

## Pfandbriefbank Pool

31 December 2021, 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

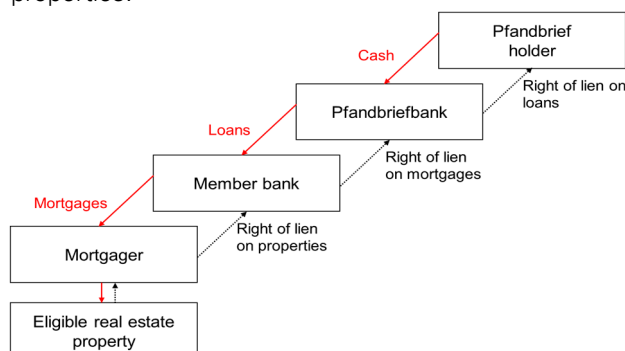
- Founded 1930, incorporated 1931
- Based on Pfandbrief act, which came into effect in 1930
- Special institute with limited scope (issuance of Swiss Pfandbriefe, loans to member banks and investment of own funds)
- No currency risk, no maturity mismatch, no interest rate risk
- Swiss Federal Council 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 property and 4. the market value of the real estate properties.



#### 1.4 Planned events

Issuances 01/02, 01/03, 29/03, 26/04, 24/05, 21/06, 12/07, 09/08/2022  
General meeting 19/05/2022

## 2 Swiss Economics

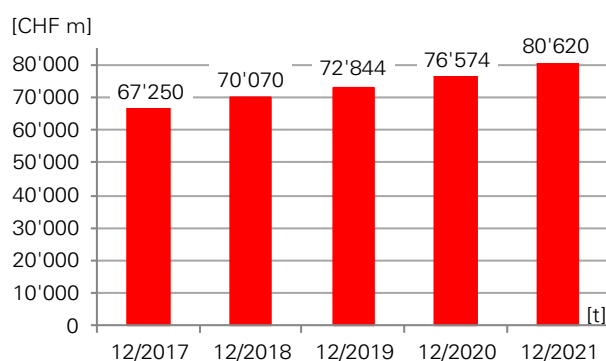
2.1 General	Source, units	12/2021	12/2020	12/2019	12/2018
Issuer Rating Switzerland	Moody's	Aaa	Aaa	Aaa	Aaa
Gross domestic product (GDP)	SECO, CHF bn	n/a (+3.5 % y/e forecast)	706	727	719
Unemployment rate <sup>19</sup>	SECO, Ø %	3.0	3.1	2.3	2.5
Eidgenossen (Gov), 10Y rate	SNB, %	-0.127	-0.525	-0.456	-0.154

### 2.2 Mortgage market

Mortgage volume of banks	SNB, CHF bn	(10/2021) 1'112	1'081	1'053	1'022
Swiss Pfandbriefe <sup>1</sup>	CHF bn	151	142	131	125
SWX IAZI Price Indices					
Private Real Estate	CH0030532342	205	192	187	184
Investment Real Estate	CH0030532391	203	192	192	183

## 3 Market

### 3.1 Pfandbriefbank - Outstanding Pfandbriefe

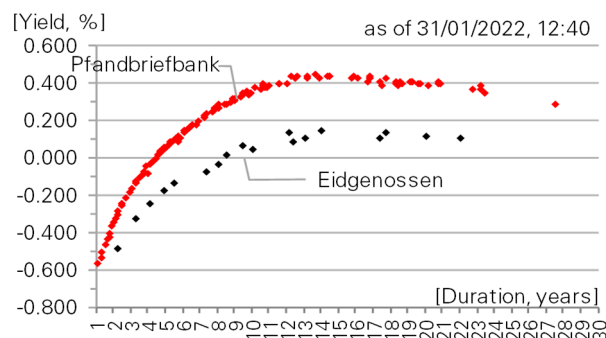


Source: Pfandbriefbank, semi-annual reports

In 2021 Pfandbriefbank issued Swiss Pfandbriefe of CHF 9'963 m. CHF 5'917 m matured. Net growth amounts to CHF 4'046 m.

