

## Pfandbriefbank Pool

31 December 2022, semi-annual publication (since June 2012), unaudited

### 1 Pfandbriefbank

#### 1.1 Contact address

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#### 1.2 Rating

Rating agency Moody's Investors Service Ltd, London  
Issuance rating Aaa (since 2002, last issuer rating report dated 19 July 2018, ratings per ISIN are published shortly after issuance)

#### 1.3 Business model

Pfandbriefbank

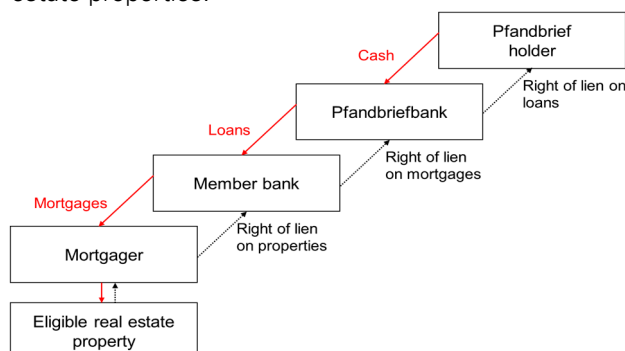
- Founded 1930, incorporated 1931
- Based on Pfandbrief act, which came into effect in 1930
- Special institute with limited scope (issuance of Swiss Pfandbriefe, loans to member banks and investment of own funds)
- No currency risk, no maturity mismatch, no interest rate risk on the balance sheet
- Swiss Federal Council authorises bylaws and valuation regulations and nominates one member of the board of directors
- Swiss Financial Market Supervisory Authority (FINMA) supervises Pfandbriefbank and its member banks

Cover pool

- Regulated by law (not only a private agreement)
- Only first-class mortgages in Swiss francs (CHF) on properties located in Switzerland are eligible
- Cover value of each member bank's cover pool must be at least 108 % of the bank's liabilities to Pfandbriefbank
- Loan to value 42 % (by law limited at max. 66 2/3 % for residential properties or lower for other property types)
- 100 % of the underlying properties are residential
- Pfandbriefbank supervises eligibility and overcollateralisation daily
- Member bank legally obliged to increase coverage in case of insufficient overcollateralisation and to replace impaired or non-performing loans
- Approximately 14 % of Swiss mortgages refinanced through Swiss Pfandbriefe
- Pfandbriefbank values the cover value of a mortgage independently
- Mortgages stay on balance sheet of member bank
- Unique historical track: No loss since 1931

Investors' fourfold security

1. The capital of Pfandbriefbank, 2. the capital of the member banks, 3. the capital of the proprietors of the real estate properties and 4. the market value of the real estate properties.



#### 1.4 Planned events

Issuances 07/02, 07/03, 28/03, 02/05, 13/06, 27/06, 02/08/2023  
General meeting 25/05/2023

## 2 Swiss Economics

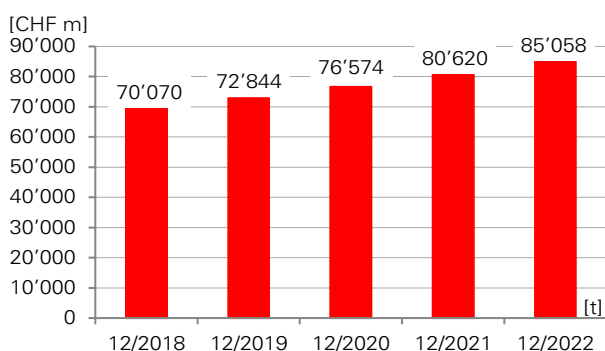
2.1 General	Source, units	12/2022	12/2021	12/2020	12/2019
Issuer Rating Switzerland	Moody's	Aaa	Aaa	Aaa	Aaa
Gross domestic product (GDP)	SECO, CHF bn	+2.0 % y/e forecast	731	694	717
Unemployment rate	SECO, Ø %	2.2	3.0	3.2	2.3
Eidgenossen (Gov), 10Y rate	SNB, %	1.565	-0.127	-0.525	-0.456

