Lucerne University of Applied Sciences and Arts

SMLA Swiss Marketplace Lending Association

Marketplace Lending Report Switzerland 2022

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FH Zentralschweiz

The Study

The Marketplace Lending Report is the second comprehensive analysis of the financing of companies, public corporations and private individuals by means of debt capital via the Internet in Switzerland.

The number of private individuals, companies, public corporations, cantons, cities and municipalities seeking loans on platforms is increasing. Online platforms bring lenders and borrowers together, eliminating the conventional financial intermediation provided by banks.

The Institute of Financial Services Zug IFZ has been analysing the online debt capital market segment since 2012. In this so-called crowdlending market, private individuals or professional investors finance other private individuals or companies. A central feature of this form of financing is that the corresponding loans are published on platforms for both private and professional investors.

Since 2018, platforms granting access exclusively to professional and institutional investors have also grown strongly. The Marketplace Lending Report includes platforms with an exclusive focus on institutional investors and institutional borrowers (B2B business) as well as platforms open to private investors.

The study is a joint publication by the Lucerne School of Business and the Swiss Marketplace Lending Association (SMLA). The publication aims to highlight the increasing economic relevance of the Swiss online financing market and to increase market transparency. Numerous Swiss platforms have made this publication possible by providing data for research purposes.

We would like to thank the marketplace lending platforms for the open discussions and the data provided. Lastly, we thank our colleagues Florian Estermann, Anja Leutenegger-Stutz, and Olivia Zahlbruckner, who contributed to this study.

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Contents

1 Objective and structure of the report

This study aims to illustrate and discuss the current status and trends of the Swiss marketplace lending market, focusing on platforms with offices in Switzerland. By publishing the market figures, we aim to improve the transparency of the Swiss market and provide an overview of key trends. Furthermore, the study aims to provide an overview of each funding option and market participant. The target readership of this study is not only professionals but also the general public.

The Institute of Financial Services Zug IFZ of the Lucerne School of Business collected data from most of the marketplace lending platforms operating in Switzerland in 2021. The data of certain subsegments are covered by the dataset of the annual Crowdfunding Monitor (Dietrich & Amrein)[1]. Additional data was collected by the Swiss Marketplace Lending Association (SMLA) from its members (risk and return figures).

The report is structured as follows: Following an introduction to the subject in Section 2, Section 3 traces the development of the Swiss marketplace lending market. Different segments of the market are shown and discussed. It also provides a deep dive into the crowdlending segment, discussing risk/return metrics of such loans. Section 4 provides an outlook for the Swiss marketplace lending market.

[1] Dietrich, A. & Amrein, S. (2022). Crowdfunding Monitor Switzerland 2021. Rotkreuz: Verlag IFZ.

2 An Introduction to Marketplace Lending

The following Section provides an introduction to marketplace lending. Moreover, the chapter offers a conceptual overview of business models in marketplace lending, which will be used as a framework for the market analysis in Section 3.

2.1 Financial Intermediation Through Marketplace Lending

Marketplace lending describes the process of arranging debt capital between lenders and borrowers online. The intermediation occurs via credit marketplaces, referred to as platforms in the following. Borrowers can be private individuals, companies or public corporations. Lenders may be private individuals or professional and institutional investors such as insurances, funds, pension funds, banks, family offices, foundations, companies or other legal entities. The borrowed capital can be granted by only one or by several entities. In order to meet the criteria of a marketplace for this study, a platform must be accessible to more than one lender. Online platforms run by individual banks to distribute loans, for example, are excluded and out of the scope of this study.

Figure 1 visualises a simplified loan transaction process on a marketplace lending platform. Potential borrowers submit a loan application to a platform and must disclose various data. Investors can select and invest in loans on the platform. Once one or several investors have been found to finance the loan, a loan agreement is often concluded between the lender(s) and the borrower directly. It should be noted that other business models also exist, where loan agreements are made through the platform (with the platform as the legal counterparty). The investors transfer the loan amount to the borrower. Subsequently, the borrower typically has to repay the loan amount and interest to the lenders over a predetermined period. The interest payment usually depends (among other factors) on the terms of the loan, the general interest rate level and the borrower's risk of default. The platform receives fees from borrowers and/or lenders for its brokerage services. The fees depend on the business model and the services provided to lenders and borrowers.

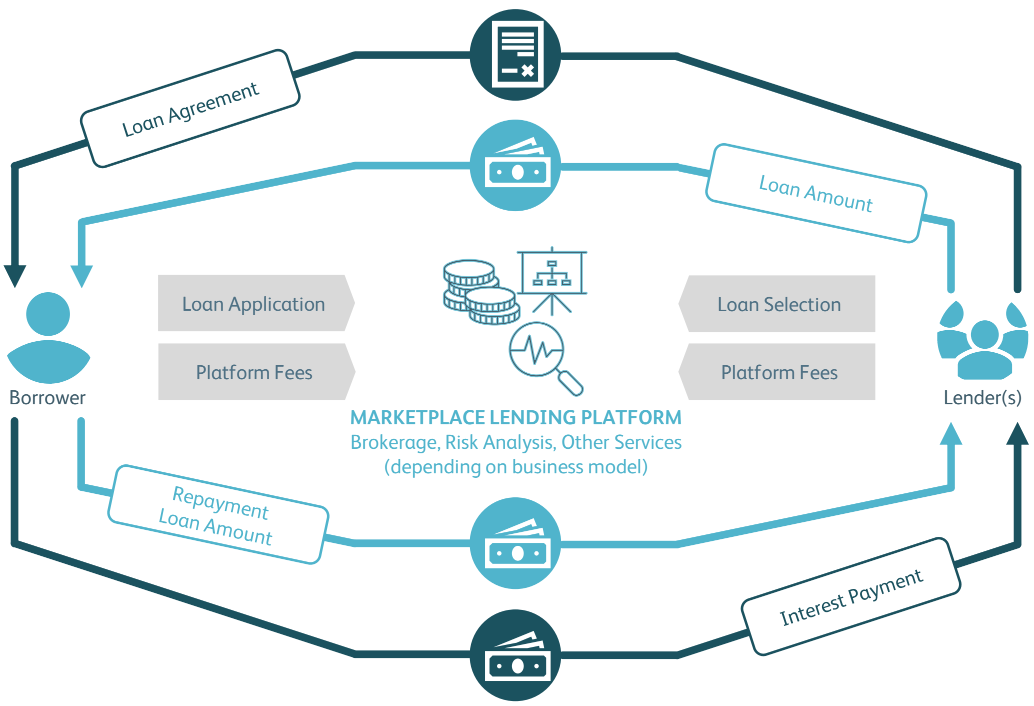

Figure 1: Capital Flows and Services of a Marketplace Lending Platform (illustrative)

Terminologies: P2P Lending, Crowdlending, Marketplace Lending, and Online Alternative Finance

The existing literature and market participants use various terminologies for the online financing of loans to consumers, small and medium enterprises (SMEs[2]) and other entities. "Peer-to- Peer (P2P) lending" emerged as the first term to describe the online intermediation of loans. With the growing popularity of crowdfunding, however, the term crowdlending also became increasingly common. Crowdfunding was derived from a concept described as "crowdsourcing" by journalist Jeff Howe in Wired magazine in 2006.[3] Both P2P lending and crowdlending were often perceived as enabling the financing of a loan by one or more private individuals ("peers"). However, as lenders became more diverse and institutional investors gradually started to engage in online loan platforms, the basic concept of loan financing from peers was increasingly diluted.

The term "marketplace lending" allows a broader scope in defining the financing of loans through online platforms. Bearing in mind the involvement of a variety of investors, the idea of marketplace lending as a marketplace for credit is more accurate in describing the business model of the respective platforms.

"Online Alternative Finance" is another term often used to describe business models relating to online capital raising activities.[4] Similarly to crowdfunding, Online Alternative Finance has a broader scope, including debt-based, equity-based, and non-investment-based financing activities (reward-based and donation-based crowdfunding). The idea of "alternative" signals that business models in this area typically operate outside the existing traditional banking and capital markets.

This study uses the term "marketplace lending". It is broad enough to cover a variety of platforms with various borrowers and lenders while focusing solely on debt capital intermediation through online platforms.

The first marketplace lending (at the time P2P) platform was Zopa, launched in the United Kingdom in 2005. The platform focused on servicing private individuals with consumer/ personal loans. In 2006, the first platform in the United States, Prosper, was established. As Zopa, Prosper started by offering personal loans. The first Chinese marketplace lending platform, Paipaidai – also focusing on consumer finance – was established in 2007. In Switzerland, the first lending platform, Cashare, was launched in 2008. Since then, there has been a rapid increase in the number of platforms globally and in Switzerland. By the end of 2021, there were 29 marketplace lending platforms in Switzerland.

