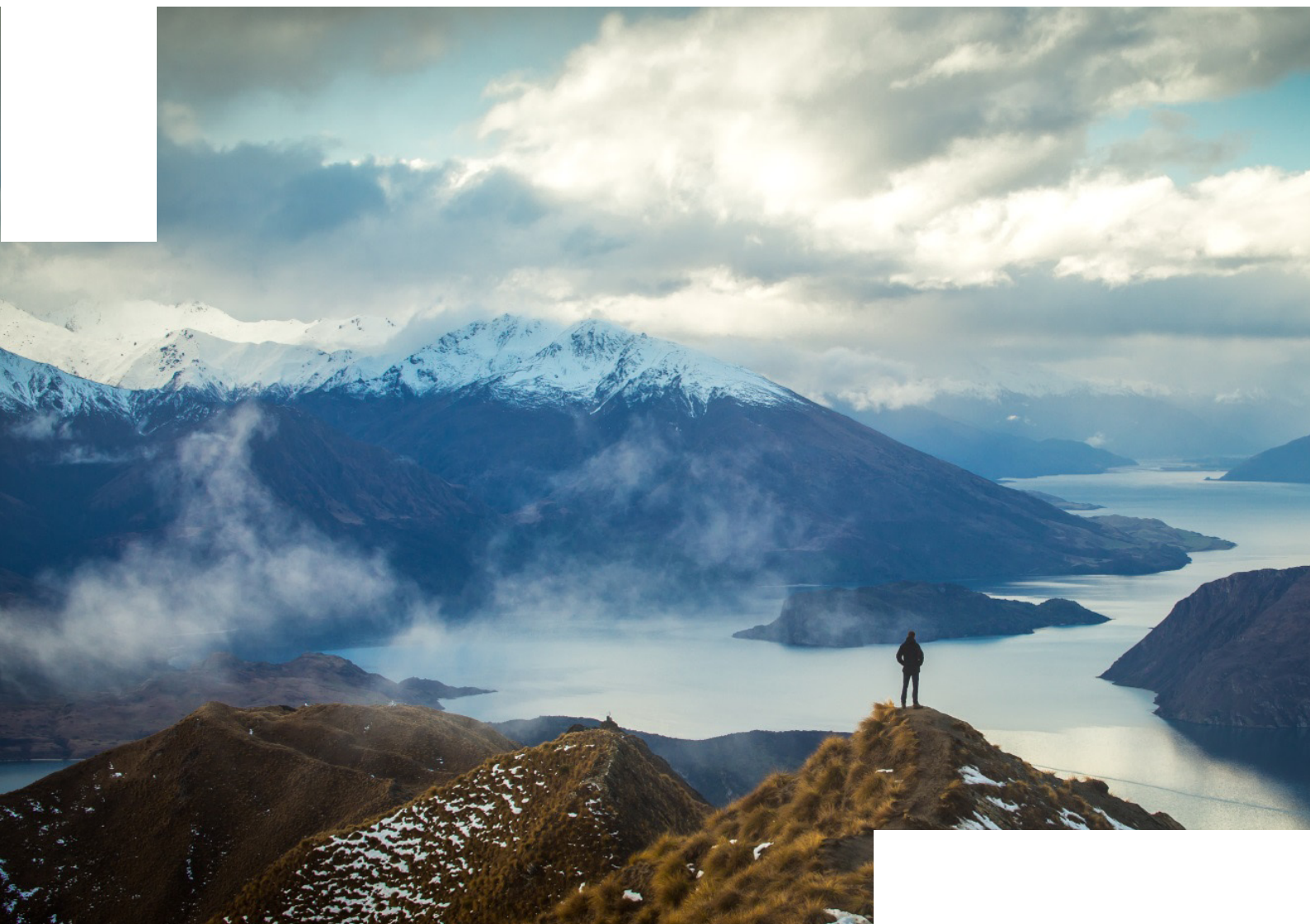


Swiss Financial Center post-COVID-19: Focus remains on sustainable growth

Swiss Financial Center | 2020



Publishing information



Publisher: Credit Suisse AG, Investment Solutions & Products

Oliver Adler
Chief Economist Switzerland
oliver.adler@credit-suisse.com

Manuel Rybach
Global Head of Public Affairs and Policy
manuel.rybach@credit-suisse.com



Authors

Maxime Botteron
Fredy Hasenmaile
Florian Klemm
Claude Maurer
Markus Stierli
Laura Canas da Costa
Lukas Hetzel
Stéphanie Kaiser
Nicolas Matthieu
Elena Scherrer
Christian Wicki



Contributors

Ewelina Krankowska-Kedziora



Copy deadline

27 May 2020



Copyright

The publication may be quoted providing that it is cited as the source.
Copyright © 2020 Credit Suisse Group AG and/or its
affiliated companies. All rights reserved.

Foreword

Urs Rohner

Chairman of the Board of Directors
Credit Suisse Group AG

Dear readers

2020 will go down in the history books as a dramatic year for the entire Swiss economy. For banks and insurers too, the consequences of the COVID-19 pandemic are considerable. For that reason, the fifth edition of our study of the Swiss financial center, which is published every two years, devotes particular attention to the repercussions of this pandemic. It also highlights how the banks have played a vital and positive role in combating the economic crisis, collaborating with the authorities to establish credit facilities for SMEs in particular. As well as attracting plenty of attention from abroad, this has proved that the banks are in good shape to handle the crisis.

In the future too, the Swiss financial center will be reliant on an internationally competitive politico-economic and regulatory environment. Only if the banks can deal successfully with the pressure on costs and margins will they be able to continue to make a key contribution to value creation and employment. In this context, the study highlights above all the need to preserve market access, dismantle tax obstacles, and implement regulatory guidelines in an internationally coordinated way.

In addition, we discuss urgently-needed reforms in the pensions sphere. The need to act in this respect has become even more apparent as a result of the coronavirus crisis. Another section is dedicated to the integration of sustainability factors in the banking business, building on our analysis of this increasingly important theme in previous publications in the series. And finally, we explore the impending replacement of the LIBOR reference rate with SARON.

As in previous editions, we identify the various success factors and the corresponding recommendations for action that these imply, breaking these down by priorities for government, parliament, and supervisory authorities on the one hand, and banks and the rest of the private sector on the other. We hope that we have once again made a constructive contribution to the debate in this area and provided further food for thought. We look forward to continuing our dialogue with you on the competitiveness of the Swiss financial center, and on Switzerland's appeal as a place to do business.

Yours sincerely
Urs Rohner

Macroeconomic development **7**

The post-pandemic economy

The COVID-19 pandemic and the measures to contain it have plunged the world – including Switzerland – into a deep recession, and the subsequent recovery is likely to prove fairly sluggish. It would be premature to predict a fundamental change in the fabric of the economy or inflationary trends from today's standpoint. Despite the huge rise in government debt, we are also expecting no trend reversal in interest rates.

Banks **13**

Key pillar of the economy rather than weak link

In the financial crisis of 2008, the banks were the weak link in the chain, and arguably the catalyst. By contrast, as the COVID-19 pandemic has unfolded, they have played a decisive role in transferring the support measures resolved upon by the authorities to the real economy – a role for which they are well equipped thanks to stronger capital bases. However, the sector is unlikely to emerge from the current crisis without suffering cost consequences. Moreover, interest rates can be expected to remain low for even longer now, which means that margins in key business areas will remain under heavy pressure.

Regulatory parameters **21**

Targeted adjustments to strengthen competitiveness

If they are to continue to make a significant contribution to value creation and employment, banks need an appropriate regulatory environment. Particularly important aspects here include the preservation and expansion of market access, the elimination of tax obstacles, and the implementation of prudential regulation in a way that is internationally aligned.

Pension funds **29**

Time ticking for reforms

The coronavirus crisis is exacerbating the already dire predicament of the state pension system. The importance of personal retirement saving is increasing as a result. But even here there is a need for reform.

Sustainability **35**

The role of financial institutions in meeting global sustainability targets

The integration of sustainability factors into the core business of financial institutions is becoming an increasingly important area of focus. A key market driver here is the development of political and regulatory framework conditions.

LIBOR replacement **41**

Goodbye LIBOR – welcome SARON

An operation is currently under way in the financial markets that is akin to switching horses while at full gallop. At the end of 2021, CHF LIBOR is set to be replaced by an alternative reference interest rate, SARON. Preparations are taking place at a high tempo. The company SIX is already calculating a number of SARON index series, while the Swiss National Bank has also already replaced CHF LIBOR in its monetary policy concept.

Recommendations **44**

Summary of recommendations





The post-pandemic economy

The COVID-19 pandemic and the measures to contain it have plunged the world – including Switzerland – into a deep recession, and the subsequent recovery is likely to prove fairly sluggish. It would be premature to predict a fundamental change in the fabric of the economy or inflationary trends from today's standpoint. Despite the huge rise in government debt, we are also expecting no trend reversal in interest rates.

Excessive optimism to start with, followed by stress in the financial markets

The coronavirus crisis came swiftly and unexpectedly, and its economic consequences were (and remain) enormous. The trigger for such a development – a pandemic caused by a highly infectious virus – was never really on the radar of most governments, or indeed of economists and financial analysts. Compared to earlier recessions, however, a number of parallels were discernible: For example, at the beginning of the crisis the “West” in particular adopted an overly optimistic stance for quite some time, assuming the pandemic would not spread much beyond China. Only in the second phase were forecasts for the proliferation of the pandemic and its economic repercussions significantly revised. As at the start of previous recessions, moreover, repeated phases of high stress in the financial markets were evident.

A recession of a different kind

Slump in demand stronger than supply shock

In a number of respects, however, the current situation could hardly be more different from previous recessions. For example, within an extraordinarily short space of time the virus essentially managed to bring the world to a standstill. And in a literal sense too: According to seismologists, the Earth's surface has clearly exhibited less vibration as a result of the cessation of large parts of human activity. The measures to contain the virus resulted in a shutdown of production in significant parts of the global economy, which in turn led to the disruption of international supply chains. In order to increase the effectiveness of social distancing rules, many businesses in the services sector were closed altogether. In keeping with this development, certain services sectors were hit hard: In the aviation industry, for example, revenues slumped by more than 90%. Catering and bricks-and-mortar retailing, along with tourism and cultural organizations, were largely brought to a standstill. So although there was clearly a supply shock – goods and services could simply no longer be delivered and sold in many places – demand likewise collapsed in step with supply, in some cases even more strongly. For this reason, compared to earlier supply shocks such as that of 1973, when crude oil, a systemically crucial commodity, became in desperately short supply for political reasons, virtually no price rises were apparent this time around.

Incredibly swift response by architects of monetary and fiscal policy

Another key difference compared to earlier recessions was certainly the extraordinarily rapid response times of the authorities. The governments of a whole host of countries put together fiscal packages almost overnight, whereby the magnitude of these packages was in most cases far beyond those of previous crises (Fig. 1). In order to keep the medium- to long-term consequences of the lockdown phase to a minimum, the architects of fiscal policy had to take swift and comprehensive countermeasures with a minimum of red tape. Equally important were the actions taken by central banks to shore up the stability of the financial system, which at times looked like it was under threat at the start of the crisis (Fig. 2). The key fiscal measures taken early on in Switzerland were short-time working and the granting of state-backed bridging loans. For its part, the Swiss National Bank (SNB) took some of the pressure off the banks by loosening the countercyclical capital buffer on the one hand, and providing support through a new refinancing facility for credit lending on the other. Furthermore, it warded off an excessive rise in the value of the Swiss franc through currency purchases and clear forward guidance.

Market normalization brought about by measures on the part of the Fed in particular

At a global level, most important of all were the emergency measures taken by the US central bank (Fed) to ease USD liquidity bottlenecks. At times, the stress in the financial markets appeared to be close to reaching the proportions seen during the financial crisis of 2008/09 – and this despite the fact that the banks were much better capitalized this time around. The driving force behind this development was mainly the flight of much of the investor community to liquidity. This in turn put pressure even on the prices of longer-dated US government bonds, which are generally considered to be the most liquid investments globally. The measures taken by the Fed and by the European Central Bank (ECB), as well as the coordination of these measures with other central banks, succeeded in restoring calm to the markets relatively quickly. The significance of central banks as lenders (and buyers) of the last resort was once again impressively demonstrated. A number of different financial market stress indicators, including the spread between inter-bank lending rates and the yield on short-term US government bonds, as well as the spread between corporate and government bonds, soon retreated from scary levels.

Sluggish recovery

Not comparable with a depression, despite severe slump

As far as we can see from today's standpoint, the measures taken by governments and central banks have prevented the global economy sliding into a longer-lasting depression, despite a deep short-term slump. True, unemployment rates have shot up in many countries – particularly in countries like the US where short-time work schemes are unknown – while corporate bankruptcies have also risen. Nonetheless, current economic developments cannot be compared to those of the 1930s. Back then, the financial system collapsed, US economic output plunged by more than a quarter within the space of half a decade, and the unemployment rate shot up to around 25%. The main reason for this disastrous development was procyclical monetary and fiscal policy. In addition, in an attempt to protect its economy the US suddenly ramped up tariffs (Smoot-Hawley Act), which prompted other countries to raise tariffs in retaliation and accordingly inflicted significant additional damage on global trade.

A number of reasons why recovery will nonetheless be only sluggish

However, there are also a number of reasons why recovery from the current recession is likely to be rather sluggish. For one thing, the labor market is likely to recover only gradually, particularly in countries where companies have slashed headcount (matching problem). Furthermore, due to the tentative nature of the recovery of consumer spending and the associated capacity surpluses, as well as a slump in earnings and the (probably not yet complete) normalization of financing costs (e.g. premiums built into lending rates), companies can be expected to be reticent about investing for quite some time. Instead, companies are likely to focus first and foremost on building up reserves – not least because these have a significant impact on financing costs. For many companies, the phase of building up reserves will be extended by the need to repay emergency loans. Certain areas of the economy, such as international travel and tourism, are likely to continue to suffer for a long period of time as a result of ongoing health protection measures. Finally, the deferred removal of lockdown measures in a number of countries will further hold back the recovery of international trade.

Pandemic as excuse for greater protectionism

Attempts to achieve autarky in medical sphere or elsewhere would be damaging to prosperity

By contrast, the prediction that the COVID-19 pandemic will also bring about a fundamental break in long-term economic trends appears to us to be somewhat premature. Without doubt, however, we will see certain developments – not least of a political nature – that could act as a lasting drag on the long-term global growth trend. Most stark of all is the risk that disruptions to international supply chains, which have occurred at times during the pandemic, and supply shortages in medical material will be used by protectionist forces as an excuse to insist on self-sufficiency (autarky) in “strategic” areas of the economy. However, this would ultimately only have the effect of drawing a veil over – rather than correcting – the key failure, namely the lack of sufficient preparation for a pandemic in most countries. While such a step might involve investment in certain emergency reserves of medical material, a much more important corrective measure would be to introduce more efficient systems for monitoring pandemic development (testing and contact tracing) and the implementation of countermeasures (particularly social distancing as well as isolation and quarantine regulations). By contrast, the systematic build-up of production capacity for purposes of self-sufficiency – be it in the area of healthcare provision or say agriculture – would result in high inefficiencies and a reduction in prosperity. Moreover, such a step would in no way guarantee that the countries in question would be better protected in the face of any future pandemic.

Geopolitical rivalry between the US and China could intensify

Overall, it is to be hoped – and this point will also be crucial for determining the future growth trend – that the corresponding political majorities both recognize and support the huge benefits that a globally integrated economy, involving the division of labor and driven by efficiency considerations, has for the prosperity of the great majority of the world’s population. By contrast, it would be too optimistic to assume that the economic conflicts between the US and China as well as other countries, which are partly geopolitically (and now politico-electorally) motivated, will simply be set aside as a result of the COVID-19 shock. However, a certain degree of reflection on the benefits of rule-based international economic relationships underpinned by multilateral jurisdiction is at least conceivable in the long term.

Centrifugal forces in Europe more or less contained

Vicious circle of rising interest rates and heightened default risk in southern European countries halted rapidly

A second potential breaking point in Europe became apparent during the pandemic. However, after a number of national isolationist initiatives were embarked upon at the start, here too the importance of open borders for the transport of goods – particularly the key staples of life – became apparent. Yet, it was even more important to contain the potential centrifugal forces within the Eurozone. As Italy and Spain were particularly badly hit by the pandemic (with the former virtually in recession already when the pandemic began), the threat emerged of a vicious circle in which rising interest rates on high levels of debt might prevent their refinancing, thereby triggering a renewed debt crisis. Fortunately, in this respect too the ECB responded much more swiftly and decisively than it had during the euro crisis. In addition, by setting up a truly comprehensive fund to support the countries that have been badly hit by COVID-19, the governments of the Eurozone have not only made an important contribution to the immediate stabilization of their economic area, they have probably also taken a step toward fiscal union, which will reduce the susceptibility of the region to future shocks. Nonetheless, a fair amount of work still needs to be done in the area of banking and capital market union in particular if growth potential is to be increased and the potential for crises reduced.

Higher government indebtedness as drag on growth?