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

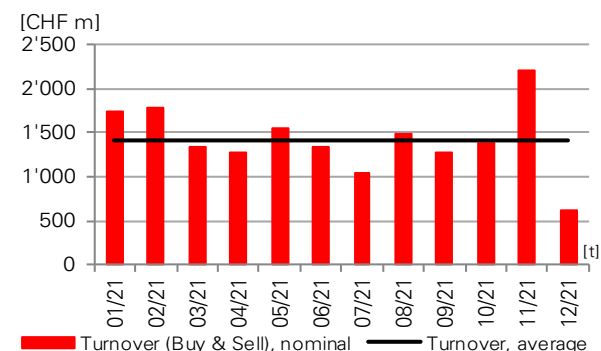
### 3.2 Pfandbriefbank - Yield per ISIN



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

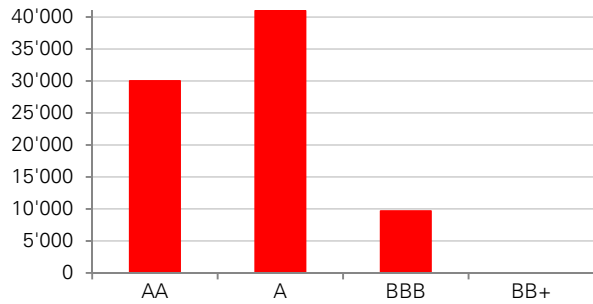


Source: SIX Swiss Exchange AG

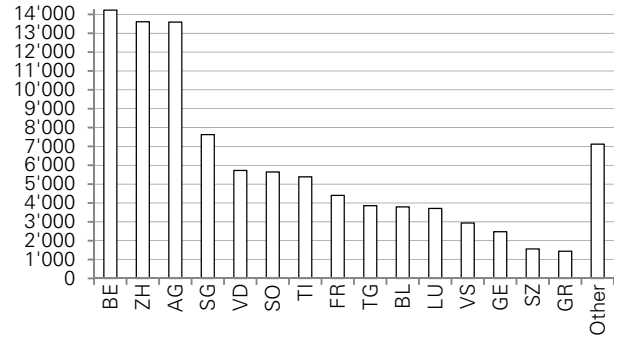
The joint lead banks are requested to organise the market making in the secondary market at SIX Swiss Exchange AG. For the last 12 months average monthly nominal turnover exceeded CHF 1'400 m (min/median/max: CHF 623 m/CHF 1'355 m/CHF 2'218 m).

## 4 Pool - Summary

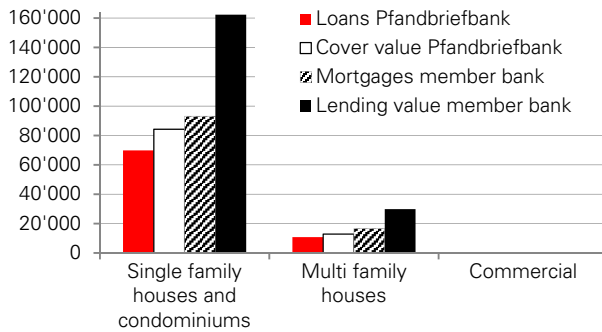
### 4.1 Loans to member banks (CHF m)



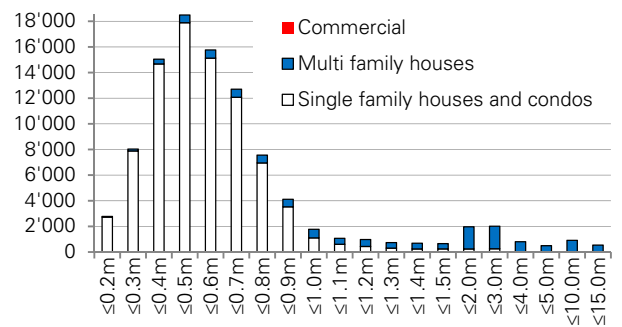
### 4.2 Cover value by region (CHF m, only CH eligible)