Banking vs Marketplace Lending

Financial intermediation through marketplace lending platforms is fundamentally different from that of banks. While banks lend via their balance sheet, the platforms usually act as intermediaries without using their balance sheets. Banks traditionally provide lot size, maturity and risk transformation functions in financial intermediation. For example, banks convert savings from several lenders into one large loan, spread over a large number of loans, or use short-term funds for long-term loans. Marketplace lending removes these roles of banks. Thus, lenders themselves bear the risk of credit default and must be concerned about portfolio diversification. In return, lenders receive direct access to an asset class. Moreover, the income of marketplace lending platforms is not based on interest income – as is the case for banks – but on fees and commissions. Therefore, this report explicitly excludes loans with a balance sheet entry by the intermediary from the definition of marketplace lending. Banks offering loans online through their website or online banking are excluded from our analyses. Also excluded from the study are private debt investments without the involvement of online platforms.

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[2] SME are defined as companies with less than 250 employees.

[3] Howe, J. (2006). The Rise of Crowdsourcing. Wired magazine. Issue 14.06.

[4] For a more detailed discussion of the term, see: Cambridge Centre for Alternative Finance (2020). The Global Alternative Finance Benchmarking Report, p. 30.

2.2 A Conceptual View on Business Models

Business models of platforms in the marketplace lending market are very heterogeneous and can be categorised according to several characteristics. Figure 2 shows two relevant dimensions (borrower and lender type) and divides them into three sub-categories. Lenders can be i) private individuals, ii) professional or institutional investors (e.g. family offices, funds), or iii) banks. Borrowers may be i) private individuals, ii) SMEs, large corporates, public corporations or entities (e.g. municipalities, cities, cantons, public or near-public entities such as hospitals), or iii) banks.

A clear distinction of business models along the nine segments is not possible. For example, the investor base of some platforms is diverse and consists of institutional and private lenders. The same applies to the borrower side, where a platform might facilitate loans to various entities.

Nevertheless, the nine segments shown in Figure 2 serve as a conceptual guide to characterise business models among marketplace lenders in Switzerland. In addition to the lender and borrower dimension, various other characteristics can also be considered. These are, for example, the loan duration and its collateral or the service offering of the platforms. In Switzerland, we currently identify eight different loan types brokered on platforms:

- i) consumer loans,
- ii) real estate loans,
- iii) business loans (for SME),
- iv) mortgage loans (brokerage),
- v) OERK & institutional loans,
- vi) loans to mid-sized and large corporations,
- vii) public bonds, and
- viii) money market loans.

The first three subsegments are often referred to as the crowdlending segment because investments are open to both private and professional investors.

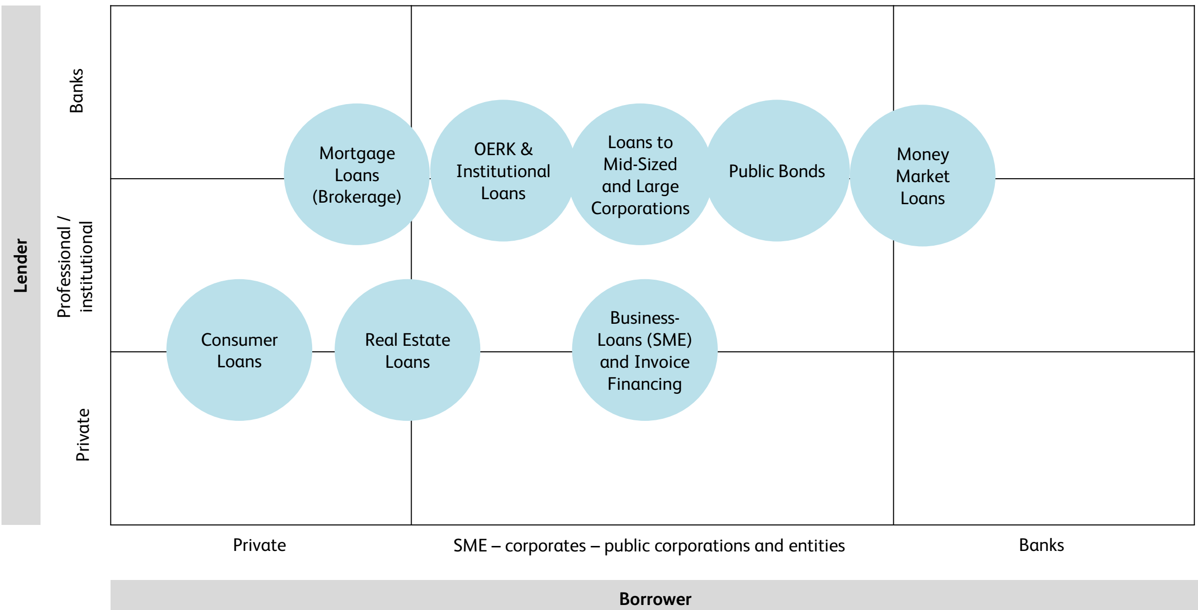

Figure 2: Conceptual Framework for Business Models in Marketplace Lending (bubble sizes do not indicate market volumes)

3 Marketplace Lending in Switzerland

Private individuals, SMEs, public corporations and public entities can access debt capital from different sources. A potential source of credit is marketplace lending. Before exploring the market participants, business models and market volumes in Swiss marketplace lending, we briefly discuss Switzerland's most relevant players in the conventional financing market, the banks.

In 2021, Swiss banks' total domestic outstanding loan volume was CHF 1,301.4bn. Figure 3 shows the shares of different loan types within the total loan volume in banks' balance sheets. A substantial amount (85 %) of the total loan volume is secured by mortgages. The borrowers are private individuals, corporates and the public sector. Private individuals accounted for CHF 859.8bn. CHF 26.7bn were loans to the public sector and CHF 6.0bn to other entities. Corporates borrowed CHF 414.8bn from banks. 87.6 % of these corporate loans were for SMEs. The most significant part of SME loans is mortgage-backed, with a share of three-fourths.[5]

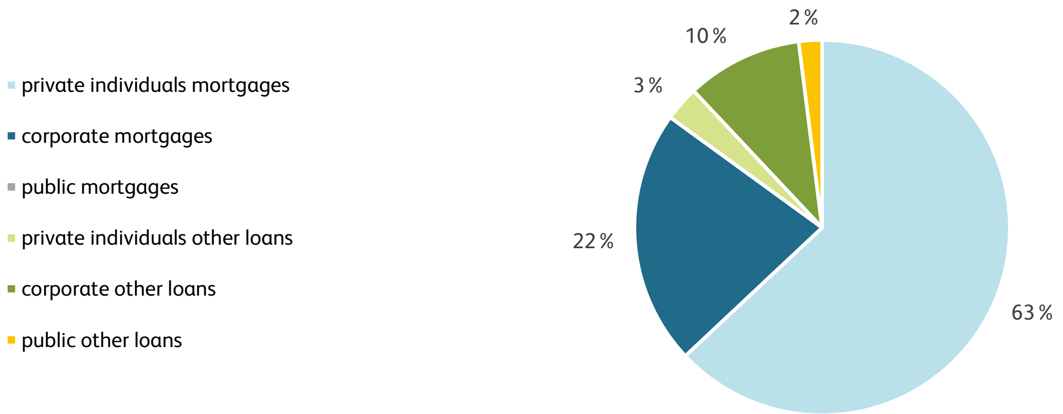

Figure 3: Swiss Banks' Share of Different Loan Types and Client Segments as of 2021

The figures above refer to outstanding domestic loan volumes. The annual volume of new loans facilitated by Swiss banks is not public. For the Swiss mortgage market, we estimate that about CHF 160-180bn of loans to private individuals are annually extended or newly concluded. The distinction between new loans and credit extensions is essential, as the statistics in the following sections will refer primarily to new loans (flow vs stock figures).

[5] SNB (2021). Datenportal der Schweizerischen Nationalbank. Online (29.08.2022): https://data.snb.ch/

3.1 Deep Dive – Consumer, SME-Business Loans and Real Estate Loans[6]

The crowdlending segment is the "oldest" online financing market in Switzerland. The first platform, at the time, providing loans to consumers only, entered the market in 2008. Currently, we identify three different loan types offered by Swiss crowdlending platforms:

i) Consumer loans are loans granted to private individuals to finance consumer spending. In Switzerland, consumer loans are regulated by the Federal Law on Consumer Credit. Among other rules, the law sets the maximum interest rate that can be charged for consumer loans. Currently, rates above the maximum interest rate of 10 % per year for cash loans and 12 % for card loans are not allowed. Average loan volumes for consumer loans range from CHF 30,000 to 40,000, similar to consumer loans provided by consumer loan banks in Switzerland. Durations often range between two and four years.

ii) Business loans are offered primarily to SMEs. These loans are usually not secured by any collateral. Average volumes of business loans brokered by crowdlending platforms are about CHF 260,000. Durations for SME loans are usually between one and four years. Business loans are typically debt capital.

iii) A third loan segment is real estate crowdlending, which provides mortgage-backed loans to individuals and SMEs. Many of these loans are used to finance residential property, short-term and later redeemed by banks. The average loan amount in the real estate crowdlending subsegment is about CHF 1.2m.

