

**Swiss Economics** 

# Coronavirus debt in Switzerland: lower than feared

Economics Alert | 24/08/2020, 06:25, UTC

The updated financial plan of the Swiss federal government foresees deficits in line with the debt brake requirements until 2023. As the costs of short-time working, compensation for loss of earnings and bridging loans have been lower than expected, the coronavirus expenditure can be offset by moderate cost savings across various task areas within the government.

The corresponding capital requirement is largely covered by existing liquid funds and registered money market claims, which represents a shift towards short-term funding with particularly favorable conditions.

We see little prospect of the unemployment insurance reaching its debt ceiling in 2021. Nonetheless, the repercussions of Covid-19 on the labor market will continue to exert substantial financial pressure on the unemployment insurance fund in the years to come.

#### Franziska Fischer

Economist - Swiss Macro & Strategy

#### Emilie Gachet

Economist - Swiss Sectors and Regions

#### Deficits compliant with debt brake in 2020 and 2021

According to its latest projections, the Swiss Federal Council expects an ordinary deficit of CHF 3.1 billion for the pandemic year of 2020. This is largely attributable to an expected decline in tax receipts of CHF 5.8 billion. Lower receipts from VAT, imports, dividend payments and fuel consumption due

to the slump in gross domestic product (GDP) are responsible for around half of this amount. The remaining tax shortfall of CHF 3 billion is attributable to the suspension of interest on arrears and the resultant deferral effect, but unlike the reduced tax receipts, these tax payments will not be lost completely as they will simply be deferred until the 2021 fiscal year. Despite this deficit, the ordinary budget for 2020 is compliant with the debt brake requirements as an adjustment of the cyclical factor to reflect the severe recession allows for a larger deficit (see text box). Due to the adverse economic situation, the requirements for the debt brake will also be less stringent in 2021. As tax receipts are also set to rise in 2021 as a result of the deferrals this year, the Swiss Federal Council has estimated a deficit of only around CHF 1 billion for next year, which means that the debt brake requirements will actually be overfulfilled by CHF 2.2 billion.

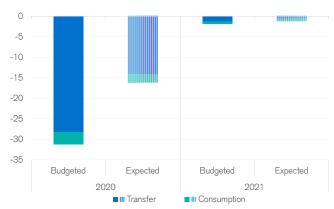
#### Extraordinary deficits for coronavirus measures

In addition to the ordinary deficit, high levels of extraordinary expenditure are required to cushion the effects of the pandemic. The measures decided thus far that will affect expenditure in 2020 are estimated to total CHF 30.9 billion, with transfer payments alone accounting for the majority of this amount. Only 10% relates to government consumption spending, e.g. the measures for the health care sector and expenditure on the extraordinary session of the Federal Assembly (see figure 1). According to the federal government and our own calculations, the actual costs of these measures may be significantly lower. This is because the take-up of short-time working and compensation for the loss of earnings caused by the coronavirus pandemic has been lower than expected, while write-downs on Covid-19 loans are likely to fall short of the budgeted amounts. It is not unusual for the

**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.

final expenditure to be lower than originally announced due to initial overestimates or delays in disbursement, as we saw during the financial crisis. According to an analysis by the Swiss Federal Audit Office, only 80% of the funding made available during the crisis was utilized at that time.

Figure 1: Extraordinary deficits in 2020 and 2021 in CHF billion



Source: Swiss Federal Finance Administration (EFV), Credit Suisse

#### Debt brake rules

The debt brake is an expenditure rule which stipulates that the ordinary receipts and expenditure of the federal budget must be balanced throughout the business cycle. A statistically determined cyclical factor reflects the current phase of the prevailing economic cycle. Surpluses must be generated during a boom, while deficits are permitted during a recession. The difference between ordinary receipts and expenditure is registered in the compensation account at the end of the fiscal year. Deficits in this account have to be offset in the subsequent three years, while surpluses must be used for debt reduction purposes.

At the end of the year, the actual ordinary expenditure tends to be lower than budgeted as the funding made available is not fully utilized. In a similar way to underestimated receipts, this unutilized credit leads to a retrospective increase in the ordinary fiscal balance and is automatically used to reduce debt via the compensation account.

Extraordinary (i.e. non-recurring, non-controllable) receipts and expenditure are exempt from the expenditure rule on the basis of a special provision. The difference between extraordinary receipts and expenditure is registered separately in the amortization account. Deficits in this account have to be reduced via the ordinary budget within six years, unless the deadline is extended by parliament.

#### Costs of short-time working are lower than expected

The main drivers of the lower than expected extraordinary expenditure are the costs of short-time working allowances, with the amounts set to fall significantly short of the original

estimates according to the latest information. In two moves in May and June, the Swiss parliament granted a total of CHF 20.2 billion in additional loans for the extraordinary supplementary financing of the Swiss unemployment insurance compensation fund (ALV fund). The first tranche of CHF 6 billion has already been paid to the ALV fund. A legal framework is still required for the disbursement of the second loan worth CHF 14.2 billion. The funds will not be released until this is available. The Federal Council passed a corresponding dispatch on 12 August and the bill is due to be discussed in a special parliamentary process in the autumn session of 2020. According to the draft legislation, the federal government will only take over the costs of short-time working allowances for 2020. As previously, the costs of unemployment benefits will have to be covered by the ALV fund itself. The funds will be transferred to the ALV fund in stages and only in the amount that is actually required.