As long as interest rates remain low, the impact of higher government debt should be minor

At a macroeconomic level, the key question is the extent to which the massive politico-economic support measures taken in response to the pandemic will weigh on the development of economic growth in the long term. As a consequence of these fiscal relief packages, government indebtedness has increased massively, reaching new highs not least in the US. Whether or not this will impact negatively on long-term growth will primarily depend on whether interest rates rise as a result of supposedly higher default or inflation risks, thereby increasing financing costs in the real economy. At least so far, no such rise in interest rates is apparent among the developed nations. Whether higher indebtedness per se – e.g. due to the expectation of higher future taxes or impending financial repression – impairs growth is a question on which economists are divided.

Low risks of inflation and high demand for government bonds keep interest rates low

Crisis will have more of a deflationary effect in the short and medium term

At the same time, central banks have seen a veritable ballooning of their balance sheets. This in turn has sparked fears of a future acceleration of inflation. We view such a development as fairly improbable, however, as inflation rates have actually been falling in many countries over the last few months. In view of the fact that the economic recovery is likely to prove sluggish, this trend can be expected to persist a while yet. In particular, given the backdrop of higher unemployment in the majority of countries, wage increases are likely to be extremely low for the time being. The principal specter haunting the central banks is therefore likely to be “excessively low” rather than “overly high” inflation for a considerable while.

Risk of a loss of trust in central banks overestimated

Although it is conceivable that interest rates will rise in the longer term due to the evaporation of trust in monetary stability – e.g. as a result of concerns over the excessive politicization of monetary policy – and a risk premium being built into interest rates accordingly, it is also rather unlikely. For demographic and institutional reasons, we are expecting to see persistently strong demand for (at least nominally) secure investments such as the government bonds of the leading developed nations, which in turn suggests persistently low rates. This also means that the government debt mountains built up even higher during the crisis should be relatively easy to finance in the future too.

Switzerland hardly a special case

Structural unemployment to rise only slightly

The Swiss economy too has been badly hit by the COVID-19 pandemic and the lockdown measures taken in response. We expect real GDP for the second quarter of 2020 to slump to around –10%. Despite widespread short-time working and the ubiquitous availability of state-backed loans, many companies – above all in areas such as tourism – have slashed headcount, with the result that unemployment has risen sharply. The extent to which this development will feed through into higher structural unemployment is unclear. However, given the Swiss labor market's extremely high degree of flexibility, we are relatively optimistic in this respect.

Slowdown in immigration to hold back economic recovery

The fiscal policy measures taken to stabilize the Swiss economy (financing of short-time working and loans guaranteed by the Confederation) are of a similar magnitude to those taken in other countries (Fig. 1). However, the differences compared to other countries include the fact that they were not only initiated very rapidly, but also – thanks to the collaboration with the banks (see next section) – implemented with great efficiency. This has without doubt prevented a stronger rise in unemployment and a higher number of corporate bankruptcies. The profile of the growth trajectory going forward is also unlikely to deviate greatly from that of other nations. A more rapid recovery will be prevented by, among other things, the fact that immigration will prove significantly lower in 2020 than was assumed at the beginning of the year, due to the economic slump in Switzerland and the restrictions imposed on cross-border mobility. This will hold back growth in consumer spending in particular.

Pharma sales provide a good cushion on the export front

It appears likely that development in Switzerland, above all in the export sector, will differ from that of other countries. Although Switzerland should essentially be much more affected by the global recession given the very high share of GDP accounted for by exports (approx. 50%), recently published export data supports our view that the dominance of the pharma industry in Swiss exports (more than 40% of total export volumes) will play a clear role in stabilizing overall exports, and therefore also GDP as a whole. The stabilizing impact of the pharma industry on the labor market is likely to be much less pronounced, however, as this sector accounts for only around 1% of total employment. Other segments of the export sector that account for a higher proportion of national employment, such as the mechanical engineering, electrical, and metalworking (MEM) industries, are much more heavily affected by the economic slump being suffered by Switzerland's key trade partners.

Government debt-to-GDP ratio to start falling soon

Another area in which Switzerland differs from other countries is the anticipated dynamism of government debt. Although the debt burden of the Confederation in particular can be expected to experience a sudden leap, just as it will in other countries, it should start to gradually fall back again – and without any particular savings measures – as early as 2022. This development is attributable to the fact that interest rates in Switzerland are extraordinarily low compared to economic growth,

and the so-called primary budget will soon start to look much healthier once the extraordinary expenditure necessitated by the pandemic falls back to a very low level.

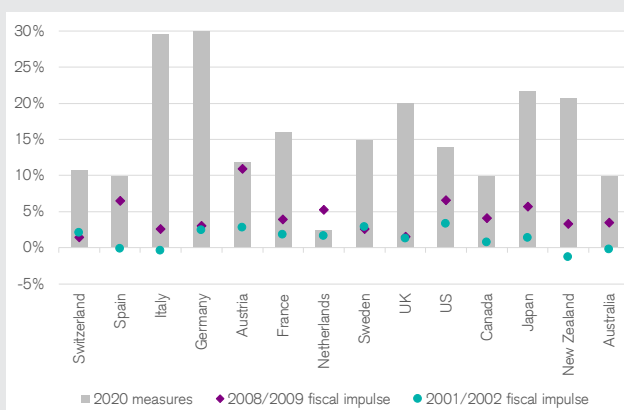
Real estate market as both prop and risk

Low interest rates to support residential property market in the future too

Low interest rates are an important source of support for the Swiss real estate market. In the residential property market in particular, price corrections are most unlikely while the burden of financing is as low as it is now. As affordability of property has significantly decreased in the last years due not least to banks' self-regulation, defaults because of income losses appear unlikely. After a short-term hit, the volume of mortgage lending can be expected to increase once again thanks to persistent low interest rates. Where buy-to-let properties are concerned, investors are unlikely to turn their back on the real estate market given the relatively high security currently offered by rental income compared to other cash flows. While it is true that the number of vacant rental apartments will rise once again due to lower net immigration and weaker domestic demand, this is likely to have only a modest impact on return expectations. By contrast, the commercial property market will suffer a much more comprehensive blow. Particularly in bricks-and-mortar retailing and in the hotel market, we can expect to see a wave of insolvencies, business closures, and downsizings, which could also reflect in banks' balance sheets.

Fig. 1: Expected fiscal policy measures worldwide

as % of GDP



Source: World Economic Outlook of IMF, Credit Suisse. Last data point: 25.05.2020

Fig. 2: Support from central banks

as per May 1, 2020.

	Policy rates	Quantitative easing	Loans to financial institutions	Fiscal measures
Fed	<ul style="list-style-type: none"> Cut policy rate by 150 bps Introduction of swap line and repo agreements with other central banks 	<ul style="list-style-type: none"> Unlimited purchases of Treasury securities and mortgage-backed securities Purchases of corporate bonds including HY and Muni 	<ul style="list-style-type: none"> Large-scale repo operations, plus a range of measures to support bank lending. Direct loans to corporates 	<ul style="list-style-type: none"> USD 2 tn of fiscal easing, including cash transfers to households, loans to businesses and increased unemployment benefits
ECB	<ul style="list-style-type: none"> Cut TLTRO III rate by 25 bps 	<ul style="list-style-type: none"> Can buy over EUR 1 trn of assets by the end of 2020, including government and corporate bonds 	<ul style="list-style-type: none"> Additional refinancing operations before TLTRO III are available 	<ul style="list-style-type: none"> Euro-wide fiscal response of EUR 540 bn, including ESM loan support, new capital to EIB and support to short-work schemes
SNB	<ul style="list-style-type: none"> No policy rate change but exempts a larger portion of banks' reserves from the negative policy rate 	<ul style="list-style-type: none"> Increases its foreign currency purchases 	<ul style="list-style-type: none"> COVID-19 refinancing facility Repo operations, if necessary 	<ul style="list-style-type: none"> Bank loan guarantees to businesses of almost 5% of GDP 3% of GDP in other measures, mostly short-work funding

Source: Fed, ECB, SNB. Credit Suisse



Key pillar of the economy rather than weak link

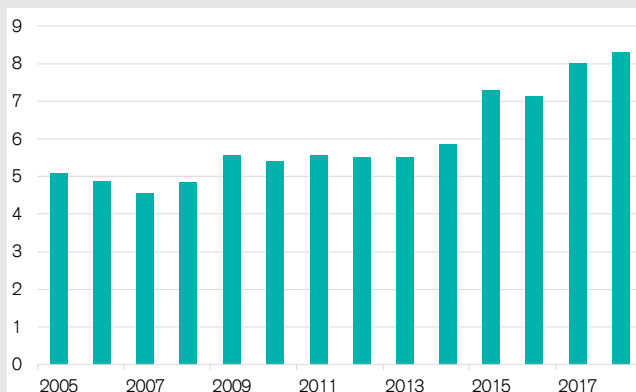
In the financial crisis of 2008, the banks were the weak link in the chain, and arguably the catalyst. By contrast, as the COVID-19 pandemic has unfolded, they have played a decisive role in transferring the support measures resolved upon by the authorities to the real economy – a role for which they are well equipped thanks to stronger capital bases. However, the sector is unlikely to emerge from the current crisis without suffering cost consequences. Moreover, interest rates can be expected to remain low for even longer now, which means that margins in key business areas will remain under heavy pressure.

Balance sheets robust at start of COVID-19 crisis

At the time of going to press, we had only a vague idea of the true economic costs of the COVID-19 pandemic (see previous section). However, we are convinced that the Swiss banks are currently in a much better position to handle an economic shock than they were prior to the global financial crisis. This time around, domestic banks have not only more capital but also a much higher liquidity buffer. In addition, relative to Swiss gross domestic product (GDP) their balance sheets are now smaller (albeit still very large), and their exposure to international risks – i.e. their share of foreign assets – has been scaled back (Figs. 1 to 4). That said, it would be wrong to claim that the banks' balance sheets are wholly risk-free, as ultimately the principal purpose of the banking business is to assume calculated balance sheet risks. Compared to the start of the last recession, however, the banks now find themselves essentially much better equipped to deal with a crisis.

Fig. 1: Domestic banks are better capitalized, ...

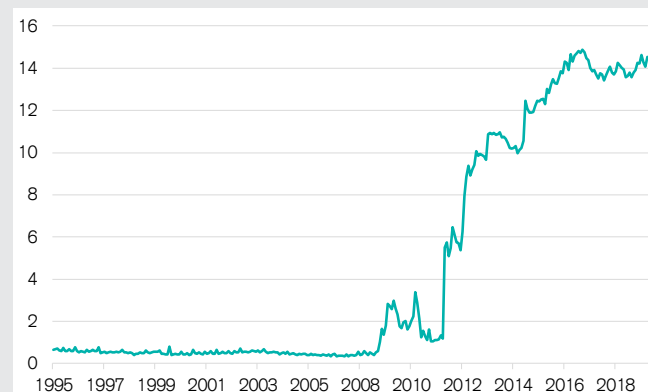
Tier 1 capital as % of balance sheet total



Source: Financial Soundness Indicators of the IMF, Datastream, Credit Suisse. Last data point: 2018

Fig. 2: ... hold greater liquidity, ...

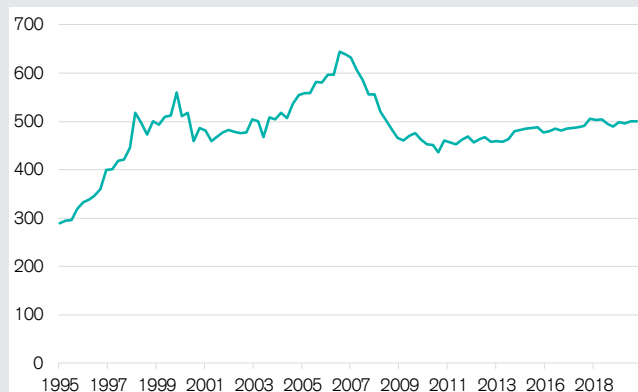
Domestic liquid assets as % of balance sheet total



Source: Swiss National Bank, Datastream, Credit Suisse. Last data point: March 2020

Fig. 3: ... have not overextended their balance sheets ...

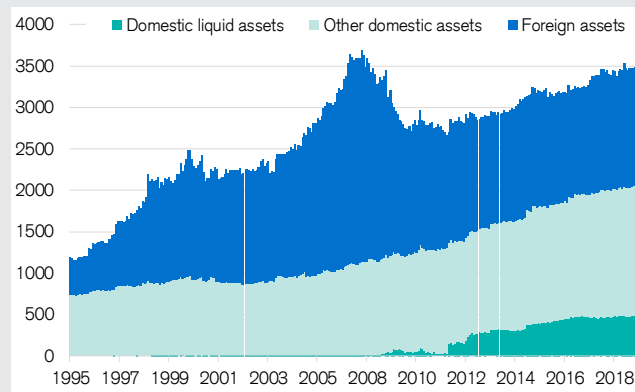
Balance sheet total as % of Swiss GDP



Source: Swiss National Bank, Datastream, Credit Suisse. Last data point: Q4 2019

Fig. 4: ... and have reduced their exposure to foreign assets

Balance sheet total (in CHF bn)



Source: Swiss National Bank, Datastream, Credit Suisse. Last data point: March 2020

Banks playing a crucial role in channeling support packages to the economy

The dramatic financial market turbulence triggered by the proliferation of COVID-19 in Europe and the US at the end of February and beginning of March has nonetheless subjected the banking sector to a high degree of stress. Decisive steps were required on the part of central banks to mitigate liquidity shortages at the banks and their clients, and to stabilize financial markets. As soon as that stabilization was achieved, however, the banks were able to step in and play a key role in supporting the fiscal and monetary policy responses to the COVID-19 crisis – and not just in Switzerland, but also elsewhere. One of the most important measures implemented by the Swiss government to contain the damage unleashed by the pandemic was to grant comprehensive guarantees for bridging credits (“COVID loans”) to small and medium-sized companies (SMEs), amounting to a total of up to CHF 40 bn (5.7% of Swiss GDP). The Swiss banks made their infrastructures and resources available so that these loans could be accessed as rapidly as possible by the companies that needed them. As a result, companies were able to draw on the first loans within just six days of the Federal Council’s announcement of the corresponding measures.

Rather than the Confederation creating liquidity, the banks are extending their balance sheets

The COVID loans are strictly speaking granted by the banks, but they are for the most part guaranteed by the Confederation. From an economic perspective, therefore, it is essentially the state that is making the money available. Nonetheless, the role played by the banks is of crucial importance, as the first port of call for SMEs wanting to raise money is to turn to their house bank, thereby significantly reducing the administrative workload at federal level. As an additional factor, these COVID loans are booked to the balance sheets of the banks, which means they are effectively financed by the latter. As a result, the Confederation has been spared – at least initially – the need to raise new funds through the issuance of bonds in the capital market. As things stand, the banks have a right to co-determine the total scope of the loans they grant as they cannot extend their balance sheets in an unlimited way, which means they potentially have to refrain from engaging in other credit activities. An additional limiting factor was the fact that the financing costs of the banks are higher than those of the Confederation. However, these restrictions do not appear to have acted as a brake on the volume of COVID loans granted – perhaps not least because the lion’s share of the money loaned out is within the scope of the credit facility that is fully covered by the Confederation.

Despite the crisis, losses on domestic loans are likely to be of a limited nature

Debts of non-financial companies in Switzerland could rise to around 130% of GDP

How will the COVID crisis affect the balance sheets of the banks and their clients? The total debts of non-financial companies in Switzerland (defined as loans and debt securities) amounted to 122% of the country’s annual GDP at the end of the third quarter of 2019. This proportion is high in an international comparison, although it is also a reflection of the fact that Switzerland is home to a large number of multinational companies that typically finance themselves in the global markets. Loans from domestic banks only account for around a third of the total (43% of GDP), and primarily comprise mortgages (33% of GDP). Based on the assumption that SMEs utilize all the COVID loan guarantees available to them, we estimate that the debt-to-GDP ratio will rise to

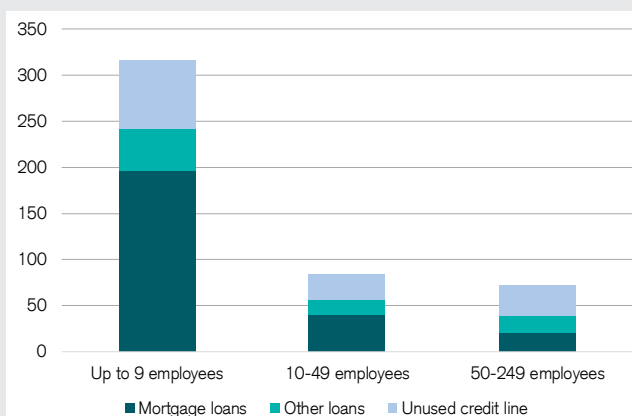
around 130% by the end of the year. As Swiss GDP is likely to shrink by a substantial amount in 2020, this ratio could actually turn out even higher. As SMEs will probably only make use of loans from domestic banks, the proportion of domestic loans will exhibit the strongest rise. As per the end of March 2020, bank loans granted to SMEs (definition: companies with up to 249 employees, including smaller financial institutions) amounted to CHF 337 bn, or around 48% of GDP, of which CHF 256 bn related to mortgage loans (Fig. 5). Furthermore, SMEs had unutilized credit facilities amounting to a total of CHF 135 bn.