### 2.2 Mortgage market

Mortgage volume of banks	SNB, CHF bn	(11/2022) 1'152	1'115	1'081	1'053
Swiss Pfandbriefe <sup>1</sup>	CHF bn	162	151	142	131
SWX IAZI Price Indices					
Private Real Estate	CH0030532342	215	205	192	187
Investment Real Estate	CH0030532391	214	203	192	192

## 3 Market

### 3.1 Pfandbriefbank - Outstanding Pfandbriefe

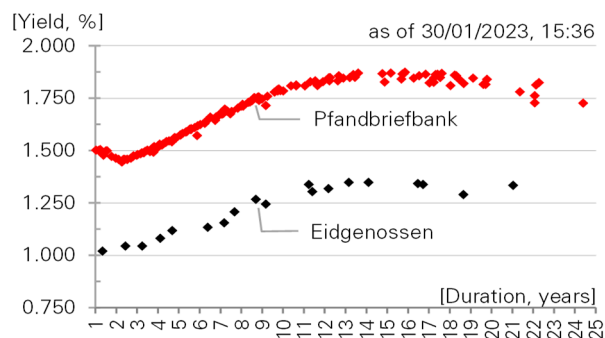


Source: Pfandbriefbank, semi-/annual reports

In 2022 Pfandbriefbank issued Swiss Pfandbriefe of CHF 10'443 m. CHF 6'005 m matured. Net growth amounts to CHF 4'438 m.

The three joint lead banks responsible for our primary market issuances are Credit Suisse AG (in charge), UBS AG and Raiffeisen Schweiz Genossenschaft.

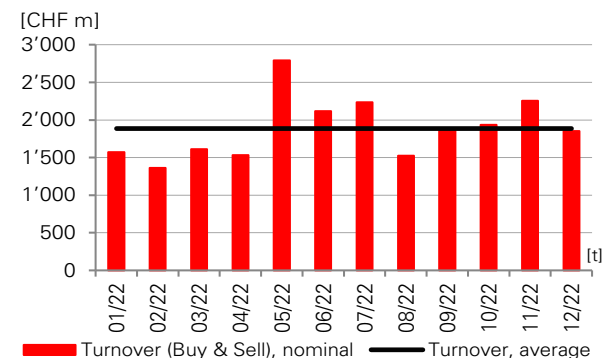
### 3.2 Pfandbriefbank - Yield per ISIN



Source: SIX Swiss Exchange AG

Pfandbriefbank's yield curve has a high density and supports portfolio duration adjustments in primary or secondary market.

### 3.3 Pfandbriefbank - Traded nominal volumes on secondary market

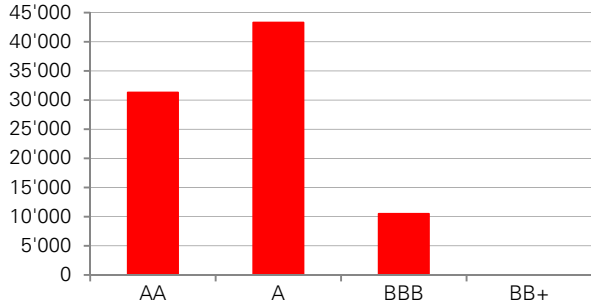


Source: SIX Swiss Exchange AG

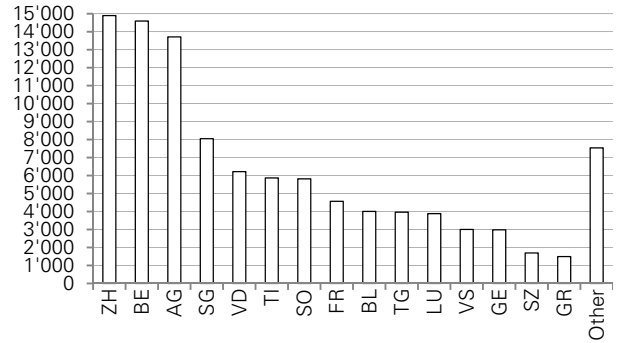
The joint lead banks are requested to organise the market making in the secondary market at SIX Swiss Exchange AG. For the last 12 months average monthly nominal turnover exceeded CHF 1'887 m (min/median/max: CHF 1'363 m/CHF 1'855 m/CHF 2'793 m).

