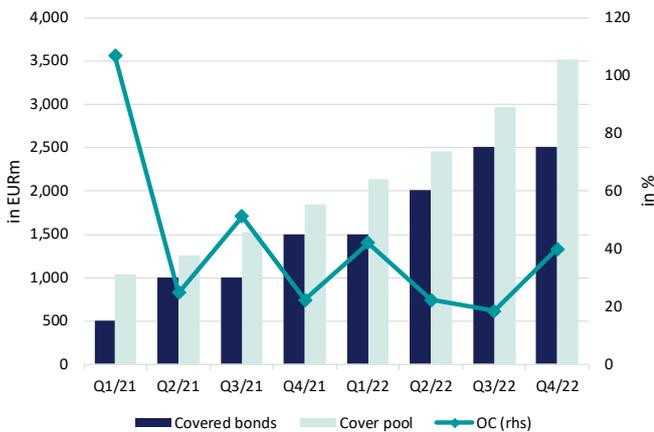
## Bausparkasse Schwäbisch Hall

## Mortgage

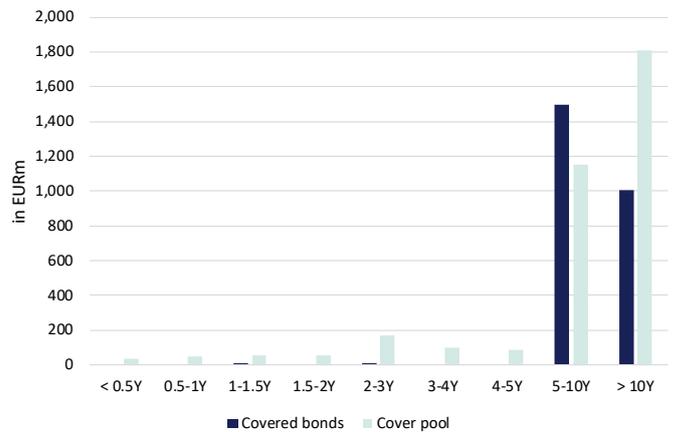
### Cover pool data

Cover pool (EURm)	3,514.7	Number of loans	24,335
of which residential	96.4%	Number of borrowers	37,891
of which commercial	0.5%	Number of properties	22,708
of which substitution assets	3.2%	Avg. exposure to borrowers (EUR)	89,804
of which derivatives	0.0%	Share of 10 largest borrowers	0.3%
Covered bonds (EURm)	2,511.0	Share of owner-occupied dwellings	85.2%
OC (EURm)	1,003.7	Share of multi-family houses	3.1%
OC	40.0%	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	86.7% (< EUR 0.3m)
WAL (Covered Bonds)	9.0y	Avg. seasoning	2.2y
Avg. LTV (Original value)	49.7%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

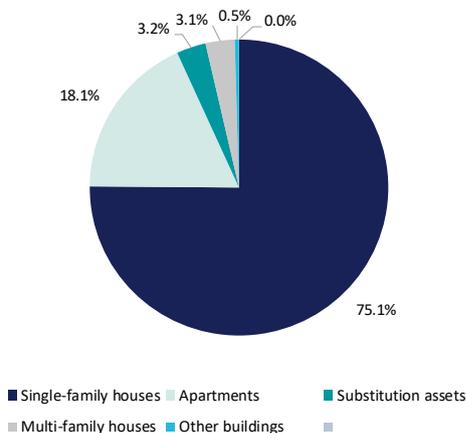
### Development of cover pool data



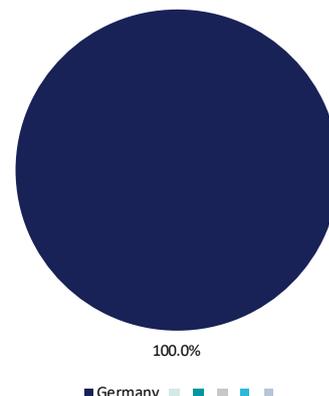
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## BayernLB

## Mortgage

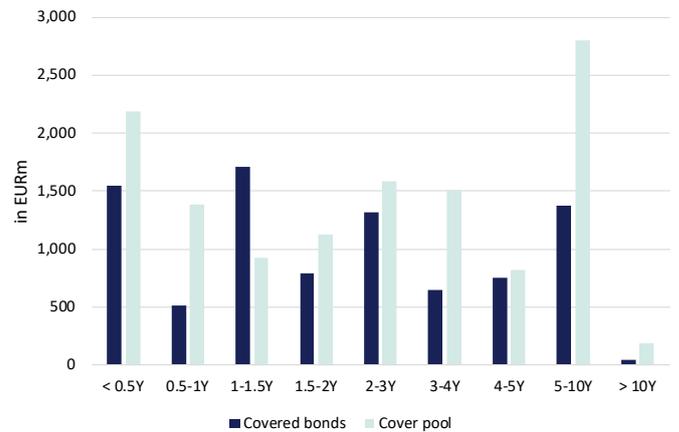
### Cover pool data

Cover pool (EURm)	12,529.0	Number of loans	629
of which residential	12.5%	Number of borrowers	479
of which commercial	74.0%	Number of properties	1,170
of which substitution assets	13.6%	Avg. exposure to borrowers (EUR)	22,603,437
of which derivatives	0.0%	Share of 10 largest borrowers	11.4%
Covered bonds (EURm)	8,701.6	Share of owner-occupied dwellings	0.3%
OC (EURm)	3,827.4	Share of multi-family houses	12.2%
OC	44.0%	EUR share (Cover pool)	91.5%
Fixed interest (Cover pool)	70.2%	EUR share (Covered bonds)	98.4%
Fixed interest (Covered bonds)	49.5%	Largest FX position (NPV in EURm)	USD (735.7)
WAL (Cover pool)	3.1y	Share of largest exposure tranche	87.6% (> EUR 10m)
WAL (Covered Bonds)	2.7y	Avg. seasoning	4.5y
Avg. LTV (Original value)	58.0%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

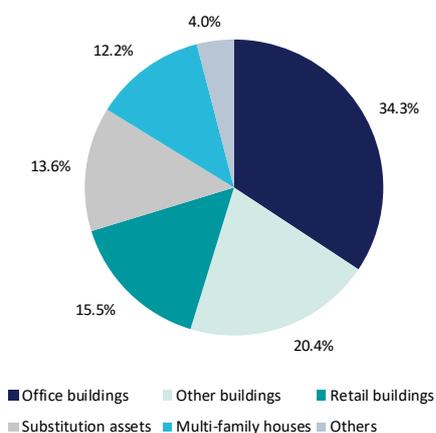
### Development of cover pool data



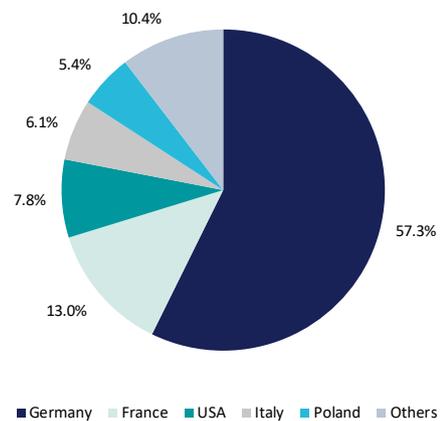
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## BayernLB

## Public sector

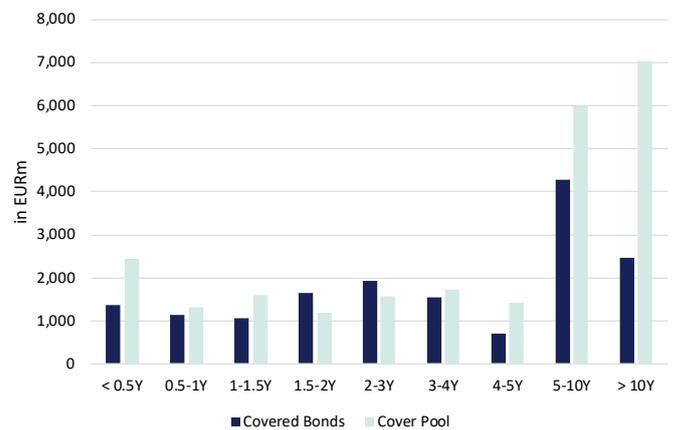
### Cover pool data

Cover pool (EURm)	24,278.9	Number of loans	78,405
of which substitution assets	2.0%	Number of borrowers	50,606
of which derivatives	0.0%	Share of 10 largest borrowers	20.3%
Covered bonds (EURm)	16,130.4	Avg. exposure to borrowers (EUR)	470,406
OC (EURm)	8,148.4	EUR share (Cover pool)	96.7%
OC	50.5%	EUR share (Covered bonds)	97.1%
Fixed interest (Cover pool)	93.1%	Largest FX position (NPV in EURm)	USD (96.3)
Fixed interest (Covered bonds)	92.4%	Share of largest exposure tranche	56.0% (> EUR 100m)
WAL (Cover pool)	8.5y	Loans in arrears (>90 days)	0.02%
WAL (Covered Bonds)	5.5y		

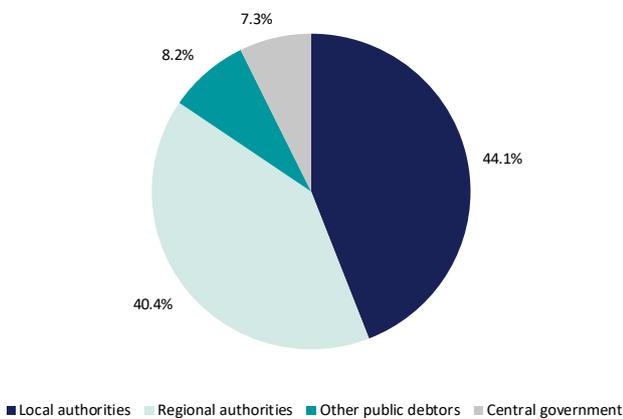
### Development of cover pool data



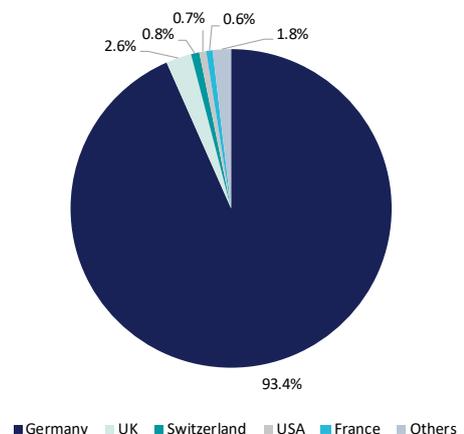
### Maturity structure



### Composition of primary assets



### Regional distribution of claims



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

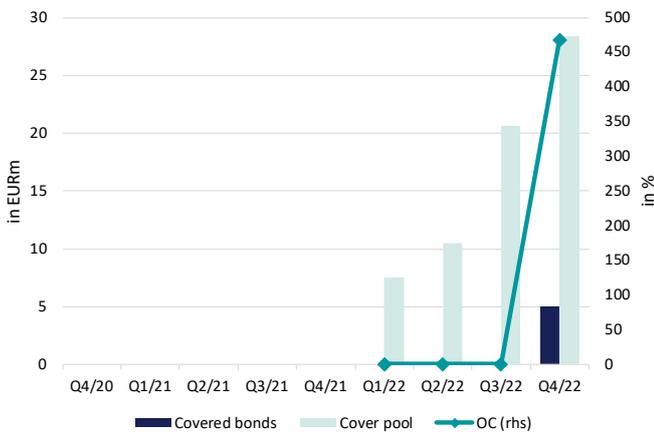
## BBBank

## Mortgage

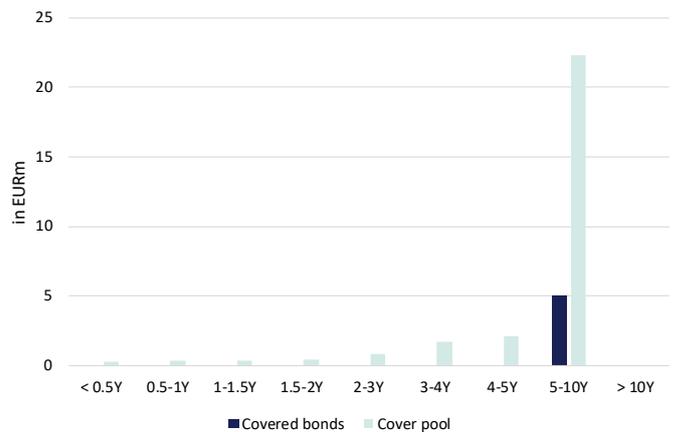
### Cover pool data

Deckungsmasse (EURm)	28.4	Anzahl der Kredite	218
davon wohnwirtschaftlich	93.0%	Anzahl der Kreditnehmer	206
davon gewerblich	0.0%	Anzahl der Objekte	208
davon Ersatzdeckung	7.0%	Ø Darlehensbetrag pro Kreditnehmer (EUR)	128,010
davon Derivate	0.0%	Anteil der 10 größten Kreditnehmer	8.1%
Pfandbriefvolumen (EURm)	5.0	Anteil selbstgenutztes Wohneigentum	71.0%
Überdeckung (EURm)	23.4	Anteil Mehrfamilienhäuser	1.3%
Überdeckungsquote	467.4%	EUR-Anteil (Deckungsmasse)	100.0%
Anteil festverzinsliche Deckungsmasse	100.0%	EUR-Anteil (Pfandbriefe)	100.0%
Anteil festverzinsliche Pfandbriefe	100.0%	Größte FX-Position (NPV in EURm)	-
WAL (Deckungsmasse)	7.2y	Anteil der größten Forderungsklasse	100.0% (< EUR 0.3m)
WAL (Pfandbriefe)	7.0y	Ø Alter der Forderungen (Seasoning)	1.8y
Ø LTV (Ursprungswert)	50.5%	Rückständige Kredite (>90 Tage)	0.00%
Ø LTV (Marktwert)	n/a		

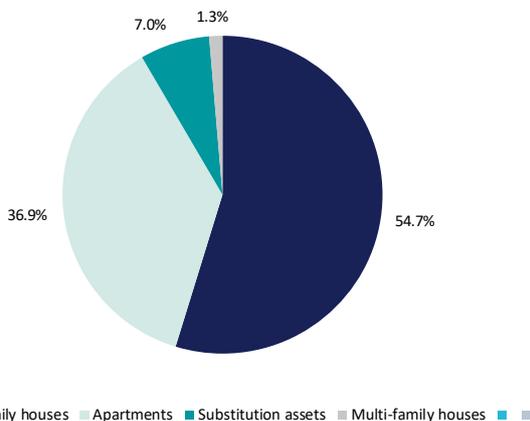
### Development of cover pool data



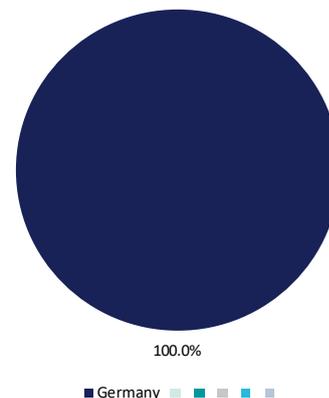
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## Berlin Hyp

### Cover pool data

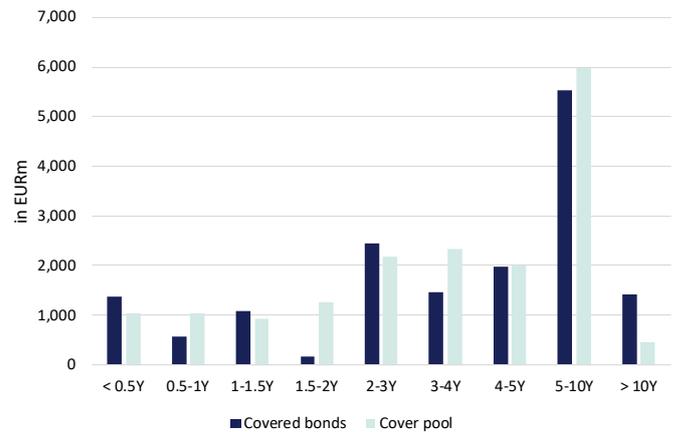
Cover pool (EURm)	17,187.6	Number of loans	1,446
of which residential	30.7%	Number of borrowers	1,322
of which commercial	62.7%	Number of properties	4,813
of which substitution assets	6.7%	Avg. exposure to borrowers (EUR)	12,132,797
of which derivatives	0.0%	Share of 10 largest borrowers	17.6%
Covered bonds (EURm)	16,045.7	Share of owner-occupied dwellings	0.0%
OC (EURm)	1,141.9	Share of multi-family houses	29.7%
OC	7.1%	EUR share (Cover pool)	99.6%
Fixed interest (Cover pool)	74.9%	EUR share (Covered bonds)	98.7%
Fixed interest (Covered bonds)	99.6%	Largest FX position (NPV in EURm)	CHF (-211.7)
WAL (Cover pool)	4.4y	Share of largest exposure tranche	85.4% (> EUR 10m)
WAL (Covered Bonds)	5.5y	Avg. seasoning	4.3y
Avg. LTV (Original value)	57.0%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

## Mortgage

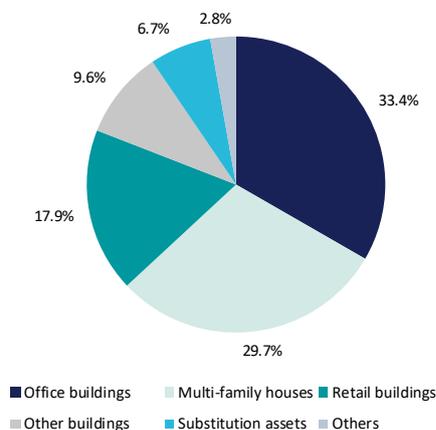
### Development of cover pool data



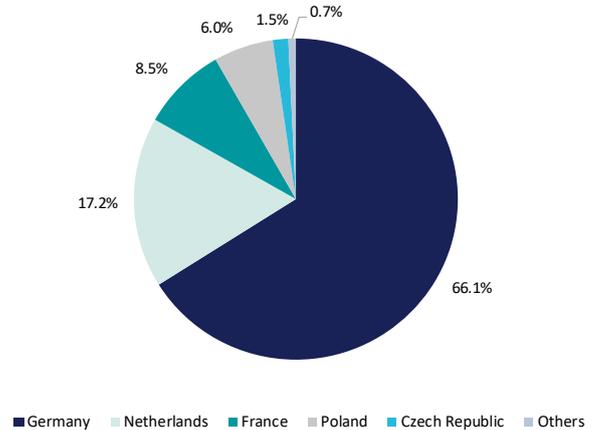
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## Berlin Hyp

### Cover pool data

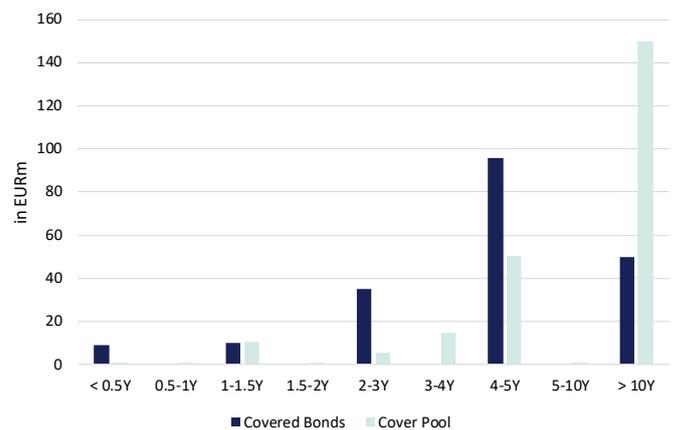
Cover pool (EURm)	232.4	Number of loans	35
of which substitution assets	0.0%	Number of borrowers	37
of which derivatives	0.0%	Share of 10 largest borrowers	89.5%
Covered bonds (EURm)	200.0	Avg. exposure to borrowers (EUR)	6,282,096
OC (EURm)	32.4	EUR share (Cover pool)	100.0%
OC	16.2%	EUR share (Covered bonds)	100.0%
Fixed interest (Cover pool)	100.0%	Largest FX position (NPV in EURm)	-
Fixed interest (Covered bonds)	100.0%	Share of largest exposure tranche	90.8% (EUR 10-100m)
WAL (Cover pool)	10.9y	Loans in arrears (>90 days)	0.00%
WAL (Covered Bonds)	5.6y		

## Public sector

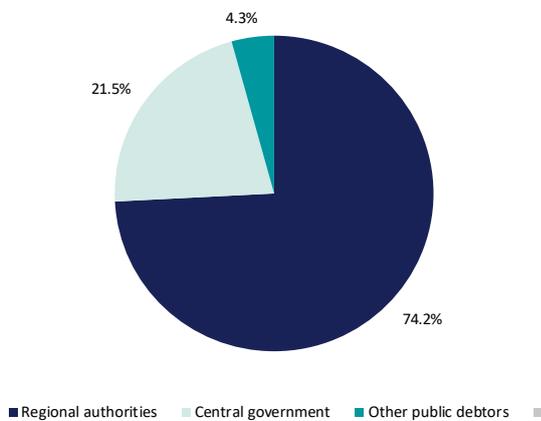
### Development of cover pool data



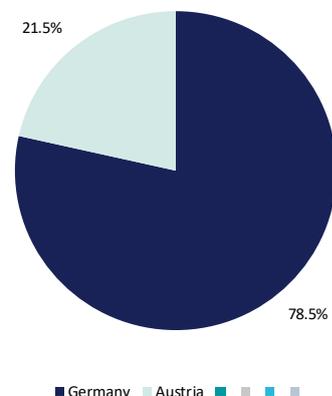
### Maturity structure



### Composition of primary assets



### Regional distribution of claims



## Commerzbank

## Mortgage

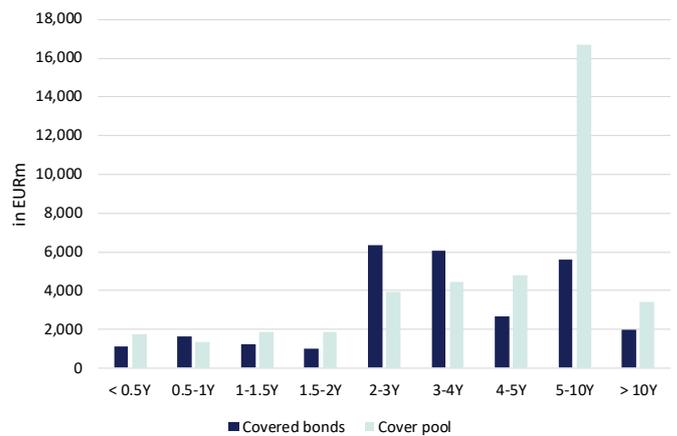
### Cover pool data

Cover pool (EURm)	40,107.5	Number of loans	302,350
of which residential	94.7%	Number of borrowers	235,721
of which commercial	2.2%	Number of properties	264,351
of which substitution assets	3.1%	Avg. exposure to borrowers (EUR)	164,833
of which derivatives	0.0%	Share of 10 largest borrowers	1.5%
Covered bonds (EURm)	27,632.6	Share of owner-occupied dwellings	16.1%
OC (EURm)	12,475.0	Share of multi-family houses	10.2%
OC	45.1%	EUR share (Cover pool)	100.0%
Fixed interest (Cover pool)	98.4%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	74.6%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	5.7y	Share of largest exposure tranche	75.0% (< EUR 0.3m)
WAL (Covered Bonds)	4.5y	Avg. seasoning	5.0y
Avg. LTV (Original value)	51.7%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

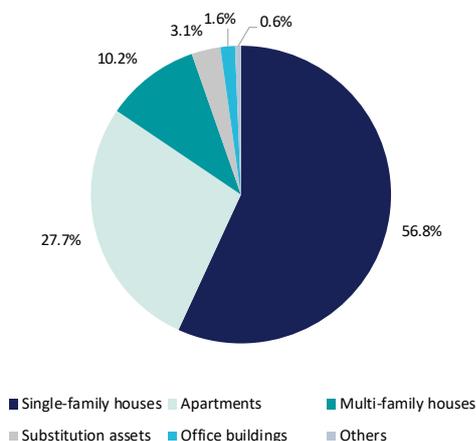
### Development of cover pool data



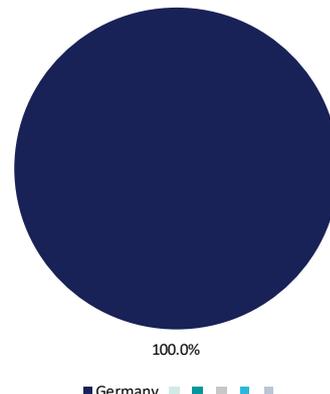
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## Commerzbank

### Cover pool data

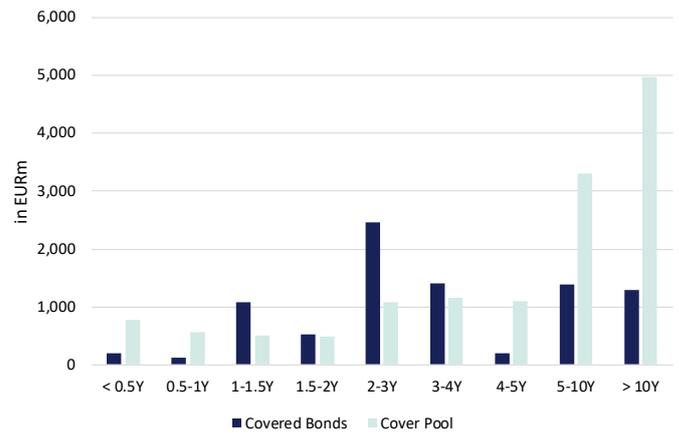
Cover pool (EURm)	13,958.3	Number of loans	1,461
of which substitution assets	0.0%	Number of borrowers	712
of which derivatives	0.0%	Share of 10 largest borrowers	27.1%
Covered bonds (EURm)	8,688.9	Avg. exposure to borrowers (EUR)	19,604,415
OC (EURm)	5,269.4	EUR share (Cover pool)	78.0%
OC	60.6%	EUR share (Covered bonds)	96.8%
Fixed interest (Cover pool)	75.4%	Largest FX position (NPV in EURm)	GBP (1,033.4)
Fixed interest (Covered bonds)	48.9%	Share of largest exposure tranche	53.4% (> EUR 100m)
WAL (Cover pool)	10.3y	Loans in arrears (>90 days)	0.00%
WAL (Covered Bonds)	4.7y		