Loans in the crowdlending segment are usually financed by a mix of private and institutional investors. Sections 3.2 and 3.3 discuss loan types financed by professional and institutional investors only.

Market Participants

At the end of 2021, 14 crowdlending platforms in Switzerland were active in the crowdlending segment. The last market entry was Neocredit in 2019. Various banks and insurance companies are involved in crowdlending platforms.

- Funders, which also has a presence in the reward-based crowdfunding segment, is operated by the Luzerner Kantonalbank and licensed to other cantonal banks.
- The Lendico platform was acquired from PostFinance by Lend (Switzerlend AG) in 2019. PostFinance has acquired a stake of Lend in a reciprocal move and entered into a cooperation agreement.[7]
- Neocredit was launched in 2019 by the French platform credit.fr and the insurance company Vaudoise. Since 2022, the Vaudoise Group has been the sole shareholder of neocredit.ch.[8]
- The last transaction was in December 2021: Basellandschaftliche Kantonalbank bought a stake in swisspeers AG as a strategic investor.[9]

For an overview of the Swiss crowdlending platforms and the respective loan segments, see Table 1.

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[6] For an overview and data of the Swiss crowdlending market and its development in the long run, see also: Dietrich, A. & Amrein, S. (2022). Crowdfunding Monitor Switzerland 2021. Rotkreuz: Verlag IFZ. Selected parts of this chapter are taken from the Crowdfunding Monitor.

[7] PostFinance (2019). Press release: LEND acquires Lendico and enters into cooperation with PostFinance (translation). Online (01.04.2020): https://www.postfinance.ch/de/ueber-uns/medien/newsroom/medienmitteilungen/lend-uebernimmt-lendico-kooperation-mit-postfinance.html

[8] Neocredit (2022). neocredit.ch - une filiale de la Vaudoise Assurances. Online (17.08.2022) : https://neocredit.ch/fr/qui-sommes-nous

[9] Basellandschaftliche Kantonalbank. (2021). BLKB beteiligt sich als strategische Investorin an swisspeers AG. Online (09.12.2021): https://www.blkb.ch/news-article.html?id=264168ff-8721-47ec-a655-c9ca37c74ae3

Not included in the list of Crowdlending platforms is Systemcredit. The Systemcredit marketplace went online in 2018 and provides SMEs with several credit offers by banks, institutional investors and crowdlenders. Their business model is, to some extent, comparable to that of brokers in the mortgage market (see Section 3.2).

Loan segment	Platform
All loan segments	Cashare, CG24 Group, Lend
Business and consumer loans	Crowd4Cash
Business loans only	Acredius, Creditworld, Funders, Neocredit, swisspeers
Consumer loans only	Lendora, Splendit
Real estate only	Foxstone, Raizers, Swisslending

Table 1: Swiss Crowdlending Platforms

Currently, various platforms and vehicles allow investors to invest indirectly in the Swiss crowdlending loan segment. The following organisations offer indirect investment solutions.

Lendity	The company was founded in 2017 and issued the first bond in cooperation with Julius Baer in 2018. Lendity provides institutional-grade investment, infrastructure, and technology solutions for the digital lending industry.
NSF Wealth Management	NSF is a Liechtenstein-based asset manager, which launched in cooperation with the startup i2 invest the alternative investment fund (AIF) SME Lending Fund Switzerland SICAV in April 2021. In the beginning, the fund will invest directly in SME loans via the platforms Cashare, lend.ch and Crowd4Cash. NSF plans to cooperate with more platforms going forward.
1741 Group	Currently the company offers two funds: The "1741 Diversified Lending Fund" invests in consumer and business loans from the platforms CreditGate24, lend.ch, and Swisspeers. Additionally, 1741 offers a fund focusing exclusively on loans from the platform lend.ch.

Table 2: Investment Vehicles and Platforms for Investments in Swiss Crowdlending Platforms

Market Volumes, Risk, and Return

The crowdlending segment reached a record volume of CHF 607.0 million new loans in 2021 (2020: CHF 448.0 million), with a growth rate of 35.5 % from 2020 to 2021. As shown in Figure 4, the number of brokered loans increased from 2,323 to 3,055.

Of the CHF 607.0 million raised, the largest share – CHF 418.0 million – can be allocated to real estate crowdlending. Compared to 2020, the volume increased by 40.9 %. The major drivers were loans to companies in the real estate business. Many of these loans are issued as short-term credits to be later redeemed by banks. Platforms are reporting that medium-sized and larger real estate investors are particularly interested in interim financing using subordinated mortgages on existing properties.

The second largest subsegment is business crowdlending (loans for SMEs), which reached CHF 110.4 million. In comparison to the previous year, the volume increased by 15 %. The volume of consumer crowdlending was CHF 78.7 million. The growth rate from the volume in 2020 (CHF 55.4m) was a remarkable 43 %, after the decrease from 2019 to 2020 of 18.2 %.

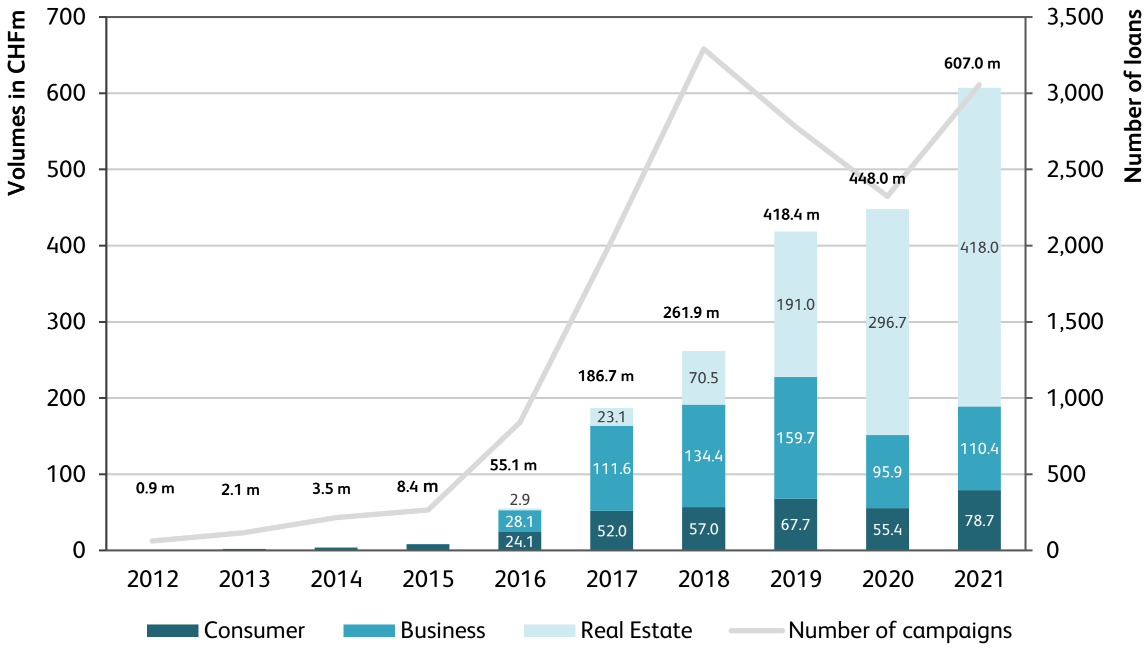

Figure 4: Crowdlending Volumes and Number of Loans in Switzerland, 2012-2021[10]

Depending on the subsegment, the average loan amounts vary. Not surprisingly, the largest loans are for real estate crowdlending, with CHF 1.2 million in 2021. The average amount has not changed compared to the preceding year. In this segment, the average capital invested is CHF 107,000. With an average loan volume of CHF 260,000, business loans are second. Compared to 2020, the average loan amount has decreased (2020: CHF 330,000). The smallest average loan amount is found in the subsegment of consumer crowdlending. With CHF 34,000, the amount has increased steadily since 2013 and has now reached the level of the average consumer loan in Switzerland.[11] Overall, institutional investors have gained importance and invest significantly higher volumes than private investors.

[10] Source: Dietrich, A. & Amrein, S. (2022). Crowdfunding Monitor Switzerland 2021. Rotkreuz: Verlag IFZ.
[11] ZEK – Verein zur Führung einer Zentralstelle für Kreditinformation (Swiss central credit information bureau) (2022). Annual Report 2020. p. 13.