The second additional loan of CHF 14.2 billion is based on the expected costs of short-time working for 2020, which were estimated at CHF 20.2 billion by the State Secretariat for Economic Affairs (SECO) in April this year, minus the supplementary funding of CHF 6 billion that has already been disbursed. The federal government has now revised up its economic forecasts slightly since the public health measures have been relaxed. Moreover, the data available so far on the actual usage of short-time working show that the take-up and resultant costs in the March to May period were significantly lower than had been expected from the record-high number of applications (see table 1). SECO now expects the costs of short-time working allowances to run to CHF 12.2 billion for 2020. Thus, if the draft is approved by parliament in its current form and the forecast from SECO is correct, some CHF 8 billion of the total available funds of CHF 20.2 billion will likely remain unclaimed.

According to our calculations, the costs may even be a further CHF 1 to 2 billion lower. While business in some sectors remains severely constrained (e.g. in the events or travel industries), the need for short-time working in many areas of the service sector has diminished since April due to the gradual relaxation of Covid-19 restrictions. Moreover, the results of a special poll conducted as part of the PMI survey indicate that after a further rise in May, the use of short-time working decreased in the manufacturing sector in June and even more in July.

Table 1: Applications and claims for short-time working

	Approved applications	Claimed (prov.)	Utilisation rate (prov.)	Costs of short-time working al- lowances (prov.)	Original esti- mate by SECO
March 2020	1.6 million employees	925,100 employees	58%	CHF 1 bil- lion	CHF 2-3 bil- lion
April 2020	1.9 million employees	1.2 million employees	64%	CHF 2.4 bil- lion	CHF 5-7 bil- lion
May 2020	1.9 million employees	890,900 employees	47%	CHF 1.5 bil- lion	-

Source: State Secretariat for Economic Affairs, media reports, Credit Suisse

# Take-up of compensation for loss of earnings is also lower than the budgeted amount

Despite the extension of the scheme until mid-September, it is highly likely that the costs of compensation for loss of earnings will be lower than the amount of CHF 5.3 billion approved by parliament. This included CHF 4 billion for those directly affected, i.e. self-employed persons who faced immediate restrictions on working owing to the ban on events and forced premises closures, people ordered to quarantine by medical professionals or authorities (except those returning from high-risk areas) and parents left without childcare due to school closures. A further CHF 1.3 billion was made available for self-employed people who are indirectly affected but are experiencing hardship. The latest data on the amounts actually paid show that only 27% of the CHF 5.3 billion total had been utilized by 16 August (CHF 1.4 billion). The low take-up is attributable to two factors. Firstly, the number of people who applied for compensation was lower than expected, especially among those in quarantine and parents (see table 2). Secondly, the level of income subject to old-age and survivor's pension contributions in 2019, which forms the basis for calculating the daily rate of compensation, was substantially lower than had been assumed in many cases. According to the latest projections, more than CHF 3 billion could remain unclaimed.

Table 2: Compensation for loss of earnings due to coronavirus

Number of people	Federal Office for So- cial Security expecta- tions (as at March 2020)	Benefits paid to date (as at mid- August 2020)
Parents without child-	60,600	13,700
care		
People in quarantine	43,000	9,300
Directly affected self- employed	60,000	95,400
Indirectly affected self-employed in hardship	-	65,200

Source: Federal Office for Social Security, Credit Suisse

# Covid-19 will also weigh on unemployment insurance finances in the years ahead

The take-up of benefits has been on an unprecedented scale during the coronavirus crisis. Nearly every fourth employee in Switzerland was on short-time working at the height of the lockdown in April. The extraordinary support from the federal government is designed to ensure that the ALV fund, which was debt-free at the beginning of the year, does not exceed its debt ceiling of around CHF 8 billion at the end of 2020 due to the soaring costs of short-time working. By law, the Federal Council would have to present new legislation on the funding of the unemployment insurance within a year in the event of a breach and increase wage contributions in advance by up to 0.3 percentage points (equally shared by employers and employees) from the current rate of 2.2% by 1 January 2021.

While this would generate additional revenues of up to around CHF 960 million for the ALV fund, it would also entail higher costs for companies and erode the purchasing power of households, which is not desirable in the current recession.

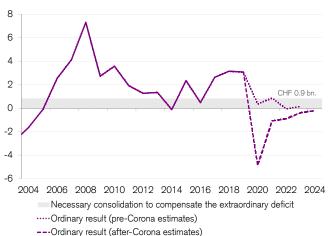
However, although the federal government is covering the costs of short-time working in 2020, the financial situation for the ALV fund will deteriorate appreciably due to the coronavirus crisis. Rising unemployment will lead to an increase in expenditure for unemployment benefits and labor market measures, while adversely affecting the aggregate wages insured and therefore the fund's income. As at the end of July, the number of people registered unemployed in Switzerland stood at 148,870 (unemployment rate: 3.2%). A more dramatic increase in joblessness was averted thanks to the broad-based take-up of shorttime working. That said, the number of those out of work is up 53% on last year. With the decline in unemployment in June and July, the Swiss labor market has fared better than initially feared. However, the improvement was driven almost entirely by the hospitality and construction industries for seasonal reasons and due to the easing of lockdown restrictions. The unemployment rate has continued to rise on a seasonally adjusted basis, albeit more slowly than at the start of the crisis. We expect unemployment to continue to climb over the months ahead. There has been a flurry of announcements relating to job cuts in recent weeks, and the number of those seeking work has increased. In some sectors of the economy such as travel and events, prospects still look bleak over the longer term. As a result, short-time working could ultimately be followed by redundancies. We are keeping our forecast for the average unemployment rate in full-year 2020 at 3.5% for the time being, which could prove to be excessively pessimistic. As things stand, our forecast for 2021 is 3.8%.