## Public sector

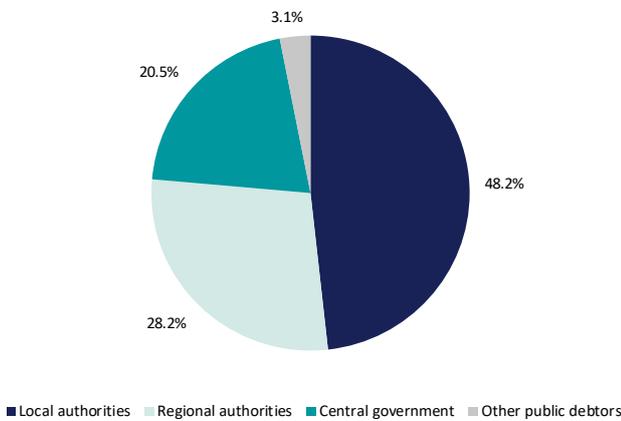
### Development of cover pool data



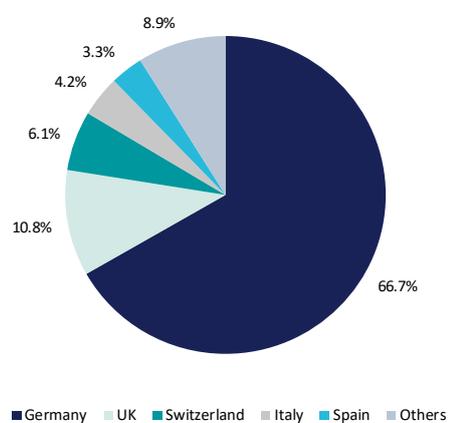
### Maturity structure



### Composition of primary assets



### Regional distribution of claims



## Commerzbank

## Ship

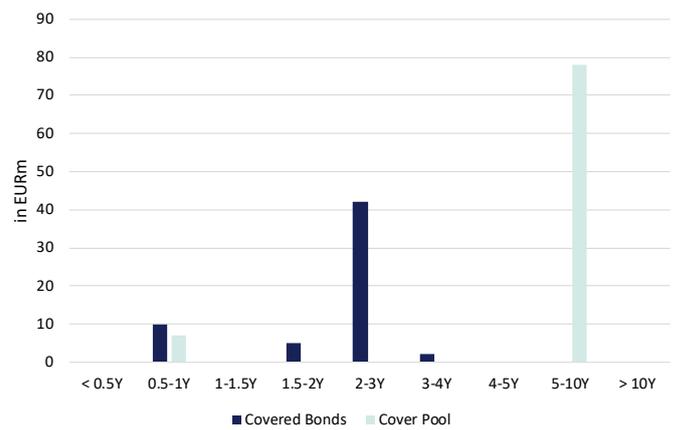
### Cover pool data

Cover pool (EURm)	85.1	Number of loans	n/a
of which substitution assets	100.0%	Number of borrowers	n/a
of which derivatives	0.0%	Avg. exposure to borrowers (EUR)	n/a
Covered bonds (EURm)	59.0	Largest FX position (NPV in EURm)	-
OC (EURm)	26.1	Share of largest exposure tranche	n/a
OC	44.2%	Loans in arrears (>90 days)	0.00%
Fixed interest (Cover pool)	100.0%		
Fixed interest (Covered bonds)	100.0%		
WAL (Cover pool)	6.4y		
WAL (Covered Bonds)	2.4y		

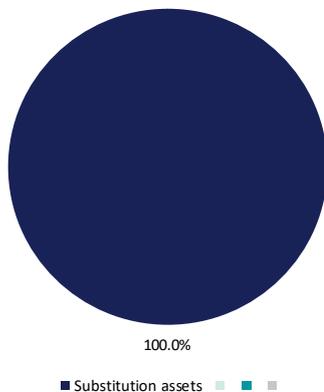
### Development of cover pool data



### Maturity structure



### Composition of cover pool



### Regional distribution of primary assets

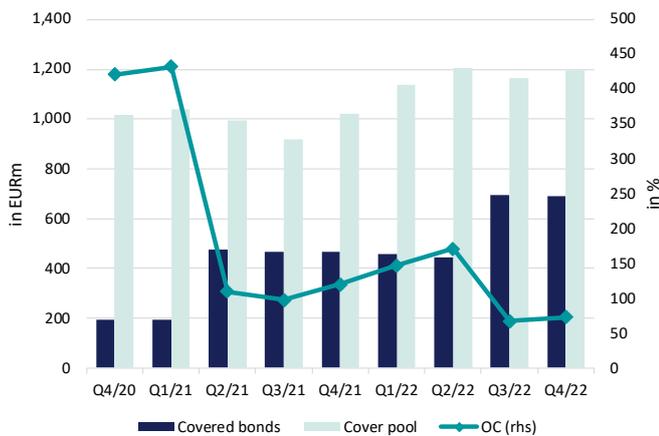
## DekaBank

## Mortgage

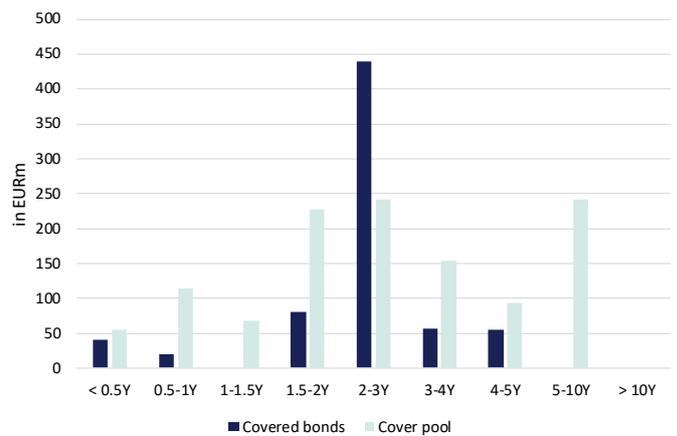
### Cover pool data

Cover pool (EURm)	1,194.3	Number of loans	27
of which residential	0.0%	Number of borrowers	29
of which commercial	91.7%	Number of properties	40
of which substitution assets	8.3%	Avg. exposure to borrowers (EUR)	37,759,207
of which derivatives	0.0%	Share of 10 largest borrowers	46.2%
Covered bonds (EURm)	691.0	Share of owner-occupied dwellings	0.0%
OC (EURm)	503.3	Share of multi-family houses	0.0%
OC	72.8%	EUR share (Cover pool)	100.0%
Fixed interest (Cover pool)	66.7%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	100.0%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	3.2y	Share of largest exposure tranche	100.0% (> EUR 10m)
WAL (Covered Bonds)	2.6y	Avg. seasoning	3.3y
Avg. LTV (Original value)	59.8%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

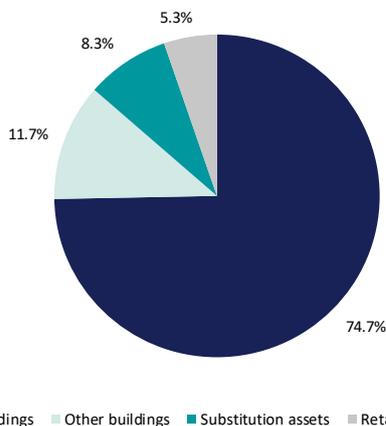
### Development of cover pool data



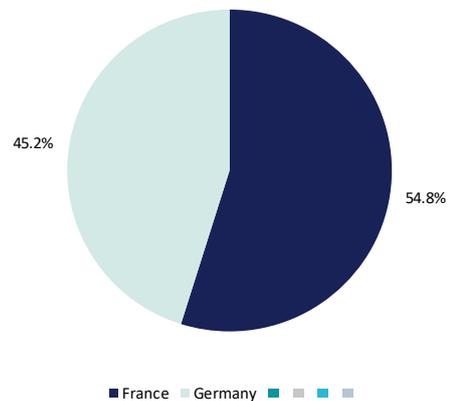
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## DekaBank

## Public sector

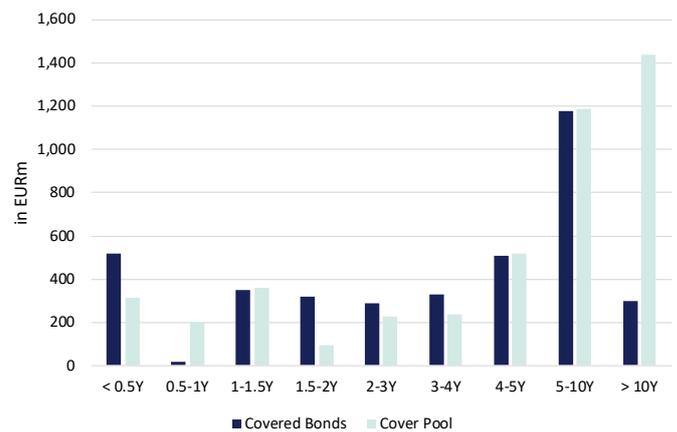
### Cover pool data

Cover pool (EURm)	4,571.9	Number of loans	289
of which substitution assets	0.6%	Number of borrowers	94
of which derivatives	0.0%	Share of 10 largest borrowers	34.5%
Covered bonds (EURm)	3,807.4	Avg. exposure to borrowers (EUR)	48,326,564
OC (EURm)	764.5	EUR share (Cover pool)	97.7%
OC	20.1%	EUR share (Covered bonds)	98.8%
Fixed interest (Cover pool)	80.8%	Largest FX position (NPV in EURm)	USD (63.0)
Fixed interest (Covered bonds)	100.0%	Share of largest exposure tranche	58.1% (EUR 10-100m)
WAL (Cover pool)	5.8y	Loans in arrears (>90 days)	0.00%
WAL (Covered Bonds)	4.7y		

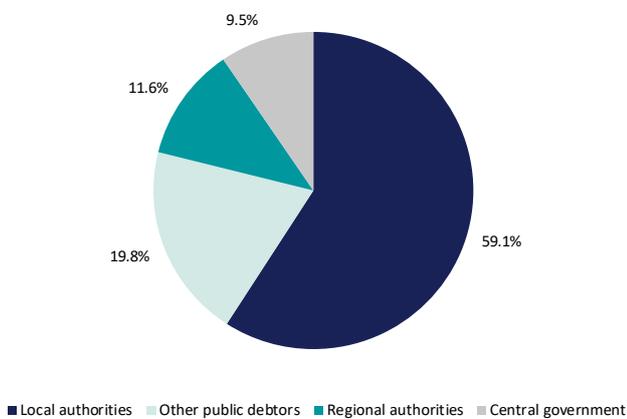
### Development of cover pool data



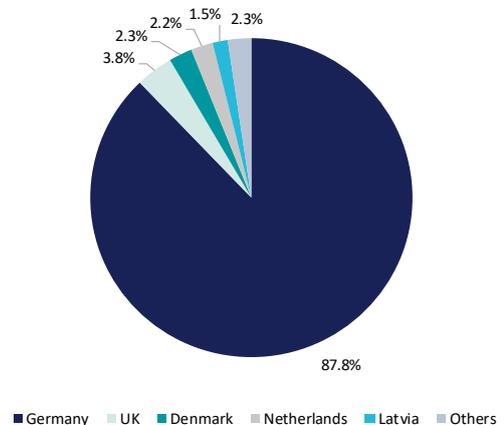
### Maturity structure



### Composition of primary assets



### Regional distribution of claims



# Deutsche Apotheker- und Ärztebank

# Mortgage

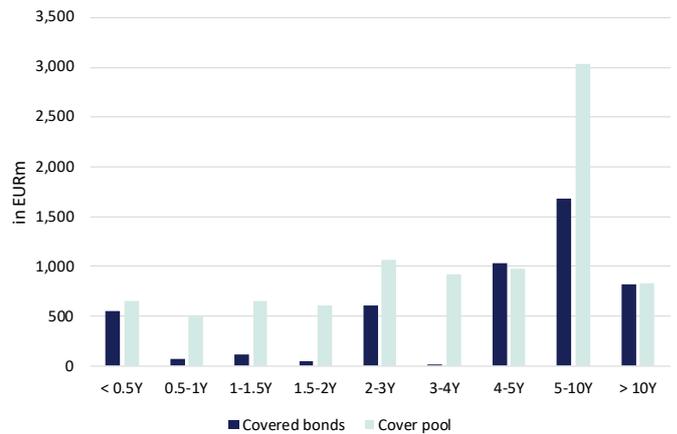
## Cover pool data

Cover pool (EURm)	9,242.9	Number of loans	81,377
of which residential	75.6%	Number of borrowers	44,791
of which commercial	17.6%	Number of properties	59,862
of which substitution assets	6.8%	Avg. exposure to borrowers (EUR)	192,291
of which derivatives	0.0%	Share of 10 largest borrowers	5.4%
Covered bonds (EURm)	4,949.1	Share of owner-occupied dwellings	52.5%
OC (EURm)	4,293.8	Share of multi-family houses	9.4%
OC	86.8%	EUR share (Cover pool)	100.0%
Fixed interest (Cover pool)	92.9%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	97.8%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	4.9y	Share of largest exposure tranche	71.1% (< EUR 0.3m)
WAL (Covered Bonds)	6.8y	Avg. seasoning	5.9y
Avg. LTV (Original value)	54.6%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

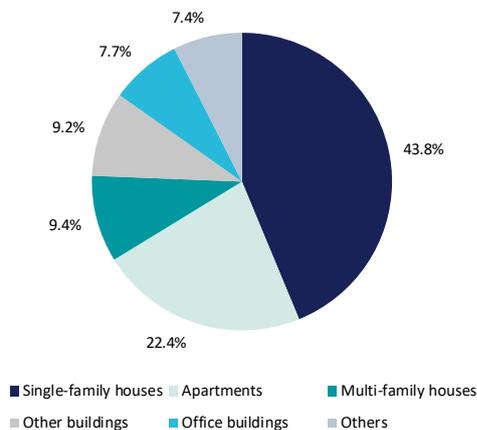
## Development of cover pool data



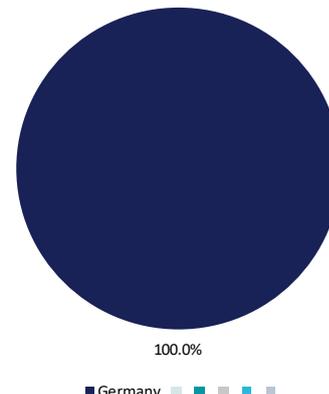
## Maturity structure



## Composition of cover pool



## Regional distribution of properties



## Deutsche Bank

## Mortgage

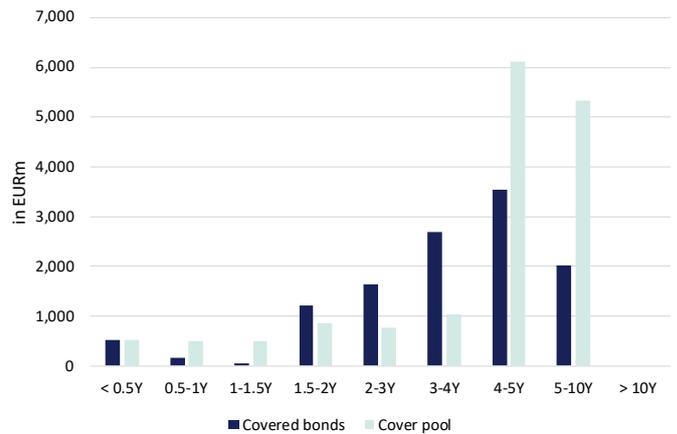
### Cover pool data

Cover pool (EURm)	16,192.8	Number of loans	n/a
of which residential	89.6%	Number of borrowers	n/a
of which commercial	6.3%	Number of properties	n/a
of which substitution assets	4.1%	Avg. exposure to borrowers (EUR)	n/a
of which derivatives	0.0%	Share of 10 largest borrowers	n/a
Covered bonds (EURm)	13,038.0	Share of owner-occupied dwellings	n/a
OC (EURm)	3,154.8	Share of multi-family houses	n/a
OC	24.2%	EUR share (Cover pool)	n/a
Fixed interest (Cover pool)	99.4%	EUR share (Covered bonds)	n/a
Fixed interest (Covered bonds)	82.9%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	n/a	Share of largest exposure tranche	79.9% (< EUR 0.3m)
WAL (Covered Bonds)	n/a	Avg. seasoning	5.4y
Avg. LTV (Original value)	53.8%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

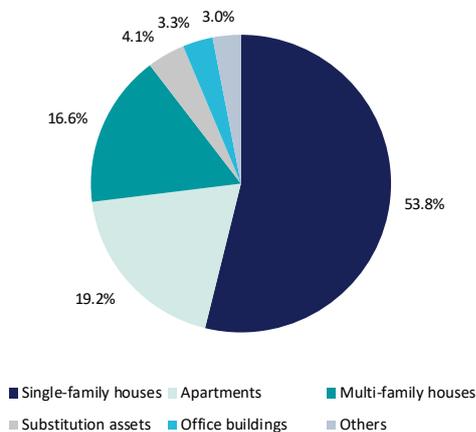
### Development of cover pool data



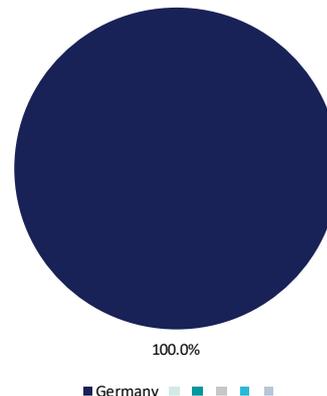
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



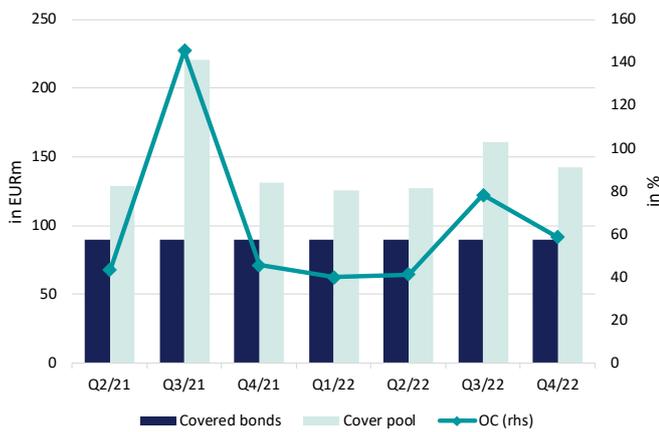
## Deutsche Bank

## Public sector

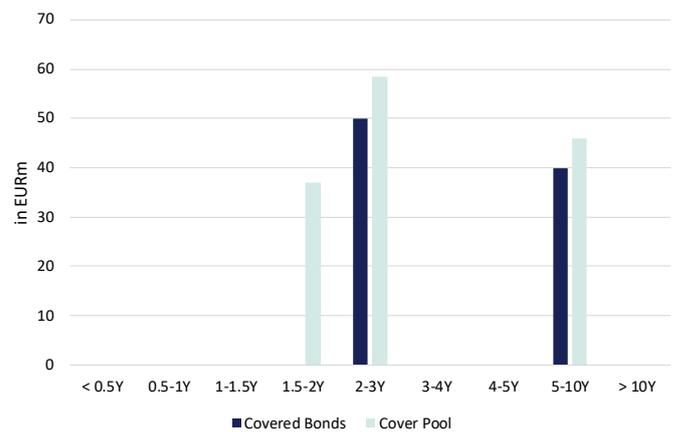
### Cover pool data

Cover pool (EURm)	142.8	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)	90.0	Avg. exposure to borrowers (EUR)	n/a
OC (EURm)	52.8	EUR share (Cover pool)	n/a
OC	58.7%	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	100.0% (EUR 10-100m)
WAL (Cover pool)	n/a	Loans in arrears (>90 days)	0.00%
WAL (Covered Bonds)	n/a		

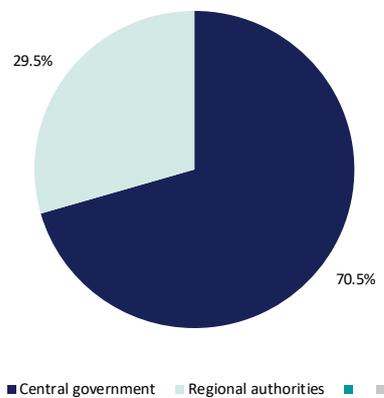
### Development of cover pool data



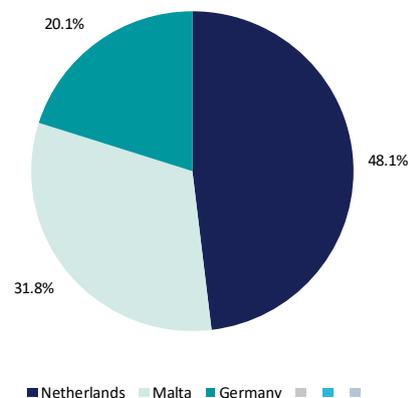
### Maturity structure



### Composition of primary assets



### Regional distribution of claims



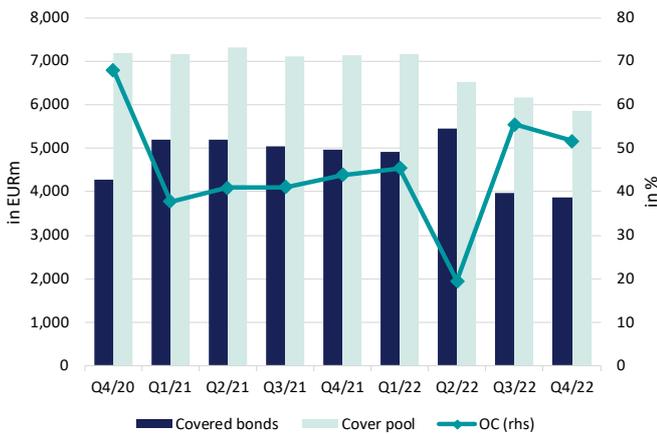
## Deutsche Kreditbank

## Mortgage

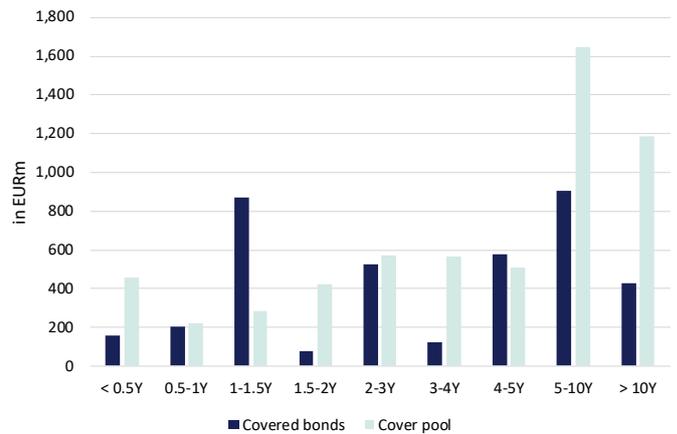
### Cover pool data

Cover pool (EURm)	5,864.0	Number of loans	n/a
of which residential	92.7%	Number of borrowers	n/a
of which commercial	1.9%	Number of properties	n/a
of which substitution assets	5.4%	Avg. exposure to borrowers (EUR)	n/a
of which derivatives	0.0%	Share of 10 largest borrowers	n/a
Covered bonds (EURm)	3,867.5	Share of owner-occupied dwellings	n/a
OC (EURm)	1,996.5	Share of multi-family houses	n/a
OC	51.6%	EUR share (Cover pool)	n/a
Fixed interest (Cover pool)	94.9%	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	42.2% (EUR 1-10m)
WAL (Covered Bonds)	n/a	Avg. seasoning	9.5y
Avg. LTV (Original value)	50.5%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

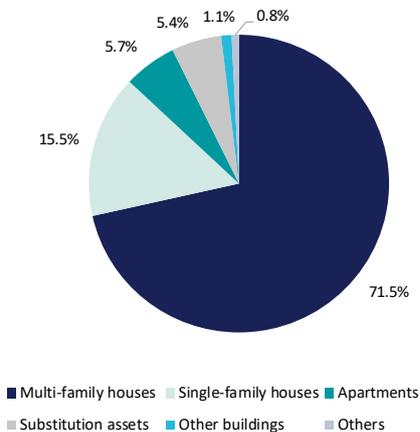
### Development of cover pool data



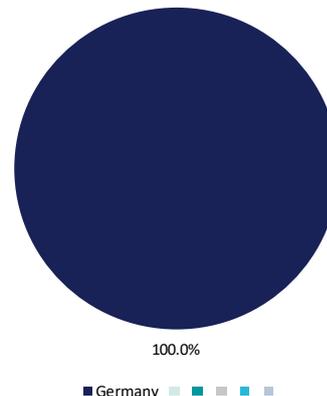
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## Deutsche Kreditbank

