



Quarterly Bulletin
4/2022 December

SCHWEIZERISCHE NATIONALBANK
BANQUE NATIONALE SUISSE
BANCA NAZIONALE SVIZZERA
BANCA NAZIUNALA SVIZRA
SWISS NATIONAL BANK



Quarterly Bulletin
4/2022 December

Volume 40

Contents

	Page
Monetary policy report	4
1 Monetary policy decision of 15 December 2022	6
Monetary policy strategy at the SNB	7
2 Global economic environment	8
3 Economic developments in Switzerland	14
4 Prices and inflation expectations	19
5 Monetary developments	22
Business cycle signals	28
Acknowledgements	36
Chronicle of monetary events	42
Glossary	44

Monetary policy report

Report for the attention of the Governing Board of the Swiss National Bank for its quarterly assessment of December 2022

The report describes economic and monetary developments in Switzerland and explains the inflation forecast. It shows how the SNB views the economic situation and the implications for monetary policy it draws from this assessment. The first section ('Monetary policy decision of 15 December 2022') is an excerpt from the press release published following the assessment.

This report is based on the data and information available as at 15 December 2022. Unless otherwise stated, all rates of change from the previous period are based on seasonally adjusted data and are annualised.

Key points

- On 15 December 2022, the SNB decided to further tighten its monetary policy. It raised the SNB policy rate by 0.5 percentage points to 1.0% to counter increased inflationary pressure and a further spread of inflation. The conditional inflation forecast was above that of September over the medium term, and would have been even higher without the rise in the SNB policy rate.
- Global growth momentum has continued to slow down. At the same time, inflation in many countries is markedly above central banks' targets. Accordingly, numerous central banks have further tightened their monetary policy. In its baseline scenario for the global economy, the SNB expects weak economic growth in the coming quarters. Inflation will remain elevated for the time being.
- Economic momentum in Switzerland remains modest. The SNB expects GDP growth of around 2% for 2022 and around 0.5% for 2023. The level of uncertainty associated with the forecast is still high.
- Annual CPI inflation was still significantly above the range consistent with price stability, but showed a decline quarter-on-quarter and stood at 3.0% in November. The short-term inflation expectations derived from surveys stabilised at a high level. The longer-term inflation expectations remained within the range consistent with price stability.
- The Swiss franc depreciated against the euro, but appreciated against the US dollar. Bond yields fluctuated significantly, while equities posted marked gains in value. Real estate prices continued to rise. Growth in the monetary aggregates was again slow. Lending growth remained robust.

1 Monetary policy decision of 15 December 2022

Swiss National Bank tightens monetary policy further and raises SNB policy rate to 1.0%

The SNB is tightening its monetary policy further and is raising the SNB policy rate by 0.5 percentage points to 1.0%. In doing so, it is countering increased inflationary pressure and a further spread of inflation. It cannot be ruled out that additional rises in the SNB policy rate will be necessary to ensure price stability over the medium term. To provide appropriate monetary conditions, the SNB is also willing to be active in the foreign exchange market as necessary.

The SNB policy rate change applies from 16 December 2022. Banks' sight deposits held at the SNB will be remunerated at the SNB policy rate of 1.0% up to a certain threshold. Sight deposits above this threshold will be remunerated at an interest rate of 0.5%, and thus still at a discount of 0.5 percentage points relative to the SNB policy rate. With this tiered remuneration of sight deposits and open market operations, the SNB is ensuring that the secured short-term Swiss franc money market rates are close to the SNB policy rate.

Inflation has declined somewhat in recent months, and stood at 3.0% in November. However, it is still clearly above the range the SNB equates with price stability. Inflation is likely to remain elevated for the time being. The SNB's new conditional inflation forecast is based on

the assumption that the SNB policy rate is 1.0% over the entire forecast horizon (cf. chart 1.1). Up to the beginning of 2023, the forecast is below that of September owing to the somewhat lower oil price. From mid-2023 onwards, the new forecast is higher and stands at 2.1% at the end of the forecast horizon. That the new forecast is higher over the medium term despite the raising of the SNB policy rate is attributable to stronger inflationary pressure from abroad and the fact that price increases are spreading across the various categories of goods and services in the consumer price index. The new forecast puts average annual inflation at 2.9% for 2022, 2.4% for 2023 and 1.8% for 2024 (cf. table 1.1). Without the SNB policy rate increase, the inflation forecast would be even higher over the medium term.

Global growth momentum has continued to slow down. At the same time, inflation in many countries is markedly above central banks' targets. Accordingly, numerous central banks have further tightened their monetary policy.

In its baseline scenario for the global economy, the SNB expects this challenging situation to persist for now. Global economic growth is likely to be weak in the coming quarters, and inflation will remain elevated for the time being. Over the medium term, however, inflation abroad should return to more moderate levels, not least due to the increasingly tighter monetary policy in many countries.

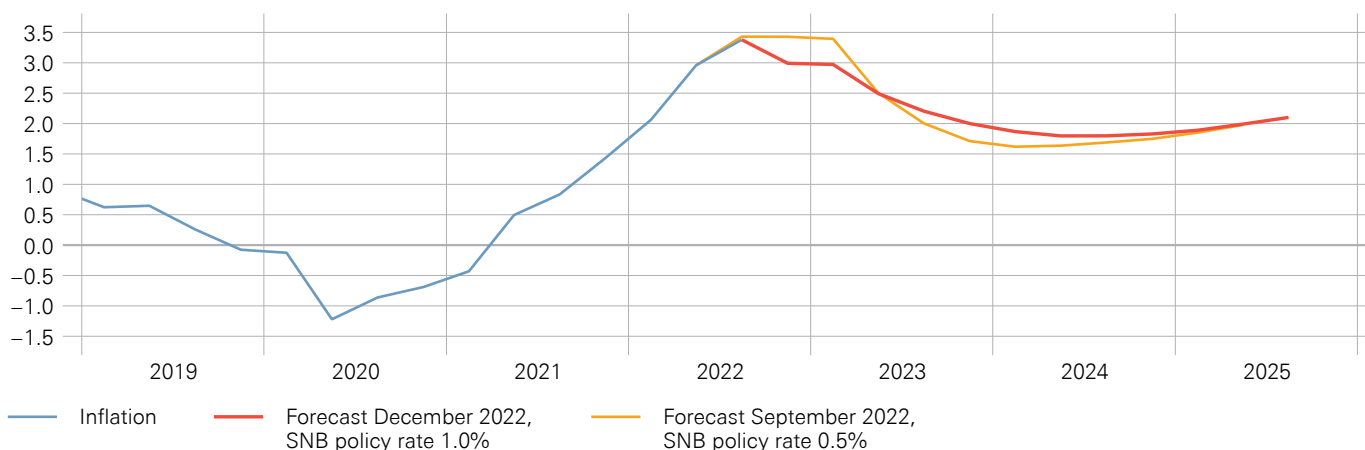
This scenario for the global economy is subject to significant risks. The energy situation in Europe could worsen again. At the same time, high inflation could become embedded and require renewed stronger monetary policy responses abroad. Finally, the coronavirus pandemic remains an important source of risk for the global economy.

In Switzerland, GDP grew at an annualised rate of 1.0% in the third quarter. Economic momentum thus remained

Chart 1.1

CONDITIONAL INFLATION FORECAST OF DECEMBER 2022

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



Source(s): SFSO, SNB

similarly modest as in the preceding quarters. While many service industries fared well, there was a renewed slight decline in value added in manufacturing.

The situation on the labour market remained positive. Employment continued to rise, and unemployment decreased again slightly. Overall production capacity has been well utilised.

Switzerland's GDP is likely to grow by around 2.0% this year. However, weaker demand from abroad and the high energy prices are likely to curb economic activity markedly in the coming year. Against this backdrop, the SNB expects GDP growth of around 0.5% for 2023.

The forecast for Switzerland, as for the global economy, is subject to high uncertainty. A stronger economic downturn abroad or a pronounced energy shortage in Switzerland would, in particular, have a negative effect.

Growth has remained largely unchanged in recent quarters for both mortgage lending and prices for single-family houses and privately owned apartments. There are, however, signs of a slowdown in prices for apartment buildings. The SNB will continue to monitor developments on the mortgage and real estate markets closely.

Monetary policy strategy at the SNB

The SNB has a statutory mandate to ensure price stability while taking due account of economic developments.

The SNB has specified the way in which it exercises this mandate in a three-part monetary policy strategy. First, it regards prices as stable when the Swiss consumer price index (CPI) rises by less than 2% per annum. This allows it to take account of the fact that the CPI slightly overstates actual inflation. At the same time, it allows

inflation to fluctuate somewhat with the economic cycle. Second, the SNB summarises its assessment of the situation and of the need for monetary policy action in a quarterly inflation forecast. This forecast, which is based on the assumption of a constant short-term interest rate, shows how the SNB expects the CPI to move over the next three years. As the third element in implementing its monetary policy the SNB sets the SNB policy rate, and seeks to keep the secured short-term Swiss franc money market rates close to this rate.

Table 1.1

OBSERVED INFLATION IN DECEMBER 2022

	2019				2020				2021				2022				2019	2020	2021
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Inflation	0.6	0.6	0.3	-0.1	-0.1	-1.2	-0.9	-0.7	-0.4	0.5	0.8	1.4	2.1	3.0	3.4	0.4	-0.7	0.6	

Source(s): SFSO

CONDITIONAL INFLATION FORECAST OF DECEMBER 2022

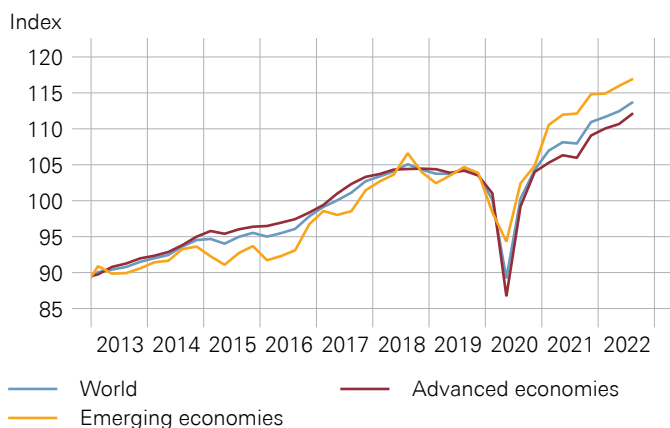
	2022				2023				2024				2025				2022	2023	2024
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Forecast September 2022, SNB policy rate 0.5%			3.4	3.4	3.4	2.5	2.0	1.7	1.6	1.6	1.7	1.7	1.9	2.0			3.0	2.4	1.7
Forecast December 2022, SNB policy rate 1.0%			3.0	3.0	2.5	2.2	2.0	1.9	1.8	1.8	1.8	1.9	2.0	2.1			2.9	2.4	1.8

Source(s): SNB

Chart 2.1

GLOBAL GOODS TRADE

Average of depicted period = 100



Source(s): CPB Netherlands Bureau for Economic Policy Analysis, Refinitiv Datastream

2 Global economic environment

Overall, economic growth remained modest in the advanced economies in the third quarter. By contrast, economic activity in China gained momentum after coronavirus containment measures were temporarily lifted. Global trade continued to expand strongly in the third quarter, and the easing in the global supply bottlenecks that have been persisting for some time is likely to have contributed to this positive development (cf. chart 2.1). Labour market conditions remained good overall, with unemployment in the advanced economies at roughly the same low level as before the outbreak of the pandemic (cf. chart 2.9). In many countries, inflation remains markedly above central banks' targets. Against this background, numerous central banks have tightened their monetary policy further.

The global economic outlook for the coming quarters is weak. In particular, the energy situation in Europe, the loss of purchasing power due to inflation, and tighter financing conditions are having a negative effect. Inflation will remain elevated for the time being. Over the medium term, however, it should return to more moderate levels, not least due to the increasingly tighter monetary policy in many countries.

This scenario for the global economy is subject to significant risks. The energy situation in Europe could worsen again. At the same time, high inflation could

Table 2.1

BASELINE SCENARIO FOR GLOBAL ECONOMIC DEVELOPMENTS

	2018	2019	2020	2021	Scenario	
					2022	2023
GDP, year-on-year change in percent						
Global ¹	3.6	2.8	-3.0	6.0	1.8	0.8
US	2.9	2.3	-2.8	5.9	1.9	0.2
Euro area	1.8	1.6	-6.3	5.3	3.2	-0.5
Japan	0.6	-0.4	-4.3	2.2	1.6	1.4
China ²	6.8	6.0	1.8	8.6	3.0	4.7
Oil price in USD per barrel						
	71.0	64.3	41.8	70.7	102.3	94.0

¹ World aggregate as defined by the IMF, PPP-weighted.

² The annual figures are based on seasonally adjusted data and can therefore differ slightly from the official annual figures.

Source(s): Refinitiv Datastream, SNB

become embedded and require renewed stronger monetary policy responses abroad. Finally, the coronavirus pandemic remains an important source of risk for the global economy.

The SNB's forecasts for the global economy are based on assumptions about oil prices and the EUR/USD exchange rate. The SNB is assuming an oil price for Brent crude of USD 94 per barrel, compared with USD 98 in the last baseline scenario, and anticipates a practically unchanged exchange rate of USD 1.01 to the euro. Both correspond to the 20-day average when the current baseline scenario was drawn up.

INTERNATIONAL FINANCIAL AND COMMODITY MARKETS

Since the monetary policy assessment in September, inflation developments and the associated expectations regarding monetary policy have continued to dominate international financial markets. The markets were expecting a stronger tightening of monetary policy over the short term than they had in September, especially in the US.

Yields on ten-year government bonds fluctuated strongly in most advanced economies. Owing to market expectations that monetary policy could be tightened more quickly than previously assumed, yields initially increased at the beginning of the period under review. However, signs that inflation was declining in the US subsequently dampened expectations of further rate increases. Government bond yields thus fell once again (cf. charts 2.2 and 2.3). Yield curves flattened significantly. Meanwhile, yields in the UK briefly rose substantially in the wake of the government announcing a comprehensive fiscal package that would potentially have resulted in considerably higher deficits in the years ahead. The Bank of England subsequently stabilised markets with its decision to conduct emergency bond purchases. Furthermore, the new government reversed some of those fiscal measures, which helped curb yields.

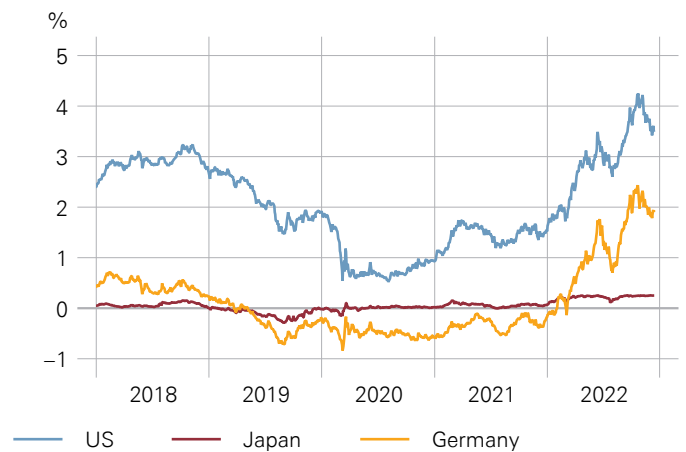
Global stock markets have recovered overall. In mid-October, the MSCI World Index initially reached its lowest level this year. However, as long-term yields declined, US inflation fell and concerns about a gas shortage in Europe diminished, stock prices subsequently saw significant gains. At the same time, uncertainty about further price movements declined, as indicated, for instance, by the VIX, the index for the implied volatility of stocks in the US as measured by options prices (cf. chart 2.4).

On the foreign exchange markets, activity continued to be dominated by the differing cycles of monetary policy tightening among advanced economies. The US dollar weakened on a trade-weighted basis, while the euro appreciated slightly. The yen temporarily reached a new low, but subsequently recouped the losses. The pound sterling fluctuated strongly in response to fiscal policy

Chart 2.2

INTERNATIONAL LONG-TERM INTEREST RATES

10-year government instruments

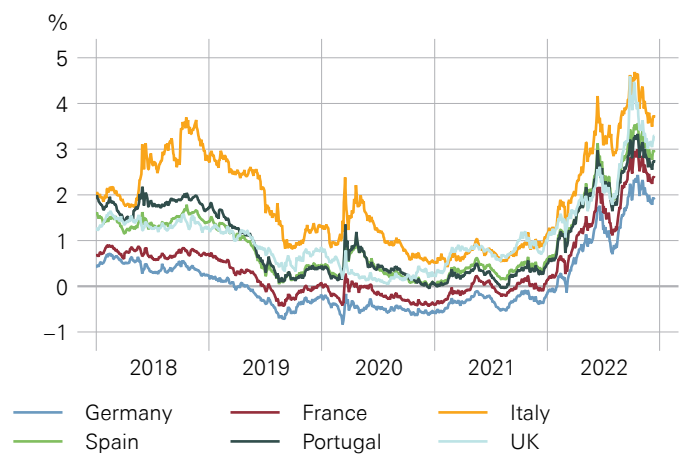


Source(s): Refinitiv Datastream

Chart 2.3

EUROPEAN LONG-TERM INTEREST RATES

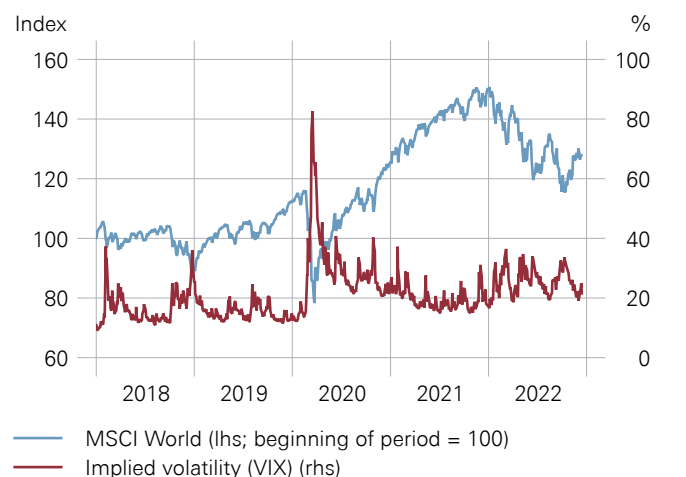
10-year government instruments



Source(s): Refinitiv Datastream

Chart 2.4

STOCK MARKETS



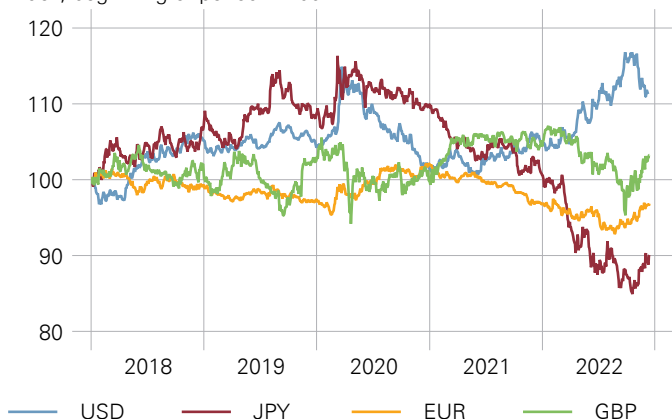
Source(s): Refinitiv Datastream

Chart 2.5

EXCHANGE RATES

Trade-weighted

Index, beginning of period = 100



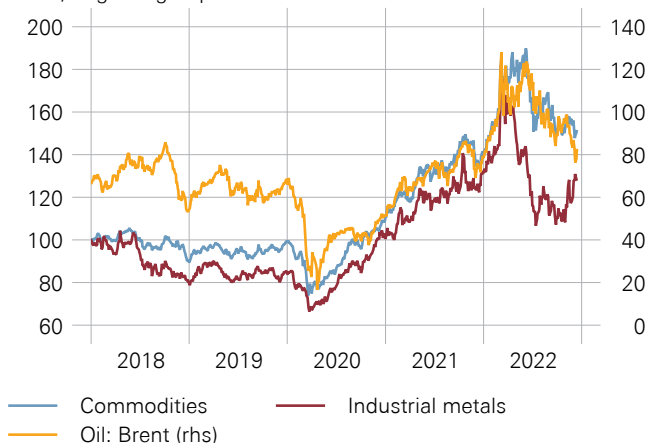
Source(s): Refinitiv Datastream

Chart 2.6

COMMODITY PRICES

Index, beginning of period = 100

USD/barrel

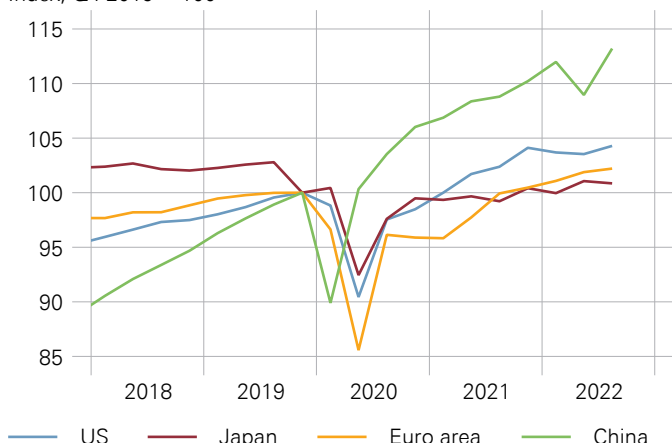


Source(s): Refinitiv Datastream

Chart 2.7

REAL GDP

Index, Q4 2019 = 100



Source(s): Refinitiv Datastream

developments. Having initially depreciated significantly at the end of September, the pound rallied again recently (cf. chart 2.5).

