Accountability report

On 22 March 2021, the Governing Board of the Swiss National Bank submitted its accountability report for 2020 to the Federal Assembly in accordance with art. 7 para. 2 of the National Bank Act (NBA). The report provides information about how the SNB has fulfilled its mandate pursuant to art. 5 NBA – in particular as regards its conduct of monetary policy and its contribution to the stability of the financial system. It is submitted to the Federal Council and the General Meeting of Shareholders for information purposes.

SUMMARY

Monetary policy

The SNB pursues a monetary policy serving the interests of the country as a whole. It must ensure price stability, while taking due account of economic developments. Its monetary policy strategy consists of the following elements: a definition of price stability, a medium-term conditional inflation forecast, and the SNB policy rate. The SNB seeks to keep the secured short-term money market rates close to the SNB policy rate.

The spread of coronavirus worldwide and the measures taken to contain the pandemic saw the global economy enter a sharp recession in 2020. The downturn in the global economy in the first half of the year was unusually strong, also by historical comparison. The decline in new infections and the easing of the containment measures in the summer led to a robust recovery of the global economy in the third quarter. In autumn, infection numbers rose again rapidly in Europe and the US, which prompted renewed containment measures. This once again weighed on the economy towards the end of the year. Extensive monetary and fiscal policy measures were introduced worldwide in light of the economic downturn in the first half of year. Even so, at the end of 2020 GDP was below pre-crisis levels, and inflation was lower in the advanced economies.

The coronavirus pandemic also pushed the Swiss economy into a sharp recession. GDP fell by 2.9%, following a rise of 1.1% in 2019. The recession in Switzerland was thus less pronounced than in many other countries. The containment measures implemented, the caution on the part of consumers, the pronounced decline in foreign demand, and delivery problems led to a marked downturn in business activity in the first half of the year. In contrast to previous recessions, services in particular were hit hard. Unemployment rose, and there was a massive increase in short-time working. Economic activity picked up from May onwards as public health measures were eased, and was further supported by fiscal and monetary policy. Coronavirus spread again quickly in October, however, and the recovery slowed markedly in the fourth quarter. As was the case abroad, the recovery in Switzerland remained incomplete.

In 2020, annual inflation as measured by the consumer price index stood at –0.7%, down from 0.4% in 2019. The strong decrease in inflation is attributable to the pandemic. The conditional forecasts published by the SNB in 2020 indicated that inflation should in the medium term return to the range the SNB equates with price stability.

The coronavirus crisis also presented a powerful challenge to monetary policy in terms of ensuring appropriate monetary conditions. The SNB contributed to crisis management via three channels. First, it countered the increased upward pressure on the Swiss franc. The decisive factors here were its willingness to intervene more strongly in the foreign exchange market, the unchanged SNB policy rate, and the interest rate of –0.75% on sight deposits at the SNB. In 2020, the SNB purchased foreign exchange worth CHF 110 billion. Second, the low level of interest rates created favourable financing conditions for Swiss businesses and the public sector. This eased the burden in particular on those companies and institutions that face increased funding needs as a result of the crisis. Third, the SNB took further measures to increase banks' latitude for lending, thereby supporting the supply of credit and liquidity to the economy. Thus, as part of a joint package of measures with the federal government, the Swiss Financial Market Supervisory Authority (FINMA) and the banks, the SNB provided additional liquidity at the SNB policy rate through the creation of the SNB COVID-19 refinancing facility (CRF) in March. This contributed to banks being able to grant COVID-19 loans to businesses at an interest rate of 0%. Also in March, after consulting with FINMA, the SNB submitted a proposal to the Federal Council to deactivate the countercyclical capital buffer. The Federal Council accepted this recommendation. In addition, the SNB significantly reduced the burden on banks as of 1 April by exempting a larger part of the sight deposits at the SNB from the negative interest rate.

The SNB has been working intensively on the topic of climate change for some time now. The assessment of possible consequences of climate change for the economy and thus for monetary policy, for financial stability and for the management of currency reserves is important in order for the SNB to be able to fulfil its statutory mandate at all times.

Implementation of monetary policy

In 2020, the interest rate on sight deposits held by banks and other financial market participants at the SNB remained unchanged at –0.75%, the same level as the SNB policy rate. The significant increase in the exemption thresholds reduced the negative interest burden on the banking system and broadened the scope for additional liquidity redistribution. This led to more trading activity on the repo market and to a temporary rise in short-term money market rates. In order to keep money market rates close to the SNB policy rate, the SNB conducted liquidity-providing open market operations in the form of bilateral repo transactions and repo auctions. At the end of 2020, the most representative money market rate, the interest rate for secured overnight money (Swiss Average Rate Overnight, SARON), stood at –0.73%.

The CRF allows banks to obtain liquidity from the SNB at the SNB policy rate against collateral. As collateral, the SNB accepts credit claims in respect of loans guaranteed by the federal government or a canton by means of a loan guarantee or credit default guarantee. The acceptance of individual bank loans was not provided for under the previous conditions or eligibility criteria for collateral. Quick and efficient acceptance of these claims was only possible because the COVID-19 ordinance on joint and several guarantees created the basis for a simplified transfer to the SNB. At the end of 2020, the liquidity drawn by the banks via the CRF amounted to CHF 11.2 billion, and claims in respect of around 112,000 loans had been transferred as collateral to the SNB.

In the wake of the coronavirus crisis, there was upheaval in the global US dollar funding markets. The SNB participated in coordinated central bank action to enhance the provision of liquidity via the standing swap arrangement with the US Federal Reserve; this action eased tensions on global funding markets.

SARON continued to gain importance as a reference interest rate on the money and cash markets in 2020. As expected, at the beginning of March 2021 the administrator of Libor (London Interbank Offered Rate), the Intercontinental Exchange Benchmark Administration, announced its intention to discontinue the Swiss franc Libor at the end of 2021. In order to enable a smooth transition to SARON, the remaining conversion work on the cash and swap markets must be completed by then. In 2020, the SNB continued to contribute to the work of the National Working Group on Swiss Franc Reference Rates, which is managing the transition from Libor to SARON.

Cash supply and distribution

Banknotes in circulation in 2020 averaged CHF 84.4 billion. This constituted an increase of 5.8%, following 1.0% in the previous year. As is usual during periods of crisis, there was higher demand for the larger banknote denominations as a store of value during the pandemic. By contrast, weaker than usual demand for the smaller denominations was registered during spring and during the fourth quarter.

In 2020, the SNB conducted its second representative survey on the usage of the different payment methods in Switzerland. Initial analyses indicate that notably less cash was used for payment purposes during autumn 2020 than three years previously. The SNB will provide comprehensive information on the results of the survey in mid-2021.

Cashless payment transactions

Cashless payment transactions have continued to grow in importance. In 2020, the Swiss Interbank Clearing (SIC) payment system settled a daily average of approximately 2.9 million transactions amounting to CHF 178 billion. Compared to the previous year, the number of transactions increased by 9.3%, while turnover rose by 12.8%. The rise in turnover is attributable to increased trading activity on the repo market and to the gradual migration of PostFinance's payment transactions with other banks to the SIC system.

As commissioning party of the SIC system, the SNB ensures appropriate conditions for the further development of cashless payment transactions affected by many innovations in the financial industry. In 2020, the SNB and SIX Interbank Clearing Ltd jointly initiated the SIC5 project for the settlement of instant payments, i.e. cashless retail payments that are processed around the clock with the amount being credited to the final recipient within seconds. The new SIC5 platform is expected to commence operations in 2023.

The project launched together with SIX Group Ltd (SIX) to develop a secure network for the Swiss financial centre (Secure Swiss Finance Network, SSFN) was in its pilot phase in 2020. After conclusion of the pilot phase, the SSFN is to gradually replace the existing solution for communicating with the SIC system from 2021. Given the growing cyber risks, the aim is to increase the security and resilience of network connections to the SIC system and to other financial market infrastructures (FMIs).

The SNB admitted the first company with a fintech licence to the SIC system in 2020.

Asset management

At the end of 2020, the SNB's assets amounted to CHF 999 billion, compared to CHF 861 billion one year earlier. The increase was mainly due to the rise in foreign currency investments and thus to the inflows from foreign currency purchases. Total currency reserves stood at CHF 962 billion at year-end. The majority of these reserves was held in the form of foreign currency investments, the remainder in gold.

The most important risk factor to which the investments are exposed is currency risk, which the SNB cannot hedge for monetary policy reasons. Even minor changes in the Swiss franc exchange rates lead to substantial fluctuations in investment income, which is measured in Swiss francs. In 2020, currency losses due to Swiss franc appreciation were more than offset by high returns on investments in the investment currencies. Measured in Swiss francs, the return on currency reserves was 1.9%. Returns on gold and foreign exchange reserves were positive, at 13.5% and 1.2% respectively.

The SNB makes most of its foreign currency investments in government bonds. However, it also invests in shares and corporate bonds in order to take advantage of the positive return contribution of these asset classes and improve the long-term risk/return ratio. When managing securities of private sector issuers, the SNB also takes non-financial aspects into consideration. For instance, owing to its special role vis-à-vis the banking sector, it refrains from investing in shares of systemically important banks worldwide.

The SNB also takes account of Switzerland's fundamental standards and values in its investment policy. Consequently, it does not invest in shares and bonds of companies whose products or production processes grossly violate broadly accepted values. The SNB therefore does not purchase securities issued by companies that seriously violate fundamental human rights, systematically cause severe environmental damage or are involved in the production of internationally condemned weapons. At the end of 2020, the SNB expanded the exclusion criterion pertaining to the environment. It now also excludes shares and bonds of companies primarily active in the mining of coal, as there is a broad consensus in Switzerland in favour of phasing out coal.

In the current environment, the level of the currency reserves is largely dictated by the implementation of monetary policy. The currency reserves volume has multiplied since the onset of the financial and debt crisis. While these reserves amounted to CHF 85 billion at the end of 2007, by the end of 2020 they had risen to CHF 962 billion. The growth in the balance sheet resulted in higher loss risk in absolute terms and to a significant decrease in the ratio of equity capital to currency reserves. The balance sheet total continued to increase in 2020, with monetary policy instruments being used to manage the coronavirus crisis.

The SNB aims for a robust balance sheet with sufficient equity capital, to ensure that it can also absorb potentially high losses. Equity capital is composed of the provisions for currency reserves and the distribution reserve. The provisions for currency reserves correspond to the desired level of equity capital at the given point in time. According to the National Bank Act, the SNB must set aside provisions that allow it to maintain the currency reserves at the necessary level, while taking into account the development of the Swiss economy.

In January 2021, the Federal Department of Finance (FDF) and the Swiss National Bank concluded a new agreement on the SNB's profit distributions to the Confederation and the cantons, covering the period through to 2025. It provides for a maximum distribution of CHF 6 billion per annum and was already applied retroactively to the 2020 financial year. The SNB also increased the minimum annual allocation to the provisions for currency reserves from 8% to 10% of the provisions. In 2020, the allocation amounted to CHF 7.9 billion, after which the provisions totalled CHF 87 billion.

Financial system stability

Within the context of monitoring the financial system, the SNB analyses developments and risks in the Swiss banking sector. Its assessment is published, in particular, in its annual *Financial Stability Report*. The SNB noted in its June 2020 report that the economic consequences of the coronavirus pandemic posed significant challenges for the banking system. Moreover, uncertainty about the impact of the pandemic on the economy, and hence the banks, was exceptionally high.

The two globally active Swiss banks, Credit Suisse Group AG (Credit Suisse) and UBS Group AG (UBS), were well placed to face these challenges and support the real economy. This was attributable in particular to the capital buffers which the two globally active banks had been building up in recent years, in line with the ‘too big to fail’ (TBTF) regulations. The SNB also noted in its scenario analysis that the capital requirements under the current TBTF regulations were necessary to ensure adequate resilience at both globally active banks.

In the case of the domestically focused banks, the SNB assumed under its baseline scenario that the main impact of the pandemic would be higher provisions and write-downs on loans to Swiss corporations. In addition, a more persistent period of low interest rates would likely put further pressure on interest rate margins. However, the SNB’s analysis indicated that the economic consequences of the pandemic on the domestically focused banks would be limited under the baseline scenario. Furthermore, it assessed their resilience as being adequate thanks to the sizeable capital buffers available.

The mortgage and real estate markets’ vulnerability to shocks persisted in 2020. Mortgage loans as well as transaction prices for residential properties and affordability risks rose further despite the economic downturn. This vulnerability represented an additional risk factor in an environment of heightened uncertainty about future economic developments. Larger declines in income than assumed under the baseline scenario could trigger a price correction in the real estate market. Equally, such declines in income could lead to a materialisation of the historically high affordability risks.

The pandemic also posed particular challenges to systemically important FMIs in Switzerland. The SNB therefore intensified its monitoring in this area, particularly with respect to operations and the management of credit and liquidity risk. It noted that FMIs were successfully ensuring the continuous operation of systemically important business processes as well as the timely processing of – at times – very high transaction volumes. Their credit and liquidity risk management models also proved their worth during the turbulence on the financial markets in March. Systemically important FMIs thus made an important contribution to financial stability.

The threat posed by cyber risks remained high, and reducing these risks through appropriate protective measures continued to be vitally important for FMIs and their participants. The SNB therefore expects FMI operators to coordinate their business continuity plans and the measures contained therein with their participants and to test them regularly on a cross-institutional basis. SIX proceeded in 2020 with its programme to improve information security and strengthen its cyber resilience.

Not only can cyberincidents impact individual financial institutions, they can also jeopardise the functioning of the financial system. While responsibility for protecting themselves against cyber risks lies with the individual financial institutions, the authorities also contribute to the cybersecurity of the financial sector within the scope of their mandates. For instance, the SNB is participating in a project under the direction of the National Cyber Security Centre that promotes institutionalised cooperation between the private sector and the authorities in strategic and operational cybersecurity matters with a view to further strengthening the financial centre's cyber defences.

International monetary cooperation

The SNB participates in international monetary cooperation through its involvement in the relevant multilateral institutions and bodies, and its collaboration on a bilateral level with other central banks and authorities. The multilateral institutions include the International Monetary Fund (IMF), the Bank for International Settlements (BIS), the Financial Stability Board (FSB), the G20 Finance Track, the Organisation for Economic Co-operation and Development (OECD), and the Central Banks and Supervisors Network for Greening the Financial System (NGFS).

In 2020, the IMF granted financial assistance to numerous emerging economies and low-income countries to cushion them from the economic effects of the pandemic. Switzerland participated in the measures to ensure that the IMF had sufficient financial means. At the end of 2020, Switzerland's maximum commitment to the IMF in respect of financing the latter's regular lending totalled CHF 23 billion; the effective outstanding amount was CHF 1.85 billion. The SNB finances these commitments, with loans granted under the bilateral borrowing agreement being guaranteed by the Confederation.

In 2020, eight employees of the BIS and SNB commenced their activities at the BIS Innovation Hub Swiss Centre, founded in 2019. Work is underway on two projects. In Project Helvetia, the SNB, the BIS and SIX jointly investigated and tested two different approaches to integrating central bank digital currency for the settlement of tokenised assets into a financial market infrastructure based on distributed ledger technology (DLT). The report on the first phase of the project, published in December, indicates that the approaches analysed are technically feasible and legally implementable, but with different advantages and disadvantages. In Project Rio, the Swiss Centre is addressing the rise in requirements placed on central banks to be able to effectively monitor fast-paced electronic markets. To this end, a prototype for a new data architecture is in development, which will enable the rapid movements and large volumes of data emanating from fast-paced markets to be processed in real time.

The focus of the Basel Committee on Banking Supervision at the BIS was on monitoring the consequences of the coronavirus crisis for the banking sector as well as on implementing and reviewing the effectiveness of the regulatory standards. The committee extended the deadline for implementation of the Basel III reform package by one year, to 1 January 2023, to free up additional resources for crisis management on the part of the authorities as well as the banks.

The impact of the pandemic on the global financial system was also at the heart of the FSB's activities in 2020. A major focus was the improvement of cross-border payments. The FSB also considered the possible effects of stablecoins and regulatory approaches in this field. Stablecoins are privately issued digital assets for payment purposes (payment tokens) that are designed to remain stable relative to specific assets or state currencies.

In the autumn edition of its biannual *Economic Outlook* report, the OECD advised the SNB to extend the CRF if necessary, in order to support the banks in their lending to companies experiencing liquidity bottlenecks due to the pandemic.

In 2020, the SNB continued to engage in international dialogue in the NGFS in order to better gauge the potential impact of climate risks on macroeconomics and financial stability. The SNB took part in NGFS working groups, focusing among other things on scenario analysis of climate risks and on the coordination of relevant research among central banks.

As part of its bilateral monetary cooperation, the SNB collaborates with other central banks, cultivates contacts with foreign authorities and provides technical assistance. The main recipients of technical assistance are the central banks of countries in Central Asia and the Caucasus, i.e. the members of the Swiss constituency at the IMF. Technical assistance in 2020 was shaped by the pandemic, which sharply limited the possibilities for cooperation from March onwards. Some bilateral projects could, however, be successfully implemented, in part by virtual means rather than locally.

In December 2020, in a report on the foreign exchange policies of major trading partners of the United States, the US Treasury designated Switzerland a currency manipulator. The Swiss authorities and the SNB rejected this accusation. The SNB's foreign exchange market interventions are necessary to ensure appropriate monetary conditions and thus price stability.

Banking services to the Confederation

In 2020, the measures to cushion the economic consequences of the coronavirus crisis raised the Confederation's short-term financing needs. On behalf of and for the account of the Confederation, the SNB issued, by auction, money market debt register claims amounting to CHF 40.7 billion and Confederation bonds amounting to CHF 3.8 billion. This was almost double the volume of the previous year. The SNB also carried out roughly 182,000 payments on behalf of the Confederation.

Statistics

The SNB compiles statistical data on banks and financial markets, the balance of payments, the international investment position, direct investment and the Swiss financial accounts. To this end, it collaborates with the relevant federal government bodies, with FINMA, and also with the authorities of other countries and international organisations.

At the end of March 2020, the SNB extended its qualitative survey of banks on lending and credit demand. In doing so, it responded to the urgent need for data in connection with the pandemic. In addition, the reporting platform eSurvey was expanded to enable the exchange of documents with banks in connection with their use of the CRF.

The data portal was further developed in 2020. Since the end of September, the SNB has been publishing more detailed data on its money market and foreign exchange market operations. Furthermore, the range of direct investment statistics data was expanded.

As of the beginning of December, Switzerland joined the IMF's new SDDS Plus data standard. The standard is aimed at countries with systemically important financial sectors. It obliges the participating countries to publish comprehensive data. In Switzerland, the data required to comply with SDDS Plus are supplied by different federal agencies. The SNB is responsible for data in several areas, including data for the 'external sector' category and for the Swiss financial accounts. The latter are now published quarterly instead of annually.

1
Monetary policy

1.1 MANDATE AND MONETARY POLICY STRATEGY

Constitutional and legal mandate

Article 99 of the Federal Constitution entrusts the Swiss National Bank, as an independent central bank, with the conduct of monetary policy in the interests of the country as a whole. The mandate is explained in detail in the National Bank Act (art. 5 para. 1 NBA), which requires the SNB to ensure price stability and, in so doing, to take due account of economic developments.

Significance of price stability

Price stability means that money retains its value over time, and it is an important prerequisite for growth and prosperity. By seeking to keep prices stable, the SNB creates an environment in which households and companies can make plans on a reliable basis. Inflation (a sustained increase in the price level) and deflation (a sustained decrease in the price level) both impair economic activity. They hinder the role of prices in allocating labour and capital to their most efficient use, and result in a redistribution of income and wealth.

Monetary policy strategy

In its monetary policy strategy, the SNB sets out the manner in which it operationalises its statutory mandate. The strategy consists of the following elements: a definition of price stability, a conditional inflation forecast over the subsequent three years, and the SNB policy rate. The SNB seeks to keep the secured short-term Swiss franc money market rates close to its policy rate.

Definition of price stability

The SNB equates price stability with a rise in the Swiss consumer price index (CPI) of less than 2% per annum. Deflation, i.e. a sustained decrease in the price level, is also regarded as a breach of the objective of price stability. With its definition of price stability, the SNB takes into account the fact that it cannot steer inflation precisely and that the CPI tends to overstate inflation slightly.

Conditional inflation forecast

The inflation forecast published quarterly by the SNB serves as the main indicator for monetary policy decisions and is a key element in its communications. The forecast relates to the three subsequent years and reflects the medium-term focus of monetary policy. With this approach, the SNB takes account of the fact that output and prices react to monetary policy stimuli with – at times considerable – lags. Besides the inflation forecast, the SNB takes into consideration a large number of indicators of domestic and international economic and monetary developments and of financial stability for its monetary policy decisions.

The SNB's inflation forecast is based on the assumption that the SNB policy rate communicated at the time of publication will remain constant over the forecast horizon. In other words, it is a conditional forecast and shows how the SNB expects consumer prices to move, assuming an unchanged interest rate. The SNB thus enables the public to gauge the future need for action in monetary policy. The inflation forecast published by the SNB cannot be compared with those provided by commercial banks or research institutions, as these generally factor in the interest rate adjustments they anticipate.

SNB policy rate

The SNB sets the level of the SNB policy rate and uses it to communicate its monetary policy decisions. It seeks to keep the secured short-term Swiss franc money market rates close to the SNB policy rate. The most representative of the secured short-term Swiss franc rates is SARON (Swiss Average Rate Overnight, cf. chapter 2.2, box 'Transitioning from Libor to SARON').

Influencing interest rate environment

The SNB ensures price stability by using its monetary policy operations to influence the interest rate environment and align it with the prevailing economic situation. Real interest rates, i.e. nominal interest rates minus inflation, play a key role here. Lowering real interest rates generally tends to have a stimulating effect on demand and on prices of goods and services, while raising them tends to have a dampening effect. Although central banks steer only short-term nominal interest rates, they also influence real rates in the short run given that inflation is slow to change.

Role of exchange rate

An independent monetary policy that is geared towards the objective of price stability fundamentally requires flexible exchange rates. This does not mean, however, that the SNB disregards exchange rate developments. In a small open economy such as Switzerland's, changes in the exchange rate have a significant impact on inflation and the economy. In times of high uncertainty, the Swiss franc is used as a safe haven by Swiss and foreign investors alike. It therefore tends to appreciate in such phases, which has an impact on inflation and the economy. Exchange rate movements thus influence monetary policy decisions. If the SNB adjusts the interest rate or intervenes in the foreign exchange market, this in turn has an impact on the exchange rate.

From 2008, following the onset of the financial and economic crisis, nominal interest rates in many countries fell to very low levels. This increasingly narrowed the scope for further interest rate reductions. Many central banks thus resorted to unconventional measures in order to be able to maintain an appropriate monetary policy. The most important unconventional measures taken by the SNB in recent years have been foreign exchange market interventions, enforcing a minimum exchange rate against the euro from September 2011 until January 2015, and the introduction of negative interest on sight deposits held by banks and other financial market participants at the SNB. To cushion the economic impact of the coronavirus pandemic, the SNB set up the SNB COVID-19 refinancing facility (CRF) in March 2020 as part of a joint package of measures with the federal government, the Swiss Financial Market Supervisory Authority (FINMA) and the banks (cf. chapters 1.4 and 2.3).

Unconventional monetary policy measures

The SNB's introduction of negative interest on sight deposits effected a reduction in the general level of interest rates. Having interest rates at a level that is low by international standards makes Swiss franc investments less attractive, thereby easing upward pressure on the currency. Furthermore, negative interest creates an incentive to consume and invest more. In order to limit the burden on banks to what is necessary, the SNB grants them exemption thresholds (cf. chapter 2.3, box 'How negative interest works').

Negative interest on sight deposits at SNB

Like negative interest, the SNB's willingness to intervene in the foreign exchange market as necessary also eases upward pressure on the Swiss franc. The SNB decides whether and how strongly to intervene based on the overall currency situation and market conditions. Foreign exchange market interventions are mainly required in times of high uncertainty, when there is particularly strong demand for Swiss francs.

Willingness to intervene in foreign exchange market

Like price stability, financial stability is a prerequisite for sustainable economic growth. Experience from the financial crisis has shown that achieving price stability does not necessarily ensure the stability of the financial system. The authorities have macroprudential instruments at their disposal that can be applied in a targeted manner to address credit market imbalances which threaten financial stability (cf. chapter 6).

Macroprudential instruments

Research
Research activities help the SNB fulfil its constitutional and statutory mandate. They enhance the understanding of complex economic interrelationships, promote further development of analytical methods, and provide an important basis for monetary policy decisions. The SNB researches subjects connected with its core tasks, the focus being on monetary policy and financial stability.

Research and studies by SNB employees are published in the *SNB Working Papers* and *SNB Economic Studies* series, as well as in academic journals. The *SNB Research Report*, which is published on an annual basis, provides an overview of the latest research activities at the SNB.

The SNB maintains a dialogue with other central banks, universities and research institutes in order to promote knowledge-sharing. It regularly holds conferences and seminars for this purpose. In 2020, many conferences had to be postponed or cancelled due to the pandemic. Instead, more events were held virtually.

The importance of communication – adjustments in a year of pandemic
Article 7 of the National Bank Act stipulates that the SNB must render account and provide information to the Federal Council, the Federal Assembly and the general public. In particular, the SNB must regularly inform the public about its monetary policy and announce its intentions in this regard. Communication is also an important monetary policy instrument that central banks use to anchor and manage expectations on financial markets. Furthermore, providing information to the general public is pivotal when it comes to promoting understanding of the SNB's role and the importance of its independence (cf. *Annual Report* 2015, chapter 1.1, box 'Accountability, information and communication' and *Annual Report* 2019, chapter 1.1, box 'Communications and information in changing times').

Owing to the coronavirus pandemic, various events aimed at engaging in dialogue with the public, the media or with other specific interest groups could not be held, or at least not in the customary format. For example, the General Meeting in April had to be held without shareholders present, and thus without speeches by SNB management. In some cases, new virtual formats were used. To address the increased demand from the media for information in light of the economic impact of the pandemic, the SNB set up conference calls after the monetary policy assessments in March and September, giving media representatives the opportunity to put questions to the Chairman of the Governing Board. In December, the media conference following the monetary policy assessment was held via conference call and webcast. Thanks to the videoconferencing infrastructure at the SNB Forum in Zurich, various research seminars and other events with international participants could be held without any difficulties. In addition, the members of the Governing Board and other representatives of the SNB took the opportunity to take part virtually in public panel discussions and roundtable talks.

As regards digital communications, a range of projects were launched in 2020 aimed at further developing the SNB website, modernising the intranet, and making greater use of existing social media channels.

The restrictions imposed in connection with the pandemic also had an impact on the operations of the SNB Forum at the head office in Zurich in 2020. The information and events centre, which is accessible to the general public, had to be closed for certain periods, or the range of services offered reduced. At the SNB Forum, which was opened in October 2019, visitors can find out about the SNB using an interactive media wall and a wall book. In addition, they can obtain information there, and procure literature from the library, material from the archives, as well as statistics and publications. The planned visitor centre at the Berne head office is also aimed at making the SNB more accessible as an institution to the general public. The centre, which the SNB will set up and run in conjunction with the Bernisches Historisches Museum, will cover the areas of money, monetary policy and central banks. It is scheduled to open in 2024.

1.2 INTERNATIONAL ECONOMIC DEVELOPMENTS

Severe global economic downturn owing to pandemic

The spread of coronavirus worldwide and the measures taken to contain the pandemic saw the global economy enter a sharp recession in 2020. In China, where the pandemic broke out, the government reacted with extensive quarantine measures as early as January. From mid-February onwards, coronavirus spread rapidly across the globe. In response, most countries introduced public health measures. These included closing restaurants, shops and schools, as well as partial curfews, and had a severe impact on the economy. The movement of people across borders was also restricted in many cases. The measures varied from country to country, and generally restricted both production and consumption. In addition, the public began to exercise increased caution with regards to activities associated with an increased risk of infection. The containment measures and behavioural changes led to a historic downturn in economic activity. In the second quarter of 2020, GDP in most countries was 10% to 20% lower than at the end of 2019.

Turbulence on financial markets

The global spread of coronavirus saw a severe decline in financial market sentiment. The implied volatility of stocks as measured by option prices increased sharply, and by mid-March had reached levels last seen during the 2008 financial crisis. Share prices dropped abruptly worldwide, while capital market interest rates and exchange rates also reacted significantly. Sentiment on the financial markets improved from the end of March, supported by central bank intervention and the prospect of fiscal stimulus measures.

Partial recovery in second half of 2020

The decline in new infections and the easing of the containment measures in the summer months increasingly allowed economic activity to resume. This led to a strong recovery of the global economy in the third quarter.

In autumn, infection numbers rose again rapidly in Europe and the US. Numerous far-reaching containment measures were then once more adopted, and there was renewed caution among the population regarding activities with a higher risk of infection. As a result, economic activity weakened significantly in certain countries in the fourth quarter.

The monetary and fiscal policy measures introduced worldwide in response to the severe downturn in the first half of the year were an important source of support for the economy. Even so, GDP in the fourth quarter was still markedly down on pre-crisis levels in most countries. Accordingly, global production capacity utilisation was also significantly lower than normal. Against this backdrop, consumer price inflation declined in the advanced economies. The lower oil price was an additional factor pushing down inflation.

Downturn in global trade

With production and consumption restricted, and the associated impairment of international supply chains, there was a substantial downturn in global goods trade in the first half of the year. In May, global trade was at one point nearly 20% lower than in the previous year. As economic activity picked up again, global trade recovered quickly and by the end of the year had even exceeded the previous year's level. Nevertheless, on an annual average basis, global trade showed a significant decline (–5.3%).

Strong movements in commodity prices

Commodity prices also declined markedly in the wake of the strong downturn in global production and demand in the first half of the year. The price of oil was particularly affected. In April, the price of Brent crude fell temporarily to around USD 20 a barrel, the lowest level in nearly 20 years. The oil price recovered as the global economy revived again, and was further strengthened by the output cuts made by the Organization of the Petroleum Exporting Countries (OPEC). Even so, at USD 50 it was still 25% lower at the end of 2020 than at the beginning of the year. Industrial metals prices also recovered from the decline in the first half of the year, bolstered by increased demand from China, and even closed 2020 significantly higher than at the beginning of the year.

Severe economic downturn in euro area owing to pandemic

In 2020, economic developments in the euro area were shaped by the pandemic. Coronavirus spread throughout Europe from mid-February. Italy was already greatly affected from the second half of February onwards, and introduced increasingly restrictive public health measures to limit the spread of coronavirus. Most other European countries also introduced measures in the course of March. At the same time, the pandemic led to a change in public behaviour, with people avoiding activities that appeared to entail a higher risk of infection. From May onwards, member states began to ease their measures. GDP thus increased strongly again in the third quarter. In autumn, coronavirus spread again more strongly in the euro area, whereupon member states decided on new public health measures. Economic output in the euro area thus fell again in the fourth quarter. On average for the year, GDP registered a historic decline (–6.8%). The unemployment rate in the euro area increased until July, although the rapid expansion of short-time work schemes since the beginning of the pandemic curtailed the rise. It fell again slightly towards the end of the year, and stood at 8.3% in December compared with 7.3% at the beginning of 2020.

Support measures in euro area

To cushion the impact of the crisis, the euro area countries provided extensive fiscal policy support from March onwards. In addition to the short-time work schemes, this included liquidity support and loan guarantees for businesses, tax relief and investment in infrastructure. Besides this, the EU approved a recovery fund that will disburse grants and loans to member states. These should be of particular benefit to countries with limited fiscal space.

Brexit

The UK left the EU at the end of January 2020, thus completing the Brexit process. However, it remained part of the EU single market and the customs union until the end of the year. In December, the UK and the EU concluded a free trade agreement that provides for zero tariffs and zero quotas on trade in goods. They also agreed on cooperation in areas such as transport and energy, as well as on social security matters.