Number and Volumes of New Loans

The data presented above is based on the Crowdfunding Monitor study.[12] It covers the whole crowdlending market annually and is representative of the Swiss market. The Swiss Marketplace Lending Association (SMLA) collects data on monthly volumes from its member platforms. In contrast to the Crowdfunding Monitor, the SMLA data covers not the whole market. However, the market share of the SMLA platform members is substantial. The SMLA statistics, therefore, allow valuable insights into monthly loan figures. Figure 5 shows the development of monthly volumes from 2018 to 2021 of SMLA members.

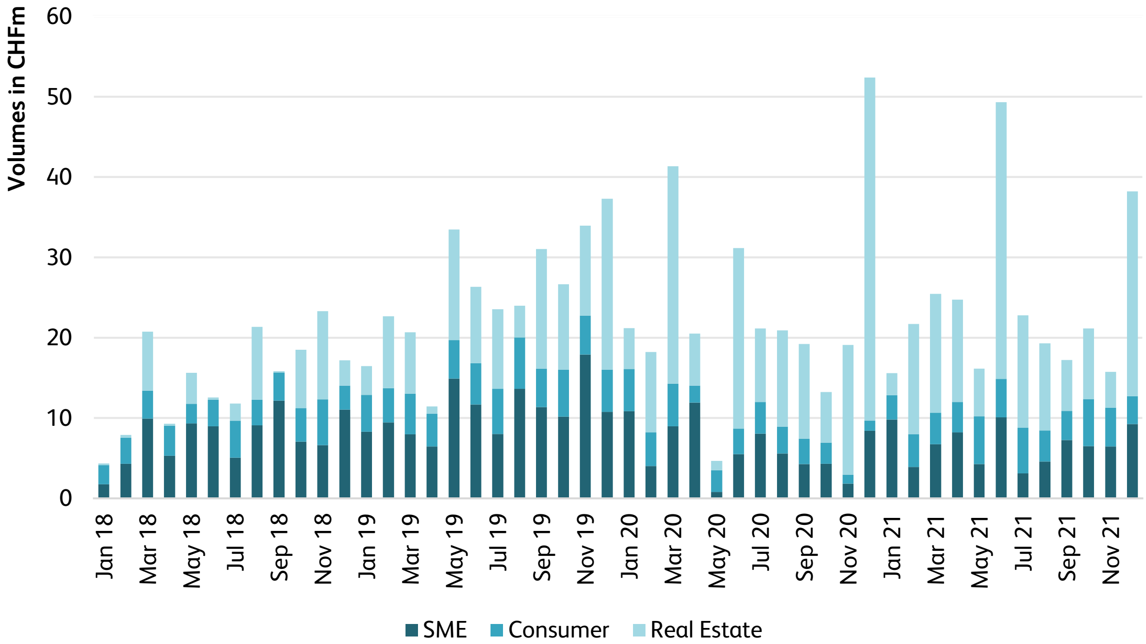

Figure 5: Monthly Volume (New Loans) by Segments of SMLA Member Platforms, 2018-2021

The volumes of real estate loans per month fluctuate substantially, indicating the influence of a few large loans during certain months. Volumes in the consumer lending subsegment are less volatile than real estate loans. All SMLA member platforms combined issue about CHF 4m to 4.5m consumer loans per month (in total).

The SME lending volumes have been growing until April 2020. In March 2020, the Swiss government initiated a government loan programme for companies facing COVID-19-related liquidity shortages. From 26th March 2020 to 31st July 2020, companies in Switzerland could submit simplified loan applications to banks. The Swiss Confederation fully guaranteed "COVID loans" up to a maximum amount of CHF 500,000. The government-guaranteed lending had a substantial impact on SME lending via platforms. Both the volume and the number of loans (see also Figure 6) fell substantially from May 2020 onwards. Since then, the segment of SME lending has been recovering only slowly. Considering the number of SME loans issued, it took more than a year to surpass the previous record-high number of loans issued in the first quarter of 2020.

[12] Dietrich, A. & Amrein, S. (2022). Crowdfunding Monitor Switzerland 2021. Rotkreuz: Verlag IFZ.

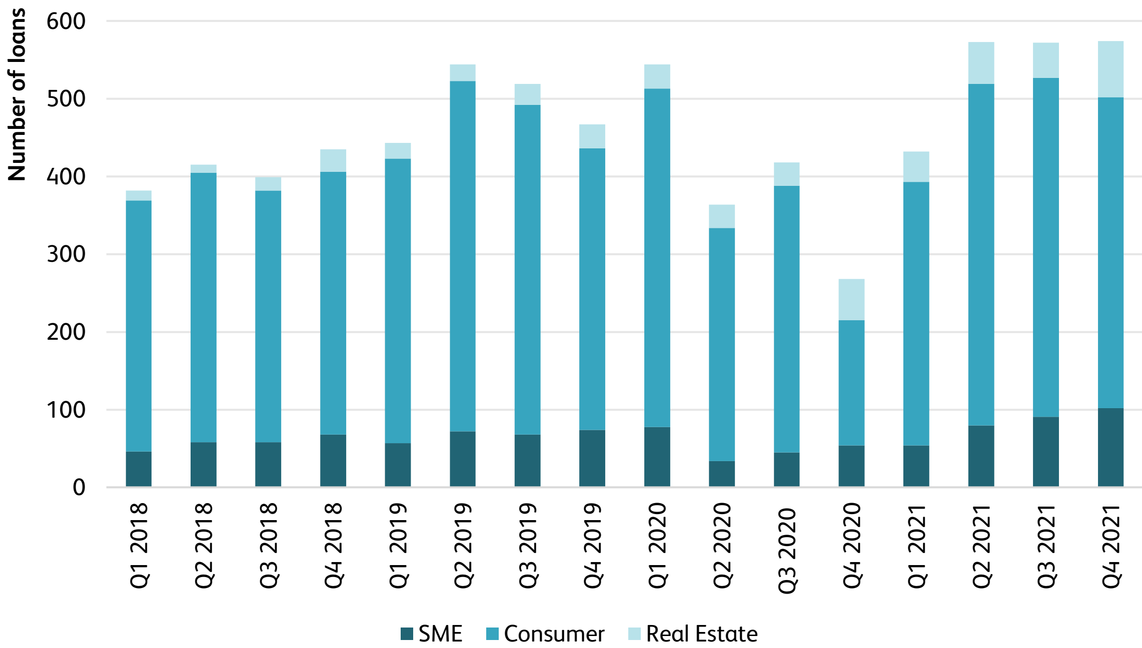

Figure 6: Number of New Loans (Quarterly) by Segments of SMLA Member Platforms, 2018-2021

Risk and Return in the Crowdlending Segment

Various approaches can be used to calculate risk and return figures. The SMLA has developed a standardised method to measure risk and return. All SMLA members report the data following the same methodology, aiming to increase the transparency of the market and the asset class. The detailed reporting on the level of individual loan vintages goes beyond what other financial service providers usually publish.

The risk is measured by the default rate. A loan is in default if the interest payment and/or the repayment of the principal amount is overdue for more than 120 days. The internal rate of return (IRR) is used to calculate the return metric (see box for more detailed information).[13] Based on the IRR methodology, the return for every individual loan is calculated after fees and then weighted according to the loan volume. If a loan's cash flow (interest rate and repayment) is overdue for more than 120 days or the platform assumes that there will be no future payments within the next 120 days, all expected future cash flows are set to zero for the IRR calculation. Thus, the SMLA follows a very conservative approach to calculating return figures, disregarding potential loan recoveries (even for loans with collateral) as long as recoveries do not materialise. If such recoveries materialise or borrowers resume payments, returns will improve again. Moreover, the calculations leave room for careful risk policies of individual platforms, as they can also declare a loan to be in default before the 120-day limit.

[13] The exact dates of cashflows are adjusted when calculating the IRR, as the dates of the payments vary quite often in the crowdlending segment. As a reinvestment rate, we use the interest rate of the corresponding loan contract.

Internal Rate of Return (IRR): Methodology

The SMLA uses the IRR as a metric to estimate the profitability of an investment in crowdlending loans. The IRR constitutes the discount rate at which all cash flows' net present value (NPV) equals zero. Using the IRR as a return metric comes with two significant disadvantages:

Firstly, the IRR considers the time value of money and compound interest but neglects the actual timing of the cash flows (i.e. it treats the time between the payments exactly as a monthly period). The only input factors for calculating an IRR are the cash flows.

Secondly, early repayments or defaults lead to extreme (very high or very low) return values. The reason for this is the assumption that cash flows are reinvested at the return of the IRR itself. This issue is usually solved using the so-called modified IRR (MIRR), where the reinvestment return can be set independently. We use the interest rate of the corresponding loan contract as a reinvestment rate. However, the MIRR does not adjust for irregular payment dates of the cashflows. Therefore, we have developed a methodology addressing both issues, the reinvestment rate and the exact timing of the returns (XMIRR methodology).