## Public sector

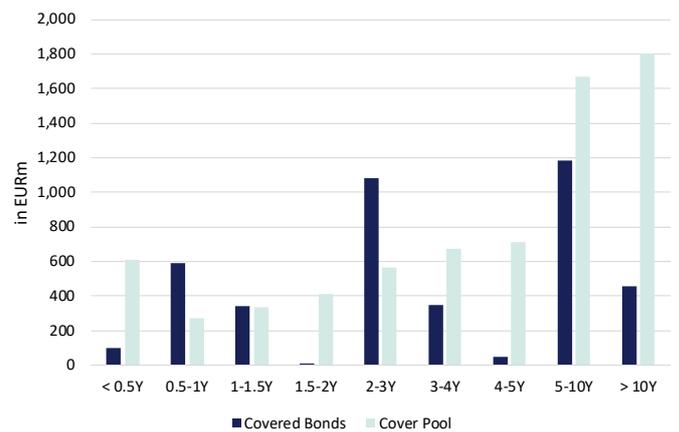
### Cover pool data

Cover pool (EURm)	7,050.4	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)	4,152.8	Avg. exposure to borrowers (EUR)	n/a
OC (EURm)	2,897.6	EUR share (Cover pool)	n/a
OC	69.8%	EUR share (Covered bonds)	n/a
Fixed interest (Cover pool)	97.3%	Largest FX position (NPV in EURm)	-
Fixed interest (Covered bonds)	94.0%	Share of largest exposure tranche	48.0% (EUR 10-100m)
WAL (Cover pool)	n/a	Loans in arrears (>90 days)	0.00%
WAL (Covered Bonds)	n/a		

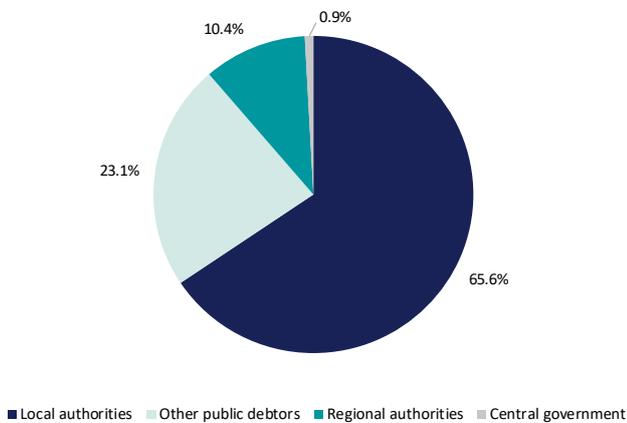
### Development of cover pool data



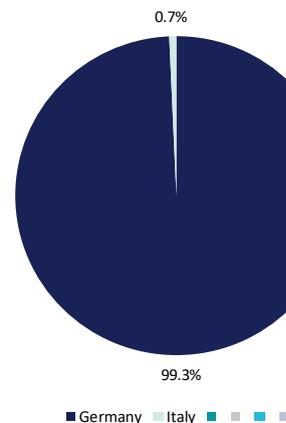
### Maturity structure



### Composition of primary assets



### Regional distribution of claims



## Deutsche Pfandbriefbank

## Mortgage

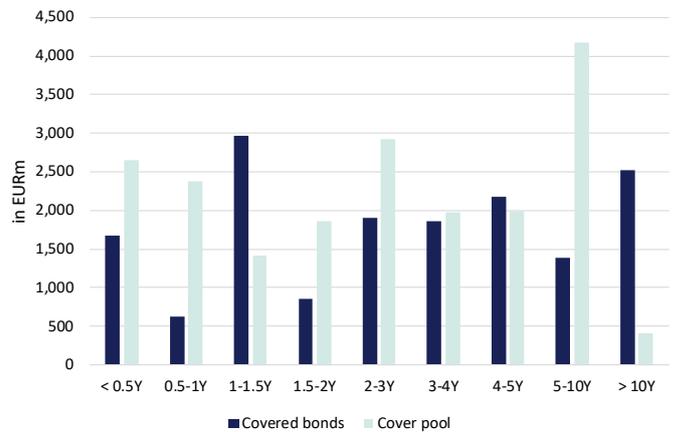
### Cover pool data

Cover pool (EURm)	19,773.0	Number of loans	1,533
of which residential	15.4%	Number of borrowers	766
of which commercial	77.9%	Number of properties	3,078
of which substitution assets	6.7%	Avg. exposure to borrowers (EUR)	24,077,023
of which derivatives	0.0%	Share of 10 largest borrowers	7.7%
Covered bonds (EURm)	15,981.0	Share of owner-occupied dwellings	0.0%
OC (EURm)	3,792.0	Share of multi-family houses	13.3%
OC	23.7%	EUR share (Cover pool)	70.9%
Fixed interest (Cover pool)	56.5%	EUR share (Covered bonds)	77.5%
Fixed interest (Covered bonds)	90.4%	Largest FX position (NPV in EURm)	USD (1,683.0)
WAL (Cover pool)	3.7y	Share of largest exposure tranche	93.1% (> EUR 10m)
WAL (Covered Bonds)	5.4y	Avg. seasoning	3.5y
Avg. LTV (Original value)	55.6%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	32.1%		

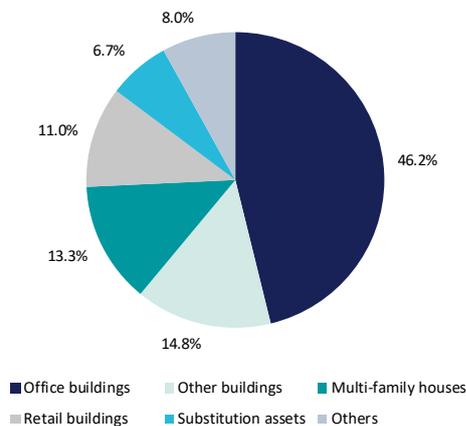
### Development of cover pool data



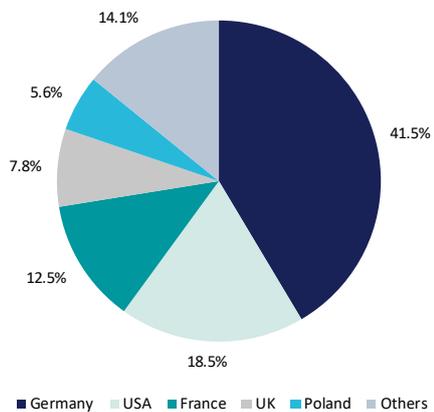
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## Deutsche Pfandbriefbank

## Public sector

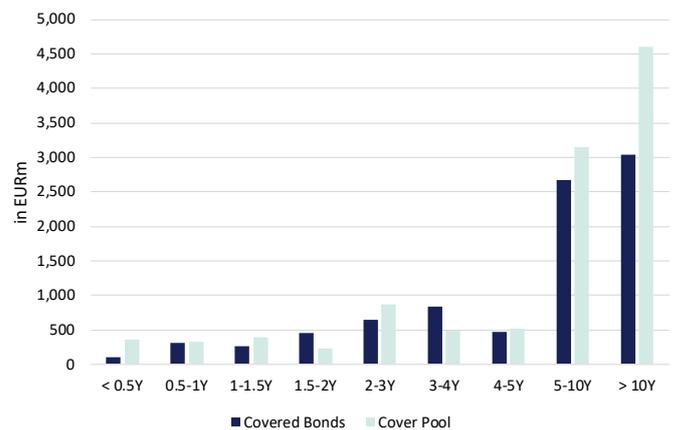
### Cover pool data

Cover pool (EURm)	10,913.0	Number of loans	465
of which substitution assets	0.0%	Number of borrowers	198
of which derivatives	0.0%	Share of 10 largest borrowers	59.7%
Covered bonds (EURm)	8,771.0	Avg. exposure to borrowers (EUR)	55,101,010
OC (EURm)	2,142.0	EUR share (Cover pool)	94.3%
OC	24.4%	EUR share (Covered bonds)	99.2%
Fixed interest (Cover pool)	75.6%	Largest FX position (NPV in EURm)	GBP (211.0)
Fixed interest (Covered bonds)	76.9%	Share of largest exposure tranche	67.6% (> EUR 100m)
WAL (Cover pool)	8.4y	Loans in arrears (>90 days)	0.00%
WAL (Covered Bonds)	7.2y		

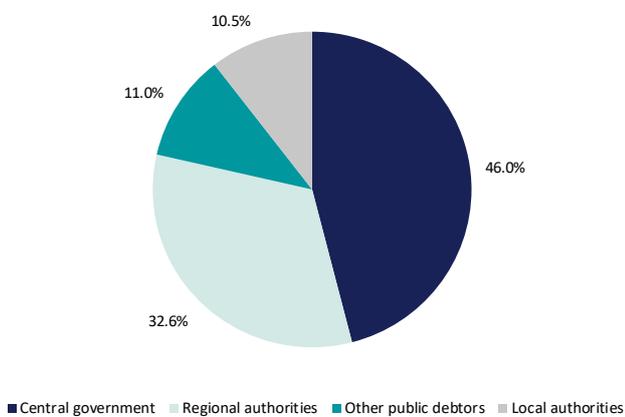
### Development of cover pool data



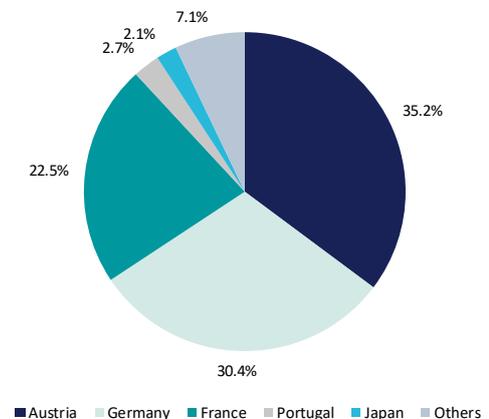
### Maturity structure



### Composition of primary assets



### Regional distribution of claims



## DZ HYP

## Mortgage

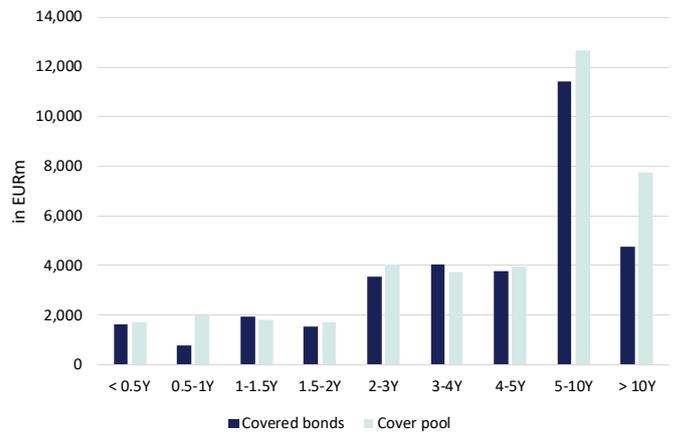
### Cover pool data

Cover pool (EURm)	39,429.0	Number of loans	109,997
of which residential	56.0%	Number of borrowers	95,386
of which commercial	41.6%	Number of properties	109,722
of which substitution assets	2.4%	Avg. exposure to borrowers (EUR)	403,424
of which derivatives	0.0%	Share of 10 largest borrowers	4.3%
Covered bonds (EURm)	33,425.1	Share of owner-occupied dwellings	23.1%
OC (EURm)	6,003.9	Share of multi-family houses	31.1%
OC	18.0%	EUR share (Cover pool)	99.3%
Fixed interest (Cover pool)	90.1%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	99.5%	Largest FX position (NPV in EURm)	GBP (201.9)
WAL (Cover pool)	6.6y	Share of largest exposure tranche	40.4% (> EUR 10m)
WAL (Covered Bonds)	6.2y	Avg. seasoning	5.1y
Avg. LTV (Original value)	54.1%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

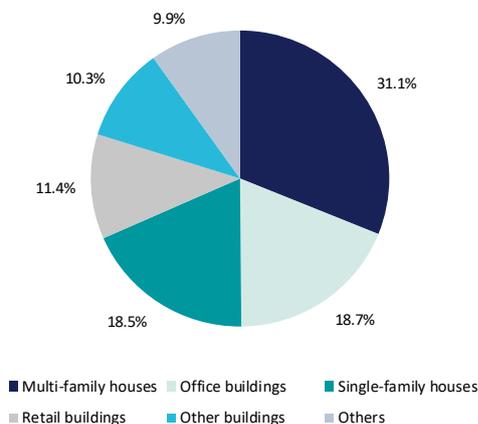
### Development of cover pool data



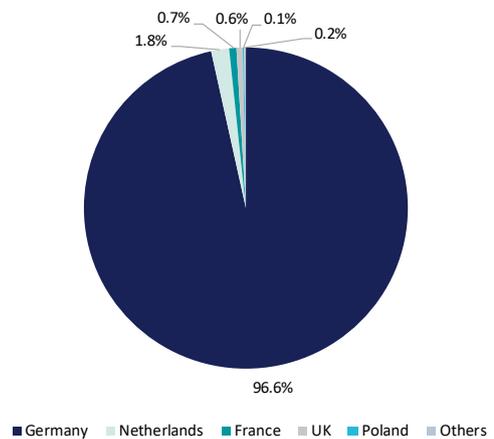
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## DZ HYP

## Public sector

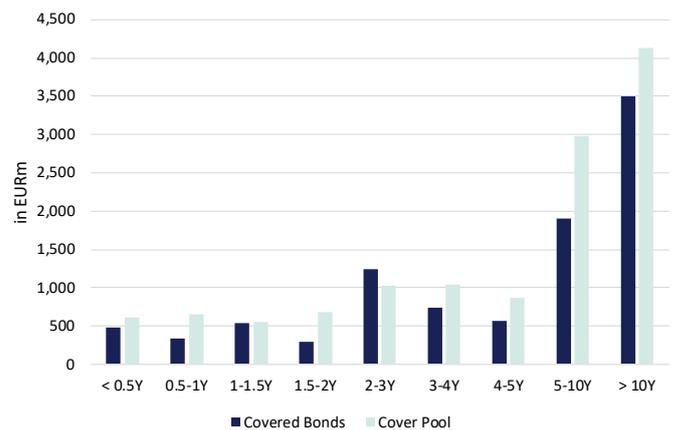
### Cover pool data

Cover pool (EURm)	12,522.9	Number of loans	16,776
of which substitution assets	0.0%	Number of borrowers	4,929
of which derivatives	0.0%	Share of 10 largest borrowers	16.4%
Covered bonds (EURm)	9,611.7	Avg. exposure to borrowers (EUR)	2,540,666
OC (EURm)	2,911.3	EUR share (Cover pool)	95.1%
OC	30.3%	EUR share (Covered bonds)	94.9%
Fixed interest (Cover pool)	97.9%	Largest FX position (NPV in EURm)	CHF (51.4)
Fixed interest (Covered bonds)	93.5%	Share of largest exposure tranche	45.7% (< EUR 10m)
WAL (Cover pool)	7.9y	Loans in arrears (>90 days)	0.00%
WAL (Covered Bonds)	7.6y		

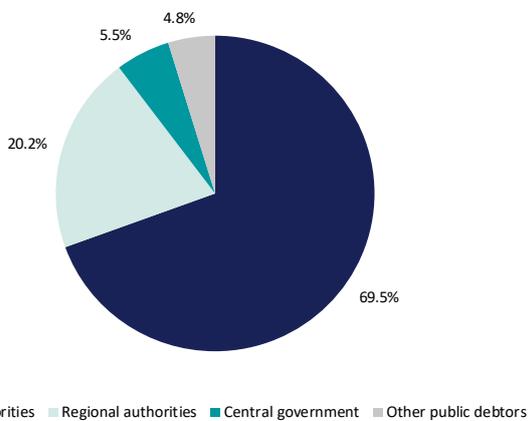
### Development of cover pool data



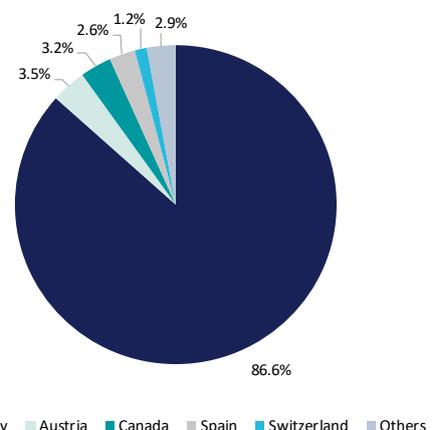
### Maturity structure



### Composition of primary assets



### Regional distribution of claims



## Hamburg Commercial Bank

## Mortgage

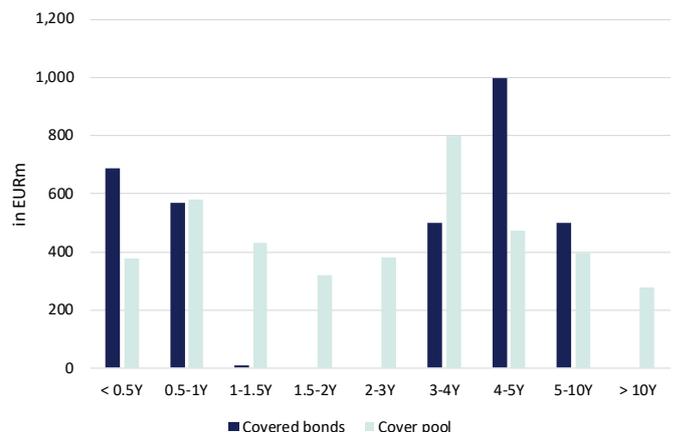
### Cover pool data

Cover pool (EURm)	4,038.3	Number of loans	365
of which residential	13.9%	Number of borrowers	217
of which commercial	67.4%	Number of properties	691
of which substitution assets	11.4%	Avg. exposure to borrowers (EUR)	15,139,568
of which derivatives	0.0%	Share of 10 largest borrowers	24.0%
Covered bonds (EURm)	3,266.8	Share of owner-occupied dwellings	0.0%
OC (EURm)	771.5	Share of multi-family houses	13.3%
OC	23.6%	EUR share (Cover pool)	93.1%
Fixed interest (Cover pool)	63.0%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	100.0%	Largest FX position (NPV in EURm)	USD (258.7)
WAL (Cover pool)	4.6y	Share of largest exposure tranche	80.0% (> EUR 10m)
WAL (Covered Bonds)	2.9y	Avg. seasoning	5.1y
Avg. LTV (Original value)	56.9%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

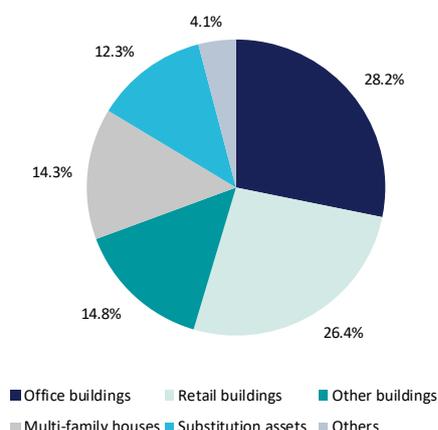
### Development of cover pool data



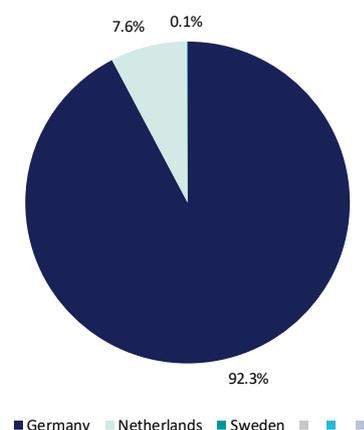
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## Hamburg Commercial Bank

## Public sector

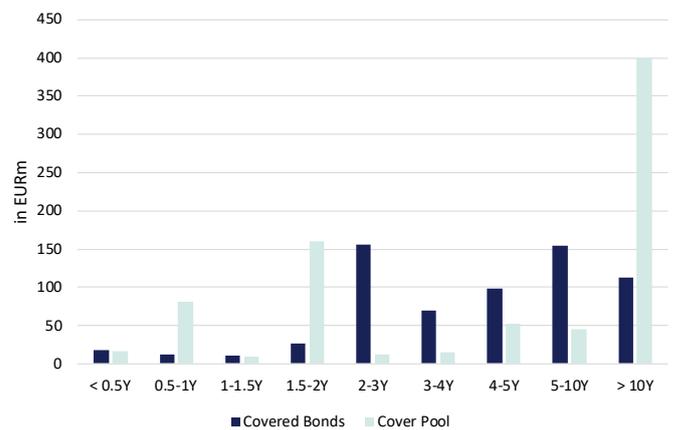
### Cover pool data

Cover pool (EURm)	790.7	Number of loans	60
of which substitution assets	0.0%	Number of borrowers	37
of which derivatives	0.0%	Share of 10 largest borrowers	90.0%
Covered bonds (EURm)	657.2	Avg. exposure to borrowers (EUR)	21,371,270
OC (EURm)	133.5	EUR share (Cover pool)	79.5%
OC	20.3%	EUR share (Covered bonds)	100.0%
Fixed interest (Cover pool)	82.4%	Largest FX position (NPV in EURm)	CHF (108.8)
Fixed interest (Covered bonds)	90.9%	Share of largest exposure tranche	51.4% (> EUR 100m)
WAL (Cover pool)	9.7y	Loans in arrears (>90 days)	0.11%
WAL (Covered Bonds)	5.7y		

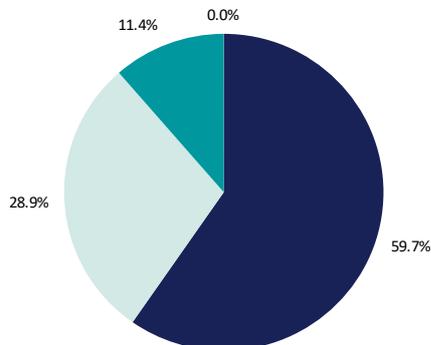
### Development of cover pool data



### Maturity structure

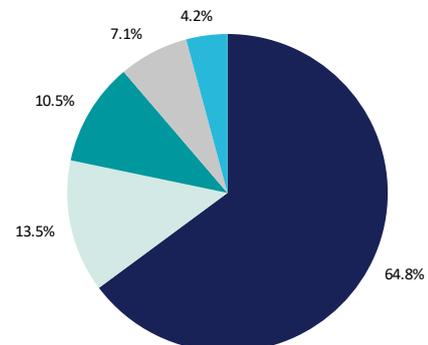


### Composition of primary assets



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

### Regional distribution of claims



■ Germany ■ Switzerland ■ Portugal ■ USA ■ Belgium

## Hamburg Commercial Bank

## Ship

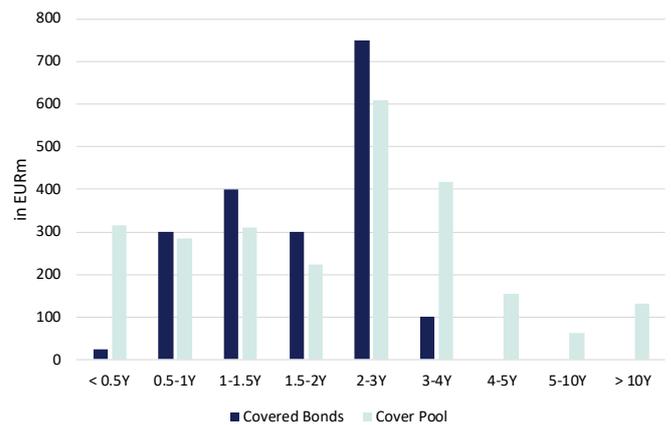
### Cover pool data

Cover pool (EURm)	2,507.1	Number of loans	244
of which substitution assets	8.1%	Number of borrowers	112
of which derivatives	0.0%	Avg. exposure to borrowers (EUR)	19,522,104
Covered bonds (EURm)	1,873.0	Largest FX position (NPV in EURm)	USD (2,221.4)
OC (EURm)	634.1	Share of largest exposure tranche	87.8% (> EUR 5m)
OC	33.9%	Loans in arrears (>90 days)	0.00%
Fixed interest (Cover pool)	41.3%		
Fixed interest (Covered bonds)	13.3%		
WAL (Cover pool)	3.6y		
WAL (Covered Bonds)	1.9y		

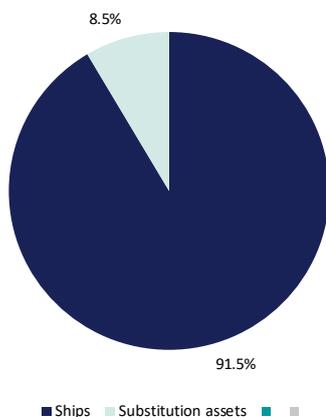
### Development of cover pool data



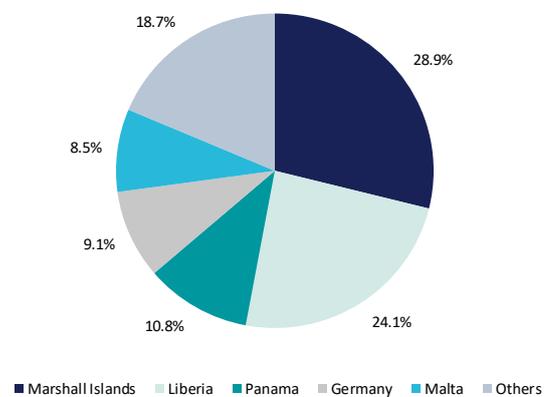
### Maturity structure



### Composition of cover pool



### Regional distribution of primary assets



## Hamburger Sparkasse

## Mortgage

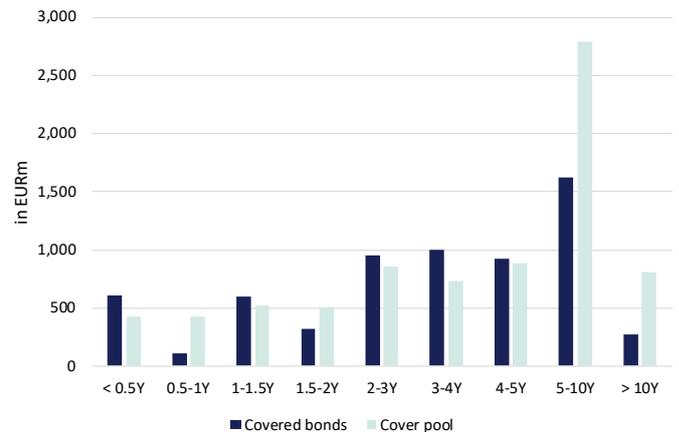
### Cover pool data

Cover pool (EURm)	7,960.9	Number of loans	n/a
of which residential	65.1%	Number of borrowers	n/a
of which commercial	27.9%	Number of properties	n/a
of which substitution assets	6.9%	Avg. exposure to borrowers (EUR)	n/a
of which derivatives	0.0%	Share of 10 largest borrowers	n/a
Covered bonds (EURm)	6,411.9	Share of owner-occupied dwellings	n/a
OC (EURm)	1,549.0	Share of multi-family houses	n/a
OC	24.2%	EUR share (Cover pool)	n/a
Fixed interest (Cover pool)	84.7%	EUR share (Covered bonds)	n/a
Fixed interest (Covered bonds)	99.4%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	n/a	Share of largest exposure tranche	32.1% (EUR 1-10m)
WAL (Covered Bonds)	n/a	Avg. seasoning	7.5y
Avg. LTV (Original value)	52.0%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