Pandemic-led recession in US

The pandemic also pushed the US economy into a severe recession. GDP shrank by 3.5%, thus exceeding the 2.5% decline recorded in 2009 at the low point of the financial crisis. However, the trade dispute with China, which has been ongoing since 2017 and had led to uncertainty and weighed on the economy in previous years, eased after the two countries signed a trade agreement in January 2020.

Public health measures aimed at containing coronavirus resulted in a historic downturn in economic activity in the first half of the year. The labour market also deteriorated dramatically. The unemployment rate rose from 3.6% at the beginning of the year to nearly 15% at one point. Unlike in the euro area, there was no support for employed persons in the form of comprehensive short-time work schemes. The US government passed several fiscal stimulus packages to limit the economic impact of the pandemic. With the gradual easing of the containment measures from May onwards, economic activity initially recovered quickly. However, the momentum of the recovery slowed towards the end of the year, partly because several states tightened their measures again in the light of a strong rise in new infections. In the fourth quarter, GDP was around 2.5% down on its pre-crisis level. Capacity remained significantly underutilised through to the end of the year, and the unemployment rate was still 6.7% in December.

… and in Japan

In Japan, GDP shrank by 4.9% as a result of the pandemic. The last time Japan suffered a decline of this order was during the economic crisis in 2009 (−5.7%). In the first quarter, the public health measures were still moderate. In mid-April, however, a six-week state of emergency was declared, which had a strong impact on economic activity. Once the nationwide measures were lifted at the end of May the economy recovered quickly, also supported by fiscal policy and global demand. Nevertheless, GDP had still not returned to pre-crisis levels by the end of the year. Labour market conditions remained difficult. Although the government granted companies employment subsidies to avoid redundancies, unemployment rose by almost one percentage point within the year and stood at 2.9% in December.

Historically low growth in China

Despite the pandemic, China recorded positive GDP growth of 2.3%. Nonetheless, this still represented the lowest expansion since the mid-1970s. Because of the spread of coronavirus, the government introduced stringent containment measures already in January. As the number of new infections fell quickly as a result, the measures were relaxed again as early as March. After a historic contraction in the first quarter, economic activity recovered quickly; GDP surpassed its pre-crisis level in the third quarter and was roughly in line with the longer-term trend in the fourth quarter. The recovery was supported by public spending, financial assistance and temporary duty relief for companies. In addition, exports benefited from the increased global demand for medical protective equipment and technical equipment for working from home. The labour market recovered significantly by the end of the year; in urban areas, unemployment in December was back in line with the 2019 level (5.2%).

Brazil, India and Russia also affected by pandemic

Brazil, India and Russia were also severely affected by the coronavirus crisis. In India, strict containment measures had a particularly severe impact on economic activity. Russia's manufacturing industry suffered additionally due to the weak global demand for oil. Economic activity recovered gradually in all three countries with the easing of containment measures from June onwards.

Inflation declining in advanced economies

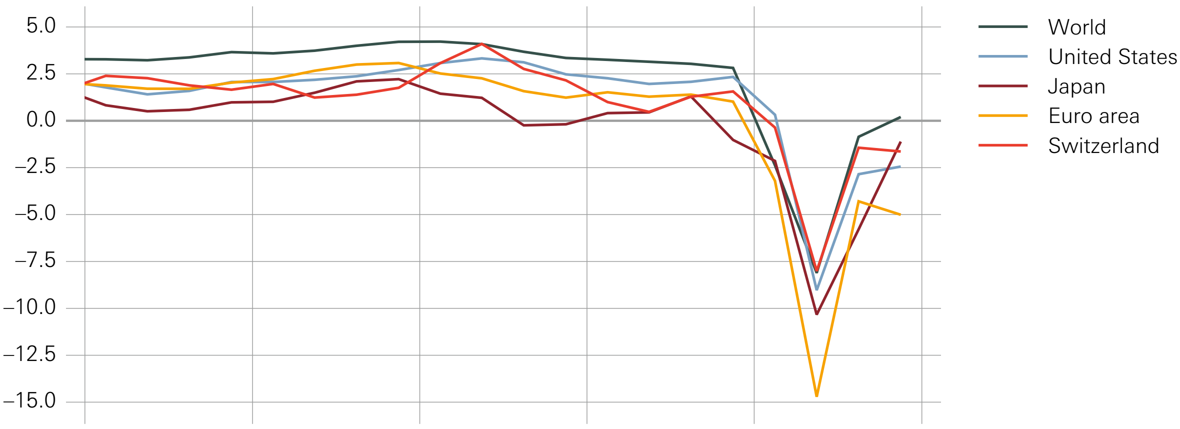
Consumer price inflation declined in the advanced economies compared with 2019, in some cases falling well below the targets set by the central banks. Core inflation, which excludes volatile categories of goods such as oil products and food, weakened in most countries, and energy price inflation was also lower.

Core inflation in euro area close to zero at year-end

Headline inflation in the euro area fell to 0.3% in 2020, down from 1.2% in 2019. This decline was largely due to lower energy prices. However, core inflation was also lower than in the preceding years at 0.7%; over the course of 2020 it dropped significantly, from 1.1% in January to 0.2% in December. Core inflation was dampened in particular by declining prices for tourism services owing to the pandemic and a temporary reduction in value added tax in Germany.

GROWTH OF GROSS DOMESTIC PRODUCT

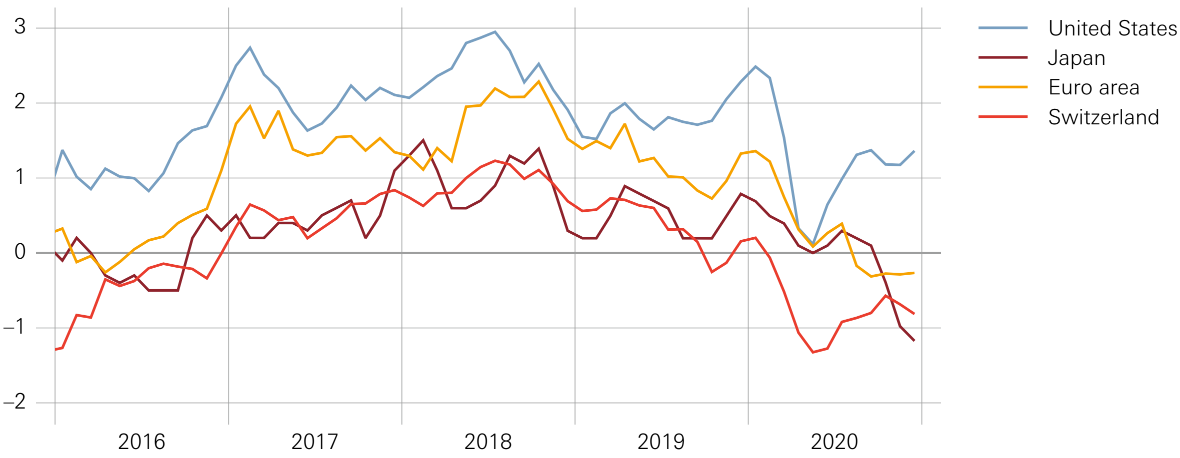
Real, year-on-year change in percent



Sources: SECO, SNB, Thomson Reuters Datastream

INFLATION

Consumer prices, year-on-year change in percent



Sources: IMF, SFSO, Thomson Reuters Datastream

US inflation significantly below target

In the US, headline inflation fell to 1.2%, from 1.8% in 2019. Core inflation was also markedly weaker. The Federal Reserve's preferred price inflation measure for its target of 2%, the personal consumption expenditure (PCE) deflator, fluctuated over the course of the year owing to the pandemic, but remained consistently below the target level. In December, the PCE deflator was significantly below this level at 1.1%, and even excluding the volatile energy and food prices was still at just 1.5%.

Slight deflation in Japan

In Japan, consumer prices stagnated on average for the year, with core inflation slightly negative (–0.1%). Prices for tourism services in particular declined sharply in the second half of the year as a result of the pandemic and a campaign to promote domestic tourism, in which the state covered up to half of the travel costs. In December, core inflation stood at –0.5%.

Mixed inflation trends in emerging economies

In China, headline inflation was slightly lower year-on-year at 2.5%, while core inflation hit its lowest level in more than ten years at 0.8%. Headline inflation also declined in Brazil (to 3.2%) and Russia (to 3.4%). However, it rose in both countries towards the end of the year. In India, meanwhile, headline inflation rose to 6.6%, in part due to disrupted supply chains, and thus exceeded the central bank's target range.

Extensive monetary policy measures in euro area due to pandemic

The European Central Bank introduced several measures aimed at cushioning the economic impact of the pandemic. It eased the conditions for its targeted longer-term refinancing operations (TLTROs) and thus supported lending to the real economy. Furthermore, it increased the volume of its longer-standing asset purchase programme (APP). It also set up the pandemic emergency purchase programme (PEPP) for private and public sector securities, the aim being to stabilise the financial markets and to prevent financing conditions in the member states from diverging too much as a result of the pandemic. By the end of the year, the ECB had increased the programme to a total of EUR 1,850 billion (15% of GDP) and planned to continue it until March 2022. It left its key rates unchanged in 2020, with the deposit facility rate thus remaining negative (–0.5%). The ECB signalled that it would not raise its key interest rates until inflation has sufficiently firmed.

In 2020, the ECB also began a review of its monetary policy strategy, which is to be completed by mid-2021. Aspects the ECB is considering adjusting include its definition of price stability, its monetary policy instruments and its communication practices. The last review was in 2003.

… and review of monetary policy strategy

The severe economic downturn prompted the Fed to undertake a comprehensive monetary policy easing in spring. It rapidly lowered the target range for its policy rate by a total of 1.5 percentage points to 0.0–0.25%. It also began to increase its purchases of Treasury securities and mortgage-backed securities, and introduced various credit facilities. These measures were aimed at countering a tightening in financing conditions, supporting the flow of credit to households and businesses, and ensuring the smooth functioning of the financial markets. The Fed also strengthened the functioning of the US dollar funding markets by providing USD liquidity at favourable conditions via the standing swap arrangements with other central banks (cf. chapter 2.5).

Easing of monetary policy in US

In August, the Fed announced important adjustments to its monetary policy framework. In future, it will seek to achieve inflation that averages 2% over time. Following periods when inflation has been running persistently below 2%, the Fed will aim to achieve inflation moderately above 2% for some time. In addition, with regard to its employment mandate, the Fed will in future allow employment to run at or above its maximum level, unless accompanied by signs of unwanted increases in inflation. Against this backdrop, the Fed expects it will be appropriate to maintain the target range for its policy rate until the labour market has recovered and inflation has risen to 2% and is on track to moderately exceed 2% for some time.

… and adjustment of monetary policy framework

Since 2016, the Bank of Japan has placed yield curve control at the centre of its monetary policy. In 2020, it maintained the target for 10-year government bond yields at around 0% and its short-term deposit rate at –0.1%. In connection with the pandemic, it announced that it would purchase the necessary amounts of Japanese government bonds without setting an upper limit with a view to stabilising the yield curve across all maturities. It also introduced measures to facilitate banks' lending to small and medium-sized enterprises in particular, and increased its purchases of corporate bonds and equity exchange-traded funds (ETFs). The Bank of Japan stressed its willingness to take additional easing measures if necessary.

Exceptional monetary policy measures in Japan, too

Policy rates lowered in China

Due to the pandemic, the People's Bank of China lowered its key rates, including its seven-day reverse repo rate by 0.3 percentage points to 2.2%, and reduced the reserve requirement ratio for smaller banks in several steps to cut financing costs for companies and promote lending.

… as well as in Brazil, India and Russia

The central banks of Brazil, India and Russia also eased their monetary policies in light of the pandemic, after having already lowered their key interest rates significantly in 2019. In Brazil, the policy rate was reduced by 2.5 percentage points to 2%, in India by 1.15 percentage points to 4%, and in Russia by 2 percentage points to 4.25%.

Revision of global baseline scenario due to coronavirus pandemic

At its quarterly monetary policy assessments in March, June, September and December, the SNB draws up a baseline scenario for the global economy for the next three years. This baseline scenario is incorporated into the projection models for the economy and prices in Switzerland, and thus also serves as the basis for the Governing Board's monetary policy decisions and for financial stability analysis.

In December 2019, the SNB had anticipated moderate global economic growth of 3.4% for 2020. Various central banks had eased their monetary policy in view of modest economic activity and were signalling that they would be likely to leave their key interest rates at a low level for some time to come. The SNB assumed that the global economy and consequently inflation would pick up again over the medium term. At the turn of the year, various surveys were pointing to an improvement in the global economy. The easing in international trade tensions fostered the expectation of a gradual pick-up in economic activity worldwide in the following months.

As coronavirus spread worldwide, the outlook for the global economy changed abruptly in the space of just a few weeks. After the pandemic broke out in China, the strict containment measures temporarily weighed heavily on economic activity in the country's affected regions. In March, appropriate public health measures were ultimately taken worldwide, which greatly curbed economic activity. Many countries therefore also announced economic support measures, and central banks introduced a range of exceptional monetary policy measures.

These developments prompted the SNB to significantly revise its baseline scenario for the global economy in March. Its new expectation for the first half of 2020 was that there would be a marked economic downturn, and thus also a decline in global economic activity for the year as a whole. In light of the exceptionally uncertain outlook, the SNB refrained from releasing any projection figures (cf. *Quarterly Bulletin* 1/2020). As it turned out, many countries experienced a decrease in GDP in the first quarter already.

However, in most countries economic activity did not reach its low point until April. Once the number of new infections declined, many governments relaxed their containment measures from May onwards. Nevertheless, an even more severe contraction in global GDP was likely in the second quarter. At the same time, the SNB expected a significant recovery in the second half of the year. In its baseline scenario in June, it anticipated a decline in global GDP of 4.6% for 2020 followed by a 7.8% rebound in 2021 (cf. *Quarterly Bulletin* 2/2020).

In September, the SNB adjusted its assessment of the global economy, newly anticipating a 3.3% decline in GDP for 2020 and a 6.9% rebound in 2021 (cf. *Quarterly Bulletin* 3/2020). The revision was mainly due to the fact that the downturn in the first half of the year had been somewhat less strong than feared.

The global economy grew more strongly than expected in the third quarter, albeit without returning to pre-crisis levels. In October, infection numbers rose again rapidly in Europe and the US. This prompted renewed containment measures, and economic activity declined significantly in certain countries. However, in light of the rapid recovery in the third quarter, in December the SNB made a further upward revision to its forecast for 2020 as a whole, projecting a contraction of just 2.6%. Nevertheless, this still represented a drop of historic proportions. For 2021, the SNB predicted growth of 6.8% (cf. *Quarterly Bulletin* 4/2020). The prediction for 2021 was based on the assumption that the pandemic could be brought back under control in the foreseeable future, and that appropriate measures would prevent further waves of infection.

1.3 ECONOMIC DEVELOPMENTS IN SWITZERLAND

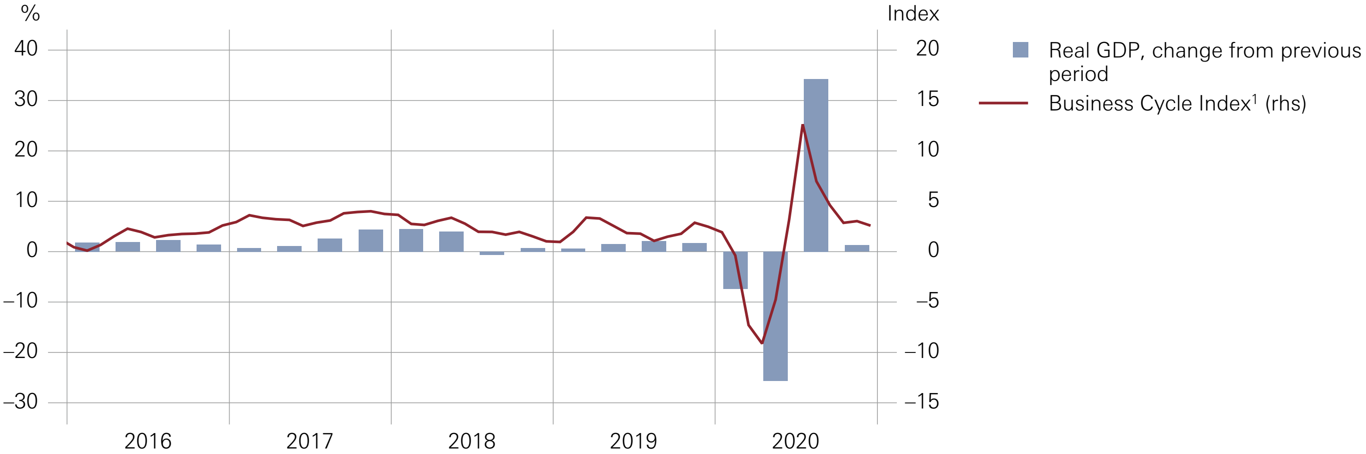
Severe economic downturn in first half of year

The coronavirus pandemic pushed the Swiss economy into a sharp recession. The containment measures implemented, the caution on the part of consumers, the pronounced decline in foreign demand, and delivery problems led to a marked downturn in business activity in the first half of the year. In contrast to previous recessions, services in particular were hit hard. Overall, GDP fell by almost 9% in the first two quarters. The situation in the labour market also deteriorated. There was a massive increase in short-time working, and unemployment rose quickly. Against this backdrop, consumer sentiment fell to an all-time low.

Rapid but incomplete recovery in second half of year

Economic activity picked up again from May onwards as public health measures were eased. The recovery was further supported by fiscal and monetary policy, and above all by the extensive compensation for short-time working and the COVID-19 loan programme (cf. chapter 1.4). This meant that most companies were able to rapidly step up their business activity again in the summer months. There was also a reduction in the use of short-time working, with hardly any additional rise in unemployment. The economic recovery continued through to September. In October, however, coronavirus spread again quickly, which weighed on economic momentum. The result was a slower recovery in the fourth quarter.

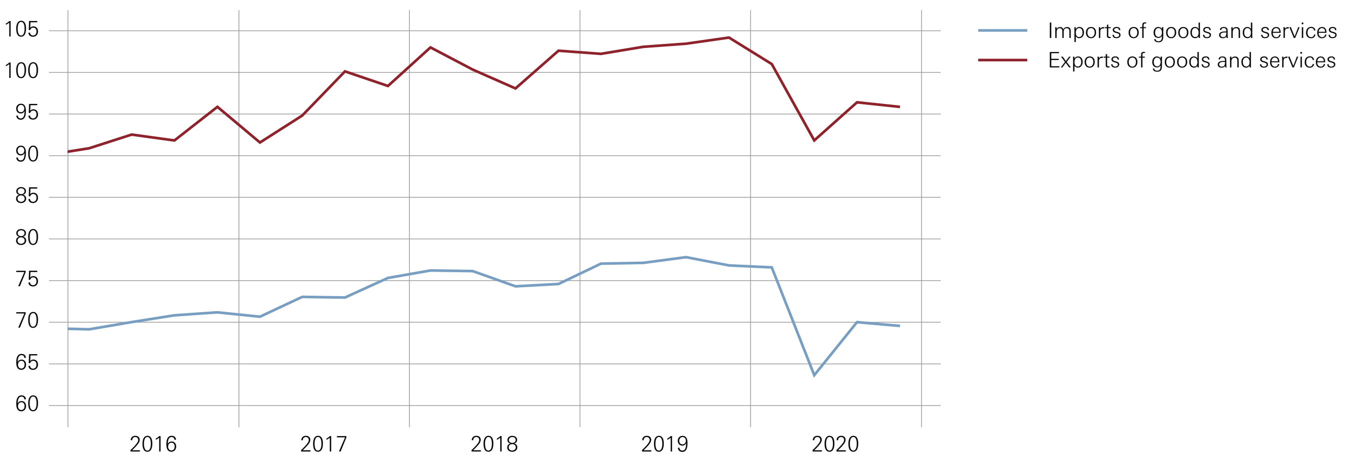
BUSINESS CYCLE INDEX AND GDP GROWTH



1 Normalised to GDP growth since 2002.
Sources: SECO, SNB

FOREIGN TRADE

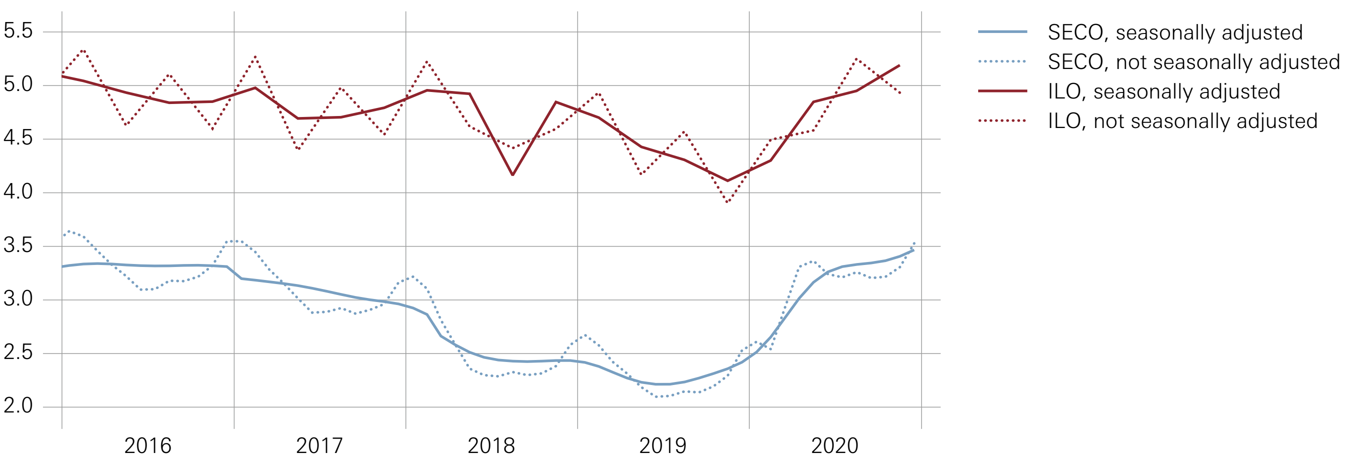
In CHF billions, in real terms, seasonally adjusted



Source: SECO

UNEMPLOYMENT RATE

In percent



Sources: SECO, SFSO

Largest drop in GDP since 1975

According to the initial estimate by the State Secretariat for Economic Affairs (SECO), GDP fell by 2.9% in 2020. This marked the largest drop since 1975. However, the decline was not as substantial as in many other countries.

Negative output gap

Utilisation of production capacity decreased significantly due to the severe economic downturn. The output gap, defined as the percentage deviation of GDP from estimated potential output, opened in the first quarter and remained negative through to the end of the year. Company surveys confirmed that capacity utilisation was significantly lower than normal in many industries, with regard to both technical capacity and personnel.

Scale of impact varied from industry to industry

Most areas of the economy suffered as a result of the crisis. The services sector was particularly hard hit, especially the hospitality and entertainment industries, where value added was down 35% and 19% respectively year-on-year. The pandemic also took a heavy toll on the business services and transport industries. Excluding the pharmaceutical industry, the manufacturing sector also recorded a marked decline in value added, albeit less pronounced than at the low point of the financial crisis in 2009. By contrast, value added increased in the pharmaceutical industry. Wholesale and retail trade fared well, as did the public sector and the insurance industry.

Historic decline in consumption

The pandemic led to a historic decline in consumption. On the one hand, consumption possibilities were at times severely restricted owing to the containment measures. On the other, the high level of uncertainty weighed on consumer sentiment among households. There was a particularly marked reduction in spending on services (events, restaurant visits, overnight hotel stays, travel, healthcare, etc.). Spending on vehicles also decreased, but there was higher demand for everyday items, in particular food. The strong increase in online trade during the pandemic was able to support the consumption of certain goods, but was by no means sufficient to offset the losses in other areas (above all, services).

Largest fall in exports since financial crisis

The global nature of the crisis meant there was also a marked decline in exports. At –6.3%, the drop was of a similar magnitude to that seen during the financial crisis. Services exports shrank by more than 17%. Due to the travel restrictions and the uncertainty surrounding the future course of the pandemic, it was above all tourism and transport services that were strongly affected. There was also a significant drop in goods exports, in particular in the case of watches, precision instruments, machinery and metals. By contrast, exports of chemical/pharmaceutical products and foodstuffs lent support to foreign trade.

Equipment investment also registered a decline. The severe downturn in economic activity worldwide, high level of uncertainty, and weak capacity utilisation put a noticeable dampener on companies' willingness to invest. That said, the negative impact was less pronounced than during the financial crisis.

Decline in equipment investment

Construction sites were closed at times in spring due to the pandemic. However, there was only a slight decrease in construction investment overall.

... and in construction investment

The pandemic also left its mark on the labour market. The number of people registered as unemployed at the regional employment offices rose rapidly. The unemployment rate published by SECO on the basis of the employment office data stood at 3.1% on an annual average basis, compared with 2.3% in 2019. The unemployment rate calculated by the Swiss Federal Statistical Office (SFSO) in line with the definition of the International Labour Organization (ILO) also rose, to an average of 4.8% (2019: 4.4%). The SFSO's figures are based on a quarterly survey of households, and also include unemployed people who are not registered, or are no longer registered, with the regional employment offices. As a result, the figures are normally higher than those calculated by SECO.

Unemployment higher

The number of employed persons fell by 0.1%, the weakest development since the financial crisis. Jobs were lost in construction and manufacturing alike. In the services sector, employment stagnated overall.

Decline in employment

Given the severity of the economic downturn, the decline in employment was small. This was above all due to the fact that companies were able to make widespread use of short-time working in response to the drop in demand. The simplified application process and the expansion of the groups eligible also contributed to the rapid increase in short-time working. According to SECO, short-time working peaked in April, with around 1.3 million employees affected (around 28% of all economically active persons). This was considerably more than at the height of the financial crisis, when 92,000 people – around 2% of all economically active persons – were affected. Provisional figures put the number of people in short-time work at the end of December at nearly 300,000.

Massive increase in short-time working

Rise in total real wage bill

The total real wage bill, comprising wages paid and compensation for short-time working, increased by 2% according to SECO's estimates. Without the compensation for short-time working of around CHF 11 billion (provisional figure), it would have shrunk by 0.8%, this coming after a 2.8% rise in 2019.

REAL GROSS DOMESTIC PRODUCT

Year-on-year change in percent

	2015	2016	2017	2018	2019	2020
Private consumption	2.5	1.6	1.2	0.8	1.4	–4.4
Government consumption	0.6	0.4	0.6	0.9	0.9	2.9
Gross fixed capital formation	2.1	2.9	3.6	0.8	1.2	–1.7
Construction	1.6	–0.2	1.5	0.0	–0.5	–0.7
Equipment	2.4	4.9	4.9	1.2	2.2	–2.3
Domestic final demand[1]	**2.1**	**1.8**	**1.8**	**0.8**	**1.3**	**–2.7**
Exports of goods and services[1]	4.4	6.8	3.4	5.0	2.1	–6.3
Aggregate demand[1]	**2.2**	**2.6**	**2.2**	**3.1**	**1.5**	**–5.0**
Imports of goods and services[1]	3.4	4.0	3.8	3.3	2.5	–9.6
Gross domestic product	**1.7**	**2.0**	**1.6**	**3.0**	**1.1**	**–2.9**

1 Excluding valuables (non-monetary gold and other precious metals, precious stones and gems as well as objets d'art and antiques).
Sources: SECO, SFSO

Economic picture derived from discussions with companies

The SNB bases its economic assessment on a broad array of information. This includes information gathered every quarter by the SNB's delegates for regional economic relations during discussions with around 240 companies from a range of sectors. The findings of these talks are summarised in the 'Business cycle signals' section of the SNB's *Quarterly Bulletin*.

The pandemic was a defining factor in the company talks in 2020. The Swiss economy got the year off to a good start, and in the discussions held in January and February the representatives said the pandemic had as yet had scarcely any impact on business activity. However, uncertainty rose markedly as coronavirus spread across Europe, and companies were increasingly affected. Given the change in the situation, the delegates for regional economic relations conducted additional talks with some 100 companies and associations in March. These discussions revealed a drastic deterioration in the business situation of those industries directly affected. In particular, there were signs of a marked fall in turnover in tourism, hospitality, entertainment and leisure, watchmaking, and bricks-and-mortar non-food retail.

The full extent of the crisis became apparent in the discussions held in the second quarter. The spread of coronavirus and the associated containment measures significantly exacerbated the downturn. The order situation deteriorated markedly, not just in the services sector, but also in large parts of manufacturing and, in certain regions, the construction sector. Procurement bottlenecks made themselves felt, although they only led to production losses in a few cases. To avoid liquidity shortfalls, many companies introduced short-time working and put a freeze on investments. Added to this, many companies drew on COVID-19 loans.

With the easing of public health measures from May, economic activity picked up again, and this was reflected in the discussions in the third quarter. Most companies experienced a significant improvement in business activity over the summer months. Nonetheless, the overall situation remained unsatisfactory. Particularly in manufacturing, turnover was still significantly lower year-on-year. Companies also estimated that their staffing levels remained too high given the difficult economic situation.

The discussions in the fourth quarter were shaped by the rapid resurgence of coronavirus, which led to renewed declines in turnover in many industries. Profit margins came under pressure, and the liquidity situation was tighter than in the previous quarter. Short-time working allowed many companies to avoid redundancies. Even so, there were some job cuts. Although the company representatives said they expected a recovery to a certain extent in the coming quarters, they indicated that uncertainty about future developments remained high.

Lower producer and import prices

Producer and import prices fell during the first six months of 2020, and remained stable in the second half of the year. On an annual average basis, they were 3.0% lower year-on-year.

CPI inflation lower than in 2019

In 2020, annual inflation as measured by the CPI stood at –0.7%, down from 0.4% in 2019. This drop in inflation was mainly attributable to the marked decrease in the price of oil and in prices for tourism-related services owing to the pandemic. Inflation reached its low point in the second quarter at –1.2%. It recovered slightly thereafter, but was still well into negative territory in the fourth quarter at –0.7%.

The rate of inflation for imported goods and services fell from –1.1% in the first quarter to –4.2% in the second quarter. Here, too, there was a countermovement over the remainder of the year, but it still stood at –2.8% in the fourth quarter. The strong decline overall was primarily attributable to lower prices for oil products and tourism-related services.

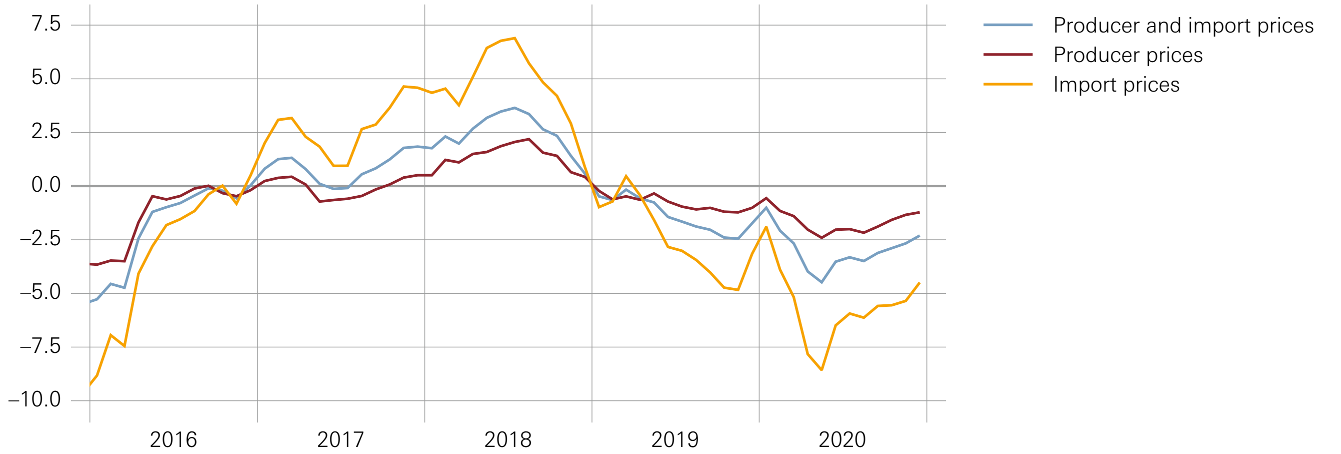
The inflation rate for domestic goods and services also fell, from 0.2% in the first quarter to –0.2% in the second quarter. It also rose slightly in the second half of the year, and stood at 0% in the fourth quarter. The decrease in the inflation rate for domestic goods and services was largely attributable to lower inflation in private services (excluding rents). Given that the reference rate for mortgages fell further, rent inflation also declined slightly in the second half of the year.