Commodity prices moved sideways overall. The price of Brent crude hovered around USD 90 per barrel in the period under review, and latterly stood at around USD 80 (cf. chart 2.6).

UNITED STATES

In the US, GDP expanded by 2.9% in the third quarter, thus recovering from the decline in the first half of the year. This mainly reflected a strong rise in exports, while domestic demand grew only moderately.

Labour market conditions remained favourable. Employment figures continued to rise at an above-average rate, and unemployment stayed at a low level in November, at 3.7% (cf. chart 2.9). Overall, the situation on the labour market suggests that production capacity is well utilised. This is also evident in higher-than-average wage growth.

Nevertheless, the economic outlook for the US has deteriorated. GDP is unlikely to grow much in the year ahead, and is likely even to shrink slightly in the first two quarters, primarily because the high level of inflation is putting pressure on households' real incomes and weighing on consumption. In addition, more restrictive financing conditions are holding back investment. Added to this are the effects of the less expansionary fiscal policy and the tightening of monetary policy. In view of the robust GDP expansion in the third quarter, the SNB is making a slight upward revision to its 2022 growth forecast compared to September, to 1.9%. The forecast for 2023, by contrast, is considerably lower at 0.2% (cf. table 2.1).

Consumer price inflation fell in recent months and stood at 7.1% in November (cf. chart 2.10). This primarily reflected a decline in energy inflation, although core inflation, too, was slightly lower at 6.0% (cf. chart 2.11). Inflation as measured by the personal consumption expenditure deflator – the index used by the US Federal Reserve to set its 2% inflation target – amounted to 6.0% in October.

Against the background of high inflation, the Fed again increased its target range for the federal funds rate in November by 75 basis points and in December by 50, to stand latterly at 4.25–4.5% (cf. chart 2.12). It signalled additional interest rate hikes and the end of its cycle of monetary policy tightening over the course of next year.

EURO AREA

In the euro area, GDP grew in the third quarter by 1.3%, which was considerably slower than in the preceding quarters (cf. chart 2.7). Activity in the services sector lost momentum, having previously benefited substantially from pandemic measures being lifted. Furthermore, industrial output declined slightly due to high gas prices. At the same time, some industries did benefit from decreasing supply bottlenecks.

Labour market developments were positive. Employment figures climbed further, while unemployment, at 6.5% in October, was considerably lower than before the outbreak of the pandemic (cf. chart 2.9). Overall capacity utilisation was recently good.

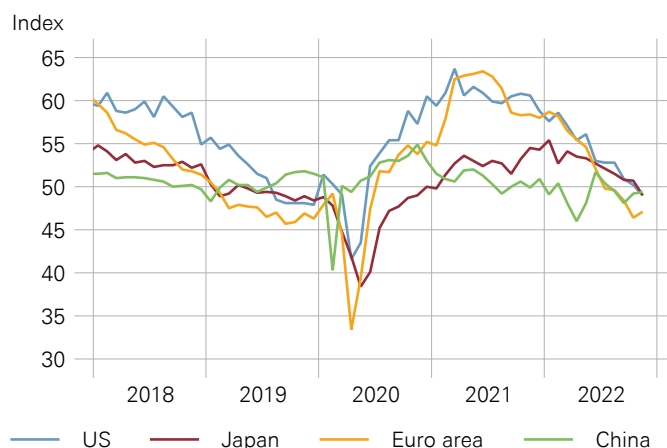
The growth outlook for the euro area has deteriorated significantly, however, with higher inflation putting pressure on households' real income and thus weighing on consumer expenditure, while tighter financing conditions are holding back corporate investment. Moreover, companies are having to further restrict their gas consumption because of the absence of deliveries from Russia, which in turn will curb production. The economy is therefore likely to contract in the quarters ahead. Nevertheless, owing to robust growth in the first half of the year, GDP expansion for 2022 is expected to be 3.2%. For 2023, by contrast, the SNB now anticipates a decline in GDP of 0.5% (cf. table 2.1).

Consumer price inflation advanced substantially further in recent months and stood at 10.0% in November (cf. chart 2.10). This was primarily driven by energy and food prices, which increased substantially with the war in Ukraine. Core inflation recently stood at 5.0% (cf. chart 2.11), reflecting both higher prices for services and price increases for various goods, due in part to high energy costs.

The ECB raised its key interest rates by 75 basis points in October and by a further 50 basis points in December. The relevant interest rate in the money market – the deposit facility rate – will thus stand at 2.0% as of 21 December (cf. chart 2.12, based on data available up to 15 December). Furthermore, the ECB signalled additional interest rate hikes and announced that, from March 2023, it would no longer be renewing all securities maturing under its asset purchase programme (APP). This means the APP portfolio will decline by EUR 15 billion per month on average until mid-2023; it will subsequently be reduced further.

Chart 2.8

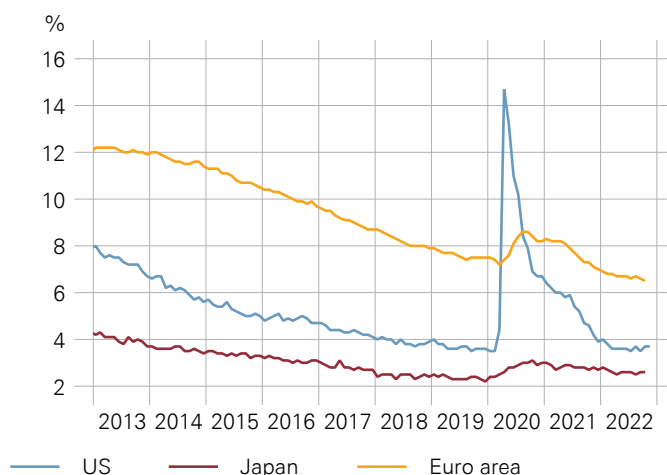
PURCHASING MANAGERS' INDICES (MANUFACTURING)



Source(s): Institute for Supply Management (ISM), S&P Global

Chart 2.9

UNEMPLOYMENT RATES

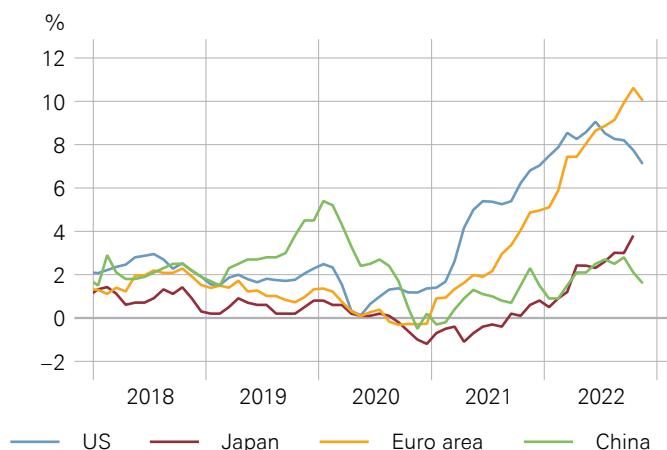


Source(s): Refinitiv Datastream

Chart 2.10

CONSUMER PRICES

Year-on-year change

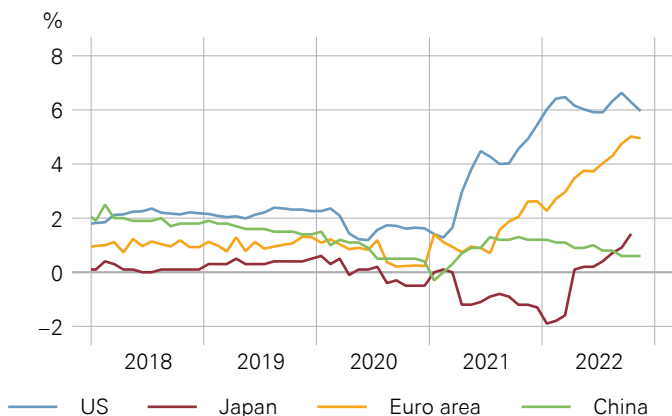


Source(s): Refinitiv Datastream

Chart 2.11

CORE INFLATION RATES ¹

Year-on-year change

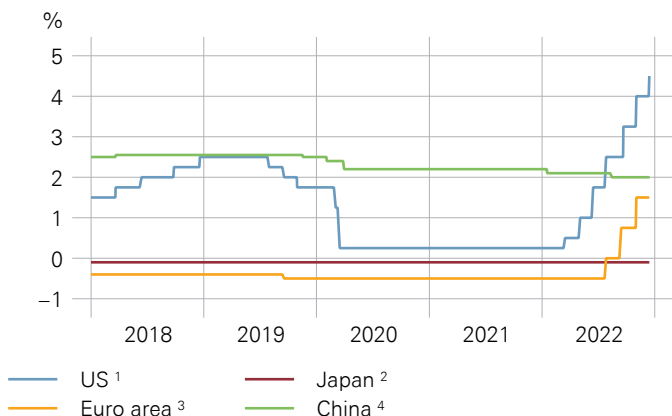


¹ Excluding food and energy

Source(s): Refinitiv Datastream

Chart 2.12

OFFICIAL INTEREST RATES



¹ Federal funds rate (upper limit of target range)

³ Deposit facility rate

² Call money target rate

⁴ Reverse repo rate (7-day)

Source(s): Refinitiv Datastream

JAPAN

GDP in Japan unexpectedly declined by 0.8% in the third quarter (cf. chart 2.7). This weak result was due to the volatile service imports. Exports remained dynamic on the back of increased demand from the US and China. While domestic demand also performed favourably, a further coronavirus wave slowed the continued recovery in private consumption in the summer months.

Employment figures stagnated in recent months, while the unemployment rate was still slightly above its pre-pandemic level, at 2.6% in October (cf. chart 2.9). In view of the sluggish recovery, overall capacity utilisation remained below average. Accordingly, there is still potential for the economy to recover lost ground.

The global economic slowdown is also weighing on Japan's growth prospects. However, a number of factors will support future growth to some extent. These include an easing of procurement problems, particularly in the automotive industry, and the lifting of the entry restrictions introduced during the pandemic. Added to this are stimulus measures, such as an energy subsidy aimed at reducing the burden on households in the coming year. The SNB is leaving its GDP forecast for 2022 virtually unchanged at 1.6%, but is lowering it for 2023 to 1.4% (cf. table 2.1).

Influenced by the weak yen, consumer price inflation increased further. It has been above the Bank of Japan's long-term target since April and, in October, stood at 3.8% (cf. chart 2.10). Core inflation also advanced, but remained modest at 1.4% (cf. chart 2.11).

The Bank of Japan considers the inflation trend resulting from higher import prices to be temporary and expects inflation to return to below 2% next year. Against this backdrop, it left its targets under the yield curve control programme unchanged.

CHINA

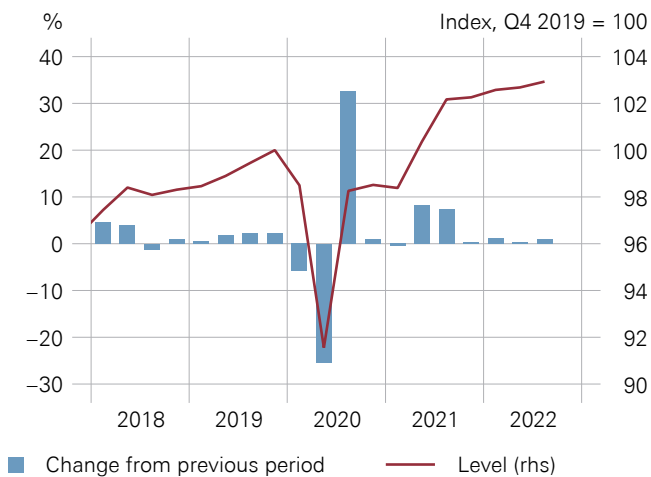
In China, GDP exhibited strong growth in the third quarter, thus recovering from the negative effects of the lockdowns in the previous quarter (cf. chart 2.7). With the exception of the real estate sector, economic activity picked up across a broad front.

In the quarters ahead, however, growth is expected to be weak. Firstly, the pandemic situation has deteriorated again. Although the government recently signalled its intention to abandon its zero-COVID policy, additional containment measures are possible if the healthcare system becomes overwhelmed. Secondly, the crisis in the residential real estate market continues to weigh on economic activity. Government investment in infrastructure is expected to support growth to some extent. The SNB is leaving its growth forecast for China at 3.0% for this year, but is lowering it for 2023 to 4.7% (cf. table 2.1).

Consumer price inflation decreased slightly and stood at a moderate 1.6% in November, while core inflation came to 0.6% (cf. charts 2.10 and 2.11).

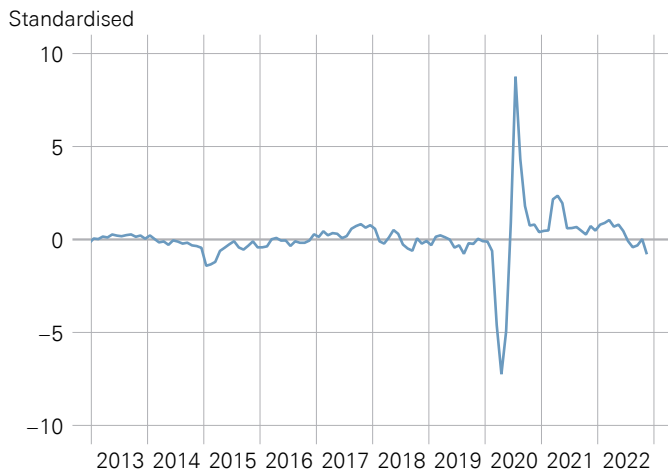
The People's Bank of China has left official interest rates unchanged since lowering them in August (cf. chart 2.12). In November, however, it once again reduced the minimum reserve rates for banks, following a cut in April. What is more, authorities decided to implement further measures aimed at supporting the real estate market.

Chart 3.1

REAL GDP

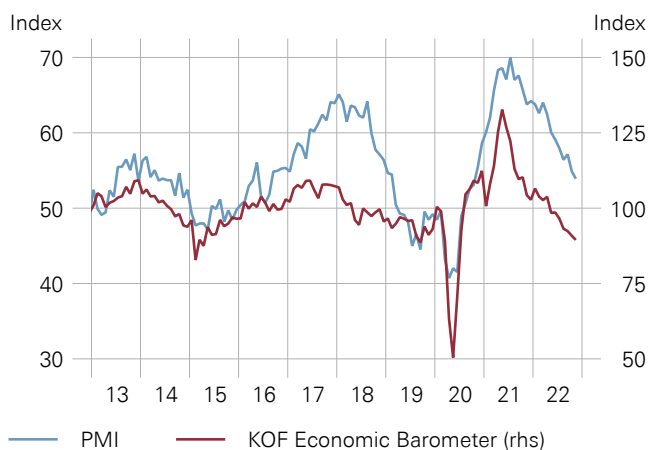
Source(s): SECO

Chart 3.2

SNB BUSINESS CYCLE INDEX

Source(s): SNB

Chart 3.3

MANUFACTURING PMI AND KOF ECONOMIC BAROMETER

Source(s): Credit Suisse, KOF Swiss Economic Institute

3

Economic developments
in Switzerland

In Switzerland, GDP growth remained modest in the third quarter at 1.0%. While many service industries fared well, there was a renewed slight decline in value added in manufacturing.

The situation on the labour market remained positive; employment increased further and unemployment declined again slightly. Overall production capacity has been well utilised.

GDP is likely to grow by around 2% this year. However, weaker demand from abroad and high energy prices are likely to curb economic activity markedly in the coming year. Against this backdrop, the SNB expects GDP growth of around 0.5% for 2023.

The forecast for Switzerland, as for the global economy, is subject to high uncertainty. The main risks are an economic downturn abroad and a pronounced energy shortage in Switzerland.

OUTPUT AND DEMAND

The SNB takes a wide range of information into account when assessing the economic situation. Overall, economic indicators point to muted growth.

Modest GDP growth in third quarter

According to the initial estimate by the State Secretariat for Economic Affairs (SECO), GDP expanded by 1.0% in the third quarter of 2022. Although the economy thus fared somewhat better than expected, it remained lacklustre (cf. chart 3.1).

Driven by trade and business-related services, value added in the services sector increased across a broad front. Value added rose in the pharmaceutical industry as well, although it declined in other manufacturing. In construction, too, value added decreased further.

GDP expansion was broad-based on the demand side. Domestic final demand benefited from robust growth in equipment investment and private consumption. Foreign trade exhibited strong growth momentum.

Muted growth also in fourth quarter

Most economic indicators suggest that growth will remain modest.

The SNB's Business Cycle Index and the KOF Economic Barometer aim to depict overall economic momentum. Both indicators are lower than in the first half of the year and point once again to below-average economic growth for the fourth quarter (cf. charts 3.2 and 3.3).

Signals from the purchasing managers' index (PMI) survey also remain muted. Although survey figures for both manufacturing and services were above the growth threshold up to November, they suggest that growth will merely be moderate (cf. chart 3.3).