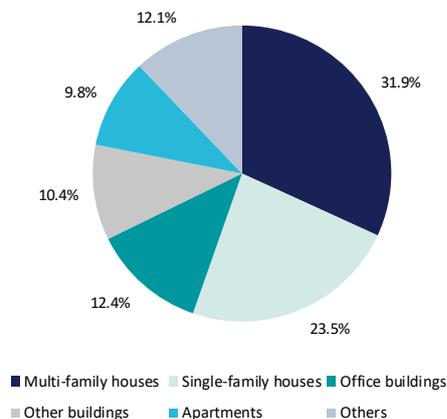
### Development of cover pool data



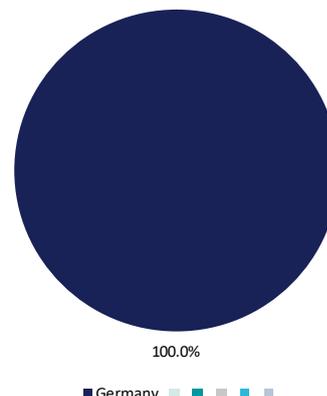
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## ING-DiBa

### Cover pool data

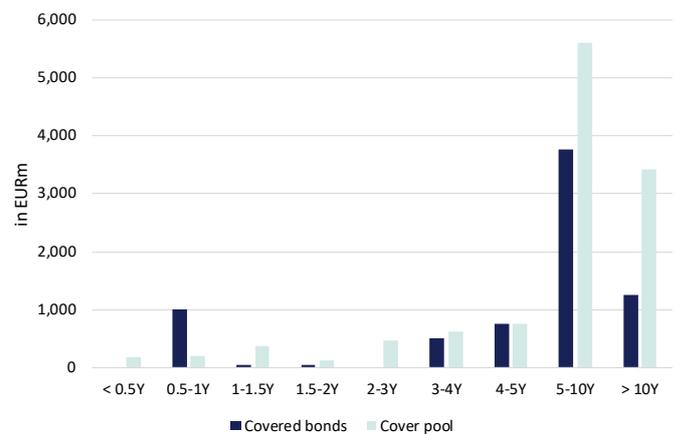
Cover pool (EURm)	11,784.6	Number of loans	90,851
of which residential	95.6%	Number of borrowers	89,402
of which commercial	0.0%	Number of properties	90,851
of which substitution assets	4.4%	Avg. exposure to borrowers (EUR)	125,976
of which derivatives	0.0%	Share of 10 largest borrowers	0.2%
Covered bonds (EURm)	7,355.0	Share of owner-occupied dwellings	78.2%
OC (EURm)	4,429.6	Share of multi-family houses	0.0%
OC	60.2%	EUR share (Cover pool)	100.0%
Fixed interest (Cover pool)	100.0%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	99.3%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	8.4y	Share of largest exposure tranche	87.1% (< EUR 0.3m)
WAL (Covered Bonds)	6.5y	Avg. seasoning	4.8y
Avg. LTV (Original value)	54.5%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	47.8%		

## Mortgage

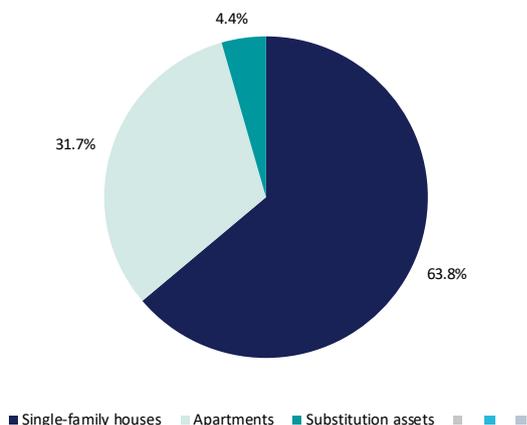
### Development of cover pool data



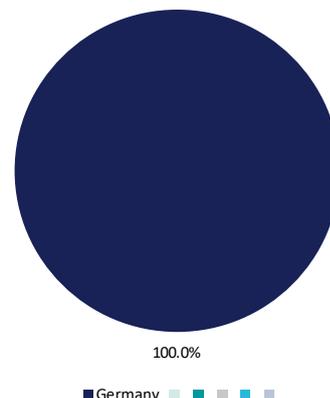
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



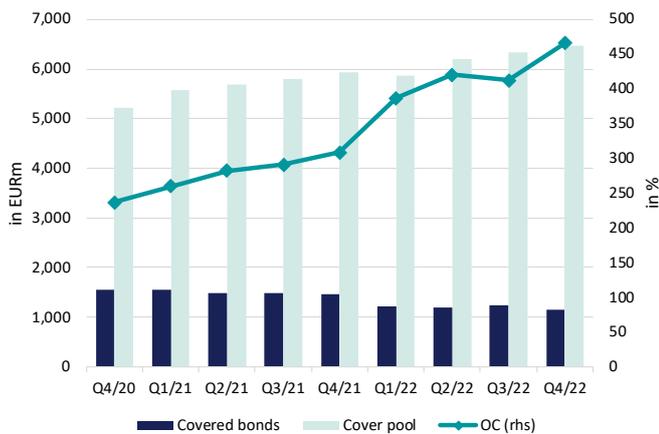
## Kreissparkasse Köln

## Mortgage

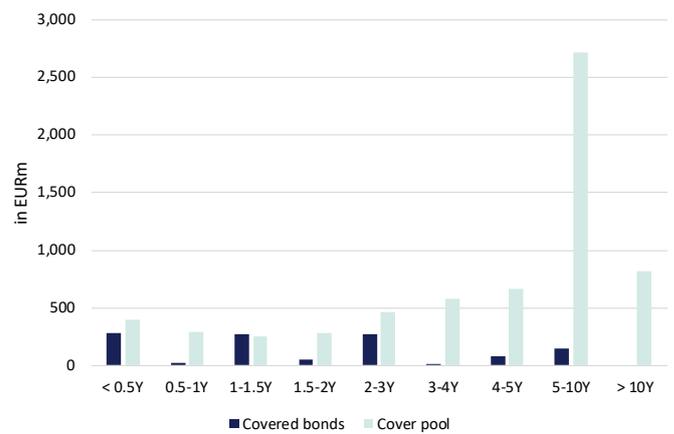
### Cover pool data

Cover pool (EURm)	6,465.9	Number of loans	46,588
of which residential	83.7%	Number of borrowers	37,287
of which commercial	11.7%	Number of properties	43,806
of which substitution assets	4.7%	Avg. exposure to borrowers (EUR)	165,307
of which derivatives	0.0%	Share of 10 largest borrowers	1.8%
Covered bonds (EURm)	1,142.5	Share of owner-occupied dwellings	n/a
OC (EURm)	5,323.4	Share of multi-family houses	23.9%
OC	465.9%	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)	5.7y	Share of largest exposure tranche	66.1% (< EUR 0.3m)
WAL (Covered Bonds)	2.3y	Avg. seasoning	5.2y
Avg. LTV (Original value)	53.3%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

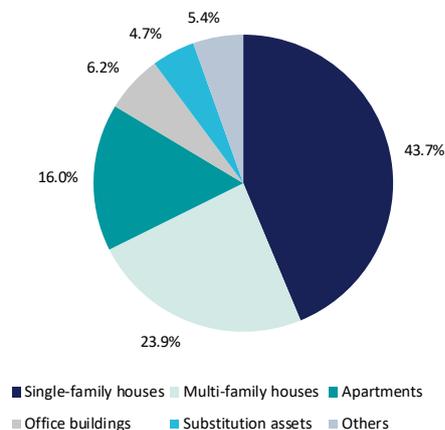
### Development of cover pool data



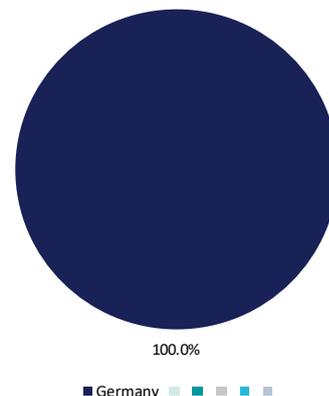
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## Kreissparkasse Köln

## Public sector

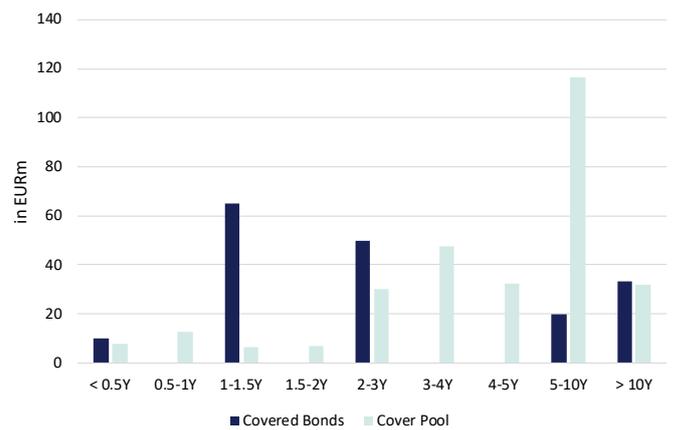
### Cover pool data

Cover pool (EURm)	292.7	Number of loans	142
of which substitution assets	0.0%	Number of borrowers	47
of which derivatives	0.0%	Share of 10 largest borrowers	73.4%
Covered bonds (EURm)	178.4	Avg. exposure to borrowers (EUR)	6,228,033
OC (EURm)	114.3	EUR share (Cover pool)	n/a
OC	64.1%	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	62.5% (EUR 10-100m)
WAL (Cover pool)	5.1y	Loans in arrears (>90 days)	0.00%
WAL (Covered Bonds)	4.0y		

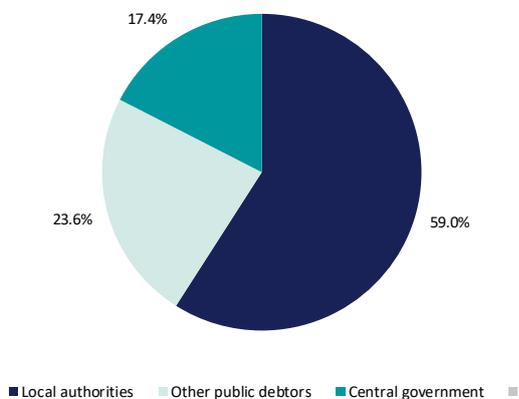
### Development of cover pool data



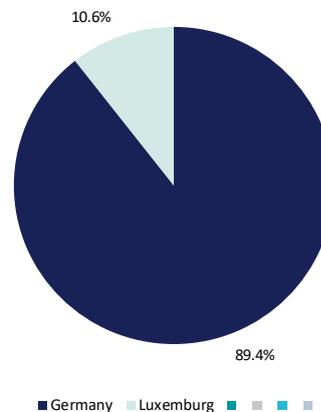
### Maturity structure



### Composition of primary assets



### Regional distribution of claims



## Landesbank Baden-Württemberg

## Mortgage

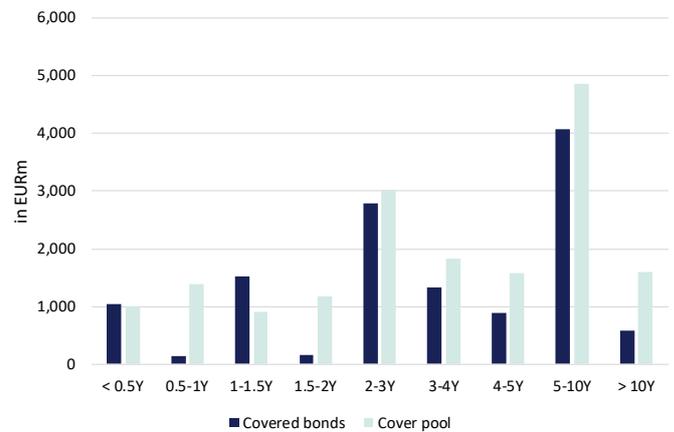
### Cover pool data

Cover pool (EURm)	17,334.6	Number of loans	35,162
of which residential	41.4%	Number of borrowers	26,821
of which commercial	53.9%	Number of properties	33,014
of which substitution assets	4.7%	Avg. exposure to borrowers (EUR)	615,968
of which derivatives	0.0%	Share of 10 largest borrowers	13.5%
Covered bonds (EURm)	12,558.0	Share of owner-occupied dwellings	16.0%
OC (EURm)	4,776.6	Share of multi-family houses	24.3%
OC	38.0%	EUR share (Cover pool)	85.0%
Fixed interest (Cover pool)	81.0%	EUR share (Covered bonds)	94.0%
Fixed interest (Covered bonds)	64.2%	Largest FX position (NPV in EURm)	GBP (915.4)
WAL (Cover pool)	4.7y	Share of largest exposure tranche	60.7% (> EUR 10m)
WAL (Covered Bonds)	4.0y	Avg. seasoning	5.6y
Avg. LTV (Original value)	55.4%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

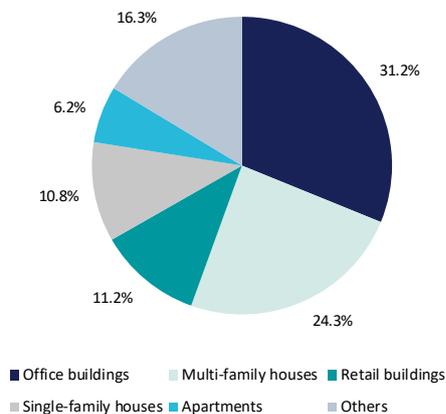
### Development of cover pool data



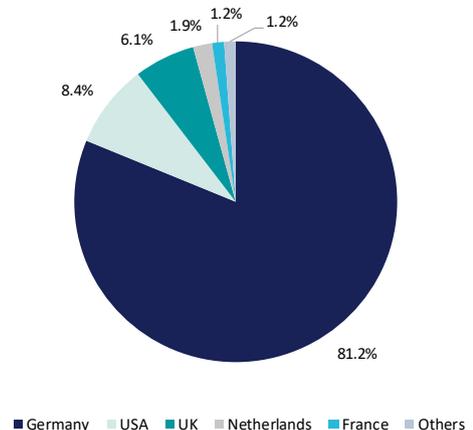
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## Landesbank Baden-Württemberg

## Public sector

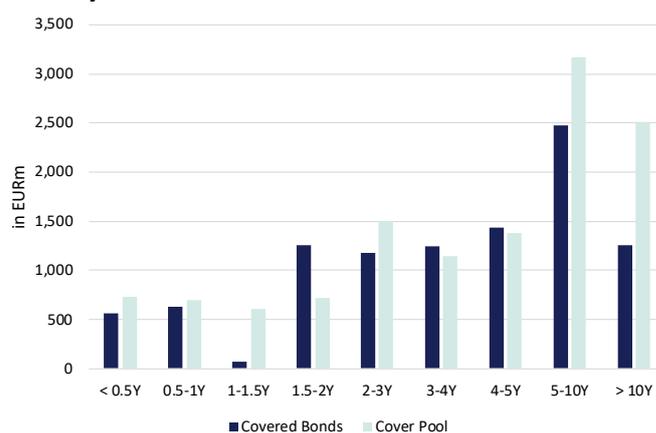
### Cover pool data

Cover pool (EURm)	12,464.5	Number of loans	7,325
of which substitution assets	0.0%	Number of borrowers	2,863
of which derivatives	0.0%	Share of 10 largest borrowers	22.2%
Covered bonds (EURm)	10,141.8	Avg. exposure to borrowers (EUR)	4,353,661
OC (EURm)	2,322.8	EUR share (Cover pool)	97.7%
OC	22.9%	EUR share (Covered bonds)	98.9%
Fixed interest (Cover pool)	74.4%	Largest FX position (NPV in EURm)	USD (183.9)
Fixed interest (Covered bonds)	70.0%	Share of largest exposure tranche	49.7% (> EUR 100m)
WAL (Cover pool)	6.2y	Loans in arrears (>90 days)	0.00%
WAL (Covered Bonds)	4.9y		

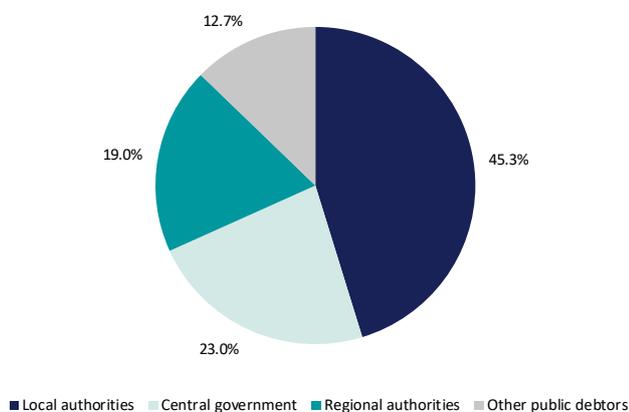
### Development of cover pool data



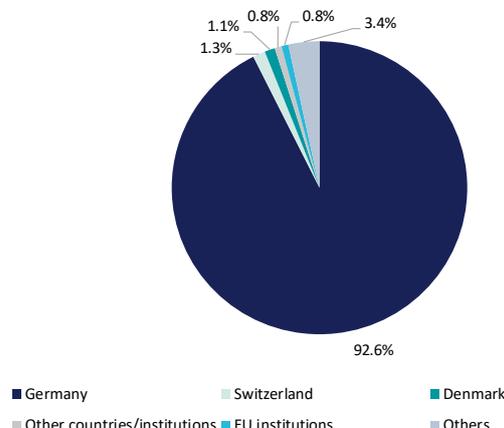
### Maturity structure



### Composition of primary assets



### Regional distribution of claims



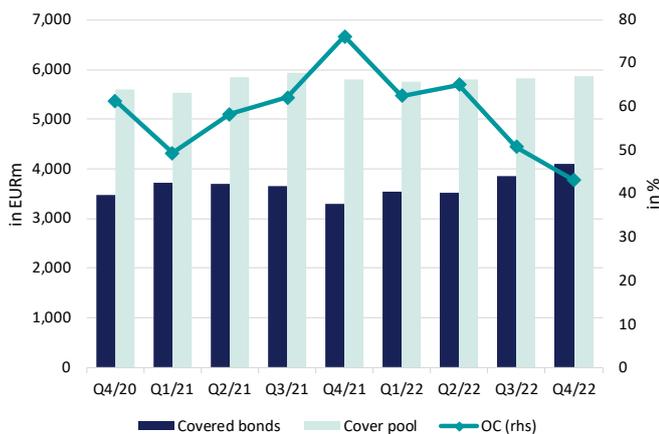
## Landesbank Berlin

## Mortgage

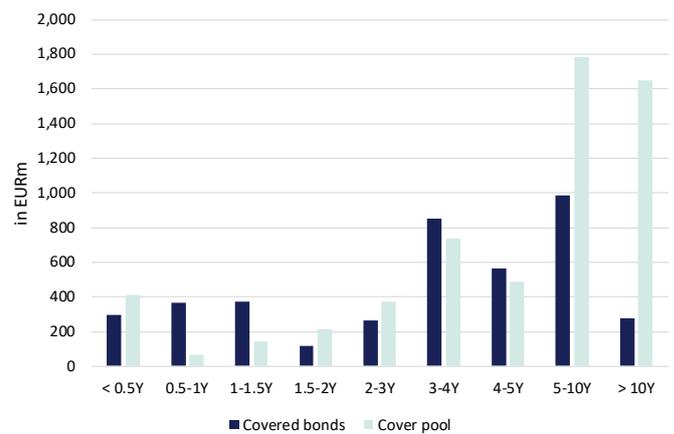
### Cover pool data

Cover pool (EURm)	5,862.2	Number of loans	8,411
of which residential	66.0%	Number of borrowers	7,591
of which commercial	29.0%	Number of properties	8,634
of which substitution assets	5.0%	Avg. exposure to borrowers (EUR)	733,599
of which derivatives	0.0%	Share of 10 largest borrowers	23.1%
Covered bonds (EURm)	4,098.0	Share of owner-occupied dwellings	4.6%
OC (EURm)	1,764.2	Share of multi-family houses	52.2%
OC	43.1%	EUR share (Cover pool)	100.0%
Fixed interest (Cover pool)	91.0%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	97.0%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	11.0y	Share of largest exposure tranche	56.7% (> EUR 10m)
WAL (Covered Bonds)	4.5y	Avg. seasoning	5.0y
Avg. LTV (Original value)	54.0%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

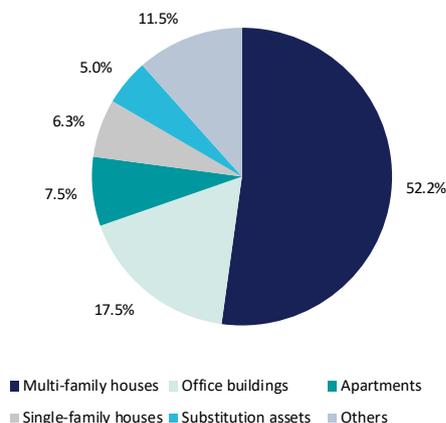
### Development of cover pool data



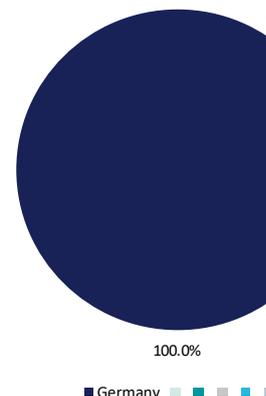
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



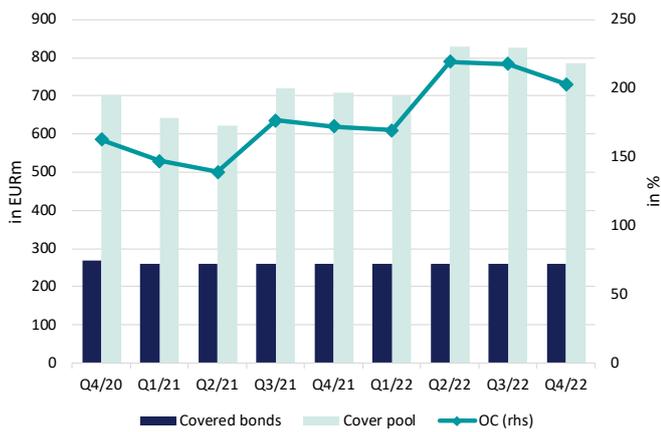
## Landesbank Berlin

### Cover pool data

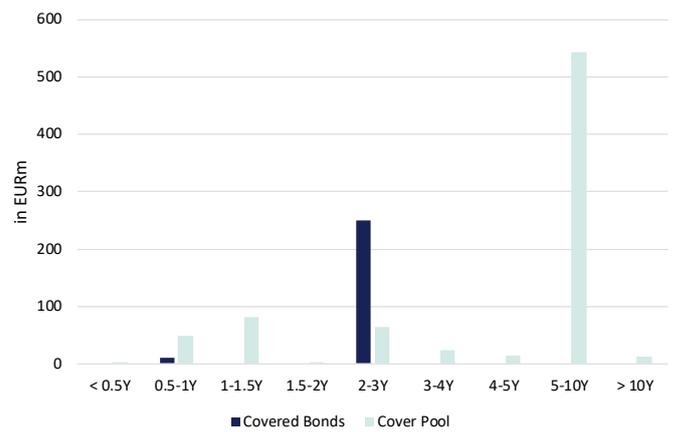
Cover pool (EURm)	787.2	Number of loans	32
of which substitution assets	0.0%	Number of borrowers	17
of which derivatives	0.0%	Share of 10 largest borrowers	98.1%
Covered bonds (EURm)	260.0	Avg. exposure to borrowers (EUR)	46,304,765
OC (EURm)	527.2	EUR share (Cover pool)	100.0%
OC	202.8%	EUR share (Covered bonds)	100.0%
Fixed interest (Cover pool)	100.0%	Largest FX position (NPV in EURm)	-
Fixed interest (Covered bonds)	100.0%	Share of largest exposure tranche	91.5% (> EUR 100m)
WAL (Cover pool)	5.9y	Loans in arrears (>90 days)	0.00%
WAL (Covered Bonds)	2.5y		