Lower core inflation

CPI headline inflation can be significantly affected in the short term by fluctuations in specific price components. In order to analyse the underlying inflation, the SNB therefore calculates core inflation using a trimmed mean. This measure excludes, each month, those goods with the largest and the smallest price changes compared to the same month one year earlier. Specifically, it factors out the 15% of items in the CPI basket with the highest price inflation and the 15% with the lowest. The core inflation rate calculated using the trimmed mean decreased during 2020 and averaged 0.1% for the year (2019: 0.4%).

PRODUCER AND IMPORT PRICES

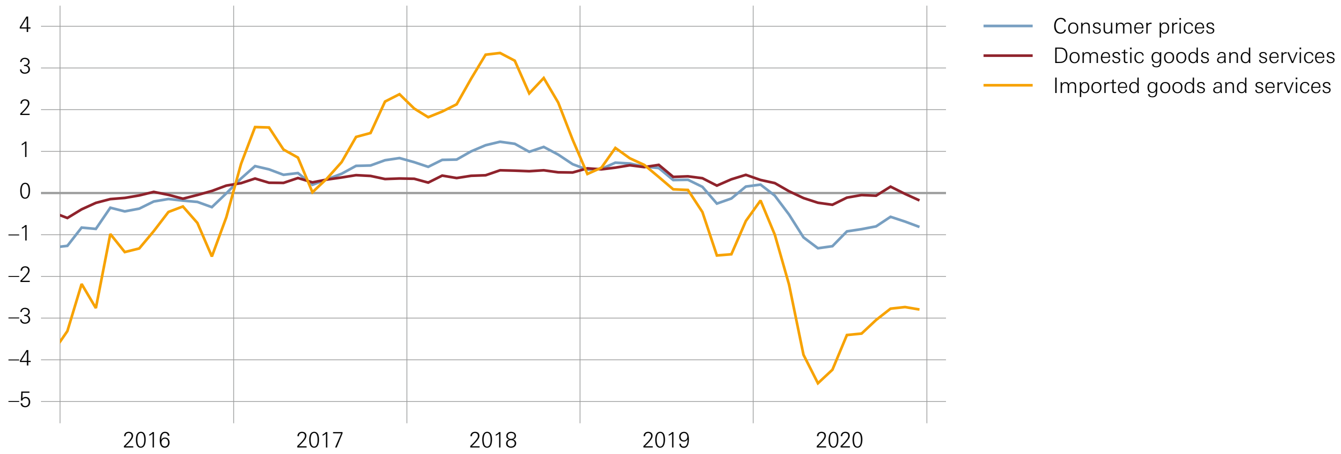
Year-on-year change in percent



Source: SFSO

CONSUMER PRICES

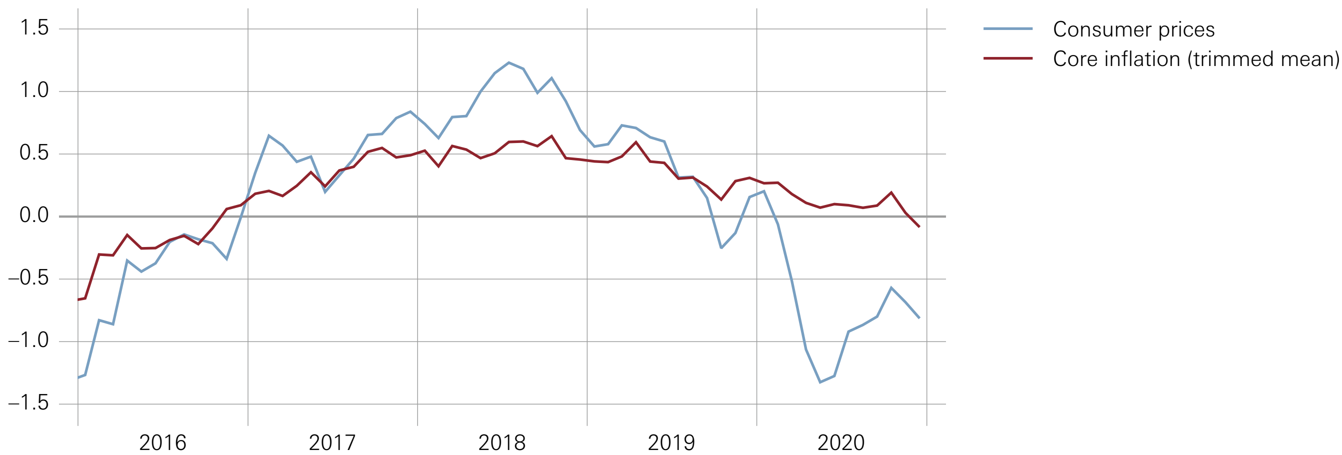
Year-on-year change in percent



Source: SFSO

CORE INFLATION

Year-on-year change in percent



Sources: SFSO, SNB

SWISS CONSUMER PRICE INDEX AND COMPONENTS

Year-on-year change in percent

	2019	2020	2020 Q 1	Q 2	Q 3	Q 4
Consumer price index, overall	**0.4**	**–0.7**	**–0.1**	**–1.2**	**–0.9**	**–0.7**
Domestic goods and services	0.5	0.0	0.2	–0.2	–0.1	0.0
Goods	0.6	0.0	–0.2	0.1	0.0	0.1
Services	0.5	0.0	0.3	–0.3	–0.1	0.0
Private services (excluding rents)	0.7	–0.4	0.2	–1.0	–0.5	–0.2
Rents	0.5	0.9	1.1	1.1	0.9	0.5
Public services	–0.3	–0.8	–0.9	–0.8	–0.8	–0.6
Imported goods and services	0.0	–2.9	–1.1	–4.2	–3.3	–2.8
Excluding oil products	0.4	–1.4	–0.8	–2.3	–1.4	–1.1
Oil products	–2.7	–13.7	–3.8	–18.6	–16.8	–15.3
Core inflation						
Trimmed mean	0.4	0.1	0.3	0.1	0.1	0.1

Sources: SFSO, SNB

1.4 MONETARY POLICY IN 2020

Continuation of expansionary monetary policy

The coronavirus pandemic and the measures taken to contain it led to a severe economic downturn in Switzerland. Inflation also fell significantly into negative territory. At the same time, the Swiss franc was often subject to strong upward pressure owing to its status as a safe haven. In this situation, an expansionary monetary policy continued to be necessary to ensure appropriate monetary conditions. In 2020, the SNB's monetary policy was based on the SNB policy rate and the interest on sight deposits at the SNB, which remained unchanged at –0.75%, as well as the willingness to intervene in the foreign exchange market. In view of the pandemic, at its monetary policy assessment in March the SNB stated that it would intervene more strongly in the foreign exchange market to stabilise the situation. The increased interventions in the foreign exchange market and the negative interest rate countered the upward pressure on the Swiss franc over the year.

Due to the unpredictability of the course and impact of the pandemic, the inflation and growth outlook in 2020 was subject to heightened uncertainty. The SNB's quarterly inflation forecasts indicated that the inflation rate would return to positive territory in the medium term if interest rates remained unchanged. At the same time, the SNB anticipated that 2021 would see the economy recover.

Measures to ensure supply of credit and liquidity

In view of the pandemic, in 2020 the SNB took measures, in addition to negative interest and its willingness to intervene, in order to ensure the supply of credit and liquidity to the economy.

Increase in threshold factor

At its monetary policy assessment in March, the SNB announced that it would increase the threshold factor, which plays a decisive role in determining the negative interest burden on banks, from 25 to 30 as of 1 April. It thus exempted more sight deposits of banks from the negative interest rate, thereby easing the burden on the banking system (cf. chapter 2.3).

Establishment of CRF

On 25 March, the SNB announced the creation of the SNB COVID-19 refinancing facility (CRF). The CRF was introduced at the same time and as a supplement to the federal government's COVID-19 joint and several guarantees programme. It was available from 26 March and allowed banks to obtain liquidity at the SNB policy rate of –0.75%, with the federally guaranteed COVID-19 loans serving as collateral. This contributed to banks being able to grant COVID-19 loans to businesses at an interest rate of 0% and to expand their lending rapidly and on a large scale.

In May, the SNB expanded the CRF. It announced that it would from then on additionally accept claims secured by loan guarantees or credit default guarantees offered by cantons, provided these had been granted in order to cushion the economic impact of the pandemic. It also stated that it would accept as eligible collateral claims in respect of loans secured by joint and several guarantees provided for startups by the federal government in cooperation with the cantons, as well as claims in respect of other loans guaranteed by the federal government. The banks made active use of the CRF. By the end of 2020, they had drawn liquidity through this facility amounting to 66% of the total COVID-19 credit lines, or CHF 11.2 billion (cf. chapter 2.3).

Countercyclical capital buffer deactivated

On 25 March, after consulting the Swiss Financial Market Supervisory Authority (FINMA), the SNB submitted a proposal to the Federal Council requesting that the countercyclical capital buffer be deactivated to further facilitate bank lending. The Federal Council approved this recommendation on 27 March 2020 (cf. chapter 6.3).

Enhancing provision of US dollar liquidity

In the wake of the coronavirus crisis, there was upheaval in the global US dollar funding markets. Together with the other participating central banks, the SNB made use of the standing swap arrangement with the US Federal Reserve in March to enhance the provision of US dollar liquidity. Towards the middle of the year, funding conditions improved, leading to a decline in demand for US dollar liquidity. As a result, the frequency of operations was gradually reduced again (cf. chapter 2.5).

SNB policy rate and negative interest on SNB sight deposits unchanged

The SNB left its policy rate unchanged at –0.75% throughout 2020. The interest that the SNB charges above a set exemption threshold on sight deposits held by banks and other financial market participants at the SNB (negative interest) also remained unchanged from 2019 at –0.75%. The low interest rates helped to manage the economic impact of the pandemic by ensuring favourable financing conditions for businesses and the public sector. The increase in the threshold factor from 25 to 30 as of April led to temporary upward pressure on short-term money market interest rates. By means of fine-tuning operations and repo auctions, the SNB provided liquidity to the money market with the aim of keeping the secured short-term money market interest rates close to the SNB policy rate (cf. chapter 2.3).

Narrower interest rate differential vis-à-vis US

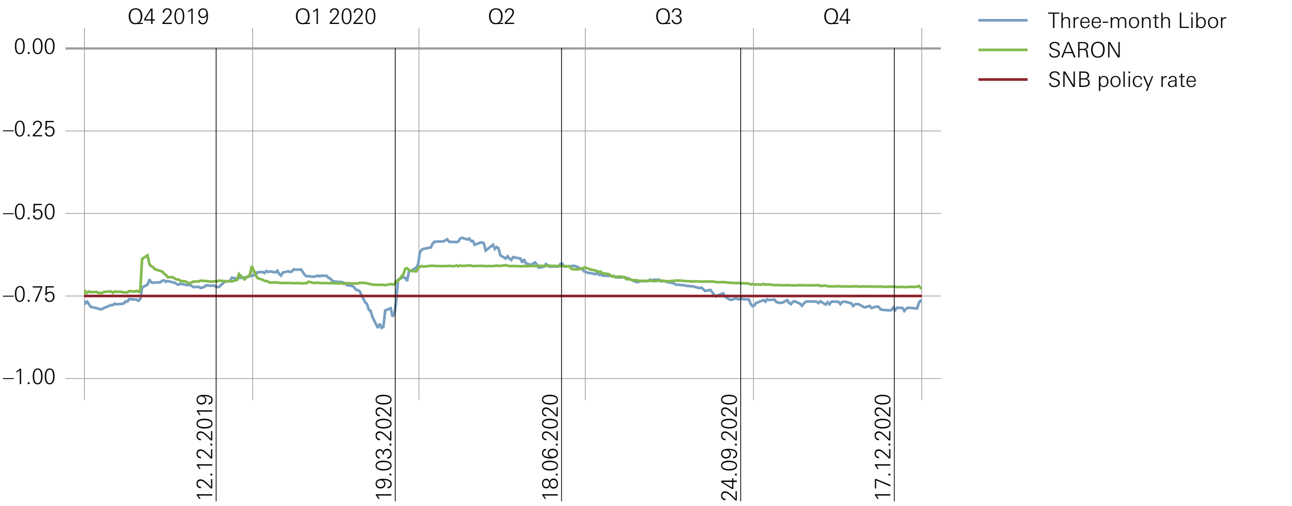
The ECB left its key rate unchanged at 0% and the interest rate on its deposit facility at –0.5% in 2020. Thus the differential between the short-term euro and Swiss franc interest rates hardly changed. The Fed, on the other hand, lowered the target range for its policy rate twice in March by a total of 1.5 percentage points, which led to a decrease in the differential between short-term US dollar and Swiss franc interest rates.

Volatile capital market yields in first half of year

The global spread of coronavirus caused substantial uncertainty, which was reflected in increased volatility in capital market yields in the first half of 2020. The yield on ten-year Confederation bonds fell from –0.5% at the beginning of the year to –0.9% in March and then rose to –0.3% in the space of just a few days. The global fiscal and monetary policy measures to cushion the economic impact of the pandemic helped to calm the financial markets. This was also reflected in developments on the bond markets. The yield on ten-year Confederation bonds fluctuated in a narrower band again from May onwards, ending the year at around –0.5% and thus back at the level at the beginning of the year. The yield curve was somewhat lower at the end of 2020 compared to 2019. Confederation bond yields remained in negative territory for all maturities throughout the year.

MONEY MARKET RATES AND SNB POLICY RATE

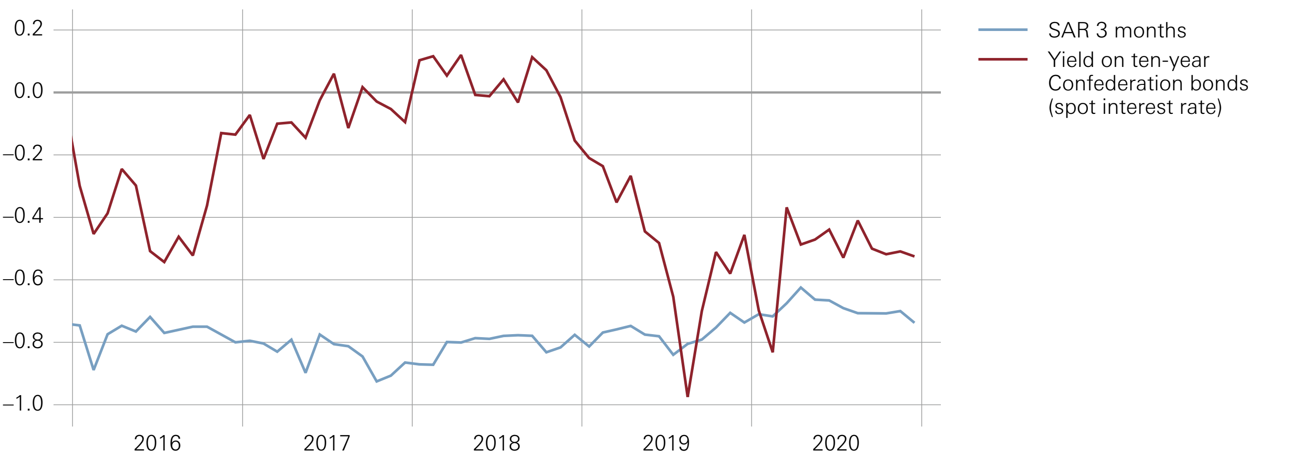
Daily values in percent, dates of monetary policy assessments



Source: SNB

MONEY AND CAPITAL MARKET RATES

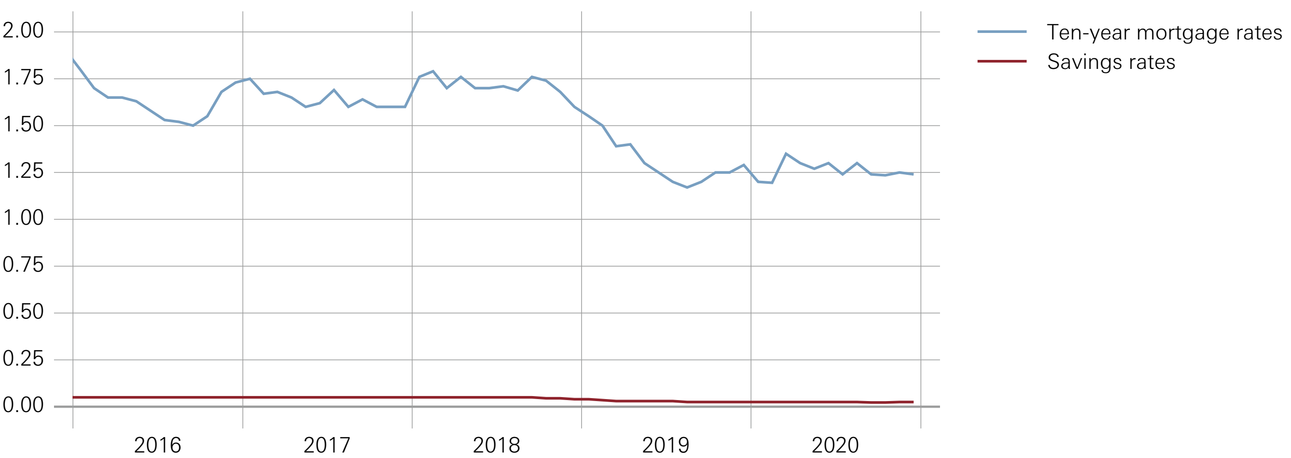
Monthly averages in percent



Source: SNB

BANK INTEREST RATES

Month-end values in percent



Source: SNB

Lending rates and deposit rates lower

Published interest rates for new mortgages remained stable at a low level during the year. By contrast, the reference rate relevant for housing rents, which corresponds to the average interest rate of all outstanding mortgages rounded to a quarter of a percentage point, fell from 1.5% to a new low of 1.25% in March. The average rate of interest on savings deposits remained just above zero. Most banks passed on the negative interest only to customers with high liquidity holdings.

Increased interventions in foreign exchange market

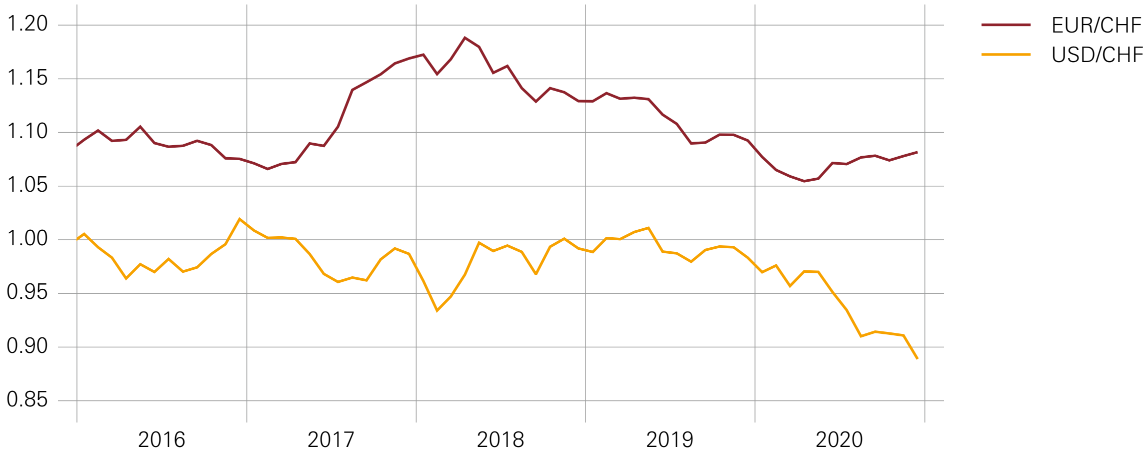
At its monetary policy assessment in March, the SNB announced that it would intervene more strongly in the foreign exchange market in order to counteract upward pressure on the Swiss franc and thereby help stabilise the situation. At its subsequent assessments, it reaffirmed its willingness to intervene more strongly in the foreign exchange market. In doing so, it at all times took into account the overall exchange rate situation and underlined the high valuation of the Swiss franc. The SNB purchased foreign exchange worth CHF 110 billion during the year (2019: CHF 13.2 billion).

Appreciation of Swiss franc

The nominal trade-weighted external value of the Swiss franc increased in 2020 and reached a new high in August. This mainly reflected the weakness of the US dollar, which lost value against a broad range of currencies, among them the Swiss franc. The Swiss franc was also subject to upward pressure against the euro. At times, one euro cost CHF 1.05, the lowest level since 2015. At the end of 2020, the Swiss franc stood at 1.08 against the euro, practically on a par with the beginning of the year, while it gained around 8% against the US dollar. The Swiss franc appreciated by about 6% against the pound sterling. It also appreciated on a real trade-weighted basis, gaining 4% year-on-year. As inflation in Switzerland was lower than abroad, the appreciation of the Swiss franc was lower in real terms than in nominal terms.

EXCHANGE RATES

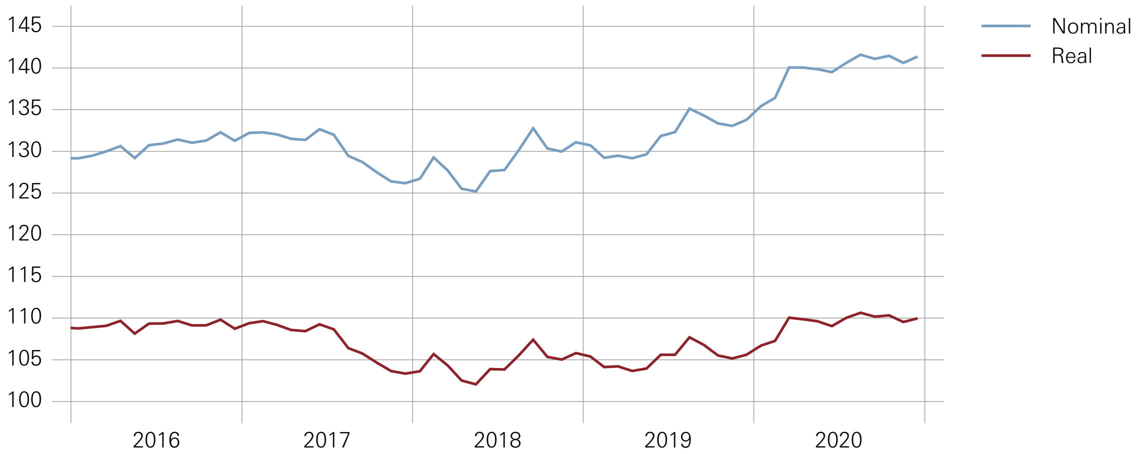
Monthly averages



Source: SNB

TRADE-WEIGHTED SWISS FRANC EXCHANGE RATES

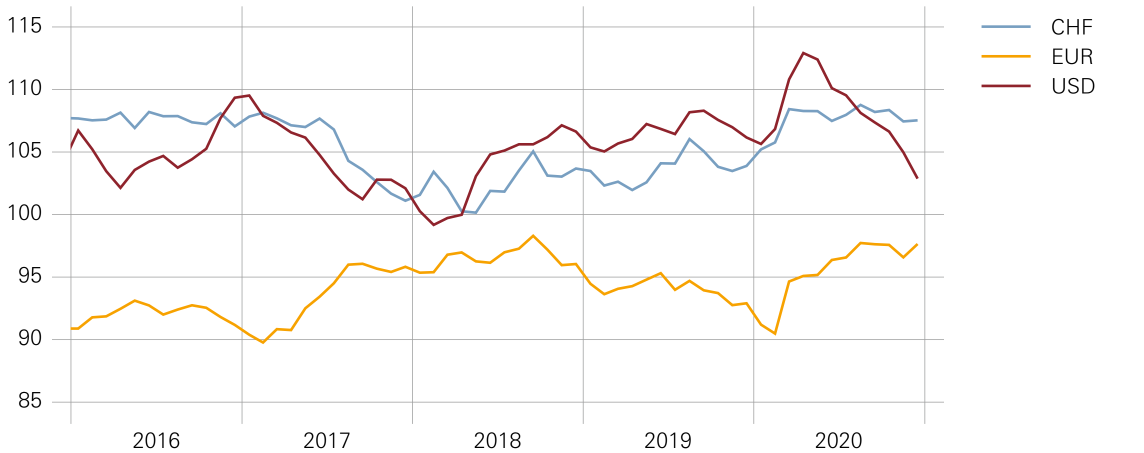
Index: average since 1990 = 100



Source: SNB

TRADE-WEIGHTED EXCHANGE RATES IN INTERNATIONAL COMPARISON

Real, 61 countries, index: average since 1990 = 100



Sources: BIS, SNB

Growing monetary base and excess liquidity

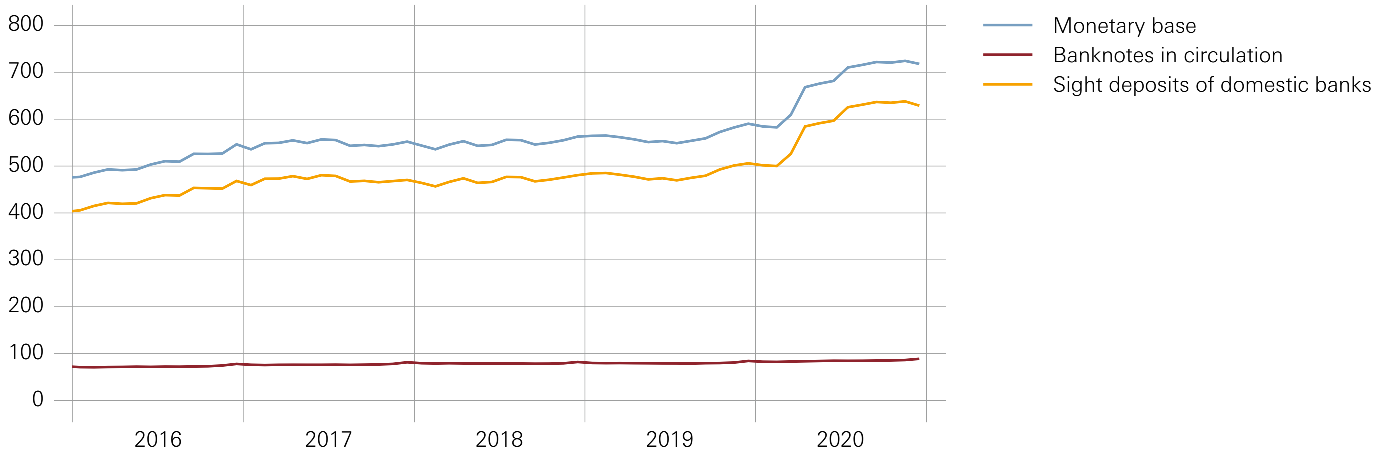
The monetary base, which is made up of banknotes in circulation and domestic banks' sight deposits with the SNB, rose in 2020 and reached a new high. A large part of the increase was attributable to the SNB's interventions in the foreign exchange market. Other drivers were the banks' use of the CRF as well as the SNB's fine-tuning operations and repo auctions. Excess liquidity also increased, this being calculated as the difference between the liquidity held by banks (banknotes, coins and sight deposits at the SNB) and the level of liquidity stipulated under the minimum reserve requirements (cf. chapter 2.4). The banks' excess reserves do not pose an inflation risk in the current situation. Furthermore, the SNB can use its monetary policy instruments to absorb liquidity rapidly and on a large scale if necessary.

Rise in bank lending and monetary aggregates

Bank lending to domestic customers increased more strongly in 2020 than in the previous year due to the joint and several guarantees programme introduced by the federal government. Under this programme, COVID-19 bridging loans with a term of five years were granted. This enabled almost 137,000 companies – most of them small firms – to access liquidity (credit lines) totalling almost CHF 17 billion. Almost half of the bridging loans were granted to companies in three industries: business services, wholesale and retail trade (excluding motor vehicles), and accommodation and food service activities. Around two-thirds of the loans had a limit of less than CHF 80,000. By contrast, annual growth in mortgage lending, which accounts for 85% of bank lending, declined slightly from an average of 3.4% in 2019 to an average of 3.1% in 2020. The broad monetary aggregates M2 (currency in circulation, sight deposits, transaction accounts and savings deposits) and M3 (M2 plus time deposits) started to grow again in March 2020. In July, their growth rates approached and partly exceeded lending growth rates. M2 and M3 were higher year-on-year at the end of 2020, by 6.0% and 6.5% respectively. About a quarter of the increase in broad monetary aggregates is likely to be due to banks' granting of COVID-19 loans to corporations.

MONETARY BASE AND COMPONENTS

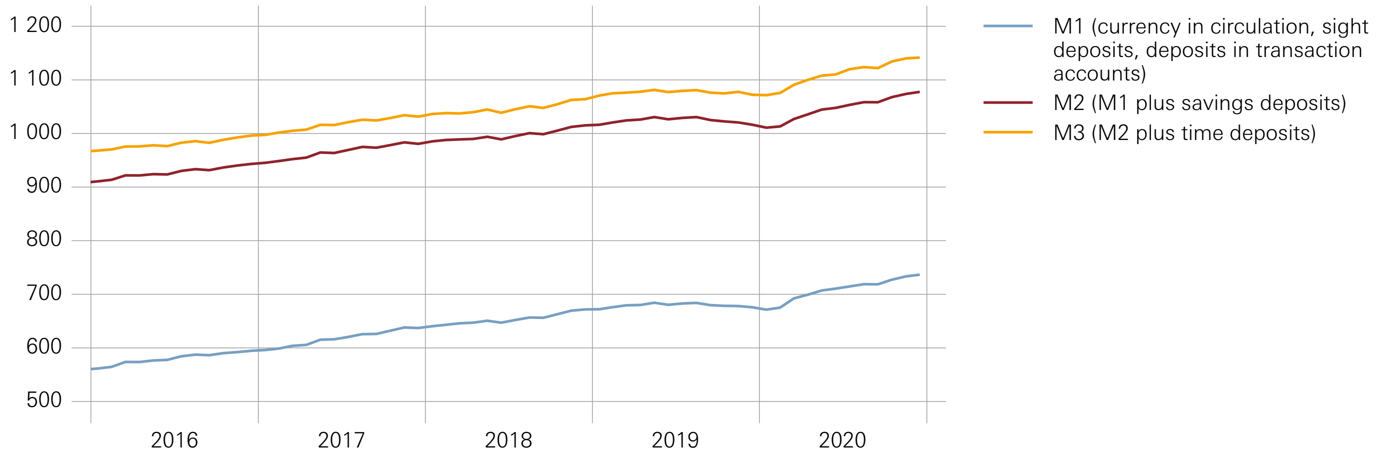
Monthly averages in CHF billions



Source: SNB

LEVEL OF MONETARY AGGREGATES

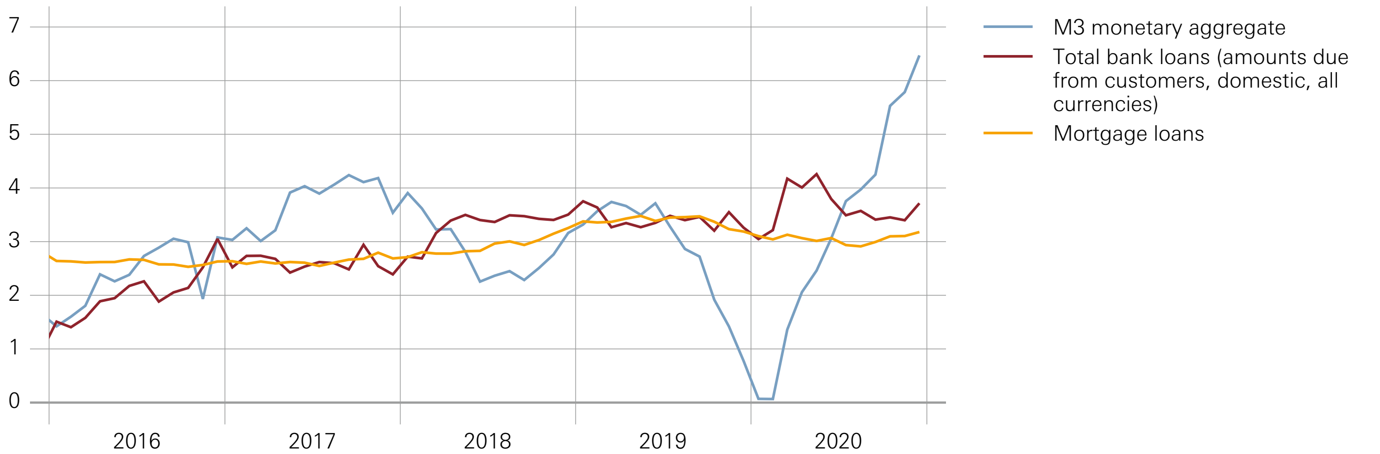
Month-end values in CHF billions



Source: SNB

GROWTH OF MONETARY AND CREDIT AGGREGATES

Year-on-year change in percent



Source: SNB

International scenario for forecasts

The conditional inflation forecasts published by the SNB as part of its quarterly monetary policy assessments of March, June, September and December are based on scenarios for the global economy. An oil price assumption is also taken into account, this being based on the market price per barrel of Brent crude at the time a given forecast is made. In December 2019, the SNB had anticipated moderate global economic growth of 3.4% for 2020. With the global spread of coronavirus and the measures taken to contain the pandemic, the outlook for the world economy changed abruptly (cf. chapter 1.2, box 'Revision of global baseline scenario due to coronavirus pandemic'.) The SNB subsequently expected a sharp downturn in the global economy. Due to the high level of uncertainty, it refrained from publishing a forecast in March. In June, it predicted a 4.6% decline in global GDP for 2020. The SNB revised this to –3.3% in September and then to –2.6% in December due to economic developments having been somewhat less poor than anticipated. Furthermore, the SNB expected the global economy to recover in 2021.