The talks held by the SNB's delegates for regional economic relations with companies signal a slight slowdown in economic growth in the fourth quarter. While procurement problems and the risk of an energy shortage have diminished, uncertainty remains high due to the economic downturn abroad (cf. 'Business cycle signals', pp. 28 et seq.).

Table 3.1

REAL GDP AND COMPONENTS

Growth rates on previous period in percent, annualised

	2018	2019	2020	2021	2020	2021				2022		
					Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Private consumption	0.7	1.2	-4.1	1.6	-7.0	-13.6	16.5	9.7	0.8	1.5	5.4	2.7
Government consumption	0.8	0.8	3.5	3.5	4.3	5.1	2.1	3.2	1.4	1.1	0.2	1.0
Investment in fixed assets	0.8	0.9	-3.1	4.2	0.7	0.8	6.6	0.1	11.2	-12.4	3.2	3.2
Construction	0.0	-0.9	-1.0	-3.0	-4.8	-5.5	-3.3	-1.6	-4.5	-4.7	-4.4	-7.6
Equipment	1.2	1.9	-4.3	8.1	3.8	4.3	12.0	1.0	19.6	-15.8	7.0	8.7
Domestic final demand	0.7	1.1	-2.9	2.6	-3.4	-7.1	11.4	5.9	3.8	-2.9	4.0	2.6
Change in inventories ¹	1.1	0.6	-0.1	-1.9	-2.7	2.3	-5.7	-4.4	-3.4	-2.9	16.4	-6.0
Total exports ²	5.0	1.6	-4.6	11.1	17.5	2.5	16.0	22.1	8.3	9.0	-27.8	25.9
Goods ²	4.5	3.4	-0.6	11.0	1.9	14.1	10.2	23.7	-8.3	32.8	-43.9	35.2
Goods excluding merchanting ²	4.4	4.9	-2.9	12.9	13.8	20.4	10.4	14.1	9.9	6.5	-5.2	6.8
Services	5.9	-2.0	-12.5	11.5	62.6	-19.7	30.6	18.5	54.6	-30.0	29.3	8.1
Total imports ²	3.5	2.7	-6.2	5.1	5.7	-4.3	11.5	13.5	10.3	-2.2	3.5	21.1
Goods ²	6.2	2.8	-6.2	4.5	-1.2	4.8	-1.2	14.9	3.1	21.1	-2.7	12.5
Services	-0.2	2.7	-6.1	5.9	16.7	-16.2	32.6	11.6	20.8	-28.4	14.0	35.1
Net exports ³	1.1	-0.4	0.3	3.7	6.7	3.3	3.8	6.5	0.2	6.6	-19.5	4.6
GDP	2.9	1.1	-2.4	4.2	1.0	-0.5	8.3	7.4	0.4	1.2	0.4	1.0

1 Contribution to growth in percentage points (including statistical discrepancy).

2 Excluding valuables (non-monetary gold and other precious metals, precious stones and gems as well as works of art and antiques).

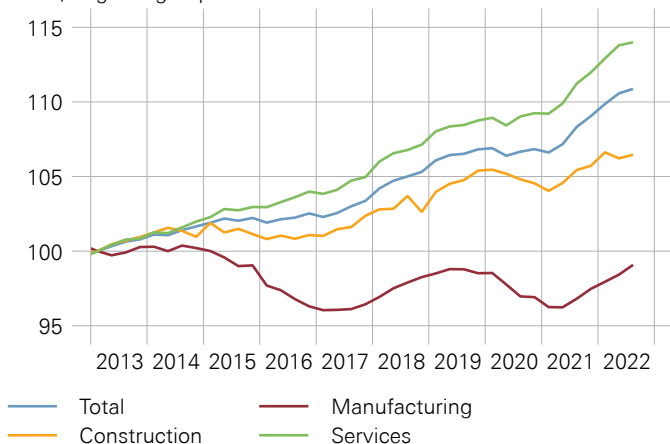
3 Contribution to growth in percentage points.

Source(s): SECO

Chart 3.4

FULL-TIME EQUIVALENT JOBS

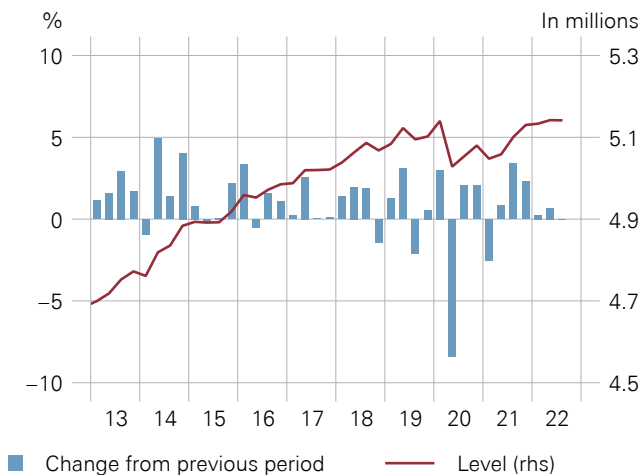
Index, beginning of period = 100



Source(s): SFSO; seasonal adjustment: SNB

Chart 3.5

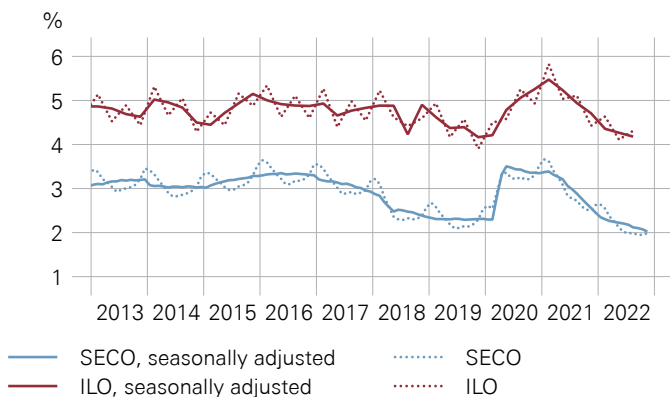
EMPLOYED PERSONS



Source(s): SFSO

Chart 3.6

UNEMPLOYMENT RATE



SECO: Unemployed persons registered with the regional employment offices, as a percentage of the labour force (economically active persons).

ILO: Unemployment rate based on International Labour Organization definition.

Source(s): SECO, SFSO

LABOUR MARKET

Labour market developments have weakened in recent months, but remain positive. Employment saw an increase, while unemployment receded further. Companies continued to have difficulty recruiting personnel.

Employment growth in third quarter

According to the national job statistics (JOBSTAT), the seasonally adjusted number of full-time equivalent positions rose further in the third quarter. New jobs were created in services as well as in manufacturing and construction (cf. chart 3.4). According to the Employment Statistics (ES), by contrast, the seasonally adjusted number of persons employed stagnated, having risen in the previous quarter (cf. chart 3.5).

Further decline in unemployment

In recent months, the unemployment rate published by SECO decreased further. Excluding seasonal fluctuations, 93,000 people were registered as unemployed at the end of November, 4,000 fewer than at the end of August. The seasonally adjusted unemployment rate stood at 2.0% at the end of November and was thus at a slightly lower level than that at the start of the pandemic in February 2020. The unemployment figures calculated by the Swiss Federal Statistical Office (SFSO) in line with the definition of the International Labour Organization (ILO) also receded. In the third quarter, the seasonally adjusted rate reached its pre-pandemic level of 4.2% (cf. chart 3.6).

Difficulty recruiting personnel

According to JOBSTAT, companies continued to have difficulty recruiting personnel in the third quarter. Many vacant positions in services, manufacturing and construction could not be filled, or only with great effort. Recruiting was not, however, more difficult than it had been during the previous quarter.

CAPACITY UTILISATION

Positive output gap

The output gap, defined as the percentage deviation of actual GDP from estimated aggregate potential output, shows how well production capacity in an economy is being utilised. In the case of overutilisation the gap is positive, and in the case of underutilisation it is negative.

Potential output as estimated by means of a production function shows a slightly positive output gap for the third quarter. Other estimation methods also indicate a positive gap (cf. chart 3.7).

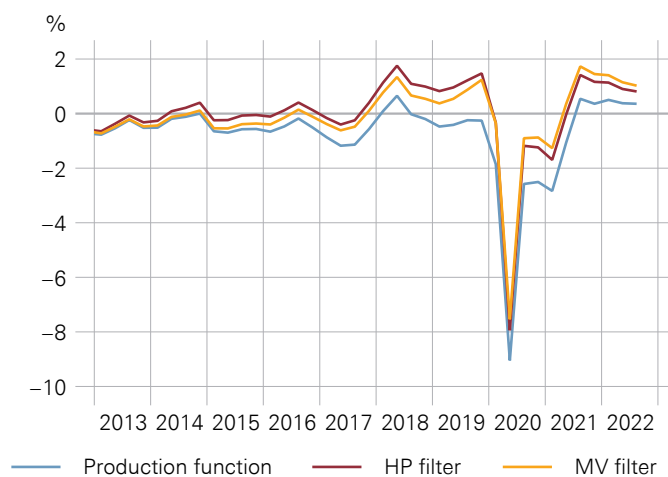
Well-utilised production capacity

In addition to estimating the aggregate output gap, surveys also play an important role in assessing utilisation levels. The surveys conducted by KOF show that technical capacity was well utilised overall in the third quarter. Although utilisation declined again in manufacturing, it remained at an above-average level (cf. chart 3.8). Utilisation in construction continued to be high (cf. chart 3.9). In services, it was close to its long-term average in the third quarter. In the hotel industry occupancy rates improved further, returning to the levels recorded at the end of 2019. In transport services, an area that had been hard hit by the pandemic, utilisation was only around 2% below its pre-crisis level.

As regards the labour situation, the surveys indicate that staff shortages did not get any worse in the third quarter. Nevertheless, staff numbers in most industries were still considered to be low.

Chart 3.7

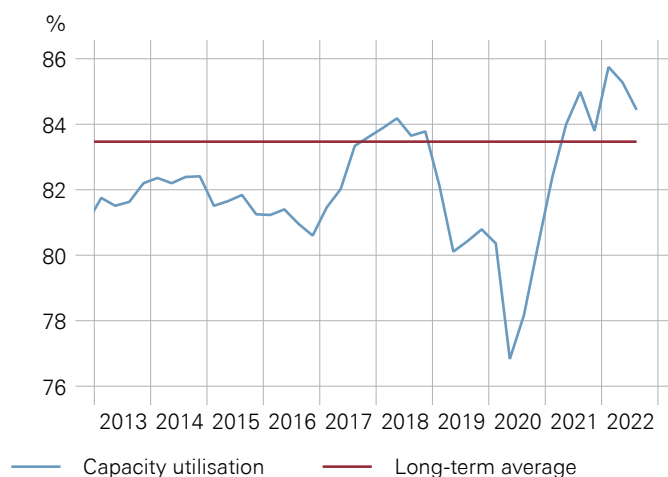
OUTPUT GAP



Source(s): SNB

Chart 3.8

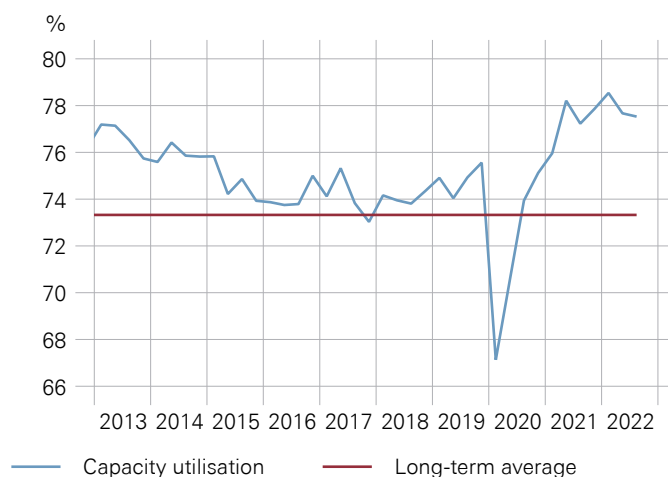
CAPACITY UTILISATION IN MANUFACTURING



Source(s): KOF Swiss Economic Institute

Chart 3.9

CAPACITY UTILISATION IN CONSTRUCTION

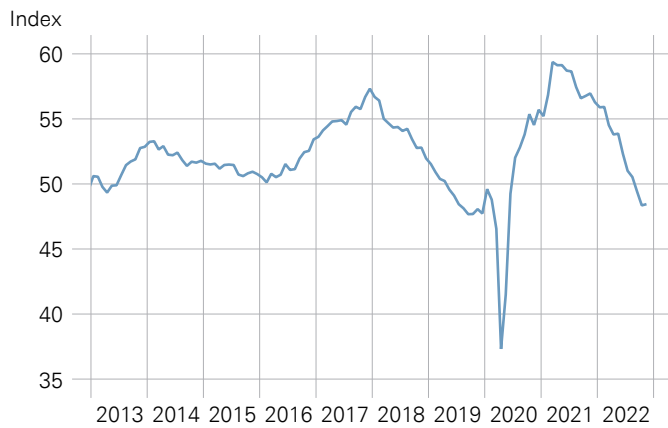


Source(s): KOF Swiss Economic Institute

Chart 3.10

MANUFACTURING PMI ABROAD

Export-weighted, 27 countries



Source(s): International Monetary Fund – Direction of Trade Statistics (IMF – DOTS), Refinitiv Datastream, SNB

Chart 3.11

BUSINESS SITUATION

Average across all KOF surveys



Source(s): KOF Swiss Economic Institute

Chart 3.12

EMPLOYMENT OUTLOOK

Seasonally adjusted, standardised



1 Seasonal adjustment: SNB

Source(s): KOF Swiss Economic Institute, SFSO, SNB regional network

OUTLOOK

The economic outlook for Switzerland is subdued. There are clear signs of weakening growth abroad, as shown by the export-weighted manufacturing PMI (cf. chart 3.10). Accordingly, manufacturing in Switzerland is likely to remain lacklustre. The outlook in the services sector is somewhat more positive, although momentum is expected to slow here too. Overall, expectations among Swiss companies regarding the future business situation have dampened further (cf. chart 3.11). There are also signs of a slowdown in the labour market. Although the employment outlook remains favourable according to the surveys, it is no longer as positive as it was at the beginning of the year (cf. chart 3.12).

GDP is likely to expand by around 2% this year. For 2023, by contrast, the SNB now only expects GDP growth of roughly 0.5%. The significant slowdown is due to weaker demand from abroad as well as the effects of high energy prices. Following a sluggish start to the year, growth is only expected to pick up again somewhat in the course of 2023. Unemployment is likely to increase slightly, and the utilisation of production capacity looks set to deteriorate.

The level of uncertainty associated with the forecast is very high. A global economic downturn, an escalation in the energy situation in Europe and an energy shortage in Switzerland pose the greatest risks. Strong price increases for commodities could also slow economic growth. Furthermore, a resurgence of the coronavirus pandemic cannot be ruled out.

4

Prices and inflation expectations

The inflation rate as measured by the CPI has fallen somewhat since August, but was still significantly higher than the range consistent with price stability, which the SNB equates to a rise in the CPI of less than 2% per year. It stood at 3.0% in November, while the SFSO1 and TM15 core inflation measures were both 1.9%.

Short-term inflation expectations stabilised at a high level, while longer-term expectations remained within the range consistent with price stability.

CONSUMER PRICES

Annual inflation somewhat lower

Annual CPI inflation stood at 3.0% in November, compared with 3.5% in August (cf. chart 4.1, table 4.1). The decline was driven primarily by the development of oil product prices, which saw a drop in inflation by more than half between August and November, from 42.3% to 18.1%.

Inflation for imported products down slightly

While inflation for oil products saw a marked decline, inflation for other imported goods and services rose slightly from 4.8% in August to 5.0% in November (cf. table 4.1).

Table 4.1

SWISS CONSUMER PRICE INDEX AND COMPONENTS

Year-on-year change in percent

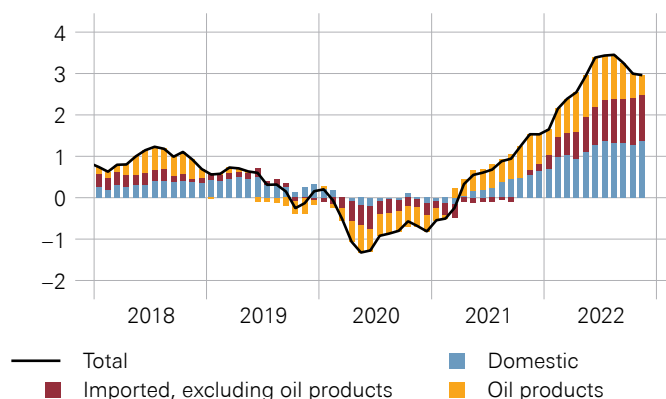
	2021	2021	2022			2022		
		Q4	Q1	Q2	Q3	Sep	Oct	Nov
Overall CPI	0.6	1.4	2.1	3.0	3.4	3.3	3.0	3.0
Domestic goods and services	0.3	0.7	1.2	1.5	1.8	1.8	1.7	1.8
Goods	0.0	0.2	1.2	2.5	3.3	3.6	4.3	4.4
Services	0.4	0.9	1.2	1.1	1.2	1.1	0.8	0.9
Private services excluding housing rents	0.3	0.9	1.4	1.3	1.3	0.9	0.3	0.4
Housing rents	0.9	1.3	1.4	1.5	1.4	1.3	1.3	1.5
Public services	-0.1	0.0	0.0	0.0	0.7	1.1	1.2	1.2
Imported goods and services	1.5	3.7	4.8	7.5	8.3	7.8	6.9	6.3
Excluding oil products	-0.4	0.5	2.1	3.6	4.7	4.9	5.0	5.0
Oil products	17.9	32.3	28.1	42.5	39.6	33.7	23.0	18.1

Source(s): SFSO, SNB

Chart 4.1

CPI: DOMESTIC AND IMPORTED GOODS AND SERVICES

Year-on-year change in CPI in percent. Contribution of individual components, in percentage points.

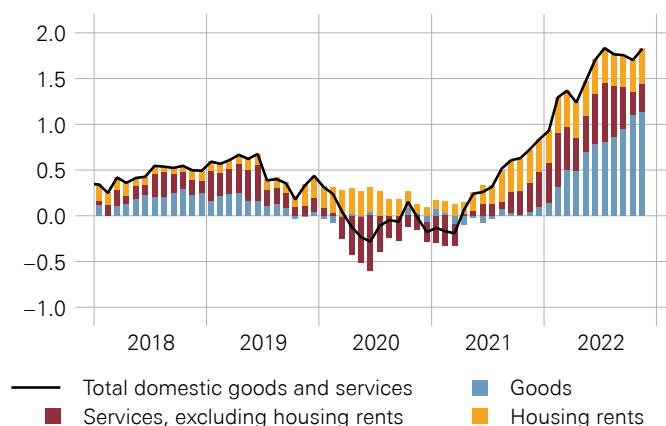


Source(s): SFSO, SNB

Chart 4.2

CPI: DOMESTIC GOODS AND SERVICES

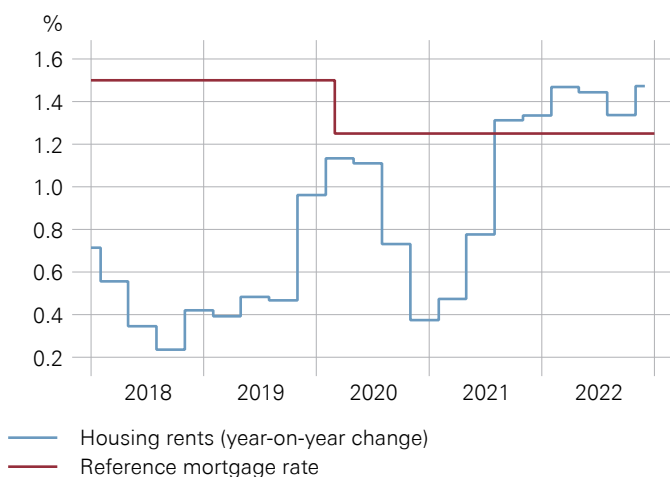
Year-on-year change in domestic CPI in percent. Contribution of individual components, in percentage points.