## Public sector

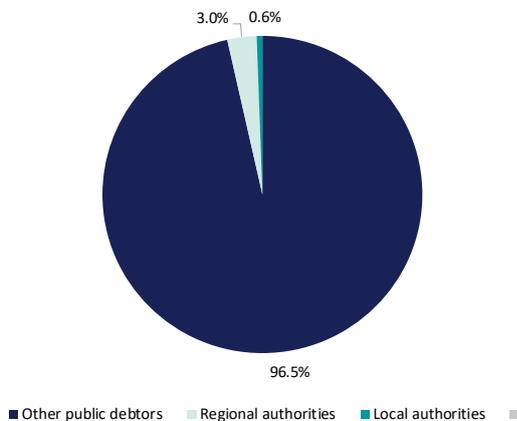
### Development of cover pool data



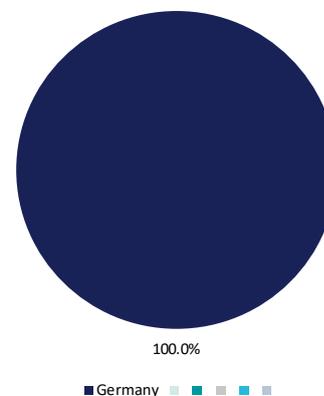
### Maturity structure



### Composition of primary assets



### Regional distribution of claims



## Landesbank Hessen-Thüringen

## Mortgage

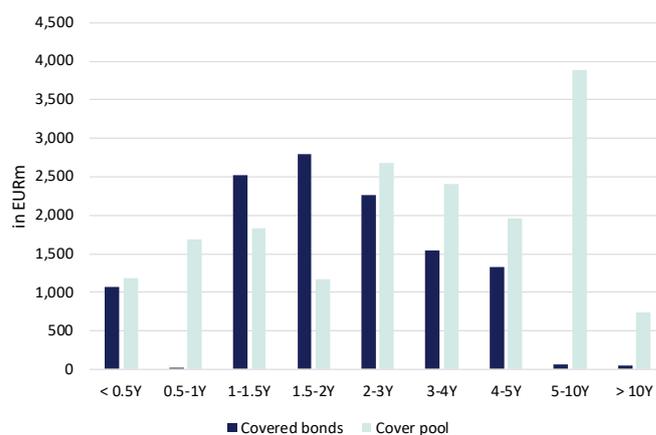
### Cover pool data

Cover pool (EURm)	17,544.3	Number of loans	9,981
of which residential	28.6%	Number of borrowers	8,717
of which commercial	64.7%	Number of properties	10,647
of which substitution assets	6.7%	Avg. exposure to borrowers (EUR)	1,878,592
of which derivatives	0.0%	Share of 10 largest borrowers	8.7%
Covered bonds (EURm)	11,653.7	Share of owner-occupied dwellings	6.6%
OC (EURm)	5,890.7	Share of multi-family houses	22.4%
OC	50.5%	EUR share (Cover pool)	72.7%
Fixed interest (Cover pool)	68.4%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	70.6%	Largest FX position (NPV in EURm)	USD (3,687.1)
WAL (Cover pool)	3.8y	Share of largest exposure tranche	86.7% (> EUR 10m)
WAL (Covered Bonds)	2.3y	Avg. seasoning	4.6y
Avg. LTV (Original value)	59.0%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

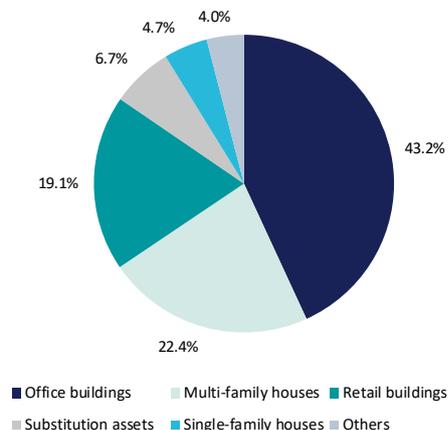
### Development of cover pool data



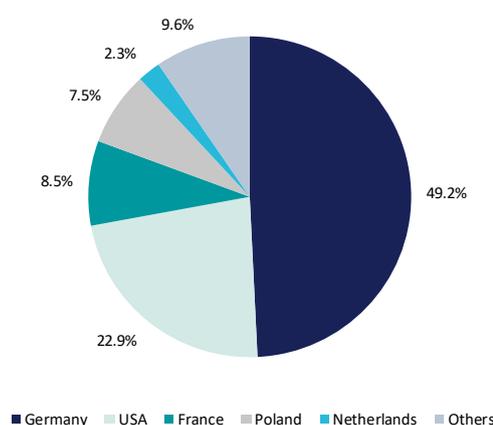
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## Landesbank Hessen-Thüringen

## Public sector

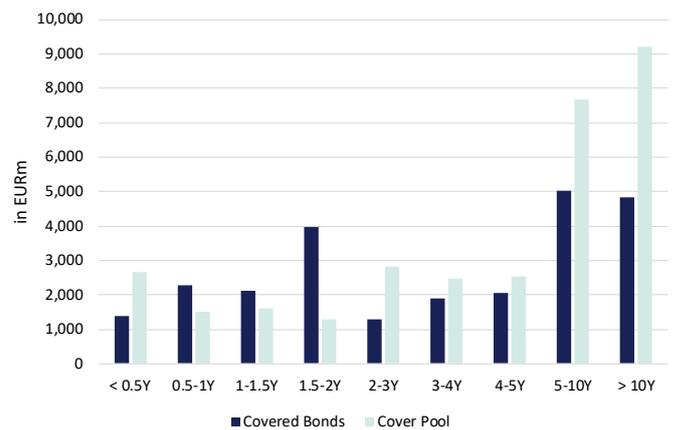
### Cover pool data

Cover pool (EURm)	31,780.6	Number of loans	19,733
of which substitution assets	0.0%	Number of borrowers	4,679
of which derivatives	0.0%	Share of 10 largest borrowers	32.0%
Covered bonds (EURm)	24,879.0	Avg. exposure to borrowers (EUR)	6,792,185
OC (EURm)	6,901.6	EUR share (Cover pool)	98.8%
OC	27.7%	EUR share (Covered bonds)	100.0%
Fixed interest (Cover pool)	93.9%	Largest FX position (NPV in EURm)	USD (294.9)
Fixed interest (Covered bonds)	68.1%	Share of largest exposure tranche	62.3% (> EUR 100m)
WAL (Cover pool)	7.5y	Loans in arrears (>90 days)	0.00%
WAL (Covered Bonds)	5.7y		

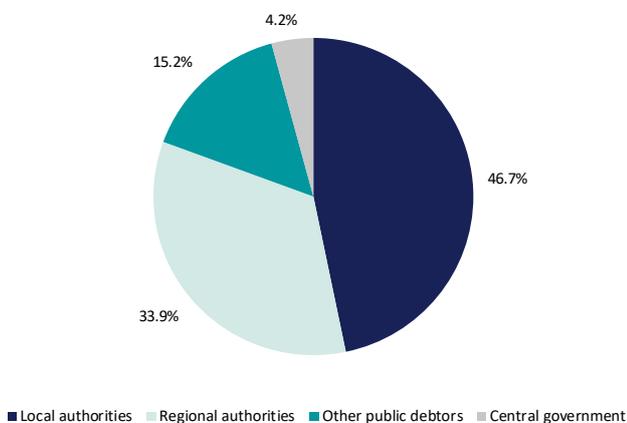
### Development of cover pool data



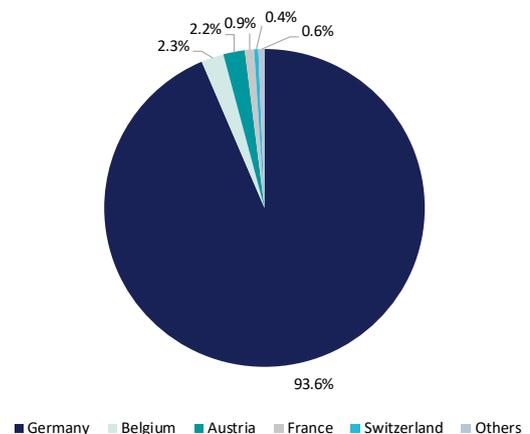
### Maturity structure



### Composition of primary assets



### Regional distribution of claims



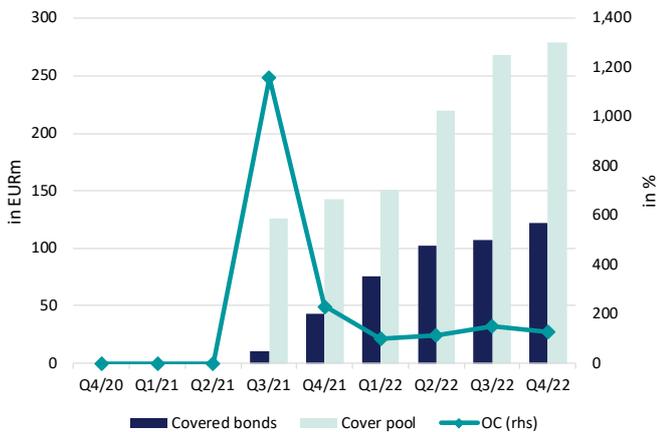
## LIGA Bank

## Mortgage

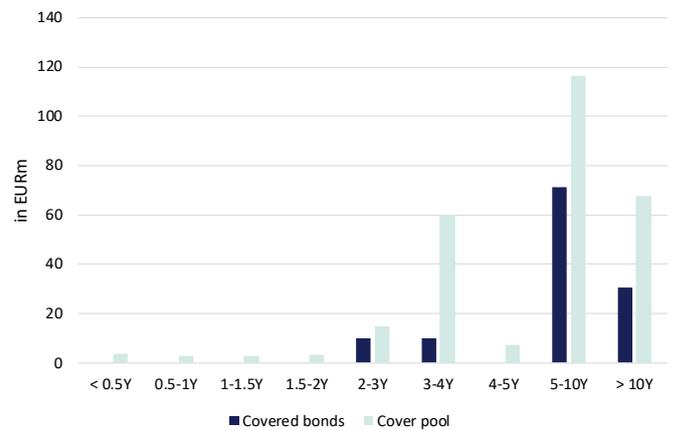
### Cover pool data

Cover pool (EURm)	279.5	Number of loans	n/a
of which residential	96.4%	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)	122.0	Share of owner-occupied dwellings	n/a
OC (EURm)	157.5	Share of multi-family houses	n/a
OC	129.1%	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	56.2% (EUR 1-10m)
WAL (Covered Bonds)	n/a	Avg. seasoning	4.3y
Avg. LTV (Original value)	52.1%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

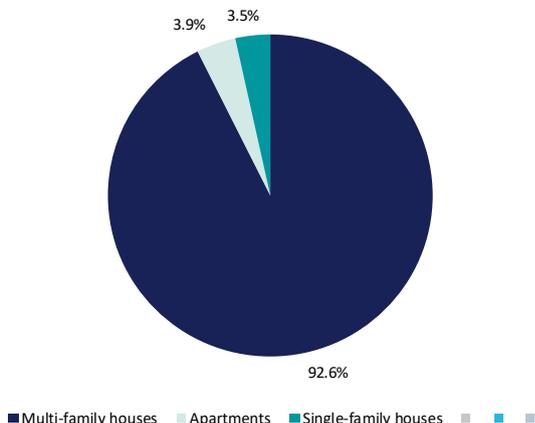
### Development of cover pool data



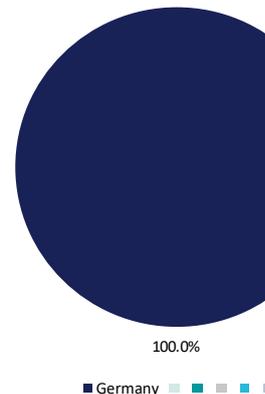
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## LIGA Bank

## Public sector

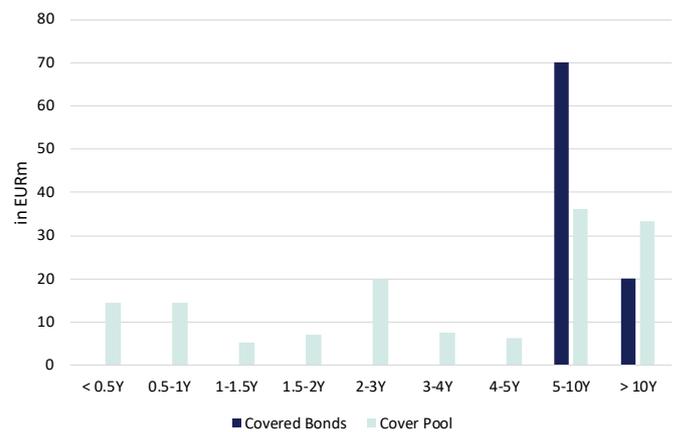
### Cover pool data

Cover pool (EURm)	144.2	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)	90.0	Avg. exposure to borrowers (EUR)	n/a
OC (EURm)	54.2	EUR share (Cover pool)	n/a
OC	60.3%	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	53.1% (< EUR 10m)
WAL (Cover pool)	n/a	Loans in arrears (>90 days)	0.00%
WAL (Covered Bonds)	n/a		

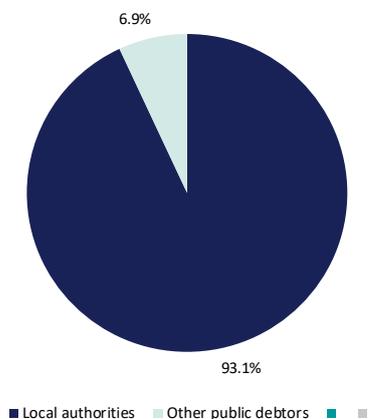
### Development of cover pool data



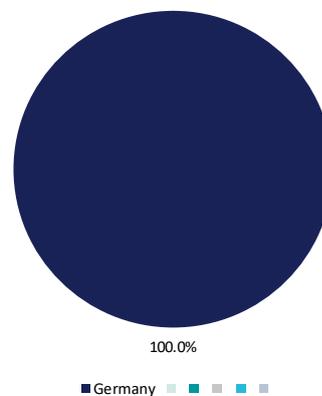
### Maturity structure



### Composition of primary assets



### Regional distribution of claims



## Münchener Hypothekenbank

## Mortgage

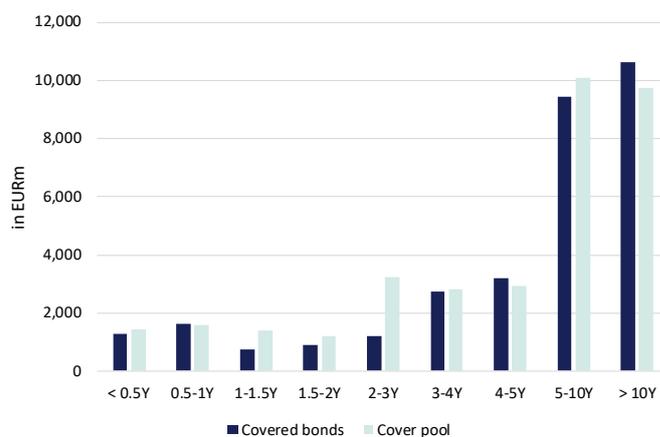
### Cover pool data

Cover pool (EURm)	34,377.0	Number of loans	202,050
of which residential	80.8%	Number of borrowers	177,698
of which commercial	17.5%	Number of properties	189,104
of which substitution assets	1.7%	Avg. exposure to borrowers (EUR)	190,185
of which derivatives	0.0%	Share of 10 largest borrowers	2.0%
Covered bonds (EURm)	31,693.9	Share of owner-occupied dwellings	53.0%
OC (EURm)	2,683.1	Share of multi-family houses	15.2%
OC	8.5%	EUR share (Cover pool)	82.8%
Fixed interest (Cover pool)	96.0%	EUR share (Covered bonds)	86.4%
Fixed interest (Covered bonds)	91.0%	Largest FX position (NPV in EURm)	CHF (795.2)
WAL (Cover pool)	9.2y	Share of largest exposure tranche	58.2% (< EUR 0.3m)
WAL (Covered Bonds)	8.6y	Avg. seasoning	5.0y
Avg. LTV (Original value)	52.0%	Loans in arrears (>90 days)	0.03%
Avg. LTV (Market value)	n/a		

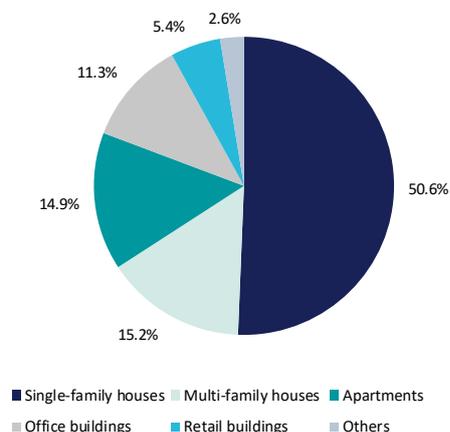
### Development of cover pool data



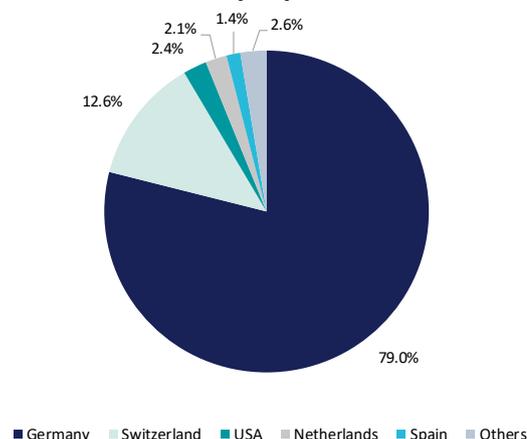
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## Münchener Hypothekbank

## Public sector

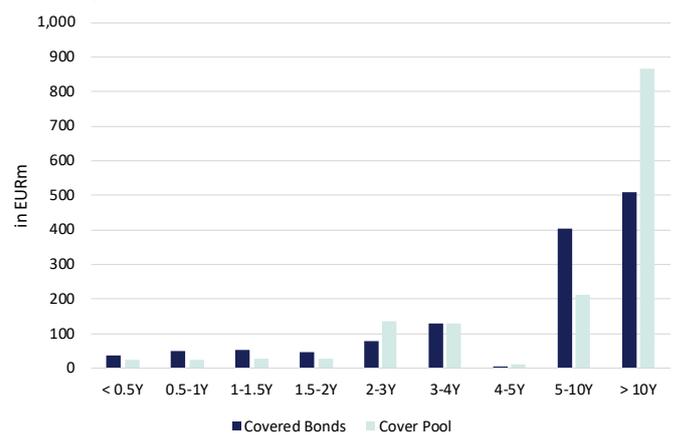
### Cover pool data

Cover pool (EURm)	1,457.0	Number of loans	248
of which substitution assets	0.0%	Number of borrowers	190
of which derivatives	0.0%	Share of 10 largest borrowers	88.2%
Covered bonds (EURm)	1,308.4	Avg. exposure to borrowers (EUR)	7,668,334
OC (EURm)	148.6	EUR share (Cover pool)	100.0%
OC	11.4%	EUR share (Covered bonds)	100.0%
Fixed interest (Cover pool)	91.0%	Largest FX position (NPV in EURm)	-
Fixed interest (Covered bonds)	92.0%	Share of largest exposure tranche	66.9% (> EUR 100m)
WAL (Cover pool)	11.7y	Loans in arrears (>90 days)	0.00%
WAL (Covered Bonds)	8.0y		

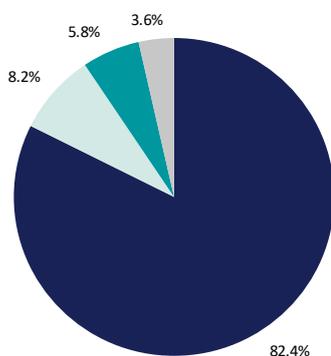
### Development of cover pool data



### Maturity structure

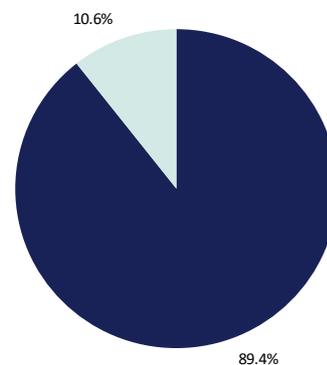


### Composition of primary assets



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

### Regional distribution of claims



■ Germany ■ Austria

## M.M.Warburg & CO Hypothekenbank

## Mortgage

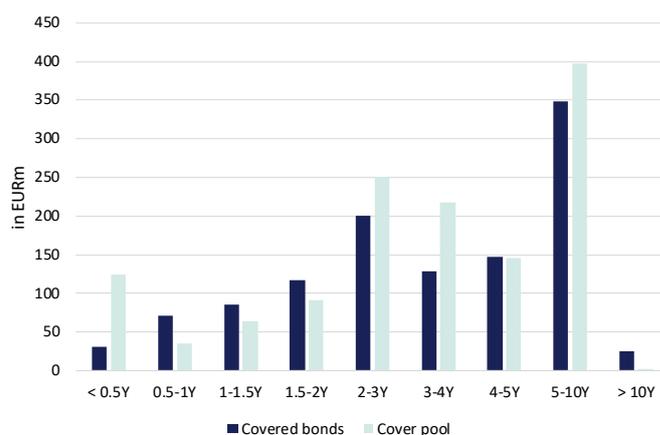
### Cover pool data

Cover pool (EURm)	1,326.1	Number of loans	311
of which residential	21.4%	Number of borrowers	178
of which commercial	73.7%	Number of properties	340
of which substitution assets	4.9%	Avg. exposure to borrowers (EUR)	7,084,775
of which derivatives	0.0%	Share of 10 largest borrowers	24.1%
Covered bonds (EURm)	1,156.5	Share of owner-occupied dwellings	0.1%
OC (EURm)	169.6	Share of multi-family houses	17.6%
OC	14.7%	EUR share (Cover pool)	100.0%
Fixed interest (Cover pool)	94.7%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	98.1%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	3.9y	Share of largest exposure tranche	50.6% (EUR 1-10m)
WAL (Covered Bonds)	4.1y	Avg. seasoning	6.1y
Avg. LTV (Original value)	57.1%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

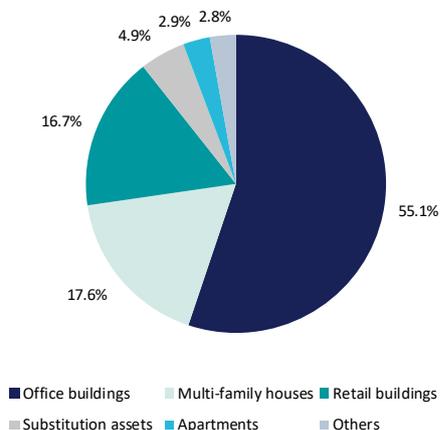
### Development of cover pool data



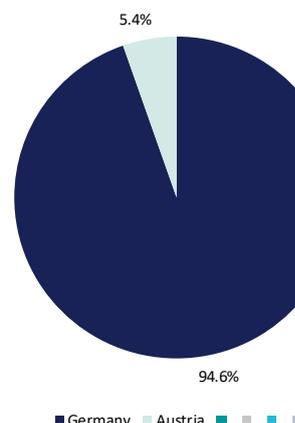
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## NATIXIS Pfandbriefbank

## Mortgage

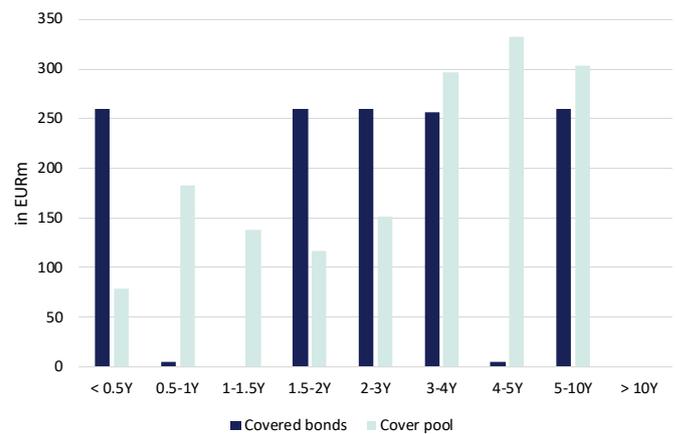
### Cover pool data

Cover pool (EURm)	1,600.3	Number of loans	81
of which residential	3.5%	Number of borrowers	98
of which commercial	81.2%	Number of properties	256
of which substitution assets	15.3%	Avg. exposure to borrowers (EUR)	13,824,388
of which derivatives	0.0%	Share of 10 largest borrowers	21.5%
Covered bonds (EURm)	1,306.0	Share of owner-occupied dwellings	0.0%
OC (EURm)	294.3	Share of multi-family houses	3.5%
OC	22.5%	EUR share (Cover pool)	100.0%
Fixed interest (Cover pool)	45.7%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	100.0%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	3.3y	Share of largest exposure tranche	91.9% (> EUR 10m)
WAL (Covered Bonds)	3.3y	Avg. seasoning	4.0y
Avg. LTV (Original value)	57.2%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

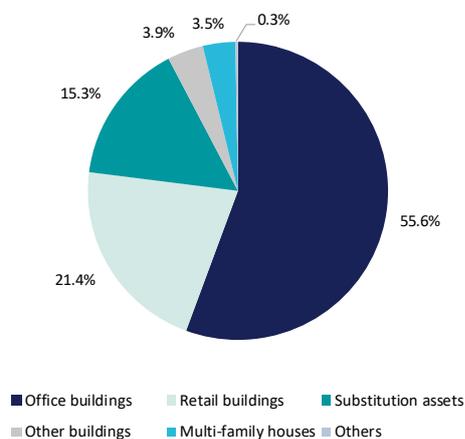
### Development of cover pool data



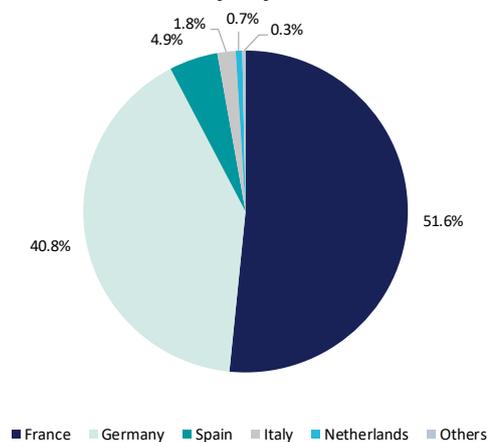
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## Norddeutsche Landesbank