Figure 7 presents the returns of six different loan vintages (loans issued from 2016 to 2021). The x-axis shows the date of the return calculation. Naturally, the returns are high at the beginning (representing an expected return at the beginning) and decrease over time, leading to the actual return after defaults and recoveries once all the loans of the respective vintages are paid back.

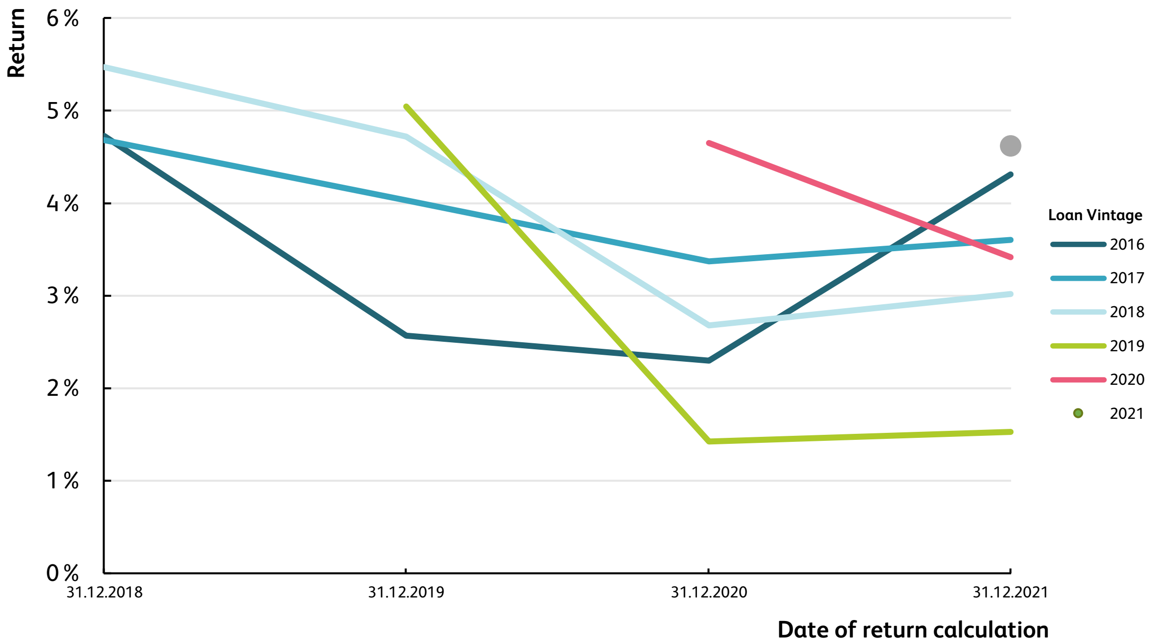

Figure 7: Returns of Crowdlending Loans (SME and Consumer) by Loan Vintage, 2018-2021

In 2017, for example, the total of consumer and SME loans issued was CHF 74.4m. The 2017 loan vintage offered a return of 4.7 % by the end of 2018. The return decreased to 4.0 % until the end of 2019 and dropped to 3.4 % as of December 2020. The reason for the declining rate of return was defaulting loans. As outlined above, late payments for more than 120 days are also considered defaults. In such a case, the methodology does not expect any further payments. As the 2017 loan vintage returns show, some borrowers have resumed payments and/or recoveries materialised, leading to an increased return of 3.6 % by the end of 2021. The increase of the return in 2021, however, was not substantial, as borrowers have already repaid the vast majority of the loans. Only 6.2 % of the total loan volume (vintage 2017) was still outstanding by the end of 2021 (see Table 3).

Table 3 shows risk and return figures for the loan vintages 2016 to 2020 (SME and consumer loans combined) as of December 2021. Many loan vintages had recovering returns. The substantial fall in the returns in 2020 can be attributed to the COVID-19 crisis and the SMLA's conservative calculation methodology. Overall, consumer and SME lending returns ranged between 1.5 % and 4.6 %.

	Loan Vintage					
	2021	**2020**	**2019**	**2018**	**2017**	**2016**
Default rate as a percentage of loans issued in the respective year of origination	0.1 %	1.3 %	5.6 %	3.8 %	3.6 %	1.8 %
Return (XIRR) per year of origination	4.6 %	3.4 %	1.5 %	3.0 %	3.6 %	4.3 %
Loan amount outstanding (in TCHF)	86,204	43,786	44,311	17,876	4,628	1,768
Volume in the respective year (in TCHF)	102,992	105,054	154,105	112,072	74,385	23,185
Share of loans still outstanding (%)	83.7 %	41.7 %	28.8 %	16.0 %	6.2 %	7.6 %

Table 3: Risk/Return Metrics of Crowdlending Loans (SME and Consumer) in Switzerland by Loan Vintage (as of 31st December 2021)

Table 4 shows the extensive risk/return metrics for SME and consumer loans as of 31st December 2018, 2019, 2020 and 2021. Average returns for the SME segment by the end of 2021 ranged between 2.7 % and 4.5 % (depending on the vintage). In the consumer loan segment, average returns of loan vintages were between 1.4 % and 4.5 % as of December 2021.

Comparing the risk/return figures published by the SMLA with data from traditional banks is difficult. First of all, data comparable to the data published by the SMLA is not available from traditional banks. Secondly, the type of loans in a crowdlending portfolio might vary from a bank's loan book. SME loans through banks, for example, are usually secured, and banks have more flexibility to renegotiate loan terms. However, crowdlending loans quickly fall into the default category, as a renegotiation of loan terms would often require several investors' involvement and agreement.

The COVID-19 crisis in 2020 has been one of the biggest crises in Switzerland during the last decade. Despite increased default rates, the returns both in the consumer and the SME segment remained positive and recovered in 2021. The current situation remains challenging for the economy and financial markets, given the high inflation and rising interest rates.

SME loans, as of 31.12.2021	2021	2020	2019	2018	2017	2016
Default rate as a percentage of loans issued in the respective year of origination (%)	0.1 %	1.4 %	2.8 %	1.7 %	5.1 %	1.5 %
Return (XIRR) per year of origination (%)	4.7 %	2.9 %	1.2 %	4.0 %	3.5 %	4.4 %
Loan amount outstanding (in TCHF)	37,871	20,159	23,708	5,496	2,019	1,567
Volume in the respective year (in TCHF)*	50,246	62,314	99,419	69,647	35,780	11,020
Share of loans still outstanding (%)	75.4 %	32.4 %	23.8 %	7.9 %	5.6 %	14.2 %

Consumer loans, as of 31.12.2021	2021	2020	2019	2018	2017	2016
Default rate as a percentage of loans issued in the respective year of origination (%)	0.0 %	1.2 %	5.4 %	6.9 %	2.3 %	2.0 %
Return (XIRR) per year of origination (%)	4.5 %	4.2 %	2.1 %	1.4 %	3.7 %	4.2 %
Loan amount outstanding (in TCHF)	48,333	23,627	20,603	12,380	2,608	202
Volume in the respective year (in TCHF)*	52,746	42,740	54,686	42,425	38,605	12,165
Share of loans still outstanding (%)	91.6 %	55.3 %	37.7 %	29.2 %	6.8 %	1.7 %

SME loans, as of 31.12.2020	2021	2020	2019	2018	2017	2016
Default rate as a percentage of loans issued in the respective year of origination (%)		0.0 %	2.6 %	1.0 %	2.3 %	4.9 %
Return (XIRR) per year of origination (%)		4.6 %	0.8 %	4.1 %	3.2 %	0.4 %
Loan amount outstanding (in TCHF)		31,762	24,607	7,287	3,324	1,732
Volume in the respective year (in TCHF)*		54,277	91,495	66,387	35,580	11,020
Share of loans still outstanding (%)		58.5 %	26.9 %	11.0 %	9.3 %	15.7 %

Consumer loans, as of 31.12.2020	2021	2020	2019	2018	2017	2016
Default rate as a percentage of loans issued in the respective year of origination (%)		0.3 %	3.2 %	4.7 %	1.0 %	0.5 %
Return (XIRR) per year of origination (%)		4.8 %	2.3 %	0.4 %	3.5 %	4.1 %
Loan amount outstanding (in TCHF)		33,683	37,375	17,401	5,376	571
Volume in the respective year (in TCHF)*		38,228	60,640	42,745	38,605	12,165
Share of loans still outstanding (%)		88.1 %	61.6 %	40.7 %	13.9 %	4.7 %

Table 4: Risk/Return Metrics of SME and Consumer Loans in Switzerland as of 31st December 2018, 2019, 2020, and 2021 (continuous on next page; * total volume in the respective year can change from year to year due to changes in the SMLA's membership structure)

SME loans, as of 31.12.2019	2021	2020	2019	2018	2017	2016
Default rate as a percentage of loans issued in the respective year of origination (%)			0.3 %	0.4 %	0.9 %	0.3 %
Return (XIRR) per year of origination (%)			5.1 %	5.2 %	4.0 %	2.0 %
Loan amount outstanding (in TCHF)			88,389	27,056	55,858	9,728
Volume in the respective year (in TCHF)*			111,371	92,999	86,541	18,984
Share of loans still outstanding (%)			79.4 %	29.1 %	64.5 %	51.2 %