In its draft legislation for supplementary funding of the unemployment insurance, the Swiss Federal Council envisages the possibility of additional extraordinary support in 2021 if there is a renewed risk that the compensation fund will hit the debt ceiling next year. Ultimately, however, the Swiss parliament would decide in favor of either new extraordinary support or an increase to wage contributions. The latest labor market projections suggest it is fairly unlikely that the debt ceiling for the ALV fund will be reached in 2021. According to our simulations - which are admittedly subject to a high degree of uncertainty - the ALV fund's debt could total more than CHF 5 billion by end-2021. The debt ceiling of CHF 8 billion would only be reached if the annualized unemployment rate climbed to more than 4.8% on average. In the absence of reforms, the ALV fund will likely accumulate more debt beyond 2021. According to SECO, an economically neutral level of unemployment, which means that the income and outgoings of the ALV fund are approximately equal, stands at around 130,000 (2.8%). Assuming that joblessness will not fall back to this level until 2023, according to our calculations the debt of the ALV fund could exceed CHF 6 billion by then. The fund has not had debt on this scale since 2010, prior to the fourth revision of unemployment insurance.

# Unutilized credit balances relieve the budget pressure only to a limited extent

We therefore estimate the actual costs of short-time working allowances and compensation for loss of earnings in 2020 at CHF 12.2 billion as opposed to CHF 25.5 billion. All in all, this could mean that extraordinary expenditure in 2020 would come in at only CHF 16.1 billion as opposed to CHF 30.9 billion. In accordance with the debt brake rules, the resulting deficit in the amortization account of CHF 12.7 billion would have to be offset by 2026, which would necessitate annual austerity measures of CHF 2.1 billion. However, this deadline can - and probably will - be extended by parliament, possibly to 15 years. This would necessitate savings of CHF 0.9 billion per year up to 2035. The latest estimates and the integrated task and financial plan for the planning period up to 2024 do not foresee such surpluses (see figure 2). So-called unutilized credit, which is built up when actual spending turns out to be lower than that earmarked in the budget, could provide some relief. Budget underspends have averaged CHF 1.8 billion per year since 2004. The Swiss Federal Finance Department expects unutilized credit to total CHF 2.6 billion in 2020, while predicting a more conservative amount of CHF 1 billion after that. In principle, this would cover a large proportion of the need for fiscal consolidation. However, the unutilized credit cannot be incorporated into budget planning. This means that for the requirements of the debt brake to be met, the requisite surpluses would have to be accounted for in the ordinary budget - irrespective of the anticipated unutilized credit. Essentially, the unutilized credit would retrospectively accelerate the process of offsetting the deficit each year once the state financial statements have been drawn up.

Figure 2: Fiscal balance and required consolidation in CHF billion



Source: Swiss Federal Finance Administration (EFV)

# Consolidation of public spending across various task areas

In principle, setting priorities within the scope of forwardlooking financial policy should be favored over harsh austerity programs. In this way, major projects earmarked for the next few years could be modified or deferred. But because this is not always possible or advisable and the Federal Council has ruled out tax hikes for the time being, the deficit also has to be reduced via cuts to public spending. One challenge is that spending in the highest-cost areas for which the federal government is responsible – social welfare, finance & taxes and transport (see table 3) - is to a large extent ring-fenced and in many cases cannot be adjusted without changes to legislation. This means that in the first few years the savings will have to be made in areas featuring comparatively little ring-fencing. To illustrate the sums involved, figure 3 shows how the task areas that are predominantly outside the scope of ring-fencing could contribute to the required savings of CHF 0.9 billion. At first glance, education & research, security and administration appear to offer the greatest leeway. However, commitments have already been made for 82% of the education funding up to 2024 via guaranteed facilities that would have to be subsequently withdrawn, which would in turn jeopardize the funding of existing projects. The armed forces account for more than 80% of the (high) expenditure on security. Direct payments to agriculture are another significant item of public spending. That said, the Federal Council had already envisaged a negative target growth rate of −1% up to 2024 for this area before the pandemic hit. Development aid within the international relations department accounts for CHF 2.7 billion. This task area was hit hard by cuts before, as part of the stabilization program from 2017-2019, contributing over 30% of the savings made. In respect of digitalization and possible process simplifications, public administration (i.e. departmental administration, Federal Council, parliament, courts and the Office of the Attorney General of Switzerland) probably offers tangible potential for savings to be made. At 41%, it accounts for a significant proportion of the other task areas.

Reducing debt over an extended period allows sufficient time for legislative changes, thus enabling savings to be made on ring-fenced spending in later years. One way in which savings should be calibrated is with reference to the growth contribution made by the relevant task areas. According to academic studies, spending on transport, education and efficient public administration fosters potential growth. Over the medium term, slashing expenditure in these areas could prove counterproductive. This would result in the next generation being left with an inferior macroeconomic environment or an investment bottleneck rather than the much cited mountain of debt.

Table 3: Spending breakdown by task areas and degree of ring-fencing

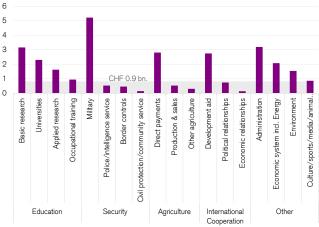
	Expenditure (CHF million)	Ring-fencing
Social welfare	24,150	95%
Finance and taxes	11,075	99%
Transportation	10,372	75%
Education and research	8,095	10%
Security	6,383	3%
Agriculture and food	3,663	12%
International relations	3,651	3%
Other task areas	7.688	

