

3.36.1 SWITZERLAND – SWISS PFANDBRIEFE®

By Robert Horat and Markus Müller, Pfandbriefbank schweizerischer Hypothekarinstitute AG

I. FRAMEWORK

The legal framework for the Swiss Pfandbrief system is the Pfandbrief Act ('Pfandbriefgesetz', 'PFG'). It is complemented by the Pfandbrief Ordinance ('Pfandbriefverordnung', 'PFV'), the statutes of the Pfandbrief institutes and the valuation regulations. These have to be authorised by the Swiss Federal Council.

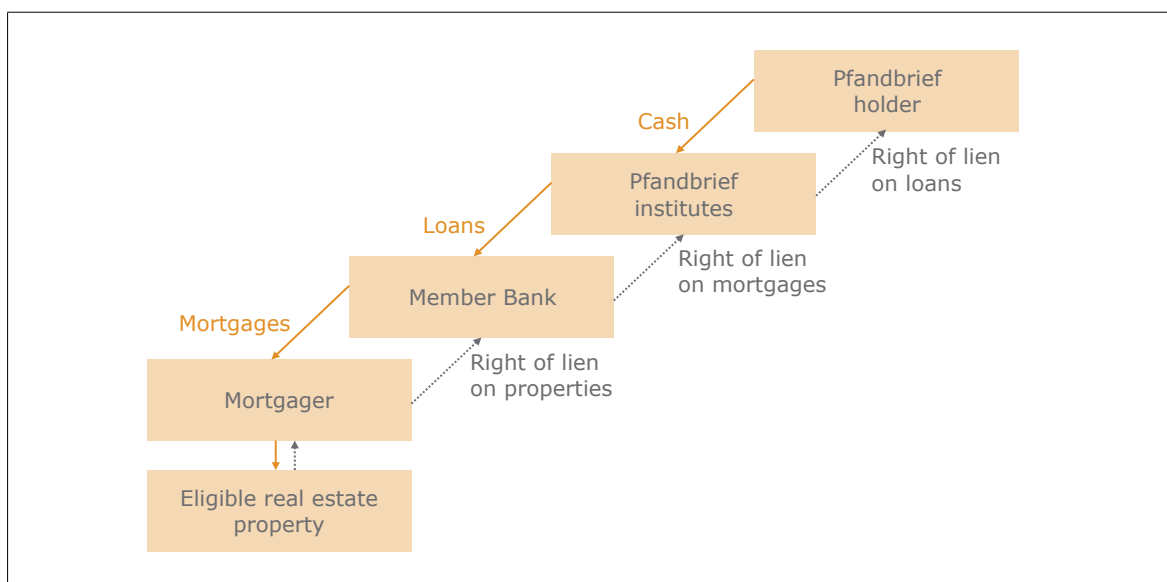
According to the PFG, the issuance of Swiss Pfandbriefe is reserved to two specialised Pfandbrief institutes, namely the 'Pfandbriefzentrale der schweizerischen Kantonalbanken AG' (PZ) and the 'Pfandbriefbank schweizerischer Hypothekarinstitute AG' (PB). They issue Swiss Pfandbriefe to refinance their member banks' Swiss mortgage business. As of article 1 of the PFG the purpose of the Pfandbrief institutes is to enable mortgages for real estate owners at interest rates which are as constant and favourable as possible. The "Swiss Pfandbrief®" is a registered trademark. The reputation of this brand shall underpin its uniqueness within the world of covered bonds.

The Swiss Pfandbrief system is an indirect one: The Pfandbrief institutes raise money by issuing Swiss Pfandbriefe in order to grant Pfandbrief loans to their member banks. Sourced volume, currency and interest terms must be equal within each series of issuance. To get a loan, each member bank has to pledge first class Swiss mortgages to the Pfandbrief institute as a cover in advance. The Pfandbrief investors have a lien on the granted loans. The investors' lien on the loans as well as the issuers lien on the mortgages in the member banks' cover pool are determined by the Pfandbrief Act.

PFG came into effect in 1930. Its 52 articles are well balanced and the PFG had to be modified only marginally in the meantime. The fact that the Swiss Pfandbrief has a special legal basis, provides legal certainty as well as stability and predictability.