Consumer loans, as of 31.12.2019	2021	2020	2019	2018	2017	2016
Default rate as a percentage of loans issued in the respective year of origination (%)			0.8 %	5.1 %	0.8 %	0.5 %
Return (XIRR) per year of origination (%)			5.0 %	3.4 %	4.0 %	3.8 %
Loan amount outstanding (in TCHF)			45,392	31,795	19,835	4,225
Volume in the respective year (in TCHF)*			48,481	37,626	29,462	9,650
Share of loans still outstanding (%)			93.6 %	84.5 %	67.3 %	43.8 %

SME loans, as of 31.12.2018	2021	2020	2019	2018	2017	2016
Default rate as a percentage of loans issued in the respective year of origination (%)				0.0 %	0.6 %	0.6 %
Return (XIRR) per year of origination (%)				5.6 %	4.5 %	4.8 %
Loan amount outstanding (in TCHF)				49,763	60,591	11,335
Volume in the respective year (in TCHF)*				93,116	86,541	18,984
Share of loans still outstanding (%)				53.4 %	70.0 %	59.7 %

Consumer loans, as of 31.12.2018	2021	2020	2019	2018	2017	2016
Default rate as a percentage of loans issued in the respective year of origination (%)				1.0 %	0.5 %	0.8 %
Return (XIRR) per year of origination (%)				5.1 %	5.2 %	4.6 %
Loan amount outstanding (in TCHF)				21,478	14,244	2,721
Volume in the respective year (in TCHF)*				44,363	38,605	12,153
Share of loans still outstanding (%)				48.4 %	36.9 %	22.4 %

Table 4: Risk/Return Metrics of SME and Consumer Loans in Switzerland as of 31st December 2018, 2019, 2020, and 2021 (* total volume in the respective year can change from year to year due to changes in the SMLA's membership structure)

3.2 Mortgage Loans on Brokerage Platforms

The mortgage market is the most relevant market for debt financing in Switzerland. In 2021, the total outstanding domestic mortgage volume reached an estimated CHF 1,175bn. 94.5 % of this volume is held by banks (CHF 1,112bn), the rest by pension funds and insurance companies.[14] Three-quarters of the mortgage volume is borrowed by private individuals, while companies and other entities borrow the other quarter.

In recent years, traditional banks and new market participants have increasingly invested in mortgage services on online platforms for private borrowers. However, the business models of platforms in the mortgage sector differ considerably.[15] Two forms of online mortgages have to be distinguished when analysing the market. Online mortgages, in the narrow sense of the term, are processed entirely digitally. In a broader sense, online mortgages refer to mortgages for which application processes are partially or entirely online. The signing, however, is not digital. This study considers both types of mortgages.

With regards to the structure of the lenders, there are platforms with one and platforms with multiple lenders. The former are usually platforms run by banks or platforms that cooperate with a bank. The study excludes such platforms. However, platforms with multiple lenders constitute a marketplace and are thus in the scope of this study.

Market Participants

The study considers twelve different platforms as marketplace lending platforms for mortgages. In contrast to crowdlending platforms offering mortgages, these platforms have an exclusively professional investor base.

UBS launched its Atrium platform in 2017 and integrated it in 2021 into the key4 platform. On key4, UBS offers its own mortgages and mortgages from third parties. Valuu is another platform run by a bank. PostFinance launched it in 2019.

The platforms HypoPlus, Hypotheke and MoneyPark are independent of banks. MoneyPark, launched in 2012, is currently Switzerland's most established mortgage brokerage firm. They offer both online mortgages and face-to-face advice in their branches. Further, estimates for the platforms FinanceScout24, RealAdvisor, Resolve, topHypo, Hypohaus, PropertyCaptain and Hypo Advisors are included. All intermediary platforms have institutional investors such as banks, insurance companies and pension funds as lenders.

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[14] Sources: SNB (2020). Datenportal SNB. Online (03.08.2021): https://data.snb.ch/de/topics/banken#!/cube/bakredsekbm.;
Eidgenössische Finanzmarktaufsicht FINMA (2021). Bericht über den Versicherungsmarkt 2020. Bundesamt für Statistik BFS (2021). Pensionskassenstatistik. Online (01.09.2021): https://www.bfs.admin.ch/bfs/de/home/statistiken/soziale-sicherheit/erhebungen/pks.html.
For an in-depth discussion of the Swiss mortgage market, see: Lengwiler, C. & Amrein, S. (2020). Markt für Immobilienfinanzierungen in der Schweiz. In: IFZ Retail Banking Studie 2020. Rotkreuz: Verlag IFZ.
[15] The estimates of the market volumes of online mortgages were first published in: Dietrich, A. & Bayley, S. (2020). Das Wachstum im Online-Hypothekarmarkt Schweiz 2019 hat sich beschleunigt. Online (30.09.2020): https://blog.hslu.ch/retailbanking/2020/05/25/das-wachstum-im-online-hypothekarmarkt-schweiz-2019-hat-sich-beschleunigt/

Market Volumes

Despite substantial volumes, the market for mortgages issued through platforms is still a niche market. The volume of mortgages brokered reached approximately CHF 5.9bn in 2021. Based on the assumption that new and extended mortgages total about CHF 160-180bn, the market share of mortgages brokered is about 3.5 %.

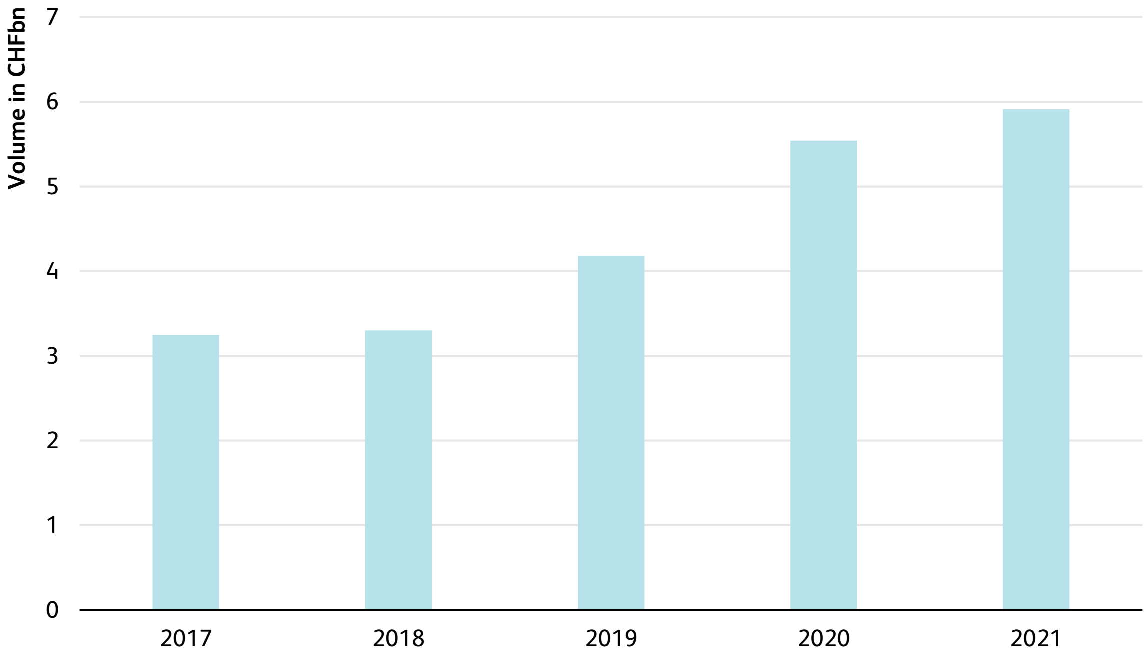

Figure 8: Volume of Mortgage Brokers in Switzerland, 2017-2021

3.3 Loans and Bonds for Public Entities, Mid-Sized and Large Corporations

This Section includes two types of loans. Firstly, the online market for loans to public entities. Loans to public entities usually consist of uncollateralised loans to municipalities, cities, cantons or corporations under public law. In German, this segment is referred to as OERK loans (OERK: öffentlich-rechtliche Körperschaften). A second subsegment are loans to mid-sized and large corporations. Investors in both subsegments are banks, institutional and professional investors (asset managers, family offices and pension funds).

Additionally, some of the platforms in this segment are also doing short-term transactions that would fall into the money market segment, which will be discussed in Section 3.4. However, since the money market segment is not their primary area of business and a clear distinction cannot be made based on the data provided, the platforms are discussed in the following paragraphs.

The subsegment of bonds is not further discussed. Bonds were issued through platforms in 2020 only but remain as a conceptional subsegment.