Source: Swiss Federal Finance Administration (EFV), Credit Suisse

#### Total funding requirement of CHF 10 to 25 billion

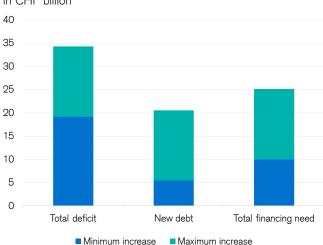
For 2020, adding the deficit from the ordinary budget including shortfalls in tax receipts (CHF 3.1 billion) to the extraordinary expenditure (from CHF 16.1 billion expected up to CHF 30.9 budgeted), produces a total deficit of CHF 18.9 to CHF 34 billion (see figure 4a). As we outlined above, this deficit is considered as debt by the debt brake, but it should not necessarily be equated with new borrowing on the capital markets. In previous analyses we have already explained that the federal government can draw on CHF 26 billion in liquid funds and sell CHF 5.5 billion in unplaced proprietary tranches of Swiss Confederation bonds as alternative sources of funding. Depending on the sum kept as liquidity buffer (estimated at CHF 15 billion as per the target range stipulated by the federal treasury) and how many proprietary tranches are held back by the government to support trading in Confederation bonds (estimate of CHF 3 billion), the new borrowing required via the issuance of registered money market claims or Confederation bonds comes to just CHF 5.2 to 20.2 billion. Together with the bond worth CHF 4.6 billion that matured in early July, this produces a total funding requirement of CHF 9.8 to 24.8 billion in 2020.

**Figure 3: Expenditure with little ring-fencing by task areas** in CHF billion



Source: Swiss Federal Finance Administration (EFV)

Figure 4a: Key figures of national debt in CHF billion

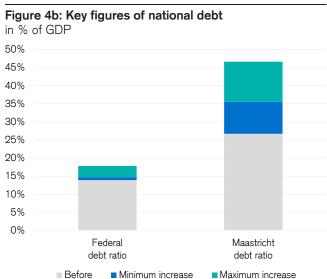


Source: Swiss Federal Finance Administration (EFV), Federal Council, Credit Suisse

### Shift towards short-term funding

To date the federal treasury has increased the volume of outstanding registered money market claims by CHF 7 billion (from around CHF 6 billion in March to over CHF 13 billion in August), while the gross issuance of Swiss Confederation bonds stood at CHF 3.1 billion as of August. This marks a shift in funding from long-term to short-term liabilities. While this offers highly favorable conditions, it also results in higher interest rate risk when transactions are rolled over. Short-term liabilities have only accounted for around 22% of gross debt until now, but with the current funding mix primarily utilizing registered money market claims, this would take the share to 30%. Nevertheless, Switzerland pursues a very conservative debt management strategy by international standards. According to data from the International Monetary Fund, prior to the Covid-19 crisis only Iceland and the UK had a longer average residual maturity among the industrialized nations. So a modest shift towards short-term funding should not trigger a huge increase in funding risk.

Depending on the final amount of the total deficit and the funding strategy pursued, the debt ratio is now expected to rise by a minimum of 0.8% and a maximum of 3%. As figure 4b shows, the federal debt ratio would then come in at 14.7 to 16.9% for 2020 (2019: 13.9%). The federal government's share in the Maastricht debt-to-GDP ratio would also rise accordingly. If we take into account the deterioration in the net financial position of the social insurance funds, and the immediate measures taken by the cantons (excluding liquidity assistance) amounting CHF 0.5 billion, while assuming that tax receipts in the cantons will fall in line with those of the federal government, the Maastricht debt-to-GDP ratio for 2020 would rise to 35.5 or 37.8% (2019: 26.7%).



Source: Swiss Federal Finance Administration (EFV), Federal Council, Credit Suisse

(20/08/2020)

### Glossary

Risk warnings	
Emerging markets	Emerging markets are located in countries that possess one or more of the following characteristics: a certain degree of political instability, relatively unpredictable financial markets and economic growth patterns, a financial market that is still at the development stage or a weak economy. Emerging market investments usually result in higher risks as a result of political, economic, credit, exchange rate, market liquidity, legal, settlement, market, shareholder and creditor risks.
Hedge funds	Regardless of structure, 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, derivative instruments and speculative investment strategies that may increase the risk of investment loss.
Commodity investments	Commodity transactions carry a high degree of risk and may not be suitable for many private investors. The extent of loss due to market movements can be substantial or even result in a total loss.
Real estate	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.
Currency risks	Investments in foreign currencies involve the additional risk that the foreign currency might lose value against the investor's reference currency.
Equity risk	Equities are subject to market forces and hence fluctuations in value, which are not entirely predictable.
Market risk	Financial markets rise and fall based on economic conditions, inflationary pressures, world news and business-specific reports. While trends may be detected over time, it can be difficult to predict the direction of the market and individual stocks. This variability puts stock investments at risk of losing value.
High Yield bond risk	High Yield Bonds are typically rated below investment grade or are unrated and as such are often subject to a higher risk of issuer default.
Perpetual Bond risk	Perpetual Bonds have no maturity date and therefore the Interest pay-out depends on the viability of the issuer in the very long term.
Subordinated Bond risk	In case of liquidation of the issuer, investors can only get back the principal after other senior creditors are paid.
Risk of Bonds with variable/ deferral of interest terms	Investors would face uncertainty over the amount and time of the interest payments to be received.
Callable bond risk	Investors face reinvestment risk when the issuer exercises its right to redeem the bond before it matures.
Risk of Bonds with extendable maturity date	Investors would not have a definite schedule of principal repayment.
Convertible or exchangeable bond risk	Investors are subject to both equity and bond investment risk.
Cocos risk	The bond may be written-off fully or partially or converted to common stock on the occurrence of a trigger event.