Pfandbrief institutes have a strictly limited scope.

> FIGURE 1: THE SWISS PFANDBRIEF® FRAMEWORK

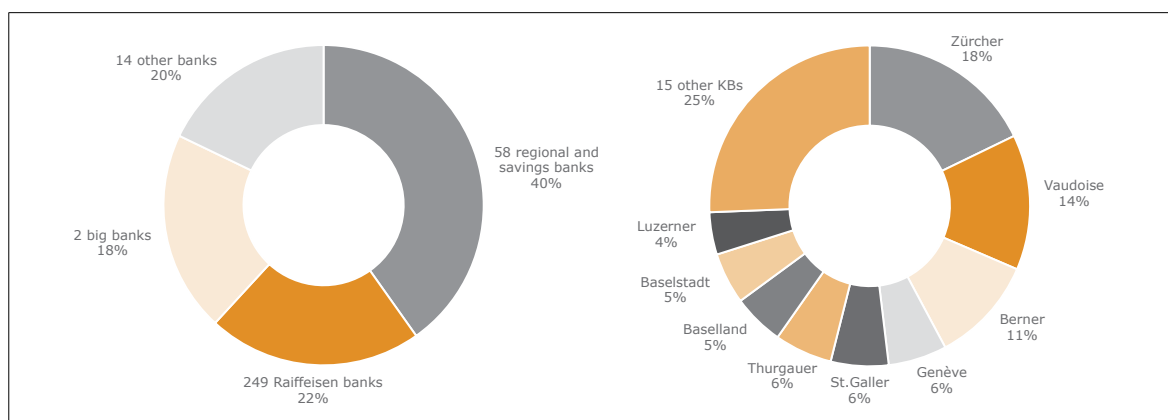


Source: Credit Suisse AG

II. STRUCTURE OF THE ISSUER

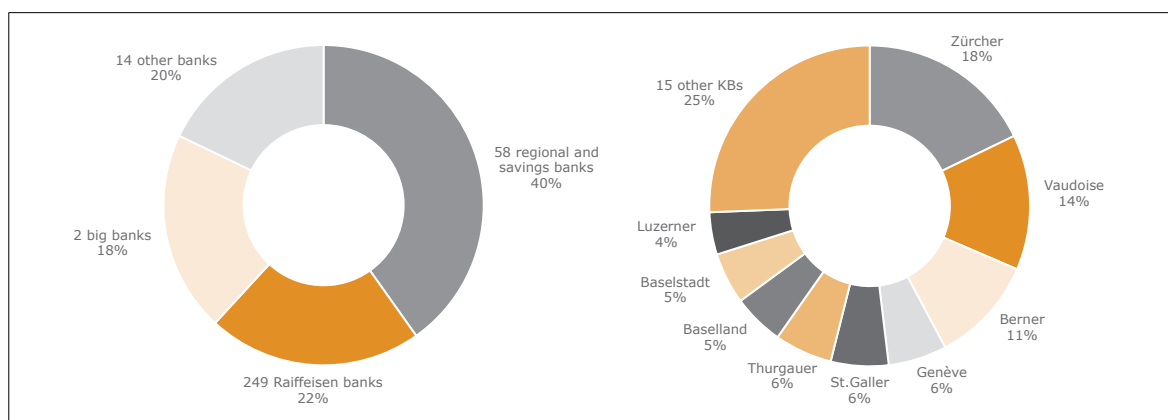
Pfandbriefzentrale operates as the Pfandbrief issuing vehicle of the Swiss cantonal banks and Pfandbriefbank of all other Swiss banks. Both are special institutions with their business scope limited to the issuance of Swiss Pfandbriefe, to granting Pfandbrief loans to their member banks and to investing their share capital and reserves. Both Pfandbrief institutes are supervised by the Swiss financial market authority (FINMA). They are owned by their member banks. The chart below shows the structure of the shareholders:

> FIGURE 2: SHAREHOLDERS OF PB



Source: PB as of 31.12.2017

> FIGURE 3: SHAREHOLDERS OF PZ



Source: PZ as of 31.12.2017

PB was founded in 1931 and counts 317 member banks with loans. Any Swiss bank has the right to become a member of PB, provided that it is headquartered in Switzerland and that Swiss mortgages account for at least 60% of the bank's balance sheet. As of 31 December 2017, the total outstanding Swiss Pfandbriefe of PB amount to CHF 67.3 billion (EUR 57.5 billion).