Credit losses in domestic SME segment likely to remain limited despite deep recession

Assuming that the COVID loans are clustered in this segment, the debts (excluding mortgages) of Switzerland's SMEs would increase sharply, namely from CHF 73 bn (as per the end of February 2020) to some CHF 113 bn, or around 16% of GDP. Not all SMEs are likely to be in a position to service these loans fully. As long as the distressed loans are predominantly restricted to the credit facility that is 100% guaranteed by the Confederation, the profits of the banks will not be affected. The latter would only be the case in the event of companies defaulting on loans with a value of more than CHF 500,000, as this is the threshold beyond which the federal guarantee only covers 85% of the loan. Above and beyond these loans, the recession triggered by the COVID-19 crisis could also lead to payment defaults on the part of companies that have not taken out state-backed loans. In the aftermath of previous recessions, the volume of distressed loans has typically increased, although the extent of the recovery following an economic slump has tended to differ according to the latter's severity. Following the bursting of the speculative bubble in the Swiss real estate market at the end of the 1980s, the domestic banks wrote off some 8.5% of their credit portfolios between 1991 and 1996¹, with the losses in this case mainly concentrated in the area of mortgage loans granted to private households. Following the global financial crisis, by contrast, distressed loans rose from a starting level of 0.77% in 2007 to just 0.95% of the credit total in 2008, while in 2009 – according to the Financial Soundness Indicator published by the International Monetary Fund (IMF) – it then rose to just 1.12% of the credit total (Fig. 6). This figure obviously does not factor in losses incurred during the global financial crisis on foreign (predominantly US) assets (excluding loans). Although the recession of 2020 is likely to be deeper than some of the slumps witnessed in the post-war era, it will also probably prove less long-lasting. In addition, a survey conducted by Credit Suisse in 2015 showed that Swiss SMEs have a preference for financing themselves with equity capital, which suggests that their balance sheets were in good shape prior to the start of the recession. As we are expecting a swift recovery from the recession in 2020, we are anticipating only modest losses in the business involving domestic corporate loans (see below for analysis of the mortgage market).

Fig. 5: Bank loans to SMEs, by company size

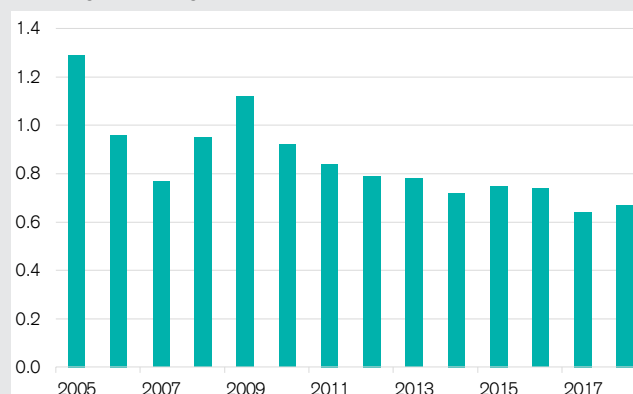
in CHF bn



Source: Swiss National Bank, Credit Suisse. Last data point: March 2020

Fig. 6: Distressed loans at a very low level

as % of gross lending



Source: Financial Soundness Indicators of the IMF, Datastream, Credit Suisse. Last data point: 2018.

¹ Birchler, U. (2007), Developments in the banking sector, in "The Swiss National Bank 1907 – 2007". Swiss National Bank (ed.)

Thanks to extremely low interest rates and restrictive credit lending in recent years, losses in the mortgage business should remain very limited

By far the greatest domestic exposure of the Swiss banks is to be found in the domestic real estate sector. Total domestic lending currently amounts to 170% of Swiss GDP, of which 149% is accounted for by mortgage loans, which in turn account for some 30% of all the banks' assets. That said, we do not believe that the COVID-19 crisis will lead to substantial losses in the mortgage business. A majority of the mortgage volume (or around 75% of the total) relates to private borrowers. Moreover, as mortgage interest rates are extremely low and buyers with lower incomes have been kept out of the market due to high real estate prices and tighter loan-to-value regulations, defaults in this area are likely to prove minimal. In the commercial property segment, meanwhile, institutional investors typically resort to borrowed capital for funding purposes to only a limited degree. Nonetheless, the banks do have a certain amount of exposure to this segment. The risks can be expected to be more pronounced in the area of retail properties and hotels, not least since these sectors have been particularly hard-hit by the COVID-19 pandemic. On the other hand, properties of this kind account for just 9% of the value of all commercial real estate in Switzerland. Furthermore, loan-to-value ratios are on average below the level of 66%, which means the banks have a certain buffer here. In our view, therefore, losses on such loans are likewise likely to be limited. As things stand, the office property sector looks set to fare better than the retail and hotel property areas. As a consequence, default risks should prove limited in this sector too. Certain losses could arise in connection with SME mortgages if these companies suffer further reverses, but the state-guaranteed COVID loans could provide this segment with indirect support. And last but not least, the degree of debt financing in the real estate segment with the highest supply overhang, namely the rental property segment, is very low generally, as the corresponding projects are typically financed by large institutional investors. All in all, therefore, we believe that losses in connection with real estate are likely to be fairly limited, despite the severity of the recession.

Weaker credit growth points to the countercyclical capital buffer not being reactivated after the crisis

Where the granting of new real estate loans is concerned, the deactivation of the countercyclical capital buffer by the Federal Council will in principle help to prevent the tightening of credit terms. In practice, however, the demand for new mortgage loans is likely to pick up again only slowly when the recession ends. The deactivation of the countercyclical capital buffer is designed to give the banks greater freedom of maneuver to grant loans above and beyond the areas covered by state guarantees. As the granting of these kinds of loans is likely to recover only very gradually – since both companies and households will initially focus on strengthening their cash positions – there appear to be few arguments for restoring the countercyclical capital buffer to its pre-crisis level in the foreseeable future. The COVID-19 crisis has surely put an end to the credit boom evident in certain areas over the last few years, at least temporarily.

Losses on foreign assets not comparable with those during global financial crisis

The current losses suffered by the Swiss banks on loans granted abroad are likely to be a fraction of those suffered during the global financial crisis. Swiss banks have only limited effective exposure to the business of granting foreign private or corporate loans. However, losses on foreign assets are nonetheless likely; their magnitude will depend on the exposure of the banks in question to areas that have been particularly hard-hit by the pandemic crisis. That said, it is difficult to quantify these crisis-related losses in any real detail at the moment.

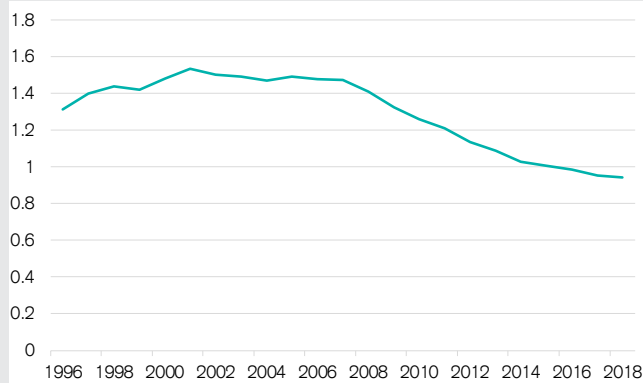
Margins in the traditional lending business to remain under pressure

Low interest rates, flat yield curves, and more modest credit growth will weigh on profitability for quite some time

Over the last ten years, interest margins have shrunk significantly (Fig. 7). The banks have compensated for this negative development by increasing their mortgage lending volumes (Fig. 8). As a consequence, their net interest income has remained largely stable. As we see it, the outlook for the lending business of the banks is not particularly promising. Both the mortgage business and the wider lending business are unlikely to make any significant contributions to profitability in the future, even if the economy fully recovers. The global recession will in all likelihood prevent any rise in consumer prices, and real interest rates can likewise be expected to remain depressed. In our view, this will also mean interest rates remaining very low going forward, and thus weighing on the banks' interest rate margins. Moreover, this implies that yield curves are unlikely to steepen, which will itself continue to have a negative impact on the banks' earnings. At the same time, growth in mortgage lending and corporate lending businesses can be expected to slow, at least temporarily. Domestically-oriented banks should therefore suffer a temporary deterioration in profitability.

Fig. 7: Interest margins shrink

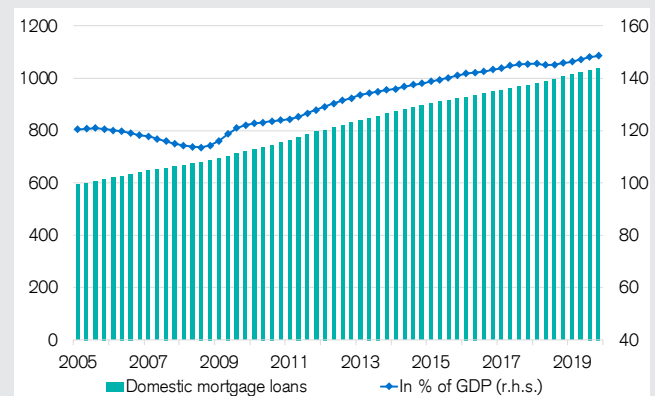
Net interest income, as % of balance sheet. Sample encompasses cantonal banks, savings banks, regional banks, and Raiffeisen banks



Source: Swiss National Bank, Credit Suisse. Last data point: 2018.

Fig. 8: Mortgage lending growth

in CHF bn and as % of GDP (right scale)



Source: Swiss National Bank, Datastream, Credit Suisse. Last data point: Q4 2019

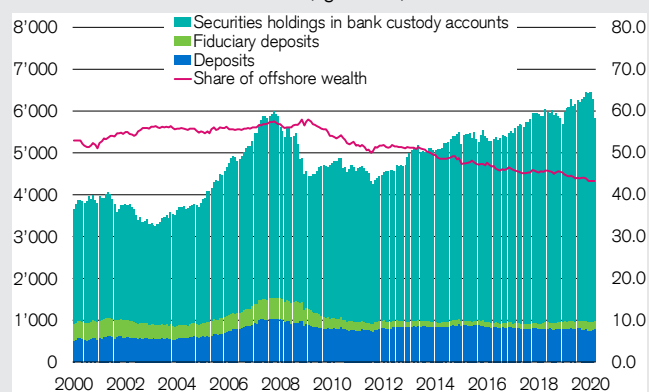
Asset management shaped by trend toward institutional clients

Stronger growth in domestic asset management market, trend increasingly toward institutional client base

In the world of asset management, the volume of assets under management (AuM) in Switzerland continued on its growth trajectory right up until the outbreak of the COVID-19 pandemic. According to our forecasts, AuM hit an all-time high of CHF 6.4 trillion in November 2019. However, the proportion of foreign assets managed from Switzerland declined to 43%, with the remainder relating to investors based in Switzerland (Fig. 9). And although Switzerland remains the leading global center for offshore asset management, both Hong Kong and Singapore are catching up quickly, according to Boston Consulting Group. The structure of the client base in offshore asset management in Switzerland has now changed dramatically: At the start of the new millennium, institutional clients accounted for some 25% of offshore assets, whereas according to our estimates that share has risen to more than 70% today. The trend in the onshore asset management business looks very similar, with the proportion of institutional assets increasing from just under 50% to more than 70% over the same timeframe. The management of institutional assets typically involves higher volumes but lower margins. The trend toward institutional business has therefore probably contributed to the erosion of margins in the asset management sector (Fig. 10). On the other hand, the business performance of asset managers depends to a very significant degree on their size. According to KPMG, the big banks (i.e. institutions with AuM of more than CHF 25 billion) exhibit superior value development, as is also reflected in their much lower cost/income ratios. Furthermore, KPMG has found that the industry players defined as “strong performers” by the audit and management consultancy firm all boast AuM of more than CHF 100 bn.

Fig. 9: AuM reach an all-time high in 2019, but share of offshore business is in decline

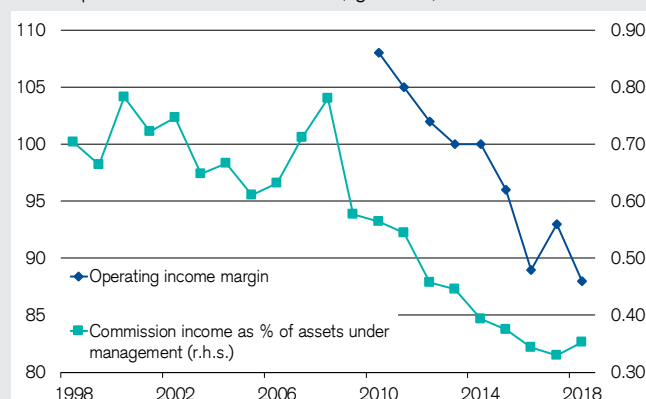
in CHF bn and as % of total AuM (right scale)



Source: Swiss National Bank, Credit Suisse. Last data point: March 2020

Fig. 10: Stabilization, but no recovery in margins

in basis points and as % of total AuM (right scale)



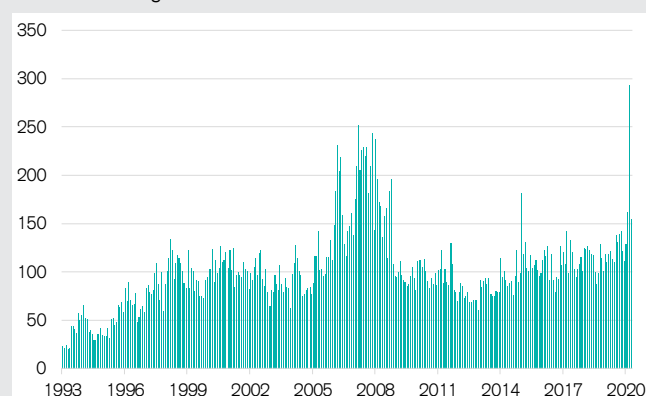
Source: KPMG, Swiss National Bank, Credit Suisse. Last data point: 2018.

Temporary strong rise in trading turnover will not alter margin situation fundamentally

The COVID-19 crisis has had a direct impact on the asset management industry in two respects: First, it has reduced the value of AuM, as the prices of financial assets have slumped. The unprecedented responses of central banks and fiscal authorities worldwide have certainly helped to stem these losses, but it can hardly be predicted how long it will take for the prices of these financial assets to fully recover. As AuM can be expected to remain subdued for a while, so too will the recurring revenues in the asset management business be reduced. Second, the downward spirals of financial assets have gone hand in hand with a sudden surge in the business of securities trading. For example, in terms of turnover the Swiss stock market recorded the best month in its history in March 2020 (Fig. 11). Rising trading revenues will temporarily boost the banks' income from trading activities. However, there is no reason to assume that trading volumes will remain at these lofty levels indefinitely. As a consequence, the pressure on margins in asset management can be expected to persist generally, with the COVID-19 crisis not triggering any enduring change here. On the other hand, over a longer time horizon AuM should once again start to expand as nominal GDP growth normalizes and new growth opportunities open up for asset managers.

Fig. 11: Sudden rise in trading volumes on SIX Swiss exchange in March 2020

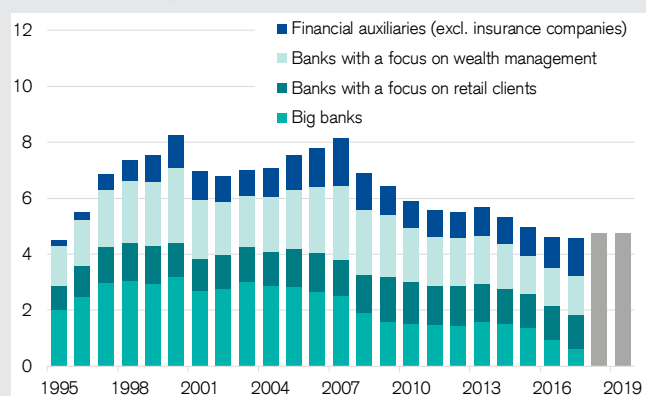
Securities trading turnover in CHF bn



Source: Swiss National Bank, Credit Suisse. Last data point: April 2020:

Fig. 12: Contribution of financial services to Swiss GDP has stabilized since 2016

Gross value added, in % of GDP



Source: Swiss Federal Statistical Office, State Secretariat for Economic Affairs (SECO), Credit Suisse. Last data point: 2019. No detailed breakdown available for 2018 and 2019

Underperformance halted, moderate growth set to persist

The global financial crisis, and to a certain extent also the euro crisis, have necessitated deep-rooted change in the Swiss financial sector. The COVID-19 crisis is the greatest challenge to confront the industry since. The consequences of the current crisis may not yet be fully assessable, but it appears that the financial sector and the banks in particular have proved themselves to be reliable partners of the fiscal and monetary policy authorities in relation to channeling the relief packages into the real economy. While the losses of the banks as a result of the recession can be expected to be fairly limited, the fundamental challenges facing the sector are still firmly in place. The banks' business volumes should recover and take them back to a growth trajectory, but the margins generated in the two most important areas of banking – the lending business and asset management – are unlikely to rise any time soon, not least because interest rates in Switzerland can be expected to remain in negative territory. Prior to the crisis, there were tentative signs that margins in asset management were stabilizing. We are expecting this sideways trend to continue after a temporary reversal. To lift profitability it is essential to consistently harness the potential of digitalization, be it at the client interface or in the back office.