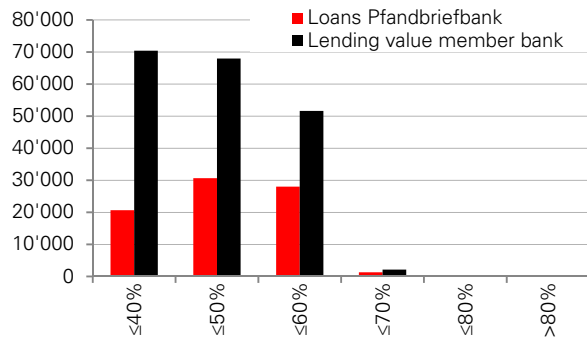
### 4.3 Property type (CHF m)



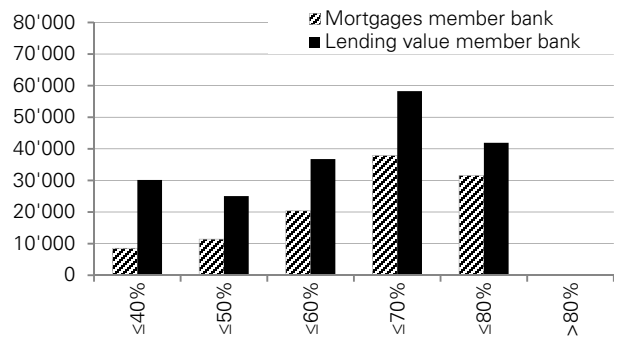
### 4.4 Cover value by size (CHF m)



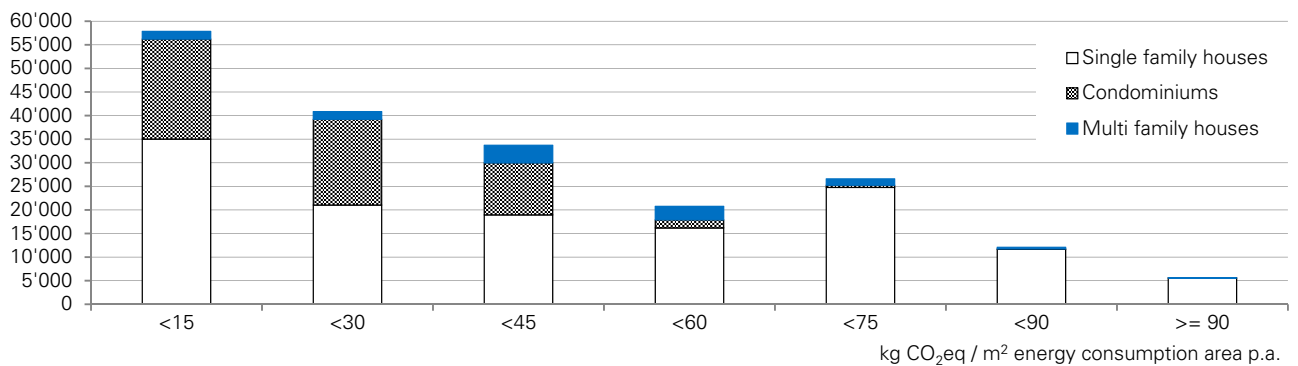
### 4.5 Loan LTV (CHF m) <sup>2</sup>



### 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 25 march 2021 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	%	CHF m	%
AA	29'998	37	35'843	37	40'887	37	70'462	37	69'796	35
A	40'957	51	49'056	51	54'775	50	96'326	50	108'303	54
BBB	9'665	12	12'212	13	14'116	13	25'374	13	23'667	12
BB+ <sup>10</sup>	0	0	0	0	0	0	0	0	0	0
Total <sup>11</sup>	80'620	100	97'111	100	109'778	100	192'161	100	201'766	100