Explanation of indices frequently used in reports		
Index	Comment	
Australia S&P/ASX 200	S&P/ASX 200 is an Australian market-capitalization-weighted and float-adjusted stock index calculated by Standard and Poor's	
BC High Yield Corp USD	The US Corporate High Yield Index measures USD-denominated, non-investment grade, fixed-rate and taxable corporate bonds. The index is calculated by Barclays.	
BC High Yield Pan EUR	The Euro Corporate Index tracks the fixed-rate, investment-grade, euro-denominated corporate bond market. The index includes issues that meet specified maturity, liquidity and quality requirements. The index is calculated by Barclays.	
BC IG Corporate EUR	The US Corporate Index tracks the fixed-rate, investment-grade, dollar-denominated corporate bond market. The index includes both US and non-US issues that meet specified maturity, liquidity and quality requirements. The index is calculated by Barclays	
BC IG Corporate USD	The IG Financials Index tracks the fixed-rate, investment-grade, dollar-denominated financials bond market. The index includes both US and non-US issues that meet specified maturity, liquidity and quality requirements. The index is calculated by Barclays	
Canada S&P/TSX comp	The S&P/TSX composite index is the Canadian equivalent of the S&P 500 Index in the USA. The index contains the largest stocks traded on the Toronto Stock Exchange.	
Consumer Confidence Indices	Consumer Confidence Indices (CCIs) are based on surveys of consumers' spending intentions and economic situations, as well as their concerns and expectations for the immediate future.	
CS Hedge Fund Index	The Credit Suisse Hedge Fund Index is compiled by Credit Suisse Hedge Index LLC. It is an asset-weighted hedge fund index and includes only funds, as opposed to separate accounts. The index reflects performance net of all hedge fund component performance fees and expenses.	
CS LSI ex govt CHF	The Liquid Swiss Index ex govt CHF is a market-capitalized bond index representing the most liquid and tradable portion of the Swiss bond market excluding Swiss government bonds. The index is calculated by Credit Suisse.	
DAX	The German Stock Index stock represents 30 of the largest and most liquid German companies that trade on the Frankfurt Exchange.	
DXY	A measure of the value of the US dollar relative to the majority of its most important trading partners. The US Dollar Index is similar to other trade-weighted indices, which also use the exchange rates from the same major currencies.	
Eurostoxx 50	Eurostoxx 50 is a market-capitalization-weighted stock index of 50 leading blue-chip companies in the Eurozone.	
FTSE EPRA/NAREIT Global Real Estate Index Series	The FTSE EPRA/NAREIT Global Real Estate Index Series is designed to represent general trends in eligible real estate equities worldwide.	
Hedge Fund Barometer	The Hedge Fund Barometer is a proprietary Credit Suisse scoring tool that measures market conditions for hedge fund strategies It comprises four components: liquidity, volatility; systemic risks and business cycle.	
Japan Topix	TOPIX, also known as the Tokyo Stock Price Index, tracks all large Japanese companies listed in the stock exchange's "first section." The index calculation excludes temporary issues and preferred stocks.	
JPM EM hard curr. USD	The Emerging Market Bond Index Plus tracks the total return of hard-currency sovereign bonds across the most liquid emerging markets. The index encompasses US-denominated Brady bonds (dollar-denominated bonds issued by Latin American countries) loans and Eurobonds.	
JPM EM local curr. hedg. USD	The JPMorgan Government Bond Index tracks local currency bonds issued by emerging market governments across the most accessible markets for international investors.	

MSCI AC World  The MSCI All Country World Index captures large and mid cap representation across 23 demarket countries. With roughly 2480 constituents, the index covers around 85% of the glot MSCI Emerging Markets  MSCI Emerging Markets is a free-float-weighted Index designed to measure equity market markets. The index is developed and calculated by Morgan Stanley Capital International.  MSCI EMU  The MSCI EMU Index (European Economic and Monetary Union) captures large and mid of Developed Markets countries in the EMU. With 237 constituents, the index covers approximately captures are proximately captured by the contribution of the contri	bal investable equity opportunity set. It performance in global emerging cap representation across the 10
markets. The index is developed and calculated by Morgan Stanley Capital International.  MSCI EMU  The MSCI EMU Index (European Economic and Monetary Union) captures large and mid of	cap representation across the 10
2	
market capitalization of the EMU.	ialely 00 % of the free float-adjusted
MSCI Europe  The MSCI Europe Index captures large and mid cap representation across 15 developed in 442 constituents, the index covers approximately 85% of the free float-adjusted market condeveloped markets equity universe.	
MSCI UK  The MSCI United Kingdom Index is designed to measure the performance of the large and r With 111 constituents, the index covers approximately 85% of the free float-adjusted mar	
MSCI World MSCI World is an index of global equity markets developed and calculated by Morgan Stank are based on closing prices with dividends reinvested.	ey Capital International. Calculations
OECD Composite Leading Indicators  OECD Composite Leading Indicators (CLIs) are designed to provide early signals of turnin components that measure early stages of production, respond to changes in economic active of future activity.	
Purchasing Managers' Indices  Purchasing Managers' Indices (PMIs) are economic indicators derived from monthly survey two principal producers of PMIs are Markit Group, which conducts PMIs for over 30 count Supply Management (ISM), which conducts PMIs for the United States. The indices include turing surveys such as new orders, employment, exports, stocks of raw materials and finished goods, and services.	ries worldwide, and the Institute for additional sub-indices for manufac-
Russell 1000 Growth Index  The Russell 1000 Growth Index measures the performance of the large-cap growth segment on 1000 large-cap companies with higher price-to-book ratios and higher forecast growth	
Russell 1000 Index  The Russell 1000 Index is a stock market index that represents the highest-ranking 1,000 (encompassing the 3,000 largest US-traded stocks, with the underlying companies all incorp about 90% of the total market capitalization of that index. The Russell 1000 Index has a we of USD 81 billion and the median market capitalization is approximately USD 4.6 billion.	orated in the USA), and representing
Russell 1000 Value Index  The Russell 1000 Value Index measures the performance of the large-cap value segment 1000 large-cap companies with lower price-to-book ratios and lower expected growth value.	1 3
Switzerland SMI  The Swiss Market Index is made up of 20 of the largest companies listed of the Swiss Performs 85% of the free-float capitalization of the Swiss equity market. As a price index, the SMI is	
UK FTSE 100 FTSE 100 is a market-capitalization-weighted stock index that represents 100 of the most on the London Stock exchange. The equities have an investibility weighting in the index capitalization.	0 7 1
US S&P 500 Standard and Poor's 500 is a capitalization-weighted stock index representing all major ind the performance of the domestic economy through changes in the aggregate market value	