PZ was also founded in 1931 and has 24 member banks. Only cantonal banks have the right to become members of the PZ (Article 3 PfG). PZ does not have its own staff but has fully outsourced its operations to Zürcher Kantonalbank. As of 31 December 2017, the total outstanding Swiss Pfandbriefe of PZ amount to CHF 52.1 billion (EUR 44.5 billion).

The total volume of all outstanding Swiss Pfandbriefe, as of 31 December 2017, amounts to CHF 119.3 billion (EUR 102.0 billion). For years the two Swiss Pfandbrief institutes have been the major bond issuers in Switzerland, even more important than the government. In 2017 they issued Swiss Pfandbriefe amounting to CHF 14.9 billion (EUR 12.7 billion).

Swiss Pfandbriefe are standardised to a great extent. They are a commodity, denominated only in Swiss francs, with an original time to maturity up to 30 years. The size of an issuance depends either on the demand of the member banks for loans or on the demand of the investors for Swiss Pfandbriefe, whichever is smaller. Whenever possible, existing bonds are reopened.

Generally, Swiss Pfandbriefe are issued as public bonds through a banking syndicate at fixed term fees (the last private placement has been placed in 2011). All of these public issuances are listed on the SIX Swiss Exchange AG. In the segment of the domestic bonds in Swiss Francs Pfandbriefe amount to 34%, followed by public sector (Swiss sovereign, cantons, cities, regions) with 31%, the banking sector with 14% and other industries with 21%.

In total about 12% of all Swiss mortgages are refinanced through Swiss Pfandbriefe (10/2017).

III./IV. COVER ASSETS, VALUATION AND LOAN TO VALUE (LTV) CRITERIA

As a principle, Pfandbrief loans are only granted against a pledge of eligible first class mortgages on Swiss properties.

PB has got an electronic cover pool system. Mortgages are pledged to PB by the member banks through entry of a complete 'cover proposal' into the electronic pool register, which all member banks are linked to. The system immediately evaluates the member bank's 'cover proposal', which is then reviewed by one employee and authorized by another. PB values the mortgages independently from the member bank. Substantial cover proposals are additionally reviewed by a special cover pool committee.

The PfG defines a general maximum LTV of two thirds (Article 5 PfG). Member banks are obliged to replace impaired, non-performing and other ineligible mortgages. Furthermore, contractual repayments of the mortgage can also reduce the cover value of the asset pool. Therefore, member bank and PB have to supervise overcollateralisation daily. If total cover value is below the overcollateralisation limit, latest by close of business new eligible mortgages have to be pledged by the member bank.

The 'Pfandbriefbank pool' consists of approx. 177'000 mortgages all over Switzerland, which provides a good diversification. Over 99% of the properties are residential and less than 1% are commercial.

If macroeconomic conditions change materially, FINMA may request a new valuation of the real estate properties (Article 32 PfG).

V. ASSET – LIABILITY MANAGEMENT

Cover principles

The PfG stipulates that the principal amount as well as the interest payments of outstanding Swiss Pfandbriefe be at all times covered by an equivalent amount of Pfandbrief loans to the member banks (Article 14 PfG). The loans granted by Pfandbrief institutes to their member banks must be collateralised by liens on eligible real estate property (Article 19 PfG). If the interest proceeds total of the pledged mortgages of a member bank is smaller than its total Pfandbrief loan interest, the asset cover pool must be increased (Article 20 PfG).

Overcollateralisation

Additionally to eligibility and valuation principles (LTV legally at maximum 2/3, for PB the average LTV is less than 50%), the cover value of the cover register assets have to exceed the Pfandbrief loans given to member banks by at least 8% for PB and by 15% for PZ. The higher overcollateralisation of PZ compensates for the fact that PZ does not have a standardised electronic cover pool register.