Market Participants

Two market participants are currently active in the segment of loans and for public entities and mid-sized and large corporations in Switzerland. Loanboox has been operational since 2016 and has grown rapidly in the loan market for public entities. Since then, the company has extended its product offering, including loans to corporates and, since 2020, the financing of housing cooperatives, real estate funds and companies. Initial pilot projects in this area have already been carried out.[16] The platform charges a fee of one to two basis points per year, depending on country and segment. The company is active in Switzerland, Germany, Austria, France, and the Netherlands, with 40 employees.

Cosmofunding is a platform owned by Bank Vontobel, which launched the platform in 2018. The company's offering focuses on public and corporate borrowers. In addition, the platform collaborates with the Swiss rating agency Fedafin for borrower ratings. Cosmofunding partnered with Innergia Group in 2021 to advance the financing of infrastructure and energy transition via public-private partnerships.[17]

Raiffeisen Switzerland operated the platform Valyo until the beginning of 2022. It was launched in 2019. For all securities already issued, Raiffeisen Switzerland will guarantee the settlement.

Market Volumes

Figure 9 shows the market volumes from 2017 to 2021 issued in Switzerland. The volumes grew from CHF 2.0bn in 2017 to 12bn in 2021. The 2021 volume consists of loans and bonds issued on Loanboox and Cosmofunding.

Loanboox made a total of 700 transactions in 2021 and issued a volume of CHF 8.2bn in five countries. The average loan size was about CHF 12m. The Swiss volume in 2021 is based on an estimate.

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[16] Loanboox (2022). Immobiliengesellschaften refinanzieren sich neu via Loanboox. Online (15.09.2022): https://loanboox.com/ch/de/blog/neu-refinanzierung-von-immobiliengesellschaften/
[17] Bank Vontobel (2022). Geschäftsbericht 2021, p. 19.

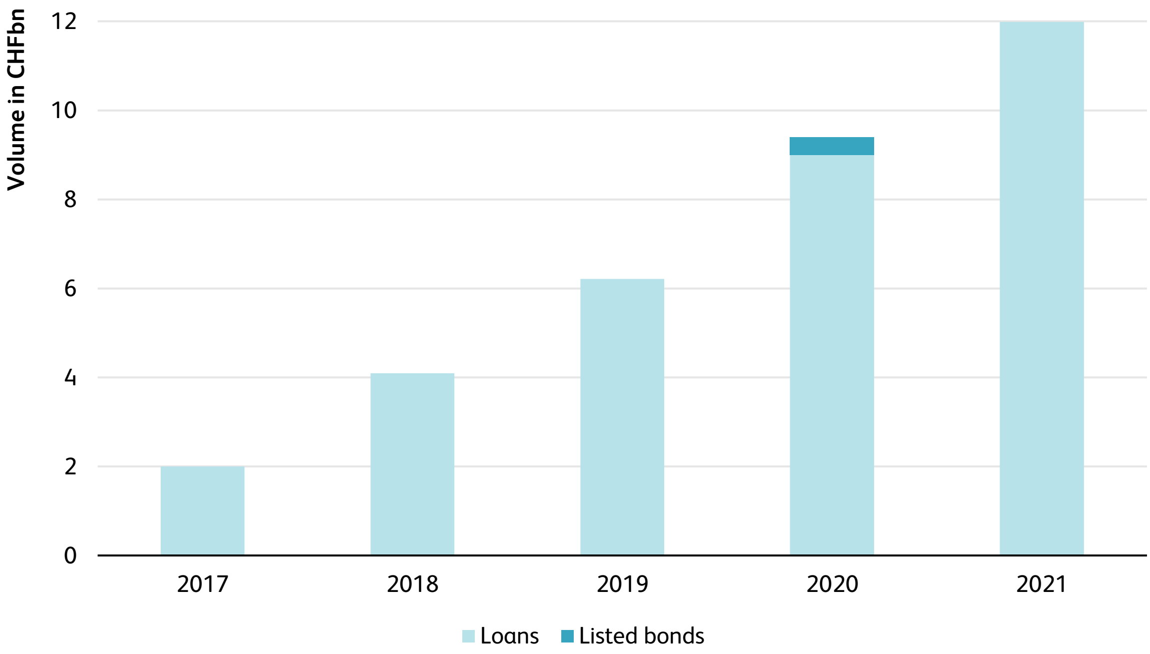

Figure 9: Loan Volume to Public Entities and Mid-Sized and Large Corporations, 2017-2021[18]

[18] Data: Estimates based on publicly available figures. For 2021 figures, see: Loanboox (2022). Starkes Wachstum im Jahr 2021 für Loanboox. Online (15.09.2022): https://loanboox.com/ch/de/blog/starkes-wachstum-im-2021; Bank Vontobel (2022). Geschäftsbericht 2021, p. 7.

3.4 Money Market Transactions

The traditional classification of money market instruments is their maturity of less than one year. Within this duration, there are many subsegments and submarkets. Furthermore, money market transactions are unsecured and typically institutional size trades that allow banks, corporates and other institutional counterparties, including public authorities, to manage their liquidity.

Compared to traditional money market trading, which is often done via phone or established financial information systems, money market platforms have several advantages. Price discovery and trading can be made more efficiently through platforms, serving the needs of "best execution". Furthermore, such marketplaces offer a higher number of potential counterparties, which allows for increased price transparency and better diversification of counterparty risk.

In Switzerland, only one money market platform is active. Instimatch Global is a Swiss-based FinTech founded in 2017. It offers a platform for money market transactions that connects institutional borrowers and lenders from various geographies and sectors. Typical counterparts on Instimatch's platform are Tier 1 and Tier 2 banks, mid-sized and large multinational corporates, public and near-public entities, family offices, pension funds and asset managers. In 2021 Instimatch arranged for transactions totalling USD 85bn. The year-to-date volume in 2022 (January to August 2022) exceeded USD 180bn, with tenors traded typically below one year.[19]

[19] Instimatch (2022). Product Portfolio. Online (15.09.2022): https://www.instimatch.ch/assets/images/20220617_Product%20Portfolio.pdf

3.5 Market Volumes – An Overview

The sections above have explored various segments in Switzerland's online debt capital market. Table 5 shows the volumes of the different segments from 2017 to 2021 (annual volumes of new loans).

The total volume of new debt capital issued on online platforms in 2021 reached approximately CHF 18.5bn. Market volumes in 2021 are close to 3.5 times higher than in 2017, representing an annual average growth rate of about 36 %. The total money market volume is not included in Table 5. First of all, the maturities of such transactions are substantially lower than in any other loan segment, making comparisons difficult. Secondly, the publicly available volumes include transactions worldwide, whereas the market figures of all other loan segments cover Switzerland only.

In total, the crowdlending segment has reached a volume of CHF 607.0m in new loans in 2021 (2020: CHF 448.0m). The market grew by 35.5 % as compared to 2020. Among the different crowdlending subsegments, real estate loans were a vital driver of the rapid growth.

The market segment of mortgage loans brokered on platforms and financed by institutional and professional investors (see Section 3.2) has continued to grow. Growth rates, however, are substantially lower than in previous years. For 2021, we estimate a new loan volume of CHF 5.9bn, representing a growth rate of 6.7 % compared to 2020 (2019-2020: 32.6 %).

The segment of loans and bonds for mid-sized and large corporations as well as public entities (see Section 3.3) reached a volume of CHF 12.0bn in 2021. The growth rate of this segment was 33.2 % compared to 2019.

For the first time, volume estimates for money market transactions are included in the study. This segment's volume reached CHF 85.0bn in 2021, representing more than 80 % of the total marketplace lending volume.

When looking at the market figures of the different marketplace lending segments, one must remember that the average duration of debt instruments within these segments varies. For example, many consumer and SME loans in the crowdlending segment have a duration between two to four years. The average duration of a mortgage loan in Switzerland is about four to five years. In contrast to these segments, the segment of online loans and bonds for mid-sized corporations, large corporations and public entities have maturities ranging anywhere between one month and ten years. Especially debt instruments with short maturities are often renewed, leading to higher turnovers and driving the annual volume of new transactions. The volume in the money market segment, as outlined above, has the lowest duration. Typically, money market instruments are defined as instruments with maturity below one year. However, many transactions probably have maturities between one or several days to a few months.