Abbreviation	s frequently used in reports		
Abb.	Description	Abb.	Description
3/6/12 MMA	3/6/12 month moving average	IMF	International Monetary Fund
Al	Alternative investments	LatAm	Latin America
APAC	Asia Pacific	Libor	London interbank offered rate
bbl	barrel	m b/d	Million barrels per day
BI	Bank Indonesia	M1	A measure of the money supply that includes all physical money such as coins and currency, as well as demand deposits, checking accounts and negotiable order of withdrawal accounts.
BoC	Bank of Canada	M2	A measure of money supply that includes cash and checking deposits (M1) as well as savings deposits, money market mutual funds and other time deposits.
BoE	Bank of England	M3	A measure of money supply that includes M2 as well as large time deposits, institutional money market funds, short-term re- purchase agreements and other larger liquid assets.
BoJ	Bank of Japan	M&A	Mergers and acquisitions
bp	Basis points	MAS	Monetary Authority of Singapore
BRIC	Brazil, Russia, China, India	MLP	Master Limited Partnership
CAGR	Compound annual growth rate	MoM	Month-on-month
CBOE	Chicago Board Options Exchange	MPC	Monetary Policy Committee
CFO	Cash from operations	OAS	Option-adjusted spread
CFROI	Cash flow return on investment	OECD	Organisation for Economic Co-operation and Development
DCF	Discounted cash flow	OIS	Overnight indexed swap
DM	Developed Market	OPEC	Organization of Petroleum Exporting Countries
DMs	Developed Markets	P/B	Price-to-book value
EBITDA	Earnings before interest, taxes, depreciation and amortization	P/E	Price-earnings ratio
ECB	European Central Bank	PBoC	People's Bank of China
EEMEA	Eastern Europe, Middle East and Africa	PEG	P/E ratio divided by growth in EPS
EM	Emerging Market	PMI	Purchasing Managers' Index
EMEA	Europe, Middle East and Africa	PPP	Purchasing power parity

EMs	Emerging Markets	QE	Quantitative easing
EMU	European Monetary Union	QoQ	Quarter-on-quarter
EPS	Earnings per share	r.h.s.	right-hand side (for charts)
ETF	Exchange traded funds	RBA	Reserve Bank of Australia
EV	Enterprise value	RBI	Reserve Bank of India
FCF	Free cash flow	RBNZ	Reserve Bank of New Zealand
Fed	US Federal Reserve	REIT	Real estate investment trust
FFO	Funds from operations	ROE	Return on equity
FOMC	Federal Open Market Committee	ROIC	Return on invested capital
FX	Foreign exchange	RRR	Reserve requirement ratio
G10	Group of Ten	SAA	Strategic asset allocation
G3	Group of Three	SDR	Special drawing rights
GDP	Gross domestic product	SNB	Swiss National Bank
GPIF	Government Pension Investment Fund	TAA	Tactical asset allocation
HC	Hard currency	TWI	Trade-Weighted Index
HY	High yield	VIX	Volatility Index
IBD	Interest-bearing debt	WTI	West Texas Intermediate
IC	Credit Suisse Investment Committee	YoY	Year-on-year
IG	Investment grade	YTD	Year-to-date
ILB	Inflation-linked bond	Personal Consumption Expenditure (PCE defla- tor)	An indicator of the average increase in prices for all domestic personal consumption.

Currency codes frequently used in reports				
Code	Currency	Code	Currency	
ARS	Argentine peso	KRW	South Korean won	
AUD	Australian dollar	MXN	Mexican peso	
BRL	Brazilian real	MYR	Malaysian ringgit	
CAD	Canadian dollar	NOK	Norwegian krone	
CHF	Swiss franc	NZD	New Zealand dollar	
CLP	Chilean peso	PEN	Peruvian nuevo sol	
CNY	Chinese yuan	PHP	Philippine peso	
COP	Colombian peso	PLN	Polish złoty	
CZK	Czech koruna	RUB	Russian ruble	
EUR	Euro	SEK	Swedish krona/kronor	
GBP	Pound sterling	SGD	Singapore dollar	
HKD	Hong Kong dollar	THB	Thai baht	
HUF	Hungarian forint	TRY	Turkish lira	
IDR	Indonesian rupiah	TWD	New Taiwan dollar	
ILS	Israeli new shekel	USD	United States dollar	
INR	Indian rupee	ZAR	South African rand	
JPY	Japanese yen			

Pricing	Option premiums and prices mentioned are indicative only. Option premiums and prices can be subject to very rapid changes: The prices and premiums mentioned are as of the time indicated in the text and might have changed substantially in the meantime.
Risks	Derivatives are complex instruments and are intended for sale only to investors who are capable of understanding and assuming all the risks involved. Investors must be aware that adding option positions to an existing portfolio may change the characteristics and behavior of that portfolio substantially. A portfolio's sensitivity to certain market moves can be heavily impacted by the leverage effect of options.
Buying calls	Investors who buy call options risk the loss of the entire premium paid if the underlying security trades below the strike price at expiration.
Buying puts	Investors who buy put options risk loss of the entire premium paid if the underlying security finishes above the strike price at expiration.
Selling calls	Investors who sell calls commit themselves to sell the underlying for the strike price, even if the market price of the underlying is substantially higher. Investors who sell covered calls (own the underlying security and sell a call) risk limiting their upside to the strike price plus the upfront premium received and may have their security called away if the security price exceeds the strike price of the short call. Additionally, the investor has full downside participation that is only partially offset by the premium received upfront. If investors are forced to sell the underlying they might be subject to taxing. Investors shorting naked calls (i.e. selling calls but without holding the underlying security) risk unlimited losses of security price less strike price.
Selling puts	Put sellers commit to buying the underlying security at the strike price in the event the security falls below the strike price. The maximum loss is the full strike price less the premium received for selling the put.
Buying call spreads	Investors who buy call spreads (buy a call and sell a call with a higher strike) risk the loss of the entire premium paid if the underlying trades below the lower strike price at expiration. The maximum gain from buying call spreads is the difference betweer the strike prices, less the upfront premium paid.