Source(s): SFSO, SNB

Chart 4.3

HOUSING RENTS



Source(s): Federal Office for Housing (FOH), SFSO

Chart 4.4

CORE INFLATION RATES

Year-on-year change

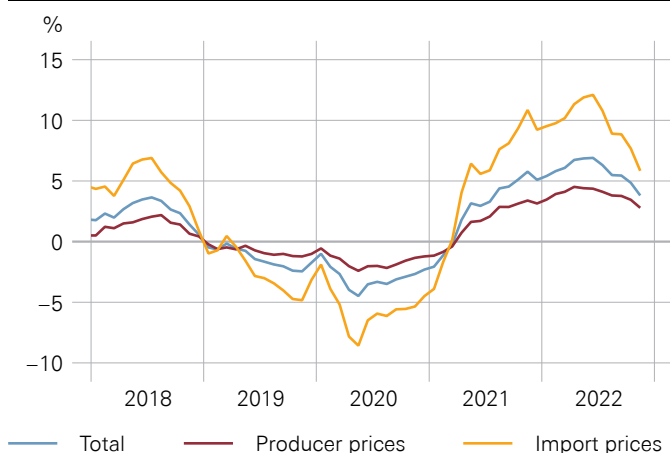


Source(s): SFSO, SNB

Chart 4.5

PRODUCER AND IMPORT PRICES

Year-on-year change



Source(s): SFSO

Overall, inflation for imported goods and services decreased from 8.6% in August to 6.3% in November.

Inflation for domestic products unchanged

Inflation for domestic goods and services stood at 1.8% in November. Following a temporary dip, it returned to the level recorded in August (cf. chart 4.2).

While the inflation contribution made by domestic services excluding housing rents declined, the contribution from domestic goods has increased further.

Inflation for domestic goods came to 4.4% in November, having stood at 3.3% in August. Inflation for domestic services fell from 1.2% in August to 0.9% in November.

Rent inflation up slightly

Housing rent inflation rose from 1.3% in August to 1.5% in November (cf. chart 4.3). The reference mortgage rate has remained unchanged since the beginning of 2020.

Core inflation remains high

Core inflation, as measured by the SNB's trimmed mean (TM15), increased from 1.7% in August to 1.9% in November, thus reaching its highest level since 2008. In the same period, the SFSO core inflation rate 1 (SFSO1) dropped marginally from 2.0% to 1.9% (cf. chart 4.4).

PRODUCER AND IMPORT PRICES

Lower inflation for producer and import prices

Inflation for total producer and import prices decreased from 5.5% in August to 3.8% in November (cf. chart 4.5). The inflation rates for the two individual components declined. In November, inflation for import prices came to 5.8%, while for producer prices it was 2.8%. Once again, the inflation levels in both producer prices and import prices were mainly attributable to oil products and intermediate goods (e.g. metal, timber and plastic). Prices for consumer goods have remained largely unchanged since the beginning of the year.

INFLATION EXPECTATIONS

Short-term inflation expectations remain high

Having presented a mixed picture in the previous quarter, the indicators for short-term inflation expectations stabilised at a high level this quarter.

The index on the expected development of prices over the next twelve months – which is based on the survey of consumer sentiment conducted by SECO – fell slightly (cf. chart 4.6). Nevertheless, the survey conducted in October indicated that the proportion of households anticipating a rise in prices in the short term is still at around 80%.

Likewise, the index based on the joint monthly financial market survey by Credit Suisse and the CFA Society Switzerland was recently at a lower level than the previous quarter (cf. chart 4.6). According to the November survey, significantly more respondents expected inflation to fall rather than rise in the next six months.

Similarly, in the talks conducted by the SNB's delegates for regional economic relations, companies expected inflation to decline in the short term (cf. chart 10 in 'Business cycle signals'), but to remain at a high level. The expected annual inflation rate for the next six to twelve months decreased from 3.6% in the previous quarter to 3.1%.

The banks and economic institutions participating in the monthly survey conducted by Consensus Economics maintained their forecast for expected inflation in 2022, putting it at 2.9% (cf. chart 4.7). Expectations for 2023 recently also moved sideways and stood at 2.3% in December.

Longer-term inflation expectations still consistent with price stability

The indicators for medium-term inflation expectations saw little change. For CS CFA financial market survey respondents, average inflation expectations for a time horizon of three to five years decreased at end-September to 1.7%, compared with 1.9% in June (cf. chart 4.8). Company representatives interviewed by the SNB's delegates put inflation for the same time frame also at 1.7%, compared with 1.9% in the previous quarter.

According to the Consensus Economics survey conducted at end-September, the long-term inflation expectations of participating banks and economic institutions rose marginally from 1.1% to 1.2%.

All available survey results on medium and long-term inflation expectations were thus still within the range consistent with price stability, which the SNB equates to a rise in the CPI of less than 2% per year.

Chart 4.6

SHORT-TERM PRICE AND INFLATION EXPECTATIONS

Aggregate responses from SECO survey on consumer sentiment and CS CFA financial market survey

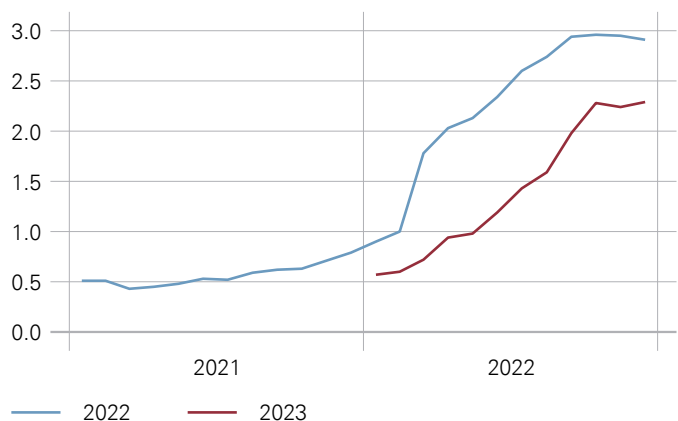


Source(s): CFA Society Switzerland, Credit Suisse, SECO

Chart 4.7

SHORT-TERM INFLATION EXPECTATIONS FROM CONSENSUS ECONOMICS

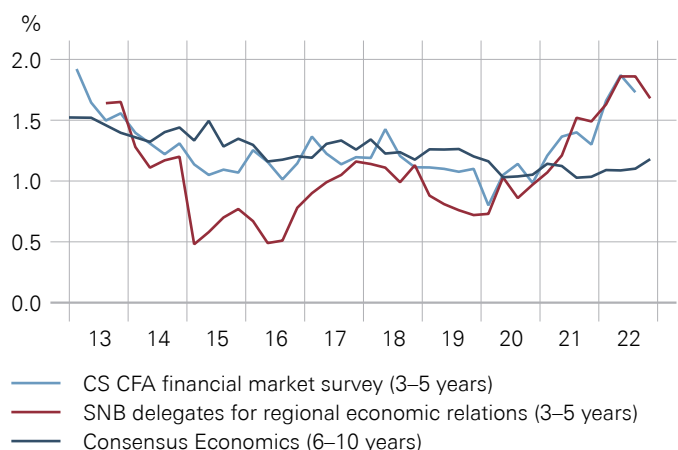
Monthly forecasts for annual inflation



Source(s): Consensus Economics Inc.

Chart 4.8

MEDIUM AND LONG-TERM INFLATION EXPECTATIONS



Source(s): CFA Society Switzerland, Consensus Economics Inc., Credit Suisse, SNB

5

Monetary developments

In the period following the September monetary policy assessment, yields on long-term Confederation bonds fluctuated strongly due to global uncertainty about economic and inflation developments and the outlook for monetary policy.

The Swiss franc depreciated against the euro, this being largely attributable to the increase in the interest rate differential between the two currencies. However, the Swiss franc has appreciated against the US dollar since November. Changed expectations regarding the scale of the monetary policy tightening in the US were a key factor driving this development, and also contributed to a significant rise in share prices.

The SNB's liquidity-absorbing measures resulted in a reduction in the monetary base. Growth rates in the broad monetary aggregates remained low. Growth in bank lending was still as robust.

MONETARY POLICY MEASURES SINCE LAST ASSESSMENT

Further monetary policy tightening

At its monetary policy assessment of 22 September 2022, the SNB decided to tighten its monetary policy further. In doing so, it was countering the renewed rise in inflationary pressure and the spread of inflation to goods and services that had so far been less affected. It raised the SNB policy rate by 0.75 percentage points to 0.5%. Furthermore, it confirmed its willingness to be active in the foreign exchange market as necessary so as to provide appropriate monetary conditions.

Adjustment in monetary policy implementation

At its monetary policy assessment in September, the SNB adjusted the implementation of its monetary policy to the positive interest rate environment so as to ensure that the secured short-term Swiss franc money market rates remain close to the SNB policy rate. Banks' sight deposits held at the SNB are remunerated at the SNB policy rate up to a certain threshold. Sight deposits above this threshold are remunerated at the SNB policy rate minus a discount. In addition, sight deposits are absorbed by way of open market operations.

Absorbing sight deposits with repo transactions and SNB Bills

Since the monetary policy assessment in September 2022, the SNB has been conducting repo transactions and issuing SNB Bills to absorb sight deposits. With these operations, the SNB has reduced the sight deposits and thereby the liquidity supply in the money market. For this purpose, repo transactions with a term of one week were auctioned daily, while SNB Bills with terms ranging from a month to a year were auctioned on a weekly basis. Furthermore, in the overnight segment, repo transactions were in some cases conducted on a bilateral basis. These open market operations ensured that the secured short-term money market rates remained close to the SNB policy rate.

Substantial reduction in sight deposits at the SNB

As a result of the liquidity-absorbing open market operations, sight deposits held at the SNB have declined significantly since the monetary policy assessment in September. In the week ending 9 December 2022 (last calendar week before the assessment of December 2022), they amounted on average to CHF 542.3 billion. This was considerably lower than in the week ending 16 September 2022, i.e. the last calendar week preceding the September assessment (CHF 754.5 billion). Between these two assessments, they averaged CHF 587.8 billion. Of this amount, CHF 535.7 billion were sight deposits of domestic banks and the remaining CHF 52.1 billion were other sight deposits. Statutory minimum reserves averaged CHF 22.9 billion between 20 August 2022 and 19 November 2022. Overall, banks still exceeded the minimum reserve requirement by CHF 561.0 billion (previous period: CHF 631.0 billion). Banks' excess reserves thus remain very high.

MONEY AND CAPITAL MARKET INTEREST RATES

SARON close to SNB policy rate

With the increase in the SNB policy rate by 0.75 percentage points to 0.5%, the SNB's monetary policy interest rate returned to positive territory for the first time in almost eight years. SARON, the average overnight interest rate on the secured money market, also increased as a result. Having fluctuated marginally between 0.43% and 0.47% since October, it stood at 0.46% in mid-December (cf. chart 5.1). Although SARON had always been slightly above the SNB policy rate before the adjustment to monetary policy implementation at the last assessment, it has since remained somewhat below it.

High volatility in capital market interest rates

In mid-December, the yield on ten-year Confederation bonds stood at around 1.2%, which was roughly at the level recorded in mid-September. Since the last monetary policy assessment, however, yields have fluctuated strongly (cf. chart 5.2). The volatility in Confederation bond yields was largely in line with developments of long-term government bonds in the US and the euro area, and was a reflection of the high level of global uncertainty about the future path of the economy and inflation, and about the monetary policy outlook.

Slightly lower yield curve for medium-term maturities

The yield curve for Confederation bonds with maturities between 18 months and 10 years shifted slightly downwards compared to the last monetary policy assessment (cf. chart 5.3). This shift essentially reflects the fact that financial markets were expecting a less pronounced tightening of monetary policy in mid-December than at the time of the September assessment.

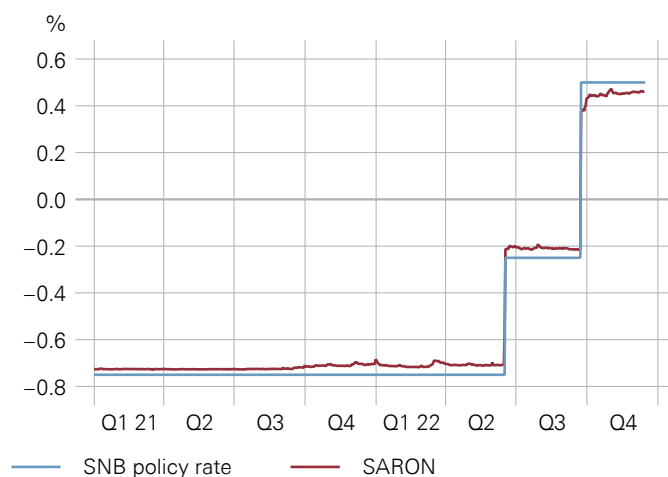
Real interest rates still low

Real interest rates – the difference between nominal interest rates and inflation expectations – are an important factor in the saving and investment decisions of companies and households.

As both long-term nominal yields and long-term inflation expectations have changed little since the last monetary policy assessment (cf. chapter 4), long-term real interest rates remained roughly on par with the previous quarter. By historical standards, the estimated long-term real interest rate was still at a low level.

Chart 5.1

SNB POLICY RATE AND MONEY MARKET RATES



Source(s): Bloomberg, SIX Swiss Exchange Ltd, SNB

Chart 5.2

10-YEAR SWISS CONFEDERATION BOND YIELD

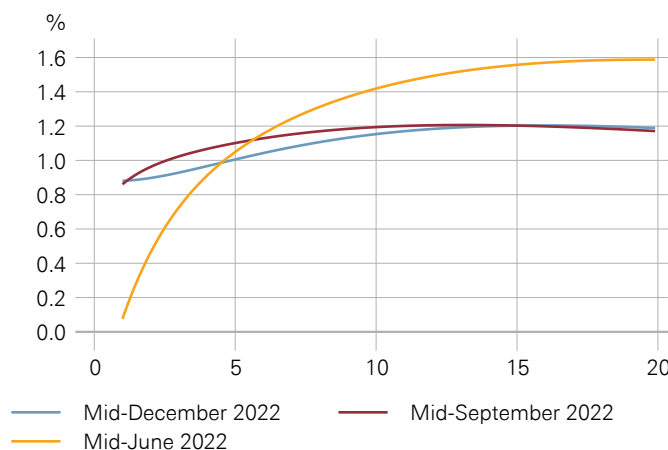


Source(s): SNB

Chart 5.3

TERM STRUCTURE OF CONFEDERATION BONDS

Years to maturity (horizontal axis); Nelson-Siegel-Svensson method



Source(s): SNB

Chart 5.4

EXCHANGE RATES

Source(s): SNB

Chart 5.5

NOMINAL EXTERNAL VALUE OF SWISS FRANC

Index, September 2022 monetary policy assessment = 100



Source(s): SNB

Chart 5.6

REAL EXTERNAL VALUE OF SWISS FRANC

Index, December 2000 = 100



Source(s): SNB

EXCHANGE RATES**Swiss franc weaker against euro and stronger against US dollar**

Having appreciated significantly against the euro in the second quarter, the Swiss franc has been weakening against the euro since the end of September (cf. chart 5.4). This is largely attributable to the increased interest rate differential between Switzerland and the euro area. The differential has widened mainly because monetary policy in the euro area has been tightened more strongly than in Switzerland in recent months. Furthermore, financial market participants expected a relatively stronger tightening of monetary policy in the euro area over the coming months as well.

In mid-December, one euro was worth around CHF 0.99; in mid-September, it had stood at CHF 0.96.

Over the course of the last quarter, the price of the US dollar in Swiss francs fluctuated between roughly CHF 0.93 and CHF 1.01. These movements primarily reflected changing market expectations regarding the required degree of monetary policy tightening in the US.

In mid-December, the US dollar stood at around 0.93 to the Swiss franc, thus lower than in mid-September (0.97).

Slight trade-weighted depreciation

Since the monetary policy assessment in September, the Swiss franc has weakened slightly in nominal trade-weighted terms (cf. chart 5.5). It lost in value against the euro (around 3%), the pound sterling (5%) and the yen (2%). Meanwhile, it appreciated against the US dollar by 4%.

Little change in real external value of Swiss franc

Despite having depreciated slightly since September, the Swiss franc has strengthened by 4% in nominal terms since the beginning of the year. As this nominal strength was more than offset by the significantly higher inflation abroad, the real external value of the franc is slightly below the level recorded at the beginning of the year (cf. chart 5.6).

SHARE AND REAL ESTATE PRICES

Share prices considerably higher

Since the last monetary policy assessment, the risk appetite among investors has increased compared with the previous quarter, as reflected in a strong rise in share prices (cf. chart 5.7). This is largely attributable to the fact that, since the beginning of November, market participants have been expecting a less pronounced tightening of monetary policy in the US than in the weeks before. In mid-December, the Swiss Market Index (SMI) was 7% higher than in mid-September, but remained 14% lower than at the beginning of the year.

Decline in stock market volatility

The volatility index derived from options on SMI futures contracts is an indicator of how investors gauge uncertainty on the stock market (cf. chart 5.7). Since the monetary policy assessment in September, the index has fallen significantly. It is currently close to the level recorded at the beginning of the year and thus considerably lower than at the time of the September assessment.

Price recovery in major Swiss stock market sectors

Chart 5.8 shows the movements of important sector indices in the broad-based Swiss Performance Index (SPI). Shares have gained in value in all sectors since the last monetary policy assessment, with shares in financials and industrials posting the strongest price recovery. However, in mid-December, share prices in the major sectors of the Swiss stock market were between 6% and 22% lower than at the beginning of the year.

Continued rise in residential real estate prices

Transaction prices for privately owned apartments and single-family houses increased further in the third quarter of 2022 (cf. chart 5.9). The apartment buildings segment – which includes residential investment property of private and institutional investors – also saw prices rise markedly, after they had fallen in the second quarter.