Loan size total	CHF m	CHF m	%	CHF m	%	CHF m	%	CHF m	%	CHF m	%
232 bank(s) ≤ 200	21'174	26	25'685	26	28'979	26	49'882	26	51'209	25	
34 ≤ 400	9'060	11	10'740	11	12'211	11	21'597	11	22'645	11	
7 ≤ 600	3'580	4	4'835	5	5'569	5	9'304	5	9'788	5	
3 ≤ 800	2'013	2	2'438	3	2'798	3	4'880	3	4'529	2	
0 ≤ 1'000	0	0	0	0	0	0	0	0	0	0	
10 > 1'000	44'793	56	53'413	55	60'220	55	106'499	55	113'595	56	
Total	80'620	100	97'111	100	109'778	100	192'161	100	201'766	100	

### 5.2 Region (only Switzerland eligible)

BE	11'960	15	14'226	15	16'128	15	27'808	14	32'256	16
AG	11'260	14	13'590	14	14'959	14	25'601	13	30'662	15
ZH	11'217	14	13'608	14	15'530	14	29'390	15	23'543	12
SG	6'412	8	7'625	8	8'538	8	14'848	8	16'403	8
SO	4'844	6	5'645	6	6'389	6	10'478	5	12'893	6
VD	4'709	6	5'725	6	6'578	6	11'510	6	10'563	5
TI	4'090	5	5'386	6	6'125	6	10'786	6	11'247	6
FR	3'758	5	4'402	5	4'884	4	8'050	4	9'741	5
TG	3'240	4	3'856	4	4'320	4	7'300	4	7'912	4
BL	3'123	4	3'794	4	4'240	4	7'571	4	7'328	4
LU	3'119	4	3'712	4	4'216	4	7'253	4	7'255	4
VS	2'400	3	2'939	3	3'331	3	5'734	3	7'741	4
GE	2'054	3	2'477	3	2'979	3	5'570	3	3'708	2
SZ	1'320	2	1'564	2	1'777	2	3'350	2	2'779	1
GR	1'150	1	1'442	1	1'635	1	2'836	1	3'195	2
Other cantons, each < 1.4 %	5'963	7	7'121	7	8'151	7	14'076	7	14'540	7
Total	80'620	100	97'111	100	109'778	100	192'161	100	201'766	100

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

Overview	CHF m	%	CHF m	%	CHF m	%	CHF m	%	CHF m	%
Residential										
Single family houses and condominiums <sup>15</sup>	69'827	87	84'257	87	93'138	85	162'317	84	190'079	94
Multi family houses	10'793	13	12'854	13	16'641	15	29'844	16	11'687	6
Total residential	80'620	100	97'111	100	109'778	100	192'161	100	201'766	100
Commercial	0	0	0	0	0	0	0	0	0	0
Total	80'620	100	97'111	100	109'778	100	192'161	100	201'766	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	2'727	3	2'880	3	9'995	5	17'563	9
	≤ 300'000	7'884	8	8'285	8	17'676	9	29'845	15
	≤ 400'000	14'670	15	15'686	14	28'206	15	40'971	20
	≤ 500'000	17'886	18	19'349	18	32'219	17	39'391	20
	≤ 600'000	15'123	16	16'477	15	26'290	14	27'433	14
	≤ 700'000	12'070	12	13'515	12	20'944	11	18'488	9
	≤ 800'000	6'950	7	8'160	7	12'673	7	9'308	5
	≤ 900'000	3'524	4	4'288	4	6'653	3	4'156	2
	≤ 1'000'000	1'103	1	1'396	1	2'380	1	1'151	1
	≤ 1'100'000	603	1	790	1	1'271	1	570	0
	≤ 1'200'000	436	0	568	1	919	0	378	0
	≤ 1'300'000	303	0	382	0	646	0	242	0
	≤ 1'400'000	238	0	309	0	503	0	176	0
	≤ 1'500'000	244	0	332	0	583	0	165	0
	≤ 2'000'000	240	0	289	0	519	0	137	0
	≤ 2'500'000	255	0	433	0	840	0	105	0
	≤ 3'000'000	0	0	0	0	0	0	0	0
Total		84'257	87	93'138	85	162'317	84	190'079	94
Average as per cover object		0.443		0.490		0.854			
<b>Residential: Multi family houses</b>									
Cover value Pfandbriefbank	≤ 1'000'000	4'315	4	5'397	5	10'708	6	7'565	4
	≤ 2'000'000	4'032	4	5'092	5	8'679	5	2'876	1
	≤ 3'000'000	1'760	2	2'273	2	3'827	2	728	0
	≤ 4'000'000	801	1	1'038	1	1'766	1	233	0
	≤ 5'000'000	496	1	664	1	1'103	1	112	0
	≤ 10'000'000	912	1	1'262	1	2'169	1	131	0
	≤ 15'000'000	539	1	915	1	1'592	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		12'854	13	16'641	15	29'844	16	11'687	6
Average as per cover object		1.100		1.424		2.554			
<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		97'111	100	109'778	100	192'161	100	201'766	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 %	20'655	26	26'098	27	30'785	28	70'419	37	60'301	30
> 40 % to ≤ 50 %	30'652	38	36'803	38	42'009	38	67'970	35	68'568	34
> 50 % to ≤ 60 %	28'018	35	32'787	34	35'428	32	51'635	27	69'758	35
> 60 % to ≤ 70 %	1'295	2	1'423	1	1'557	1	2'137	1	3'139	2
> 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	80'620	100	97'111	100	109'778	100	192'161	100	201'766	100
Overcollateralisation		100		120		136		238		
LTV <sup>16</sup>		42		51		57		100		