## Mortgage

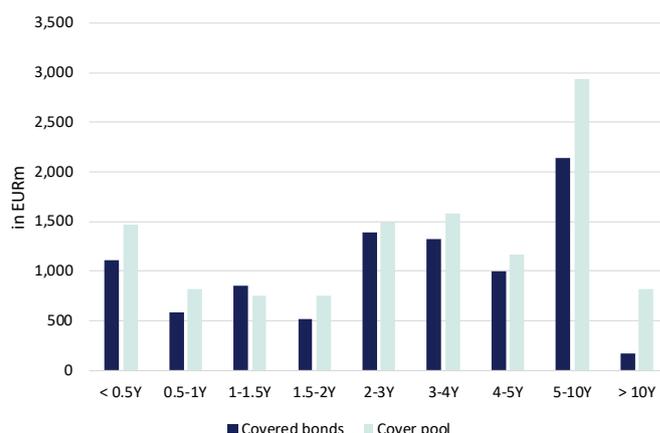
### Cover pool data

Cover pool (EURm)	11,801.0	Number of loans	n/a
of which residential	38.5%	Number of borrowers	n/a
of which commercial	55.3%	Number of properties	n/a
of which substitution assets	6.2%	Avg. exposure to borrowers (EUR)	n/a
of which derivatives	0.0%	Share of 10 largest borrowers	n/a
Covered bonds (EURm)	9,100.1	Share of owner-occupied dwellings	n/a
OC (EURm)	2,700.9	Share of multi-family houses	n/a
OC	29.7%	EUR share (Cover pool)	n/a
Fixed interest (Cover pool)	81.2%	EUR share (Covered bonds)	n/a
Fixed interest (Covered bonds)	97.7%	Largest FX position (NPV in EURm)	GBP (390.0)
WAL (Cover pool)	n/a	Share of largest exposure tranche	57.8% (> EUR 10m)
WAL (Covered Bonds)	n/a	Avg. seasoning	6.3y
Avg. LTV (Original value)	60.0%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

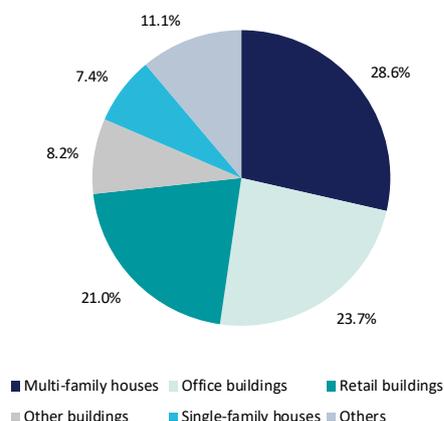
### Development of cover pool data



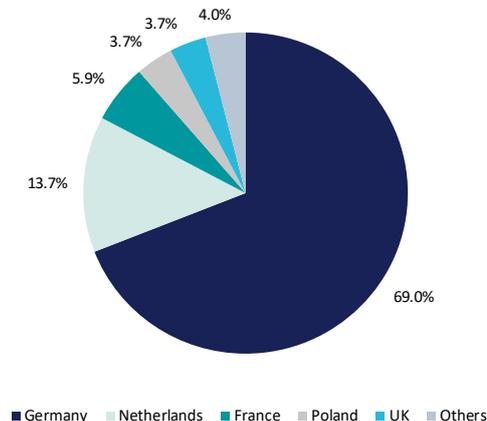
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## Norddeutsche Landesbank

## Public sector

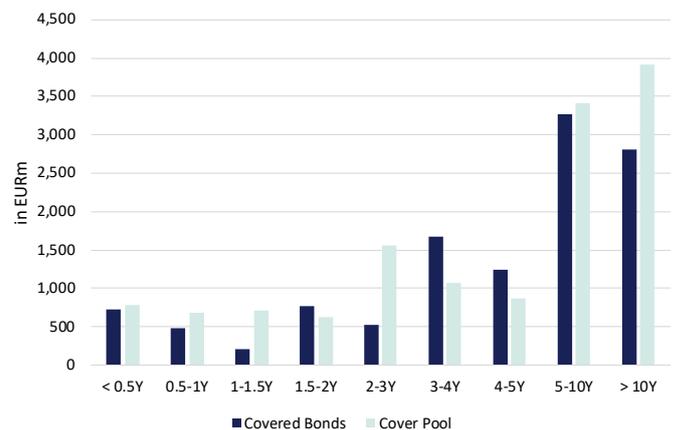
### Cover pool data

Cover pool (EURm)	13,626.8	Number of loans	3,875
of which substitution assets	2.4%	Number of borrowers	1,395
of which derivatives	0.0%	Share of 10 largest borrowers	22.8%
Covered bonds (EURm)	11,696.3	Avg. exposure to borrowers (EUR)	9,537,921
OC (EURm)	1,930.5	EUR share (Cover pool)	96.7%
OC	16.5%	EUR share (Covered bonds)	99.5%
Fixed interest (Cover pool)	87.8%	Largest FX position (NPV in EURm)	USD (203.2)
Fixed interest (Covered bonds)	97.5%	Share of largest exposure tranche	41.0% (EUR 10-100m)
WAL (Cover pool)	7.5y	Loans in arrears (>90 days)	0.06%
WAL (Covered Bonds)	6.8y		

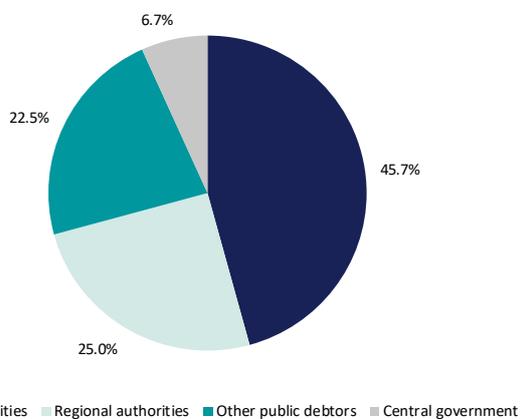
### Development of cover pool data



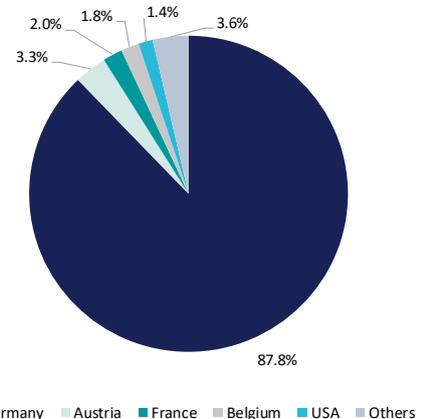
### Maturity structure



### Composition of primary assets



### Regional distribution of claims



## Oldenburgische Landesbank

## Mortgage

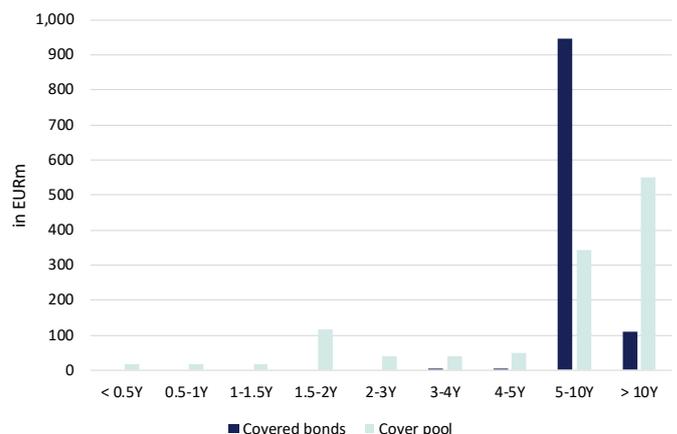
### Cover pool data

Cover pool (EURm)	1,190.1	Number of loans	n/a
of which residential	89.6%	Number of borrowers	n/a
of which commercial	2.0%	Number of properties	n/a
of which substitution assets	8.4%	Avg. exposure to borrowers (EUR)	n/a
of which derivatives	0.0%	Share of 10 largest borrowers	n/a
Covered bonds (EURm)	1,061.0	Share of owner-occupied dwellings	n/a
OC (EURm)	129.1	Share of multi-family houses	n/a
OC	12.2%	EUR share (Cover pool)	n/a
Fixed interest (Cover pool)	91.6%	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	94.7% (< EUR 0.3m)
WAL (Covered Bonds)	n/a	Avg. seasoning	4.4y
Avg. LTV (Original value)	56.0%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

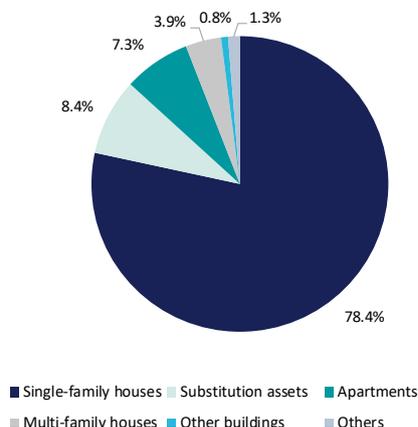
### Development of cover pool data



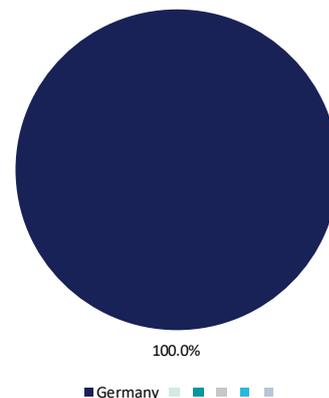
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



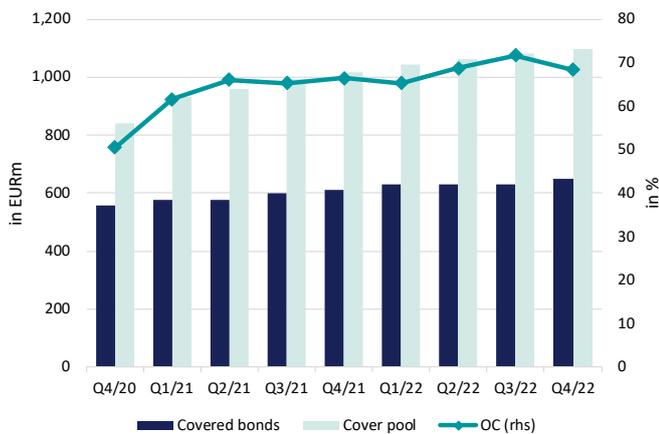
## PSD Bank Nürnberg

## Mortgage

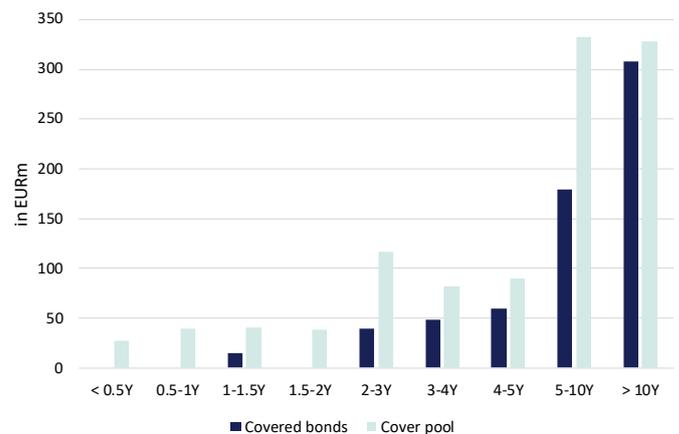
### Cover pool data

Cover pool (EURm)	1,095.9	Number of loans	11,110
of which residential	97.7%	Number of borrowers	8,924
of which commercial	0.0%	Number of properties	10,270
of which substitution assets	2.3%	Avg. exposure to borrowers (EUR)	119,944
of which derivatives	0.0%	Share of 10 largest borrowers	0.4%
Covered bonds (EURm)	650.6	Share of owner-occupied dwellings	85.2%
OC (EURm)	445.3	Share of multi-family houses	0.0%
OC	68.4%	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)	7.3y	Share of largest exposure tranche	99.1% (< EUR 0.3m)
WAL (Covered Bonds)	10.8y	Avg. seasoning	5.1y
Avg. LTV (Original value)	50.7%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

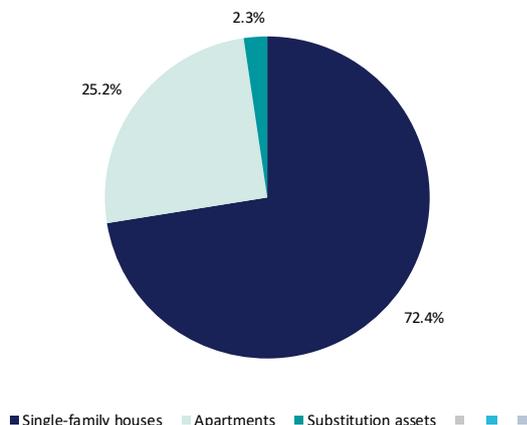
### Development of cover pool data



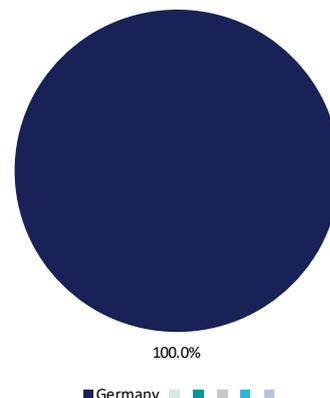
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## PSD Bank Rhein-Ruhr

## Mortgage

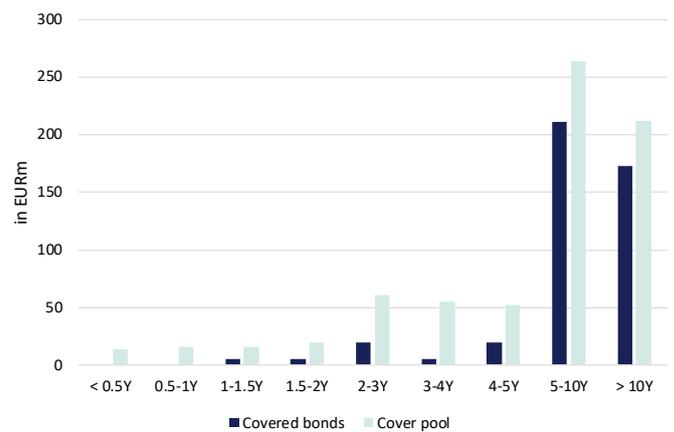
### Cover pool data

Cover pool (EURm)	708.6	Number of loans	7,287
of which residential	97.2%	Number of borrowers	5,779
of which commercial	0.0%	Number of properties	6,078
of which substitution assets	2.8%	Avg. exposure to borrowers (EUR)	119,240
of which derivatives	0.0%	Share of 10 largest borrowers	1.0%
Covered bonds (EURm)	439.0	Share of owner-occupied dwellings	88.6%
OC (EURm)	269.6	Share of multi-family houses	6.1%
OC	61.4%	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)	7.8y	Share of largest exposure tranche	93.1% (< EUR 0.3m)
WAL (Covered Bonds)	8.8y	Avg. seasoning	4.8y
Avg. LTV (Original value)	50.9%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

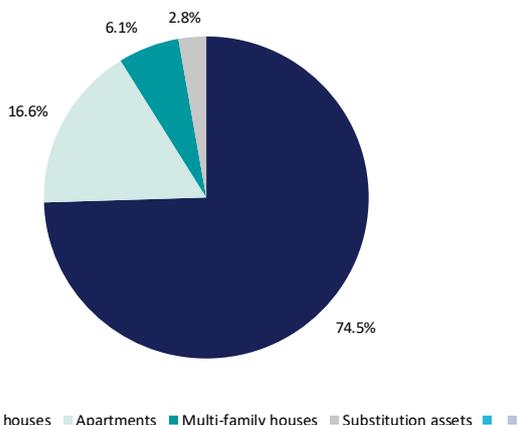
### Development of cover pool data



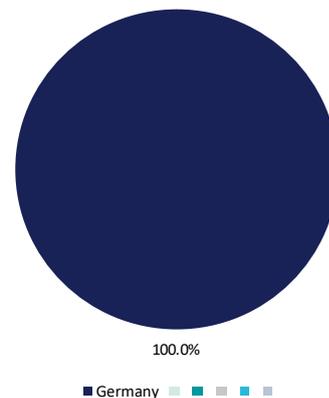
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



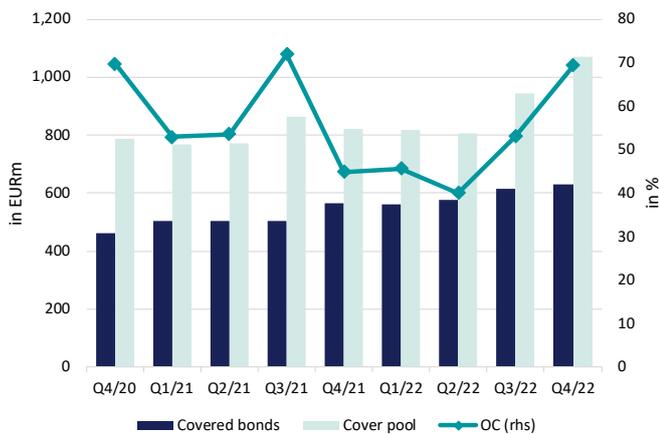
## SaarLB

## Mortgage

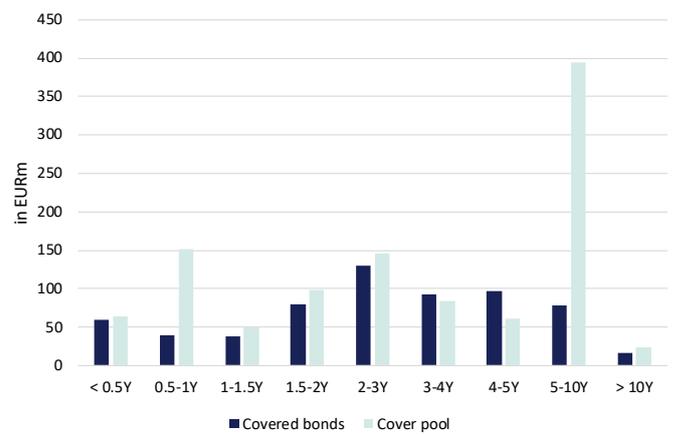
### Cover pool data

Cover pool (EURm)	1,069.6	Number of loans	n/a
of which residential	1.8%	Number of borrowers	n/a
of which commercial	94.4%	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)	631.3	Share of owner-occupied dwellings	n/a
OC (EURm)	438.3	Share of multi-family houses	n/a
OC	69.4%	EUR share (Cover pool)	n/a
Fixed interest (Cover pool)	80.7%	EUR share (Covered bonds)	n/a
Fixed interest (Covered bonds)	98.4%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	n/a	Share of largest exposure tranche	58.1% (> EUR 10m)
WAL (Covered Bonds)	n/a	Avg. seasoning	5.1y
Avg. LTV (Original value)	52.2%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

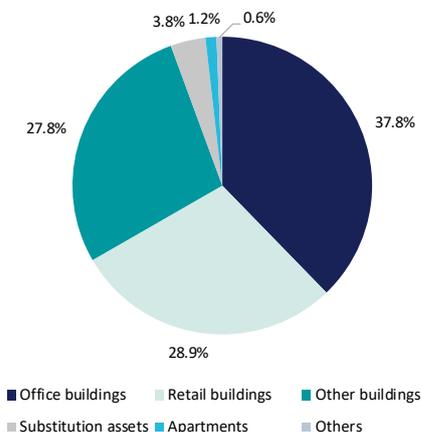
### Development of cover pool data



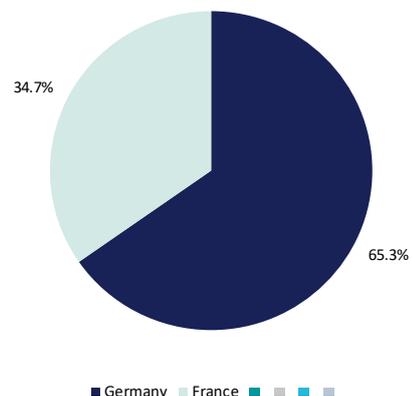
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## SaarLB

## Public sector

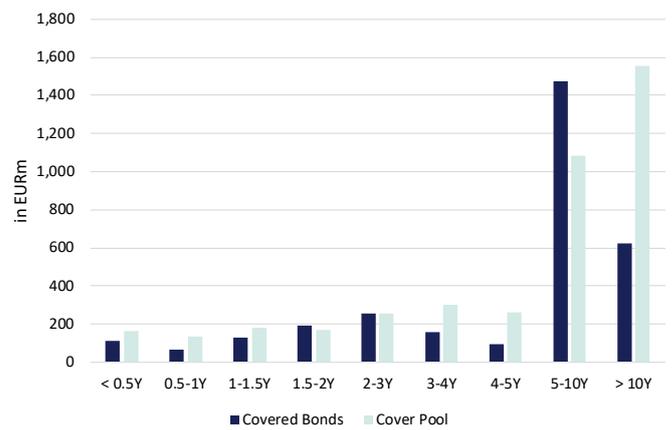
### Cover pool data

Cover pool (EURm)	4,099.6	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)	3,104.7	Avg. exposure to borrowers (EUR)	n/a
OC (EURm)	994.9	EUR share (Cover pool)	n/a
OC	32.0%	EUR share (Covered bonds)	n/a
Fixed interest (Cover pool)	75.9%	Largest FX position (NPV in EURm)	-
Fixed interest (Covered bonds)	98.4%	Share of largest exposure tranche	63.0% (EUR 10-100m)
WAL (Cover pool)	n/a	Loans in arrears (>90 days)	0.00%
WAL (Covered Bonds)	n/a		

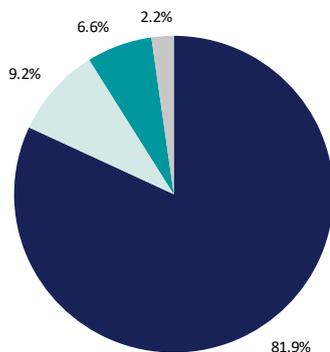
### Development of cover pool data



### Maturity structure

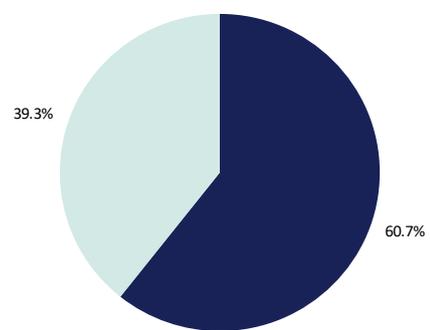


### Composition of primary assets



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

### Regional distribution of claims



■ Germany ■ France ■ ■ ■ ■

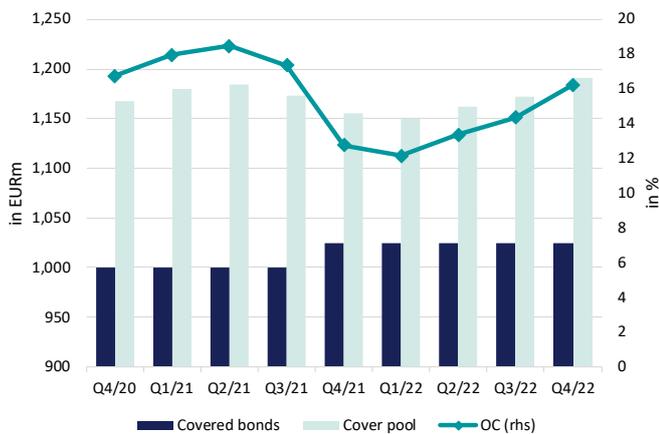
## Santander Consumer Bank

## Mortgage

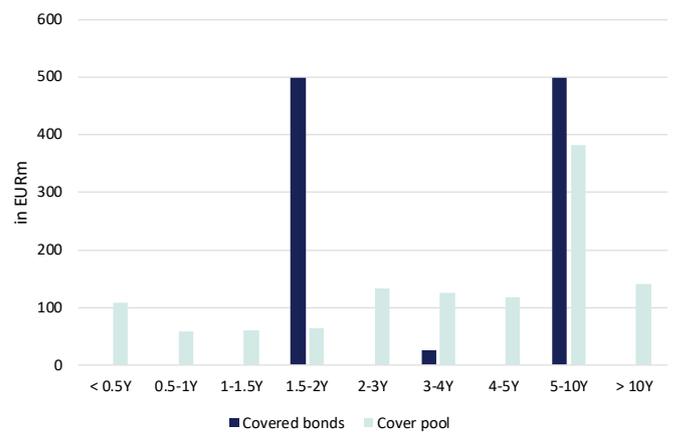
### Cover pool data

Cover pool (EURm)	1,191.3	Number of loans	18,716
of which residential	95.7%	Number of borrowers	23,208
of which commercial	0.0%	Number of properties	13,892
of which substitution assets	0.0%	Avg. exposure to borrowers (EUR)	49,124
of which derivatives	0.0%	Share of 10 largest borrowers	0.4%
Covered bonds (EURm)	1,025.0	Share of owner-occupied dwellings	83.2%
OC (EURm)	166.3	Share of multi-family houses	2.1%
OC	16.2%	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)	5.1y	Share of largest exposure tranche	96.1% (< EUR 0.3m)
WAL (Covered Bonds)	4.5y	Avg. seasoning	6.9y
Avg. LTV (Original value)	45.2%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