Chart 5.7

SHARE PRICES AND VOLATILITY



Source(s): SIX Swiss Exchange Ltd

Chart 5.8

SELECTED SPI SECTORS

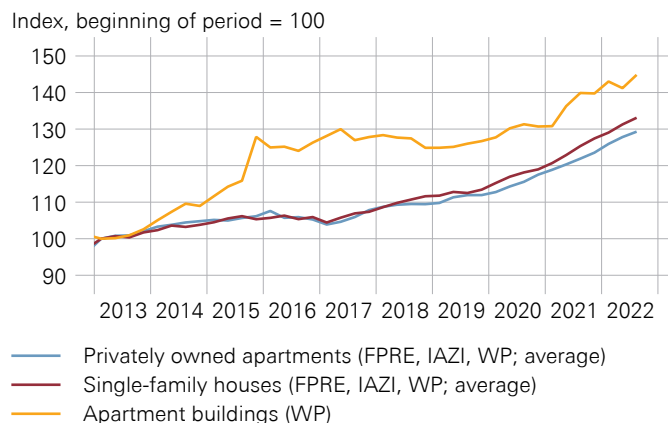


Source(s): SIX Swiss Exchange Ltd

Chart 5.9

TRANSACTION PRICES FOR RESIDENTIAL REAL ESTATE

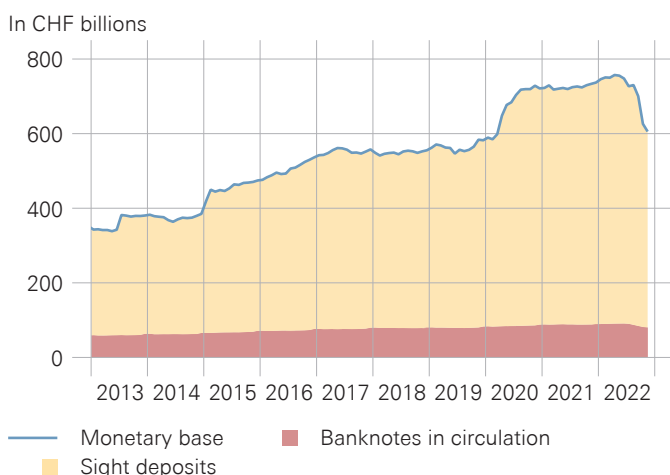
Nominal (hedonic)



Source(s): Fährländer Partner Raumentwicklung (FPRE), IAZI, Wüest Partner (WP)

Chart 5.10

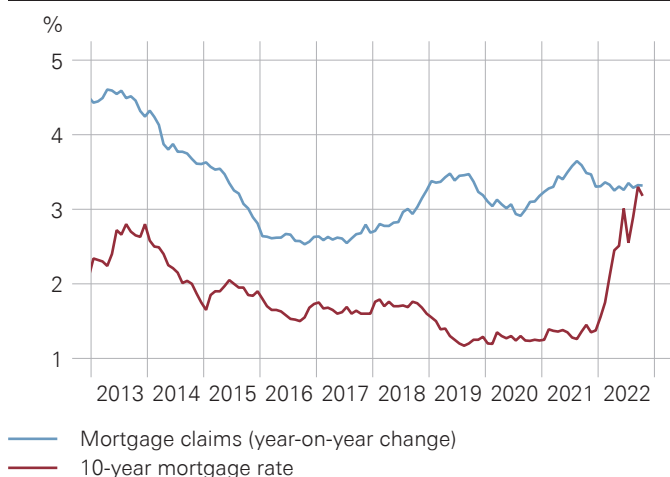
MONETARY BASE



Source(s): SNB

Chart 5.11

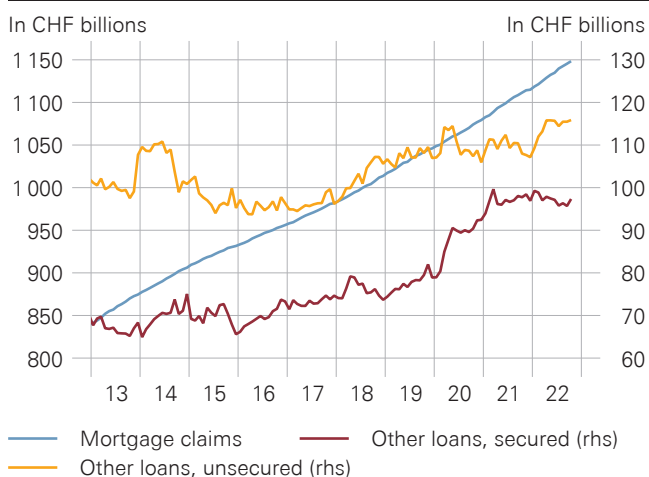
MORTGAGE CLAIMS AND INTEREST RATES



Source(s): SNB

Chart 5.12

MORTGAGE CLAIMS AND OTHER LOANS



Source(s): SNB

MONETARY AND CREDIT AGGREGATES

Monetary base declined further

The decrease in the monetary base, which consists of banknotes in circulation and sight deposits of domestic banks held at the SNB, has further accelerated since August. This primarily reflects the reduction in domestic banks' sight deposits, which decreased significantly as a result of the SNB's liquidity-absorbing operations following the return to a positive interest rate environment. In November, the monetary base averaged CHF 605.6 billion (cf. chart 5.10), and was thus down by around CHF 124.7 billion on August.

Growth in broad monetary aggregates still slow

The M1 aggregate (currency in circulation, as well as sight deposits and transaction accounts of resident bank customers) grew by 0.6% year-on-year, after having increased by 2.7% in August. Meanwhile, M2 (M1 plus savings deposits) contracted in November by 1.4% compared to the previous year, whereas M3 (M2 plus time deposits) was 0.9% above its year-back level (cf. table 5.1). The ongoing low, and in some cases negative, growth rates are primarily due to the fact that higher capital market interest rates reduce the incentive to hold bank deposits at relatively low rates of interest.

Little change in lending growth

Bank lending by domestic bank offices in all currencies was up 3.1% year-on-year in the third quarter of 2022. The growth rate thus remained virtually unchanged compared with the second quarter (cf. table 5.1).

Banks' mortgage claims, which make up roughly 85% of all bank lending to domestic customers, were up 3.3% year-on-year in the third quarter of 2022 (cf. chart 5.11). Growth in mortgage claims has thus been stable since the beginning of the year.

In line with interest rate movements on the capital market, interest rates for fixed-rate mortgages also rose in recent months (cf. chart 5.11). The ten-year mortgage interest rate climbed from 1.4% in December 2021 to more than 3.0% in September 2022, to reach its highest level in eleven years. Money market mortgage rates also rose slightly at the end of September, after the SNB raised its policy rate above zero.

From a long-term perspective, mortgage rates remain relatively low despite the increase in recent months. So far, demand for mortgage loans does not appear to have been affected by the rise in interest rates. However, there has been increased demand for mortgage loans with relatively short maturities.

Other loans are considerably more volatile than mortgage loans (cf. chart 5.12). The volume of secured other loans has declined slightly since the beginning of the year, which was attributable to the first repayments of COVID-19 loans in the amount of roughly CHF 6 billion. The volume of unsecured other loans has, by contrast, risen slightly since the beginning of the year.

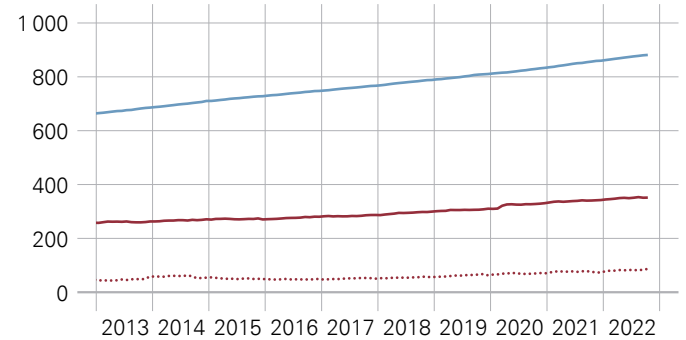
Lending growth by sector

Bank loans to households as well as to financial and non-financial companies continued to grow (cf. chart 5.13). At the end of October 2022, loans to households recorded a year-on-year increase of CHF 24.8 billion (2.9%) and loans to non-financial companies a rise of CHF 10.8 billion (3.2%). Loans to financial companies rose in the same period by CHF 11.2 billion (14.8%).

Chart 5.13

LOANS TO HOUSEHOLDS AND COMPANIES

In CHF billions



— Households
— Private companies, excluding financial sector
..... Private companies in financial sector

Source(s): SNB

Table 5.1

MONETARY AGGREGATES AND BANK LOANS

Year-on-year change in percent

	2021	2021	2022			2022		
		Q4	Q1	Q2	Q3	Sep	Oct	Nov
M1	6.7	4.8	4.1	3.3	2.1	1.6	-0.2	0.6
M2	4.1	2.0	0.9	0.2	-0.1	-0.6	-1.8	-1.4
M3	4.0	1.9	0.9	0.0	-0.2	0.0	-0.2	0.9
Bank loans, total ^{1,3}	3.6	3.4	3.0	3.2	3.1	3.0	3.4	
Mortgage claims ^{1,3}	3.4	3.4	3.3	3.3	3.3	3.3	3.3	
Households ^{2,3}	3.0	3.1	3.1	3.1	3.0	3.0	2.9	
Private companies ^{2,3}	5.3	4.9	4.0	3.9	4.1	4.2	4.3	
Other loans ^{1,3}	4.6	3.1	1.3	2.9	1.8	1.3	3.6	
Secured ^{1,3}	10.2	6.5	1.6	1.1	-1.3	-2.4	-0.4	
Unsecured ^{1,3}	0.1	0.2	0.9	4.4	4.6	4.6	7.3	

1 Monthly balance sheets (domestic bank offices, positions vis-à-vis domestic non-banks, all currencies).

2 Credit volume statistics (domestic bank offices, positions vis-à-vis domestic non-banks, all currencies).

3 Growth rates for the bank loans item and its components include information provided by banks on changes in their classification practices. Consequently, they may deviate from growth rates published on the SNB's data portal, data.snb.ch.

Source(s): SNB

Business cycle signals

Results of the SNB company talks

Fourth quarter of 2022

Report submitted to the Governing Board of the Swiss National Bank for its quarterly monetary policy assessment.

The appraisals presented here are based on discussions between the SNB's delegates for regional economic relations and company managers throughout Switzerland. In its evaluation, the SNB aggregates and interprets the information received. A total of 220 company talks were conducted between 11 October and 29 November.

Regions

Central Switzerland
Eastern Switzerland
Fribourg/Vaud/Valais
Geneva/Jura/Neuchâtel
Italian-speaking Switzerland
Mittelland
Northwestern Switzerland
Zurich

Delegates

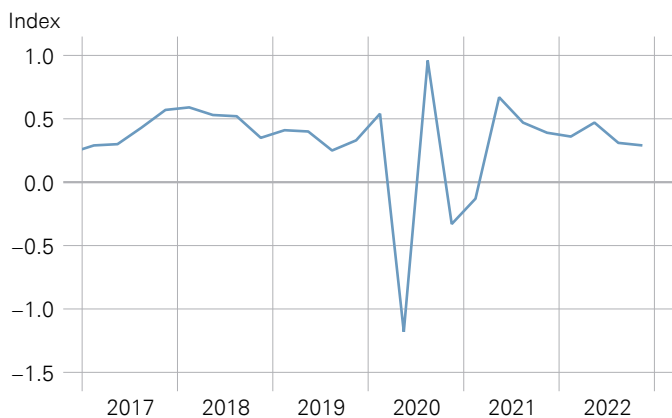
Astrid Frey
Urs Schönholzer
Aline Chabloz
Jean-Marc Falter
Fabio Bossi
Roland Scheurer
Daniel Hanimann
Fabian Schnell and Marco Huwiler

Key points

- Turnover growth weakened slightly in the fourth quarter but remained positive in broad sections of the economy. Various export-oriented companies have been feeling the cooling in global economic activity. Developments in domestic demand for consumer goods have been subdued.
- The majority of companies are anticipating increases in turnover in the coming quarters. However, the prospects are clouded by many uncertainties. While concerns around the onset of energy shortages have diminished, uncertainty about the global economic situation has increased.
- Staff shortages have eased somewhat. However, recruitment difficulties remain a big challenge for many companies. The tight labour market and the increased rate of inflation are leading to higher wage agreements.
- There are signs that the situation regarding the procurement of intermediate goods is easing. Supply bottlenecks are increasingly confined to specific electronic components.
- Companies expect growth in purchase prices, which has been strong to date, to weaken slightly. At the same time, companies intend to continue raising their sales prices significantly, primarily to cushion the pressure that past cost developments are putting on margins.

Chart 1

TURNOVER COMPARED TO PREVIOUS QUARTER

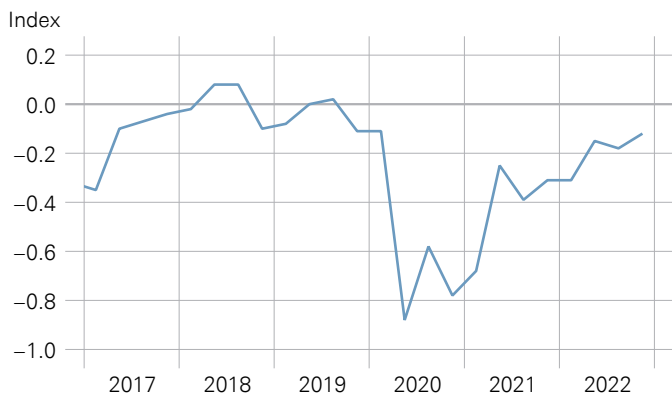


Developments in real turnover compared to the previous quarter. Positive (negative) index values signal an increase (decrease).

Source(s): SNB

Chart 2

CAPACITY UTILISATION

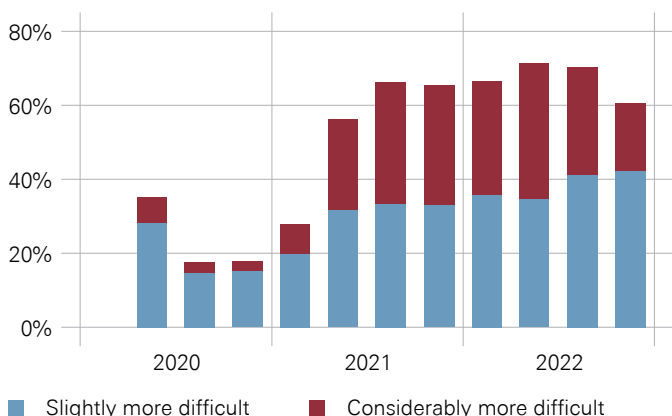


Current utilisation of technical capacity / business infrastructure compared to a normal level. A positive (negative) index value signals utilisation is higher (lower) than normal.

Source(s): SNB

Chart 3

PROCUREMENT SITUATION



Share of companies facing a more difficult procurement situation as compared to a normal situation.

Source(s): SNB

CURRENT SITUATION

Turnover growth slows slightly

Real turnover growth, in other words turnover growth adjusted for price changes, weakened slightly in the fourth quarter, but remained positive in broad sections of the economy (cf. chart 1). The robust development of the domestic economy is a supporting factor. Demand for IT and financial services, for example, remains lively. The construction industry and associated manufacturing and services companies are also profiting from solid growth in turnover. By contrast, momentum in the trade industry has been modest and tending to decline, which suggests that demand for consumer goods is subdued.

Turnover growth in manufacturing is underpinned by the improved procurement situation. So far, high energy prices have prompted only very few companies to directly reduce their production. Because of longer-term energy contracts, however, some still have an increase in energy prices before them and are concerned about the anticipated higher costs. At the same time, some export-oriented companies are feeling the cooling in global economic activity and the slowing, particularly in the European economy, brought on by the energy crisis. A few companies note something of a weakening in strong demand from the US as well. The signals from Asia, especially China, remain mixed.

Production capacity and infrastructure utilisation close to normal

Utilisation of companies' technical production capacity and infrastructure has improved slightly overall, and is now running at close to normal levels (cf. chart 2). However, the situation varies from sector to sector. In manufacturing, capacity utilisation has decreased and is now somewhat lower than usual. A decline in utilisation is also reported in construction, although levels remain satisfactory in most cases. The services sector, on the other hand, has reduced its overcapacity, and the majority of companies are now seeing normal levels of infrastructure utilisation.

Tangible easing on the procurement front

There are signs of tangible easing on the procurement front. While more than half of companies say they are still having to contend with a difficult procurement situation (cf. chart 3), the proportion suffering seriously under supply problems has declined significantly. For example, there are no longer any pronounced delays reported in the delivery of raw materials such as metals and timber. Difficulties in the sourcing of electronic components are also less widespread, although delivery times for some products are still very long.

Slight easing in the recruitment situation

The recruitment situation remains a big challenge for many companies (cf. chart 4). In some services industries, however, there are signs of a slight easing in staff shortages. Recruiting staff in the hospitality industry, for example, seems to be somewhat less difficult again – owing among other things to adjustments in wages and, in some cases, in working conditions. Finding specialists in technical and skilled manual trades, by contrast, is still only possible with great effort and in some cases high starting wages. This means that manufacturing in particular, and construction as well, are still especially hard hit by recruitment difficulties.

Profit margins improving

The margin situation is improving at the majority of companies (cf. chart 5). This is after many in the previous quarter suffered the effects of cost increases that could not be fully passed through to sales prices. The improvement has been most evident in services and construction. Companies in these sectors are attempting to adjust sales prices in line with the increases in costs, and in most cases customers accept these price increases. Owing to pressure on margins in the last few quarters, some companies are also taking steps to increase efficiency at an accelerated pace.

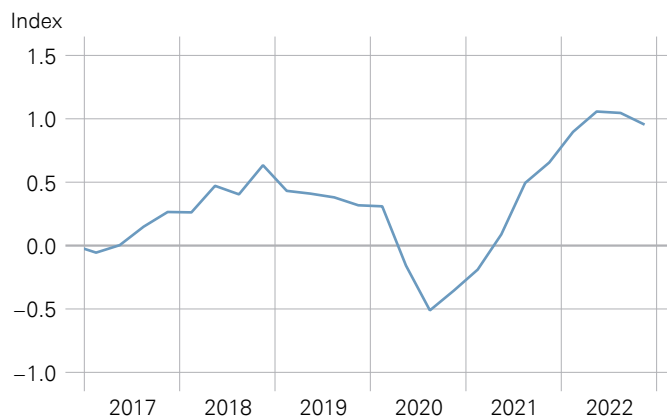
Margin developments in manufacturing, by contrast, have been less favourable. Particularly in the export business, companies are sometimes unable to raise prices sufficiently without losing order volume. Some companies cite the exchange rate situation as an additional challenge in this connection. In some cases long-standing customer relationships, agreements related to long-term projects and framework agreements are limiting companies' flexibility when it comes to setting prices. However, the situation also varies within the manufacturing industry. For example, margins on goods in industries such as medical technology and luxury watches that enjoy robust and less cyclical demand are less under pressure.

Liquidity situation stable in the vast majority of cases

The liquidity situation remains unproblematic for the vast majority of companies. However, the proportion of companies that see their liquidity situation as tight has increased slightly. The reasons given for liquidity bottlenecks are the capital tied up in increased inventory, higher purchase prices and more expensive financing conditions.