Growth forecast for Switzerland

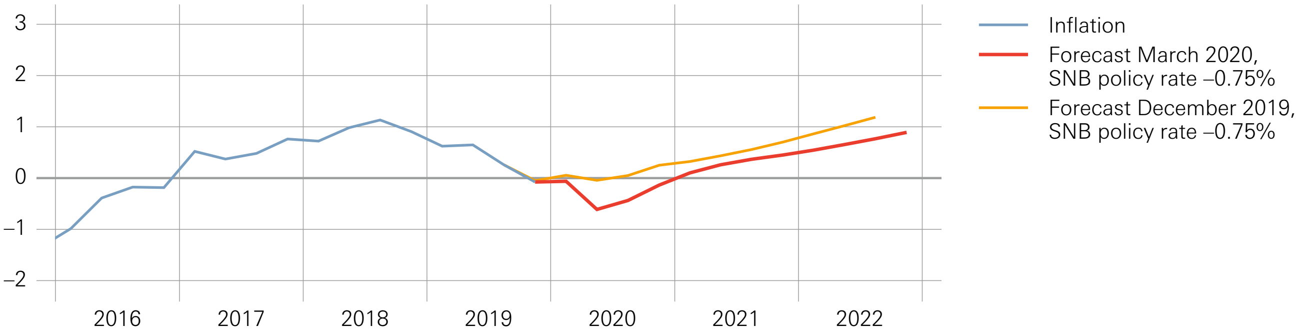
For Switzerland, the SNB had expected GDP growth of between 1.5% and 2% for 2020 at the end of 2019, thus anticipating an increase in economic growth compared to the previous year. Due to the pandemic, the SNB assumed in March 2020 that GDP growth in 2020 was likely to be negative, and in June it predicted a 6% decline in GDP. In September, the SNB raised this forecast slightly to –5%, then in December to –3% after the drop in GDP in the wake of the first wave of the pandemic turned out to be less than originally assumed. In December, the SNB expected growth of between 2.5% and 3% for 2021.

Conditional inflation forecast

The published conditional inflation forecasts are based on the assumption that the SNB policy rate remains constant over the three-year forecast horizon. As the policy rate remained at –0.75% in 2020, all forecasts in that year assumed an interest rate of –0.75%. Following the outbreak of the pandemic, the conditional inflation forecast was revised significantly downwards during the first half of 2020. The main factors were the marked drop in growth prospects, the appreciation of the Swiss franc and lower oil prices. In the second half of the year, the conditional inflation forecast was adjusted only slightly. While the conditional inflation forecasts published in 2020 predicted negative inflation in the short term, with regard to the medium term they were in the range the SNB equates with price stability.

CONDITIONAL INFLATION FORECAST OF MARCH 2020

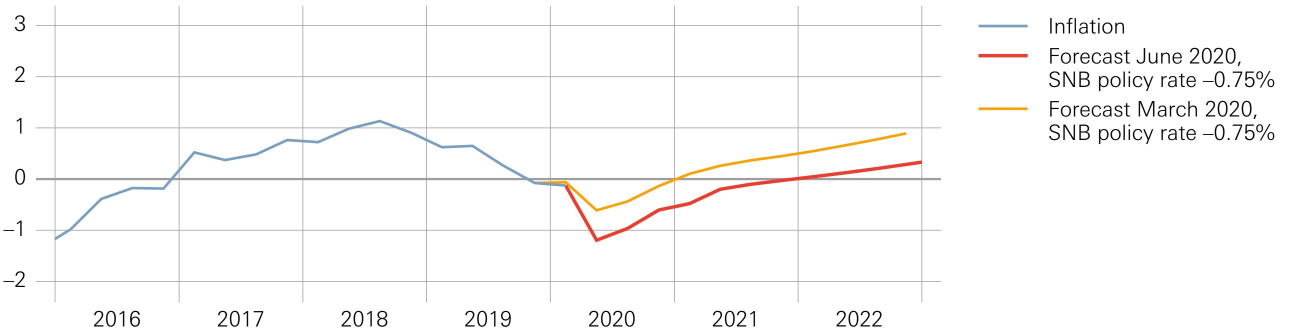
Year-on-year change in Swiss consumer price index in percent



Sources: SFSO, SNB

CONDITIONAL INFLATION FORECAST OF JUNE 2020

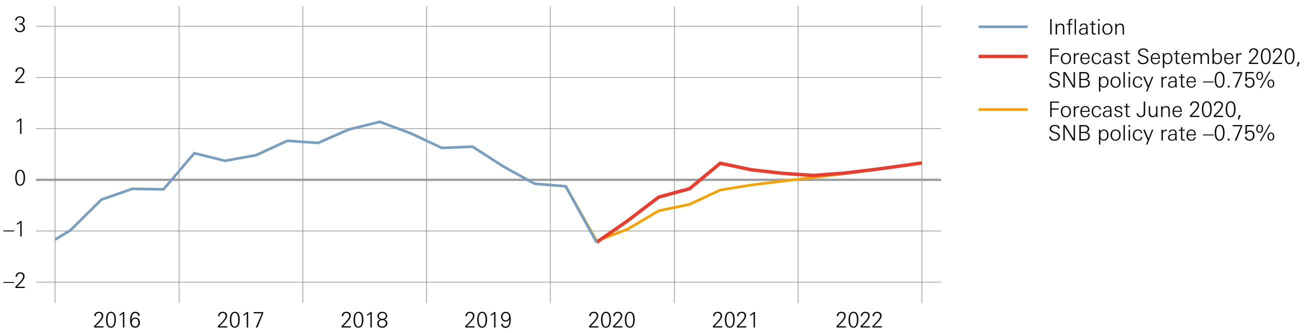
Year-on-year change in Swiss consumer price index in percent



Sources: SFSO, SNB

CONDITIONAL INFLATION FORECAST OF SEPTEMBER 2020

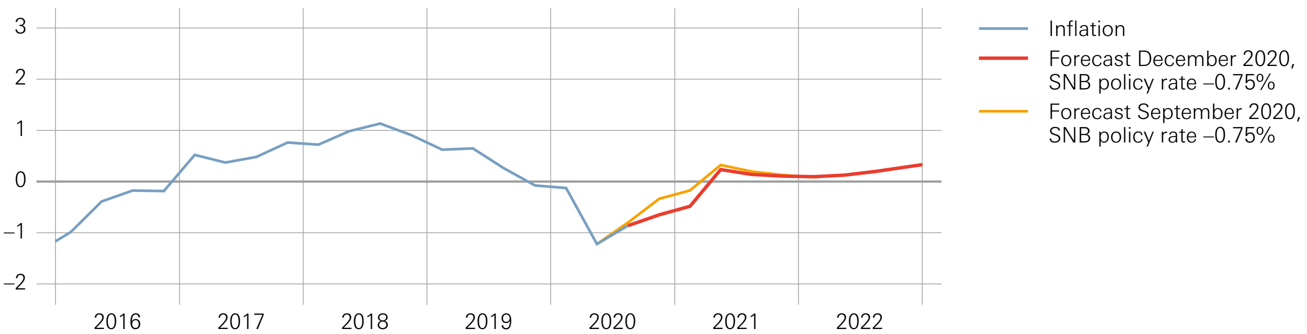
Year-on-year change in Swiss consumer price index in percent



Sources: SFSO, SNB

CONDITIONAL INFLATION FORECAST OF DECEMBER 2020

Year-on-year change in Swiss consumer price index in percent



Sources: SFSO, SNB

Ongoing uncertainty

The SNB regularly drew attention to risks that could lead to an adjustment in the forecasts and could necessitate a reassessment of the situation. The focus was on the global spread of coronavirus and the effects of containment measures abroad and in Switzerland. Furthermore, the SNB emphasised the risks related to trade tensions. However, it also pointed out that the monetary and fiscal policy measures taken in many countries could support the recovery more strongly than expected.

Effect of monetary policy in coronavirus crisis

During the coronavirus crisis, the SNB's monetary policy contributed to crisis management via three channels. First, it countered the increased upward pressure on the Swiss franc with the SNB policy rate and the interest rate on sight deposits at the SNB of –0.75%, as well as stronger interventions in the foreign exchange market. An appreciation of the Swiss franc would have put additional pressure on the Swiss economy. Second, the low level of interest rates created favourable financing conditions for Swiss businesses and the public sector. This eased the burden in particular on those companies and institutions that face increased funding needs as a result of the crisis. Third, the SNB supported the supply of credit and liquidity to the economy with further measures to increase the banks' latitude for lending. At the forefront of these was the CRF, which contributed to banks being able to grant COVID-19 loans at an interest rate of 0%. The deactivation of the countercyclical capital buffer and the increase in exemption thresholds had the same aim.

Climate change – a challenge for monetary policy, financial stability and investment policy

Climate change is an issue that has attracted ever greater public interest in Switzerland in recent years as it poses major challenges for society, the economy and politics.

The SNB has been working intensively on this topic for some time now. The assessment of possible consequences of climate change for the economy and thus for monetary policy, for financial stability and for the management of currency reserves is important in order for the SNB to be able to fulfil its statutory mandate. To this end, the SNB also works closely with other central banks and authorities such as FINMA and participates in the international exchange of experience on climate issues as a member of the Central Banks and Supervisors Network for Greening the Financial System (NGFS) (cf. chapter 7.2.6).

There are primarily two ways in which climate change can affect monetary policy. First, it could lead to structural change in the economy, which would have to be taken into account in the SNB's analyses and forecasting models. Second, political and regulatory measures against climate change could lead to sudden changes in the prices of certain goods. The SNB considers the impact of these changes on economic growth and inflation, and assesses the potential implications for monetary policy. The dialogue with other central banks is particularly important in this area.

Climate change can also affect the financial system, on the one hand through an increase in the frequency and severity of natural disasters, and on the other through changes to climate policy and to the corresponding regulations. For the SNB, the primary focus is on determining the effects of climate risks on the stability of the Swiss banking system. To this end, in 2020 the SNB initiated a pilot project together with FINMA with the aim of identifying risk concentrations at Switzerland's two big banks in respect of sectors exposed to higher transition risks, i.e. possible implications of future amendments to laws.

Finally, climate change also affects the SNB's investment policy. Like other financial risks, climate risks can trigger or amplify market fluctuations and influence the attractiveness of assets. From an investment perspective, they are thus essentially no different from other risks. The SNB holds equities in the various economic sectors based fundamentally on their market capitalisation. This ensures that risk concentrations are avoided as far as possible and that structural changes in the global economy are also reflected in the SNB's portfolio. Furthermore, since 2013 the SNB has excluded investments in companies that cause severe environmental damage, violate human rights or produce condemned weapons. At the end of 2020, the SNB expanded the exclusion criterion pertaining to the environment by additionally taking climate-related issues into consideration. Shares and bonds of companies primarily active in the mining of coal are now also excluded (cf. chapter 5.3, box 'Non-financial aspects of managing securities of private sector issuers').

2
Implementation of monetary policy

2.1 BACKGROUND AND OVERVIEW

Mandate

It is the task of the Swiss National Bank to provide the Swiss franc money market with liquidity (art. 5 para. 2 (a) National Bank Act (NBA)). It implements its monetary policy by steering the interest rate level on the money market. In so doing, it seeks to keep the secured short-term Swiss franc money market rates close to the SNB policy rate. The SNB can influence money market rates by means of its open market operations or adjust the interest rate on sight deposits held by banks and other financial market participants at the SNB. The SNB may also intervene in the foreign exchange market.

SNB policy rate unchanged

The Swiss National Bank implements its monetary policy by setting the SNB policy rate. In so doing, it seeks to keep the short-term Swiss franc money market rates close to the SNB policy rate. The focus in this regard is the interest rate for secured overnight money, the Swiss Average Rate Overnight (SARON). The SNB left its policy rate unchanged at –0.75% in 2020.

Negative interest and foreign exchange market interventions

Since 2015, the SNB has been implementing monetary policy via the negative interest rate (i.e. the interest rate on sight deposits held by banks and other financial market participants at the SNB), and, where necessary, foreign exchange market interventions. The interest rate remained at –0.75% in 2020 and thus corresponded to the SNB policy rate. In order to ensure appropriate monetary conditions for the economy, the SNB made foreign currency purchases in the year under review.

Sight deposits at the SNB

The SNB maintains sight deposit accounts for banks and other financial market participants. The balances on these accounts at the SNB are a financial market participant's most liquid assets, since they can be used immediately to effect payments and are deemed to be legal tender. Domestic banks' sight deposits at the SNB are eligible assets for minimum reserve requirement purposes. Banks also need them for payment transactions and as liquidity reserves. The SNB influences the level of sight deposits by deploying its monetary policy instruments. In addition to sight deposits held by domestic banks, total sight deposits include sight liabilities towards the Confederation, sight deposits of foreign banks and institutions, as well as other sight liabilities.

The level of sight deposits influences activity on the money market. If the supply of liquidity to the financial system is kept tight, the individual financial market participants adjust their liquidity positions on the money market. Banks seeking to place funds on a short-term basis provide liquidity in the form of a loan to other banks that require short-term refinancing. These loans can be granted on a secured or unsecured basis. If there is ample liquidity in the financial system, the need for banks to adjust their liquidity positions declines and so too does trading activity on the money market. Under certain circumstances, negative interest on sight deposits, with exemption thresholds granted, stimulates trading. The reason for this is that institutions with sight deposits over and above the exemption threshold conclude money market operations with institutions which have not yet exceeded their threshold.

2.2 DEVELOPMENTS IN THE MONEY AND FOREIGN EXCHANGE MARKETS

Considerable increase in sight deposits

Sight deposits held at the SNB totalled CHF 702 billion at the end of 2020 and were thus up significantly year-on-year (2019: CHF 590 billion).

Money market rates close to SNB policy rate

The interest rate of –0.75% charged by the SNB on sight deposits contributed to short-term interest rates in Switzerland remaining low. It was thus possible to maintain a certain interest rate differential between Switzerland and other countries and keep the attractiveness of Swiss franc investments low.

The relevant money market rates were close to the SNB policy rate in 2020. The increase in the threshold factor from 25 to 30 as of 1 April led to a rise in the aggregate exemption thresholds and to a slight increase in short-term interest rates on the secured money market. This upward pressure developed because some of the larger money market participants wanted to rapidly increase their sight deposits to their new exemption threshold level, leading them to seek substantial volumes of liquidity from other market participants. SARON rose at times to –0.66%, before reverting towards the SNB policy rate, due in part to the SNB selectively providing additional liquidity – initially via fine-tuning operations, then, from July, also via longer-term repo transactions (cf. chapter 2.3). At the end of 2020, SARON stood at –0.73%.

Higher trading activity on repo market

As in previous years, activity on the repo market (interbank market) was shaped by trade in sight deposits between account holders with balances above or below their respective exemption thresholds. The exemption threshold increase in spring 2020 broadened the scope for additional liquidity redistribution. Institutions with new balances below the exemption threshold increased their sight deposits (e.g. via repo transactions). On the other side of these trades were banks whose sight deposits still exceeded the exemption threshold. The funds were traded at rates slightly above the SNB's negative interest rate. At CHF 13.9 billion, average daily turnover on the repo market was thus considerably higher year-on-year (2019: CHF 6.4 billion). The number of banks active on the repo market also increased.

Money market infrastructure: TPA facilitates collateral management

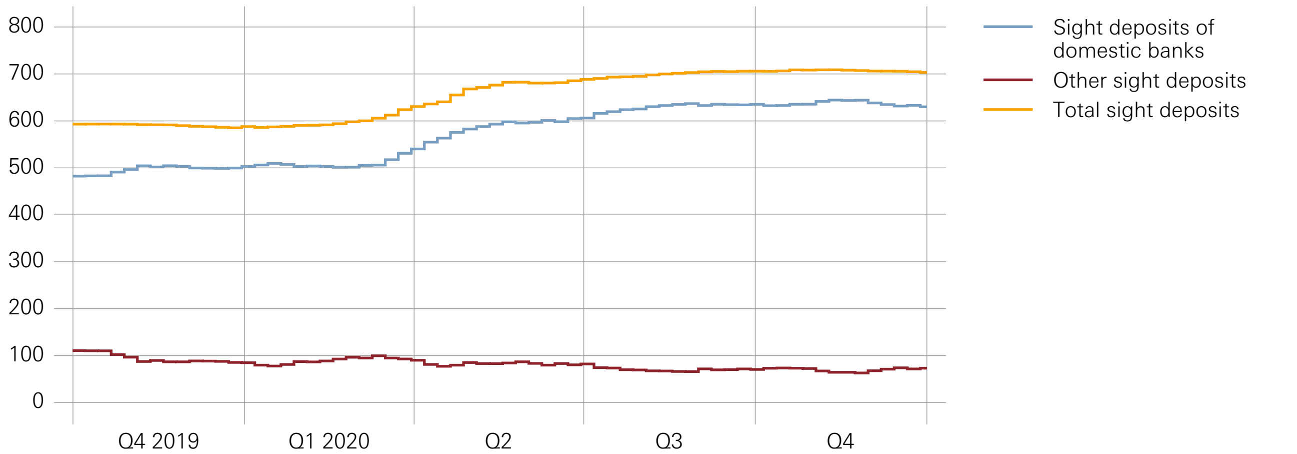
A secure and efficient money market infrastructure that runs smoothly at all times is vital for the implementation of monetary policy, as well as for market participants' direct access to central bank liquidity. Since 2013, SIX Group Ltd (SIX), which operates Switzerland's money market infrastructure, and the SNB have been overhauling important parts of the Swiss Money Market Value Chain. After the CO:RE electronic trading platform went live in 2016, another important link in the Swiss Money Market Value Chain – the Triparty Agent (TPA) – was renewed in June 2020. The ongoing development of the new TPA is greatly simplifying collateral management and expanding the range of services offered. For market participants, collateral management is an increasingly important discipline for deploying securities efficiently while ensuring that the underlying transactions are secured as contractually agreed at all times.

Replacement of Libor

In 2020, the SNB continued to monitor work on the replacement of Libor (London Interbank Offered Rate) and the transition to robust alternative reference interest rates. In Switzerland, the reforms are being coordinated by a national working group on Swiss franc reference rates (cf. box 'Transitioning from Libor to SARON'). Internationally, the reform process is being overseen by the Financial Stability Board's Official Sector Steering Group, which in 2020 once again published an annual report on international reform efforts. The SNB is also represented on this body.

SIGHT DEPOSITS AT THE SNB

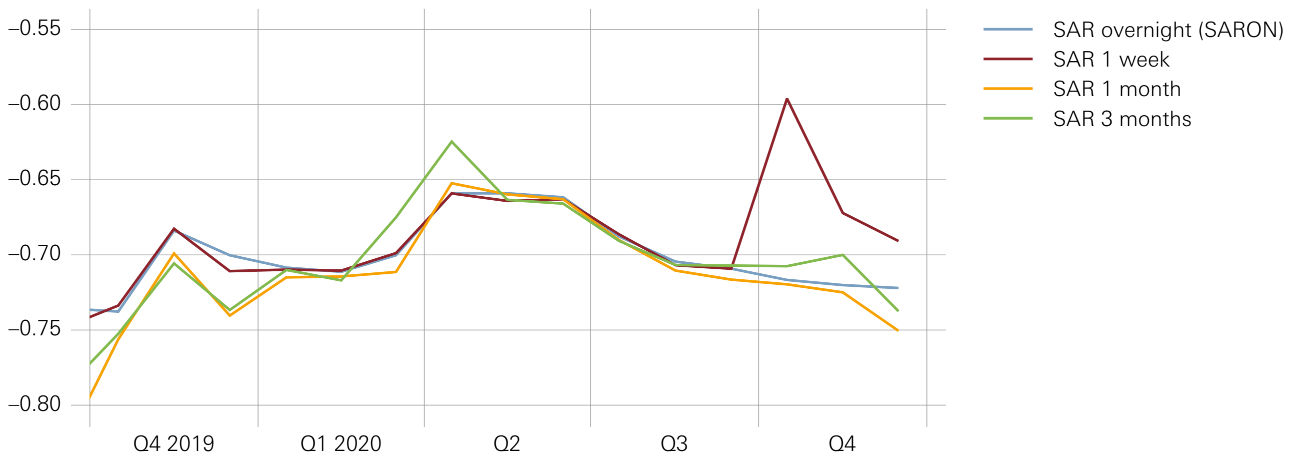
Weekly averages in CHF billions



Source: SNB

SWISS FRANC REFERENCE RATES (SWISS AVERAGE RATES, SAR)

Monthly averages of daily figures in percent



Source: SIX Swiss Exchange Ltd

Transitioning from Libor to SARON

Ever since the Libor regulator, the Financial Conduct Authority, announced in 2017 that it would not support Libor beyond the end of 2021 and that it would no longer oblige banks to participate in the Libor Panel from that point on, there has been a major drive at both the international and national level to find a replacement. As expected, at the beginning of March 2021 the administrator of Libor, the Intercontinental Exchange Benchmark Administration, announced its intention to discontinue the Swiss franc Libor at the end of 2021. In order to enable a smooth transition to SARON, the remaining conversion work on the cash and swap markets must be completed by then.

In Switzerland, the National Working Group on Swiss Franc Reference Rates (NWG) is managing the transition. The NWG ensures that all the relevant participants are involved and comprises representatives from banks, insurance companies, infrastructure providers, non-financial companies, public institutions and interest groups. The SNB supports the NWG's work, though its primary role is to coordinate. It also provides information on the NWG's activities on its website.

In 2017, the NWG recommended SARON as an alternative to the Swiss franc Libor. SARON, which has been calculated since 2009, is a secured overnight rate based on the most liquid segment of the Swiss franc money market. It has already gained in importance as a reference interest rate in recent years. In 2017, for example, a SARON-based yield curve was created which is derived from corresponding swap transactions. In 2020, the outstanding volume of SARON swap transactions remained lower than that of the corresponding Libor-based market. At the latest from the end of 2021, however, SARON is expected to completely replace the Swiss franc Libor in swap transactions. Market participants have until the end of 2021 to convert outstanding Libor-based swap transactions into SARON-based swap transactions. Any remaining Libor-based swap transactions will subsequently be converted automatically via fallback clauses.

SARON is also establishing itself as a reference rate on the cash market. At the beginning of 2019 the NWG proposed various options for structuring SARON-based cash products and the first such products had already been transacted by the end of 2019. In the course of 2020, various banks, including both of the Swiss big banks, also began offering SARON-based cash products.

The time until the end of 2021 is to be used to complete transition work on the cash and swap markets. This includes adjusting remaining Libor-based contracts and launching more SARON-based cash products. In addition, market participants should increasingly use SARON-based swap transactions to manage their interest rate positions and should work on operational readiness (e.g. implementation of fallback clauses) to ensure a smooth transition away from the Swiss franc Libor.

Principles of collateral policy

The SNB requires that the banks and other financial market participants with whom it conducts credit transactions provide sufficient collateral (art. 9 NBA). In so doing, the SNB protects itself against losses and ensures equal treatment of its counterparties.

The 'Guidelines of the Swiss National Bank on monetary policy instruments' outline the types of securities that are eligible as collateral for SNB transactions. The 'Instruction sheet on collateral eligible for SNB repos' details the criteria which securities must meet in order to be eligible as collateral in repo transactions with the SNB. Only securities included in the 'List of collateral eligible for SNB repos' are accepted. Since the SNB also admits foreign banks to its monetary policy operations and since the portfolio of Swiss franc securities is limited, it also accepts securities in foreign currencies.

The SNB sets high minimum requirements with regard to the marketability and credit rating of securities. This prompts banks to hold recoverable and liquid assets. In turn, this is essential if banks are to be able to refinance their operations on the money market, even under difficult conditions.

Adjustments to eligibility of collateral for SNB repos due to Brexit

In light of the UK's departure from the EU on 31 January 2020 (Brexit), the SNB adjusted the criteria that must be met in order for collateral to be eligible for repos in the 'Guidelines of the Swiss National Bank on monetary policy instruments' and the 'Instruction sheet on collateral eligible for SNB repos', effective 3 February. The UK was also added to the list of domiciles for eligible issuers, and recognised stock exchanges and representative markets in the UK were defined as eligible markets. The SNB thereby ensured that securities whose issuers are domiciled in the UK continue to be eligible for SNB repos. Furthermore, it was determined that securities whose ultimate or intermediate depository is in the UK and which are delivered through SIX SIS Ltd continue to meet the criteria for eligibility.

… and transition to new reference rates

Within the framework of the existing criteria, the SNB announced on 17 December 2020 that it will be excluding all Libor-based floating-rate notes in all currencies from the list of collateral eligible for SNB repos as of end-2021. This move supports market participants in the transition to new and more robust reference rates, and reduces potential risks associated with the discontinuation of the Libor.

Higher volume of collateral eligible for SNB repos

Translated into Swiss francs, the volume of collateral eligible for SNB repos at the end of 2020 totalled CHF 10,770 billion, up around CHF 1,051 billion year-on-year. This increase is principally due to greater public-sector issuance.

Swiss Foreign Exchange Committee and FX Global Code

The Swiss Foreign Exchange Committee (Swiss FXC) was set up in 2018 and serves as a discussion forum for banks and other foreign exchange market participants in Switzerland and the Principality of Liechtenstein. It is also a member of the Global Foreign Exchange Committee (GFXC), which promotes, maintains and updates the principles of the FX Global Code. The FX Global Code was introduced in 2017 to establish a common set of guidelines to promote the integrity and efficiency of foreign exchange trading. The SNB is a member of the Swiss FXC and co-chairs the committee along with a representative from the private sector.

In 2020, the Swiss FXC prepared the matters to be discussed in the GFXC. It focused on the review of the principles of the FX Global Code, which is to be completed by mid-2021. Such a review takes place every three years. Relevant market developments and changes in market structure were also discussed. In addition, the Swiss FXC renewed its composition – every two years, some of the members step down in order to give other interested market participants an opportunity to play their part in the committee.

Adjustments to publication of data on money and foreign exchange market operations

In September 2020, the SNB announced that it would be publishing more detailed data on its money and foreign exchange market operations on its data portal from 30 September. The SNB has since been publishing information on the conditions and volume of individual monetary policy-related transactions at the end of each month for the previous month. This change was a response by the SNB to its resumption of monetary policy operations on the money market in November 2019. With respect to foreign exchange market operations, the volume of interventions will now be disclosed at the end of each quarter for the previous quarter. Hitherto, only the annual total had been published in the accountability report. The SNB's new publication frequency takes into account increased public interest in its operations.

2.3 USE OF MONETARY POLICY INSTRUMENTS

Foreign exchange transactions

In order to fulfil its monetary policy mandate, the SNB may purchase and sell foreign currency against Swiss francs on the financial markets. Foreign exchange transactions conducted by the SNB are usually spot or swap transactions. In a foreign exchange swap, the purchase (sale) of foreign currency at the current spot rate and the sale (purchase) of the foreign currency at a later date are simultaneously agreed. The SNB concludes foreign exchange transactions with a wide range of domestic and foreign counterparties.

In 2020, the SNB continued to influence monetary conditions where necessary, purchasing a total of CHF 109.7 billion in foreign currency over the course of the year. Appreciation pressure on the Swiss franc, which was particularly high in the first half of the year due to uncertainty surrounding the pandemic, necessitated CHF 90.0 billion in interventions during that period. Pressure on the Swiss franc decreased in the second half of the year, meaning that fewer interventions were required. The SNB did not conclude any foreign exchange swaps for the purposes of influencing conditions on the Swiss franc money market.

Interest rate on sight deposits at SNB

Since 22 January 2015, the SNB has been charging interest of –0.75% on sight deposits held by banks and other financial market participants at the SNB. By setting the interest rate and defining other conditions, the SNB influences the interest rate level on the money market. To achieve this, it is sufficient if only a portion of sight deposits are subject to negative interest, which is why the SNB grants exemption thresholds.

The revision of the exemption threshold regime as of 1 November 2019 and a further increase in the threshold factor as of 1 April 2020 led to a reduction in the negative interest burden on the banking system. On the other hand, the additional liquidity created via foreign exchange market interventions and other monetary policy instruments in 2020 increased the volume of sight deposits subject to negative interest at the SNB. Net payment flows from the Confederation's sight deposit accounts, which are not subject to negative interest, to account holders who are subject to negative interest, had a similar effect. As the burden-reducing effect of the two exemption threshold adjustments preponderated, negative interest income in 2020 decreased to CHF 1.4 billion (2019: CHF 1.9 billion).

At the end of December 2020, the sight deposits of institutions required to pay negative interest stood at CHF 686 billion, well above the total exempted amount of CHF 521 billion. At the end of December, balances of CHF 221 billion (32% of the sight deposits of institutions required to pay negative interest) were subject to negative interest compared to CHF 187 billion (33% of the sight deposits of institutions required to pay negative interest) the previous year.

Before 1 November 2019, utilisation of the exemption thresholds amounted to almost 100%. The adjustment of the exemption threshold regime resulted in higher thresholds for certain institutions, which were not immediately used up. As was seen when the negative interest rate was introduced at the beginning of 2015, it takes some time for sight deposits to be redistributed via the repo market or other channels following an adjustment. This redistribution process recommenced following the adjustment to the exemption threshold regime in 2019 and the increase in the threshold factor in spring 2020. At the end of 2020, the utilisation rate of the exemption thresholds was 89%.