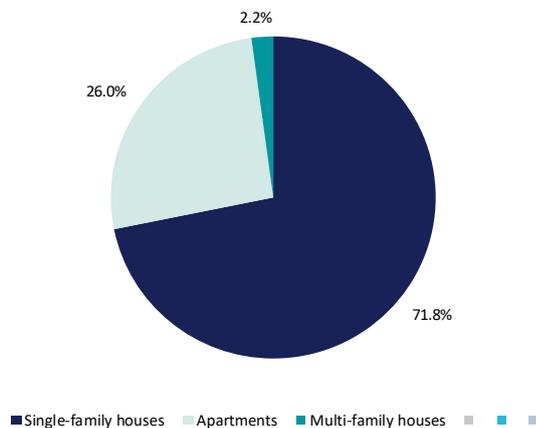
### Development of cover pool data



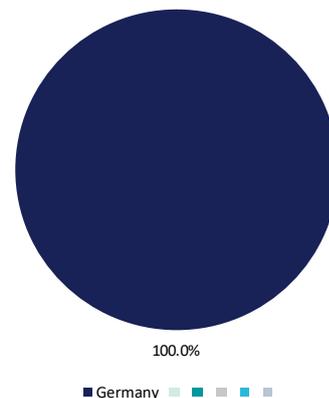
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



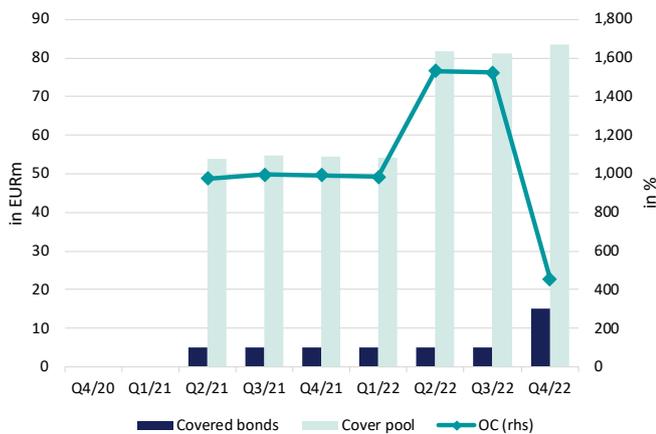
## Sparda-Bank Südwest

## Mortgage

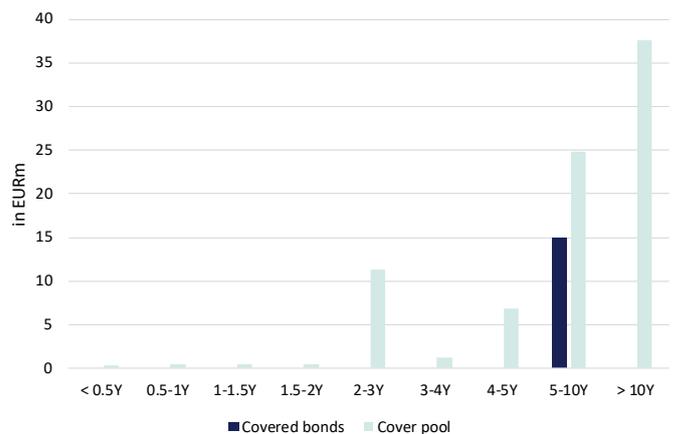
### Cover pool data

Cover pool (EURm)	83.4	Number of loans	n/a
of which residential	88.0%	Number of borrowers	n/a
of which commercial	0.0%	Number of properties	n/a
of which substitution assets	12.0%	Avg. exposure to borrowers (EUR)	n/a
of which derivatives	0.0%	Share of 10 largest borrowers	n/a
Covered bonds (EURm)	15.0	Share of owner-occupied dwellings	n/a
OC (EURm)	68.4	Share of multi-family houses	n/a
OC	456.0%	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	82.6% (< EUR 0.3m)
WAL (Covered Bonds)	n/a	Avg. seasoning	3.8y
Avg. LTV (Original value)	57.7%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

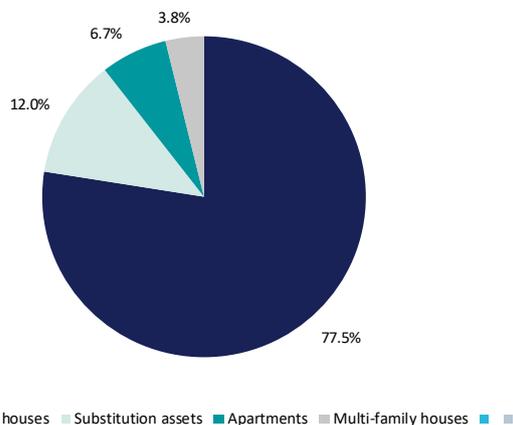
### Development of cover pool data



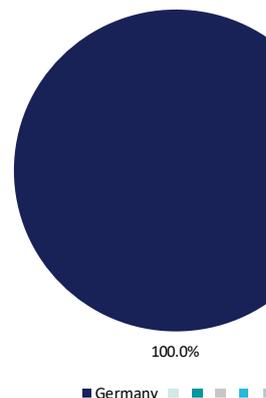
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## Sparkasse Hannover

## Mortgage

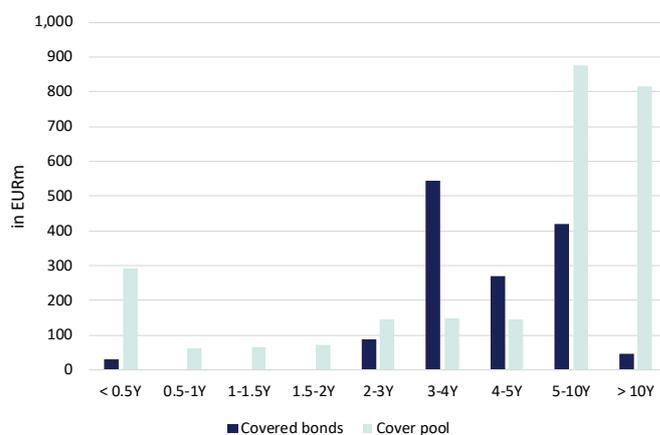
### Cover pool data

Cover pool (EURm)	2,617.5	Number of loans	n/a
of which residential	77.3%	Number of borrowers	n/a
of which commercial	18.6%	Number of properties	n/a
of which substitution assets	4.1%	Avg. exposure to borrowers (EUR)	n/a
of which derivatives	0.0%	Share of 10 largest borrowers	n/a
Covered bonds (EURm)	1,397.6	Share of owner-occupied dwellings	n/a
OC (EURm)	1,219.9	Share of multi-family houses	n/a
OC	87.3%	EUR share (Cover pool)	n/a
Fixed interest (Cover pool)	89.1%	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	4.7y
Avg. LTV (Original value)	56.1%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

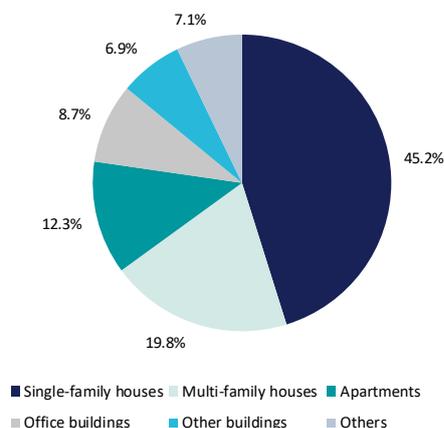
### Development of cover pool data



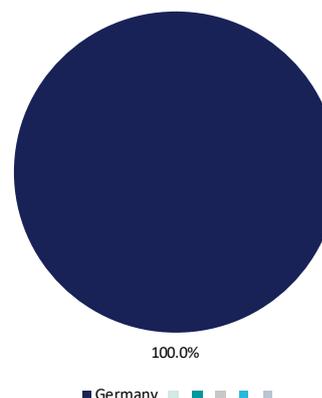
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## Sparkasse Hannover

## Public sector

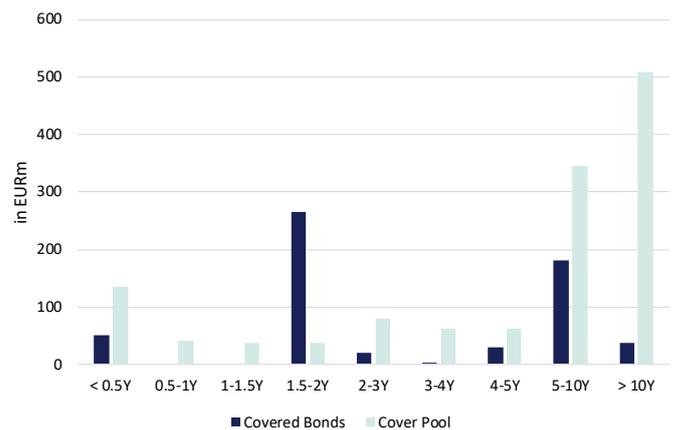
### Cover pool data

Cover pool (EURm)	1,306.0	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)	586.1	Avg. exposure to borrowers (EUR)	n/a
OC (EURm)	719.9	EUR share (Cover pool)	n/a
OC	122.8%	EUR share (Covered bonds)	n/a
Fixed interest (Cover pool)	94.1%	Largest FX position (NPV in EURm)	-
Fixed interest (Covered bonds)	100.0%	Share of largest exposure tranche	40.1% (EUR 10-100m)
WAL (Cover pool)	n/a	Loans in arrears (>90 days)	0.00%
WAL (Covered Bonds)	n/a		

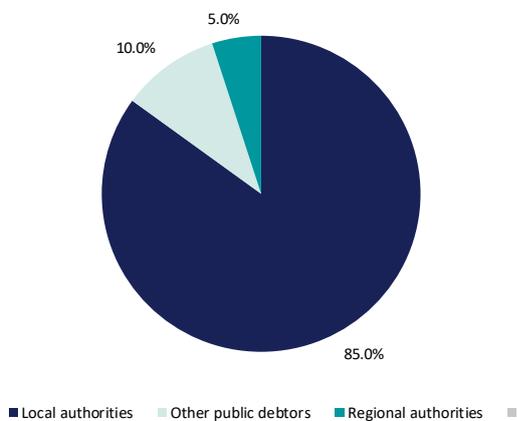
### Development of cover pool data



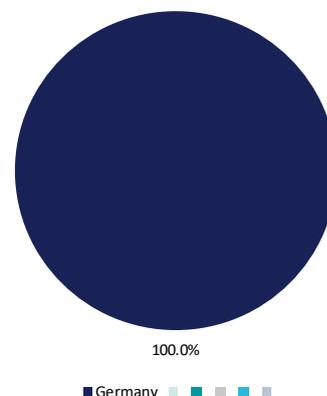
### Maturity structure



### Composition of primary assets



### Regional distribution of claims



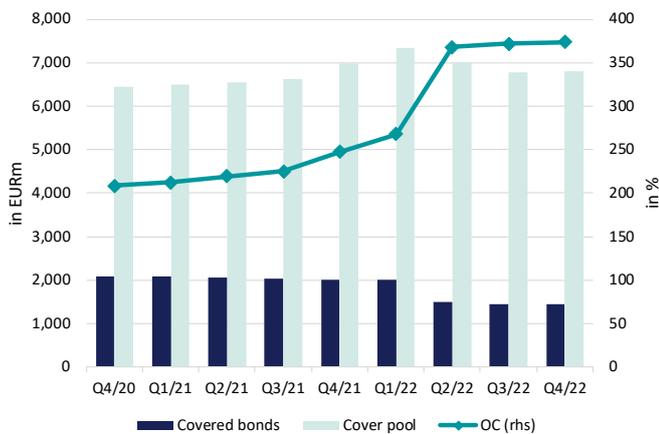
## Sparkasse KölnBonn

## Mortgage

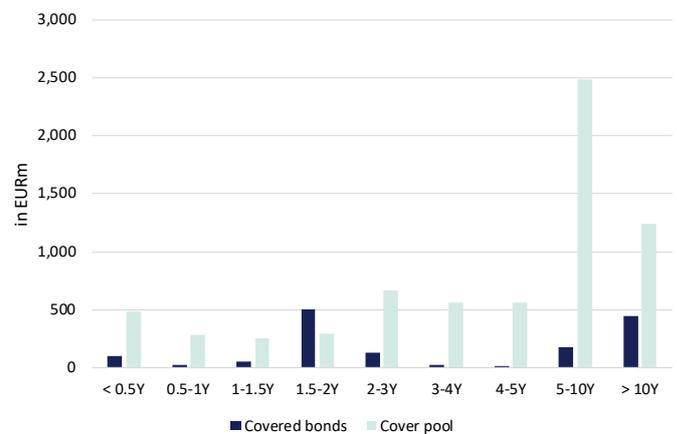
### Cover pool data

Cover pool (EURm)	6,812.0	Number of loans	n/a
of which residential	78.8%	Number of borrowers	n/a
of which commercial	20.1%	Number of properties	n/a
of which substitution assets	1.1%	Avg. exposure to borrowers (EUR)	n/a
of which derivatives	0.0%	Share of 10 largest borrowers	n/a
Covered bonds (EURm)	1,438.2	Share of owner-occupied dwellings	n/a
OC (EURm)	5,373.8	Share of multi-family houses	n/a
OC	373.6%	EUR share (Cover pool)	n/a
Fixed interest (Cover pool)	92.2%	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	48.2% (< EUR 0.3m)
WAL (Covered Bonds)	n/a	Avg. seasoning	5.8y
Avg. LTV (Original value)	53.1%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

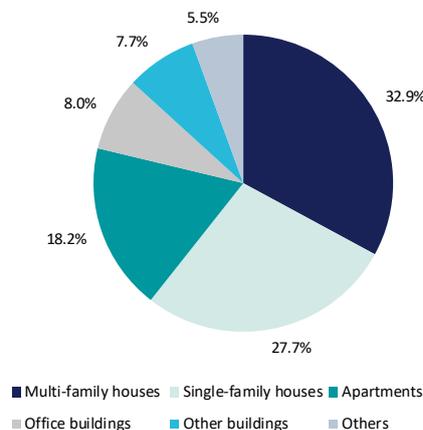
### Development of cover pool data



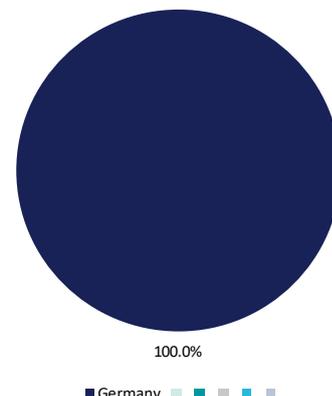
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## Sparkasse KölnBonn

## Public sector

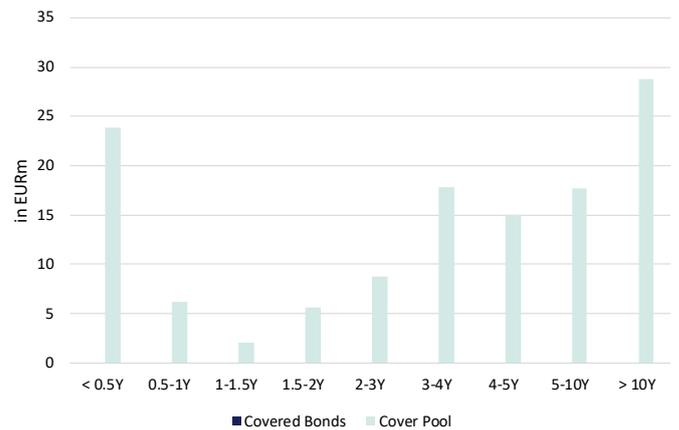
### Cover pool data

Cover pool (EURm)	125.7	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)	0.0	Avg. exposure to borrowers (EUR)	n/a
OC (EURm)	125.7	EUR share (Cover pool)	n/a
OC	0.0%	EUR share (Covered bonds)	n/a
Fixed interest (Cover pool)	0.0%	Largest FX position (NPV in EURm)	-
Fixed interest (Covered bonds)	0.0%	Share of largest exposure tranche	61.9% (EUR 10-100m)
WAL (Cover pool)	n/a	Loans in arrears (>90 days)	0.00%
WAL (Covered Bonds)	n/a		

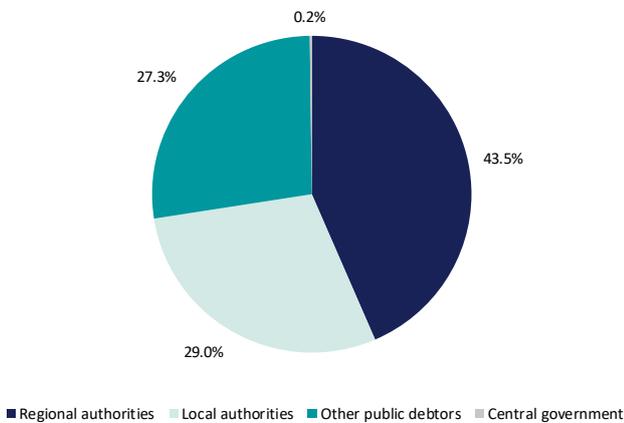
### Development of cover pool data



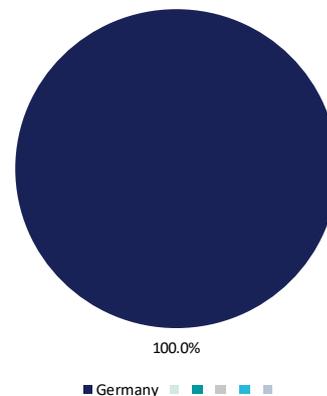
### Maturity structure



### Composition of primary assets



### Regional distribution of claims



## Stadtsparkasse Düsseldorf

## Mortgage

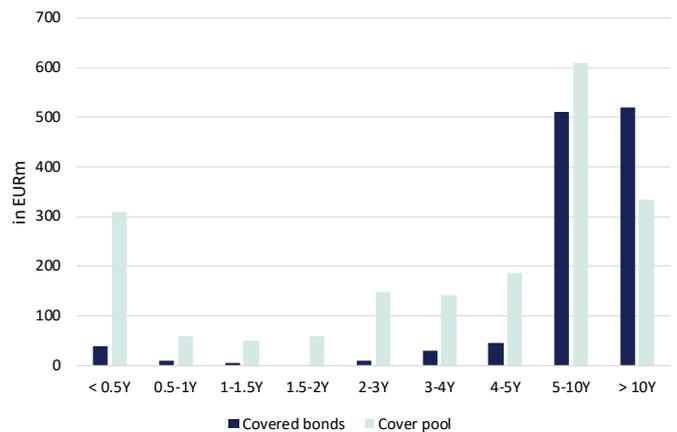
### Cover pool data

Cover pool (EURm)	1,900.4	Number of loans	n/a
of which residential	71.0%	Number of borrowers	n/a
of which commercial	23.8%	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)	1,171.3	Share of owner-occupied dwellings	n/a
OC (EURm)	729.1	Share of multi-family houses	n/a
OC	62.2%	EUR share (Cover pool)	n/a
Fixed interest (Cover pool)	88.7%	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	44.4% (< EUR 0.3m)
WAL (Covered Bonds)	n/a	Avg. seasoning	7.2y
Avg. LTV (Original value)	55.4%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

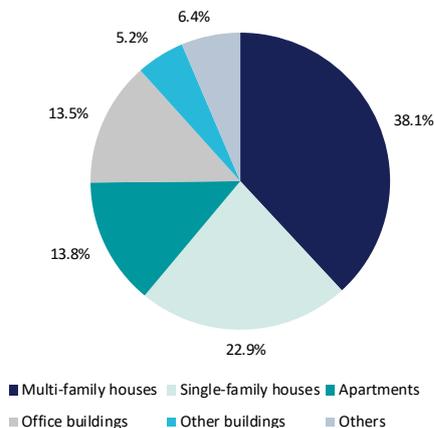
### Development of cover pool data



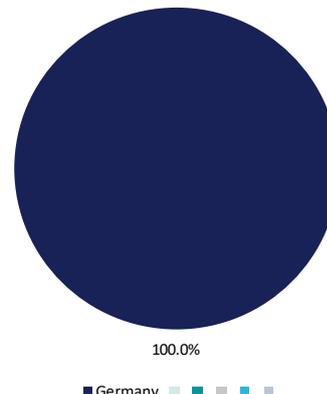
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



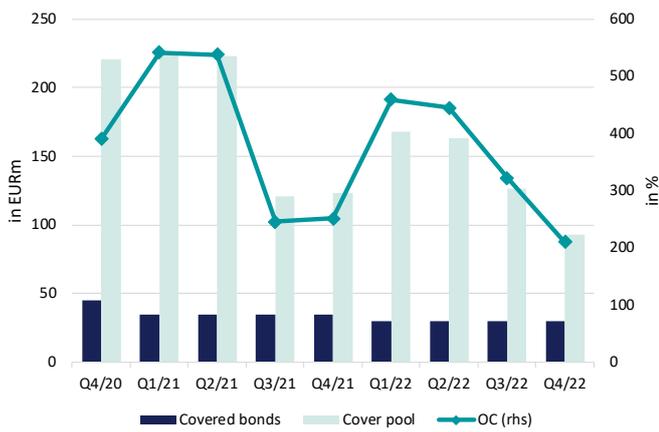
## Stadtparkasse Düsseldorf

## Public sector

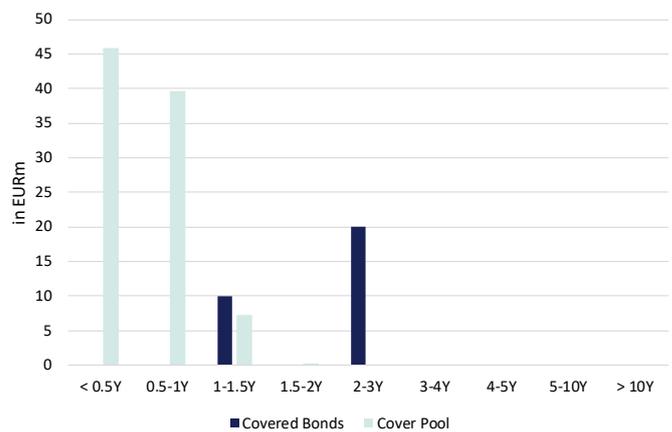
### Cover pool data

Cover pool (EURm)	93.2	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)	30.0	Avg. exposure to borrowers (EUR)	n/a
OC (EURm)	63.2	EUR share (Cover pool)	n/a
OC	210.5%	EUR share (Covered bonds)	n/a
Fixed interest (Cover pool)	89.3%	Largest FX position (NPV in EURm)	-
Fixed interest (Covered bonds)	100.0%	Share of largest exposure tranche	52.6% (< EUR 10m)
WAL (Cover pool)	n/a	Loans in arrears (>90 days)	0.00%
WAL (Covered Bonds)	n/a		

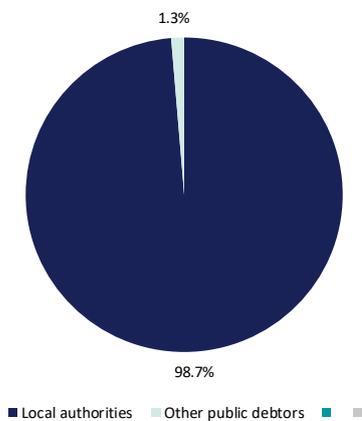
### Development of cover pool data



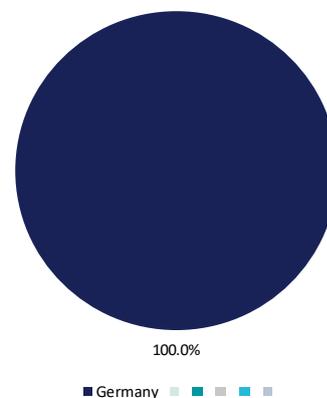
### Maturity structure



### Composition of primary assets



### Regional distribution of claims



## UniCredit Bank

## Mortgage

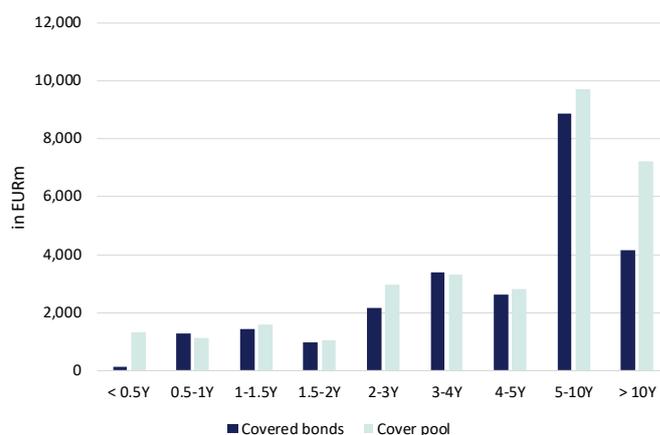
### Cover pool data

Cover pool (EURm)	31,111.6	Number of loans	134,520
of which residential	69.6%	Number of borrowers	103,266
of which commercial	28.6%	Number of properties	126,091
of which substitution assets	1.8%	Avg. exposure to borrowers (EUR)	295,881
of which derivatives	0.0%	Share of 10 largest borrowers	8.0%
Covered bonds (EURm)	25,116.7	Share of owner-occupied dwellings	34.4%
OC (EURm)	5,994.9	Share of multi-family houses	23.9%
OC	23.9%	EUR share (Cover pool)	100.0%
Fixed interest (Cover pool)	82.5%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	99.1%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	6.9y	Share of largest exposure tranche	34.7% (< EUR 0.3m)
WAL (Covered Bonds)	6.2y	Avg. seasoning	6.8y
Avg. LTV (Original value)	42.3%	Loans in arrears (>90 days)	0.00%
Avg. LTV (Market value)	n/a		