Share of Swiss GDP accounted for by financial service providers should remain stable

Rising demand for financial services offset by efficiency increases and fiercer competition

As things stand, we are not expecting the Swiss financial center to regain market share in the off-shore asset management business. Conversely, however, we are also not expecting the Swiss banking sector to lose any of its importance within the Swiss economy. Indeed, the banks could turn out to be more robust in the current crisis than other sectors, which could in turn lead financial services to claim a greater share of Swiss GDP. The industry's gross value added has stabilized since 2016, and we see no real reason to assume that this is set to change (Fig. 12): When viewed in fundamental terms, financial assets are growing more or less in step with GDP, while demand for asset management services is increasing, as is competitive pressure. The latter two factors can be expected to more or less cancel each other out. At the same time, the increasing share of activities associated with financial services (excluding insurance) being driven by innovative pressure shows that growth niches still exist. This proportional increase is probably attributable to the rapidly expanding fund industry, which is classified in the Swiss National Accounts under the heading "Activities associated with financial services".

Development of the insurance industry

The proportion of Swiss GDP accounted for by the insurance industry has historically remained stable. Since 1995, this sector has contributed between 4.0% and 4.5% to domestic economic output almost every single year. This is high in an international comparison. In the US, the insurance sector is responsible for just under 3.0% of GDP, whereas in the United Kingdom and Germany the respective figures are around 1.2% and less than 1.0% respectively. The insurance industry in Switzerland has changed dramatically. According to the latest data, life insurers now contribute less than 1.0% to GDP, whereas at the end of the 1990s that share stood at more than 1.5%. By contrast, non-life insurers and reinsurers have enjoyed rapid growth, and currently contribute 1.1% and 1.2% to GDP respectively.

Swiss insurers are currently confronted by three challenges. The most direct threat is obviously the COVID-19 crisis. According to a report produced by Swiss Re, the insurance industry will be affected via three channels: lower interest rates, declining prices of financial assets, and the resulting negative impact on the capital bases and investment returns of the industry. Where non-life insurers are concerned, Swiss Re believes the worst-affected branches will be credit and surety insurance, along with loss underwriting as a result of event cancellations and disruptions to business. Among life and health insurers, the consequences of the COVID-19 crisis are fairly clear when one looks at how clearly this pandemic is impacting on mortality rates and healthcare. The second challenge is the saturation of the Swiss market. In an international comparison, Swiss households already spend a significant proportion of their income on insurance services. At the same time, potential economic growth in Switzerland is unlikely to exceed 1.0% over a long-term horizon, which means the growth potential of insurers is likewise restricted in the domestic market. In a fairly pessimistic study published in 2016, EY even concluded that 45% of Swiss insurers could be no longer active in the business by 2030. The third and final challenge is climate change. Extreme weather events and ever more grievous catastrophes will lead to increasing loss claims in the future, as Swiss Re has identified. This is obviously relevant not just to insurers focused on the domestic economy but also global reinsurers based in Switzerland, particularly as – according to S&P Global Rating and Intelligent Insurer – Switzerland is the world's third-largest reinsurance market when measured by net reinsurance premiums written.



Targeted adjustments to strengthen competitiveness

If they are to continue to make a significant contribution to value creation and employment, banks need an appropriate regulatory environment. Particularly important aspects here include the preservation and expansion of market access, the elimination of tax obstacles, and the implementation of prudential regulation in a way that is internationally aligned.

Ensuring market access

Banks as key exporters

The Swiss financial center is an important part of the national export industry. In particular, Switzerland plays a leading role in the cross-border business with wealthy private clients. Even in the era of tax transparency, Switzerland boasts a number of unique strengths in the business of wealth management, which include above all a high level of advisory quality and political stability. That said, the regulatory environment for the provision of such services has become more restrictive in recent years, which has in turn had an impact on Switzerland's ability to access foreign markets. The level of Swiss value creation and employment associated with the cross-border wealth management business is therefore under threat.

EU market access of paramount importance

In particular, Switzerland's ability to access the internal market of the European Union (EU) is of paramount importance. According to recent estimates by the Swiss Bankers Association (SBA), clients domiciled in the EU area hold assets amounting to some CHF 1,000 bn with banks in Switzerland. Furthermore, the SBA estimates that some 20,000 people in Switzerland work in this area, which generates annual tax receipts of up to CHF 1.5 bn². The figures from the most recent Credit Suisse Wealth Report clearly demonstrate the importance of the European market: After North America, Europe is home to more dollar billionaires than any other region, with a significant proportion of these individuals being domiciled in countries that neighbor Switzerland³. However, restrictive regulations in respect of market access are increasingly becoming a problem for the export-oriented Swiss financial center. The national legislation of numerous EU member states nowadays imposes significant restrictions on the ability of the Swiss banks to acquire private clients

Tax treatment depends on the individual circumstances of each client and may be subject to changes in future.

² Swiss Bankers Association (SBA). 2019. Market access for Swiss banks: importance and outlook

³ Credit Suisse Research Institute. 2020. Global Wealth Report 2019.

and service them on a cross-border basis. Switzerland is currently seeking to counteract this process of erosion through bilateral negotiations with selected EU member states.

Politicization of EU equivalence procedures as stumbling block

The Swiss banks' ability to access the EU market faces an additional obstacle in the form of the current discussion over the equivalence of Swiss financial market law with EU legislation. According to the existing regulations in respect of "third countries" in EU financial market law, the EU Commission may grant the Swiss financial center access to its internal market either partially or completely – or indeed not at all. An equivalence resolution is passed if the regulatory and supervisory framework of a third country is recognized as being equivalent in the area in question, although fundamental political considerations are also playing an increasingly important role here (e.g. in connection with stock market equivalence).

Against this background, the Swiss legislator is striving for an equivalent legal framework to that of the EU in order to facilitate access to the EU internal market. In particular, this objective is being pursued in the area of investor protection with the introduction of the Financial Services Act (FinSA) and the Financial Institutions Act (FinIA), both of which take account of the core concerns addressed by the corresponding EU rules (above all the EU's Markets in Financial Instruments Directive, MiFID II). However, these endeavors have so far failed to result in the desired scope of positive equivalence assessments by the EU Commission.

InstA to serve as basis for regulating relations with the EU

Moreover, in the event of stock market equivalence, the instrumentalization of the equivalence regime by the EU Commission for political purposes will give rise to significant uncertainties for the protagonists involved. From the perspective of the Swiss financial center, therefore, it is important that Switzerland soon concludes an Institutional Framework Agreement (InstA) with the EU that is capable of achieving majority support, so that the country's relationship with its most important economic partner can achieve regulated status backed by a reliable mechanism for resolving any disputes.

If an InstA were to be concluded, the current politicization of equivalence procedures would lose much of its relevance, a development that would ultimately benefit the reciprocal exchange of financial services. In the medium and long term, a regulated institutional framework would also facilitate the elaboration of other practical market access solutions for securing and improving access to the EU area for Swiss banks on a permanent basis.

Brexit as both opportunity and risk

Brexit and the subsequent negotiations over the future relationship between the United Kingdom and the remaining member states of the EU (EU-27), harbor both risks and opportunities for Switzerland. On the one hand, the EU will give high priority to the exit negotiations with the UK in 2020. It is likely that the outcome of these negotiations will also have a significant impact on the EU's future relations with other third countries such as Switzerland. On the other hand, Brexit is also opening up an opportunity for the bilateral relationship between Switzerland and the UK to be redefined and deepened. This will give the Swiss financial services sector the opportunity to seek out relaxations in the area of market access. In a recently published joint position paper, the Swiss umbrella business association "economiesuisse" and the UK association "TheCityUK" have argued in favor of an approach involving the mutual recognition of the relevant national regulatory and supervisory requirements. In addition, areas such as data protection and cyber risks should also be incorporated into any future agreement⁴.

Markets outside of Europe becoming increasingly important

For the globally active Swiss banks, markets outside of Europe are becoming increasingly important. For example, the Credit Suisse Global Wealth Report 2019 estimated that the number of dollar millionaires in the Asia-Pacific region (including China) could surpass the equivalent European figure by 2024. There is no doubt that the COVID-19 crisis will temporarily weigh on growth, not least in other regions such as the Middle East and Latin America. In the longer term, however, growth in the emerging markets should once again outstrip that of the more developed economies. As a consequence, in parallel to its efforts at a European level, Switzerland should also seek to conclude bilateral agreements that improve market access with relevant target markets in Asia, Eastern Europe, the Middle East, and Latin America.

⁴ economiesuisse & TheCityUK. 2020. Future-proofing the UK-Swiss Financial and Related Professional Services Relationship.

Fig. 1: Multi-layered approach and practicable solutions for market access required

	Short term	Long term
EU-27	<ul style="list-style-type: none"> ▪ Adjustment of Swiss regulation in order to facilitate selective market access via equivalence ▪ Depoliticized and principle-based process for recognition of equivalence at EU level ▪ Improvement of bilateral market access in respect of key countries (e.g. Germany, France, Italy, Spain, and Luxembourg) 	<ul style="list-style-type: none"> ▪ Seek out options for permanently guaranteeing and improving market access for financial service providers
Rest of world	<ul style="list-style-type: none"> ▪ Bilateral solution (e.g. free trade agreement, tax agreement, financial dialogue) to improve market access with key countries such as UK, Russia, Israel, and Brazil 	<ul style="list-style-type: none"> ▪ Longer-term expansion and deepening of bilateral relations with key countries outside of Europe

Source: Credit Suisse

Recommendations

Government, parliament, and supervisory authorities:

- Conclusion of an institutional framework agreement with the EU capable of achieving majority support.
- Preservation of good relations with the UK after Brexit as well as up to the end of the transitional phase; thereafter deepening of bilateral ties with a focus on improving market access for financial services.
- Improving bilateral market access to core markets in the EU/EEA area as well as outside the EU, and expanding access in the medium to long term via the corresponding agreements.
- Closely involving the financial industry in the improvement of current parameters and the elaboration of practicable long-term market access solutions.
- Further development and intensification of the (financial) dialogue with foreign authorities and regulators.

Private sector and banks:

- Early identification of obstacles to market access and active involvement in the search for (and elaboration of) practicable market access solutions through existing bodies.
- Sensitizing the political establishment and wider public to the significance of market access to the EU for the Swiss financial center and Switzerland as a business location.

Tackling tax challenges swiftly

Eliminate the taxes that are damaging the financial center

On May 19, 2019, the Swiss electorate accepted the “Tax Reform and AHV Financing” (TRAF) reform package by a clear majority, thereby giving their seal of approval to a corporate tax system that should continue to be internationally competitive. With this decision behind it, Switzerland should now remove the tax obstacles to the development of the financial center and thereby improve its competitiveness. At the same time, the current state of the federal budget should be taken into account, possibly by staggering the entry into force of the required measures.

Press ahead with abolition of stamp duties, ...

One measure demanded for many years is the abolition of stamp duties. These taxes are levied by the Confederation on the issuance and transfer of securities, as well as on the payment of insurance premiums, and were introduced during the First World War in order to tap into new sources of revenue. Fast-forward more than a century, and three different kinds of stamp tax are still being levied: stamp tax on the issuance of equity capital, stamp tax on transfer of domestic and foreign securities, and insurance tax.

... strengthen the capital market and trigger growth stimuli

Stamp taxes have the effect of discouraging the financing of investment with equity capital, as they make the corresponding issues more expensive. This in turn restricts the growth stimuli that investment triggers. Furthermore, these taxes impact negatively on the attractiveness of the Swiss capital market, as none of the leading competitor financial centers – such as the UK, the US, Singapore, or Hong Kong – imposes this kind of levy. In addition, for Switzerland as a financial center the turnover tax on foreign securities is particularly disadvantageous, as the levying of the tax in Switzerland combined with the taxes that may apply in the country of issue pose the risk of a double burden. Moreover, as an ex-ante tax, issuance stamp duty contradicts the constitutional principle of taxation according to economic capacity. The abolition of these taxes would therefore not only eliminate a competitive advantage, but also contribute to an invigoration of the Swiss economy. Analysis conducted by the economic research institute BAK Economics shows that the abolition of stamp taxes would lead to an increase in gross domestic product (GDP) that could compensate in the long term for the decline in tax receipts as a result of the abolition of these duties⁵.

Parliament recognizes need for action

The negative repercussions of stamp duties for Switzerland’s competitiveness have long been a topic of discussion at the political level. The current parliamentary initiative “Abolish stamp tax in stages and create jobs”, which is still pending, was actually submitted by the FDP back in 2009. The initiative was split into two drafts by the preparatory Committee for Economic Affairs and Taxation of the National Council (WAK-N): the first part relating to the abolition of stamp tax on issue of securities, the other part relating to the abolition of stamp tax on transfer of securities and insurance tax. Following the acceptance of the TRAF, the WAK-N advocated a two-stage abolition of stamp tax on transfer and insurance taxes. The corresponding consultation procedure was launched by the WAK-N on January 16, 2020 (Fig. 2). The abolition of stamp tax on transfer of Swiss bonds has additionally been proposed by the Federal Council in its bill relating to the reform of withholding tax (cf. below).

Reform of withholding tax also needed

In addition to the initiative to abolish stamp taxes, the latest efforts to drive through reform in the area of withholding tax are also welcome. With two previous attempts to reform withholding tax already having failed, it is important that a workable solution is found swiftly. The proposed reform, which was put out to consultation by the Federal Council at the start of April 2020, is designed to strengthen the Swiss debt capital market by exempting domestic legal entities and foreign investors from withholding tax on Swiss interest-bearing investments and abolishing transfer tax on Swiss bonds. This step is to be welcomed. Foreign investors typically avoid bonds that are subject to withholding tax, even if full reimbursement of this tax is theoretically possible. Aside from the temporary hit to liquidity that results from the withholding tax deduction, foreign investors are also reluctant to engage with the administrative hassle of reclaiming the tax. New tasks will arise for the banks as a result of this reform. When designing the new withholding tax system, it will therefore be important to focus on a simple design, the limitation of liability for the banks, and compensation for the banks for the work associated with implementation.

Tax treatment depends on the individual circumstances of each client and may be subject to changes in future.

⁵ BAK Economics. 2019. Volkswirtschaftliche Auswirkungen einer Reform der Stempelabgaben und Verrechnungssteuer [“Economic repercussions of a reform of stamp taxes and withholding tax”]

Fig. 2: Step-by-step abolition of stamp taxes

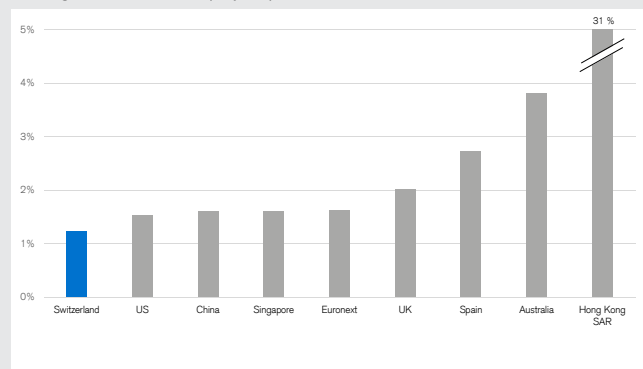
Issuance taxes	Turnover taxes	Insurance duties
Debt capital	Domestic securities / foreign bonds with term of < one year	Life insurance policies
Equity capital	Other foreign securities	Non-life / property insurance policies

■ Already abolished
 ■ Draft 1: National Council: approved / Council of States: suspended
 ■ Draft 2: First stage (in consultation)
 ■ Draft 3: Second stage (still pending)

Source: Credit Suisse

Fig. 3: Switzerland lagging behind in equity capital issuance

Average issuance of equity capital 2008 – 2016 (as % of GDP)



Source: "Future of the Financial Centre" Advisory Board

Recommendations

Government, parliament, and supervisory authorities:

- Press ahead with efforts to abolish stamp taxes.
- Appropriate involvement of the banks in the design of the new withholding tax system, taking into account the following key points: simplicity of design, limiting liability for paying agents, and compensation for paying agents.

Private sector and banks:

- Closer involvement of issuers and banks in the discussion on promotion of the Swiss capital market.
- Active participation in the elaboration of a practicable and expedient solution to reform withholding tax.

Circumspect finalization of prudential regulation

COVID-19 triggers deferral of implementation deadlines

The outbreak of COVID-19 has also had repercussions for the implementation of the still outstanding components of the "Basel III" framework. For example, on March 27, 2020, the Basel Committee for Banking Supervision (BCBS) decided to defer the implementation period for these significant provisions of banking regulation by one year to January 1, 2023. The aim of this move was to strengthen the operating capacities of the banks and supervisory authorities as they tackle the current crisis.

"Basel III" framework improves capital adequacy ...

The BCBS approved the final component parts of "Basel III" back in December 2017, before then finalizing the new regulations regarding disclosure and calculation of market risk in December 2018 and January 2019 respectively. With the capital guidelines having already been massively increased in the aftermath of the financial crisis – to the point where Switzerland is internationally leading in the area of capital requirements – the new regulations are designed to improve both credibility in the calculation of risk-weighted assets and the comparability of the banks' capital ratios. Specifically, this is to be achieved through:

- an overhaul of calculation approaches for credit risk, CVA (credit valuation adjustment) risk, market and operational risks,
- the determination of a lower capital threshold (output floor),
- the introduction of a new capital buffer in the leverage ratio for globally systemically important banks,
- changes in the calculation of overall exposure for the leverage ratio, and
- new disclosure guidelines.