In the case of liquidity-providing repo transactions, the SNB purchases securities from a bank (or other financial institution admitted to the repo market) and credits the associated sum in Swiss francs to the counterparty's sight deposit account with the SNB. At the same time, it is agreed that the SNB will resell securities of the same type and quantity at a later date. In the case of a liquidity-absorbing repo, the transactions are conducted in the opposite direction. For the term of the repo agreement, the cash taker generally pays interest (the repo rate) to the cash provider. Repo transactions can be conducted by way of auction or on a bilateral basis with a wide range of counterparties.

Repo transactions

As with the adjustment to the calculation of exemption thresholds in 2019, the increase in the threshold factor as of 1 April 2020 led to a significant rise in the exempt amounts for the banking system and to upward pressure on short-term interest rates. In order to counteract an excessive rise in SARON and, in particular, to cap upward spikes, the SNB initially conducted fine-tuning operations. These open market operations were concluded bilaterally in the form of overnight liquidity-providing repo transactions. Beginning in July 2020, the SNB also conducted open market operations in the form of repo auctions with longer maturities in order to reduce upward pressure on SARON via liquidity in the medium term and to support gradual convergence towards the SNB policy rate.

In 2020, the outstanding volume of the SNB's monetary policy repo transactions averaged CHF 4.1 billion.

Monetary policy instruments

The framework within which the SNB may conduct transactions on the financial market is defined in art. 9 NBA. The 'Guidelines of the Swiss National Bank on monetary policy instruments' describe the instruments and procedures which the SNB uses to implement its monetary policy. These guidelines are supplemented by instruction sheets for the SNB's counterparties. As lender of last resort, the SNB also provides emergency liquidity assistance.

Within its set of monetary policy instruments, the SNB distinguishes between open market operations and standing facilities. In the case of open market operations, the SNB takes the initiative in the transaction. Where standing facilities (i.e. the liquidity-shortage financing facility and the intraday facility) are concerned, it merely sets the conditions under which counterparties can obtain liquidity.

Open market operations include repo transactions, the issuance, purchase and sale of its own debt certificates (SNB Bills), as well as foreign exchange transactions. The SNB can carry out open market operations in the form of auctions or bilateral transactions. Transactions on the money market are mostly conducted via an electronic trading platform.

In principle, all banks domiciled in Switzerland and the Principality of Liechtenstein are admissible as counterparties in monetary policy operations. Other domestic financial market participants such as insurance companies, as well as foreign banks, may be admitted, provided there is a monetary policy interest in doing so and they contribute to liquidity on the secured Swiss franc money market.

One of the SNB's monetary policy instruments is the interest rate on sight deposit accounts. Art. 9 NBA authorises the SNB to keep interest-bearing and non-interest-bearing accounts for banks and other financial market participants. Until January 2015, when the SNB charged negative interest for the first time, the sight deposit accounts were non-interest-bearing.

Furthermore, since 2020 the SNB's monetary policy instruments have included the SNB COVID-19 refinancing facility (CRF). Pursuant to art. 9 NBA, the SNB is authorised to enter into credit transactions with banks and other financial market participants on condition that sufficient collateral is provided for the loans.

The 'Guidelines of the Swiss National Bank on Monetary Policy Instruments' were revised in connection with the introduction of the new facility. In the course of this revision the SNB also reviewed the interest rates on its standing facilities and decided to adjust the calculation of the special rate for the liquidity-shortage financing facility. Since 1 July 2020, the lower limit for the special rate has been at least 0% rather than at least 0.5%.

SNB debt certificates

The issuance of its own debt certificates in Swiss francs (SNB Bills) allows the SNB to absorb liquidity. It can repurchase SNB Bills via the secondary market in order to increase the supply of liquidity to the financial system where necessary.

In 2020, no SNB Bills were issued or repurchased for monetary policy purposes.

How negative interest works

In order for negative interest to have an impact on financial market rates and – as desired from a monetary policy perspective – thus make the Swiss franc less attractive, it is sufficient if only a portion of sight deposits are subject to negative interest. The SNB therefore grants exemption thresholds when calculating negative interest on sight deposits held by banks and other financial market participants. This ensures that the burden imposed on the banking system is kept to the minimum required for monetary policy reasons.

The minimum reserve requirement is the key variable for calculating the exemption threshold for domestic banks (cf. chapter 2.4). When it announced the negative interest rate in December 2014, the SNB set the exemption threshold at 20 times (threshold factor) the minimum reserve requirement. In 2019, it increased the threshold factor from 20 to 25 and adjusted the calculation method as of 1 November. At its monetary policy assessment in March 2020, the SNB raised the threshold factor from 25 to 30 as of 1 April to increase the banks' latitude for lending.

The calculation of the exemption threshold is currently based on the following rules: For banks subject to minimum reserve requirements, the exemption threshold is calculated by multiplying the moving average of the minimum reserve requirements over the preceding 36 reference periods by the applicable threshold factor (basis component), minus the cash holdings in the last reference period (cash holdings component). Before the adjustment in 2019, the exemption threshold was calculated on the basis of the November 2014 reference period. For account holders not subject to any minimum reserve requirements, for example foreign banks and other domestic or foreign financial market participants, the exemption threshold is CHF 10 million.

The level of minimum reserves is calculated for each bank according to its short-term liabilities towards third parties in Swiss francs by using a uniform method. Banks holding higher sight deposits in proportion to their minimum reserves are charged more than other banks. The dynamic calculation of the basis component recognises developments in banks' balance sheets over time. By increasing the threshold factor twice, the SNB also took account of the additional liquidity provision to the banking system. The SNB regularly reviews the calculation of the exemption threshold.

Negative interest is applied across the board, with as few exceptions as possible. This respects the principle of equal treatment and increases the monetary policy effectiveness of the instrument. The only sight deposit accounts exempted from negative interest are those of the central Federal Administration and the compensation funds for old age and survivors' insurance, disability insurance and the fund for loss of earned income (compenswiss). However, the SNB will continue to monitor the development of the balances on these accounts.

SNB COVID-19 refinancing facility

The SNB announced on 25 March 2020 that it was launching a new instrument – the SNB COVID-19 refinancing facility (CRF). This facility allows banks to obtain liquidity from the SNB at the SNB policy rate of –0.75% against collateral. As collateral the SNB accepts credit claims in respect of loans guaranteed by the federal government under the COVID-19 ordinance on joint and several guarantees. It also accepts claims secured by loan guarantees or credit default guarantees offered by cantons, provided these have been granted in order to cushion the economic impact of the pandemic. Claims in respect of loans secured by joint and several guarantees provided for startups by the federal government in cooperation with the cantons are also deemed by the SNB to be eligible collateral, as are other claims in respect of loans guaranteed by the federal government. The acceptance of individual bank loans was not provided for under the previous conditions or eligibility criteria for collateral. Quick and efficient acceptance of these claims was only possible because the COVID-19 ordinance on joint and several guarantees created the basis for a simplified transfer to the SNB.

Banks' use of CRF in 2020
The SNB COVID-19 refinancing facility (CRF) has been used actively by the banks since inception. At the end of 2020, they were drawing CHF 11.2 billion of liquidity from the SNB via this facility. The approximately 112,000 items of collateral submitted to the SNB originated mainly from COVID-19 bridging loans guaranteed by the federal government; approximately two-thirds of these were refinanced at the SNB. The facility was used particularly heavily in the first few months after its launch. At the end of April, banks were already drawing more than CHF 8.4 billion in liquidity via the CRF. As the year progressed, usage increased at a slower rate. CRF usage peaked at the end of November at CHF 11.4 billion. The majority of the refinanced loans related to small and medium-sized enterprises. Almost three-quarters of the companies whose COVID-19 loan from a bank was refinanced at the SNB had fewer than five full-time positions, and 98% of the companies had fewer than 50 full-time positions. Loans from companies in virtually all industries were refinanced via the CRF. The most significant in terms of the number of loans were business services, retail and wholesale (excluding motor vehicles), construction, as well as accommodation and food service activities.

Intraday facility

During the day, the SNB provides its counterparties with interest-free liquidity (intraday facility) through repo transactions so as to facilitate the settlement of payment transactions via the Swiss Interbank Clearing (SIC) system and the settlement of foreign exchange transactions via Continuous Linked Settlement, the multilateral foreign exchange settlement system. The funds received must be repaid by the end of the same bank working day at the latest.

Average utilisation of the intraday facility amounted to CHF 1.1 billion in 2020.

Liquidity-shortage financing facility

To bridge unexpected liquidity bottlenecks, the SNB offers a liquidity-shortage financing facility. For this purpose, it grants its counterparties a limit which must be covered at all times by at least 110% collateral eligible for SNB repos. Counterparties can obtain liquidity up to the limit granted until the following bank working day. The liquidity-shortage financing facility is granted in the form of a special-rate repo transaction. The special rate corresponds to the SNB policy rate plus a surcharge of 0.5 percentage points.

On 1 July 2020, the lower limit for the special rate was reduced from at least 0.5% to at least 0%. The liquidity-shortage financing facility was hardly used; averaged over the year, volume was close to zero. The limits for the liquidity-shortage financing facility amounted to CHF 36.8 billion; at the end of the year, 75 financial market participants held corresponding limits.

In 2020, an adapted form of liquidity-shortage financing facility for systemically important financial market infrastructures domiciled in Switzerland was established. Up to a specified limit, the drawing of Swiss franc liquidity must also be covered by at least 110% collateral eligible for SNB repos.

SUPPLYING THE MONEY MARKET WITH LIQUIDITY

Liquidity-related operations in CHF millions[1]

	2020	2019
Open market operations		
Repo transactions[2, 3]	+4 068	+40
Foreign exchange swaps[2]	–	–
SNB Bills[2, 4]	–	–6
Foreign exchange transactions	+109 675	+13 241
Standing facilities		
CRF[2]	+7 553	–
Intraday facility[5]	+1 111	+416
Liquidity-shortage financing facility[2]	0	0
Other monetary policy instruments		
Interest on sight deposit account balances	–1 378	–1 938

1 A plus sign (+) indicates liquidity-providing; a minus sign (–) indicates liquidity-absorbing.
2 Average level of operations outstanding at the end of the day.
3 Fine-tuning operations, longer-term operations carried out by auction, and operations for test purposes.
4 Operations for test purposes.
5 Average daily turnover.

2.4 MINIMUM RESERVES

Main features of regulation

The duty to hold minimum reserves (arts. 17, 18 and 22 NBA) ensures that banks have a minimum demand for base money; it thus fulfils a monetary policy objective. Eligible assets in Swiss francs comprise coins in circulation, banknotes and sight deposits held at the SNB. The minimum reserve requirement amounts to 2.5% of the relevant short-term liabilities, which are calculated as the sum of short-term liabilities in Swiss francs (up to 90 days) plus 20% of liabilities towards customers in the form of savings and investments. The National Bank Ordinance (NBO) sets out in detail which balance sheet positions are subject to minimum reserve requirements. The relevant figure for the minimum reserve requirement is taken to be the average for the respective reporting period, which lasts from the 20th day of one month to the 19th day of the following month. It is calculated as the average of the last three month-end values of the relevant liabilities.

The minimum reserves have formed the basis for calculating the exemption thresholds for domestic banks since the negative interest rate was introduced in January 2015.

If a bank fails to fulfil the minimum reserve requirement, it is obliged to pay the SNB interest on the shortfall for the number of days of the reporting period during which the minimum reserve requirement was not observed. The interest rate is 4 percentage points higher than SARON over the reporting period in question.

MINIMUM RESERVES

In CHF millions

	2020 Outstanding Average	2019 Outstanding Average
Sight deposits at the SNB	585 413	481 079
Banknotes	6 286	6 466
Coins in circulation	105	112
Eligible assets	591 804	487 657
Requirement	19 209	17 399
Compliance in excess of requirement	572 595	470 259
Compliance in percent	3 080	2 803

In 2020 (between 20 December 2019 and 19 December 2020), statutory minimum reserves averaged CHF 19.2 billion. This is a 10% increase year-on-year. Eligible assets rose to CHF 591.8 billion on average, compared with CHF 487.7 billion the previous year. Banks thus exceeded the requirement by an annual average of CHF 572.6 billion. The statutory minimum reserve requirement was met by all 224 banks.

2.5 LIQUIDITY IN FOREIGN CURRENCIES

Permanent network of swap arrangements

Since 2013, standing bilateral liquidity swap arrangements have been in place between the SNB and the Bank of Canada, the Bank of England, the Bank of Japan, the European Central Bank and the US Federal Reserve. This permanent network of swap arrangements allows the participating central banks, where necessary, to provide banks in their jurisdiction with liquidity in any of the relevant currencies, thus serving as a liquidity backstop.

Strong demand for US dollar liquidity at times

Until March 2020, the SNB offered weekly repo transactions in US dollars with a maturity of seven days; as in the previous year, there was no demand during this period.

In the wake of the coronavirus pandemic, there was upheaval in the global US dollar funding markets in March. On 15 March 2020, in order to enhance the provision of liquidity, the SNB, together with the Bank of Canada, the Bank of England, the Bank of Japan, the ECB and the Fed, announced that the pricing on the standing US dollar swap arrangements would be lowered from 50 to 25 basis points as of 16 March. From this point on, the new interest rate applied to US dollar liquidity operations was the US dollar overnight index swap rate over the maturity of the operation plus 25 basis points. Furthermore, US dollars with an 84-day maturity were offered weekly. In addition, on 20 March the central banks agreed to increase the frequency of seven-day maturity operations from weekly to daily as of 23 March.

Once US dollar funding conditions had improved and demand for US dollar liquidity-providing operations had tapered off again, the SNB, together with the other participating central banks and in consultation with the Fed, announced on 19 June that the frequency of seven-day operations would be reduced from daily to three times a week from July. On 20 August, it was announced that the frequency of these operations would be further reduced to once a week as from September. Operations with an 84-day maturity continued to be held on a weekly basis.

Outstanding volume from demand at the SNB's US dollar auctions peaked at the end of April 2020. At approximately USD 11 billion, this volume represented around 3% of the total US dollars drawn via various swap arrangements between the Fed and other central banks worldwide.

Liquidity in other foreign currencies or in Swiss francs did not have to be offered within the framework of these bilateral swap arrangements.

Further swap arrangements

The SNB has further bilateral and temporary swap arrangements with the National Bank of Poland, the People's Bank of China and the Bank of Korea in place since 2012, 2014 and 2018, respectively.

2.6 EMERGENCY LIQUIDITY ASSISTANCE

SNB as lender of last resort

The SNB can act as lender of last resort. Within the context of this emergency liquidity assistance, the SNB can provide liquidity to domestic banks if they are no longer able to obtain sufficient liquidity on the market.

Conditions

Certain conditions apply in order for emergency liquidity assistance to be granted. The bank or group of banks requesting credit must be important for the stability of the financial system and solvent. Furthermore, the liquidity assistance must be fully covered by sufficient collateral at all times. The SNB determines which types of collateral it will accept in return for liquidity assistance. To assess the solvency of a bank or group of banks, the SNB obtains an opinion from the Swiss Financial Market Supervisory Authority (FINMA).

3
Ensuring the supply and distribution of cash

3.1 BACKGROUND

Mandate

The Swiss National Bank is entrusted with the note-issuing privilege. Pursuant to art. 5 para. 2 (b) of the National Bank Act, it is responsible for ensuring the supply and distribution of cash (banknotes and coins) in Switzerland. It works to ensure an efficient and secure payment system with cash. The SNB is also charged by the Confederation with the task of putting coins into circulation.

Role of SNB

Banknotes and coins are supplied to the economy via the two cashier's offices at the Berne and Zurich head offices. Until the end of 2020, this service was also provided by 14 agencies operated by cantonal banks on behalf of the SNB. Urner Kantonalbank terminated its agreement with the SNB and, as a result, the agency in Altdorf was closed at the end of the year. As there is a high density of agencies in Central Switzerland, the supply and distribution of cash continue to be ensured. The SNB issues banknotes and coins commensurate with demand for payment purposes, offsets seasonal fluctuations and withdraws banknotes and coins no longer fit for circulation. Local distribution and redemption of banknotes and coins are performed by commercial banks, Swiss Post and cash processing operators.

3.2 CASHIER'S OFFICES, AGENCIES AND CASH DEPOSIT FACILITIES

Turnover at cashier's offices

In 2020, the turnover (incoming and outgoing) of the cashier's offices in Berne and Zurich amounted to CHF 72.9 billion (2019: CHF 105.8 billion). They received a total of 276.1 million banknotes (2019: 382.4 million) and 260.2 million coins (2019: 287.6 million). The SNB examined the quantity, quality and authenticity of the incoming notes and coins. The incoming banknotes and coins were offset by an outflow of 297.5 million banknotes (2019: 399.7 million) and 268.5 million coins (2019: 352.8 million).

Turnover at agencies

The agencies assist the SNB's cashier's offices in the distribution and redemption of cash. They play an important role in ensuring the regional supply and distribution of cash by providing cash withdrawal services to third-party banks (local institutions or branches of larger banking groups), as well as to the branches of the cantonal banks hosting each agency.

The agencies' turnover (incoming and outgoing) amounted to CHF 10.0 billion (2019: CHF 13.4 billion). This constitutes 13.7% (2019: 12.7%) of the turnover at the SNB's cashier's offices.

Cash distribution services

The SNB's main partners with respect to cash distribution services are commercial banks, Swiss Post and cash processing operators. They conduct their cash handling activities at separate locations around the country. To ensure the supply of cash in Switzerland at all times, the SNB operates cash distribution centres at the head offices in Zurich and Berne and issues regulations on the manner, place and time for the receipt and delivery of banknotes and coins. Its activities in this field are based on the Federal Act on Currency and Payment Instruments (CPIA).

Cash deposit facilities

Cash processing operators can apply for cash deposit facilities with the SNB. These storage facilities contain stocks of notes and coins. The SNB sets up the facilities with third parties, while retaining ownership. The cash processing operators deposit surplus cash and withdraw it as required. The corresponding bookings are made to their sight deposit accounts at the SNB. Cash deposit facilities reduce the amount of incoming and outgoing cash at the SNB, as well as the number of transports made by the operators of cash deposit facilities, which makes for a more efficient supply and distribution of cash.

3.3 BANKNOTES

Mandate

Pursuant to art. 7 CPIA, the SNB issues banknotes commensurate with the demand for payment transactions and takes back any banknotes which are worn, damaged or surplus to requirements due to seasonal fluctuations. It also determines the denomination and design of the notes. Particular attention is paid to banknote security.

Banknotes in circulation

In 2020, banknotes in circulation averaged CHF 84.4 billion, 5.8% above the 2019 level. The total number of notes in circulation averaged 513.4 million, which was 5.2% higher than in 2019.

Impact of coronavirus crisis

As is usual during periods of crisis, there was stronger demand for the larger denominations as a store of value during the coronavirus crisis. By contrast, weaker than usual demand for the smaller denominations and for coins was registered during spring 2020, when the economy was partially shut down by the government, and during the fourth quarter, when containment measures were reintroduced. Reasons for this are likely to be the lower levels of economic activity as well as increased caution among the public in handling cash due to hygiene considerations. Furthermore, many businesses were concerned that contact with banknotes and coins could lead to infection and urged their customers to use cashless methods of payment whenever possible. It is too early to estimate what kind of an impact the coronavirus crisis will have on cash use in the medium and long term.

Second survey on use of payment methods

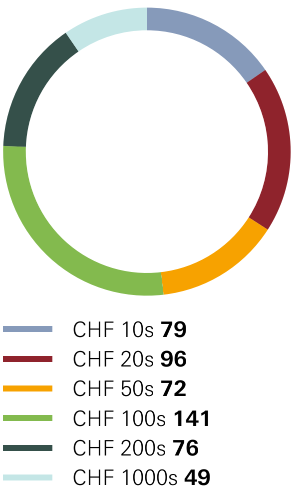
In 2020, the SNB conducted its second representative survey on the use of the different payment methods in Switzerland. To this end, 2,000 randomly selected Swiss residents were asked to complete a questionnaire and to keep a payment diary to track their payment habits and use of cash. Initial survey results indicate that, compared to the survey conducted in 2017, notably less cash was used for payment purposes during autumn 2020 than in the same period three years previously. In particular, survey respondents had made increased use of debit cards, especially the contactless feature, but also other cashless methods of payment. The SNB will provide comprehensive information on the results of the payment methods survey in mid-2021.

Issuance and disposal

In 2020, the SNB put 86.8 million (2019: 181.1 million) freshly printed banknotes with a nominal value of CHF 15.0 billion (2019: CHF 41.1 billion) into circulation. The large decline in both value and number is attributable to the 1000-franc and 100-franc notes from the ninth banknote series having been released in 2019. The SNB destroyed 129.4 million damaged or recalled notes (2019: 166.9 million) with a nominal value of CHF 56.8 billion (2019: CHF 45.1 billion).

NUMBER OF BANKNOTES IN CIRCULATION

In millions



Annual average for 2020

Counterfeits

In 2020, 1,692 (2019: 982) counterfeit banknotes were confiscated in Switzerland. This corresponds to 3 (2019: 2) counterfeit notes per million Swiss franc notes in circulation – a very low figure by international standards.

Recall and exchange of sixth-series banknotes

The sixth-series banknotes were recalled on 1 May 2000 and have not been legal tender since. According to a revision to the CPIA which came into effect on 1 January 2020, there is no limitation on the period during which these banknotes can be exchanged at the SNB at full nominal value. At the end of 2020, a total of 17.7 million notes (equivalent to CHF 1.0 billion) from the sixth series had still not been exchanged.

Recall of eighth-series banknotes

The SNB announced on 15 May 2020 that it will communicate the recall of the banknotes from the eighth series in the first half of 2021. These banknotes will remain legal tender until they are recalled.

KEY FIGURES ON BANKNOTES AND COINS IN CIRCULATION (ANNUAL AVERAGE)

	2016	2017	2018	2019	2020
Banknotes in circulation					
In value terms (in CHF millions)	72 201	76 471	78 997	79 809	84 450
Year-on-year change (in percent)	7.2	5.9	3.3	1.0	5.8
Number of notes (in thousands)	425 876	449 221	471 276	488 060	513 381
Year-on-year change (in percent)	4.8	5.5	4.9	3.6	5.2
Coins in circulation					
In value terms (in CHF millions)	3 062	3 102	3 144	3 180	3 189
Year-on-year change (in percent)	1.5	1.3	1.3	1.2	0.3
Number of coins (in millions)	5 442	5 527	5 617	5 693	5 737
Year-on-year change (in percent)	1.7	1.6	1.6	1.3	0.8

3.4 COINS

Mandate

The SNB is entrusted by the Confederation with the task of coin circulation. Its role is defined in art. 5 CPIA. It takes over the coins minted by Swissmint and puts into circulation the number required for payment purposes. Coins that are surplus to requirements are taken back against reimbursement of their nominal value. The SNB's coinage services are not remunerated, as they constitute part of its mandate to supply the country with cash. The SNB is supported in this task by Swiss Post and Swiss Federal Railways in accordance with the Coinage Ordinance.

Revision to Coinage Ordinance

On 18 December 2020, the Federal Council adopted an amendment to the Coinage Ordinance that enters into force on 1 March 2021. The new provisions draw a distinction between coins worn as a result of normal use and coins that have been damaged by other processes or uses. This concerns coins seriously damaged at metal processing plants (recycling) in particular. Worn coins will continue to be accepted by the SNB without restriction and exchanged at their full nominal value. Damaged coins will only be accepted and reimbursed subject to certain conditions being met. The SNB, in collaboration with the relevant federal government bodies, has published provisions governing the details.

Coin circulation

In 2020, the value of coins in circulation averaged CHF 3.2 billion. This corresponds to 5.7 billion coins (2019: 5.7 billion). The growth rate in value terms, at 0.3%, was lower than in 2019.

4
Facilitating and securing cashless payments

4.1 BACKGROUND

Mandate

In accordance with art. 5 para. 2 (c) of the National Bank Act (NBA), the Swiss National Bank facilitates and secures the operation of cashless payment systems. Art. 9 of the NBA empowers the SNB to maintain sight deposit accounts for banks and other financial market participants.

Role in cashless payment transactions

The SNB fulfils its statutory mandate of facilitating and securing the operation of cashless payment systems in its role as commissioning party and system manager of the Swiss Interbank Clearing (SIC) payment system. The SIC system is the central payment system for payments in Swiss francs. The SNB determines the admission criteria, provides the system with liquidity and defines the functionalities and settlement rules, thus ensuring a sound and efficient infrastructure for cashless payment transactions. As a systemically important financial market infrastructure (FMI), the SIC system is overseen by the SNB (cf. chapter 6.4).

Main features of SIC system

The SIC system is a real-time gross settlement system for payments in Swiss francs. This means that payment orders are settled continuously, individually, irrevocably and with finality in central bank money. Via the SIC system, banks and other financial market participants settle both interbank payments (payments between financial institutions as well as third-party system payments) and retail payments in Swiss francs. Retail payments are mainly initiated by payment instruments such as bank transfers and direct debits. Likewise, some obligations arising from card payments are bundled via the SIC system and settled among the participants.

Operation of SIC system

The SNB transfers deposits from the SIC participants' sight deposit accounts to their settlement accounts in the SIC system at the beginning of each settlement day. During the day, it ensures that there is sufficient liquidity in the SIC system by granting, when necessary, intraday loans to banks against collateral (cf. chapter 2.3). At the end of a settlement day, it calculates, on the basis of the turnover of the individual SIC participants, the balance to be transferred from the settlement accounts back to the sight deposit accounts at the SNB. Legally, the two accounts form one unit.

The SNB has entrusted the operation of the SIC system to SIX Interbank Clearing Ltd, a subsidiary of SIX Group Ltd (SIX). The provision of services for the SIC system is governed by contract between the SNB and SIX Interbank Clearing Ltd. Furthermore, the SNB has a seat on the Board of Directors of SIX Interbank Clearing Ltd and participates in various payment system bodies, where it represents its interests based on its mandate. The business relationship between the SNB and the SIC participants is governed by the SIC giro agreement.

Admission to SIC system

The SNB grants domestic financial market participants access to the SIC system. They include banks, securities firms, insurance companies and institutions such as cash processing operators, FMIs and fintech companies (cf. chapter 4.2). Additionally, third-party system operators which are able to effect debits and credits to the accounts of other participants also have access to the SIC system. The SNB may grant foreign financial market participants access to the SIC system too. As a general rule, to be admitted participants must make a significant contribution to the fulfilment of the SNB's tasks, and their admission must not pose any major risks.

SIC system as part of Swiss financial market infrastructure

The SIC system is a key element of the Swiss financial centre. This FMI is operated by SIX, a company owned by around 120 financial institutions which are also the main users of the services provided by SIX. A well-functioning, secure and efficient financial market infrastructure is of vital importance to the SNB for the fulfilment of its statutory mandate, particularly with regard to facilitating and securing the operation of cashless payment systems. The SNB regularly exchanges information with SIX and the banking sector with the aim of continually developing Switzerland's financial market infrastructure.

4.2 THE SIC SYSTEM IN 2020

Key figures

In 2020, a daily average of approximately 2.9 million transactions amounting to CHF 178 billion were settled via the SIC system. Compared to the previous year, the average number of transactions settled per day rose by 9.3% and turnover increased by 12.8%. Peak days saw up to 9.3 million transactions, with turnover of up to CHF 276 billion. The rise in turnover is attributable to increased trading activity on the repo market (cf. chapter 2.2) as well as the gradual migration of PostFinance's payment transactions with other banks to the SIC system.

Retail payments accounted for 97.5% of the transactions in the SIC system (10.3% of turnover) and interbank payments 2.5% (89.7% of turnover).

KEY FIGURES ON SIC SYSTEM

	2016	2017	2018	2019	2020
Number of transactions					
Daily average (in thousands)	1 765	2 035	2 432	2 623	2 867
Peak daily value for year (in thousands)	5 670	7 025	7 436	7 484	9 286
Share of interbank payments (in %)	3.6	3.2	2.6	2.4	2.5
Share of retail payments (in %)	96.4	96.8	97.4	97.6	97.5
Turnover					
Daily average (in CHF billions)	153	173	156	158	178
Peak daily value for year (in CHF billions)	266	227	249	240	276
Average value per transaction (in CHF)	86 914	84 941	64 081	60 256	62 160
Share of interbank payments (in %)	90.4	91.1	89.2	88.6	89.7
Share of retail payments (in %)	9.6	8.9	10.8	11.4	10.3
Sight deposits of SIC participants and intraday facility					
Average sight deposits at end of day (in CHF millions)	463 038	519 433	524 801	521 595	621 458
Average intraday facility utilisation (in CHF millions)	1 060	1 086	1 061	416	1 111

Participants in SIC system

As at 31 December 2020, the SNB had 394 holders of sight deposit accounts (2019: 403). Of these, 321 participated in the SIC system (2019: 323). The majority of SIC participants (238) are domiciled in Switzerland (2019: 234). Six third-party system operators also have access to the SIC system.

Developments in payment transactions

Innovations in the financial industry have an especially strong impact on cashless payment transactions. Based on its mandate regarding cashless payment transactions, the SNB as commissioning party of the SIC system ensures appropriate conditions for the further development of cashless payment transactions in Swiss francs.

SIC5 and instant payments

In 2020, the SNB and SIX Interbank Clearing Ltd initiated the SIC5 project to further develop the SIC system. Among other things, SIC5 allows the settlement of instant payments, i.e. cashless retail payments that are processed around the clock with the amount being credited to the final recipient within seconds. The new SIC5 platform is expected to be launched in 2023 and will initially settle instant payments. Other payment methods in the SIC system, e.g. interbank payments, will subsequently be migrated to the new platform and will thus also be able to benefit from the enhancements. The SIC5 project is being developed in close collaboration with the SIC participants.

Admission of fintech companies

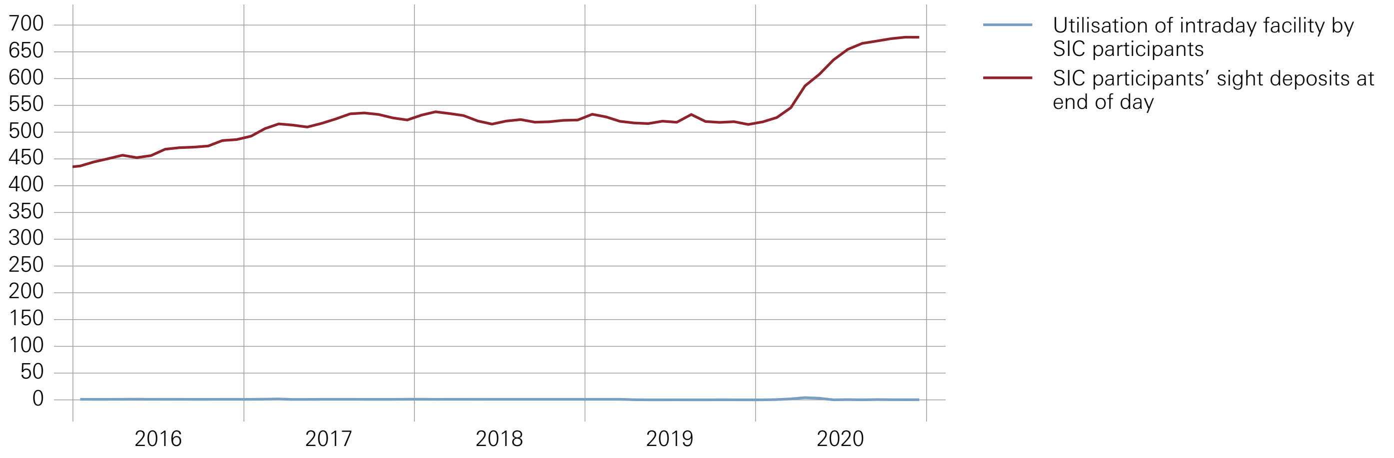
After the revised Banking Ordinance containing the new licensing category of fintech companies entered into force at the beginning of 2019, the SNB decided in January 2020 to grant SIC system access to companies with the requisite fintech licences and a business model that is significant in the area of Swiss franc payment transactions. February 2020 saw the first company with a fintech licence gain access to the SIC system.