## 4 Pool - Summary

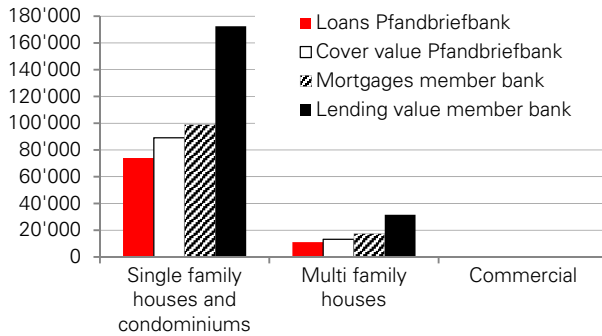
### 4.1 Loans to member banks (CHF m)



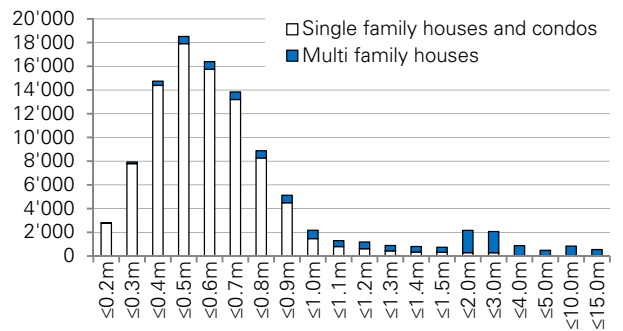
### 4.2 Cover value by region (CHF m, only CH eligible)



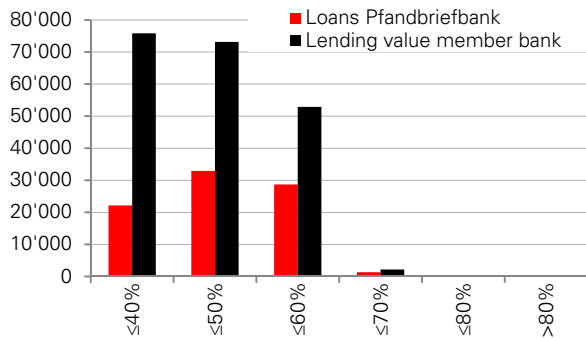
### 4.3 Property type (CHF m)



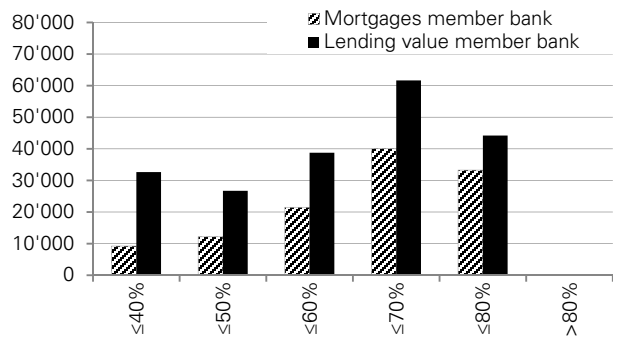
### 4.4 Cover value by size (CHF m)