**... and increases
the liquidity of the
affected banks**

A further component of the “Basel III” framework relates to the banks’ liquidity requirements. Here a distinction is made between two quantitative minimum standards: the minimum liquidity ratio (Liquidity Coverage Ratio, LCR), which strengthens the banks’ resilience in the face of sudden liquidity crises, and the structural liquidity ratio (Net Stable Funding Ratio, NSFR), which is designed to ensure stable long-term financing. The LCR has been implemented by systemically important banks in Switzerland since January 2015 – no less than four years before the deadline set by the BCBS. By contrast, the envisaged introduction of the NSFR, which was originally scheduled for 2018, has been repeatedly postponed not only in the EU and the US, but also in Switzerland. However, it has now become clear that the EU will introduce the NSFR in mid-2021, with the US expected to follow suit shortly after.

**Proven collaboration
between authorities
and financial sector**

As a member of the BCBS, Switzerland has committed to implementing and applying “Basel III”. To this end, various working groups led by the Federal Department of Finance are amending and supplementing regulations on an ongoing basis, often with the involvement of the financial sector. The corresponding National Working Groups (NWGs) aim to involve the affected banks in their preparatory work and submit the regulation in question to critical scrutiny. For example, the “NWG for the implementation of the final Basel III regulations” commenced its work in 2019. With respect to the implementation of the NSFR, the “Liquidity NWG” embarked on a final overhaul of the regulatory texts back in the spring of 2020, so the corresponding ordinance can be adopted by the Federal Council and enter into force by mid-2021.

**Implementation
in Switzerland
should be in step
with comparable
financial centers**

From the perspective of Credit Suisse, two points are of crucial importance for all these implementation projects: Firstly, from both a content and a timing standpoint, implementation in Switzerland should be geared around developments in comparable financial centers such as the EU, the UK, and the US. For Switzerland to press ahead on its own would not only entail competitive disadvantages for its financial center, but would also complicate comparability with regulations implemented in other BCBS member states. In addition, in view of the postponement of the implementation deadline for the outstanding components of the “Basel III” framework by the BCBS, it must be ensured that Switzerland implements the corresponding new regulations in step with comparable financial centers. Secondly, the various forms of national discretions envisaged in national implementation by the Basel framework must be used. This will ensure that the distinguishing features of the Swiss economy can be taken into account and the competitiveness of the financial sector strengthened.

Fig. 4: Key elements of the “Basel III” framework

Implementation deadlines and staggered introduction as per BCBS guidelines

Element	Implementation deadline
	January 1, 2015. 60%
	January 1, 2016. 70%
Liquidity Coverage Ratio, LCR	January 1, 2017. 80%
	January 1, 2018. 90%
	January 1, 2019. 100%
Net Stable Funding Ratio, NSFR	January 1, 2018
Revised standard approaches for market risks, credit risks, and operational risks	January 1, 2023
Leverage ratio buffer for globally systemically important banks	January 1, 2023
	January 1, 2023. 50%
	January 1, 2024. 55%
	January 1, 2025. 60%
Lower capital threshold (“output floor”)	January 1, 2026. 65%
	January 1, 2027. 70%
	January 1, 2028. 72.5% (final calibration)

Source: Basel Committee for Banking Supervision, 2020; Credit Suisse

Fig. 5: Switzerland leads the way in area of capital requirements

International minimum standards compared to Swiss capital requirements (in %, excl. buffers and discounts)



Source: Financial Stability Board (FSB), 2015; Federal Department of Finance, 2016; Credit Suisse

Recommendations

Government, parliament, and supervisory authorities:

- Implementation of “Basel III” framework in step with relevant financial centers (above all EU, UK, US) from a timing and content perspective.
- Make use of national discretions to strengthen the competitiveness of the Swiss financial center.
- Continuation of close collaboration with financial sector.

Private sector and banks:

- Contribution of industry expertise in collaboration with authorities.
- Prompt and circumspect planning of implementation of “Basel III” framework.



Time ticking for reforms

The coronavirus crisis is exacerbating the already dire predicament of the state pension system. The importance of personal retirement saving is increasing as a result. But even here there is a need for reform.

Pressure builds on pension system

The economic consequences of the coronavirus pandemic are impacting on Switzerland's pension system in a sensitive phase. On the one hand, life expectancy is rising continuously, a development that may be positive for individuals but is a serious problem for retirement saving. When the mandatory BVG system was introduced in 1985, life expectancy for Swiss aged 65 was 19.0 years for women and 14.9 years for men. Retirement capital nowadays has to last 3.7 years longer for women and 5.0 years longer for men.

In addition, the pension system is at a turning point due to the retirement of the high birth-rate "baby boomer" cohorts from 2020 onward. Although there are still a number of uncertainties when assessing the longer-term repercussions of the pandemic for the Old Age and Survivors' Insurance (AHV, Pillar 1) and the occupational benefits system (Pillar 2) from today's standpoint, political debate over the need for reform can be expected to intensify. As before, the focus is likely to remain on the stabilization of the AHV system, which is now likely to experience – at least in the short term – an even greater deterioration in its financing than had previously been widely assumed. Also affected by this development are the financing measures sketched out in the Federal Council's dispatch on the AHV 21 reform bill. The debate on the latter can therefore be expected to become much more difficult.

Current financial market developments highlight funding problem

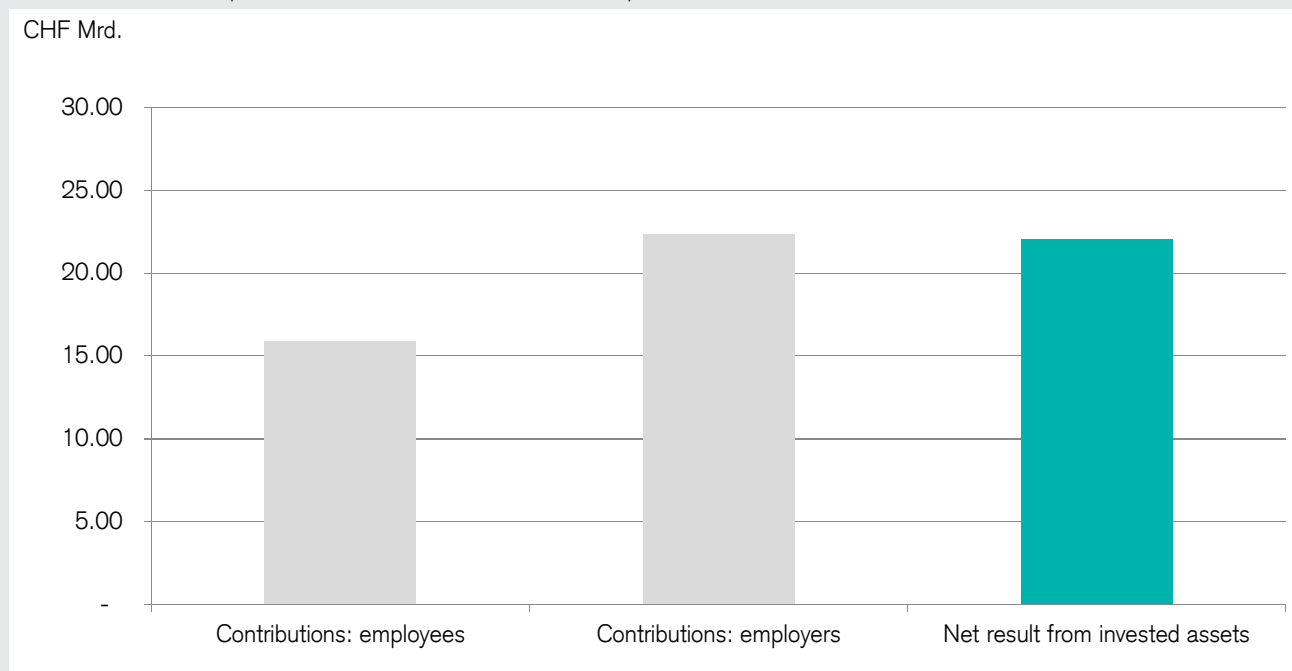
The sustainable financing of Switzerland's pension system is heavily influenced by the investment returns generated in the financial markets. Due to the above-mentioned effects, the proportion of pensioners has risen from 21% back in 1985 to 25% today, and is set to rise to a third within just a few years.⁶ This also has the effect of reducing the risk capacity of pension schemes, as fewer active insured are available to pay capital over the long term and thereby help to offset any losses or even correct these through restructuring measures. Without political countermeasures, it is only logical to fear that the financing of the AHV system and occupational benefits could be under threat, and that a further reduction in benefits is unavoidable.

Thanks to its more defensive asset allocation, the AHV compensation fund is likely to have been much less affected. At the end of 2019, around two-thirds of the assets of this fund (which has a total value of CHF 29.6 billion) were invested in money market investments and bonds, with just 26% in equities. That said, it nonetheless appears doubtful whether an annual return of more than 2% on average, as applied in the Federal Council's dispatch to the AHV 21 reform bill, can be achieved. But the medium-term problem is unlikely to revolve solely around the impaired ability of the compensation fund to make good the discrepancy between the AHV's active contributors and those who draw benefits. Indeed, it is more probable that the AHV will suffer a deterioration of all the factors relevant to its financing. In addition to the return on the compensation fund, these encompass potentially reduced inflows from contributions and value-added tax, as well as a possible fall in the number of workers immigrating from abroad.

⁶ "Second pillar: Growing gap between the generations", Credit Suisse, October 2019

Fig. 1: Relevance of the “third contributor”

Between 2004 and 2018, Pillar 2 pension schemes generated average returns of CHF 22 billion on their investments each year. In other words, the “third contributor” was responsible for more than 35% of all inflows into pension assets.



Source: Swiss National Bank

Relevance of the “third contributor”

Compared to the AHV, the occupational benefits pension schemes of Pillar 2 are exposed to much greater pressure to deliver the returns necessary to meet their liabilities. In contrast to the AHV system, second-pillar occupational benefits schemes are subject to much greater pressure to generate returns to meet their liabilities. Accordingly, the weighting of higher-risk investments in the asset allocation is that much greater. This strategy has paid off insofar as investment returns were responsible for more than a third of the growth in pension assets over the period 2004 to 2018 (Fig. 1). In the years of higher returns, this “third contributor” makes a substantial contribution to financing the redistribution from active insured to pensioners. According to the Occupational Pension Supervisory Commission (OPSC), this amounted to an annual average of CHF 6.8 billion between 2014 and 2019.⁷ In 2018 the redistribution was as high as CHF 7.2 billion, which equates to 0.8% of all pension capital. The redistribution is related to high conversion rates, which fail to take sufficient account of both higher life expectancy and low interest rates. The statutory minimum conversion rate is 6.8%, which corresponds to an implied interest rate promise of 4.9% annually. This stands in stark contrast with average investment performance since 2000, which stands at 2.7% annually.

Slump in Pillar 2

Credit Suisse publishes regular information on the average allocation and performance of the investments of pension funds whose assets are held within the bank’s Global Custody framework⁸. Accordingly, pension funds invested just 39.3% of their assets in nominal values at the end of March 2019 (Fig. 2). As might be expected, the market correction since the end of February has had a dramatic effect: The value of all pension fund assets slumped by 7.4% in the first quarter of 2020. Only in the third quarter of 2001 has performance been worse since record-keeping began in the year 2000.

Historical performance indications and financial market scenarios are not reliable indicators of future performance.

⁷ Report on the financial situation of pension funds 2019. Occupational Pension Supervisory Commission (OPSC). 2020.

⁸ Swiss Pension Funds Index. Credit Suisse (Switzerland) Ltd. 2020

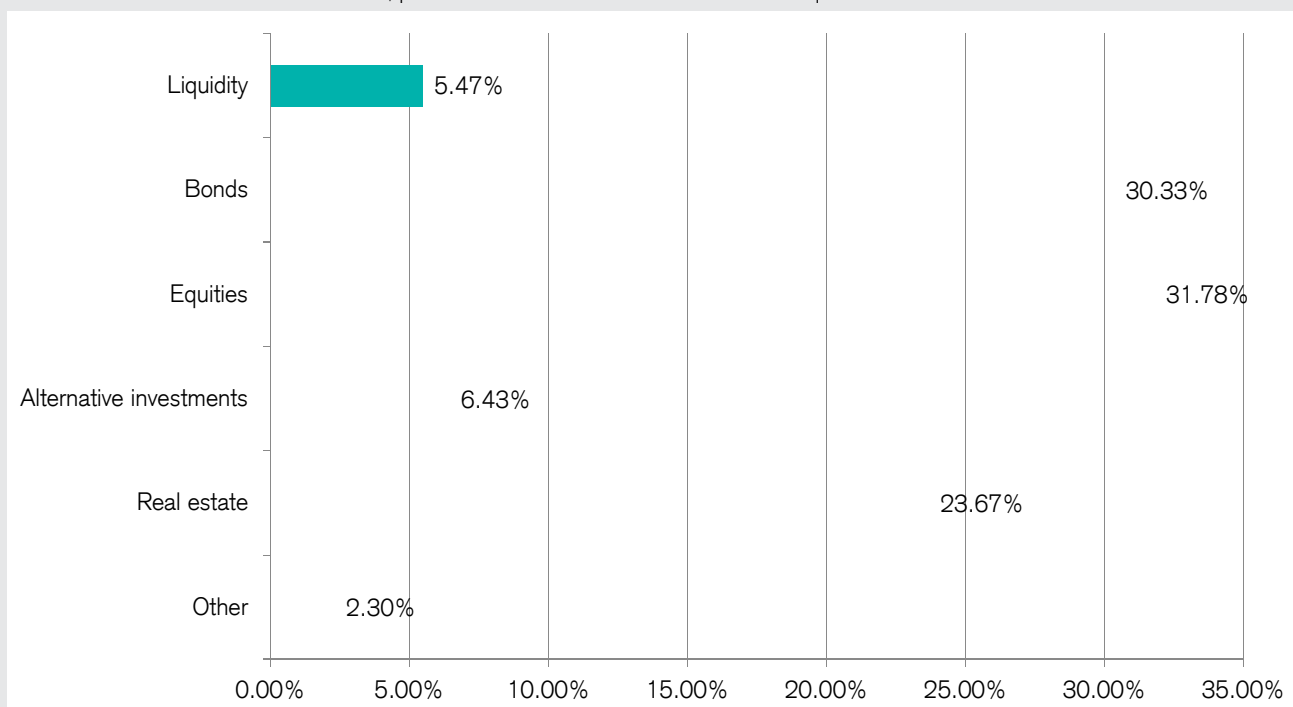
Due to the dependency of cover ratios on investment results, it must be assumed that the overall risk of pension funds has risen significantly, at least in the short term. The 2018 investment year, which was also weak, serves as a useful comparison here. Due to the 3.2% decline in pension fund assets, the proportion of pension funds without state guarantees exhibiting a cover ratio of less than 100% rose from 6% at the end of 2017 to 28% at the end of 2018⁹. Even if the investment result were to recover in the medium term, the current situation once again highlights how pension funds are limited in their ability to counteract the risk of a shortfall in cover due to the promises that must be redeemed on the one hand, and the associated pressure to deliver returns on the other. Political pressure to reform Pillar 2 can be expected to increase given the current situation.

1e plans gain in significance

1e plans are Pillar 2 pension plans for incomes in excess of CHF 127,980 per year, and take their name from Article 1e of the Ordinance on Occupational Retirement, Survivors' and Disability Pension Plans (BVV2). They involve employees selecting their preferred investment strategy from a total of 10 predefined strategies, and thereafter participating fully in the corresponding investment result. Furthermore, since 2017 the Vested Benefits Act has envisaged the insured being paid out the actual value of their retirement assets upon leaving the pension fund.

Fig. 2: Asset allocation of pension funds (Q4 2019)

Pension funds are under great pressure to deliver returns in the current low-interest environment in order to finance their liabilities. According to the Swiss Pension Funds Index of Credit Suisse, pension funds are invested more than 30% in equities.



Source: Credit Suisse Pension Funds Index

As the investment risks in 1e plans are transferred from the group to the insured individual, no redistribution takes place. 1e pension schemes should therefore also not bear any coverage shortfall or interest rate risks. In contrast to comparable contribution-oriented pension plans abroad, such as the 401k schemes in the United States, pension assets are paid out at the point of departure from a company, and from the associated insurance group to the insured individual. In the event of this person then joining a company that does not offer a 1e scheme, the new employee can no longer pursue their previous investment strategy. The investment horizons of 1e plans are therefore subject to limits that are beyond the insured's control, for example in the event of severance of employment.

⁹ Report on the financial situation of pension funds 2018. Occupational Pension Supervisory Commission (OPSC), 2019.