Secure Swiss Finance Network

In 2019, the SNB and SIX jointly launched a project to develop a secure network for the Swiss financial centre (Secure Swiss Finance Network, SSFN). The aim of this project is to increase the security and resilience of network connections to the SIC system and to other FMIs. In collaboration with telecommunications providers and their participants, the project seeks to set up a new, secure network on the basis of SCION (Scalability, Control and Isolation on Next-Generation Networks), the routing architecture developed at ETH Zurich. The new SCION network not only allows for the exchange of messages between FMIs and participants, but it also enables data to be exchanged securely between participants using the same architecture. This project was in its pilot phase in 2020. Third-party expert opinions confirmed the suitability and security of the SSFN on a technical level. If the pilot phase can be successfully concluded and further set-up completed, the SSFN is to gradually replace the existing communication link with the SIC system from 2021.

SIGHT DEPOSITS AND INTRADAY FACILITY IN SIC SYSTEM

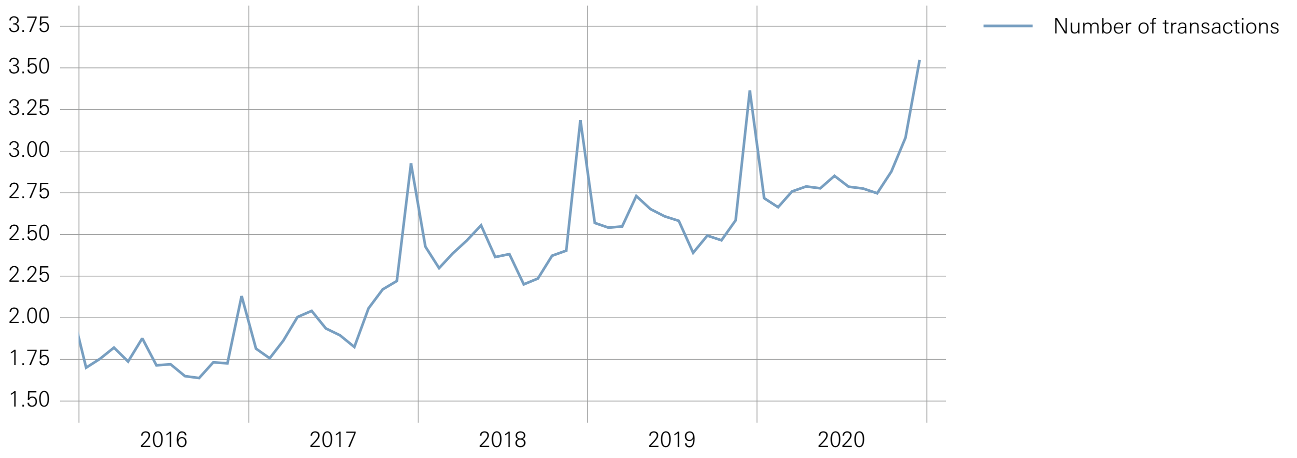
Monthly averages of daily values, in CHF billions



Source: SNB

TRANSACTIONS IN SIC SYSTEM

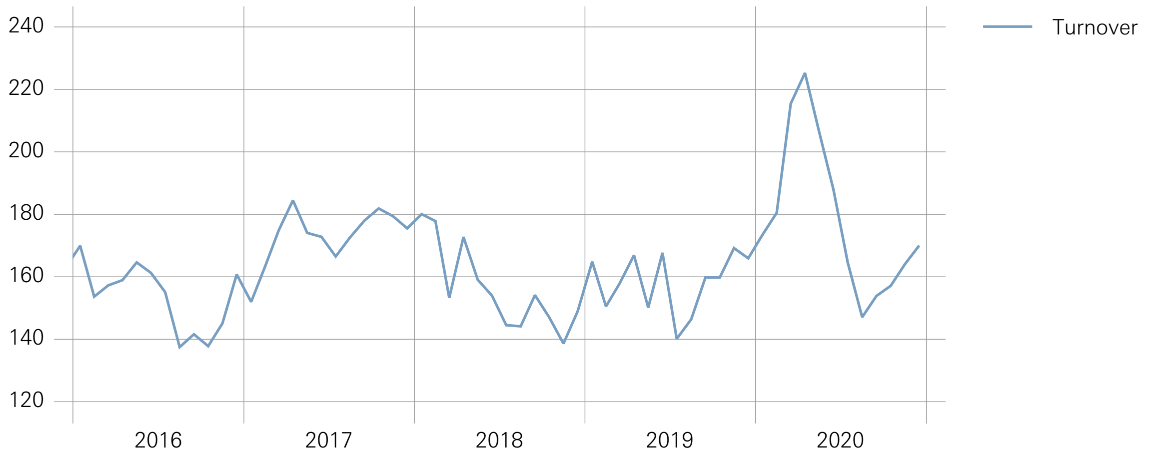
Monthly averages of daily values, transactions in millions



Source: SNB

TURNOVER IN SIC SYSTEM

Monthly averages of daily values, in CHF billions



Source: SNB

Endpoint security to reduce fraud risk

In 2018, the Committee on Payments and Market Infrastructures (CPMI) at the Bank for International Settlements (BIS) published recommendations for reducing the risk of wholesale payments fraud related to endpoint security. Endpoint security in payment transactions means the protection of all endpoints against unauthorised third-party access. Endpoints are devices, applications and systems used to submit payment messages to the wholesale payment system. The SNB plans to define mandatory requirements derived from these recommendations for SIC participants by the end of 2021. They are set to be implemented in 2022, after which the SNB will check compliance with the requirements.

5
Asset management

5.1 BACKGROUND

Mandate

The assets of the Swiss National Bank fulfil important monetary policy functions. They consist largely of investments in foreign currencies, gold and, to a lesser extent, financial assets in Swiss francs. Their size and composition are determined by the established monetary order and the requirements of monetary policy. Under art. 5 para. 2 of the National Bank Act (NBA), the SNB is responsible for managing the currency reserves, part of which must be held in the form of gold (art. 99 para. 3 Federal Constitution).

Currency reserves

The SNB's currency reserves are held primarily in the form of foreign currency investments and gold. The currency reserves also include international payment instruments and the reserve position in the International Monetary Fund (IMF).

Currency reserves ensure that the SNB has room for manoeuvre in its monetary policy at all times. They also serve to build confidence, and to prevent and overcome potential crises. In the current environment, the level of the currency reserves is largely dictated by the implementation of monetary policy. The level of currency reserves has multiplied since the onset of the financial and debt crisis. While these reserves amounted to CHF 85 billion at the end of 2007, by the end of 2020 they had risen to CHF 962 billion. The increase is mainly due to foreign currency purchases aimed at curbing the appreciation of the Swiss franc.

Financial assets in Swiss francs

The financial assets in Swiss francs are made up of Swiss franc bonds, claims from repo transactions, and covered loans from the SNB COVID-19 refinancing facility (CRF) established in 2020.

Investment principles

Asset management is governed by the primacy of monetary policy. In applying its investment policy, the SNB has two main objectives. The first is to ensure that its balance sheet can be used for monetary policy purposes at any time. In particular, the SNB must be in a position to expand or shrink the balance sheet if necessary. The second objective of investment policy is to preserve the value of currency reserves in the long term. In order to achieve these objectives, the SNB's investment policy must be oriented towards high liquidity and broad diversification.

The primacy of monetary policy means that there are restrictions on investment policy. The SNB does not hedge currency risks from its investments against the Swiss franc as this would constitute demand for Swiss francs, thereby generating upward pressure on the currency (cf. chapter 5.4). In addition, the SNB does not want to influence markets with its investment policy and therefore aims for minimal market impact.

The investment process ensures that no privileged information acquired within the SNB can influence investment activity and that no unintentional signal effects are created. For this reason, the SNB does not invest in the shares of any systemically important banks. Equally, it does not invest in Swiss shares or in bonds issued by Swiss companies, and the Swiss franc bond portfolio is managed passively.

A high degree of asset liquidity, in particular, is required to ensure sufficient room for manoeuvre in the implementation of monetary policy. The SNB therefore invests a substantial portion of its currency reserves in highly liquid foreign government bonds. The criterion of security is taken into account by structuring investments so that at least the real value is preserved over the long term. This goal is pursued through broad diversification of currencies; additionally, to improve the long-term risk/return profile, government bond holdings in the major currencies are supplemented by other asset classes. Since all investments are valued in Swiss francs, the return must offset the Swiss franc's long-term upward trend. This necessitates a sufficiently positive return in the local currencies. By investing part of the currency reserves in a well-diversified range of shares and corporate bonds, the SNB is able to exploit the positive contribution of these asset classes. At the same time, it retains the flexibility to adjust its monetary and investment policy to changing requirements.

5.2 INVESTMENT AND RISK CONTROL PROCESS

Bank Council and Risk Committee responsibilities

The NBA defines the SNB's responsibilities and describes in detail its mandate with regard to asset management. The Bank Council is charged with the integral oversight of the investment and risk control process. Its role is to assess the underlying principles and monitor compliance with them. The Risk Committee – which is composed of three Bank Council members – supports the Bank Council in this task. It monitors risk management, in particular, and evaluates the governance of the investment process. Internal risk management reporting is addressed to the Governing Board and the Risk Committee.

Governing Board responsibilities

The Governing Board defines the principles of the investment policy. Specifically, it sets the parameters for the balance sheet structure and investment targets, the investment universe, investment strategy and the associated risk tolerance, as well as the investment and risk control process. In particular, it sets out the requirements with regard to the security, liquidity and return of the investments, as well as the eligible currencies, asset classes, instruments, and borrower categories. The Governing Board decides on the composition of the currency reserves and other assets, and defines the foreign currency investment strategy. The investment strategy covers the allocation of foreign currency investments to different asset classes and currencies, and determines the scope for active management at operational level.

Investment Committee responsibilities

The Investment Committee, an internal body, decides on the tactical allocation of the foreign currency investments at operational level. Within the strategically prescribed ranges set by the Governing Board, it adjusts currency weightings, bond durations and allocations to the different asset classes, to take account of changed market conditions.

Portfolio Management responsibilities

Portfolio Management manages the individual portfolios. The majority of the foreign currency investments (97%) are managed internally. External asset managers are used to benchmark internal portfolio management and obtain efficient access to new asset classes. At operational level, responsibilities for monetary policy and investment policy are organised in such a way as to avoid conflicts of interest.

Singapore office responsibilities

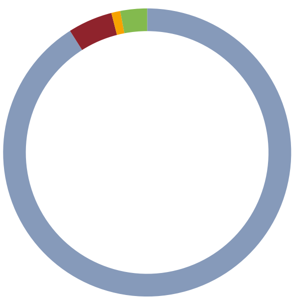
The Asia-Pacific portfolios are managed by SNB portfolio managers in the Singapore branch office, which opened in 2013. It is the SNB's only branch office outside Switzerland. Its primary task is to ensure the efficient management of the SNB's currency reserves in the Asia-Pacific region. Having a presence in Asia is also beneficial when it comes to implementing monetary policy on the foreign exchange market. The office's trading and portfolio management operations are fully integrated into the investment and risk control process in Switzerland.

Risk Management responsibilities

The most important element for managing absolute risk is broad diversification of investments. Risk is managed and mitigated by means of a system of reference portfolios (benchmarks), guidelines and limits. All relevant financial risks associated with investments are identified, assessed and monitored continuously. Risk measurement is based on standard risk indicators and procedures. In addition to these procedures, sensitivity analyses and stress tests are carried out on a regular basis. The SNB's generally long-term investment horizon is taken into account in all of these risk analyses.

To assess and manage credit risk, information from major rating agencies, market indicators and in-house analyses are used. Credit limits are set on the basis of this information, and adjusted whenever the risk assessment changes. To mitigate counterparty risk, the replacement values of derivatives are usually collateralised by securities. Concentration and reputational risks are also factored in when determining risk limits. Risk indicators are aggregated across all investments. Compliance with the guidelines and limits is monitored daily. The risk analyses and results of risk management activities are submitted to the Governing Board and the Bank Council's Risk Committee in quarterly risk reports. In addition, the annual risk management report is submitted to the Bank Council.

BREAKDOWN OF SNB ASSETS



Foreign currency investments **91%**
Gold holdings **5%**
Financial assets in CHF **1%**
Sundry **3%**

Total: CHF 999 billion
At year-end 2020

5.3 CHANGES IN AND BREAKDOWN OF ASSETS

Changes in assets

At the end of 2020, the SNB's assets amounted to CHF 999 billion, which was CHF 138 billion higher than a year earlier. They consisted of foreign currency investments (CHF 910 billion), gold (CHF 56 billion), Special Drawing Rights (CHF 7 billion), Swiss franc bonds (CHF 4 billion), claims from repo transactions in Swiss francs (CHF 0.5 billion) and other assets (CHF 22 billion). As of this year, the balance sheet includes the item secured loans (CHF 11 billion). These are loans granted under the SNB COVID-19 refinancing facility (CRF) established in March. At the end of 2020, the balance sheet also included CHF 9 billion in claims from US dollar repo transactions. In spring, the SNB conducted US dollar repo transactions with banks for the first time since 2012 as part of the international central bank action to enhance the provision of US dollar liquidity to the markets.

The rise in the balance sheet total in 2020 was mainly attributable to higher foreign currency investments, which were up CHF 116 billion year-on-year. The increase was principally due to inflows from foreign currency purchases.

There were slightly fewer outstanding foreign currency repo transactions on the balance sheet at the end of 2020 than one year previously. Such repo transactions are performed as part of portfolio management; foreign-issued securities are transferred for a given term in exchange for foreign currency sight deposits, and then the process is reversed at maturity. Since there is a market demand for these securities, a corresponding premium can be achieved with such repo transactions. There is also a temporary expansion of the balance sheet because, first, the securities that are temporarily exchanged under the transaction continue to be on the SNB's books and, second, the sight deposits received and the commitment to repay them at maturity are also reported in the balance sheet. Since these instruments are not freely disposable, they are deducted from the foreign currency investments for the calculation of the foreign exchange reserves and currency reserves.

Currency reserves

The gold holdings of 1,040 tonnes remained unchanged over the course of the year, while their value rose by just under CHF 7 billion. At the end of 2020, total currency reserves amounted to CHF 962 billion, an increase of CHF 126 billion compared to the previous year.

COMPOSITION OF CURRENCY RESERVES

In CHF billions

	31.12.2020	31.12.2019
Gold reserves	56	49
Foreign currency investments	910	794
Less: associated liabilities[1]	–10	–13
Derivatives (replacement values, net)	0	0
Total foreign exchange reserves	900	781
Reserve position in the IMF	2	1
International payment instruments	4	4
Total currency reserves	**962**	**836**

1 Liabilities from foreign currency repo transactions.

Bond portfolios

The SNB's bond portfolios chiefly comprise government bonds (approximately 85% of total bond holdings). The selection of government bonds and the corresponding markets takes into account the SNB's specific requirements and, in particular, ensures a high degree of liquidity. Within a given market, investments are diversified broadly across maturities so that, if necessary, large volumes can be bought or sold with minimum impact on prices. In addition to government bonds, the bond portfolios in the foreign exchange reserves contain quasi-government bonds as well as bonds issued by supranational organisations, local authorities, financial institutions (mainly covered bonds and similar instruments) and other companies.

The average duration of the portfolio decreased slightly in 2020, and stood at 4.6 years at year-end. Over 50% of the bonds had a negative yield to maturity.

Equity portfolios

Equities are managed passively according to a set of rules based on a strategic benchmark comprising a combination of equity indices in various markets and currencies. The principle of broadly replicating entire markets ensures that the SNB operates as neutrally as possible in the individual stock markets. The SNB does not actively engage in stock picking, nor does it generally overweight or underweight particular sectors, in order to avoid concentrations in specific companies and sectors.

At the end of 2020, the equity portfolios comprised mostly shares of mid-cap and large-cap companies in advanced economies. Shares of small-cap companies in advanced economies and shares of companies in emerging economies were also held. This resulted in a globally well-diversified equity portfolio of around 6,700 individual shares (over 1,400 shares of mid-cap and large-cap companies and about 4,300 shares of small-cap companies in advanced economies, as well as approximately 1,000 shares of companies in emerging economies). With its even, broad-based market coverage, the SNB's ownership share of individual mid-cap and large-cap companies is roughly the same in all advanced economies. For reasons of liquidity, the corresponding proportions of small-cap companies and companies in emerging economies are somewhat lower.

Swiss franc bonds

The passively managed Swiss franc bond portfolio primarily contains bonds issued by the Confederation, the cantons, municipalities and foreign borrowers, as well as Swiss Pfandbriefe. In 2020, the average duration of the portfolio increased slightly to 8.6 years. At the end of 2020, over 90% of the SNB's Swiss franc bond holdings, which were worth more than CHF 4 billion, had a negative yield to maturity.

Non-financial aspects of managing securities of private sector issuers

The SNB holds part of its foreign currency investments in the form of shares and corporate bonds in order to take advantage of the positive return contribution of these asset classes and improve the long-term risk/return ratio. When managing securities of private sector issuers, the SNB also takes non-financial aspects into consideration.

Owing to its special role vis-à-vis the banking sector, the SNB refrains from investing in shares of systemically important banks worldwide. The SNB also takes account of Switzerland's fundamental standards and values in its investment policy. Consequently, it does not invest in shares and bonds of companies whose products or production processes grossly violate values that are broadly accepted at a societal level. The SNB therefore does not purchase securities issued by companies that seriously violate fundamental human rights, systematically cause severe environmental damage or are involved in the production of internationally condemned weapons.

Condemned weapons include biological and chemical weapons, cluster munitions and anti-personnel mines. Companies involved in the production of nuclear weapons for countries that are not among the five legitimate nuclear-weapon states defined under the Nuclear Non-Proliferation Treaty (China, France, Russia, United Kingdom, United States) are also excluded.

Individual companies are excluded under the criterion of systematically causing severe environmental damage if they, for example, systematically pollute waterways or the countryside, or seriously damage biodiversity through their production operations. As of December 2020, companies with a business model primarily based on coal mining are also excluded. The reason for expanding the environmental criterion is that there is a broad consensus in Switzerland in favour of phasing out coal.

The SNB reviews the whole investment universe on a regular basis in order to identify the companies concerned. A specialised external service provider reviews the SNB's investment universe to specifically identify companies involved in the manufacturing of condemned weapons. With regard to companies that focus on coal mining, the SNB bases its assessment on a classification by a specialised index provider. Companies that fall under other exclusion criteria are identified in a two-phase process. The first phase consists of examining and processing public information in order to identify companies whose activities are very likely to fall under the exclusion criteria. During the second phase, a detailed assessment is performed on each identified company to ascertain whether it should be excluded or not. The SNB relies on the recommendations made by the specialised external service providers in deciding on the exclusion of companies, and reviews its decisions on a regular basis.

It should be noted that the constitutional and legislative authorities have deliberately not tasked the SNB with using its asset management activities to selectively influence the development of certain economic sectors. The SNB's investment policy therefore cannot be geared to pursuing structural policies, i.e. advantaging or disadvantaging specific economic sectors via positive or negative selections, or promoting or inhibiting economic, political or social change.

Against this backdrop, the SNB generally aims to replicate the individual stock markets in their entirety, taking into account the aforementioned exceptions. As a result, the SNB holds equities in the various economic sectors based on market capitalisation. This approach ensures that the portfolio's exposure to different risks is similar to that of the global universe of listed companies, and that structural changes in the global economy are also reflected in the SNB's portfolio.

The process of exercising voting rights relating to shares is another non-financial aspect of managing assets issued by private sector companies. Here, the SNB restricts itself to issues of good corporate governance. In the long term, good corporate governance helps companies – and hence the SNB's investments in them – to perform favourably. In exercising its voting rights, the SNB focuses on mid-cap and large-cap companies in Europe and also works with external service providers to this end. The voting procedure is based on the SNB's internal guidelines for exercising voting rights. The external service providers are tasked with interpreting the guidelines for exercising voting rights and applying them to the proposals being put forward at the shareholders' meetings. The SNB is in regular contact with the external service providers and monitors the correct interpretation of the guidelines for voting rights.

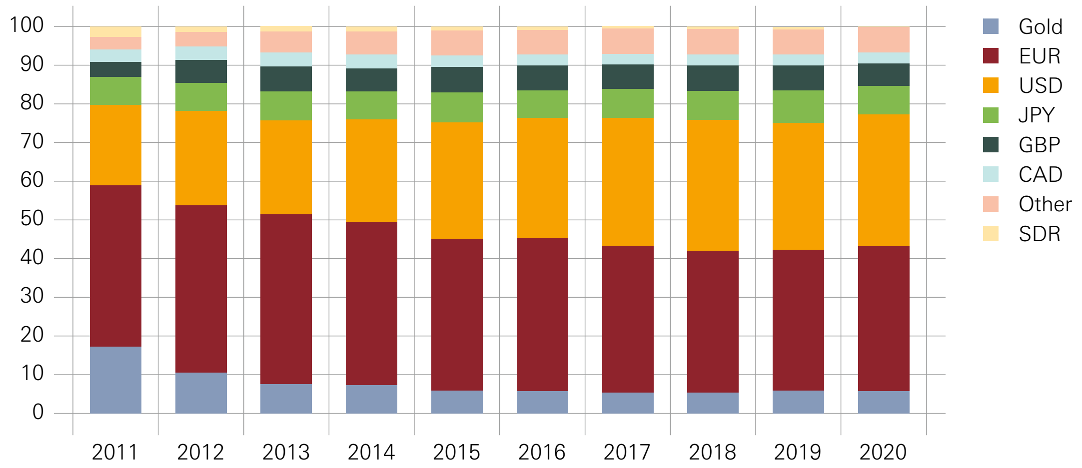
BREAKDOWN OF FOREIGN EXCHANGE RESERVES AND SWISS FRANC BOND INVESTMENTS AT YEAR-END

	2020		2019	
	Foreign exchange reserves	CHF bonds	Foreign exchange reserves	CHF bonds
Currency allocation (in percent, incl. derivatives positions)				
CHF		100		100
EUR	40		39	
USD	36		35	
JPY	8		9	
GBP	6		7	
CAD	3		3	
Other[1]	7		7	
Asset classes (in percent)				
Investments with banks	0		0	
Government bonds[2]	70	38	69	39
Other bonds[3]	10	62	11	61
Shares	20		20	
Breakdown of interest-bearing investments (in percent)				
AAA-rated[4]	62	79	58	79
AA-rated[4]	19	20	22	21
A-rated[4]	15	1	16	0
Other	4	0	4	0
Investment duration (years)	4.6	8.6	4.7	8.5

1 Mainly AUD, CNY, DKK, KRW, SEK, SGD plus small holdings of other currencies in the equity portfolios.
2 Government bonds in own currency, deposits with central banks and the BIS; in the case of Swiss franc investments, also bonds issued by Swiss cantons and municipalities.
3 Government bonds in foreign currency as well as bonds issued by foreign local authorities and supranational organisations, covered bonds, corporate bonds, etc.
4 Average rating, calculated from the ratings of major credit rating agencies.

BREAKDOWN OF CURRENCY RESERVES AT YEAR-END

In percent, excluding investments and liabilities from foreign exchange swaps against CHF



Source: SNB

Changes in asset structure

There was little year-on-year change in the structure of the foreign exchange reserves and Swiss franc bonds. The euro and US dollar shares increased slightly at the expense of the pound sterling and yen, while the share of other currencies remained unchanged. The proportion of AAA-rated investments increased by 4 percentage points at the expense of AA-rated and A-rated investments. The share of equities in the foreign exchange reserves stood at 20% at end-2020, as in the previous year.

Initiative against war trade

The Swiss popular initiative calling for a ban on the financing of war material manufacturers was put to a national vote on 29 November 2020. This initiative aimed to limit the SNB's investment universe as well as that of foundations and pension funds. The Swiss voters and cantons rejected the initiative.

5.4 BALANCE SHEET RISK

Risk profile

The risk profile of assets is determined by the currency reserves. The main risk to the currency reserves is market risk, in particular risks related to exchange rates, the gold price, share prices and interest rates. In addition, there is liquidity risk as well as credit and country risk, although these are not as significant as market risk. The contribution of Swiss franc bonds to total risk is negligible.

Market risk

Exchange rates are the most important risk factor for the currency reserves. As currency risk is not hedged against the Swiss franc, even minor changes in the Swiss franc exchange rates lead to substantial fluctuations in investment income, and thus in the SNB's equity. In addition to currency risk, fluctuations in the gold price and stock prices as well as interest rate risk are relevant. Currency risk, share price risk and interest rate risk are limited through the specification of benchmarks and management guidelines. Various means, including the use of derivative financial instruments such as interest rate swaps, stock index futures and interest rate futures, are used to control these risks. Foreign exchange derivatives can also be used to manage currency exposure.

The SNB does not hedge currency risk against the Swiss franc, as hedging would have an undesirable impact on monetary policy. Hedging operations, for example selling foreign exchange forwards against Swiss francs, would create additional demand and increase upward pressure on the Swiss franc. Therefore, hedging would de facto have the same effect as a foreign exchange market intervention to strengthen the Swiss franc. For this reason, currency risk must be accepted as an inherent component of currency reserves.

Liquidity risk

The SNB's liquidity risk arises from the possibility that, should investments in foreign currencies need to be sold, such sales could be effected only partially or after considerable price concessions, or may not be possible at all. By holding a large volume of highly liquid government bonds in the major currencies – euros and US dollars – the SNB continued to ensure a correspondingly high level of liquidity in its foreign exchange reserves in 2020. Liquidity risk is reassessed periodically.

Credit risk

Credit risk stems from the possibility that counterparties or issuers of securities do not meet their obligations. Such risks are inherent in bilateral (over-the-counter) transactions with banks and in bonds issued by all borrower categories. The SNB holds bonds issued by public and supranational borrowers, covered bonds and similar instruments as well as corporate bonds as part of its currency reserves. For issuers of bonds, the SNB requires a minimum rating of 'investment grade'. Exposure to individual issuers is limited by means of concentration limits. Credit risk arising from non-tradable instruments with respect to banks was very low in 2020. Replacement values of derivatives were netted and collateralised, in accordance with the ISDA (International Swaps and Derivatives Association) agreements with counterparties. The SNB settles most of its interest rate swaps via a central counterparty. On the one hand, this facilitates netting of offsetting positions. On the other, efficiency gains are made in the daily management of the securities used as collateral.

In 2020, too, investments mainly took the form of government bonds; the bulk of these were in highly liquid bonds issued by European countries with very good credit ratings and by the US. At the end of 2020, outstanding balances at central banks and the Bank for International Settlements amounted to CHF 80 billion. Overall, more than 80% of interest-bearing investments were rated AA or higher.

Country risk

Country risk arises from the possibility that a country may block payments by borrowers domiciled in its sovereign territory or block the right to dispose of assets held there. In order to avoid entering into any unbalanced country risk, the SNB endeavours to distribute assets across a number of different depositories and countries.

Gold holdings are stored according to this principle as well. In choosing a location, attention is paid to both appropriate regional diversification and easy market access. Of the 1,040 tonnes of gold, approximately 70% is stored in Switzerland, some 20% at the Bank of England, and roughly 10% at the Bank of Canada. Decentralised storage of gold holdings in Switzerland and abroad ensures that the SNB has access to its gold reserves even in the event of a crisis.

Balance sheet growth

The increase in currency reserves stemming from monetary policy in recent years has led to corresponding growth in the SNB's balance sheet. The balance sheet total increased substantially again in 2020; this was attributable to the use of monetary policy instruments to manage the coronavirus crisis. The growth in the balance sheet resulted in higher loss risk in absolute terms. The SNB aims for a robust balance sheet with sufficient equity capital, to ensure that it can absorb potential losses. With the expansion of the balance sheet from 2008 onwards, the ratio of equity capital to currency reserves has decreased significantly.

Provisions and distribution reserve

The SNB is required by art. 99 para. 3 of the Federal Constitution to create sufficient currency reserves from its earnings. According to art. 30 para. 1 NBA, the SNB must set aside provisions that allow it to maintain the currency reserves at the necessary level, while taking into account the development of the Swiss economy. The provisions for currency reserves and the distribution reserve together form the SNB's equity capital. The provisions for currency reserves correspond to the desired level of equity capital at the given point in time, with funds being allocated to it on an annual basis. They are intended to ensure that the SNB has sufficient equity capital to absorb even large losses. The loss-absorbing equity capital also includes the distribution reserve. The non-distributed annual profit is allocated to the distribution reserve, or the shortfall for the appropriation of profit is drawn from it. The distribution reserve is a form of profit carried forward and serves as a fluctuation reserve to enable the legally required medium-term smoothing of the annual distributions.

Allocation to provisions

Annual allocations to the provisions for currency reserves are necessary to ensure a solid equity base. The annual allocation is determined on the basis of double the average nominal GDP growth rate over the previous five years. This requirement was supplemented in 2016 with the specification of a minimum annual allocation of 8% of the provisions for currency reserves. In view of the considerable increase in currency reserves since then, the SNB intends to reinforce its equity capital and plans to set a minimum annual allocation to the provisions for currency reserves of 10% for the next few years. This is aimed at ensuring that sufficient allocations are made and the balance sheet is strengthened even in periods of low nominal GDP growth. The minimum allocation of 10% already applied in 2020 and amounted to CHF 7.9 billion. After the allocation, the provisions for currency reserves totalled CHF 87 billion.

Profit distribution 2020

In accordance with art. 31 para. 2 NBA, one-third of the SNB's net profit remaining after the dividend requirement is met accrues to the Confederation and two-thirds to the cantons. The amount of the annual profit distribution to the Confederation and the cantons is laid down in an agreement between the Federal Department of Finance (FDF) and the SNB, with the aim of smoothing the distributions in the medium term. In January 2021, the FDF and the SNB decided to conclude a new agreement covering the period through to 2025, which would already apply to the profit distribution for 2020. This agreement provides for an annual distribution of up to CHF 6 billion, provided that the SNB's financial situation permits. The maximum distribution of CHF 6 billion will be made if a net profit of at least CHF 40 billion is achieved. This condition was fulfilled for the 2020 financial year. The profit distribution to the Confederation and the cantons for 2020 therefore came to CHF 6 billion.

Changes in equity

The SNB recorded a profit of CHF 21 billion in 2020. After allocation to the provisions for currency reserves of CHF 7.9 billion and taking account of the profit distribution to the Confederation and the cantons totalling CHF 6 billion for the 2020 financial year, the SNB's equity amounted to CHF 178 billion (provisions of CHF 87 billion plus a distribution reserve of CHF 91 billion). This was CHF 15 billion higher than one year earlier.

5.5 INVESTMENT PERFORMANCE

Investment performance

Investment return comprises the returns on foreign exchange reserves, gold and Swiss franc bonds.

In 2020, the return on currency reserves was 1.9%. Returns on gold and foreign exchange reserves were positive, at 13.5% and 1.2% respectively. In local currency, the return on foreign exchange reserves was 6.0%. Owing to the appreciation of the Swiss franc, the exchange rate return was negative (–4.5%). In Swiss franc terms, the annual return on the currency reserves has averaged 2.6% over the last 15 years.