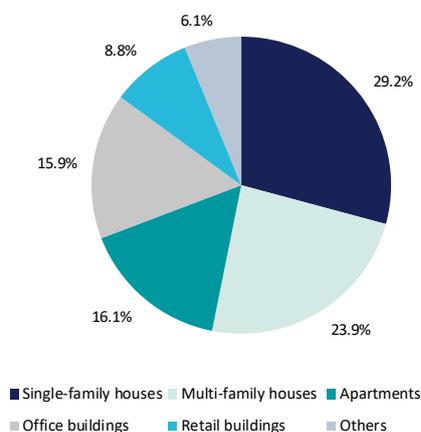
### Development of cover pool data



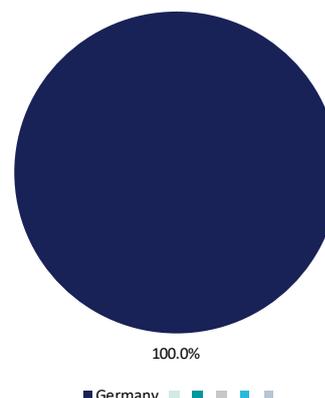
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## UniCredit Bank

### Cover pool data

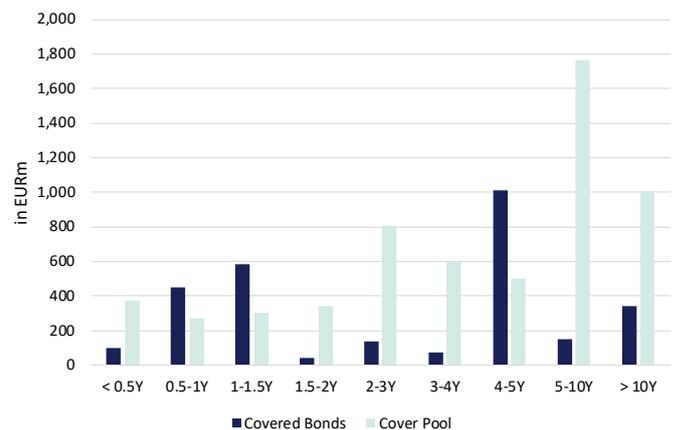
Cover pool (EURm)	5,970.3	Number of loans	1,526
of which substitution assets	0.0%	Number of borrowers	805
of which derivatives	0.0%	Share of 10 largest borrowers	41.8%
Covered bonds (EURm)	2,894.3	Avg. exposure to borrowers (EUR)	7,416,522
OC (EURm)	3,076.0	EUR share (Cover pool)	96.5%
OC	106.3%	EUR share (Covered bonds)	100.0%
Fixed interest (Cover pool)	73.9%	Largest FX position (NPV in EURm)	USD (190.3)
Fixed interest (Covered bonds)	99.8%	Share of largest exposure tranche	54.8% (> EUR 100m)
WAL (Cover pool)	6.7y	Loans in arrears (>90 days)	0.00%
WAL (Covered Bonds)	4.8y		

## Public sector

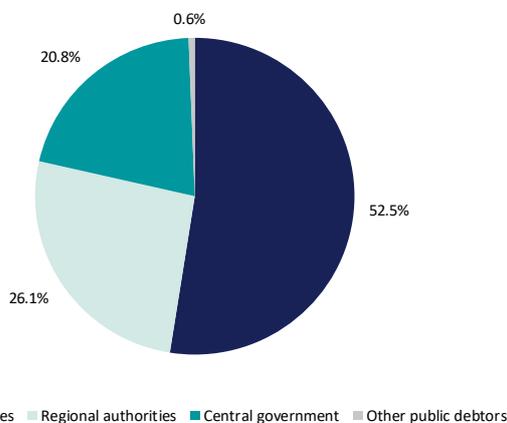
### Development of cover pool data



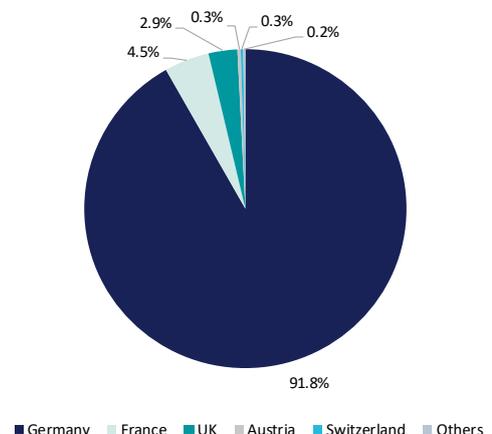
### Maturity structure



### Composition of primary assets



### Regional distribution of claims



## Wüstenrot Bausparkasse

## Mortgage

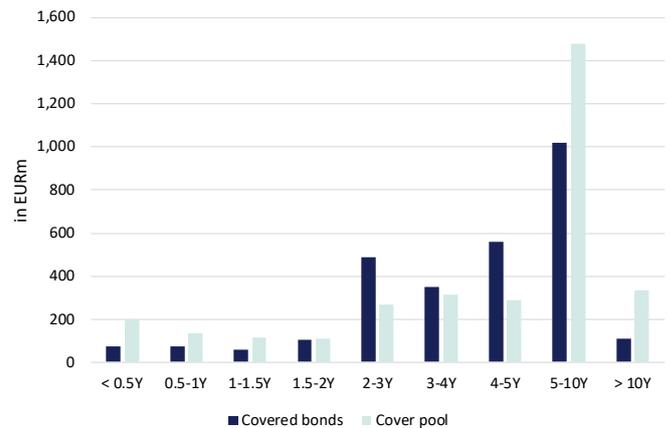
### Cover pool data

Cover pool (EURm)	3,241.5	Number of loans	32,878
of which residential	89.2%	Number of borrowers	29,103
of which commercial	1.2%	Number of properties	30,713
of which substitution assets	9.6%	Avg. exposure to borrowers (EUR)	100,730
of which derivatives	0.0%	Share of 10 largest borrowers	6.0%
Covered bonds (EURm)	2,826.6	Share of owner-occupied dwellings	65.5%
OC (EURm)	414.9	Share of multi-family houses	18.2%
OC	14.7%	EUR share (Cover pool)	100.0%
Fixed interest (Cover pool)	99.4%	EUR share (Covered bonds)	100.0%
Fixed interest (Covered bonds)	89.7%	Largest FX position (NPV in EURm)	-
WAL (Cover pool)	5.7y	Share of largest exposure tranche	75.8% (< EUR 0.3m)
WAL (Covered Bonds)	4.8y	Avg. seasoning	8.7y
Avg. LTV (Original value)	48.2%	Loans in arrears (>90 days)	0.01%
Avg. LTV (Market value)	n/a		

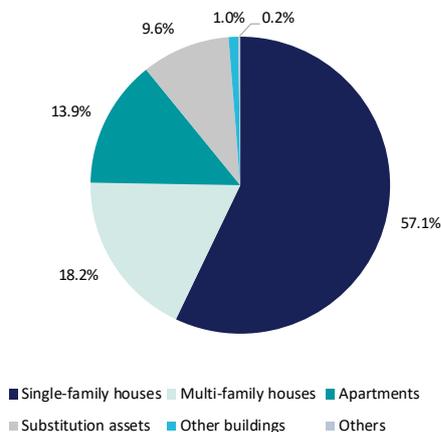
### Development of cover pool data



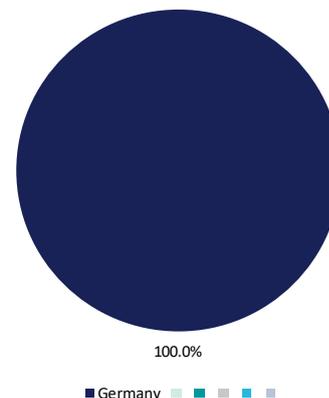
### Maturity structure



### Composition of cover pool



### Regional distribution of properties



## Appendix

### Contacts at NORD/LB

#### Markets Strategy & Floor Research



**Dr Frederik Kunze**

Covered Bonds/Banks

+49 172 354 8977

[frederik.kunze@nordlb.de](mailto:frederik.kunze@nordlb.de)



**Melanie Kiene**

Covered Bonds/Banks

+49 172 169 2633

[melanie.kiene@nordlb.de](mailto:melanie.kiene@nordlb.de)



**Stefan Rahaus**

Covered Bonds/Banks

+49 172 6086 438

[stefan.rahaus@nordlb.de](mailto:stefan.rahaus@nordlb.de)



**Dr Norman Rudschuck**

SSA/Public Issuers

+49 152 090 24094

[norman.rudschuck@nordlb.de](mailto:norman.rudschuck@nordlb.de)



**Jan-Phillipp Hensing**

SSA/Public Issuers

+49 172 425 2877

[jan-phillipp.hensing@nordlb.de](mailto:jan-phillipp.hensing@nordlb.de)

#### Sales

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

#### Origination & Syndicate

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

#### Treasury

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

#### Trading

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

#### Sales Wholesale Customers

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

#### Relationship Management

Institutionelle Kunden	<a href="mailto:rm-vs@nordlb.de">rm-vs@nordlb.de</a>
Öffentliche Kunden	<a href="mailto:rm-oek@nordlb.de">rm-oek@nordlb.de</a>

#### Disclaimer

The present report (hereinafter referred to as “information”) was drawn up by NORDEUTSCHE LANDESBANK GIROZENTRALE (NORD/LB). The supervisory authorities responsible for NORD/LB are the European Central Bank (ECB), Sonnemannstraße 20, D-60314 Frankfurt am Main, and the Federal Financial Supervisory Authority in Germany (Bundesanstalt für Finanzdienstleistungsaufsicht; BaFin), Graurheindorfer Str. 108, D-53117 Bonn and Marie-Curie-Str. 24-28, D-60439 Frankfurt am Main. The present report and the products and services described herein have not been reviewed or approved by the relevant supervisory authority.

The present information is addressed exclusively to Recipients in Austria, Belgium, Canada, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Indonesia, Ireland, Italy, Japan, Korea, Luxembourg, the Netherlands, New Zealand, Poland, Portugal, Singapore, Portugal, Spain, Sweden, Switzerland, the Republic of China (Taiwan), Thailand, the United Kingdom and Vietnam (hereinafter referred to as “Relevant Persons” or “Recipients”). The contents of the information are disclosed to the Recipients on a strictly confidential basis and, by accepting such information, the Recipients shall agree that they will not forward it to third parties, copy and/or reproduce this information without the prior written consent of NORD/LB. The present information is addressed solely to the Relevant Persons and any parties other than the Relevant Persons shall not rely on the information contained herein. In particular, neither this information nor any copy thereof shall be forwarded or transmitted to the United States of America or its territories or possessions, or distributed to any employees or affiliates of Recipients resident in these jurisdictions.

**The present information does not constitute financial analysis within the meaning of Art. 36 (1) of the Delegate Regulation (EU) 2017/565, but rather represents a marketing communication for your general information within the meaning of Art. 36 (2) of this Regulation. Against this background, NORD/LB expressly points out that this information has not been prepared in accordance with legal provisions promoting the independence of investment research and is not subject to any prohibition of trading following the dissemination of investment research.** Likewise, this information does not constitute an investment recommendation or investment strategy recommendation within the meaning of the Market Abuse Regulation (EU) No. 596/2014.

This report and the information contained herein have been compiled and are provided exclusively for information purposes. The present information is not intended as an investment incentive. It is provided for the Recipient’s personal information, subject to the express understanding, which shall be acknowledged by the Recipient, that it does not constitute any direct or indirect offer, recommendation, solicitation to purchase, hold or sell or to subscribe for or acquire any securities or other financial instruments nor any measure by which financial instruments might be offered or sold.

All actual details, information and statements contained herein were derived from sources considered reliable by NORD/LB. For the preparation of this information, NORD/LB uses issuer-specific financial data providers, own estimates, company information and public media. However, since these sources are not verified independently, NORD/LB cannot give any assurance as to or assume responsibility for the accuracy and completeness of the information contained herein. The opinions and prognoses given herein on the basis of these sources constitute a non-binding evaluation of the employees of the Markets Strategy & Floor Research division of NORD/ LB. Any changes in the underlying premises may have a material impact on the developments described herein. Neither NORD/LB nor its governing bodies or employees can give any assurances as to or assume any responsibility or liability for the accuracy, appropriateness and completeness of this information or for any loss of return, any indirect, consequential or other damage which may be suffered by persons relying on the information or any statements or opinions set forth in the present Report (irrespective of whether such losses are incurred due to any negligence on the part of these persons or otherwise).

Past performance is not a reliable indicator of future performance. Exchange rates, price fluctuations of the financial instruments and similar factors may have a negative impact on the value and price of and return on the financial instruments referred to herein or any instruments linked thereto. Fees and commissions apply in relation to securities (purchase, sell, custody), which reduce the return on investment. An evaluation made on the basis of the historical performance of any security does not necessarily provide an indication of its future performance.

The present information neither constitutes any investment, legal, accounting or tax advice nor any assurance that an investment or strategy is suitable or appropriate in the light of the Recipient’s individual circumstances, and nothing in this information constitutes a personal recommendation to the Recipient thereof. The securities or other financial instruments referred to herein may not be suitable for the Recipient’s personal investment strategies and objectives, financial situation or individual needs.

Moreover, the present report in whole or in part is not a sales or other prospectus. Accordingly, the information contained herein merely constitutes an overview and does not form the basis for any potential decision to buy or sell on the part of an investor. A full description of the details relating to the financial instruments or transactions which may relate to the subject matter of this report is given in the relevant (financing) documentation. To the extent that the financial instruments described herein are NORD/LB’s own issues and subject to the requirement to publish a prospectus, the conditions of issue applicable to any individual financial instrument and the relevant prospectus published with respect thereto as well NORD/LB’s relevant registration form, all of which are available for download at [www.nordlb.de](http://www.nordlb.de) and may be obtained free of charge from NORD/LB, Georgsplatz 1, 30159 Hanover, shall be solely binding. Furthermore, any potential investment decision should be made exclusively on the basis of such (financing) documentation. The present information cannot replace personal advice. Before making an investment decision, each Recipient should consult an independent investment adviser for individual investment advice with respect to the appropriateness of an investment in financial instruments or investment strategies subject to this information as well as for other and more recent information on certain investment opportunities.

Each of the financial instruments referred to herein may involve substantial risks, including capital, interest, index, currency and credit risks in addition to political, fair value, commodity and market risks. The financial instruments could experience a sudden and substantial deterioration in value, including a total loss of the capital invested. Each transaction should only be entered into on the basis of the relevant investor’s assessment of his or her individual financial situation as well as of the suitability and risks of the investment.

NORD/LB and its affiliated companies may participate in transactions involving the financial instruments described in the present information or their underlying basis values for their own account or for the account of third parties, may issue other financial instruments with the same or similar features as those of the financial instruments presented in this information and may conduct hedging transactions to hedge positions. These measures may affect the price of the financial instruments described in the present information.

If the financial instruments presented in this information are derivatives, they may, depending on their structure, have an initial negative market value from the customer's perspective at the time the transaction is concluded. NORD/LB further reserves the right to transfer its economic risk from a derivative concluded with it to a third party on the market by means of a mirror-image counter transaction.

More detailed information on any commission payments which may be included in the selling price can be found in the "Customer Information on Securities Business" brochure, which is available to download at [www.nordlb.de](http://www.nordlb.de).

The information contained in the present report replaces all previous versions of corresponding information and refers exclusively to the time of preparation of the information. Future versions of this information will replace this version. NORD/LB is under no obligation to update and/or regularly review the data contained in such information. No guarantee can therefore be given that the information is up-to-date and continues to be correct.

By making use of this information, the Recipient shall accept the terms and conditions outlined above.

NORD/LB is a member of the protection scheme of Deutsche Sparkassen-Finanzgruppe. Further information for the Recipient is indicated in clause 28 of the General Terms and Conditions of NORD/LB or at [www.dsgv.de/sicherungssystem](http://www.dsgv.de/sicherungssystem).

**Additional information for Recipients in Australia:**

NORD/LB IS NOT A BANK OR DEPOSIT TAKING INSTITUTION AUTHORISED UNDER THE 1959 BANKING ACT OF AUSTRALIA. IT IS NOT SUPERVISED BY THE AUSTRALIAN PRUDENTIAL REGULATION AUTHORITY.

NORD/LB does not provide personal advice with this information and does not take into account the objectives, financial situation or needs of the Recipient (other than for the purpose of combating money laundering).

**Additional information for Recipients in Austria:**

None of the information contained herein constitutes a solicitation or offer by NORD/LB or its affiliates to buy or sell any securities, futures, options or other financial instruments or to participate in any other strategy. Only the published prospectus pursuant to the Austrian Capital Market Act should be the basis for any investment decision of the Recipient.

For regulatory reasons, products mentioned herein may not be on offer in Austria and therefore not available to investors in Austria. Therefore, NORD/LB may not be able to sell or issue these products, nor shall it accept any request to sell or issue these products to investors located in Austria or to intermediaries acting on behalf of any such investors.

**Additional information for Recipients in Belgium:**

Evaluations of individual financial instruments on the basis of past performance are not necessarily indicative of future results. It should be noted that the reported figures relate to past years.

**Additional information for Recipients in Canada:**

This report has been prepared solely for information purposes in connection with the products it describes and should not, under any circumstances, be construed as a public offer or any other offer (direct or indirect) to buy or sell securities in any province or territory of Canada. No financial market authority or similar regulatory body in Canada has made any assessment of these securities or reviewed this information and any statement to the contrary constitutes an offence. Potential selling restrictions may be included in the prospectus or other documentation relating to the relevant product.

**Additional information for Recipients in Cyprus:**

This information constitutes an analysis within the meaning of the section on definitions of the Cyprus Directive D1444-2007-01 (No. 426/07). Furthermore, this information is provided for information and promotional purposes only and does not constitute an individual invitation or offer to sell, buy or subscribe to any investment product.

**Additional information for Recipients in the Czech Republic:**

There is no guarantee that the invested amount will be recouped. Past returns are no guarantee of future results. The value of the investments may rise or fall. The information contained herein is provided on a non-binding basis only and the author does not guarantee the accuracy of the content.

**Additional information for Recipients in Denmark**

This Information does not constitute a prospectus under Danish securities law and consequently is not required to be, nor has been filed with or approved by the Danish Financial Supervisory Authority, as this Information either (i) has not been prepared in the context of a public offering of securities in Denmark or the admission of securities to trading on a regulated market within the meaning of the Danish Securities Trading Act or any executive orders issued pursuant thereto, or (ii) has been prepared in the context of a public offering of securities in Denmark or the admission of securities to trading on a regulated market in reliance on one or more of the exemptions from the requirement to prepare and publish a prospectus in the Danish Securities Trading Act or any executive orders issued pursuant thereto.

**Additional information for Recipients in Estonia**

It is advisable to closely examine all the terms and conditions of the services provided by NORD/LB. If necessary, Recipients of this information should consult an expert.

**Additional information for Recipients in Finland**

The financial products described herein may not be offered or sold, directly or indirectly, to any resident of the Republic of Finland or in the Republic of Finland, except pursuant to applicable Finnish laws and regulations. Specifically, in the case of shares, such shares may not be offered or sold, directly or indirectly, to the public in the Republic of Finland as defined in the Finnish Securities Market Act (746/2012, as amended). The value of investments may go up or down. There is no guarantee of recouping the amount invested. Past performance is no guarantee of future results.

**Additional information for Recipients in France**

NORD/LB is partially regulated by the "Autorité des Marchés Financiers" for the conduct of French business. Details concerning the extent of our regulation by the respective authorities are available from us on request.

The present information does not constitute an analysis within the meaning of Article 24 (1) Directive 2006/73/EC, Article L.544-1 and R.621-30-1 of the French Monetary and Financial Code, but does represent a marketing communication and does qualify as a recommendation pursuant to Directive 2003/6/EC and Directive 2003/125/EC.

**Additional information for Recipients in Greece**

The information contained herein gives the view of the author at the time of publication and may not be used by its Recipient without first having confirmed that it remains accurate and up to date at the time of its use.

Past performance, simulations or forecasts are therefore not a reliable indicator of future results. Investment funds have no guaranteed performance and past returns do not guarantee future performance.

**Additional information for Recipients in Indonesia**

This report contains generic information and has not been tailored to the circumstances of any individual or specific Recipient. This information is part of NORD/LB's marketing material.

**Additional information for Recipients in the Republic of Ireland**

This information has not been prepared in accordance with Directive (EU) 2017/1129 (as amended) on prospectuses (the "Prospectus Directive") or any measures made under the Prospectus Directive or the laws of any Member State or EEA treaty adherent state that implement the Prospectus Directive or such measures and therefore may not contain all the information required for a document prepared in accordance with the Prospectus Directive or the laws.

**Additional information for Recipients in Japan:**

This information is provided to you for information purposes only and does not constitute an offer or solicitation of an offer to enter into securities transactions or commodity futures transactions. Although the actual data and information contained herein has been obtained from sources which we believe to be reliable and trustworthy, we are unable to vouch for the accuracy and completeness of this actual data and information.

**Additional information for Recipients in South Korea**

This information has been provided to you free of charge for information purposes only. The information contained herein is factual and does not reflect any opinion or judgement of NORD/LB. The information contained herein should not be construed as an offer, marketing, solicitation to submit an offer or investment advice with respect to the financial investment products described herein.

**Additional information for Recipients in Luxembourg**

Under no circumstances shall the present information constitute an offer to purchase or issue or the solicitation to submit an offer to buy or subscribe for financial instruments and financial services in Luxembourg.

**Additional information for Recipients in New Zealand:**

NORD/LB is not a bank registered in New Zealand. This information is for general information only. It does not take into account the Recipient's financial situation or objectives and is not a personalised financial advisory service under the 2008 Financial Advisers Act.

**Additional information for Recipients in the Netherlands:**

The value of your investment may fluctuate. Past performance is no guarantee for the future.

**Additional information for Recipients in Poland**

This information does not constitute a recommendation within the meaning of the Regulation of the Polish Minister of Finance Regarding Information Constituting Recommendations Concerning Financial Instruments or Issuers thereof dated 19 October 2005.

**Additional information for Recipients in Portugal**

This information is intended only for institutional clients and may not be (i) used by, (ii) copied by any means or (iii) distributed to any other kind of investor, in particular not to retail clients. The present information does not constitute or form part of an offer to buy or sell any of the securities covered by the report, nor should it be understood as a request to buy or sell securities where that practice may be deemed unlawful. The information contained herein is based on information obtained from sources which we believe to be reliable, but is not guaranteed as to accuracy or completeness. Unless otherwise stated, all views contained herein relate solely to our research and analysis and are subject to change without notice.

**Additional information for Recipients in Sweden**

This information does not constitute (or form part of) a prospectus, offering memorandum, any other offer or solicitation to acquire, sell, subscribe for or otherwise trade in shares, subscription rights or other securities, nor shall it or any part of it form the basis of or be relied on in connection with any contract or commitment whatsoever. The present information has not been approved by any regulatory authority. Any offer of securities will only be made pursuant to an applicable prospectus exemption under the EC Prospectus Directive (Directive (EU) 2017/1129), and no offer of securities is being directed to any person or investor in any jurisdiction where such action is wholly or partially subject to legal restrictions or where such action would require additional prospectuses, other offer documentation, registrations or other actions.

**Additional information for Recipients in Switzerland**

This information has not been approved by the Federal Banking Commission (merged into the Swiss Financial Market Supervisory Authority (FINMA) on 1 January 2009). NORD/LB will comply with the Directives of the Swiss Bankers Association on the Independence of Financial Research (as amended). The present information does not constitute an issuing prospectus pursuant to article 652a or article 1156 of the Swiss Code of Obligations. The information is published solely for the purpose of information on the products mentioned herein. The products do not qualify as units of a collective investment scheme pursuant to the Federal Act on Collective Investment Schemes (CISA) and are therefore not subject to supervision by FINMA.

**Additional information for Recipients in Singapore:**

This information is directed only at accredited investors or institutional investors under the Securities and Futures Act in Singapore. This information is intended for general distribution only. It does not constitute investment advice and does not take into account the specific investment objectives, financial situation or particular needs of the Recipient. It is recommended that advice be obtained from a financial adviser regarding the suitability of the investment product in light of the specific investment objectives, financial situation and special needs of the Recipient before agreeing to purchase the investment product.

**Additional information for Recipients in the Republic of China (Taiwan)**

This information is provided for general information only and does not take into account the individual interests or requirements, financial status and investment objectives of any specific investor. Nothing herein should be construed as a recommendation or advice for you to subscribe to a particular investment product. You should not rely solely on the information provided herein when making your investment decisions. When considering any investment, you should endeavour to make your own independent assessment and determination on whether the investment is suitable for your needs and seek your own professional financial and legal advice.

NORD/LB has taken all reasonable care in producing this report and trusts that the information is reliable and suitable for your situation at the date of publication or delivery. However, no guarantee of accuracy or completeness is given. To the extent that NORD/LB has exercised the due care of a good administrator, we accept no responsibility for any errors, omissions, or misstatements in the information given. NORD/LB does not guarantee any investment results and does not guarantee that the strategies employed will improve investment performance or achieve your investment objectives.

**Information for Recipients in the United Kingdom:**

NORD/LB is subject to partial regulation by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA). Details of the scope of regulation by the FCA and the PRA are available from NORD/LB on request. The present information is "financial promotion". Recipients in the United Kingdom should contact the London office of NORD/LB, Investment Banking Department, telephone: 0044 / 2079725400, in the event of any queries. An investment in financial instruments referred to herein may expose the investor to a significant risk of losing all the capital invested.

Time of going to press and last update of all market data: Tuesday, 14 March 2023 (14:35h)