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

> 0 % to ≤ 40 %	8'765	11	10'584	11	12'548	11	36'994	19	31'393	16
> 40 % to ≤ 50 %	17'989	22	21'781	22	26'090	24	46'974	24	38'096	19
> 50 % to ≤ 60 %	27'196	34	32'744	34	36'736	33	58'658	31	62'311	31
> 60 % to ≤ 70 %	26'670	33	32'003	33	34'404	31	49'536	26	69'966	35
> 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	80'620	100	97'111	100	109'778	100	192'161	100	201'766	100

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

> 0 % to ≤ 40 %	6'996	9	8'442	9	8'525	8	30'163	16	28'504	14
> 40 % to ≤ 50 %	9'168	11	11'074	11	11'430	10	25'041	13	25'346	13
> 50 % to ≤ 60 %	16'005	20	19'299	20	20'389	19	36'762	19	38'922	19
> 60 % to ≤ 70 %	27'999	35	33'655	35	37'871	34	58'272	30	63'317	31
> 70 % to ≤ 80 %	20'451	25	24'639	25	31'561	29	41'919	22	45'675	23
> 80 % <sup>18</sup>	2	0	2	0	4	0	4	0	2	0
Total	80'620	100	97'111	100	109'778	100	192'161	100	201'766	100

## 6 Maturity structure

Contractual Cashflows (unaudited MIS view)		Maturity Buckets (in years)					
		Total	> 1y and ≤ 1y	> 5y and ≤ 5y	> 10y and ≤ 10y	> 15y and ≤ 15y	> 15y
31/12/2021							
CHF m (A/L denominated in CHF)							
Assets (stylised)		82'791					
thereof	Loans to member banks	80'620	6'005	22'885	26'530	12'082	13'118
	Bonds	1'423	46	461	692	224	0
	- thereof SNB GC Basket	1'399					
	- thereof pledged	0					
	Share capital not paid in	560	560				
Liabilities (stylised)		-82'791					
thereof	Swiss Pfandbriefe	-80'620	-6'005	-22'885	-26'530	-12'082	-13'118
	Equity	-1'871					
Net total			606	461	692	224	0

- <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 286 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 80'620 m are covered by the cover value determined by Pfandbriefbank of CHF 97'111 m for eligible mortgages of CHF 109'778 m with a lending value set up by member banks of CHF 192'161 m (201'766 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 138 m or 0.2 % of total).
- <sup>16</sup> If loans are 100, the lending value of member banks amounts to 238. 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.
- <sup>19</sup> The lost working hours from paid short-time work (including from COVID-19 measures) rose from 0.2 million hours in December 2019 to 2.2 million hours in October 2021 (last available indicator; the cumulative total since November 2020 is approximately 181 million hours). Short-time workers are not considered unemployed.

## 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

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