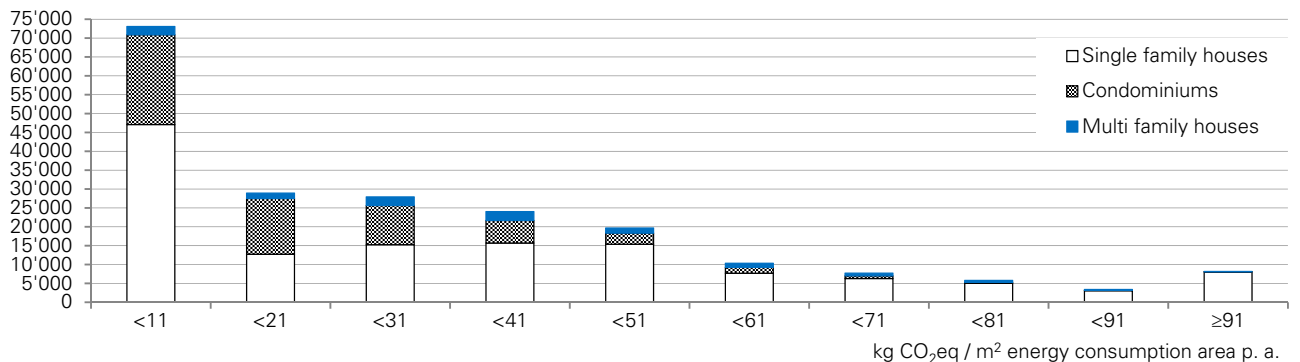
### 4.5 Loan LTV (CHF m) <sup>2</sup>



### 4.6 Mortgage LTV member bank (CHF m) <sup>3</sup>



### 4.7 Distribution of CO<sub>2</sub> emissions (number of properties)



Source: IAZI CO<sub>2</sub> model; data as of 31 march 2022 supplemented with data from the Federal Register of Buildings and Dwellings

## 5 Pool - Details

Criteria for eligible cover pool assets	Pfandbriefbank				Member bank				Cover objects	
	Loans <sup>4</sup>		Cover value <sup>5</sup>		Mortgages <sup>6</sup>		Lending value <sup>7</sup>		Number	%
	CHF m	%	CHF m	%	CHF m	%	CHF m	%		

### 5.1 Loans to member banks <sup>8</sup>

Rating <sup>9</sup>	CHF m	%	CHF m	%	CHF m	%	CHF m	%	Number	%
AA	31'290	37	37'121	36	42'301	36	73'749	36	72'113	35
A	43'285	51	51'827	51	58'437	50	102'098	50	110'316	53
BBB	10'484	12	13'329	13	15'531	13	28'184	14	25'389	12
BB+ <sup>10</sup>	0	0	0	0	0	0	0	0	0	0
Total <sup>11</sup>	85'058	100	102'277	100	116'269	100	204'031	100	207'818	100

Loan size total	CHF m	CHF m	%	CHF m	%	CHF m	%	CHF m	%	Number	%
225 bank(s) ≤ 200	21'241	25	25'545	25	28'853	25	50'201	25	50'073	24	
40 ≤ 400	10'627	12	12'590	12	14'314	12	25'448	12	26'436	13	
8 ≤ 600	4'012	5	4'539	4	5'264	5	8'916	4	8'811	4	
6 ≤ 800	4'251	5	5'890	6	6'933	6	12'183	6	10'595	5	
0 ≤ 1'000	0	0	0	0	0	0	0	0	0	0	
9 > 1'000	44'927	53	53'714	53	60'906	52	107'283	53	111'903	54	
Total	85'058	100	102'277	100	116'269	100	204'031	100	207'818	100	

### 5.2 Region (only Switzerland eligible)

BE	12'272	14	14'593	14	16'637	14	28'796	14	32'499	16
ZH	12'265	14	14'894	15	17'231	15	32'531	16	24'887	12
AG	11'357	13	13'711	13	15'146	13	25'932	13	30'035	14
SG	6'792	8	8'050	8	9'022	8	15'840	8	17'304	8
VD	5'114	6	6'217	6	7'202	6	12'521	6	11'220	5
SO	5'006	6	5'816	6	6'581	6	10'884	5	13'162	6
TI	4'506	5	5'867	6	6'699	6	11'801	6	12'153	6
FR	3'896	5	4'566	4	5'085	4	8'411	4	9'976	5
TG	3'378	4	3'963	4	4'443	4	7'574	4	8'028	4
BL	3'325	4	4'006	4	4'497	4	8'030	4	7'607	4
LU	3'256	4	3'882	4	4'411	4	7'649	4	7'438	4
VS	2'475	3	3'003	3	3'401	3	5'868	3	7'826	4
GE	2'454	3	2'981	3	3'600	3	6'484	3	4'283	2
SZ	1'430	2	1'695	2	1'912	2	3'617	2	2'995	1
GR	1'196	1	1'493	1	1'706	1	2'995	1	3'286	2
Other cantons, each < 1.4 %	6'337	7	7'539	7	8'695	7	15'097	7	15'119	7
Total	85'058	100	102'277	100	116'269	100	204'031	100	207'818	100