In CHF million	**2017**	**2018**	**2019**	**2020**	**2021**
Crowdlending Loans	**186.7**	**261.9**	**418.4**	**448.0**	**607.0**
Consumer Loans	*52.0*	*57.0*	*67.7*	*55.4*	*78.7*
SME Loans	*111.6*	*134.4*	*159.7*	*95.9*	*110.4*
Real Estate Loans	*23.1*	*70.5*	*191.0*	*296.7*	*418.0*
Mortgage Loans (Online Brokerage)	**3,250.0**	**3,300.0**	**4,179.0**	**5,541.0**	**5,913.0**
Online Loans for Mid-Sized Corporations, Large Corporations, and Public Entities	***2,000.0**	***4,100.0**	**6,200.0**	**9,400.0**	**11,986.7**
Loans	**2,000.0*	**4,100.0*	*6,200.0*	*9,000.0*	*11,986.7*
Listed Bonds	*0.0*	*0.0*	*0.0*	*400.0*	*0.0*
Total Volume Swiss Marketplace Lending	**5,436.7**	**7,661.9**	**10,797.4**	**15,389.0**	**18,506.7**

Table 5: Total Volume Swiss Marketplace Lending, 2017-2021 (in CHF million; * Estimate)

Figure 10 illustrates the importance of the new online lending segments. The y-axis shows the average growth in volume over the past four years, providing insights into the growth dynamics of the subsegments. The x-axis indicates the estimated market share of the different subsegments within the respective markets.[20] The market shares below are based on estimates and discussions with market participants.

We estimate that online loans for public entities have reached the highest relevance measured by market share. The evolution is driven by financing municipalities, cities, cantons and near-public entities (e.g. hospitals). A study by Lengwiler and Frey (2020) focusing on municipalities has shown that about 15 % of the surveyed municipalities used platforms for financing purposes in 2019.[21]

Mortgage loans from brokers have reached annual growth rates of about 16 % (2017-2021). The market share has already reached around 3.5 %. The crowdlending market has shown impressive growth rates (2017-2021: 34 % p.a.) but has a lower significance compared to the total underlying market (consumer and SME lending).

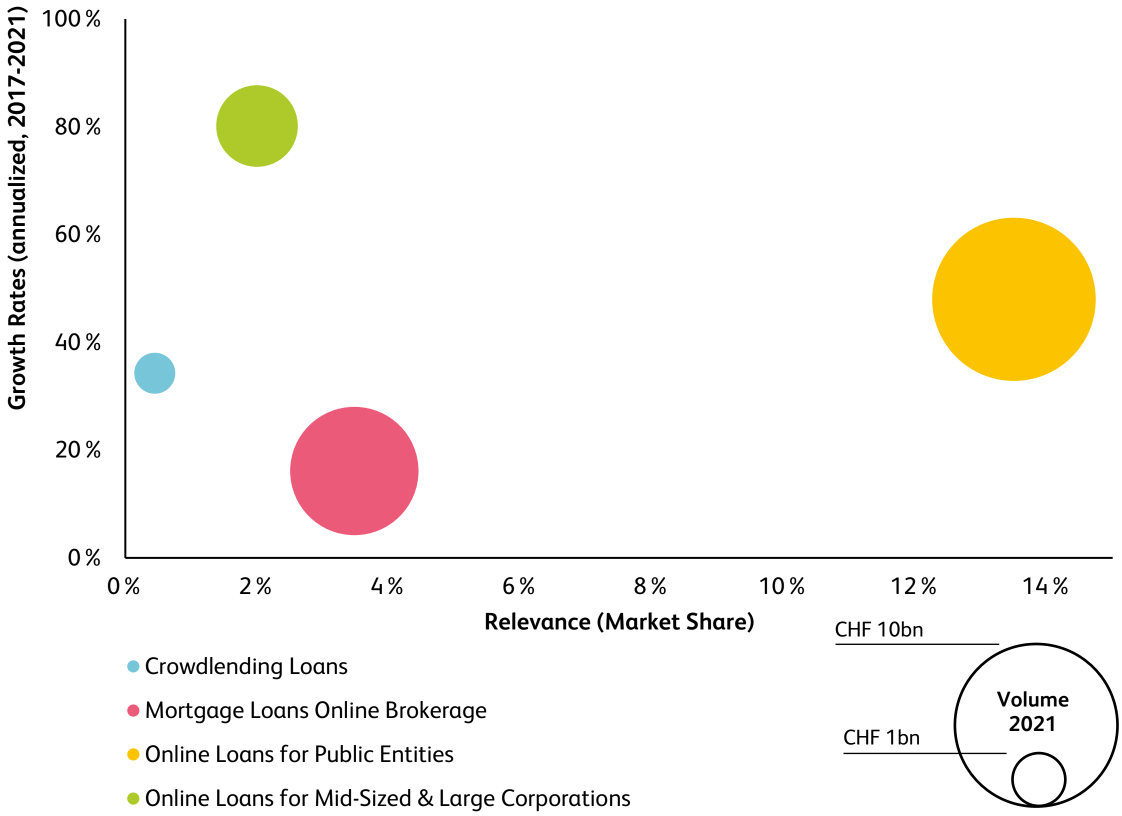

Figure 10: Market Growth vs Relevance (Indicative, Estimated Values, Issued Annual Volumes) in Different Market Segments

[20] The market share is defined as the total volume issued on marketplace lending platforms in 2021 as a percentage of the total loan volume issued by all financial service providers in Switzerland in 2021 (in the respective loan segment).
[21] Lengwiler, C. & Frey, P. (2020). Finanzierung von mittelgrossen Gemeinden 2019. Erhebung bei 238 Gemeinden mit 4'000 bis 30'000 Einwohnern in der Deutsch- und Westschweiz per 31.12.2019. Rotkreuz: Institut für Finanzdienstleistungen Zug IFZ.

4 Outlook

Rebound effect: SME lending, consumer lending, and their returns

The COVID-19 crisis and the Swiss government's loan programme brought the market growth in the SME loan segment in 2020 to a halt. The demand for consumer loans also decreased substantially during 2020. In 2021, growth rates in both segments accelerated again. However, it took more than a year in both subsegments to reach the previous record high levels in terms of volumes and number of loans.

The 2020 returns in crowdlending had suffered significantly due to the COVID-19 crisis. The effect was also related to the SMLA's conservative and strict measurement approach. Many borrowers have resumed the payments of their loans, which increased the returns of several loan vintages in 2021.

Before the COVID-19 crisis, returns in the Swiss crowdlending were high and risk – measured by default rates – low. The crisis was an important test for the loan portfolios, providing investors with a realistic risk and return profile of the asset class.

Changing interest rate environment, inflation and economic situation: Test for online lending business models

Since the launch of the first crowdlending platform in Switzerland, interest rates have been at an all-time low. Now, the economic environment is changing rapidly. The recently increasing interest rates are new to many platforms, and the environment will substantially impact the pricing of loans. At the same time, investors' return expectations will also adjust. It remains to be seen how these changes will impact the demand and supply of capital in marketplace lending and how risk/return metrics will adjust to an increasingly dynamic economic environment.

Online mortgage brokerage: Hybrid Platforms will become more relevant

Mortgage brokers are becoming increasingly important in Switzerland. Market volumes have been growing steadily since 2017. However, with a market share of around 3.5 % in Switzerland, the Swiss market is still substantially smaller than in other countries, such as Germany or the United Kingdom.

We expect the mortgage brokerage market to grow further. However, we expect that pure online mortgages (without counselling) will remain a niche and will lose relative market share in the brokerage market. We also observe that the hybrid model continues to gain relevance for banks.

Sustainability as a relevant topic in the online debt market

Sustainability has become increasingly important in the debt market. The topic is on the agenda of most platforms but not yet prioritised. However, the first initiatives are launched. In the mortgage sector, for example, "green mortgages" are offered with an interest rate discount if the borrowers meet specified environmental criteria. In SME lending, some platforms integrate sustainability into their risk models. In the future, we expect the emergence of new, innovative sustainable lending products and the integration of sustainability risk into the risk assessment to become the new normal.

More transparency, more relevance

Transparency is crucial for the development of the market in Switzerland. Lending through platforms contributes to financial disintermediation. If growth rates of marketplace lending continue to be high, the market share of platforms will reach a substantial level in the coming years. Increased relevance will require more transparency in the market regarding market participants and their business models, volumes, risk and return data, and the risks involved in such transactions for institutional and private investors.

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Institute of Financial Services Zug IFZ

The Institute of Financial Services Zug IFZ, a department of the Lucerne School of Business, is the leading financial institute at a university of applied sciences level in Switzerland. The IFZ provides research and advisory services and offers wide-ranging continuing and executive education programmes for specialists and managers in the financial sector. It also offers Bachelor and Master of Science degree programmes with specialisations in banking and finance, financial management, and real estate.

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- CAS Group Reporting and Analysis
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- CAS Real Estate Development
- CAS Real Estate Investment Management
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- CAS Turnaround Management
- CAS Verwaltungsrat

Swiss Marketplace Lending Association

The Swiss Marketplace Lending Association brings together all stakeholders of marketplace lending in Switzerland. The SMLA's goals are to increase the transparency of the asset class for professional and private investors, raise awareness for marketplace lending, and foster cooperation within the sector. For further information, please visit www.lendingassociation.ch

The following platforms, investors and institutions are members of the SMLA:

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