RETURN ON INVESTMENTS

Returns in percent

	Currency reserves[1]					CHF bonds
	Total	Gold	Foreign exchange reserves			Total
			Total	Exchange rate return	Return in local currency	
2006	6.9	15.0	1.9	–1.1	3.0	0.0
2007	10.1	21.6	3.0	–1.3	4.4	–0.1
2008	–6.0	–2.2	–8.7	–8.9	0.3	5.4
2009	11.0	23.8	4.8	0.4	4.4	4.3
2010	–5.4	15.3	–10.1	–13.4	3.8	3.7
2011	4.9	12.3	3.1	–0.8	4.0	5.6
2012	2.3	2.8	2.2	–2.3	4.7	3.7
2013	–2.5	–30.0	0.7	–2.4	3.2	–2.2
2014	8.0	11.4	7.8	2.6	5.1	7.9
2015	–4.7	–10.5	–4.4	–5.6	1.3	2.3
2016	3.8	11.1	3.3	–0.4	3.7	1.3
2017	7.2	7.9	7.2	2.9	4.2	–0.1
2018	–2.1	–0.6	–2.2	–1.5	–0.7	0.2
2019	6.1	16.3	5.5	–2.4	8.1	3.2
2020	1.9	13.5	1.2	–4.5	6.0	1.2
2016–2020[2]	3.3	9.5	3.0	–1.2	4.2	1.1
2011–2020[2]	2.4	2.4	2.4	–1.5	3.9	2.3
2006–2020[2]	2.6	6.2	0.9	–2.7	3.7	2.4

1 In this table, they correspond to gold and foreign exchange reserves, excluding IMF Special Drawing Rights.
2 Average annual return over 5, 10 and 15 years.

Contributions of asset classes to investment performance

The currency reserves are mainly composed of gold, bonds and shares. The diversification effects achieved by adding shares to a portfolio, as well as equities' high liquidity, make them an attractive asset class for the SNB. Furthermore, given that expected return is higher on shares than on bonds, this asset class helps to preserve the real value of the currency reserves. Though long-term return expectations are higher for equities, they are also subject to greater fluctuations in value. Yet, while equities, viewed on their own, are indeed more prone to fluctuation, in the context of the portfolio as a whole – and with an equity exposure of this magnitude – this disadvantage is offset by the asset class's favourable diversification effects relative to bonds and gold.

The share of equity holdings stood at 20% at the end of 2020. Equity exposure improves the risk/return profile of the foreign exchange reserves. Measured in Swiss francs, the average annual return on equities since their introduction as an asset class in 2005 has been 4.5%. Likewise measured in Swiss francs, the annual return on bonds over the same period has averaged 0.8%. Earnings on the bonds component of the foreign exchange reserves totalled CHF 13.4 billion between 2005 and 2020. The equity holdings generated earnings of CHF 103.4 billion over this period. In recent years, equities have thus played a major role in enabling the SNB to increase its equity capital and make distributions.

RETURNS ON FOREIGN EXCHANGE RESERVES, IN SWISS FRANCS

Returns in percent

	Total	Bonds	Shares
2005	10.8	10.6	24.4
2006	1.9	1.3	11.1
2007	3.0	3.3	0.6
2008	–8.7	–3.1	–44.9
2009	4.8	3.7	20.4
2010	–10.1	–11.0	–2.6
2011	3.1	4.0	–6.8
2012	2.2	0.8	12.7
2013	0.7	–2.4	20.4
2014	7.8	6.9	12.7
2015	–4.4	–5.2	0.6
2016	3.3	1.5	9.2
2017	7.2	4.5	18.4
2018	–2.2	–1.1	–7.1
2019	5.5	1.1	24.5
2020	1.2	–0.7	5.1
2005–2020[1]	1.5	0.8	4.5

1 Average annual return over 16 years.

6 Contribution to financial system stability

6.1 BACKGROUND

Mandate

Art. 5 para. 2 (e) of the National Bank Act (NBA) confers upon the Swiss National Bank the task of contributing to the stability of the financial system. Financial stability means that financial system participants, i.e. financial intermediaries (especially banks) and financial market infrastructures (FMIs), can perform their functions and are able to withstand potential disruptions. It is an important prerequisite for economic development and effective monetary policy implementation.

In the field of financial stability, the SNB fulfils this mandate by analysing sources of risk to the financial system and identifying areas where action may be needed. In addition, it helps to create and implement a regulatory framework for the financial sector, and oversees systemically important FMIs.

Focus on crisis prevention

In recent years, there has been a shift in the focus of central banks' activities in the area of financial stability, away from crisis management and towards crisis prevention. To counteract the risks that threaten the stability of the financial system, the SNB has two macroprudential regulatory powers at its disposal, namely the authority to designate banks as systemically important and the authority to propose the activation, adjustment or deactivation of the countercyclical capital buffer (CCyB). While the designation of systemically important banks is focused on combating structural risks, the CCyB is geared towards addressing cyclical risks.

In a crisis, the SNB fulfils its mandate by acting as lender of last resort where necessary. It provides emergency liquidity assistance to domestic banks whose insolvency would have a severe impact on financial system stability in cases where such banks are no longer able to refinance themselves on the market (cf. chapter 2.6).

Collaboration with FINMA, FDF and foreign authorities

At national level, the SNB works closely with the Swiss Financial Market Supervisory Authority (FINMA) and the Federal Department of Finance (FDF) to create a regulatory framework that promotes stability. The SNB addresses the issue mainly from a systemic perspective, and its focus is therefore on the macroprudential aspects of regulation. FINMA, on the other hand, is responsible for the supervision of individual financial institutions and for ensuring that the financial markets function effectively. The principles for this collaboration are set out in two Memoranda of Understanding: one bilateral with FINMA, and the other trilateral with FINMA and the FDF.

At international level, the SNB participates in the design of the regulatory framework through its membership of the Financial Stability Board, the Basel Committee on Banking Supervision, the Committee on Payments and Market Infrastructures and the Committee on the Global Financial System (cf. chapters 7.2.2 and 7.2.3). In the oversight of cross-border FMIs, the SNB liaises closely with FINMA and with foreign authorities.

6.2 MONITORING THE FINANCIAL SYSTEM

Within the context of monitoring the financial system, the SNB analyses developments and risks in the Swiss banking sector. Its assessment is published, in particular, in its annual *Financial Stability Report*.

6.2.1 GLOBALLY ACTIVE BANKS

Well positioned to face challenges of coronavirus crisis

In 2020, the SNB identified significant challenges facing the two globally active Swiss banks, Credit Suisse Group AG (Credit Suisse) and UBS Group AG (UBS), in relation to the economic consequences of the coronavirus pandemic. Nevertheless, it also noted that the two banks were well placed to face these challenges and support the real economy. This favourable situation was attributable in particular to the capital buffers which the two globally active banks had been building up in recent years, in line with the 'too big to fail' (TBTF) regulations. Under its baseline scenario, the SNB expected that credit quality would deteriorate and consequently provisions would increase. Overall, however, the economic impact of the pandemic on Credit Suisse and UBS would likely be limited. Furthermore, the SNB's scenario analysis showed that, thanks to their capital buffers, both banks would also be able to cope with significantly worse developments in the economic environment than assumed under the baseline scenario.

Continued high loss potential and exceptionally high uncertainty

At the same time, the SNB emphasised that the loss potential under stress scenarios at Credit Suisse and UBS remained substantial, with exceptionally high uncertainty concerning the impact of the pandemic on the global economy and thus on the two globally active Swiss banks. The loss potential shows that the capital requirements under the current TBTF regulations are necessary to ensure adequate resilience at both globally active banks.

Developments in resolution

Measures are in place to facilitate recovery or orderly wind-down (resolution) in a crisis where a bank can no longer continue to operate as a going concern (and is thus a 'gone-concern'). FINMA is responsible for bank resolution planning and implementation.

In relation to gone-concern loss-absorbing capacity, the SNB noted that both globally active banks fully meet the requirements at a consolidated level. At the parent company level, the Federal Council's amendment to the Capital Adequacy Ordinance (CAO) will gradually strengthen gone-concern loss-absorbing capacity at globally active banks. The amended CAO entered into force on 1 January 2020 with a transitional period to 1 January 2024 for full implementation.

Gone-concern loss-absorbing capacity alone is not enough for a successful resolution. Globally active banks also need to have sufficient liquidity (funding in resolution). As part of its TBTF evaluation report of July 2019, the Federal Council instructed the FDF, together with FINMA and the SNB, to examine whether current liquidity requirements for systemically important banks are adequate to cover the funding needs in resolution or whether regulatory adjustments are necessary. The analysis showed that the current liquidity requirements for systemically important banks would probably not be sufficient to cover liquidity needs in the event of a resolution. The authorities are therefore reviewing these requirements.

6.2.2 DOMESTICALLY FOCUSED BANKS

Limited overall impact of coronavirus crisis under baseline scenario

As regards the domestically focused banks – whose main activity is deposit and lending business – the SNB recognised that the marked deterioration in the economic outlook likewise posed significant challenges. Under its baseline scenario, the SNB assumed that the pandemic would primarily affect domestically focused banks through higher provisions and write-downs on loans to Swiss corporations. Moreover, the assumption under the baseline scenario was that a persistent period of low interest rates would put increased pressure on interest rate margins at these banks. However, the SNB's analysis indicated that the economic consequences of the pandemic on the domestically focused banks would be limited under the baseline scenario. While some of them could be expected to incur losses, the domestically focused banks would likely remain profitable overall.

As in the case of the globally active banks, the SNB noted that the true extent of the pandemic's impact on domestically focused banks is subject to a high degree of uncertainty. The situation on the domestic mortgage and real estate markets represented an additional risk factor in this connection (cf. chapter 6.3).

Adequate resilience

Given these challenges, the SNB emphasised that the capital buffers held by domestically focused banks were crucial for their robustness. These banks have built up sizeable capital buffers, which significantly exceed regulatory minimum requirements. Furthermore, all domestically focused banks complied with the institution-specific capital buffer target levels set by the CAO. According to the SNB's scenario analysis, these capital buffers would enable the banks to cope with significantly worse developments in the economic environment than are assumed under the baseline scenario. The SNB thus assessed the domestically focused banks' resilience as being adequate.

Domestically focused systemically important banks: loss-absorbing capacity and status of emergency plans

The domestically focused systemically important banks (DF-SIBs) – Zürcher Kantonalbank, the Raiffeisen Group and PostFinance – have to fulfil additional going concern and gone concern requirements under the TBTF regulations. The SNB noted that these three banks are fully compliant with the TBTF going-concern risk-weighted capital and leverage ratio requirements. The gone-concern requirements entered into force in 2019 and are to be phased in by 2026. Like the globally active banks, the DF-SIBs would also be subject to any revised liquidity requirements for systemically important banks (cf. chapter 6.2.1).

In addition to the gone-concern requirements, emergency plans are necessary for the maintenance of systemically important functions in a crisis. FINMA is responsible for the assessment of emergency plans.

6.3 RISKS AND MEASURES RELATING TO MORTGAGE AND REAL ESTATE MARKETS

Developments up to end-2019

In the aftermath of the global financial crisis, vulnerabilities had increasingly built up due to the strong growth in lending volumes and real estate prices. These posed a threat to the stability of the banking system. Measures implemented between 2012 and 2014 helped to counter the further build-up of risks on the mortgage market and on the market for single-family houses and privately owned apartments. By contrast, prices again rose sharply in the residential investment property segment, and affordability risks in newly granted mortgage loans increased from their already high levels. In view of these risks, the Swiss Bankers Association's self-regulation guidelines were tightened in 2019 with respect to mortgage financing for investment properties, and were recognised by FINMA as a minimum standard. The revised self-regulation guidelines came into effect on 1 January 2020.

Deactivation of countercyclical capital buffer in March 2020

The outbreak of the coronavirus pandemic rapidly presented enormous challenges for the Swiss economy, and hence thousands of companies. In this situation of exceptionally high uncertainty, ensuring the supply of credit to the economy became crucially important. In order to give banks maximum latitude for lending, the SNB made a proposal to the Federal Council to deactivate the sectoral countercyclical capital buffer (CCyB). The Federal Council approved this proposal on 27 March. As a result, the CCyB requirement for banks to hold additional capital for mortgage loans financing residential property in Switzerland was reduced from 2% to 0%.

Developments in 2020

The mortgage and real estate markets' vulnerability to shocks persisted in 2020. Mortgage loans as well as transaction prices for residential properties and affordability risks increased further despite the economic downturn. In its communications, the SNB noted that this vulnerability represents an additional risk factor in an environment of heightened uncertainty about future economic developments. Larger declines in income than assumed under the baseline scenario could trigger a price correction in the real estate market. Equally, such declines in income could lead to a materialisation of the historically high affordability risks. The SNB regularly reassesses the need for an adjustment of the CCyB.

6.4 OVERSIGHT OF FINANCIAL MARKET INFRASTRUCTURES

6.4.1 BACKGROUND

Mandate

The NBA (art. 5 and arts. 19–21) requires the SNB to oversee systemically important central counterparties, central securities depositories and payment systems as specified in art. 22 of the Financial Market Infrastructure Act (FinMIA). To this end, the SNB cooperates with FINMA as well as with foreign supervisory and oversight authorities. The National Bank Ordinance (NBO) sets out the details of the oversight of systemically important FMIs.

Focus on systemically important FMIs

The domestic FMIs that could harbour risks for the stability of the financial system currently include the central counterparty SIX x-clear, the central securities depository SIX SIS and the payment system Swiss Interbank Clearing (SIC). These are operated by SIX x-clear Ltd, SIX SIS Ltd and SIX Interbank Clearing Ltd respectively, which are subsidiaries of SIX Group Ltd (SIX).

Other systems that are important for the stability of the Swiss financial system are the Continuous Linked Settlement (CLS) foreign exchange settlement system and the central counterparties London Clearing House (LCH) and Eurex Clearing. The operators of these FMIs are domiciled in the US, the UK and Germany, respectively.

Cooperation with FINMA

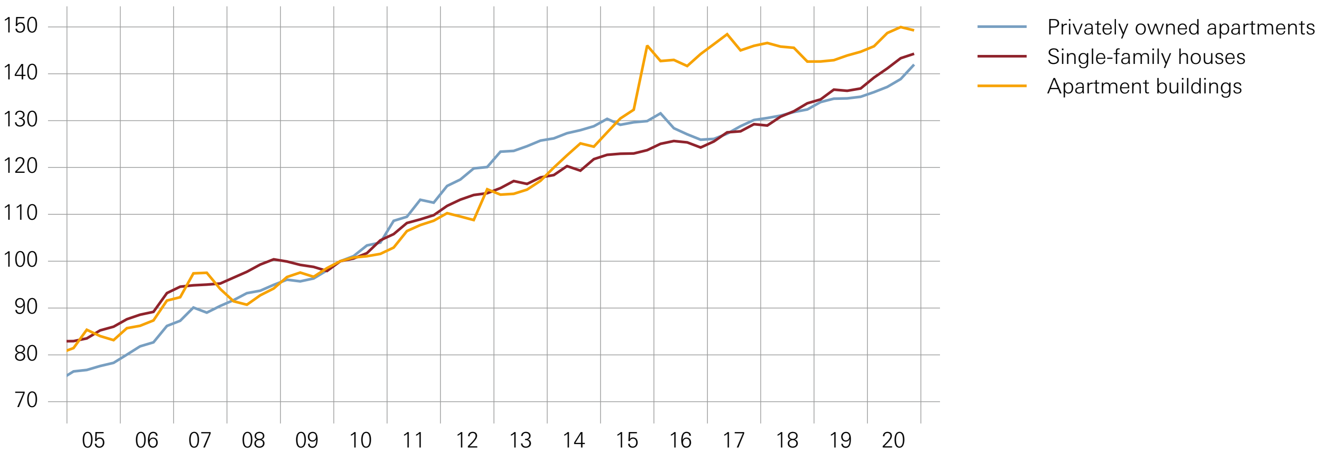
The central counterparty SIX x-clear and the central securities depository SIX SIS are subject both to prudential supervision by FINMA and to oversight by the SNB. Although FINMA and the SNB exercise their supervisory and oversight powers separately, they coordinate their activities. Oversight of the SIC payment system is exclusively the SNB's responsibility.

... and with foreign authorities

For the oversight of Swiss FMIs with cross-border activities, the SNB cooperates with foreign authorities, in particular the European Securities and Markets Authority, the European Central Bank, authorities in the Netherlands, and the Bank of England. For the oversight of FMIs domiciled abroad, namely CLS, Eurex Clearing and LCH, the SNB cooperates with the relevant foreign authorities. The SNB also participates in the oversight of the Belgium-based Society for Worldwide Interbank Financial Telecommunication (SWIFT), which operates a global network for the transmission of financial messages.

REAL ESTATE PRICE INDICES

Transaction prices, nominal, index: Q1 2010 = 100



Source: Wüest Partner

6.4.2 ONGOING OVERSIGHT

Challenges due to coronavirus crisis

The pandemic posed particular challenges to systemically important FMIs in Switzerland. First, the turbulence on the financial markets led to pronounced price volatility and significantly higher transaction volumes, which caused a temporary increase in FMIs' risk positions vis-à-vis their participants. Second, the operational continuity of systemically important business processes had to be guaranteed at all times, even with the introduction of alternative working models. The pandemic also increased the default risk of critical suppliers and service providers. FMIs therefore had to protect themselves against possible supply bottlenecks.

Immediately after the pandemic broke out, the SNB intensified its monitoring of FMIs, particularly with respect to operational challenges and the management of credit and liquidity risk. It noted that FMIs were successfully ensuring the continuous operation of systemically important business processes as well as the timely processing of – at times – very high transaction volumes. Their credit and liquidity risk management models also proved their worth during the turbulence on the financial markets. Systemically important FMIs thus made an important contribution to financial stability.

Assessing compliance with special requirements

Based on their ongoing supervision and oversight activities, FINMA and the SNB issue annual statements regarding systemically important FMIs' compliance with regulatory requirements. While FINMA addresses compliance with the general requirements of the FinMIA, the SNB addresses compliance with the special requirements of the NBO.

In its assessment, the SNB did not cite any special requirements with which the FMIs had failed to comply. Where it had identified a need for action in the previous year with regard to liquidity risk management, SIX SIS and SIX x-clear were able to take appropriate measures. In particular, they were granted access in 2020 to an adapted form of the liquidity-shortage financing facility for obtaining Swiss franc liquidity against collateral (cf. chapter 2.3).

In its statements, the SNB set out expectations to be taken into consideration by FMIs in the ongoing development of their services and risk management tools in order to ensure continued compliance with the special requirements. For instance, the SNB called on SIX SIS and SIX x-clear to organise an independent review of their technical implementation of liquidity stress test calculations and to analyse the impact of upcoming collateral management optimisation efforts on their liquidity risk management. In addition, the SNB urged SIX x-clear to arrange third-party testing of its stress scenarios for credit risk management. Finally, the SNB stipulated that SIX Interbank Clearing Ltd should update its guidelines and recovery plan.

Precautions against cyberattacks

The threat posed by cybersecurity risks and combating such risks continues to be highly relevant for FMIs. A successful cyberattack can, for example, affect the availability of systemically important business processes or compromise data integrity. This leads to an interruption in business processes, which can only be resumed after the FMI has reconciled the data with its participants and verified the data's accuracy. The SNB therefore expects FMIs to coordinate their business continuity plans and the measures contained therein with their participants and to test them regularly on a cross-institutional basis.

SIX took part in the 'Financial Sector Information Sharing and Analysis Centre' (FS-ISAC) project launched in 2020 under the direction of the National Cyber Security Centre (NCSC) (cf. chapter 6.5). Further, it proceeded with its programme to improve information security and strengthen its cyber resilience. Besides implementing various protective measures, SIX also carried out specific tests that use the tools and techniques deployed by cyberattackers in order to assess the security of system components as well as network and software applications. These tests make it possible to identify technical and organisational vulnerabilities and to establish further protective measures.

Monitoring major projects

The SNB maintains a regular dialogue with the operators of the FMIs subject to oversight in which it discusses projects and initiatives that could impact the FMIs' business activities or risk profile – and hence their ability to meet the special requirements.

Acquisition of BME by SIX

In 2020 the SNB addressed the acquisition by SIX of a controlling stake in the Spanish stock market (Bolsas y Mercados Españoles, BME). It focused in particular on clarifying regulatory and supervisory questions raised by the integration of SIX and BME for systemically important FMIs.

… and innovations in SIC system

As in the previous year, the SNB dealt with SIX x-clear's planned introduction of a new clearing platform and its impact on risk management and information security. Furthermore, it looked at the 'SIC5' and 'Secure Swiss Finance Network' (SSFN) projects launched in 2020 which aimed at making functional and technical enhancements to the SIC system (cf. chapter 4.2). The objective of the SIC5 project is to facilitate the instant settlement of cashless retail payments via the SIC system on a 24/7 basis. The SSFN project aims to build a new communication network between SIC participants to further improve protection against cyber risks. Both projects will run over several years.

6.4.3 ASSESSMENT OF SYSTEMIC IMPORTANCE OF FMIs

Authorisation procedure for new Swiss FMIs

Central counterparties, central securities depositories and payment systems which apply for a licence from FINMA are assessed by the SNB for their systemic importance pursuant to art. 22 para. 1 FinMIA. To conduct such an assessment, the SNB considers the impact of an FMI on the stability of the Swiss financial system. FINMA passed on to the SNB licensing applications from SIX Digital Exchange Ltd and Diem Networks Ltd.

SIX Digital Exchange

SIX Digital Exchange Ltd (SDX) submitted a licensing application to FINMA in April to operate a central securities depository pursuant to art. 61 FinMIA. SDX plans to launch a trading platform in 2021 with integrated settlement and custody infrastructure for tokenised assets based on distributed ledger technology (DLT). SDX participants will use stablecoins to conduct the settlement of the cash leg of financial market transactions, backed in full by sight deposits at the SNB.

The SNB classified SDX as a non-systemically important central securities depository due, in particular, to expected low transaction volumes. It will closely monitor developments at SDX and review its assessment on a regular basis.

Diem Networks Ltd (formerly Libra Networks Ltd) submitted a licensing application to FINMA to operate the payment system Diem Payment Network (formerly Libra Payment Network). Based on DLT, this payment system is integrated into a multidimensional structure allowing end customers to settle payments worldwide. Cryptocurrencies, whose value is to be kept stable through the posting of collateral (single-currency stablecoins), serve as the means of payment. As at the end of 2020, the SNB had not concluded its assessment of Diem Payment Network's systemic importance.

Diem Payment Network

6.5 FINANCIAL SECTOR CYBERSECURITY

Importance of cybersecurity for financial sector

Failures of – and disruptions to – IT systems, particularly those resulting from cyberincidents, can severely jeopardise the availability, integrity and confidentiality of data as well as critical services and functions within the financial system. It is first and foremost the responsibility of the individual financial institutions to adequately protect themselves against cyber risks. However, due to the highly interconnected nature of the financial system and the various cross-institutional processes, sector-wide precautions and measures are also necessary. This calls for, on the one hand, close cooperation between the private stakeholders. On the other, the authorities – notably the federal government, FINMA and the SNB – also contribute to the cybersecurity of the financial sector within the scope of their respective mandates.

Institutionalised cooperation between financial institutions and authorities

In Switzerland, the National Cyber Security Centre (NCSC), which is attached to the FDF, is responsible for the coordinated implementation of the national strategy for the protection of Switzerland against cyber risks. The SNB is participating in the 'Financial Sector Information Sharing and Analysis Centre' (FS-ISAC) project launched in 2020 under the direction of the NCSC. The FS-ISAC is being set up to promote institutionalised cooperation between the private sector (banks, insurance companies, FMIs, industry associations) and the authorities (FDF, FINMA, SNB) in strategic and operational matters relating to cybersecurity. The scope of activities will focus on the exchange of information, the identification and implementation of sector-wide prevention and protection measures, as well as crisis management. In the year under review, the focus was on developing the conceptual principles underpinning the FS-ISAC, which is scheduled to start operating in 2021.

Sector-wide measures to improve cybersecurity

The SNB conducts or takes part in projects aimed at improving cybersecurity on a sector-wide basis, particularly in the area of cashless payments. In 2020, two undertakings were at the forefront: the Secure Swiss Finance Network (SSFN) and the Endpoint Security project. The SNB pursued these projects in its role as commissioning party and system manager of the SIC payment system (cf. chapter 4.2).

7 Participation in international monetary cooperation

7.1 BACKGROUND

Mandate

The Swiss National Bank participates in international monetary cooperation. For this purpose, it works jointly with the Federal Council (art. 5 para. 3 National Bank Act). The objective of international monetary cooperation is to promote the functioning and stability of the international monetary and financial system and help overcome crises. As a globally integrated economy with a major financial centre and its own currency, Switzerland derives particular benefit from a stable international monetary and financial system.

Forms of international monetary cooperation

The SNB is involved in international monetary cooperation through its participation in multilateral institutions and forums, namely the International Monetary Fund (IMF), the Bank for International Settlements (BIS), the Financial Stability Board (FSB), the Organisation for Economic Co-operation and Development (OECD), the Central Banks and Supervisors Network for Greening the Financial System (NGFS), and the G20 Finance Track, the latter at the invitation of the G20 presidency. Participation in the IMF, FSB, OECD and the Finance Track is in cooperation with the Confederation and, in the case of the FSB, also with the Swiss Financial Market Supervisory Authority (FINMA). Furthermore, the SNB cooperates with the Confederation in providing international monetary assistance. It also cooperates on a bilateral level with other central banks and authorities. As part of this bilateral cooperation, the SNB provides technical assistance to central banks – mainly those from the group of countries with which Switzerland forms a constituency at the IMF.

International monetary cooperation during the coronavirus crisis

The coronavirus crisis had a decisive impact on the SNB's international monetary cooperation in 2020. The scale of the pandemic, and of the ensuing containment measures, caused a global economic downturn, by which many developing countries and emerging economies were particularly hard hit. The IMF played a central role in the crisis from the outset by providing support for its member countries. This led in particular to the IMF granting a historically large number of emergency loans. Together with the Federal Department of Finance, the SNB prepared Switzerland's statements for discussions concerning such loans, as well as financing capabilities and the adaptation of IMF credit instruments, on the Executive Board.

The coronavirus crisis also significantly affected the SNB's practical cooperation with the IMF and other multilateral institutions, central banks and foreign authorities. Digital communication channels proved to be key in maintaining international relations under difficult circumstances. Thus, for example, it was possible to swiftly conceive and implement central bank action to enhance the global provision of US dollar liquidity in March 2020 (cf. chapter 2.5).

7.2 MULTILATERAL COOPERATION

7.2.1 INTERNATIONAL MONETARY FUND

Participation in IMF

The SNB contributes to IMF activities and decisions in collaboration with the Confederation. The IMF is the central institution for international monetary cooperation. It promotes the stability of the global monetary and financial system as well as the economic stability of its 190 member countries. Its main fields of activity are economic policy surveillance, the provision of financial support to countries facing balance of payments difficulties, and technical assistance. Switzerland exercises its influence through its representation on the Board of Governors, in the International Monetary and Financial Committee (IMFC), and on the Executive Board.

Coronavirus crisis as challenge for global economic policy

The focus of the IMF's work in 2020 was on managing the global economic downturn triggered by the pandemic and the related containment measures. The IMF reacted swiftly in the spring, granting financial assistance to numerous emerging economies and low-income countries to cushion the impact. A decision had already been taken to modify the New Arrangements to Borrow (NAB) at the beginning of 2020 to ensure that the IMF had sufficient financial means; the NAB resources were doubled as a result. The spring also saw a decision to renew the temporary bilateral borrowing agreements and to initiate a new round of loans to the IMF's Poverty Reduction and Growth Trust (PRGT).

Switzerland participated in all three measures. It doubled its contributions under the modified NAB, renewed its bilateral borrowing agreement and granted the PRGT a new loan. Looking ahead to the phase of normalisation, Switzerland noted the vital importance of supporting countries as they formulate their reform plans over the longer term and build good governance.

Marked increase in regular IMF lending

The coronavirus crisis led to a marked increase in regular lending by the IMF, i.e. lending financed via its General Resources Account. Total loan commitments rose from SDR 139.5 billion at the end of February to SDR 184 billion at end-2020. In particular, the Executive Board granted numerous emergency loans totalling around SDR 15 billion under the existing – but hitherto little-used – Rapid Financing Instrument. Several comprehensive new programmes or expansions of existing programmes were also approved in the form of Stand-By Arrangements or Extended Arrangements, as well as new commitments in the form of Flexible Credit Lines.

Switzerland in the IMF

Switzerland is jointly represented in the IMF by the Federal Department of Finance (FDF) and the SNB. The Chairman of the SNB's Governing Board represents Switzerland on the Board of Governors, the IMF's highest decision-making body. The Head of the FDF is one of the 24 members of the IMFC, the IMF's steering committee. Switzerland is part of a voting group (constituency) whose other members are Azerbaijan, Kazakhstan, the Kyrgyz Republic, Poland, Serbia, Tajikistan, Turkmenistan and Uzbekistan. Switzerland and Poland alternate in appointing the constituency's executive director, for two years each time, the latter representing the group as one of the 24 members on the Executive Board, the IMF's most important operational body. The post of Swiss executive director is held alternately by a representative of the FDF and the SNB. The FDF and the SNB determine Switzerland's policy in the IMF and support the constituency's executive director in his or her activities.

Special Drawing Right

The Special Drawing Right (SDR) is an international reserve currency which the IMF introduced in 1969. The IMF uses the SDR as a means of payment and unit of account for its financial transactions with member countries. It creates SDRs as needed and allocates them to member countries in proportion to their quotas. Through voluntary trading arrangements with a number of member countries, including Switzerland, the IMF ensures that the exchange of SDRs for currency reserves functions smoothly. The value of the SDR is based on a basket of currencies, which the IMF regularly reviews. The currencies in the basket are the US dollar, the euro, the renminbi, the yen and the pound sterling. At the end of 2020, one SDR was equivalent to CHF 1.28 or USD 1.44.

Ensuring IMF financing and Review of Quotas

The IMF mainly finances its regular lending through member country quotas (cf. box 'Quota'). If necessary, the NAB resources can be activated as a second line of defence. Temporary bilateral borrowing agreements serve as a third line of defence for the IMF.

Since the IMF members had been unable to reach an agreement on an increase in quotas as part of the 15th General Review of Quotas, the IMF Executive Board and the NAB participants approved a modification to the NAB at the beginning of 2020 which doubled the NAB resources. Once the creditor nations had ratified it, the reform came into effect as planned on 1 January 2021. Moreover, the IMF Executive Board decided in March to renew the temporary bilateral borrowing agreements on a reduced scale in order to ensure that the available IMF financial resources do not fall below current levels. This was particularly significant in view of the sharp increase in demand for IMF loans due to the coronavirus crisis. Furthermore, the IMF members underscored their intention to conclude the 16th General Review of Quotas by December of 2023. As with previous such reviews, the central issues are the scale of the quota increase and potential adjustments to the quota formula.

Switzerland reaffirms its commitment to a strong, quota-based and adequately resourced IMF. It contributed both to doubling the NAB and to renewing the temporary bilateral borrowing agreements.

Quota
When a country joins the IMF, it is assigned a quota based broadly on its relative position in the world economy. GDP, economic and financial openness, the variability of trade and capital flows, and the level of reserves are all used in the formula to calculate a member's quota. Members' quotas are reviewed at regular intervals and adjusted as required. The quota fulfils three important functions. First, a member's quota determines the maximum amount of financial resources which the member is obliged to provide to the IMF if required. Second, the quota is used in determining a member's voting power in IMF decisions. Third, the amount of financing a member can obtain from the IMF is based on its quota.

IMF lending capacity

At the beginning of 2021, the IMF had SDR 154 billion of resources available for new loan commitments under the quota. Under the NAB, which were modified on 1 January 2021, a further SDR 361 billion could have been activated. New temporary bilateral borrowing agreements totalling SDR 128 billion served as a third line of defence for the IMF.