### 5.3 Property type <sup>12, 13, 14</sup>

Overview	CHF m	%	CHF m	%	CHF m	%	CHF m	%	Number	%
Residential										
Single family houses and condominiums <sup>15</sup>	73'976	87	89'079	87	98'918	85	172'482	85	195'906	94
Multi family houses	11'082	13	13'198	13	17'352	15	31'549	15	11'912	6
Total residential	85'058	100	102'277	100	116'269	100	204'031	100	207'818	100
Commercial	0	0	0	0	0	0	0	0	0	0
Total	85'058	100	102'277	100	116'269	100	204'031	100	207'818	100

Criteria for eligible cover pool assets	Pfandbriefbank		Member bank				Cover objects	
	Cover value <sup>5</sup>		Mortgages <sup>6</sup>		Lending value <sup>7</sup>		Number	%
	CHF m	%	CHF m	%	CHF m	%		

#### 5.4 Property type by size <sup>12, 13, 14</sup>

<b>Residential: Single family houses and condominiums</b>									
Cover value Pfandbriefbank	≤ 200'000	2'757	3	2'904	2	10'336	5	17'845	9
	≤ 300'000	7'791	8	8'186	7	17'723	9	29'460	14
	≤ 400'000	14'389	14	15'355	13	27'979	14	40'154	19
	≤ 500'000	17'907	18	19'345	17	32'469	16	39'415	19
	≤ 600'000	15'748	15	17'139	15	27'443	13	28'557	14
	≤ 700'000	13'200	13	14'765	13	22'914	11	20'211	10
	≤ 800'000	8'273	8	9'758	8	15'138	7	11'064	5
	≤ 900'000	4'495	4	5'491	5	8'483	4	5'300	3
	≤ 1'000'000	1'467	1	1'879	2	3'136	2	1'533	1
	≤ 1'100'000	795	1	1'039	1	1'674	1	753	0
	≤ 1'200'000	618	1	814	1	1'297	1	536	0
	≤ 1'300'000	431	0	551	0	901	0	344	0
	≤ 1'400'000	335	0	432	0	703	0	247	0
	≤ 1'500'000	312	0	434	0	750	0	211	0
	≤ 2'000'000	283	0	338	0	607	0	161	0
	≤ 2'500'000	280	0	488	0	930	0	115	0
	≤ 3'000'000	0	0	0	0	0	0	0	0
Total		89'079	87	98'918	85	172'482	85	195'906	94
Average as per cover object		0.455		0.505		0.880			
<b>Residential: Multi family houses</b>									
Cover value Pfandbriefbank	≤ 1'000'000	4'376	4	5'537	5	11'104	5	7'586	4
	≤ 2'000'000	4'295	4	5'495	5	9'519	5	3'059	1
	≤ 3'000'000	1'790	2	2'337	2	3'971	2	741	0
	≤ 4'000'000	873	1	1'147	1	1'993	1	255	0
	≤ 5'000'000	483	0	651	1	1'107	1	109	0
	≤ 10'000'000	834	1	1'175	1	2'077	1	120	0
	≤ 15'000'000	547	1	1'009	1	1'777	1	42	0
	≤ 20'000'000	0	0	0	0	0	0	0	0
	≤ 25'000'000	0	0	0	0	0	0	0	0
Total		13'198	13	17'352	15	31'549	15	11'912	6
Average as per cover object		1.108		1.457		2.648			
<b>Commercial</b>									
Cover value Pfandbriefbank	≤ 1'000'000	0	0	0	0	0	0	0	0
	≤ 2'000'000	0	0	0	0	0	0	0	0
	≤ 3'000'000	0	0	0	0	0	0	0	0
	≤ 4'000'000	0	0	0	0	0	0	0	0
	≤ 5'000'000	0	0	0	0	0	0	0	0
	≤ 10'000'000	0	0	0	0	0	0	0	0
	≤ 15'000'000	0	0	0	0	0	0	0	0
	≤ 20'000'000	0	0	0	0	0	0	0	0
	≤ 25'000'000	0	0	0	0	0	0	0	0
Total		0	0	0	0	0	0	0	0
Average as per cover object		0.000		0.000		0.000			
Total		102'277	100	116'269	100	204'031	100	207'818	100