Chart 4

RECRUITMENT DIFFICULTIES

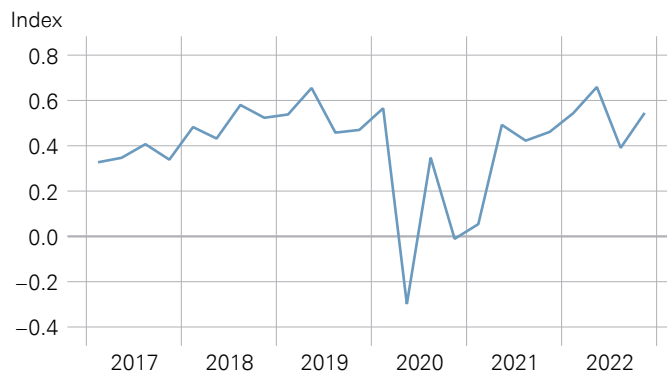


Difficulties in recruiting new staff. Positive (negative) index values signal a worsening (easing).

Source(s): SNB

Chart 5

CHARACTERISATION OF MARGINS



Characterisation of the current margin situation. Negative (positive) index values signal an uncomfortable (comfortable) margin situation.

Source(s): SNB

DEVELOPMENTS IN INDIVIDUAL INDUSTRIES

Momentum in the trade industry weak

Business in the trade industry is sluggish. While the turnover of goods in the wholesale trade is somewhat higher than the previous quarter, partly because specialised wholesalers are benefiting from the improved supply situation, volumes in the retail sector are declining slightly. Given the increases in prices, consumers are paying more attention to their spending and are choosing lower-cost alternatives more often. Added to this, continuing supply problems at automakers continue to seriously affect sales of new vehicles. Increasingly, general uncertainty is also making customers reluctant to invest in a new vehicle.

Conditions for food services encouraging, but hotel industry weaker

Food services companies have seen further increases in turnover. They profited from unusually high temperatures in October and November, when restaurants were heavily frequented. The hotel industry, by contrast, has recorded lower turnover in many cases. After enjoying pent-up demand, for example for conferences and events, in the summer months following the lifting of coronavirus measures, hotels are now seeing another decline in demand. They also still report a significant lack of guests from abroad, especially from certain parts of Asia. In addition to coronavirus measures in guests' countries of origin, a lack of transport capacity and the resulting high price of air travel are slowing business.

Financial and ICT industries see robust development

The financial industry is enjoying robust growth. Despite higher interest rates, solid demand for residential property is underpinning the mortgage market. Some asset managers also report inflows of client money. The fact that many clients are acting cautiously in the current environment, however, is curbing revenue growth. Turnover in the ICT industry also continues to increase. Thanks to digital transformation and the mounting need for cybersecurity, this industry still has high growth potential. The procurement situation for IT equipment has improved.

Development of business in manufacturing varies

Business in most manufacturing industries is developing positively. In many cases the improved procurement situation is leading to higher turnover. The order situation is particularly pleasing in watchmaking, an industry profiting from great demand for luxury goods. But other manufacturers of precision instruments and electrical equipment are also reporting robust business activity. This is being underpinned by growing demand for medical technology worldwide. Suppliers to the energy industry are also benefiting again from increasing demand. Not only is there very high demand for photovoltaic systems, but investment in larger power generation assets is also increasing again.

At the same time, some companies are feeling the signs of the cooling in global economic activity. This is an especially big challenge for manufacturing companies whose products are subject to strong global competition. The high costs of energy in Europe compared with the US or Asia, the shortage of staff in Switzerland and the strong franc are putting pressure on margins. This is particularly true for companies in the energy-intensive businesses of processing plastics, metals or ceramics. Companies reliant on goods that have become much more expensive, such as paper or glass, are having to fight for market share in the global arena.

Good order situation but uncertain outlook for construction

Construction is profiting from a good order situation. Given that demand for residential space and energy-efficient renovations remain stable, building construction companies in particular report good levels of utilisation. Construction activity has been further underpinned by the warm, stable weather. Margins in construction have improved somewhat. Many companies have been able to pass on the higher price of materials to customers, for example by means of inflation clauses. Moreover, the good capacity utilisation is accompanied by greater efficiency. Construction companies would still like to take on additional personnel to be able to deliver more contracts. The corresponding labour market, however, has dried up.

OUTLOOK

Cautious optimism

For the first half of 2023, companies expect turnover to increase more or less in line with the long-term average (cf. chart 6). Despite concerns about global economic developments, confidence has grown slightly. One reason for this is that the risk of electricity shortages over the winter has declined recently. At the same time, there are signs of robust development in domestic demand, which the majority of companies expect to continue in the next two quarters. One exception is construction, which anticipates only modest growth over the next six months. Companies in this sector fear that the higher interest rates in conjunction with the higher costs of construction could curb investment activity.

In line with the overall positive outlook, companies expect staff numbers to increase further, albeit at a slightly slower pace (cf. chart 7). Many companies consider their current staffing levels to be too low. Added to this, the anticipated growth in turnover will tend to increase the need for staff. Due to the tight situation on the labour market and the elevated level of inflation, companies are planning to raise wages next year by an average of 2.7% (cf. chart 8).

Companies are planning to invest slightly more overall in the coming year than in the past twelve months. A difficult margin situation, higher prices for capital goods and the uncertain business situation are curbing some companies' appetite for investment. At the same time, however, capacity utilisation is good overall, and this is increasing the need for investment. Companies are favouring investment in automation and a more efficient IT infrastructure as a means of countering shortages of staff. Some companies are stepping up measures to reduce their energy costs.

Purchase and sales prices expected to increase

Given the slight easing in the procurement situation, companies are expecting purchase prices to increase further, albeit not as sharply as before. Expectations, however, are mixed. Companies anticipate sustained strong growth in prices of electronic products and IT services as well as of energy-intensive intermediate goods such as paper, glass wool and cement. On the other hand, declining prices on the commodity markets will curb any further increases in purchase prices in industries such as metalworking. In addition to this, logistics costs are expected to fall.

Chart 6

EXPECTED TURNOVER



Expected developments in real turnover over the coming two quarters. Positive (negative) index values indicate turnover is expected to be higher (lower).

Source(s): SNB

Chart 7

EXPECTED EMPLOYMENT

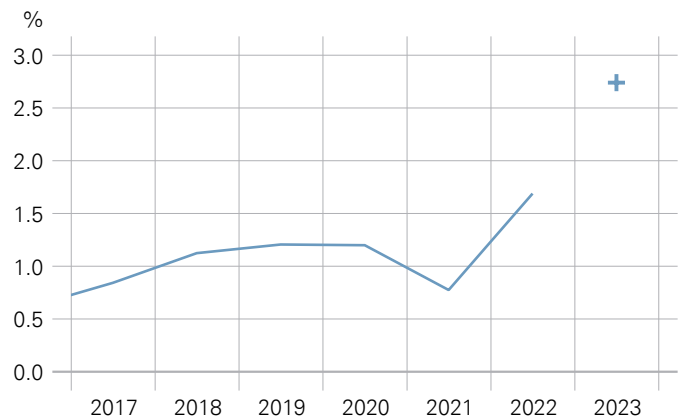


Expected developments in staff numbers over the coming two quarters. Positive (negative) index values indicate an expected increase (decrease).

Source(s): SNB

Chart 8

WAGE INCREASES

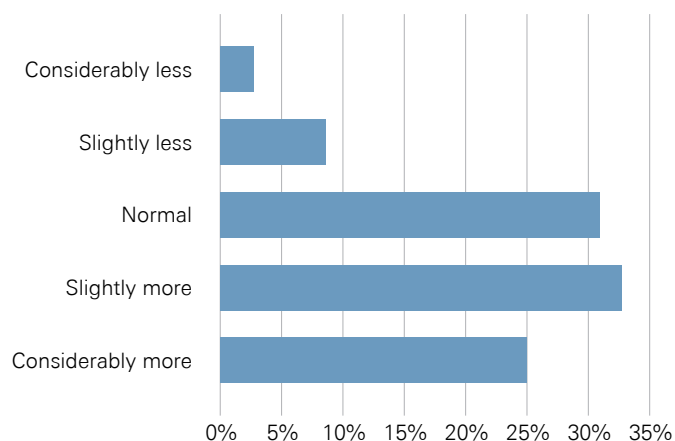


Expected average wage increase for the coming year (cross) and agreed annual wage increases (line).

Source(s): SNB

Chart 9

UNCERTAINTY



Uncertainty about development of business over the next two quarters.

Source(s): SNB

By contrast, there are signs that sales prices are increasing at a slightly accelerated pace. A large proportion of companies intend to pass the higher costs of intermediate goods and energy, as well as anticipated wage increases, through to sales prices as far as possible to stabilise their margins. Companies also justify the planned price increases with the fact that so far it has not been possible to fully pass on the higher costs. A few companies say that they intend to use the general increase in prices to improve their margins.

Diverse challenges and a high degree of uncertainty

The mildly favourable sales outlook is clouded by an array of challenges and imponderables. Many companies stress the extraordinary level of uncertainty regarding the future development of business. Roughly 25% of companies rate the level of uncertainty as considerably elevated. Around 30% of companies speak of a slightly elevated level of uncertainty (cf. chart 9).

While concerns about energy shortages have diminished, uncertainty about the global economic situation has increased. Companies are particularly concerned about high rates of inflation in their sales markets. The company representatives fear that this will curb demand for consumer goods and in conjunction with rising interest rates will contribute to a broad weakening in global demand.

Rising interest rates are also a concern for companies geared to the domestic market. Companies with a high proportion of debt are uncertain about their future financing. Above all, however, the construction industry and related companies such as component suppliers or planning and consulting firms are concerned about the impact of rising financing costs on construction activity and the real estate market in general. Companies in the financial industry share this concern, although various representatives say that immigration will remain a supporting factor.

Added to this are imponderables that have been occupying companies for a number of quarters already. For example, given the tight labour market, companies are uncertain as to whether they will be able to put their personnel plans into practice. Despite the recent improvement in the procurement situation, this is still also cited as a risk factor. Exchange rate developments are also giving grounds for concern. Even though high rates of inflation abroad help exporters mitigate the effects of the strong franc on their competitiveness, some export-oriented companies, and those exposed to strong competition from imports, take a critical view of the current exchange rate level. Finally, some company representatives are concerned that the coronavirus pandemic could continue to result in more frequent staff absences and in the continuation of international trade restrictions.

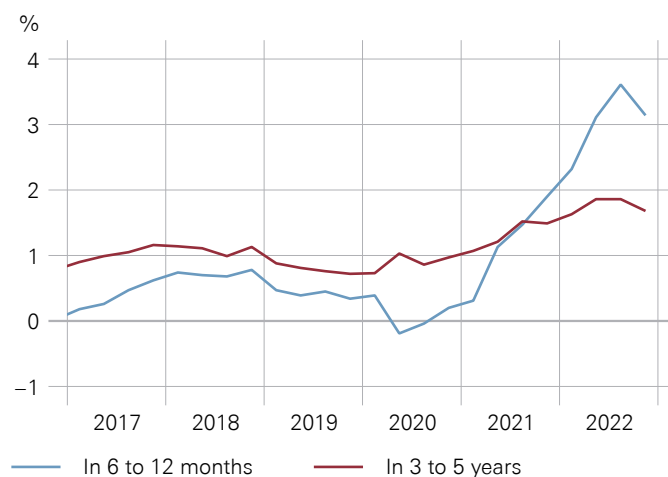
INFLATION EXPECTATIONS

The delegates also ask company representatives about their short and long-term inflation expectations.

For the first time since the beginning of the pandemic, there has been a decline in short-term inflation expectations as measured by the consumer price index: The average for the next six to twelve months (cf. chart 10) is 3.1%, compared with 3.6% in the previous quarter. This significant decline is connected with the fall in energy and raw materials prices in the past few months and with the somewhat lower level of observed inflation. In the medium term, company representatives expect a significant levelling-off in inflation to within the range that the SNB equates with price stability. Their inflation expectations over a three to five-year horizon are 1.7%, a somewhat lower figure than the previous quarter. Company representatives emphasise the important role of the central banks in ensuring price stability in the medium term.

Chart 10

EXPECTED INFLATION



Source(s): SNB

About this report

Approach

Each quarter, the SNB's delegates for regional economic relations hold talks with members of management at companies throughout Switzerland. The main results of these discussions are summarised in the 'Business cycle signals' report.

Over 200 companies are visited every quarter. The selection of companies reflects the industrial structure of the Swiss economy based on GDP and employment. Industries subject to stronger cyclical fluctuations are somewhat over-represented, while the public administration and agriculture are not taken into consideration. As a rule, the companies in the sample have at least 50 employees. Different companies are visited from one quarter to the next.

In the talks, the SNB's delegates capture primarily qualitative information. The discussions are nevertheless structured in such a way as to allow the delegates to grade part of the qualitative information received according to a numeric scale. This enables the results to be aggregated and represented graphically.

The five-tier scale ranges from 'substantially higher' or 'much too high' (+2), 'slightly higher' or 'somewhat high' (+1), 'the same' or 'normal' (0), 'slightly lower' or 'somewhat low' (-1), to 'substantially lower' or 'much too low' (-2).

Interpreting the charts

The charts are to be regarded as a numeric summary of the qualitative information received. The index value shown represents the average of the findings from all companies visited. When interpreting the curves, relevance should be attached to their overall development, rather than to their numeric level or individual changes.

Additional information

Further information on the 'Business cycle signals' report is available at www.snb.ch, The SNB/SNB regional network.

Acknowledgements

The SNB would like to thank the representatives from around 900 companies that have consented to take part in interviews with the delegates for regional economic relations during the course of 2022. In doing so, they have made a significant contribution to the evaluation of economic developments. The companies listed below have agreed that their names may be published:

A	Anybotics AG	Basilea Pharmaceutica AG	Borflex Rex SA
A. Reinhard Nutzfahrzeuge AG	API SA	Bättig Treuhand AG	Boss Info AG
A. Walker AG	Appenzeller Kantonalbank	Bauhaus Fachcentren AG	BP (Switzerland)
Aare Energie AG	Arab Bank	Baumann Koelliker Gruppe	brack.ch
ABB Schweiz AG	(Switzerland) Ltd	Baumeler Reisen AG	Brauch Transport AG
Abbott Products Operations AG	Arbenz RVT AG	BBT Software AG	Briner Winterthur
ABC Maritime AG	Archroma	BDO AG	Brühwiler Sägewerk AG
Adcubum AG	Argus Data Insights Schweiz AG	BE Netz AG	Bruker BioSpin Group
AdNovum Informatik AG	Ascenseurs Menétrey SA	Beck AG Grosshandel	Brun & Strebel Tief- und Gartenbau AG
AEK Bank 1826	Assos of Switzerland GmbH	Beer AG	Brunni-Bahnen
Genossenschaft	Astra Hôtel Vevey	Beeworx GmbH	Engelberg AG
Aepli Metallbau AG	Atar Roto Presse SA	Belimport SA	Brütsch Elektronik AG
Aerni AG	atokalpa	Belvédère Hotels Scuol	Bühler AG
Aéroport International de Genève	Atos AG	Benninger Guss AG	Bulgari Horlogerie SA
Aeschbach Chocolatier AG	ATP Hydraulik AG	Berest AG	Burckhardt + Partner AG
AFRY Svizzera SA	Atupri Gesundheitsversicherung	Bergbahnen Destination Gstaad AG	Burger Söhne AG
Agrano AG	Auto Marti AG	Bergbahnen Scuol AG	Buschini SA
Agrola AG	Auto Welt von Rotz AG	Bergeon SA	BÜWE Tiefbau AG
Agustoni Cesare Trucks SA	Autobritt Automobiles SA	Bering AG	
AHG Holding AG	Autogrill Schweiz AG	Bernexpo AG	C
aire h SA	Automobiles Senn SA	Bertschi AG	CA Indosuez (Switzerland) SA
AISA Automation Industrielle SA	AVJ Transports et Voyages	Bezirks-Sparkasse Dielsdorf	cabana AG
Albergo Losone	AWK Group AG	Bezzola Denoth AG	CABB AG
Albert Pougner SA	Axpo Holding AG	BG Ingénieurs Conseils SA	Café de Grancy Sàrl
Alcon Management SA	AZ Direct AG	Biberbau AG	Café du Centre, Genève
Aldo Lepori SA Impresa Costruzioni	B	BIC-BRED (Suisse) SA	Calida Group
Alfred Müller SA	B+S AG	Bien-Air Dental SA	Camillo Vismara SA
Aligro	Baccinex SA	Bigla Office AG	Candrian Catering AG
All in One Personal AG	Bachem AG	Bigler AG Fleischwaren	Cantin SA
Allega GmbH	Baechler Teinturiers SA	Bikes Center SA	Cantina Giubiasco SA
Allianz Suisse Immobilien AG	Balance Familie AG	Bio Partner Schweiz AG	Capita Customer Services AG
Alpex Pharma SA	Baloise Bank SoBa AG	bio-familia AG	Capital International Sàrl
Alternative Bank Schweiz AG	Banca Cler SA	Biofruits SA	Cargill International SA
Aluwag AG	Banca Popolare di Sondrio (Suisse) SA	Biondi Gastronomie	Carlo Bernasconi AG
AMAG Group AG	Banca Zarattini & Co SA	Biosynth AG	Carthesio SA
Amalthea (Elfab, Grossenbacher)	Bank EKI Genossenschaft	Birolini SA	Casram SA
AMC International AG	Bank Vontobel AG	BitHawk AG	Cavelti AG
Ander Group SA	Banque Bonhôte & Cie SA	BKW AG	CCHE Lausanne SA
Andermatt-Sedrun Sport AG	Banque Cantonale de Fribourg	Blaser Café AG	Cebi Micromotors Switzerland SA
Anliker AG	Banque Cantonale de Genève	Blu Restaurant & Lounge, Locarno	Centre Dentaire B1
Antalis AG	Banque Cantonale du Jura	Blumer Techno Fenster AG	Chemspeed Technologies AG
	Banque Cramer & Cie SA	BMW (Schweiz) AG	Chocolat Bernrain AG
	Banque Eric Sturdza SA	Bobst Group SA	Chocolat Stella SA
	BASF Schweiz AG	Bögli-Gravures SA	Chopard & Cie SA
		Bogn Engiadina Scuol SA	Cicorel SA
		Boost Holding AG	
		Borel & Barbey	