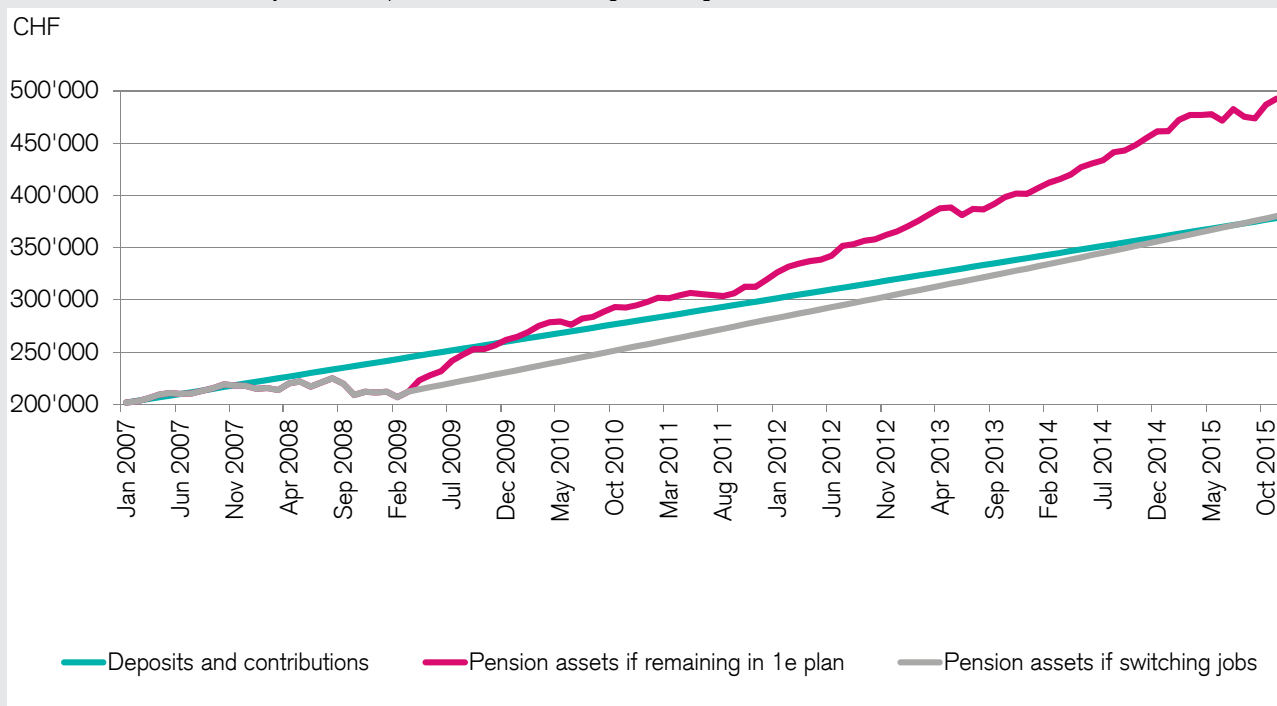
Unnecessary risk of loss when switching jobs

This dilemma can be illustrated on the basis of historic market data from the last major recession (Fig. 3). Here we assume that the individual joined a 1e plan in January 2007 with existing pension assets of CHF 200,000, annual contributions of CHF 20,000, and an equity weighting of 25%, but as a consequence of the economic situation is then made redundant precisely when equity markets are at their nadir in March 2009. If the individual in question is then enrolled in a pension plan offering the BVG minimum interest rate at his or her new employer, it would be more than five years from this point before the pension pot in question reaches the value of all cash deposits and contributions. This shows how the sudden discontinuation of the insured person's investment strategy poses a major obstacle to the long-term accumulation of assets even with moderate investment risk – which applies even if the insured was exposed to much lower risk in their original strategy than pension funds assume on average.

1e plans are currently estimated to account for less than 2% of active retirement assets in Switzerland, but are likely to gain in significance over the coming years. In June 2019, the political establishment addressed the problem of an employee changing jobs and facing the unwanted discontinuation of their investment strategy with a motion calling for pension fund assets to be eligible to remain in a vested benefits scheme for up to two years after the individual's departure from a 1e pension plan. A change in Swiss legislation appears desirable here, as current parameters make it difficult for insured to pursue a long-term investment strategy in the context of 1e plans.

Fig. 3: Consequences of exiting a 1e plan when equity markets are at a nadir

Illustration based on achieved market value of a strategy with 25% equity weighting (Pictet LPP 25 Index) from 2007 to 2015. Employee joins company with a 1e plan (deposit of CHF 200,000; annual contributions of CHF 20,000) when financial markets are at their peak. The change of employer coincides with the nadir of the financial crisis, and the 1e plan is therefore exited with a loss. Thereafter, transfer to a management pension plan with BVG interest rate. It takes five years for the previous loss to be made good through interest income.



Source: Credit Suisse, Bloomberg

Voluntary retirement saving remains relevant

The continuous rise in the importance of private pension assets in the Pillar 3a area is mainly due to the realization on the part of the working population that conversion rates and therefore occupational pension benefits must decline in order to ensure the sustainability of the system. From a socio-political perspective, an expansion of voluntary retirement saving in principle appears both expedient and capable of gaining majority support in parliament. In September 2019, the Council of States approved a motion designed to facilitate retrospective buying-in to Pillar 3a. This kind of cover shortfall solution could help middle earners, as well as women who have been unable to pay into a Pillar 3a plan for maternity reasons, build up a private pension pot (3a).

Historical performance indications and financial market scenarios are not reliable indicators of future performance.

Recommendations

Government, parliament, and supervisory authorities:

- Press ahead with AHV and occupational benefits reforms. Guarantee long-term viability of Swiss pension schemes: adjustment of minimum conversion rate, gradual adjustment of retirement age to demographic developments.
- Remove the setting of key parameters such as conversion rate, technical interest rate, and minimum interest rate from political influence.
- Facilitate buy-in for private retirement savers (3a) retrospectively, for persons who have temporarily had no AHV-relevant income (maternity break, etc.).
- Amend legislation so that assets from 1e pension plans can be left in a vested benefits scheme for a period of two years.

Private sector and banks:

- Make spectrum of well-diversified, straightforward, and cost-effective investment solutions available under BVV2 for all investment horizons.
- Ensure pension policyholders are clear about the relevant risks and have received advice on investment issues across all generations.



The role of financial institutions in meeting global sustainability targets

The integration of sustainability factors into the core business of financial institutions is becoming an increasingly important area of focus. A key market driver here is the development of political and regulatory framework conditions.

International framework for sustainable finance policy

Through the 2015 Paris Climate Agreement, the 196 signatory states committed to reducing the global average temperature increase to “well below 2°C” (aiming at 1.5°C) to avoid disastrous changes of the global climate system. The financial services industry is considered to play a key role in redirecting capital flows toward enabling the necessary investments for the transition to a low-carbon and climate-resilient economy. For this reason, the Agreement introduced an explicit requirement to make financial flows compatible with its “well-below 2°C” objective.

Even before 2015, there was a significant increase in the consideration of Environmental, Social and Governance (ESG) factors by financial institutions. Since 2015, however, regulatory action to scale sustainable finance has picked up speed, driven by a number of notable initiatives and organizations¹⁰:

- **The United Nations Sustainable Development Goals (SDGs):** Agreed in 2015, the 17 SDGs address overarching global challenges such as poverty, inequality, climate change, environmental degradation, peace and justice. They provide a common framework of reference for financial institutions, companies, policymakers, NGOs, and the public for creating a better and more sustainable future for all.
- **The Financial Stability Board’s (FSB) Task Force for Climate-related Financial Disclosures (TCFD):** The TCFD, established by Mark Carney and chaired by Michael Bloomberg, in June 2017 published a set of voluntary climate-related financial disclosures for companies to address risks to financial system stability that could arise from climate change.
- **Network for Greening the Financial System (NGFS):** In December 2017, eight central banks and supervisors established the NGFS to enhance the role of the financial system in managing the financial risks of climate change and to mobilize capital for sustainable and low carbon investments. The NGFS currently counts 54 members (including the Swiss National Bank, SNB, and the Swiss Financial Market Supervisory Authority, FINMA) and 12 observers.

¹⁰ Leading Swiss sustainable finance trade association Swiss Sustainable Finance (SSF) defines sustainable finance as: “Sustainable finance refers to any form of financial service integrating environmental, social and governance (ESG) criteria into business or investment decisions for the lasting benefit of both clients and society at large”

- **The UN Principles for Responsible Banking (PRB):** The PRB, launched in September 2019 by 130 banks, call for aligning the banking sector with the objectives of the UN SDGs and the Paris Climate Agreement and represent a comprehensive framework for the integration of sustainability across all business areas of banks.
- **EU International Platform on Sustainable Finance (IPSF):** In October 2019, the European Commission (EC) established the IPSF with nine other jurisdictions to facilitate the exchange of best practice and coordinate efforts on approaches to encourage sustainable finance. Switzerland has been a member since March 2020.

Sustainable finance as a market opportunity

Global sustainability organizations and initiatives, driven by increasing client demand and regulatory developments, contributed to the creation of significant market opportunities in sustainable finance, as evidenced by a surge in funds managed according to ESG criteria.

According to the 2018 Global Sustainable Investment Review, published biannually by the Global Sustainable Investment Alliance (GSIA), sustainably invested assets in the five major markets it analyzed¹¹ stood at USD 30.7 trillion at the start of 2018, a 34% increase in two years. The Global Impact Investing Network's (GIIN's) Annual Impact Investor Survey¹², representing roughly 48% of the global impact investing market, concludes a strong annual growth rate of nearly 17% since 2016 (as of June 2019)¹³. The global green bond market¹⁴, a key indicator for sustainable debt market trends, hit a new record of USD 258 billion in total green bond issuance in 2019, representing a 51% increase from 2018¹⁵.

The Swiss financial sector is a pioneer in sustainable finance and has a history of spearheading micro-finance, impact investing and development. Milestones such as the foundation of re-sponsAbility, Blue Orchard, RobecoSAM and SSF have firmly established Switzerland as a leading center for sustainable finance. According to the latest Swiss Sustainable Investment Market Study 2020, published by SSF, sustainable investments in Switzerland reached CHF 1'163 billion by the end of 2019¹⁶.

Sustainable finance policy: A key market driver

Tackling climate change and other environmental and social challenges has become a top priority for policymakers and regulators worldwide as the effects of climate change are increasingly visible. While Europe has been the main driving force in sustainable finance policy, other jurisdictions are catching up.

Sustainable finance policy developments in a regional comparison

European Union (EU) as pioneer

In March 2018, in line with its ambition to lead by example in the fight against climate change, the EU adopted a comprehensive Action Plan on Sustainable Finance with a package of measures for its implementation, aimed at mobilizing finance for sustainable growth. Implementation of the Action Plan saw important progress in 2019:

- **A common language for sustainable finance:** EU co-legislators reached an agreement in December 2019 on the final text of the EU Taxonomy Regulation, which establishes a framework to provide financial market participants with a common language to identify economic activities that can be considered as 'environmentally sustainable'.

¹¹ The five markets analyzed were Europe, United States, Japan, Canada, and Australia/New Zealand.

¹² GIIN: "Annual Impact investor Survey 2019", June 2019, https://thegiin.org/assets/GIIN_2019%20Annual%20Impact%20Investor%20Survey_webfile.pdf.

¹³ However, only a subset of about 30% of survey respondents have consistently reported across all four years.

¹⁴ Green bonds are bonds that are issued with the goal of financing projects that met pre-defined environmental and/or climate objectives, usually the green use of proceeds (e.g. financing renewable energy or energy efficiency measures).

¹⁵ Climate Bonds Initiative: «2019 Green Bond Market Summary», February 2020, https://www.climatebonds.net/files/reports/2019_annual_highlights-final.pdf

¹⁶ Swiss Sustainable Finance: "Swiss Sustainable Investment Market Study 2020", June 2020, https://www.sustainablefinance.ch/upload/cms/user/2020_06_08_SSF_Swiss_Sustainable_Investment_Market_Study_2020_E_final_Screen.pdf

- **Increased transparency for sustainable investing:** EU co-legislators have finalized and adopted the ESG Disclosures Regulation and the Low Carbon Benchmarks Regulation, which will come into effect in May 2020 and March 2021, respectively. Both regulations aim at providing financial market participants with enhanced transparency over how sustainability objectives are pursued and how sustainability risks are taken into account.
- **Enhanced climate-related reporting:** the EC developed new guidelines on reporting climate-related information, providing companies with practical recommendations on how to report the impact their activities have on the climate as well as the impact of climate change on their business. The guidelines integrate the TCFD recommendations and will apply (on voluntary basis) to large listed companies, banks, and insurance companies, with more than 500 employees for the financial year 2019.
- The European Green Deal (EGD), a policy roadmap adopted in December 2019 (and to be implemented through specific legislative measures), is intended as a growth strategy that aims to transform the EU into a fair and prosperous society with a modern, resource-efficient and competitive economy. Specifically, it sets out the EU's goal for Europe to become the first climate neutral continent by 2050, hence seeking to bring the region in alignment with the Paris Climate Agreement.

**Switzerland:
Sustainable finance
increasingly in focus
of political
establishment**

Switzerland has made important advances in the area of sustainable finance policy over the last two years. The Federal Council recognizes the importance of the topic and set up an inter-departmental working group on sustainable finance policy in spring 2019. One goal of the working group is to assess the impact of sustainable finance developments in the EU and it is expected to present a report assessing the need for further regulatory action in sustainable finance in summer 2020. In October 2019, Federal Councilor Ueli Maurer, Head of the Federal Department of Finance, joined the Coalition of Finance Ministers for Climate Action, which supports principles that align fiscal policy and public finances with the objectives of the Paris Climate Agreement.

The revision of the Swiss CO₂ Act, the cornerstone of Swiss climate policy, also made progress in 2019. The deliberations in the Council of States led to the acceptance of measures specifically affecting the financial sector, including incorporation of the demand for financial flows to be brought into alignment with the targets of the Paris Agreement. Furthermore, the Council of States proposed that the SNB and FINMA be mandated to review climate-related financial risks in the financial sector on a regular basis. In April 2019, SNB and FINMA joined the NGFS. In December 2019, FINMA started to include climate-related risks in its risk monitor, an overview of what it considers the most urgent risks currently facing the Swiss financial sector. In 2020, FINMA will refine its analyses of climate-related risks in the balance sheets of financial institutions and develop approaches for improved voluntary or regulated disclosure of financial climate risks accordingly.

In this context, the Federal Office for the Environment (BAFU) and the State Secretariat for International Finance (SIF) are again offering free climate compatibility tests in 2020. For the first time, these tests will be available to banks and asset managers as well as pension funds and insurance companies on a voluntary basis.

The European Union is expected to make further progress in the implementation of its sustainable finance agenda in 2020. This will include, among other topics, the revision of the EU Non-Financial Reporting Directive and the development of a Renewed Sustainable Finance Strategy. Consultations for both of these initiatives are currently ongoing.

International sustainable finance policy developments

- EU Sustainable Finance Action Plan (Taxonomy Regulation, Benchmarks Regulations etc.), EU Green Deal
- Network for Greening the Financial System (NGFS)
- Bank of England (BoE): PRAs supervisory statement (April 2019) and Biennial Exploratory Scenario (BES) exercise consultation paper (December 2019)
- Task Force for Climate Related Financial Disclosures (TCFD)



Swiss sustainable finance developments

Swiss Parliament

- Revision of CO₂ law likely to include provision on financial flows (in line with Paris Agreement) and mandate for SNB/FINMA to regularly assess climate-related risks
- Numerous sustainable finance parliamentary initiatives submitted across party lines on a wide range of topics

Federal Council/SIF/BAFU

- Cross-departmental working group on sustainable finance led by SIF (Credit Suisse participated in consultations)
- Report examining further regulatory action in sustainable finance expected in H2 2020
- Switzerland joined Coalition of Finance Ministers for Climate Action
- BAFU climate compatibility test 2020

SNB/FINMA

- FINMA and SNB joined Network for Greening the Financial System
- FINMA 2019 risk monitor considers climate-related risks key long-term risk

Industry associations

- SBA sustainable finance working group with SSF participation. Publication of position paper in September 2019
- Currently developing industry guidelines for integrating ESG factors into advisory process for private clients
- Increased sustainable finance activity at SFC and economiesuisse

Asia-Pacific region (APAC): Strong growth of sustainable finance regulation

In Asia, interest in ESG investing has historically somewhat lagged behind global interest, but is picking up speed. Financial market regulators in the region are increasingly addressing ESG issues through a variety of mechanisms, most importantly sustainability-oriented stewardship codes, disclosure for listed companies and fostering of green investment such as green bonds. Green bond issuance in the Asia-Pacific region reached record levels of USD 64 billion in 2019, of which USD 31 billion (equivalent to 48% of the regional total) were issued in China alone.

Significant milestones in APAC were the release of the Hong Kong Monetary Authority's (HKMA) draft of its planned common assessment framework to evaluate the preparedness of financial institutions vis-a-vis climate change risk, other environmental risks and sustainability issues. A further milestone was the publication of the Monetary Authority of Singapore's (MAS) Green Finance Action Plan, which seeks to enable its financial sector to play a key role in promoting sustainable development opportunities and powering the transition to a low-carbon economy in Asia. Reports emerged in February 2020 that MAS is also working on incorporating a broader range of climate-related risks in its stress testing scenarios. In a written reply to parliament, MAS said it had already started to stress test for climate change-related risks, but that the methodologies for stress testing these risks were still at a nascent stage.