Criteria for eligible cover pool assets	Pfandbriefbank				Member bank				Cover objects	
	Loans <sup>4</sup>		Cover value <sup>5</sup>		Mortgages <sup>6</sup>		Lending value <sup>7</sup>		Number	%
	CHF m	%	CHF m	%	CHF m	%	CHF m	%		

### 5.5 Loan to lending value (loan LTV)<sup>2</sup>

> 0 % to ≤ 40 %	22'147	26	27'793	27	33'130	28	75'837	37	62'405	30
> 40 % to ≤ 50 %	32'910	39	39'450	39	45'245	39	73'148	36	71'649	34
> 50 % to ≤ 60 %	28'683	34	33'589	33	36'320	31	52'874	26	70'731	34
> 60 % to ≤ 70 %	1'317	2	1'446	1	1'574	1	2'171	1	3'033	1
> 70 % to ≤ 80 %	0	0	0	0	0	0	0	0	0	0
> 80 %	0	0	0	0	0	0	0	0	0	0
Total	85'058	100	102'277	100	116'269	100	204'031	100	207'818	100
Overcollateralisation		100		120		137		240		
LTV <sup>16</sup>		42		50		57		100		

### 5.6 Cover value to lending value (cover value LTV)<sup>17</sup>

> 0 % to ≤ 40 %	9'849	12	11'860	12	14'285	12	41'261	20	33'567	16
> 40 % to ≤ 50 %	20'125	24	24'306	24	29'326	25	52'360	26	40'784	20
> 50 % to ≤ 60 %	28'149	33	33'840	33	37'952	33	60'485	30	63'761	31
> 60 % to ≤ 70 %	26'935	32	32'271	32	34'707	30	49'925	24	69'706	34
> 70 % to ≤ 80 %	0	0	0	0	0	0	0	0	0	0
> 80 %	0	0	0	0	0	0	0	0	0	0
Total	85'058	100	102'277	100	116'269	100	204'031	100	207'818	100

### 5.7 Mortgage to lending value (mortgage LTV member bank)<sup>3</sup>

> 0 % to ≤ 40 %	7'593	9	9'131	9	9'227	8	32'658	16	30'146	15
> 40 % to ≤ 50 %	9'754	11	11'742	11	12'191	10	26'725	13	26'240	13
> 50 % to ≤ 60 %	16'852	20	20'271	20	21'502	18	38'776	19	39'815	19
> 60 % to ≤ 70 %	29'379	35	35'265	34	40'071	34	61'659	30	64'534	31
> 70 % to ≤ 80 %	21'480	25	25'868	25	33'277	29	44'212	22	47'082	23
> 80 % <sup>18</sup>	1	0	1	0	1	0	1	0	1	0
Total	85'058	100	102'277	100	116'269	100	204'031	100	207'818	100

## 6 Maturity structure

Contractual Cashflows (unaudited MIS view)		Maturity Buckets (in years)				
31/12/2022			> 1y and	> 5y and	> 10y and	
CHF m (A/L denominated in CHF)	Total	≤ 1y	≤ 5y	≤ 10y	≤ 15y	> 15y
Assets (stylised)	87'459					
thereof Loans to member banks	85'058	5'153	25'528	28'515	12'234	13'628
Bonds	1'580	75	575	742	188	0
- thereof SNB GC Basket	1'557					
- thereof pledged	0					
Share capital not paid in	616	616				
Liabilities (stylised)	-87'459					
thereof Swiss Pfandbriefe	-85'058	-5'153	-25'528	-28'515	-12'234	-13'628
Equity	-2'076					
Net total		691	575	742	188	0

In May 2022, shareholders decided to increase the share capital from nominal CHF 1'000 m to CHF 1'100 m, resulting in a cash inflow of CHF 130.6 m as of 10 August 2022.