Selling naked call spreads	Selling naked call spreads (sell a call and buy a farther out-of-the-money call with no underlying security position): Investors risk a maximum loss of the difference between the long call strike and the short call strike, less the upfront premium taken in, if the underlying security finishes above the long call strike at expiration. The maximum gain is the upfront premium taken in, if the security finishes below the short call strike at expiration.
Buying put spreads	Investors who buy put spreads (buy a put and sell a put with a lower strike price) also have a maximum loss of the upfront premium paid. The maximum gain from buying put spreads is the difference between the strike prices, less the upfront premium paid.
Buying strangles	Buying strangles (buy put and buy call): The maximum loss is the entire premium paid for both options, if the underlying trades between the put strike and the call strike at expiration.
Selling strangles or straddles	Investors who are long a security and short a strangle or straddle risk capping their upside in the security to the strike price of the call that is sold plus the upfront premium received. Additionally, if the security trades below the strike price of the short put, investors risk losing the difference between the strike price and the security price (less the value of the premium received) on the short put and will also experience losses in the security position if they owns shares. The maximum potential loss is the full value of the strike price (less the value of the premium received) plus losses on the long security position. Investors who are short naked strangles or straddles have unlimited potential loss since, if the security trades above the call strike price, investors risk losing the difference between the strike price and the security price (less the value of the premium received) on the short call. In addition, they are obligated to buy the security at the put strike price (less upfront premium received) if the security finishes below the put strike price at expiration.

#### 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 report, 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 "Risks Involved in Trading Financial Instruments" 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. 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**

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 PEfunds 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.

#### **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

https://www.credit-suisse.com/disclosure

#### Global disclaimer / Important information

The information provided herein constitutes marketing material; it is not investment research. 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 report 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 investment research 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 report 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 report. 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 report or a related investment to any company or issuer mentioned. Some investments referred to in this report 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 report. These businesses include specialized trading, risk arbitrage, market making, and other proprietary trading. TAX: Nothing in this report 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 report 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 report. WEBSITES: This report may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the report 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 report. Accessing such website or following such link through this report 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 either distributed by CREDIT SU-ISSE (LUXEMBOURG) S.A. Zweigniederlassung Österreich (the "Austria branch") or by Credit Suisse (Deutschland) AG. The Austria branch 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-1150 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. Credit Suisse (Deutschland) Aktiengesellschaft is supervised by the German supervisory authority Bundesanstalt für Finanzdienstleistungsaufsicht ("BaFin") in collaboration with 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, a branch of Credit Suisse AG, Zurich/Switzerland, duly 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 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 is located at Level 21-22, East Tower, Bahrain World Trade Centre, Manama, Kingdom of Bahrain. Chile: This report is distributed by Credit Suisse Agencia de Valores (Chile) Limitada, a branch of Credit Suisse AG (incorporated in the Canton of Zurich), regulated by the Chilean Financial Market Commission. Neither the issuer nor the securities have been registered with the Financial Market Commission of Chile (Comisión para el Mercado Financiero) pursuant to Law no. 18.045, the Ley de Mercado de Valores, and regulations thereunder, so they may not be offered or sold publicly in Chile. This document does not constitute an offer of, or an invitation to subscribe for or purchase, the securities in the Republic of Chile, other than to individually identified investors pursuant to a private offering within the meaning of article 4 of the Ley de Mercado de Valores (an offer that is not "addressed to the public in general or to a certain sector or specific group of the public"). 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 ("DFSA"). Related financial services or products are only made available to Professional Clients or Market Counterparties, as defined by the DFSA, 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 authorities, the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and the Autorité des Marchés Financiers (AMF). 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 of Credit Suisse AG 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. Israel: If distributed by Credit Suisse Financial Services (Israel) Ltd. in Israel: This document is distributed by Credit Suisse Financial Services (Israel) Ltd. Credit Suisse AG, including the services offered in Israel, is not supervised by the Supervisor of Banks at the Bank of Israel, but by the competent banking supervision authority in Switzerland. Credit Suisse Financial Services (Israel) Ltd. is a licensed investment marketer in Israel and thus, its investment marketing activities are supervised by the Israel Securities Authority. 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") and having a financial institution license number 42. Credit Suisse (Lebanon) Finance SAL is subject to the CBL's laws and circulars as well as the laws and regulations 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. It is hereby expressly understood and acknowledged that investments in financial markets may involve a high degree of complexity and risk of loss in value 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 as at the date of such assessment 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 expressly and irrevocably confirms that he fully understands, and has no objection to the use of the English language. Luxembourg: This report is distributed by Credit Suisse (Luxembourg) S.A., a duly authorizedcredit institution in the Grand Duchy of Luxembourg with registered address5, 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: This document represents the vision of the person who provides his/her services to C. Suisse Asesoría México, S.A. de C.V. ("C. Suisse Asesoría") and/or Banco Credit Suisse (México), S.A., Institución de Banca Múltiple, Grupo Financiero Credit Suisse (México) ("Banco CS") so that both C. Suisse Asesoría and Banco CS reserve the right to change their mind at any time not assuming any liability in this regard. This document is distributed for informational purposes only, and does not imply a personal recommendation or suggestion, nor the invitation to celebrate any operation and does not replace the communication you have with your executive in relation to C. Suisse Asesoría and/or Banco CS prior to taking any investment decision. C. Suisse Asesoría and/or Banco CS does not assume any responsibility for investment decisions based on information contained in the document sent, as the same may not take into account the context of the investment strategy and objectives of particular clients. Prospectus, brochures, investment regimes of investment funds, annual reports or periodic financial information contain all additional useful information for investors. These documents can be obtained free of charge directly from issuers, operators of investment funds, in the Internet page of the stock exchange in which they are listed or through its executive in C. Suisse Asesoría and/or Banco CS. Past performance and the various scenarios of existing markets do not guarantee present or future yields. In the event that the information contained in this document is incomplete, incorrect or unclear, please contact your Executive of C. Suisse Asesoría and/or Banco CS as soon as possible. It is possible that this document may suffer modifications without any responsibility for C. Suisse Asesoría and/or Banco CS. This document is distributed for informational purposes only and is not a substitute for the Operations Reports and/or Account Statements you receive from C. Suisse Asesoría and/or Banco CS in terms of the General Provisions Applicable to Financial Institutions and other Legal Entities that Provide Investment Services issued by the Mexican Banking and Securities Commission ("CNBV"). Given the nature of this document, C. Suisse Asesoría and/or Banco CS does not assume any responsibility derived from the information contained therein. Without prejudice to the fact that the information was obtained from or based on sources believed to be reliable by C. Suisse Asesoría and/or Banco CS, there is no guarantee that the information is either accurate or complete. Banco CS and/or C. Suisse Asesoría does not accept any liability arising from any loss arising from the use of the information contained in the document sent to you. It is recommended that investor make sure that the information provided is in accordance to his/her personal circumstances and investment profile, in relation to any particular legal, regulatory or fiscal situation, or to obtain independent professional advice. C. Suisse Asesoría México, S.A. de C.V. is an investment adviser created in accordance with the Mexican Securities Market Law ("LMV"), registered with the CNBV under the folio number 30070. C. Suisse Asesoría México, S.A. de C.V. is not part of Grupo Financiero Credit Suisse (México), S.A. de C.V., or any other financial group in Mexico. C. Suisse Asesoría México, S.A. de C.V. is not an independent investment adviser as provided by LMV and other applicable regulations due to its direct relationship with Credit Suisse AG, a foreign financial institution, and its indirect relationship with the entities that make up Grupo Financiero Credit Suisse (México), S.A. de C.V. 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 Nederlansche 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 authorities, the Banco de Portugal (BdP) and 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 Eligible Counterparties (as defined by the QFCRA) or Business