US: Regulatory measures at federal level in particular

Progress in sustainable finance policy matters has been slower in the United States than in Europe, with little meaningful regulatory action in this field, particularly at federal government level. The Security and Exchange Commission's (SEC) stance on ESG disclosure, for example, remains voluntary and principles-based, in contrast to the mandatory disclosure rules in development in Europe. However, in March 2020, the SEC issued a request for public comment on whether ESG products should follow the existing Names Rule, which requires funds focusing on a particular type of investment, e.g. one labelled as "sustainable," to invest at least 80% of its assets accordingly. While the US executive branch remains apprehensive, both Congress and State authorities have begun to consider regulatory measures to drive sustainable finance. In 2019, Congress held its first hearing on ESG issues in the House Financial Services Committee and the New York State Department of Financial Services (NYSDFS) became the first US state financial regulator to join the NGFS. Growth in shareholder pressure and sustainable finance initiatives at sub-federal level are expected to continue in 2020.

Recommendations

Government, parliament and supervisory bodies:

- Putting in place appropriate framework conditions to foster sustainable finance, for example through rules for internalizing external costs (e.g. appropriate carbon pricing), prevent greenwashing and reduce regulatory hurdles for sustainable finance
- Applying caution with regard to a possible differentiated prudential treatment of green and non-green until a stable causal relationship between an asset's risk profile and its sustainability classification has been established.
- Fostering greater alignment of regulatory requirements across jurisdictions (no "Swiss Finish"). In particular, aligning nascent stress testing methodologies internationally to limit the potential for market fragmentation.
- Early and active Swiss government participation in international coordination forums such as the NGFS or EU Platform for Sustainable Finance.

Business community and banks:

- Bringing financial flows in line with the goals of the Paris Climate Agreement, for example by becoming a signatory to the UN's PRB, and developing methodologies to align lending portfolios with the "well-below 2 degrees" objective.
- Expanding the range and volume of sustainable finance products to meet in-creased client demand.
- Enhancing reporting practices and disclosure of ESG issues at company level.



Goodbye LIBOR – welcome SARON

An operation is currently under way in the financial markets that is akin to switching horses while at full gallop. At the end of 2021, CHF LIBOR is set to be replaced by an alternative reference interest rate, SARON. Preparations are taking place at a high tempo. The company SIX is already calculating a number of SARON index series, while the Swiss National Bank has also already replaced CHF LIBOR in its monetary policy concept.

Significance of LIBOR

The London Interbank Offered Rate (LIBOR) is the interest rate at which selected international banks have to pay interest for unsecured interbank loans. It is one of the key metrics of the financial markets. Over the last few decades, LIBOR has served as the benchmark rate for comparing the interest rates available in the markets at any given point in time. A well-known example is that of money market mortgages in Switzerland, on which interest is typically payable quarterly or semi-annually at three-month CHF LIBOR. The total nominal value of derivatives, loans, and other banking products in Switzerland based on LIBOR is around CHF 6.5 trillion. LIBOR is therefore the most commonly used reference interest rate not just in Switzerland, but also worldwide (Fig. 1).

LIBOR set to disappear at the end of 2021

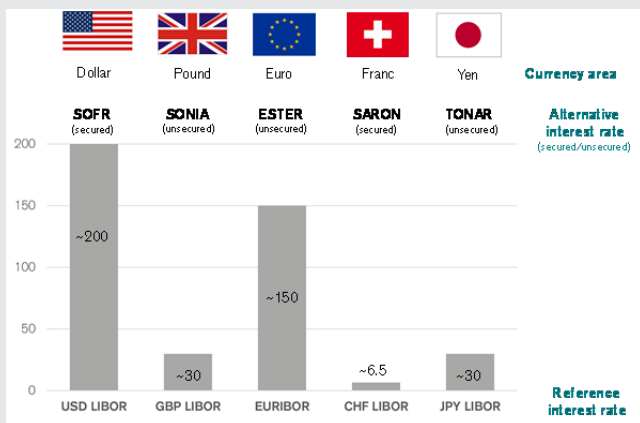
Much of the money market business underpinned by LIBOR evaporated in the aftermath of the financial crisis. As the database of actual transactions has consequently become too restricted, there is no longer a robust basis for calculating LIBOR, and hence the need for it to be replaced by alternative reference interest rates. This historic changeover must be effected before the end of 2021, as the calculation of LIBOR is only guaranteed up until that point. Alternative rates to LIBOR have already been identified and made available in the world's key currency regions. In Switzerland, a National Working Group chaired by the Swiss National Bank (SNB) and including all the key players, recommended the secured Swiss Average Rate Overnight (SARON) as an alternative back in the fall of 2017.

Differences between SARON and LIBOR

SARON is an overnight interest rate, calculated on the basis of actually executed secured transactions as well as tradable prices in the repo market. The repo market, which is part of the money market, is where banks and other market participants can lend money overnight with securities deposited by the counterparty as collateral. A functioning repo market is absolutely critical to the banks as a means of securing liquidity at times of crisis. Banks that possess securities of sufficient credit quality can rapidly obtain liquidity in the repo market at any time. Daily trading volumes amount to just under CHF 8 billion on average. A price is published every 10 minutes, and fixing takes place three times a day. The final fixing of the day at 18:00 serves as the reference rate for derivative products, among others. SARON is much more transparent than LIBOR in this respect.

Fig. 1: Huge significance of LIBOR

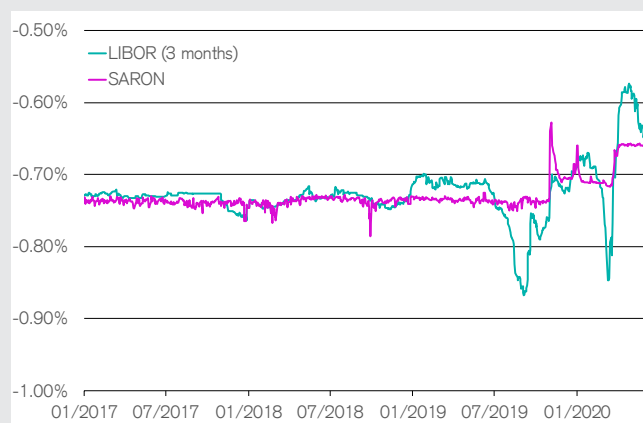
Global LIBOR-based transactions by currency area, in USD trn



Source: IBOR Global Benchmark Survey 2018, Credit Suisse

Fig. 2: LIBOR and SARON can deviate from one another

Comparison of LIBOR and SARON reference interest rates



Source: Datastream, Credit Suisse

Large deviations between LIBOR and SARON a rarity

Because LIBOR – unlike SARON – is an unsecured interest rate, the two reference interest rates also differ from one another fundamentally from a risk perspective. While LIBOR contains a credit risk and a term premium, the counterparty and liquidity risks inherent in SARON are negligible (Fig. 3). However, when tranquility prevails in the markets these differences are hardly noticeable, and a look at the past shows that these two interest rates have indeed hardly ever deviated from one another. By contrast, in stress situations the premiums for counterparty risk and the premium demanded by an investor for relinquishing liquidity rise significantly, with the result that LIBOR can deviate from SARON sharply.

Determining a forward SARON rate is challenging

Interest rates for three-month and six-month terms are required for many financial products, such as mortgages and syndicated loans. SARON is an overnight interest rate, however, which is why it lacks a term structure. Rates for longer terms must therefore be derived from the overnight rate. This derivation can be done in two different ways: Either one uses a “forward-looking” interest rate, by reading market expectations in respect of traded derivatives, or one uses a “composite” interest rate made up of individual overnight rates. As the corresponding derivative trading volumes are still very small, the second solution was the preferred variant for Switzerland. In contrast to 3-month LIBOR, for example, where clients know right at the start of the interest period how much interest they will have to pay, the effective rate for so-called compounded SARON can only be determined at the end of the interest rate period. In total, there are seven different variants to choose from (Fig. 4).

Banks may choose different variants

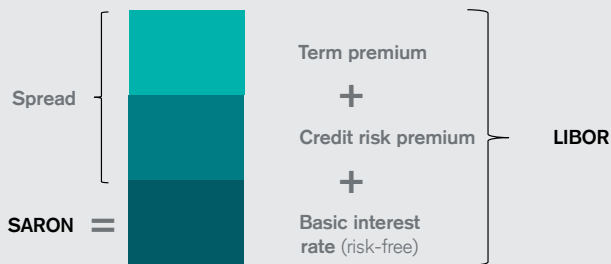
The different forms of calculation differ from one another with regard to the point in time at which the interest payment for the three-month period is known, and with regard to the period drawn upon for the interest rate calculation (observation period). With the basic variant (“Variant 0”) the interest rate period and observation period are identical. The drawback of this variant is that the amount of interest payable is only known on the eve of the payment date, which may give rise to operating problems (e.g. liquidity problems) for clients. The first group of banks in Switzerland have therefore opted for Variant 3, in which the observation period is slightly brought forward so that notification of the interest payable can be sent out a few days prior to the due date. Another option with its supporters is Variant 4, which involves exclusive recourse to overnight rates of the prior period, which means there will be clarity over the interest payable right at the start of the term. Variants 5 and 6 are less appealing, as the kind of volatile markets we have seen recently do not favor short observation periods.

Changeover of open contracts

When the transition to SARON takes place, countless existing (i.e. open) contracts will also have to be changed over to the new rate. This presents a challenge when it comes to designing fallback provisions. For example, it must be clearly determined what event will trigger the fallback (e.g. announcement by the Fed, the US central bank). Moreover, the changeover must also take account of the differences (i.e. spreads) between LIBOR and SARON. Solutions are currently being designed in this area, and include discussions over which of these solutions should ideally involve application of historic averages/medians of these spreads. The creation of a lending market based on SARON is therefore gradually edging ever closer to reality – another important prerequisite for the replacement of Swiss franc LIBOR.

Fig. 3: Structural differences between SARON and LIBOR

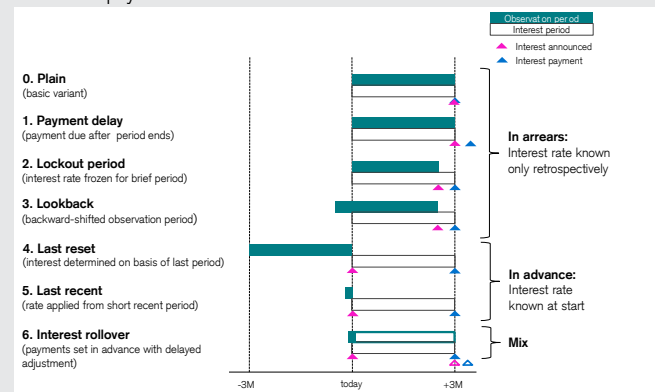
LIBOR rates also contain a credit risk premium and a term premium



Source: Credit Suisse

Fig. 4: Variants for calculating the SARON long-term rate

Variants in respect of observation period, payment date, and notification of interest payable



Source: National Working Group (NWG), Credit Suisse

Summary of recommendations

	Ensuring market access	Tackling tax challenges swiftly	Circumspect finalization of prudential regulation	Time ticking for pension reforms	Shaping conducive sustainable finance policy
Government, parliament and supervisory bodies:	<ul style="list-style-type: none"> • Conclusion of an institutional framework agreement with the EU capable of achieving majority support. • Preservation of good relations with the UK after Brexit as well as up to the end of the transitional phase; thereafter deepening of bilateral ties with a focus on improving market access for financial services. • Improving bilateral market access to core markets in the EU/EEA area as well as outside the EU, and expanding access in the medium to long term via the corresponding agreements. • Closely involving the financial industry in the improvement of current parameters and the elaboration of practicable long-term market access solutions. • Further development and intensification of the (financial) dialogue with foreign authorities and regulators. 	<ul style="list-style-type: none"> • Press ahead with efforts to abolish stamp taxes. • Appropriate involvement of the banks in the design of the new withholding tax system, taking into account the following key points: simplicity of design, limiting liability for paying agents, and compensation for paying agents. 	<ul style="list-style-type: none"> • Implementation of "Basel III" framework in step with relevant financial centers (above all EU, UK, US) from a timing and content perspective. • Make use of national discretions to strengthen the competitiveness of the Swiss financial center. • Continuation of close collaboration with the financial sector. 	<ul style="list-style-type: none"> • Press ahead with AHV and occupational benefits reforms. Guarantee long-term viability of Swiss pension schemes: adjustment of minimum conversion rate, gradual adjustment of retirement age to demographic developments. • Remove the setting of key parameters such as conversion rate, technical interest rate, and minimum interest rate from political influence. • Facilitate buy-in for private retirement savers (3a) retrospectively, for persons who have temporarily had no AHV-relevant income (maternity break, etc.). • Amend legislation so that assets from 1e pension plans can be left in a vested benefits scheme for a period of two years. 	<ul style="list-style-type: none"> • Putting in place appropriate framework conditions to foster sustainable finance, for example through rules for internalizing external costs (e.g. appropriate carbon pricing), prevent greenwashing and reduce regulatory hurdles for sustainable finance. • Applying caution with regard to a possible differentiated prudential treatment of green and non-green until a stable causal relationship between an asset's risk profile and its sustainability classification has been established. • Fostering greater alignment of regulatory requirements across jurisdictions (no "Swiss Finish"). In particular, aligning nascent stress testing methodologies internationally to limit the potential for market fragmentation. • Early and active Swiss government participation in international coordination forums such as the NGFS or EU Platform for Sustainable Finance.
Business community and banks:	<ul style="list-style-type: none"> • Early identification of obstacles to market access and active involvement in the search for (and elaboration of) practicable market access solutions through existing bodies. • Sensitizing the political establishment and wider public to the significance of market access to the EU for the Swiss financial center and Switzerland as a business location. 	<ul style="list-style-type: none"> • Closer involvement of issuers and banks in the discussion on promotion of the Swiss capital market. • Active participation in the elaboration of a practicable and expedient solution to reform withholding tax. 	<ul style="list-style-type: none"> • Contribution of industry expertise in collaboration with authorities. • Prompt and circumspect planning of implementation of "Basel III" framework. 	<ul style="list-style-type: none"> • Make spectrum of well-diversified, straightforward, and cost-effective investment solutions available under BVV2 for all investment horizons. • Ensure pension policyholders are clear about the relevant risks and have received advice on investment issues across all generations. 	<ul style="list-style-type: none"> • Bringing financial flows in line with the goals of the Paris Climate Agreement, for example by becoming a signatory to the UN's PRB, and developing methodologies to align lending portfolios with the "well-below 2 degrees" objective. • Expanding the range and volume of sustainable finance products to meet increased client demand. • Enhancing reporting practices and disclosure of ESG issues at company level.

Important Information

This report represents the views of the Investment Strategy Department of CS and has not been prepared in accordance with the legal requirements designed to promote the independence of investment research. It is not a product of the Credit Suisse Research Department even if it references published research recommendations. CS has policies in place to manage conflicts of interest including policies relating to dealing ahead of the dissemination of investment research. These policies do not apply to the views of Investment Strategists contained in this report.

Risk warning

Every investment involves risk, especially with regard to fluctuations in value and return. If an investment is denominated in a currency other than your base currency, changes in the rate of exchange may have an adverse effect on value, price or income.

For a discussion of the risks of investing in the securities mentioned in this document, please refer to the following Internet link:
<https://investment.credit-suisse.com/gr/riskdisclosure/>

This document may include information on investments that involve special risks. You should seek the advice of your independent financial advisor prior to taking any investment decisions based on this document or for any necessary explanation of its contents. Further information is also available in the information brochure "Special Risks in Securities Trading" available from the Swiss Bankers Association.

Past performance is not an indicator of future performance. Performance can be affected by commissions, fees or other charges as well as exchange rate fluctuations.

Financial market risks

Historical returns and financial market scenarios are no reliable indicators of future performance. The price and value of investments mentioned and any income that might accrue could fall or rise or fluctuate. Past performance is not a guide to future performance. If an investment is denominated in a currency other than your base currency, changes in the rate of exchange may have an adverse effect on value, price or income. You should consult with such advisor(s) as you consider necessary to assist you in making these determinations.

Investments may have no public market or only a restricted secondary market. Where a secondary market exists, it is not possible to predict the price at which investments will trade in the market or whether such market will be liquid or illiquid.

Emerging markets

Where this document relates to emerging markets, you should be aware that there are uncertainties and risks associated with investments and transactions in various types of investments of, or related or linked to, issuers and obligors incorporated, based or principally engaged in business in emerging markets countries. Investments related to emerging markets countries may be considered speculative, and their prices will be much more volatile than those in the more developed countries of the world. Investments in emerging markets investments should be made only by sophisticated investors or experienced professionals who have independent knowledge of the relevant markets, are able to consider and weigh the various risks presented by such investments, and have the financial resources necessary to bear the substantial risk of loss of investment in such investments. It is your responsibility to manage the risks which arise as a result of investing in emerging markets investments and the allocation of assets in your portfolio. You should seek advice from your own advisers with regard to the various risks and factors to be considered when investing in an emerging markets investment.

Alternative investments

Hedge funds are not subject to the numerous investor protection regulations that apply to regulated authorized collective investments and hedge fund managers are largely unregulated. Hedge funds are not limited to any particular investment discipline or trading strategy, and seek to profit in all kinds of markets by using leverage, derivatives, and complex speculative investment strategies that may increase the risk of investment loss.

Commodity transactions carry a high degree of risk, including the loss of the entire investment, and may not be suitable for many private investors. The performance of such investments depends on unpredictable factors such as natural catastrophes, climate influences, hauling capacities, political unrest, seasonal fluctuations and strong influences of rolling-forward, particularly in futures and indices.