- <sup>1</sup> Including private placements as per annual reports of Pfandbrief institutes
- <sup>2</sup> Ratio: Loan Pfandbriefbank divided by lending value member bank
- <sup>3</sup> Ratio: Mortgage member bank divided by lending value member bank
- <sup>4</sup> Loans from Pfandbriefbank to member banks at nominal value
- <sup>5</sup> Eligibility and value of cover objects determined by Pfandbriefbank independently from member bank based on Pfandbrief act and valuation regulations.
- <sup>6</sup> Mortgage nominal value in the balance sheet of member bank
- <sup>7</sup> Lending value of cover objects set up by member bank to determine maximum mortgage
- <sup>8</sup> There are 288 banks with outstanding loans from Pfandbriefbank.
- <sup>9</sup> Rating by 1. Moody's, 2. S&P, 3. Fitch, 4. independent third party bank rating. According to Moody's bank rating methodology dated 16 March 2015 the Moody's bank deposit rating is selected before Moody's senior unsecured rating, where available.
- <sup>10</sup> BB+ rated member banks must have 120 % collateralisation. Member banks with rating better than BB+ must have 108 % collateralisation.
- <sup>11</sup> Loans of CHF 85'058 m are covered by the cover value determined by Pfandbriefbank of CHF 102'277 m for eligible mortgages of CHF 116'269 m with a lending value set up by member banks of CHF 204'031 m (207'818 objects).
- <sup>12</sup> The maximum cover value Pfandbriefbank for single family houses is CHF 2.5 m, for condominiums CHF 1.5 m, for multi family houses and commercial properties CHF 15 m.
- <sup>13</sup> Single family houses and condominiums larger than CHF 1.5 m, multi family houses larger than CHF 3 m and commercial properties larger than CHF 1.2 m are reviewed by the cover pool committee.
- <sup>14</sup> Selected single family houses and condominiums, multi family houses larger than CHF 5 m (CHF 3 m, if older than 20 years) and commercial properties larger than CHF 2.5 m (CHF 2 m, if older than 20 years) are visited on-site by the cover pool committee.
- <sup>15</sup> Properties with occupancy type 'vacation' are immaterial (loans of CHF 206 m or 0.2 % of total).
- <sup>16</sup> If loans are 100, the lending value of member banks amounts to 240. In other words: the overall loan to value is 42 %.
- <sup>17</sup> Ratio: Cover value Pfandbriefbank divided by lending value member bank
- <sup>18</sup> Mortgages with mortgage LTV member bank > 80 % are considered as ETPs (exception to policy). ETPs can be covered by additional collateral, which is not pledged to Pfandbriefbank, but to member bank only.

## 7 Investment Risks

For consulting refer to your Swiss bank, which will evaluate your individual risk profile and advise you according to your needs. They also will inform you directly about restrictions.

## 8 Disclaimer

The content of this publication is for informational purposes only and shall not be construed as constituting a solicitation, an offer or a recommendation with respect to the purchase or sale of the "Swiss Pfandbriefe". Moreover, this publication is neither a prospectus in terms of art. 652a and art. 1156 CO (Swiss Code of Obligations, SR 220) nor a simplified prospectus pursuant to art. 5 para. 2 CISA (Collective Investment Schemes Act, SR 951.31). No investment decisions, or other kinds of decisions should be reached solely on the basis of information from this publication. Further information, such as the base prospectus for the listing on the SIX Swiss Exchange, can be requested from the "Pfandbriefbank".

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