Custormers (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 document 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. Under the Rules on the Offer of Securities and Continuing Obligations this document may not be distributed in the Kingdom except to such persons as are permitted under the Rules on the Offer of Securities and Continuing Obligations issued by the Capital Market Authority. The Capital Market Authority does not make any representation as to the accuracy or completeness of this document, and expressly disclaims any liability whatsoever for any loss arising from, or incurred in reliance upon, any part of this document. Prospective purchasers of the securities offered hereby should conduct their own due diligence on the accuracy of the information relating to the securities. If you do not understand the contents of this document, you should consult an authorised financial advisor. Under the Investment Fund Regulations this document may not be distributed in the Kingdom except to such persons as are permitted under the Investment Fund Regulations issued by the Capital Market Authority. The Capital Market Authority does not make any representation as to the accuracy or completeness of this document, and expressly disclaims any liability whatsoever for any loss arising from, or incurred in reliance upon, any part of this document. Prospective subscribers of the securities offered hereby should conduct their own due diligence on the accuracy of the information relating to the securities. If you do not understand the contents of this document you should consult an authorised financial adviser. 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 document is a marketing material and is provided by Credit Suisse AG, Sucursal en España, legal entity registered at the Comisión Nacional del Mercado de Valores for information purposes. It is exclusively addressed to the recipient for personal use only and, according to current regulations in force, by no means can it be considered as a security offer, personal investment advice or any general or specific recommendation of products or investment strategies with the aim that you perform any operation. The client shall be deemed responsible, in all cases, for taking whatever decisions on investments or disinvestments, and therefore the client takes all responsibility for the benefits or losses resulting from the operations that the client decides to perform based on the information and opinions included in this document. This document is not the result of a financial analysis or research and therefore, neither it is subject to the current regulations that apply to the production and distribution of financial research, nor its content complies with the legal requirements of independence of financial research. 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 Terasevler 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.

20C014A\_IS

## **Imprint**

#### **Publisher**

Nannette Hechler-Fayd'herbe Head of Global Economics & Research +41 44 333 17 06 nannette.hechler-fayd'herbe@credit-suisse.com

# Information about other Investment Solutions & Products publications

Credit Suisse AG Investment Publishing P.O. Box 300, CH-8070 Zürich

#### Internet

https://investment.credit-suisse.com

### Intranet (for employees only)

https://isr.csintra.net

### Subscription (clients)

Please contact your customer advisor to subscribe to this publication

#### Subscription (internal)

For information on subscriptions please visit: https://isr.csintra.net/subscriptions

### **Authors**

#### Franziska Fischer

Economist – Swiss Macro & Strategy +41 44 333 77 35 franziska.fischer@credit-suisse.com

#### **Emilie Gachet**

Economist – Swiss Sectors and Regions +41 44 332 09 74 emilie.gachet@credit-suisse.com