Investors in real estate are exposed to liquidity, foreign currency and other risks, including cyclical risk, rental and local market risk as well as environmental risk, and changes to the legal situation.

Private Equity

Private Equity (hereafter "PE") means private equity capital investment in companies that are not traded publicly (i.e. are not listed on a stock exchange), they are complex, usually illiquid and long-lasting. Investments in a PE fund generally involve a significant degree of financial and/or business risk. Investments in private equity funds are not principal-protected nor guaranteed. Investors will be required to meet capital calls of investments over an extended period of time. Failure to do so may traditionally result in the forfeiture of a portion or the entirety of the capital account, forego any future income or gains on investments made prior to such default and among other things, lose any rights to participate in future investments or forced to sell their investments at a very low price, much lower than secondary market valuations. Companies or funds may be highly leveraged and therefore may be more sensitive to adverse business and/or financial developments or economic factors. Such investments may face intense competition, changing business or economic conditions or other developments that may adversely affect their performance.

Interest rate and credit risks

The retention of value of a bond is dependent on the creditworthiness of the Issuer and/or Guarantor (as applicable), which may change over the term of the bond. In the event of default by the Issuer and/or Guarantor of the bond, the bond or any income derived from it is not guaranteed and you may get back none of, or less than, what was originally invested.

Investment Strategy Department

Investment Strategists are responsible for multi-asset class strategy formation and subsequent implementation in CS's discretionary and advisory businesses. If shown, Model Portfolios are provided for illustrative purposes only. Your asset allocation, portfolio weightings and performance may look significantly different based on your particular circumstances and risk tolerance. Opinions and views of Investment Strategists may be different from those expressed by other Departments at CS. Investment Strategist views may change at any time without notice and with no obligation to update. CS is under no obligation to ensure that such updates are brought to your attention.

From time to time, Investment Strategists may reference previously published Research articles, including recommendations and rating changes collated in the form of lists. The recommendations contained herein are extracts and/or references to previously published recommendations by Credit Suisse Research. For equities, this relates to the respective Company Note or Company Summary of the issuer. Recommendations for bonds can be found within the respective Research Alert (bonds) publication or Institutional Research Flash/Alert – Credit Update Switzerland. These items are available on request or from <https://investment.credit-suisse.com>. Disclosures are available from www.credit-suisse.com/disclosure.

Global disclaimer/important information

This document is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject CS to any registration or licensing requirement within such jurisdiction.

References in this document to CS include Credit Suisse AG, the Swiss bank, its subsidiaries and affiliates. For more information on our structure, please use the following link: <http://www.credit-suisse.com>

NO DISTRIBUTION, SOLICITATION, OR ADVICE: This document is provided for information and illustrative purposes and is intended for your use only. It is not a solicitation, offer or recommendation to buy or sell any security or other financial instrument. Any information including facts, opinions or quotations, may be condensed or summarized and is expressed as of the date of writing. The information contained in this document has been provided as a general market commentary only and does not constitute any form of regulated financial advice, legal, tax or other regulated service. It does not take into account the financial objectives, situation or needs of any persons, which are necessary considerations before making any investment decision. You should seek the advice of your independent financial advisor prior to taking any investment decisions based on this document or for any necessary explanation of its contents. This document is intended only to provide observations and views of CS at the date of writing, regardless of the date on which you receive or access the information. Observations and views contained in this document may be different from those expressed by other Departments at CS and may change at any time without notice and with no obligation to update. CS is under no obligation to ensure that such updates are brought to your attention. **FORECASTS & ESTIMATES:** Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. To the extent that this document contains statements about future performance, such statements are forward looking and subject to a number of risks and uncertainties. Unless indicated to the contrary, all figures are unaudited. All valuations mentioned herein are subject to CS valuation policies and procedures. **CONFLICTS:** CS reserves the right to remedy any errors that may be present in this document. CS, its affiliates and/or their employees may have a position or holding, or other material interest or effect transactions in any securities mentioned or options thereon, or other investments related thereto and from time to time may add to or dispose of such investments. CS may be providing, or have provided within the previous 12 months, significant advice or investment services in relation to the investments listed in this document or a related investment to any company or issuer mentioned. Some investments referred to in this document will be offered by a single entity or an associate of CS or CS may be the only market maker in such investments. CS is involved in many businesses that relate to companies mentioned in this document. These businesses include specialized trading, risk arbitrage, market making, and other proprietary trading. **TAX:** Nothing in this document constitutes investment, legal, accounting or tax advice. CS does not advise on the tax consequences of investments and you are advised to contact an independent tax advisor. The levels and basis of taxation are dependent on individual circumstances and are subject to change. **SOURCES:** Information and opinions presented in this document have been obtained or derived from sources which in the opinion of CS are reliable, but CS makes no representation as to their accuracy or completeness. CS accepts no liability for a loss arising from the use of this document. **WEBSITES:** This document may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the document refers to website material of CS, CS has not reviewed the linked site and takes no responsibility for the content contained therein. Such address or hyperlink (including addresses or hyperlinks to CS's own website material) is provided solely for your convenience and information and the content of the linked site does not in any way form part of this document. Accessing such website or following such link through this document or CS's website shall be at your own risk. **DATA PRIVACY:** Your Personal Data will be processed in accordance with the Credit Suisse privacy statement accessible at your domicile through the official Credit Suisse website <https://www.credit-suisse.com>. In order to provide you with marketing materials concerning our products and services, Credit Suisse Group AG and its subsidiaries may process your basic Personal Data (i.e. contact details such as name, e-mail address) until you notify us that you no longer wish to receive them. You can opt-out from receiving these materials at any time by informing your Relationship Manager.

Distributing entities

Except as otherwise specified herein, this report is distributed by Credit Suisse AG, a Swiss bank, authorized and regulated by the Swiss Financial Market Supervisory Authority. **Austria:** This report is distributed by CREDIT SUISSE (LUXEMBOURG) S.A. Zweigniederlassung Österreich (the "Austria branch") which is a branch of CREDIT SUISSE (LUXEMBOURG) S.A., a duly authorized credit institution in the Grand Duchy of Luxembourg with

registered address 5, rue Jean Monnet, L-2180 Luxembourg. The Austria branch is subject to the prudential supervision of the Luxembourg supervisory authority, the Commission de Surveillance du Secteur Financier (CSSF), 283, route d'Arlon, L-2991 Luxembourg, Grand Duchy of Luxembourg, as well as of the Austrian supervisory authority, the Financial Market Authority (FMA), Otto-Wagner Platz 5, A-1090 Vienna, Austria. **Bahrain:** This report is distributed by Credit Suisse AG, Bahrain Branch, authorized and regulated by the Central Bank of Bahrain (CBB) as an Investment Business Firm Category 2. Related financial services or products are only made available to professional clients and Accredited Investors, as defined by the CBB, and are not intended for any other persons. The Central Bank of Bahrain has not reviewed, nor has it approved, this document or the marketing of any investment vehicle referred to herein in the Kingdom of Bahrain and is not responsible for the performance of any such investment vehicle. Credit Suisse AG, Bahrain Branch, a branch of Credit Suisse AG, Zurich/Switzerland, is located at Level 21-22, East Tower, Bahrain World Trade Centre, Manama, Kingdom of Bahrain. **DIFC:** This information is being distributed by Credit Suisse AG (DIFC Branch). Credit Suisse AG (DIFC Branch) is licensed and regulated by the Dubai Financial Services Authority ("DFS"). Related financial services or products are only made available to Professional Clients or Market Counterparties, as defined by the DFS, and are not intended for any other persons. Credit Suisse AG (DIFC Branch) is located on Level 9 East, The Gate Building, DIFC, Dubai, United Arab Emirates. **France:** This report is distributed by Credit Suisse (Luxembourg) S.A. Succursale en France (the "France branch") which is a branch of Credit Suisse (Luxembourg) S.A., a duly authorized credit institution in the Grand Duchy of Luxembourg with registered address 5, rue Jean Monnet, L-2180 Luxembourg. The France branch is subject to the prudential supervision of the Luxembourg supervisory authority, the Commission de Surveillance du Secteur Financier (CSSF), and of the French supervisory authority, the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and of the Autorité des Marchés Financiers. **Germany:** This report is distributed by Credit Suisse (Deutschland) Aktiengesellschaft regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht („BaFin“). **Guernsey:** This report is distributed by Credit Suisse AG Guernsey Branch, a branch of Credit Suisse AG (incorporated in the Canton of Zurich), with its place of business at Helvetia Court, Les Echelons, South Esplanade, St Peter Port, Guernsey. Credit Suisse AG Guernsey Branch is wholly owned by Credit Suisse AG and is regulated by the Guernsey Financial Services Commission. Copies of the latest audited accounts are available on request. **India:** This report is distributed by Credit Suisse Securities (India) Private Limited (CIN no. U67120MH1996PTC104392) regulated by the Securities and Exchange Board of India as Research Analyst (registration no. INH 000001030), as Portfolio Manager (registration no. INP000002478) and as Stock Broker (registration no. INZ000248233), having registered address at 9th Floor, Ceejay House, Dr. Annie Besant Road, Worli, Mumbai – 400 018, India, T-+91-22 6777 3777. **Italy:** This report is distributed in Italy by Credit Suisse (Italy) S.p.A., a bank incorporated and registered under Italian law subject to the supervision and control of Banca d'Italia and CONSOB. **Lebanon:** This report is distributed by Credit Suisse (Lebanon) Finance SAL ("CSLF"), a financial institution incorporated in Lebanon and regulated by the Central Bank of Lebanon ("CBL") with a financial institution license number 42. Credit Suisse (Lebanon) Finance SAL is subject to the CBL's laws and regulations as well as the laws and decisions of the Capital Markets Authority of Lebanon ("CMA"). CSLF is a subsidiary of Credit Suisse AG and part of the Credit Suisse Group (CS). The CMA does not accept any responsibility for the content of the information included in this report, including the accuracy or completeness of such information. The liability for the content of this report lies with the issuer, its directors and other persons, such as experts, whose opinions are included in the report with their consent. The CMA has also not assessed the suitability of the investment for any particular investor or type of investor. Investments in financial markets may involve a high degree of complexity and risk and may not be suitable to all investors. The suitability assessment performed by CSLF with respect to this investment will be undertaken based on information that the investor would have provided to CSLF and in accordance with Credit Suisse internal policies and processes. It is understood that the English language will be used in all communication and documentation provided by CS and/or CSLF. By accepting to invest in the product, the investor confirms that he has no objection to the use of the English language. **Luxembourg:** This report is distributed by Credit Suisse (Luxembourg) S.A., a duly authorized credit institution in the Grand Duchy of Luxembourg with registered address 5, rue Jean Monnet, L-2180 Luxembourg. Credit Suisse (Luxembourg) S.A. is subject to the prudential supervision of the Luxembourg supervisory authority, the Commission de Surveillance du Secteur Financier (CSSF). **Mexico:** Banco

Credit Suisse (México), S.A., Institución de Banca Múltiple, Grupo Financiero Credit Suisse (México) and C. Suisse Asesoría México, S.A. de C.V. ("Credit Suisse Mexico"). This document is elaborated for information purposes only and does not constitute a recommendation, advice or an invitation to execute any operation and does not replace direct communication with your relationship manager at Credit Suisse Mexico before the execution of any investment. The people who elaborated this document do not receive payment or compensation from any entity of the Credit Suisse Group other than the one employing them. The prospectuses, offering documentation, term sheets, investment regimes, annual reports and periodical financial information contained useful information for investors. Such documents can be obtained without any cost, directly from the issuer of securities and investment fund managers or at the securities and stock market web page, as well as from your relationship manager at Credit Suisse Mexico. The information herein does not substitutes the Account Statements, the INFORME DE OPERACIONES or/ and confirmations you receive from Credit Suisse Mexico pursuant to the General Rules applicable to financial institutions and other persons that provide investment services. C. Suisse Asesoría México, S.A. de C.V., is an investment advisor duly incorporated under the Securities Market Law ("LMV") and is registered before the National Banking and Securities Commission ("CNBV") under folio number 30070 and therefore is not a bank, is not authorized to receive deposits nor to custody any securities, is not part of Grupo Financiero Credit Suisse (México), S.A. de C.V.. Under the provisions of the LMV, C. Suisse Asesoría México, S.A. de C.V. is not an independent investment advisor pursuant to its relationship with Credit Suisse AG, a foreign financial institution, and its indirect relationship with Grupo Financiero Credit Suisse (Mexico), S.A. de C.V. The people who produced this document do not receive payment or compensation from any entity of the Credit Suisse Group other than the one employing them.

Netherlands: This report is distributed by Credit Suisse (Luxembourg) S.A., Netherlands Branch (the "Netherlands branch") which is a branch of Credit Suisse (Luxembourg) S.A., a duly authorized credit institution in the Grand Duchy of Luxembourg with registered address 5, rue Jean Monnet, L-2180 Luxembourg. The Netherlands branch is subject to the prudential supervision of the Luxembourg supervisory authority, the Commission de Surveillance du Secteur Financier (CSSF), and of the Dutch supervisory authority, De Nederlandsche Bank (DNB), and of the Dutch market supervisor, the Autoriteit Financiële Markten (AFM). **Portugal:** This report is distributed by Credit Suisse (Luxembourg) S.A., Sucursal em Portugal (the "Portugal branch") which is a branch of Credit Suisse (Luxembourg) S.A., a duly authorized credit institution in the Grand Duchy of Luxembourg with registered address 5, rue Jean Monnet, L-2180 Luxembourg. The Portugal branch is subject to the prudential supervision of the Luxembourg supervisory authority, the Commission de Surveillance du Secteur Financier (CSSF), and of the Portuguese supervisory authority, the Comissão do Mercado dos Valores Mobiliários (CMVM). **Qatar:** This information has been distributed by Credit Suisse (Qatar) L.L.C., which is duly authorized and regulated by the Qatar Financial Centre Regulatory Authority (QFCRA) under QFC License No. 00005. All related financial products or services will only be available to Business Customers or Market Counterparties (as defined by the QFCRA), including individuals, who have opted to be classified as a Business Customer, with net assets in excess of QR 4 million, and who have sufficient financial knowledge, experience and understanding to participate in such products and/or services. Therefore this information must not be delivered to, or relied on by, any other type of individual. **Saudi Arabia:** This information is being distributed by Credit Suisse Saudi Arabia (CR Number 1010228645), duly licensed and regulated by the Saudi Arabian Capital Market Authority

pursuant to License Number 08104-37 dated 23/03/1429H corresponding to 21/03/2008AD. Credit Suisse Saudi Arabia's principal place of business is at King Fahad Road, Hay Al Mhamadiya, 12361-6858 Riyadh, Saudi Arabia. Website: <https://www.credit-suisse.com/sa>. **South Africa:** This information is being distributed by Credit Suisse AG which is registered as a financial services provider with the Financial Sector Conduct Authority in South Africa with FSP number 9788 and / or by Credit Suisse (UK) Limited which is registered as a financial services provider with the Financial Sector Conduct Authority in South Africa with FSP number 48779. **Spain:** This report is distributed in Spain by Credit Suisse AG, Sucursal en España, legal entity registered at Comisión Nacional del Mercado de Valores. **Turkey:** The investment information, comments and recommendations contained herein are not within the scope of investment advisory activity. The investment advisory services are provided by the authorized institutions to the persons in a customized manner taking into account the risk and return preferences of the persons. Whereas, the comments and advices included herein are of general nature. Therefore recommendations may not be suitable for your financial status or risk and yield preferences. For this reason, making an investment decision only by relying on the information given herein may not give rise to results that fit your expectations. This report is distributed by Credit Suisse Istanbul Menkul Degerler Anonim Sirketi, regulated by the Capital Markets Board of Turkey, with its registered address at Levazim Mahallesi, Koru Sokak No. 2 Zorlu Center Terasse No. 61 34340 Besiktas/ Istanbul-Turkey. **United Kingdom:** This material is distributed by Credit Suisse (UK) Limited. Credit Suisse (UK) Limited, is authorized by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. Where this material is distributed into the United Kingdom by an offshore entity not exempted under the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 the following will apply: To the extent communicated in the United Kingdom ("UK") or capable of having an effect in the UK, this document constitutes a financial promotion which has been approved by Credit Suisse (UK) Limited which is authorized by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority for the conduct of investment business in the UK. The registered address of Credit Suisse (UK) Limited is Five Cabot Square, London, E14 4QR. Please note that the rules under the UK's Financial Services and Markets Act 2000 relating to the protection of retail clients will not be applicable to you and that any potential compensation made available to "eligible claimants" under the UK's Financial Services Compensation Scheme will also not be available to you. Tax treatment depends on the individual circumstances of each client and may be subject to changes in future.

UNITED STATES: NEITHER THIS REPORT NOR ANY COPY THEREOF MAY BE SENT, TAKEN INTO OR DISTRIBUTED IN THE UNITED STATES OR TO ANY US PERSON (within the meaning of Regulation S under the US Securities Act of 1933, as amended).

This report may not be reproduced either in whole or in part, without the written permission of Credit Suisse. Copyright © 2020 Credit Suisse Group AG and/or its affiliates. All rights reserved.

20C013A_IS



CREDIT SUISSE AG

P.O. Box 100

CH-8070 Zürich

[credit-suisse.com](https://www.credit-suisse.com)