Ciposa	Dixa AG	Extramet AG	Gebr. Kuoni Transport AG
Cippà Trasporti SA	Docu Media Schweiz GmbH	EY Schweiz AG	Gebrüder Hodel AG
Clariant International AG	Domaco Dr. med. Aufdermaur AG	F	Gemdat AG
Cleanfix Reinigungssysteme AG	Domaine de Châteauevieux	F. Hoffmann-La Roche AG	General Dynamics European Land Systems – Mowag GmbH
Clientis BS Bank Schaffhausen	Domani Food SA	FAPS Engineering SA	Genossenschaft Baseltor, Solothurn
Codan Argus AG	Donada SA	Fattorini Autotrasporti Sagl	Geosud SA
Cogestim SA	Doppelleu Boxer AG	Fehlmann AG	Gerber-Vogt AG
Coiffina AG	Dorier SA	Fela Ticino SA	Gericke AG
Colasit AG	Dosim SA	Felco SA	Gewinde - Ziegler AG
Comet AG	Dreier AG	Felix Transport AG	GF Agie Charmilles SA
Cometel SA	Dreyfus Söhne & Cie AG, Banquiers	Ferrovie Luganesi SA (FLP)	GF Casting Solutions Novazzano
Compass Group (Schweiz) AG	dsp Ingenieure + Planer AG	Festo Microtechnology AG	Ghelma AG Baubetriebe
ComputerWorks AG	duotec SA	filofibra sa	Gilli Garten AG
Confiserie Al Porto	Durrer Spezialmaschinen AG	Filtex AG	Girsberger AG
Confiserie Christian Boillat	Dyconex AG	Finardi & Partners Sagl	Glarner Kantonalbank
Confiserie Sprüngli AG	E	Finnova AG	Glatz AG
Confiseur Bachmann AG	E. Kalt AG	Firmenich SA	Glencore International AG
Contexa SA	EA Swiss Sàrl	Fleur de Pains SA	Globaz SA
Convisa Holding AG	Eberhard Unternehmungen	FlowBank SA	Gmür AG
Coop	Eberli AG	Flughafen Zürich AG	Goldbach Group AG
Coople Holding AG	EBL	FNAC (Suisse) SA	Goldener Mode AG
Coperion K-Tron (Switzerland) LLC	ecco-jäger Früchte und Gemüse AG	Fontana Print SA	Grand Hôtel Zermatterhof, Zermatt
Cornu & Cie SA	eco2net SA	Forster Gruppe AG	Grand Resort Bad Ragaz AG
Corvaglia Holding AG	Edifea SA	Fortimo Group AG	Grau Electricité SA
Corvecna Inspection SA	Edwards Lifesciences SA	Fortuna Rechtsschutz-Versicherungsgesellschaft AG	Grill & More Lausanne SA
Credit Suisse AG	Egli Gartenbau AG Sursee	Four Seasons Hôtel des Bergues, Genève	Groupe Ardentis
Cremo SA	Eglin Group	Fr. Sauter AG	Groupe Buchard Voyages
Cronoparty & Services Sagl	EgoKiefer AG	Franke Group	Groupe Colas Suisse
Crowne Plaza Geneva	EHC Biel Holding AG	Franscella SA	Groupe Friderici
CSC Impresa di costruzione SA	Elcotherm SA	Frédérique Constant SA (Schweiz) AG	Groupe Grisoni
CTA AG	Elektroplan Buchs & Grossen AG	Fresenius Medical Care (Schweiz) AG	Groupe Integraal
CTC Analytics AG	Emch Aufzüge AG	Frewitt fabrique de machines SA	Groupe JPF
CWA Constructions SA	Emch+Berger AG Bern	Frey + Cie Tech Invest 22 Holding AG	Groupe Leuba SA
CWS-boco Suisse SA	Emil Egger AG	Fritz Studer AG	Groupe MOB SA
D	Emil Gisler Holding AG	Froneri AG	Groupe Orllati
Daniel Fournier SA Agencement	emmental versicherung	Frutiger AG	Groupe SOS
Darest Informatic SA	Endress + Hauser AG	Furrer + Frey AG	Gruner Stucky SA
Datamars SA	Enea GmbH	G	Gruppo Corriere del Ticino
Datasport AG	Ennio Ferrari Impresa Generale SA	G. Bianchi AG	Gruppo Multi SA
Dätwyler Holding AG	ERI Bancaire SA	G. Bopp & Co AG	Gruppo Sicurezza SA
Debiopharm Research & Manufacturing SA	Erne Gruppe	Gabs AG	GS Swiss PCB AG
Delcò Mobili SA	Ernest Gabella SA	Galvano Wullimann AG	Gübelin Gruppe
Dell Technologies	Ernst Sutter AG	Galvolux SA	GVB Privatversicherungen AG
Deloitte AG	Esmo – European Society for Medical Oncology	Gambrinus Gastronomie AG	GVS Agrar AG
Demo Scope AG	Estrella AG	Ganz & Co AG	GWF MessSysteme AG
Denogent SA	Eugen Seitz AG	Garage Auto Kunz AG	H
Diametal AG	Evatec AG	Garage Galliker Gruppe	Hans Gassler AG
Dietsche Montage-Profis AG	Evéquo SA	Garbani AG Bern	Haupt Verlag AG
Dillena SA	Exten SA	Gastrag AG	Häusermann + Partner AG
Dipl. Ing. Fust AG		GE	Hauswartprofis AG
			Heimbach Switzerland AG
			Heiniger AG

Helen of Troy	Imbach + Cie AG	Kistag Dekopack AG	Luzerner Kantonalbank AG
Hemair Luftkanal- systeme GmbH	Imedco AG	Knecht Brugg Holding AG	Lyreco Switzerland AG
Henry Sports SA	Imerys Graphite & Carbon Switzerland SA	Koch Group AG	M
Herzog Bau und Holzbau AG	Implenia Schweiz AG	Komax Holding AG	M3 Real Estate
Herzog Küchen AG	Infoniqa Schweiz AG	Kongress und Kursaal Bern AG	Maagtechnik AG
HG Commerciale	Infra-Com Swiss AG	Kost + Partner Ingenieure und Planer	Mad Productions SA - Square Danses SA
Highlight Communications	Inova Solutions AG	KPMG SA	Madec AG
Hilti (Schweiz) AG	Insel Gruppe Management AG	Krafft Gruppe	Maerki Baumann & Co AG
Hirslanden Lausanne	Integra Biosciences AG	Kraftwerke Hinterrhein AG	Magtrol SA
Hitachi Energy Switzerland AG	International Handball Federation (IHF)	Krattiger Holzbau AG	Makies AG
HLS Hotels & Spa AG	Interroll Holding AG	Krebser AG	MAN Energy Solutions Schweiz AG
Hodel & Partner AG	Intersport Schweiz AG	Kromer AG	Manor
Holdigaz SA	Intuitive	Kuhn Rikon AG	Manpower Group
Honegger AG	Inventx AG	Kühne + Nagel Inter- national AG	Manufacture de boîtes de montres MRP SA
Hôpital de la Tour SA	Investas AG	Küng Platten AG	Manufacture Roger Dubuis SA
Horvath & Partner AG	Ismeca Europe Semicon- ductor SA (groupe Cohu)	Kunststoff Schwanden AG	Mario Ravasi SA
Hospitality & Gastro Services, Muralto	Itecor Suisse SA	Kuoni Viaggi	Marti AG Basel
hostettler group	IVF Hartmann AG	kybun Joya	Mathys AG Bettlach
Hostpoint AG	IXM SA	L	Matisa Matériel Industriel SA
Hôtel Beau-Rivage SA, Genève	J	Labcorp Central	Maulini SA
Hotel Belvedere Locarno	J3C Holding SA	Laboratory Services Sàrl	Maurice Lacroix SA
Hotel Continental-Park AG, Luzern	Jacquet SA	Laboratoires Biologiques Arval SA	mawiGroup SA
Hotel de la Paix, Lugano	Jakob AG	Läckerli Huus AG	Max Bersinger AG
Hotel de la Paix, Luzern	Jakob AG, Jakob-Markt	Lambertini & Partners SA	Max Felchlin AG
Hotel Eiger Mürren AG	Jakob Müller AG	Landis+Gyr AG	Max Pfister Baubüro AG
Hotel Hof Weissbad	Jauslin Stebler AG	Landquart Fashion Outlet	Max Zeller Söhne AG
Hôtel La Réserve, Genève	JeanShop Abbigliamento	Lanz-Anliker Holding AG	maxon motor ag
Hotel Lido Seegarten, Lugano	JL Services SA	Laubscher Präzision AG	McDonald's Restaurants Sven Matthisson
Hotel Schweizerhof Grindelwald AG	Jörg Lienert AG	Lauener & Cie SA	MCL Medizinische Laboratorien AG
Hotel Seedamm AG, Pfäffikon	Jörimann Gruppe	Lausanne Palace	Medacta International SA
Hotel Waldhaus, Sils- Maria	Josef Meyer Stahl & Metall AG	L'Autopostale del Mendrisiotto	Medgate AG
Hotel Walther, Pontresina	Joseph Baume SA	Laydevant SA	Meggitt SA
Hotelplan Suisse MTCH AG	Joux SA	Léguriviera Groupe	Meister & Cie AG
HR Campus AG	JT International AG Dagmersellen	Lehmann Riverside	Menu System AG
HRS Real Estate AG	Jungbunzlauer	Leitz GmbH	Mercuri Urval AG
HSBC Private Bank (Suisse) SA	Jura Materials	Lenovo (Schweiz) GmbH	Mercuria Energy Trading SA
Hupac Intermodal SA	K	Leonteq	Merkur Druck Gruppe AG
Hydro Exploitation SA	K. Dysli AG	Les Bains de Lavey SA	Merz + Benteli AG
I	Kaltband AG	Les Toises	Merz Anteis
IBG Engineering AG	Käppeli Strassen- und Tiefbau AG	Liip	Messe Luzern AG
Ibis Hotel Baden Neuenhof	Kasper Gruppe	Linde Kryotechnik AG	Meyer Burger Technology AG
IBSA Institut Bio- chimique SA	Kästli Bau AG	Linnea SA	Micarna SA
IGP Pulvertechnik AG	Keller Laser AG	Linth stz AG	Microsoft Schweiz GmbH
Ikea AG	Keller Swiss Group AG	Lista Office Group AG	Micro-Sphere SA
Ikea Supply AG	Kellerhals Carrard Lausanne/Sion SA	Lombard Odier Darier Hentsch & Cie	Migros
Ilapak International SA	Kelly Services (Suisse) SA	Lonza	Mikron Tool
	Keramik Laufen AG	Losinger Marazzi AG	Mirabaud & Cie SA
	Kern Tunneltechnik SA	Lötscher Plus Gruppe	Möbel Schubiger AG
	Kissling + Zbinden AG Ingenieure Planer	Lotti Impianti SA	Mobimo Holding AG
		Louis Dreyfus Company Suisse SA	Molkerei Lanz AG
		LURAG Luzerner Raststätten AG	

Morant AG
Motorex-Bucher Group AG
Mövenpick Gruppe
MPM facility services SA
MST Systemtechnik AG
Mueller AG
Müller Group
Müller-Steinag Gruppe
MultiNet Communication GmbH
Multitime Quartz SA
MUnit SA
myStromer AG

N

Natalini SA
Nestlé Suisse SA
Netstal Maschinen AG
neue Holzbau AG Lungern
Neugass Kino AG
New Work
Nexans Suisse SA
Nextthink
Nidwaldner Kantonalbank
Niederer Kraft Frey
Noser Gruppe
Nova Taxi AG
Nova Werke AG
Novametal SA
Novartis
Novex AG
NRP Ingenieure AG
NZZ Mediengruppe

O

OBI Bau- und Heimwerkermärkte Systemzentrale (Schweiz) GmbH
Oblamatik AG
Obwaldner Kantonalbank
Octapharma AG
Oettinger Davidoff AG
OM Pharma SA
ONE swiss bank SA
Optiswiss AG
Orange Business Switzerland SA
Ostschweiz Druck AG
Otis SA
Outils Rubis SA

P

Pagani Pens SA
Palo Alto SA
Panatere SA
Panerai
Pantex AG
Partners Group AG
Patric métal SA
Pax

Pemsa Group
Perrin Frères SA
Pfefferlé & Cie SA
Philip Morris Products SA
Phoenix Contact AG
Phoenix Mecano Komponenten AG
Pidas AG
Piguet Galland & Cie SA
Pilatus Flugzeugwerke AG
Pini Group SA
PK Bau AG
PKZ Burger-Kehl & Co AG
Plastifil SA
Poli Bau AG
Pomp It Up
PP Pharmacie Principale SA
PQR Béton SA
Pramol-Chemie AG
Pricewaterhouse-Coopers AG
Primeo Energie
Privatklinik Hohenegg AG
Privatklinik Reichenbach b. Meiringen AG
Privera AG
Probst Group Holding
Project Partners Ltd Consulting Engineers
Proman Group Switzerland
Prometall Handel AG
ProNet Services SA
Protectas SA
Proton AG
Publicis Gruppe Schweiz
Puliconsult SA

Q

Qualibroker Romandie SA

R

Raboud Group SA
Radio Top AG
Raiffeisenbanken
Randstad (Schweiz) AG
Rapelli SA
Rapp AG
RATP Dev Suisse SA
Raymond Weil SA
Recomatic SA
Regine Group
Regio Energie Solothurn
Regionalverkehr Bern-Solothurn AG
Reglatronic SA
Regloplas AG
Reichmuth & Co Privatbankiers
Resilux Schweiz AG

Resonetics SA
Restaurant de l'Hôtel de Ville de Crissier SA
Retraites populaires
Rezzonico Bioggio
Rhenus Alpina AG
Ritschard SA
Robert Aebi AG
Robert Fuchs AG
Roche Diagnostics (Schweiz) AG
Rofra Bau AG
Roland Berger AG
Ronchi SA
Ronin Primeurs SA
Roschi Rohde & Schwarz AG
Rosta AG
Rothschild & Co
Rotronic AG
RVA Associati SA
RWB Groupe SA
RWD Schlatter AG

S

SA Vini Bée
Sabag
Saint-Gobain Weber AG
Sajet SA
Salanitro SA
Sandro Sormani SA
Sanitas Krankenversicherung
Sanitas Troesch AG
Sanofi-Aventis (Suisse) SA
Saphir Group AG
Sara SA
Sarix SA
Sarna Plastec AG
Schaeppli Grundstücke AG
Schär + Trojahn AG
Schärli Architekten AG
Schätti AG Metallwarenfabrik
Schelling AG
Schenk SA
Scherrer Haustechnik AG
Schiller AG
Schlagenhauf Gruppe
Schlatter Industries AG
Schmid AG energy solutions
Schmid Gruppe
Schmolz + Bickenbach Stahlcenter AG
Schneider System AG
Schott Schweiz AG
Schurter Holding AG
Schütz Montlingen GmbH & Co KG Selters (DE)

Schüwo AG
Schwabe Pharma AG
Schwab-Guillod AG
Schwob AG
Schwyzer Kantonalbank
Scintilla AG
SCS Supercomputing Systems AG
Sécheron SA
Securitas AG
Seehotel Waldstättlerhof AG, Brunnen
Sefar Holding AG
Seilfabrik Ullmann AG
Sekisui Alveo AG
Senn Transport AG
Sensirion AG
Services industriels de Lausanne
Servier (Suisse) SA
Settelen AG
Seven Group
Seven-Air Gebr. Meyer AG
SFI Switzerland SA
SGA Management SA
Shopping Arena Center Management
Sieber Transport AG
Siegfried Holding AG
Similasan
Similor AG
Simplex AG Bern
Sinergy Commerce SA
SIP Industrial Promotion SA
SITAG AG
Skan Group AG
Skynight SA
Société Electrique des Forces de l'Aubonne SA (SEFA)
Sogood SA
Solo Swiss SA
Someco SA
Sonepar Suisse SA
Sontex SA
Soulfood SA
Spaeter Ticino SA
SPAG Schnyder, Plüss AG
Sphinx Werkzeuge AG
SPIE ICS AG
Spinelli SA
Spitex Oberaargau AG
Spühl GmbH
St. Claraspital
St. Galler Kantonalbank
St. Gallisch-Appenzellische Kraftwerke AG
Stabilit Suisse SA
Stadtcasino Baden AG

Stadthaus Nidau AG
 Stanserhorn-Bahn
 Stauer & Hasler
 Architekten AG
 Steeltec AG
 Steinemann Technology AG
 Steiner Group AG
 Steiner-Beck AG
 STH Swiss Tech
 Holding AG
 Stiftung Gurten-Park im
 Grünen
 Stihl Kettenwerk Schweiz
 Stirnimann AG,
 Baumaschinen
 Stobag AG
 Stöckli Swiss Sports AG
 Stöcklin Logistik AG
 Strabag AG
 Straumann Group
 Streuli Bau AG
 Stutz Holding AG
 Suitenhotel Parco
 Paradiso, Lugano
 Sushi Shop Genève SA
 Sushizen SA
 Suteria Chocolata AG
 Swiss Automotive
 Group AG
 Swiss Caps AG
 Swiss Holiday Park AG
 Swiss International Air
 Lines Ltd
 Swiss Krono AG
 Swiss Life AG
 Swiss Visio Network
 Swisscom Digital Technology SA
 SwissFactory.Group AG
 Sword Group
 SWS Medien AG PriMedia
 Sygnum Bank AG
 Symbiotics SA
 Syngenta AG

T

TAG Maintenance Services
 Tamaro Drinks SA
 Tamedia Publications
 romandes
 TBS, La Buona Stampa SA
 TD Synnex Switzerland
 GmbH
 Team Marketing AG
 Tech Insta SA
 Techautocenter Sàrl
 Tech'Firm SA
 Telsonic AG
 Tenconi SA

TEQ SA
 TESA Technology
 Textilcolor AG
 Textil-Service Frei AG
 The Nail Company SA
 Thierry Koulbanis
 Restaurants McDonald's
 Thomann
 Nutzfahrzeuge AG
 ThomasLloyd Global Asset
 Management
 (Schweiz) AG
 Thomi + Co AG
 Thurgau Travel AG
 Ticino Hotels Group
 Ticino Parquet SA
 Tillotts Pharma
 Tisca Tischhauser AG
 Tofwerk AG
 Toldo Strassen- und
 Tiefbau AG
 Toneatti AG
 Tornos SA
 Translait SA
 Traveco Transporte AG
 TRAVYS
 Treier AG
 Trelleborg Sealing Solutions
 Stein am Rhein AG
 Trianon SA
 Tricycle SA
 Triumph Holding AG
 Trumpf Schweiz AG
 Truvag Treuhand AG
 TUI Suisse
 Tusa precision tools SA
 Twerenbold Reisen Gruppe
 Typ AG

U

UBS AG
 Ugo Bassi SA
 Uhde Inventa-Fischer AG
 Ultra Marine Food SA
 Unifil AG
 Unigestion SA
 Unione Farmaceutica
 Distribuzione SA
 United Rivers AG
 United Security
 Providers AG
 Univerre Pro Uva SA
 update Fitness AG
 Urner Kantonalbank

V

Valiant Bank AG
 Valora
 Varin Etampage SA
 Vasano

Vaucher Manufacture
 Fleurier SA
 Vaudoise Assurances
 Holding SA
 Vebeo AG
 Vetropack SA
 Victorinox AG
 Villa Garni Gardenia,
 Caslano
 Villars Holding SA
 Vitogaz Switzerland AG
 Volvo Car Switzerland AG
 Von Bergen SA
 VP Bank (Schweiz) AG

W

W. Thommen AG
 W+P Weber und
 Partner AG
 Walliserhof Grand-Hotel &
 Spa, Saas-Fee
 Walter + Bai AG
 Warteck Invest AG
 Wäsche-Perle AG
 Wider SA
 Wiederkehr AG
 Wilhelm AG
 Willisau Group
 Winteler SA
 Winterthur Gas &
 Diesel AG
 Wirz AG Bauunter-
 nehmung
 Wunderman Thompson
 Switzerland AG
 Wyder Gartenbau AG
 Wyniger Gruppe

Y

Ypsomed AG

Z

Zambon Svizzera SA
 Zehnder Group AG
 Ziegler AG
 Zimmer Biomet
 Zoo Basel
 Zuger Kantonalbank
 Zugerland Verkehrs-
 betriebe AG
 Zürcher Kantonalbank
 Zürich Marriott Hotel

1

1875 Finance SA

2

25hours Hotel Company
 Zürich AG

4

4B AG

Chronicle of monetary events

The chronicle summarises the most recent monetary events. For events dating further back, please refer to SNB press releases and the Annual Report at www.snb.ch