Additional Limits

Swiss Pfandbriefe are issued in individual series which must match the repayment profile of the Pfandbrief loans to member banks, eliminating interest rate and funding risks. Currency risk does not exist as both the loans to member banks and the Pfandbriefe are issued in Swiss Francs. Therefore, there is no need for derivatives to hedge market risks. Liquidity concentration risk is limited by individual limits for each member bank. The investment policy for free assets limits credit and market risks on counterparty and portfolio level.

Growth of the Pfandbrief institutes is limited as the required capital must exceed 2% of the total Pfandbrief issuance volume of the respective institute (Article 10 PfG).

VI. TRANSPARENCY

Although Switzerland does not participate in the 'Covered Bond Label' self-certification programme, PB publishes the 'Pfandbriefbank Pool' report (incl. member bank rating distribution, region, property type, property type by cover value size, loan to value) semi-annually on its home page (www.pfandbriefbank.ch).

VII. COVER POOL MONITOR AND BANKING SUPERVISION

PB values the cover pool independently of the member bank (which grants the mortgage to the house owner) and monitors eligibility and overcollateralisation of the cover pool daily. Mortgages are back-tested by means of a hedonic valuation model. Additionally, a special cover pool committee reviews substantial mortgages and visits major properties.

The Swiss Federal Council approves by-laws and valuation regulations and nominates one member of the board of directors.

Swiss Pfandbrief institutes as well as their member banks are supervised by FINMA and audited by external audit firms.

In addition, Moody’s rates all Swiss Pfandbriefe with Triple A, investors analyse the annual reports of the Pfandbrief institutes, various analysts publish research reports and/or ratings and last but not least capital market values Swiss Pfandbriefe.

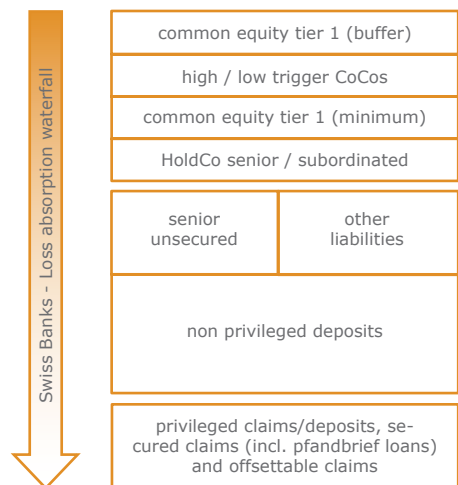
VIII. SEGREGATION OF COVER ASSETS AND BANKRUPTCY REMOTENESS

In the event of a member bank’s insolvency, the Pfandbrief institute has a priority claim on the registered collateral (Article 23 PfG). The insolvency of a member bank does not directly trigger the acceleration of outstanding Pfandbriefe. In this respect, the Pfandbrief institute functions as a buffer between the investors and the member banks. The Pfandbrief institutes have own funds at their disposal and maintain an unencumbered SNB-/repo-eligible bond portfolio within their free assets.

Should there be justified concern that a member bank is overindebted, has serious liquidity problems or that the bank no longer fulfils the capital adequacy provisions (Article 25 Banking Act – BankG), FINMA can order:

- a) Protective measures pursuant to Article 26 BankG. However, FINMA can order deferment of payments or payment extension, except for mortgage-secured receivables of the Pfandbrief institutes (Article 26 h BankG). FINMA can also order the delivery of the cover assets and then act as fiduciary (Article 40 PfG).
- b) Restructuring procedures pursuant to Article 28 – 32 BankG: If it appears likely that the member bank can continue to provide individual banking services (regardless of the continued existence of the bank concerned) or can recover, FINMA can issue the necessary provisions and restructuring orders (Article 28 BankG):

- > Convertibility of claims (Article 49 BIV): All bank debt capital may be converted into equity capital, explicitly excluding a) defined “privileged claims”, b) “secured claims to the extent that they are secured” (incl. pfandbrief loans) and “offsettable claims to the extent that they are offsettable”.
- > Reduction in claims (Article 50 BIV): In addition to or instead of converting bank debt capital into bank equity capital, FINMA may order a partial or full reduction in claims, again excluding the aforementioned letters a and b (of Article 49 BIV) and letters a to c of Article 48 BIV.
- > In our view, this framework leads to the Swiss bank loss absorption waterfall as shown on the right-hand figure.