Swiss contribution to IMF financing

At the end of 2020, Switzerland's commitment to financing the IMF's regular lending, under the framework of Switzerland's quota, under the NAB, and under the bilateral borrowing agreement, amounted to a maximum of CHF 23 billion (cf. table 'The SNB's financial commitment to the IMF'). The SNB finances these amounts, with loans granted under the bilateral borrowing agreement being guaranteed by the Confederation. The SNB's maximum commitment amounted to CHF 7.4 billion under the quota, CHF 7.1 billion under the NAB, and CHF 8.5 billion under the bilateral credit line. At the end of 2020, the IMF had drawn a total of CHF 1.85 billion under the quota and previous activations of the NAB. With the entry into force of the modified NAB and the renewed bilateral borrowing agreement on 1 January 2021, Switzerland's maximum commitment increased by CHF 2.3 billion. Its commitment under the NAB doubled to CHF 14.2 billion, while that under the bilateral agreement was reduced by CHF 4.8 billion to CHF 3.7 billion.

Sharp increase in concessional lending

In low-income countries, the IMF provides concessional lending arrangements, which it finances via the PRGT. The pandemic caused demand for such loans to increase sharply. The IMF's total commitments via the PRGT rose accordingly, from SDR 9 billion at the end of February to SDR 14.5 billion at the end of the year. The main driver behind this increase was the IMF's concessional emergency lending to over 40 countries.

Mobilisation of lending resources for PRGT and SNB's new loan

In April, to finance the sharp increase in demand for loans, the IMF launched a new round of fundraising for the swift mobilisation of lending resources for the PRGT. The aim, an increase of at least SDR 12.5 billion, was achieved. In the course of the new financing round, Switzerland, too, made a further loan available to the IMF, in the amount of SDR 500 million. Switzerland's loans to the PRGT are granted by the SNB and guaranteed by the Confederation. The interest subsidies are financed by the Confederation. At the end of 2020, CHF 819 million in loans were outstanding under previous borrowing agreements, and the maximum IMF drawdown still available was CHF 463 million. With the new borrowing agreement, which entered into force on 1 January 2021, the maximum drawdown increased by SDR 500 million.

THE SNB'S FINANCIAL COMMITMENT TO THE IMF

In CHF billions

		End-2020
	Maximum	Drawn down
Reserve position[1]		1.849
Quota	7.396	1.545
NAB	7.101	0.304
Bilateral borrowing agreement[2]	8.500	0.000
PRGT[2]	1.282	0.819
SDR[3]	2.107	0.150

1 The used portion of the Swiss quota and the amount drawn by the IMF under the NAB and the bilateral borrowing agreement together equal Switzerland's reserve position in the IMF. This reserve position represents a liquid asset of the SNB vis-à-vis the IMF and thus forms part of the currency reserves.
2 With federal guarantee.
3 As part of the voluntary trading arrangement with the IMF, the SNB has committed itself to purchasing (+) or selling (–) SDRs against foreign currencies (USD, EUR) up to the agreed maximum of SDR 1.644 billion (CHF 2.107 billion).

Article IV consultation

As part of its Article IV consultations, the IMF regularly reviews the economic policies of its member countries. Once the coronavirus crisis was underway, the IMF focused its activities on emergency lending and suspended all Article IV consultations. This also affected the Article IV consultation with Switzerland planned for spring 2020. The next consultation is scheduled to take place in March 2021 in virtual form.

7.2.2 BANK FOR INTERNATIONAL SETTLEMENTS

BIS as bank and forum for central banks

The Bank for International Settlements (BIS) is an international organisation headquartered in Basel. It fosters international monetary and financial cooperation and serves as a bank and forum for central banks. The SNB has held one of the seats on the Board of Directors since the BIS was founded in 1930.

The governors of member central banks convene every two months to discuss developments in the global economy and the international financial system, and also to guide and oversee the work of the standing committees. The SNB also participates in the four standing committees of the BIS: the Basel Committee on Banking Supervision, the Committee on Payments and Market Infrastructures, the Committee on the Global Financial System, and the Markets Committee.

Report of working group on central bank digital currency

In January 2020, the SNB announced that it had joined the Bank of Canada, the Bank of Japan, the Bank of England, the European Central Bank, the Sveriges Riksbank and the BIS in creating a working group to discuss experiences evaluating the implementability of central bank digital currency (CBDC). The working group published a report in October, in which the US Federal Reserve also participated. The report outlined the basic principles and main features of a publicly accessible CBDC, without however making a recommendation on the potential introduction of central bank digital currency. The group of seven central banks will continue to explore the feasibility of CBDCs without committing themselves to a decision on issuance.

BIS Innovation Hub and projects at the Swiss Centre
The BIS Innovation Hub was established in 2019 and maintains centres in Switzerland, Hong Kong and Singapore. In June 2020, the BIS Board of Directors decided to expand the Hub with four further Centres, in London, Frankfurt/Paris, Stockholm and Toronto, respectively. In addition, a strategic partnership was established with the Federal Reserve Bank of New York. The Hub's aim is to gain in-depth insights into relevant technological developments affecting central banking, and to develop public goods in the technology space geared towards further improving the functioning of the global financial system. In 2020, eight employees of the BIS and SNB commenced their activities at the BIS Innovation Hub Swiss Centre, with offices in Basel and Zurich. Work proceeded on two projects in the past year.

Project Helvetia involves collaboration between the SNB, the BIS and SIX Group Ltd. The focus is on the integration of central bank digital currency into a financial market infrastructure for the settlement of digital (tokenised) assets based on distributed ledger technology (DLT). Two approaches were investigated and tested in proof-of-concept studies. The first approach involved the issuance by central banks of digital assets (central bank tokens) that financial institutions can use for payment purposes – a so-called wholesale central bank digital currency (wholesale CBDC) – onto a DLT financial market infrastructure. The second approach involved the establishment of an interface between the DLT-based financial market infrastructure and the Swiss Interbank Clearing payment system. The report, which appeared in December 2020, indicates that both approaches are technically feasible and can be implemented under civil law within Switzerland's legal framework. The project also highlighted advantages and disadvantages of the two approaches, to be analysed in more detail in a second phase. Furthermore, the project will be expanded to include the integration of wholesale CBDC into the accounting systems of banks and the SNB, as well as the cross-border context. This phase of the project, too, serves exclusively to develop a better understanding of central bank digital currency for financial institutions and to gather relevant experience.

Project Rio is developing a prototype data architecture for monitoring fast-paced markets. In recent decades, new technologies have sharply accelerated the pace of trading, for example on foreign exchange markets. Trading is also increasingly fragmented, i.e. takes place on ever more platforms in parallel. This poses a challenge to central banks when it comes to tracking these developments in such fast-paced markets. The prototype developed at the Swiss Centre should enable the rapid market movements and large volumes of data emanating from various trading centres to be processed in real time. This will provide central banks with an instrument for monitoring and analysing trading conditions. The project's initial findings are expected in the course of 2021.

Basel Committee on Banking Supervision

The Basel Committee on Banking Supervision (BCBS) brings together high-ranking representatives of banking supervisory authorities and central banks. It issues recommendations and sets international standards in the area of banking supervision.

In 2020, the BCBS focused on monitoring the consequences of the coronavirus crisis for the banking sector as well as on implementing and reviewing the effectiveness of the regulatory standards. As the pandemic set in, the BCBS stepped up its ongoing monitoring of risk development. It extended the deadline for implementation of the Basel III reform package by one year, to 1 January 2023, to free up additional resources for crisis management on the part of the authorities as well as the banks. Amid the uncertainty concerning further developments, it reiterated guidance on the capital and liquidity buffers available to banks in times of stress. These buffers are intended to allow banks to bridge extraordinary losses or liquidity bottlenecks themselves, thereby minimising the impact of such developments on lending and other relevant functions. In addition to crisis management, the BCBS continued its work on the regulatory treatment of cryptoassets and accounting for climate-related financial risks.

The Committee on Payments and Market Infrastructures (CPMI) promotes the safety and efficiency of cashless payment arrangements and market infrastructures via which financial market transactions are cleared or settled.

Committee on Payments and Market Infrastructures

In 2020, the CPMI focused on three key areas. First, it made conceptual and technical contributions to the development of a plan of action, coordinated by the FSB, aimed at globally improving cross-border payments. Second, it addressed various innovations in the area of payments, particularly those involving digital currencies and stablecoins. Third, it continued its efforts to increase the operational resilience of financial market infrastructures to mounting cyber risks.

The Committee on the Global Financial System (CGFS) monitors developments in international financial markets and analyses their impact on financial stability.

Committee on the Global Financial System

In 2020, the CGFS addressed the impact of the pandemic on financial stability. The focus was on potential cliff effects caused by the suspension of support measures, the resilience of the banking sector, and the financial requirements of small and medium-sized enterprises. In addition to this, the Committee published two reports. The first report examines global property price dynamics and emphasises the growing role of international investors in many markets. The second report analyses the role of US dollar funding in the global financial system. Although the widespread use of the US dollar has benefits, the resulting interconnectedness of the market also leads to risks.

The Markets Committee (MC) examines current developments in the money, foreign exchange, capital and commodity markets, as well as the functioning of these markets.

Markets Committee

In 2020, the MC principally addressed the impact of the coronavirus crisis and the measures taken by central banks to combat it. It focused on the issue of how these measures affect the functioning of financial markets. In addition, the MC published a report in October on ‘FX execution algorithms and market functioning’, prepared by a working group led by the SNB. The reform of reference interest rates remained a key issue, in particular the impact of replacing Libor.

7.2.3 FINANCIAL STABILITY BOARD

Swiss representation on FSB

The FSB brings together national authorities responsible for financial stability (central banks, supervisory authorities and finance ministries), international organisations, and standard-setting bodies. Switzerland’s representation on the FSB is shared between the FDF, the SNB and FINMA. The SNB is a member of the Steering Committee, the Plenary, and the Standing Committee on Assessment of Vulnerabilities. Since November 2020, the SNB has chaired the Standing Committee on Budget and Resources.

Risks in financial system

The FSB addresses risks in the financial system and coordinates precautions to counter such risks. The focus in 2020 was on the impact of the pandemic on the global financial system. In this regard, the FSB published a report on the global market turbulence in March and the associated liquidity bottlenecks. The turbulence was caused mainly by money market funds and other non-banks in the financial system; risks in the non-banking sector are thus to be more closely examined and potential regulatory approaches identified.

Improvement of cross-border payments

A major focus of the FSB’s work was the improvement of cross-border payments. In close cooperation with the CPMI at the BIS, the FSB developed a plan of action to make cross-border payments quicker, cheaper, more transparent and more accessible. The proposed measures aim at standardising regulatory requirements and improving existing payment systems while also reviewing the potential use of new technologies.

In 2017, the FSB approved a framework for evaluating the advantages and possible unintended consequences of regulatory reforms. Since then, regular evaluation studies have been carried out. In 2020, the FSB completed a consultation report on the evaluation study started in 2019 on the effects of the 'too big to fail' reforms. The study, in which the SNB played a part, concludes that the reforms have made systemically important banks substantially more resilient, and that the benefits of these reforms significantly outweigh the costs. It does, however, identify gaps in the implementation of the planned reforms, particularly in the area of resolvability. The final report on this evaluation study is due to be published in 2021.

Impact of 'too big to fail' reforms

In 2020, the FSB considered the possible effects of stablecoins and regulatory approaches in this field. Stablecoins are privately issued digital assets for payment purposes (payment tokens) whose value is to be kept stable relative to specific assets or state currencies by means of a stabilisation mechanism. The working group charged with this study, in which the SNB was represented, drew up recommendations for the regulation, supervision and oversight of stablecoins, to be implemented under the principle of 'same business, same risks, same rules'. A key aspect is international cooperation, since stablecoins also have cross-border impact.

Regulatory approaches for stablecoins

7.2.4 OECD

Participation

Switzerland is a founding member of the Organisation for Economic Co-operation and Development (OECD). It works in the organisation's intergovernmental committees to maintain and develop relations among the 37 member countries with regard to economic, social and development policies. Together with the Confederation, the SNB represents Switzerland on the Economic Policy Committee (EPC), the Committee on Financial Markets (CMF), and the Committee on Statistics and Statistical Policy (CSSP). The EPC and its working groups deal with developments in the global economy as well as with structural policy. The CMF analyses developments in the international financial markets and examines regulatory issues. The CSSP drafts standards for the national accounts in coordination with other international organisations.

OECD recommendations for Switzerland

The OECD's *Economic Outlook* report, which is published biannually, contains economic policy recommendations and macroeconomic assessments for every member country. In the autumn 2020 edition, the OECD advised the SNB to extend the SNB COVID-19 refinancing facility if necessary, in order to support the banks in their lending to companies experiencing liquidity bottlenecks due to the pandemic.

7.2.5 G20

Switzerland's participation in Finance Track

The G20 comprises the twenty leading advanced and emerging economies and is a key forum for international cooperation on financial and economic issues. In recent years, Switzerland has been invited to participate in the meetings of the G20 finance ministers and central bank governors, known as the Finance Track. These meetings focus on economic, monetary, and financial issues. It has also been involved in the preparatory meetings at deputy level and in the working groups. Swiss interests are represented jointly by the Confederation and the SNB.

Priorities in 2020 and invitation for 2021

In 2020, Saudi Arabia held the G20 presidency. For the first time, Switzerland was invited as a guest to take part in all other activities of the Group in addition to the Finance Track. These comprise the Leaders Summits, the Meetings of Finance Ministers and Central Bank Governors, and the working groups. In the Finance Track, Saudi Arabia set the focus, among other things, on the challenges of the pandemic for the world economy, the global response to it, and debt relief for the poorest countries. Switzerland supported the Saudi agenda. Italy will hold the G20 presidency in 2021, and Switzerland has again been invited to the Finance Track.

7.2.6 NETWORK FOR GREENING THE FINANCIAL SYSTEM

Climate and environment-related risks for financial system

The Central Banks and Supervisors Network for Greening the Financial System (NGFS) is a network of central banks and supervisory authorities launched in December 2017 during the Paris One Planet Summit. It serves as a forum in which participating institutions can discuss the risks climate change poses to the economy and the financial system. Within the framework of the NGFS, institutions are examining how best to counter such risks and fund the transition to more sustainable economic activity. The SNB and FINMA are both represented in the NGFS Plenary.

In 2020, the SNB engaged in dialogue in the NGFS so as to better gauge the potential impact of climate risks on macroeconomic developments and financial stability. The SNB took part in three of the five NGFS working groups – 'Macrofinancial', 'Scaling up Green Finance' and 'Research' – in which it focused among other things on scenario analysis of climate risks and on the coordination of relevant research among central banks.

SNB participation

7.3 BILATERAL COOPERATION

7.3.1 MONETARY ASSISTANCE

Principles

The division of responsibilities between the SNB and the Confederation regarding the granting of monetary assistance loans is specified in the Monetary Assistance Act of 19 March 2004. The Federal Council may instruct the SNB to grant loans or guarantees aimed at preventing or remedying serious disruptions in the international monetary system. A credit line amounting to CHF 10 billion has been established for such an eventuality. The SNB can also contribute to special funds or other IMF facilities, or grant bilateral monetary assistance loans to individual countries. The Confederation can request that the SNB grant a loan. In return, the Confederation guarantees the SNB the interest payments and principal repayment on the loan in all of the above cases.

Lending to National Bank of Ukraine

In April 2016, at the instruction of the Confederation, the SNB concluded a loan agreement with the National Bank of Ukraine for a maximum amount of USD 200 million. The Confederation guarantees the SNB timely reimbursement and interest payments on the loan. Under the terms of the loan agreement, the disbursement is to be made in stages based on the payout of tranches under the IMF Extended Fund Facility of 2015, to whose implementation the loan is tied. The first tranche was disbursed at the beginning of March 2017. Following the replacement of the facility with a Stand-by Arrangement at the end of December 2018, no further tranches have been disbursed.

7.3.2 COOPERATION WITH OTHER CENTRAL BANKS AND FOREIGN AUTHORITIES

The SNB cultivates regular bilateral contacts with other central banks and foreign authorities. This includes the SNB's exchanges with other central banks on matters relating to international monetary cooperation and the financial dialogues it engages in with other countries. These dialogues serve to strengthen the contacts with key partner countries and provide a platform for sharing views on financial topics. They are led by the State Secretariat for International Finance (SIF) in liaison with various federal institutions and associated enterprises.

7.3.3 US TREASURY

US Treasury report

In the December 2020 edition of a regularly published report on the foreign exchange policies of major trading partners of the United States, the US Treasury designated Switzerland a currency manipulator. The Swiss authorities and the SNB rejected the accusation of currency manipulation. The SNB's foreign exchange market interventions are necessary to ensure appropriate monetary conditions and thus price stability. They do not serve the purpose of preventing balance of payments adjustments or gaining unfair competitive advantages for the Swiss economy. The Swiss authorities indicated their willingness to explain Switzerland's special situation to the US Treasury.

7.3.4 PRINCIPALITY OF LIECHTENSTEIN

Currency treaty and cooperation

Switzerland and the Principality of Liechtenstein concluded a Currency Treaty in 1980. Prior to this, there had already been a de facto currency union between the two countries for nearly 60 years, albeit not based on a treaty. Under the Currency Treaty, the Swiss franc became legal tender in Liechtenstein, and the SNB became the country's central bank. As a result, certain Swiss legal and administrative regulations relating to monetary policy are applicable in Liechtenstein, in particular the National Bank Act and the National Bank Ordinance. The SNB has the same powers in respect of banks and other persons and entities in the Principality of Liechtenstein as it does in respect of banks, persons and entities domiciled in Switzerland. It cooperates closely with the relevant authorities in Liechtenstein.

7.3.5 TECHNICAL ASSISTANCE

Principles

The SNB provides technical assistance to other central banks upon request. This assistance comprises the transfer of central bank know-how, generally via individual consultations with SNB experts, either at the central bank concerned or in Switzerland. The SNB's technical assistance is primarily oriented towards the countries of Central Asia and the Caucasus that are members of Switzerland's constituency at the IMF and the World Bank.

Activities in 2020

Technical assistance in 2020 was shaped by the coronavirus pandemic, which sharply limited the possibilities for cooperation from March onwards. Some bilateral projects could, however, be successfully implemented, in part by virtual means rather than locally. For example, SNB economists advised the central banks of Tajikistan and Uzbekistan on monetary policy analysis. It was also possible to continue providing the Central Bank of Azerbaijan with support in managing currency reserves, in cooperation with the State Secretariat for Economic Affairs (SECO) and the Geneva-based Graduate Institute of International and Development Studies. In addition, SNB experts took part in IMF missions in Georgia and Uganda to support the central banks in those countries in their implementation of monetary policy. SNB experts participated virtually in a further IMF mission for the Central Bank of Tunisia.

Central Bankers Courses at Study Center Gerzensee

The SNB has been running the Study Center Gerzensee since 1984. It serves as a hub for both academic research and training for central bankers. In view of the pandemic, only one of six such planned courses could be held in 2020.

8 Banking services for the Confederation

Mandate

The Swiss National Bank provides banking services to the Swiss Confederation (art. 5 para. 4 and art. 11 National Bank Act).

Remuneration for banking services

The SNB provides these banking services to the Confederation in return for adequate remuneration. However, they are offered free of charge if they facilitate the implementation of monetary policy. Services subject to remuneration comprise account management, payment transactions, liquidity management, the custody of securities, and the issuance of money market debt register claims (MMDRCs) and Confederation bonds on behalf of and for the account of the Confederation. Details of the services to be provided and the remuneration are laid down in an agreement concluded between the Confederation and the SNB.

Issuing activities

In 2020, the measures to cushion the economic consequences of the coronavirus pandemic raised the Confederation's short-term financing needs. As a result, MMDRCs amounting to CHF 200.9 billion were subscribed (2019: CHF 106.5 billion), of which CHF 40.7 billion was allocated (2019: CHF 21.0 billion). The corresponding figures for Confederation bonds were CHF 6.1 billion (2019: CHF 3.4 billion) and CHF 3.8 billion (2019: CHF 2.1 billion) respectively. The SNB issued the MMDRCs and Confederation bonds by auction.

Negative MMDRC yields

In an environment of persistently low interest rates, money market rates remained low. Yields on MMDRCs thus stayed in negative territory. Taken over the whole year, yields on three-month issues ranged from –0.71% to –0.98%. The lowest yield was therefore practically on the same level as in the previous year.

Account management and payment transactions

The SNB keeps sight deposit accounts in Swiss francs and foreign currencies for the Confederation. At year-end, liabilities towards the Confederation amounted to CHF 13.8 billion, compared to CHF 23.5 billion at the end of 2019. The Confederation's sight deposit accounts at the SNB are exempted from negative interest and thus do not bear interest. The SNB carried out roughly 160,000 payments in Swiss francs (2019: 158,000) and approximately 22,000 payments in foreign currencies (2019: 29,000) on behalf of the Confederation.

9 Statistics

9.1 BACKGROUND

Purpose of activities in field of statistics

On the basis of art. 14 of the National Bank Act (NBA), the Swiss National Bank collects the statistical data it requires to perform its statutory tasks. It collects data for the conduct of monetary policy and the oversight of financial market infrastructures (FMIs), for safeguarding the stability of the financial system and for preparing both the balance of payments and the statistics on the international investment position. Statistical data compiled for purposes relating to international monetary cooperation are transmitted to international organisations. The National Bank Ordinance (NBO) lays down the details of the SNB's activities in the field of statistics.

Reporting institutions

Banks, FMIs, securities firms and authorised parties in accordance with art. 13 para. 2 of the Collective Investment Schemes Act are required to provide the SNB with figures on their activities (art. 15 NBA). The SNB may also collect statistical data from other private individuals or legal entities where this is necessary to analyse developments in the financial markets, obtain an overview of payment transactions or prepare the balance of payments or the statistics on Switzerland's international investment position. This applies in particular to entities for the issuing of payment instruments or for the processing, clearing and settlement of payment transactions, insurance companies, occupational pension institutions, and investment and holding companies.

Survey activity kept to minimum

The SNB limits the number and type of surveys to what is strictly necessary. It seeks to minimise the demands placed on reporting institutions.

Confidentiality and exchange of data

Under art. 16 NBA, the SNB is required to ensure the confidentiality of the data it collects and may only publish them in aggregated form. However, the data may be supplied to the relevant Swiss financial market supervisory authorities.

9.2 PRODUCTS

Surveys and statistics

The SNB conducts statistical surveys in the areas of banking statistics, collective investment statistics, the balance of payments and the international investment position, and payment transactions. An overview is contained in the annex to the NBO and on the SNB website. The SNB publishes the results of its surveys in the form of statistics. It also maintains a data bank with just under 19 million time series in the fields of banking, financial markets and economics.

Statistical publications

The SNB releases its statistics on its website (www.snb.ch) and via its online data portal (data.snb.ch) and, in some cases, also in the form of printed publications. The annual publication *Banks in Switzerland* was published for the last time in 2020. It will be replaced at the end of the second quarter of 2021 by an expanded range of data relating to banks on the SNB's data portal. In particular, data will now also be published at group level.

SNB data portal expanded

The data portal was further expanded in 2020. Since the end of September, the SNB has been publishing more detailed information on its money market and foreign exchange market operations. With regard to money market operations, the SNB now publishes information at the end of each month on the conditions and volume of individual monetary policy-related transactions of the previous month. With respect to foreign exchange market operations, the volume of interventions in the previous quarter is now disclosed at the end of each quarter. The volume had hitherto been communicated annually in the accountability report.

At the end of October, Swiss financial accounts data were published on a quarterly basis for the first time. Previously, these data had been made available only on an annual basis. Furthermore, the range of direct investment statistics data was expanded. The data portal now contains additional information on the operational activities of multinational enterprises abroad. This includes the number of subsidiaries abroad and the turnover achieved there.

9.3 PROJECTS

Coronavirus-related work

At the end of March 2020, the SNB extended its qualitative survey of banks on lending and credit demand. In doing so, it responded to the urgent need for data in connection with the coronavirus pandemic. The extended survey is conducted in the form of a supplementary survey limited in terms of content and time in accordance with art. 6 NBO. In addition, the reporting platform eSurvey was expanded to enable the exchange of documents with banks in connection with their use of the SNB COVID-19 refinancing facility (CRF). This channel meets stringent security requirements.

Other survey projects

The SNB decided to collect additional data from banks regarding interest rates on liability items. This survey will be phased in and its introduction will be concluded by October 2021. The backdrop is the SNB's need for data in connection with the negative interest rate regime. Moreover, the SNB decided to revise its survey on customer payment transactions to take into account the increasing digitalisation of payment transactions and the shift in the public's payment habits. The survey on customer payment transactions is now conducted monthly instead of quarterly. Banks are obliged to report data in accordance with the new requirements for the first time as of January 2022.

SDDS Plus

As of the beginning of December 2020, Switzerland joined the IMF's Special Data Dissemination Standard (SDDS) Plus. The new standard is aimed at countries with systemically important financial sectors. It obliges the participating countries to publish comprehensive data in a range of categories. In Switzerland, the data required to comply with SDDS Plus are supplied by different federal agencies. The SNB is responsible for data in several areas. The switch in the financial accounts from annual to quarterly data, for example, is directly related to the SDDS Plus requirements. The SNB also prepares data for the 'external sector' category, including data on direct investment and portfolio investment. Some of these data – together with information on the current IMF data standard – are published on the SNB's data portal.

Global production processes

Work on the 'global production processes' project has been underway since 2017 to improve the recording of global production in Switzerland's balance of payments statistics. The focus of the SNB's internal project team is on the activities of multinational enterprises whose production and trade processes are distributed across various countries. This distribution leads to a separation of the finance and goods flows, which poses problems with regard to measurement, definition and data collection. The project's planning phase was brought to a close in 2020. Work on its implementation is currently underway. The aim is to publish data based on the revised surveys from 2024. Work is also underway on recording digital trade more comprehensively in the balance of payments statistics. Digital trade comprises trade in goods and services that are digitally ordered, digitally delivered or made available on a platform, as well as trade in intellectual property.

9.4 COLLABORATION

The SNB gives reporting institutions and their associations the opportunity to comment on organisational and procedural issues, as well as on the introduction of new surveys or the modification of existing ones.

Groups of experts

The SNB is advised on the content of its banking surveys by the banking statistics committee. This committee is made up of representatives of the Swiss commercial banks, the Swiss Bankers Association and the Swiss Financial Market Supervisory Authority (FINMA). In 2020, the banking statistics committee dealt in particular with the revision of the survey on customer payment transactions. A group of experts under the direction of the SNB participates in the compilation of the balance of payments. It comprises representatives from manufacturing, banking and insurance, as well as from various federal agencies and academic bodies.

Public institutions

In compiling statistical data, the SNB collaborates with the relevant federal government bodies, particularly the Swiss Federal Statistical Office (SFSO), with FINMA, and also with the authorities of other countries and international organisations.

Swiss Federal Statistical Office

The SNB has a close working relationship with the SFSO. Reciprocal data access is governed by a data exchange agreement; this agreement also covers the collaboration between the two authorities in drawing up the Swiss financial accounts. Moreover, the SNB belongs to a number of bodies that work with Swiss federal statistics. These include the Federal Statistics Committee and the group of experts for economic statistics (Expertengruppe für Wirtschaftsstatistik/Groupe d'experts de statistique économique).

Federal Office for Housing

The SNB collects quarterly data on mortgage rates from about 80 banks on behalf of the Federal Office for Housing (FOH). Based on these data, the FOH calculates the mortgage reference interest rate for tenancies. The sole responsibility for the contents of this survey lies with the FOH, which also publishes the reference rate.

FINMA

Under the terms of a Memorandum of Understanding between FINMA and the SNB on the collection and exchange of data, the SNB carries out surveys in areas such as capital adequacy, liquidity and interest rate risk of banks and securities firms. The focus in 2020 was above all on the implementation of the definitive small banks regime and on preparing the introduction of the revised survey on the net stable funding ratio in July 2021. Adjustments were also made to the capital adequacy reporting for systemically important banks, the interest rate risk reporting and the supervisory reporting.

Principality of Liechtenstein

The SNB also surveys Liechtenstein companies when preparing its balance of payments figures and its statistics on Switzerland's international investment position. It works with the relevant authorities in Liechtenstein (the Office of Economic Affairs and the Financial Market Authority).

EU

The SNB's collaboration with the EU is based on the bilateral agreement on statistics. It covers the financial accounts, parts of the banking statistics, the balance of payments and the international investment position, as well as the direct investment statistics. The SNB participates in various bodies of the EU statistical office (Eurostat).

Other international organisations

In the area of statistics, the SNB works closely with the Bank for International Settlements (BIS), the Organisation for Economic Co-operation and Development (OECD) and the International Monetary Fund (IMF). This collaboration is aimed at harmonising statistical survey methods and analyses.

Banking statistics

Art. 14 para. 1 NBA entitles the SNB to collect such data as it requires to fulfil its statutory tasks. Data from banks are particularly important in this context. This is because banks play a key role in the transmission of monetary policy decisions, and also because banks are at the centre of the SNB's contribution to the stability of the financial system.

The data collected by the SNB cover the key business areas of banks in Switzerland. The SNB collects balance sheet, off-balance-sheet and income statement data as well as structural and interest rate-related information. Depending on the area in question, the data are broken down by counterparty characteristics, currency and maturity as well as by geographical criteria. One of the key areas is lending by banks. The focus here is not only on the volume of the loans granted, but also on the lending conditions, the characteristics of the borrowers and – for instance in the case of mortgages – details on the property pledged as collateral. Securities held by customers in open custody accounts at banks represent a second focal point of the data collection: What customer categories hold what types of securities in what currencies? What are the countries of origin of the issuers of the securities held in such custody accounts? A third focal point are the data collected by the SNB in collaboration with international organisations, in particular the BIS. These surveys concentrate on cross-border banking business and on the banks' activities in the foreign exchange and derivatives markets. Depending on the matter in question, the data are collected on a monthly, quarterly or annual basis or, in some cases, only once every few years.

Art. 4 NBO obliges the SNB to ensure the burden placed on reporting institutions is kept to a minimum. Most surveys are therefore conducted in the form of partial surveys. Only banks that exceed certain thresholds defined in a survey are required to report to the SNB. As a rule, the narrower the focus of a survey, the smaller the group of banks that are obliged to report. The SNB always seeks to keep the demands on the reporting institutions as low as possible on the one hand, and to collect statistically pertinent data on the other.

To avoid any duplication of effort on the part of the reporting banks, the SNB also collaborates closely with FINMA. Some of the banking statistics surveys are thus conducted on the statutory basis of FINMA. This form of collaboration between the SNB and FINMA has been in effect since the 1990s and was redefined in a Memorandum of Understanding in 2018.

One of the characteristics of banking statistics surveys is that they address different reporting entities. Depending on the area in question, the banks may, for example, only have to report data on operations that they conduct at their offices in Switzerland. This applies in particular to information that the SNB uses for monitoring the domestic economy. In other cases, the reporting obligation may also include data from legally dependent branches abroad. Information at the level of group reporting entities is relevant in particular for data used in connection with financial stability. Such information covers all business that banks conduct across all their group companies, irrespective of whether these are domiciled in Switzerland or abroad.

Another characteristic of the SNB's banking statistics is that some of the surveys also include banks domiciled in the Principality of Liechtenstein. Such surveys cover not only the Swiss economy, but also the entire Swiss franc currency area. The SNB therefore also cooperates with the Liechtenstein Financial Market Authority with regard to statistics. Examples of such surveys are the comprehensive monthly balance sheet statistics, used also for the calculation of the monetary aggregates, and the survey on minimum reserves, which has been used since 2015 inter alia as a basis for the calculation of exemption thresholds in the negative interest regime.

The formal collaboration between the SNB and the reporting institutions is governed by art. 7 NBO. The banking statistics committee is the central body in matters of banking statistics. As a rule, the SNB and the committee members meet once a year to discuss the introduction of new surveys, the revision of existing ones, and various other issues that have arisen in connection with banking statistics surveys. In these discussions, the banking statistics committee acts as a consultative body. The final decision on the introduction or revision of a survey is made by the SNB alone. The key condition is that there must be a direct link between a survey and one of the SNB's statutory tasks or that the survey data are essential for the SNB to monitor developments in the financial markets. Furthermore, art. 4 para. 3 NBO obliges the SNB to refrain from conducting a survey of its own if the required data can be obtained elsewhere.