- c) The member bank's liquidation due to bankruptcy pursuant to BankG Article 33 – 37 g: Should there be no prospect of restructuring or if a restructuring were to fail, FINMA will have to revoke the bank's licence, order its liquidation and make this public (Article 33 BankG).

The Banking Insolvency Ordinance (BIV) defines restructuring proceedings and bankruptcy proceedings under Article 28 – 37 g BankG in detail. This includes that FINMA may draw up a separate schedule of claims for claims secured by a registered pledge of the Pfandbrief institutes, if systemic risks can only be restricted by doing so (Article 27 BIV).

IX. RISK-WEIGHTING & COMPLIANCE WITH INTERNATIONAL LEGISLATION

The Bank for International Settlements regularly assesses the consistency of implementation of Basel standards. Within the Regulatory Consistency Assessment Programme (RECAP) the Basel Committee on Banking Supervision rated Switzerland with an overall "compliant" grade for the risk based capital standards (June 2013), for G/D-SIB standards (June 2016) and for the Liquidity (LCR) standards (October 2017).

Basel III – capital standards

Switzerland implements Basel III capital requirements by means of the 'Banking Act' and the 'Swiss Capital Adequacy Ordinance' (CAO) into national law. The CAO has two approaches to measure credit risks in banking books: The BIS standard approach and the internal ratings-based approach. Under the BIS standard approach Swiss Pfandbriefe have a 20% risk weighting.

Basel III – liquidity standards

Switzerland implements Basel III liquidity requirements by means of the 'Banking Act' and the 'Liquidity Ordinance' (LiqO) into national law. Swiss Pfandbriefe fulfil the Liquidity Coverage Ratio criteria for high-quality liquid assets (Article 15b of LiqO for LCR HQLA 2a: Covered bonds, not self-issued, rated AAA or AA). As a second minimum liquidity requirement for Swiss banks the Net Stable Funding Ratio (NSFR) is planned to come into effect in 2018.

Beyond the Basel risk framework, Article 9 of the National Bank Act also lists the open market operations and standing facilities that the Swiss National Bank (SNB) may contract. The preconditions for entering into a standing intraday or liquidity facility are the granting of a limit by the SNB and the provision of eligible collateral. Only securities included in the latest SNB GC basket may be pledged as collateral for repo transactions (www.snb.ch, financial markets, monetary policy operations, collateral eligible for SNB repos). Swiss Pfandbriefe are part of the SNB GC list and are therefore eligible.

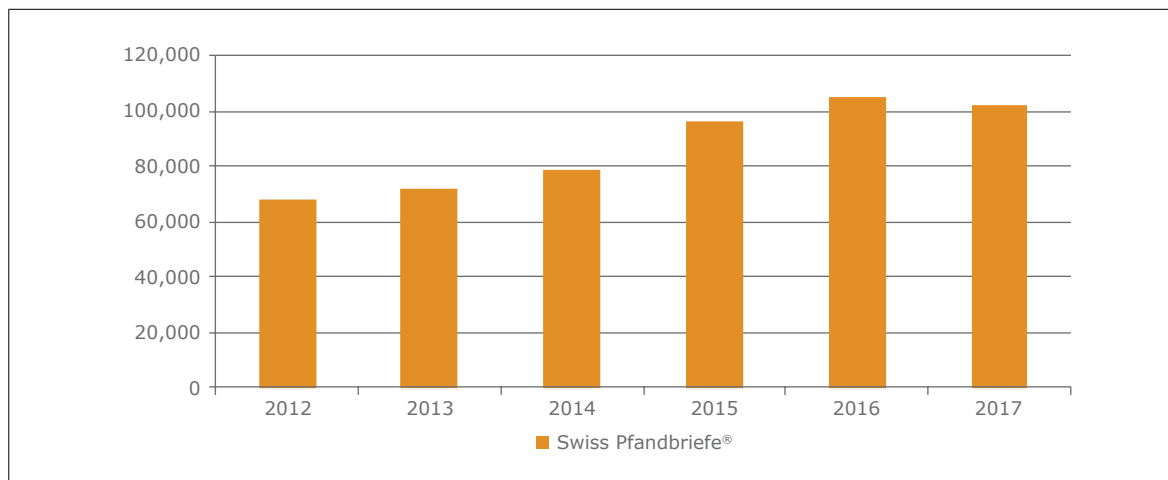
X. INVESTORS BENEFITS

An investor in Swiss Pfandbriefe benefits from:

- > The special institute principle with strictly limited scope;
- > Swiss legislation applicable for all contracts within the Swiss Pfandbrief collateral chain;
- > The cover pool, which only includes eligible Swiss franc mortgages on Swiss real estate properties;
- > The fourfold security which is: 1) the creditworthiness of the Pfandbrief institute; 2) the creditworthiness of the member bank; 3) the creditworthiness of the mortgager and 4) the market value of the real estate property itself;
- > In the case of PB: the value of the real estate property is independently determined by PB and not by the member bank;

- > In the case of PZ: explicit state guarantee for most of its member banks¹;
- > The fact that since the establishment of the PfG in 1930 neither an investor nor a Pfandbrief institute have ever suffered a loss.

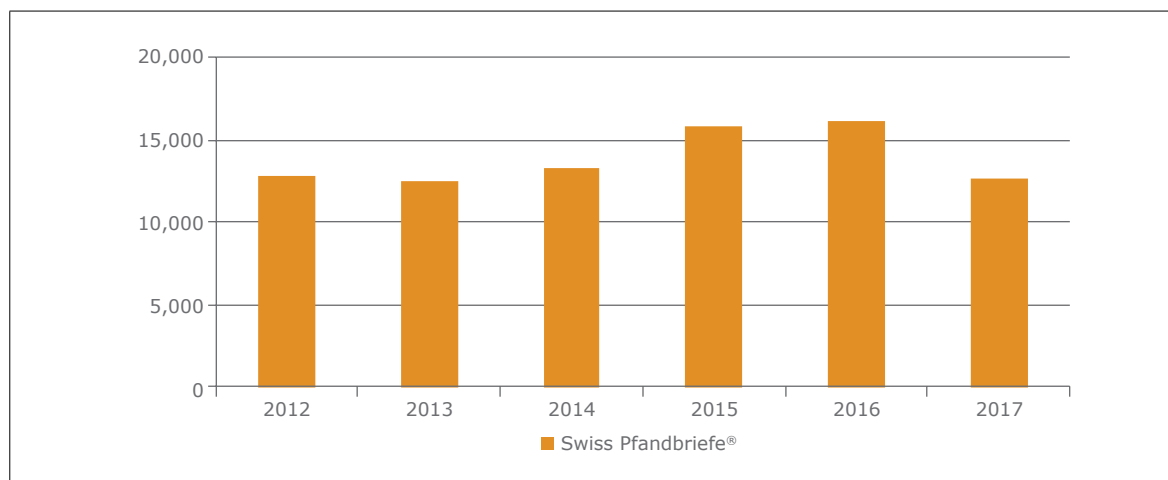
> FIGURE 4: SWISS PFANDBRIEFE OUTSTANDING, 2012-2017, EUR M



Source: EMF-ECBC

On 15 January 2015 Swiss National Bank (SNB) discontinued the minimum exchange rate of CHF 1.20 per Euro.

> FIGURE 5: SWISS PFANDBRIEFE ISSUANCE, 2012-2017, EUR M



Source: EMF-ECBC

Issuers: Pfandbriefbank schweizerischer Hypothekarinstitute AG (PB) and Pfandbriefzentrale der schweizerischen Kantonalbanken AG (PZ).

ECBC Covered Bond Comparative Database: http://www.ecbc.eu/framework/82/Swiss_Pfandbriefe.

¹ Three of PZ's member banks do not benefit from a cantonal guarantee, namely Banque Cantonale de Genève AG, Banque Cantonale Vaudoise AG and Berner Kantonalbank AG.