<p>At its quarterly assessment of 15 December, the SNB tightens its monetary policy further and raises the SNB policy rate by 0.5 percentage points to 1.0%. In doing so, it is countering increased inflationary pressure and a further spread of inflation. To provide appropriate monetary conditions, the SNB is also willing to be active in the foreign exchange market as necessary. Banks' sight deposits held at the SNB are remunerated at the SNB policy rate up to a certain threshold. Sight deposits above this threshold are remunerated at an interest rate of 0.5%. With this tiered remuneration of sight deposits and open market operations, the SNB is ensuring that the secured short-term money market rates are close to the SNB policy rate.</p>	<p>December 2022</p>
<p>At its quarterly assessment of 22 September, the SNB tightens its monetary policy further and raises the SNB policy rate by 0.75 percentage points to 0.5%. In doing so, it seeks to counter the rise in inflationary pressure and a broad spread of inflation to goods and services. To ensure appropriate monetary conditions, the SNB is also willing to be active in the foreign exchange market as necessary. Moreover, the SNB adjusts the implementation of its monetary policy to the positive interest rate environment. This ensures that the secured short-term money market rates remain close to the SNB policy rate. Banks' sight deposits held at the SNB are remunerated at the SNB policy rate up to a certain threshold. Sight deposits above this threshold are remunerated at an interest rate of zero percent.</p>	<p>September 2022</p>
<p>At its quarterly assessment of 16 June, the SNB tightens its monetary policy and raises the SNB policy rate by half a percentage point to -0.25%. In doing so, it seeks to counter increased inflationary pressure and prevent inflation from spreading more broadly to goods and services. To ensure appropriate monetary conditions, the SNB is also willing to be active in the foreign exchange market as necessary. With effect from 1 July 2022, the SNB also adjusts the threshold factor used to calculate the level of banks' sight deposits at the SNB exempt from negative interest. The factor will be lowered from 30 to 28. This will ensure that the secured short-term Swiss franc money market rates are close to the SNB policy rate.</p>	<p>June 2022</p>
<p>At its quarterly assessment of 24 March, the SNB leaves its policy rate and the interest rate on sight deposits with the SNB at -0.75%. In light of the highly valued Swiss franc, it is willing to intervene in the foreign exchange market as necessary. In so doing, it takes the overall currency situation and the inflation rate differential with other countries into consideration. Russia's invasion of Ukraine has led to a strong increase in uncertainty worldwide. Against this backdrop, the SNB with its expansive monetary policy is ensuring price stability and supporting the Swiss economy.</p>	<p>March 2022</p>
<p>At its quarterly assessment of 16 December, the SNB leaves its policy rate and the interest rate on sight deposits with the SNB at -0.75%. In light of the highly valued Swiss franc, it remains willing to intervene in the foreign exchange market as necessary. In so doing, it takes the overall currency situation into account. The SNB's expansionary monetary policy thus ensures price stability and supports the Swiss economy in its recovery from the impact of the coronavirus pandemic.</p>	<p>December 2021</p>
<p>At its quarterly assessment of 23 September, the SNB leaves its policy rate and the interest rate on sight deposits with the SNB at -0.75%. In light of the highly valued Swiss franc, it remains willing to intervene in the foreign exchange market as necessary. In so doing, it takes the overall currency situation into account. The SNB's expansionary monetary policy serves to ensure price stability and provide support to the Swiss economy in its recovery from the impact of the coronavirus pandemic. <i>der Preisstabilität und unterstützt die Erholung der Schweizer Wirtschaft von den Folgen der Corona-Pandemie.</i></p>	<p>September 2021</p>

Glossary

Annualised	Data are said to be annualised when they are converted to an annual value. When → GDP increases by 1% from one quarter to the next, the annualised growth is 4.06%.
Baseline scenario	The SNB's baseline scenario comprises forecasts for what it considers to be the most likely global economic development for the coming three calendar years. It serves as an important basis for the domestic economic and → inflation forecasts.
Basket of goods	The basket of goods represents an average household's expenditure on goods and services. It is determined on the basis of a household survey and is used to calculate the → Swiss consumer price index.
Bond	A bond is a → security. The buyer of a bond (creditor) makes a specific amount of money available to the bond issuer for a specific period. The issuer repays this amount to the creditor at the end of the term, and in most cases also pays → interest.
Business cycle, business cycle conditions	Business cycle refers to deviations in economic activity from the long-term trend. In addition to → real → GDP, the business cycle is also reflected in a variety of other economic → indicators (e.g. unemployment and consumer confidence indices). A business cycle lasts from the beginning of an upturn and all the way through the economic downturn to its end (→ recession).
Capacity utilisation	Capacity utilisation measures the degree of utilisation of the technical capacities (e.g. machines and equipment) of a company or an industry.
Capital	Capital refers on the one hand to financing resources (→ equity and → debt capital) and on the other to a → factor of production (e.g. machinery).
Capital market	The capital market supplements the → money market, and is a market for raising and investing funds with a term of more than one year. A distinction is made between the market for → equity capital (→ shares), and the market for → debt capital (→ bonds).
Collateral	In credit transactions, the debtor can provide the creditor with collateral (→ secured loan) in order to reduce the risk for the creditor and thus the → interest. The creditor can take possession of the collateral if the debtor is unable to pay the agreed interest or make the repayment.
Consumer price index	→ Swiss consumer price index
Core inflation	Core inflation is a measure of → inflation that excludes goods and services with particularly volatile prices (e.g. energy and food). Core inflation thus captures the underlying price trend. The Swiss Federal Statistical Office therefore takes neither energy and fuel nor unprocessed food and seasonal goods and services into account when calculating the SFSO1 core inflation rate. The TM15, as calculated by the SNB, excludes the 15% of goods and services with the lowest annual rates of change in prices, and the 15% with the highest every month.
Corporate bond	A corporate bond is a → bond issued by a company.
Countercyclical capital buffer	The countercyclical capital buffer is a → macroprudential measure which contributes towards → financial stability. If the capital buffer is activated, banks are required to hold more → capital. The capital buffer can be targeted at the entire credit market or just individual sectors, e.g. the mortgage market.
Debt capital	Debt capital refers to the borrowings and provisions of a company.
Deflation	Deflation denotes a sustained decrease in the general price level over time.
Delegates for regional economic relations	The delegates for regional economic relations represent the SNB in the various regions of Switzerland, collect information on economic development through their contacts to companies in those regions and, as ambassadors of the SNB, explain its policies. They are supported by the Regional Economic Councils. The SNB maintains representative offices in Basel, Berne, Geneva, Lausanne, Lucerne, Lugano, St Gallen and Zurich.
Equity	Equity is the difference between a company's assets and liabilities (→ debt capital).
Exchange rate	The exchange rate is the rate at which two currencies are exchanged. It is expressed as the price of one currency in units of another currency. If the exchange rate is adjusted for the price development of the countries concerned, it is referred to as the real exchange rate; if it is measured against the currencies of trading partners, it is referred to as the → trade-weighted exchange rate.
Exemption threshold, threshold factor	Between January 2015 and September 2022, the SNB charged → negative interest on → sight deposits. The exemption threshold was the portion of a bank's sight deposits on which the SNB did not charge negative interest.
Factors of production	Factors of production are the inputs (primarily labour and → capital) used in the production of goods and services.

Final demand, domestic	Domestic final demand is the sum of private and public consumption plus construction and equipment investment (e.g. new machines).
Financial stability	A financial system is stable if its individual components – banks, financial markets and financial market infrastructures (e.g. stock exchanges) – fulfil their individual functions and are resilient to potential disruptions.
Fine-tuning operations	Fine-tuning operations refer to measures taken by a central bank to curb excessive volatility in short-term → interest rates on the → money market. This can be carried out using → repo transactions, for example.
Fiscal policy	Measures (receipts and expenditure) that aim to influence → business cycle conditions.
Foreign exchange	Foreign exchange comprises credit balances and claims denominated in a foreign currency.
Foreign exchange market interventions	When a central bank intervenes in the foreign exchange market, it buys or sells its domestic currency against a foreign currency with the aim of influencing the → exchange rate.
Full-time equivalent (FTE)	The full-time equivalent is the unit of measure for the number of full-time employees that would be needed to complete the working hours of full-time and part-time employees.
Futures contract	A futures contract governs a transaction that has to be performed at a future point in time specified in the contract.
Government bond	A government bond is a → bond issued by a public-law institution.
Government consumption	Government consumption measures government consumption expenditure, i.e. current spending on goods and services provided by the government to the citizens of a country (e.g. schools, healthcare, defence).
Gross domestic product (GDP)	Gross domestic product indicates the total value of all final goods and services produced in a country during a period, after subtracting the cost of intermediate goods. → Real GDP is the most important measure of an economy's → value added.
Hodrick-Prescott filter (HP filter)	The Hodrick-Prescott filter is a tool for calculating a trend in a data series. For example, deviations of → real → GDP from trend are used in business cycle analysis.
ICT industry	The ICT industry comprises those companies active in information and communications technology.
Indicator	An indicator is a statistical metric or data series that, for example, provides information on → business cycle conditions.
Inflation, inflation rate	Inflation is a sustained increase in the general price level over time. Inflation reduces the → purchasing power of money. In Switzerland, inflation is measured using the → Swiss consumer price index (CPI). The inflation rate denotes the percentage change in the index compared to the previous year.
Inflation forecast, conditional	The SNB publishes a forecast of movements in the → inflation rate over the coming three years every quarter at its → monetary policy assessment. The forecast is conditional because it is based on the assumption that the SNB will not change the → SNB policy rate over the forecast horizon. The SNB bases its monetary policy decisions on the inflation forecast.
Interest, interest rate	Interest is the price a borrower pays to the creditor in return for the latter making a sum of money available for a certain period. Its level is influenced by the term and the financial standing (creditworthiness and solvency) of the debtor as well as the quality of any → collateral. Interest is expressed as a percentage of the loan (interest rate) and usually refers to a time period of one year.
Interest differential, interest margin transaction	The difference between → interest rates on investments which vary, for example, according to currency or risk, is called the interest rate differential. An interest margin transaction uses the interest differential between various financial products to generate profit.
KOF Economic Barometer	The KOF Economic Barometer is an → indicator that shows how the Swiss → business cycle is likely to develop in the near future. It has been published by the KOF Swiss Economic Institute at ETH Zurich since the 1970s.
Liquidity	Liquidity has three meanings in economics. First, being liquid refers to the ability to make due payments at any time and without restriction. Second, liquidity describes the funds required for this purpose. Banks exchange liquidity via the → money market, and the SNB can influence liquidity with → repo transactions, among other things. Third, a market is considered liquid if transactions can be effected without triggering significant price movements.
Macroprudential measure	Regulatory requirement for banks, for example, which contributes to → financial stability.
Mandate	Mandate refers to the SNB's statutory tasks. Article 99 of the Federal Constitution entrusts the Swiss National Bank, as an independent central bank, with the conduct of monetary policy in the interests of the country as a whole. The National Bank Act sets this out in detail, explaining that the SNB is required to ensure → price stability and, in so doing, to take due account of economic developments (art. 5 para. 1 NBA).
MEM industries	MEM industries refers to the companies in the mechanical engineering, electrical engineering and metals industries.

Minimum reserves, minimum reserve requirement	In order to facilitate the smooth functioning of the → money market, banks are required to hold minimum reserves against a certain percentage of their Swiss franc short-term liabilities (e.g. customer deposits). The minimum reserves are composed of cash in Swiss francs and → sight deposits held at the SNB. The minimum reserves form the basis for calculating the → thresholds for the domestic banks.
Monetary aggregate, broad	The broad monetary aggregate, in contrast to the → monetary base, is the stock of money held by households and companies outside the banking sector. It comprises money held on bank accounts and cash.
Monetary base	The monetary base is composed of the sum of banknotes in circulation plus the → sight deposits of domestic commercial banks held at the SNB. The monetary base is also referred to as the M0 monetary aggregate.
Monetary conditions	The interest rate level and the → exchange rate determine monetary conditions. The SNB uses → monetary policy instruments to influence monetary conditions in order to fulfil its → mandate.
Monetary policy	Monetary policy is the use of → monetary policy instruments by the central bank to set appropriate → monetary conditions and thereby fulfil its statutory → mandate.
Monetary policy assessment	As a rule, the SNB conducts a monetary policy assessment every quarter. Based on economic developments both domestically and abroad as well as → monetary conditions in Switzerland, the SNB Governing Board decides whether → monetary policy is to remain unchanged, or be tightened or eased.
Monetary policy instruments	In order to set appropriate → monetary conditions, the SNB uses monetary policy instruments such as → repo transactions and → foreign exchange market interventions.
Monetary policy strategy	The SNB's monetary policy strategy sets out how it operationalises its statutory → mandate. The strategy, which has been in place since December 1999, consists of three elements: the definition of → price stability, the conditional → inflation forecast over the subsequent three years, and the → SNB policy rate.
Money market	The money market is the market for raising and investing short-term → liquidity. Here, banks in particular grant short-term loans to each other, either secured against → collateral (→ repo transactions) or unsecured. Short-term liquidity is defined as liquidity with a term of up to one year.
Mortgage loan	A → secured loan for which real estate serves as the collateral.
Multivariate filter (MV filter)	Multivariate filters are used, for example, in business cycle analysis. In contrast to the → HP filter, MV filters use multiple → indicators to calculate a trend in a data series.
Negative interest	Between January 2015 and September 2022, the SNB charged negative interest on sight deposits above a certain → exemption threshold. The negative interest rate corresponded to the → SNB policy rate.
Nominal	Nominal is the term used when an economic variable is not adjusted to reflect price development (→ nominal interest rate).
Nominal interest rate	→ Interest rates are usually stated in nominal terms, i.e. they do not take into account that, during → inflation, the → purchasing power of money is lower after the credit transaction expires than before the credit transaction.
Open market operations	Open market operations are a type of → monetary policy instrument. In contrast to → standing facilities, the use of open market operations is initiated by the SNB, rather than a commercial bank.
Option	An option is the right to either buy (call option) or sell (put option) a → share, for example, at a fixed price on a specific date. This right can be securitised and traded on exchanges.
Other loans	According to the SNB's definition, the other loans category comprises all loans granted to households and companies that are not → mortgage loans. They can be secured or unsecured (→ secured loan).
Output gap	The output gap is defined as the percentage deviation of → real → GDP from the estimated → potential output. If actual economic output falls below potential output, the output gap is negative and the economy is thus underutilised.
Personal consumption expenditure (PCE) deflator	The personal consumption expenditure (PCE) deflator measures the development of prices for all domestic and foreign goods and services consumed by households. Unlike the → consumer price index, it is not based on a specific → basket of goods, rather it takes all current consumer spending into account.
PMI manufacturing	The Purchasing Managers' Index is based on surveys and is an important → indicator of activity in the manufacturing sector. The Swiss index is composed of sub-indices covering production, order volume, delivery times, inventory, purchases and number of employees. A value above 50 points is considered a growth signal.
Potential growth	Potential growth refers to the change in → potential output.
Potential output, production potential	Potential output or production potential is the level of → real → GDP at normal utilisation of the → factors of production. Potential output is estimated using tools such as the → HP filter.

Price stability	According to the SNB's definition, price stability is considered to prevail when → inflation, as measured by the → Swiss consumer price index, is below 2%, and there is also no → deflation.
Production function	A production function describes the relationship between inputs (→ factors of production) and the resulting output (goods and services).
Purchasing power	The purchasing power of money indicates how many goods and services in a fixed → basket of goods can be bought with one unit of money. If → inflation prevails, purchasing power decreases over time.
Real	Real is the term used when an economic variable is adjusted to reflect price development (→ real rate of interest).
Real rate of interest	Adjusting the → nominal interest rate for the loss of → purchasing power due to → inflation over the duration of a credit transaction gives the real interest rate. The real rate of interest is thus calculated as the difference between the → nominal interest rate and the → inflation rate.
Recession	A recession is an economic downturn. There is no uniform definition, but a recession is often said to occur when → real → GDP falls for at least two consecutive quarters.
Refinancing	Refinancing has two meanings in economics. First, refinancing is when commercial banks raise funds on the → money market or → capital market. Second, it refers to the replacement of maturing debt by means of new debt.
Repo transactions, repo rate	In a repo transaction, the cash taker sells → securities to the cash provider and simultaneously agrees to repurchase securities of the same type and quantity at a later date. Economically, a repo transaction is a → secured loan. The → interest rate used in a repo transaction is called the 'repo rate'. The SNB can use repo transactions to steer → liquidity in the → money market. It can provide liquidity or, using a reverse repo, absorb liquidity.
Risk premium	A risk premium reflects the valuation of the risk associated with a financial instrument.
SARON	SARON (Swiss Average Rate Overnight) is the interest rate for → repo transactions in Swiss francs with overnight maturity. It is based on → transaction prices and trade quotes. The SNB has been focusing on SARON in seeking to keep the short-term Swiss franc money market rates close to the → SNB policy rate.
Seasonal adjustment	Seasonal adjustment is a statistical method to remove regular seasonal effects (such as the rise in unemployment in the winter months) from time series so that → business cycle conditions, for example, can be more easily identified.
Secured money market rate	The secured money market rate is the → interest for → secured loans on the → money market which are usually concluded as → repo transactions (→ SARON).
Secured/covered loan	A secured or covered loan, in contrast to an unsecured (uncovered) loan, is a loan where the debtor provides → collateral. The main type of secured loan is a → mortgage loan.
Security	A security certifies a property right (e.g. the right to receive an interest payment). The most important securities traded on a market are → shares and → bonds.
Share	A share or → stock is a → security with which the buyer acquires a participation in a company.
Sight deposits at the SNB	Banks use their sight deposits held at the SNB to carry out transactions (e.g. payments) for their customers. In addition to sight deposits held by domestic banks, total sight deposits include sight liabilities towards the Confederation, sight deposits of foreign banks and institutions, as well as other sight liabilities.
SNB policy rate	The SNB implements its → monetary policy by setting the SNB policy rate. It seeks to keep the secured short-term Swiss franc money market rates close to the SNB policy rate. → SARON is the most representative of these rates.
Standing facilities	Standing facilities are a type of → monetary policy instrument. In contrast to → open market operations, the use of standing facilities is initiated not by the SNB, but by a commercial bank.
Stock	→ share
Swap, interest rate swap	A swap is a financial transaction in which the contracting parties exchange payment flows. In an interest rate swap, one contracting party pays the other a variable → interest rate linked to a market interest rate and in return receives fixed interest payments contractually determined in advance.
Swiss consumer price index (CPI)	The Swiss consumer price index (CPI), which is compiled by the Swiss Federal Statistical Office (SFSO), measures the average development of prices for goods and services consumed by households in Switzerland. The CPI is calculated every month based on a → basket of goods representative of household consumption.
Threshold	If the → SNB policy rate is zero percent or positive, → sight deposits at the SNB up to a certain threshold are subject to interest (or 'remuneration') at the SNB policy rate. Sight deposits above this threshold are remunerated at the SNB policy rate minus a discount. The threshold per sight deposit account holder is at least zero. For domestic banks, the threshold corresponds to the three-year average of the → minimum reserve requirements, multiplied by the applicable threshold factor.

Trade-weighted exchange rate	The trade-weighted or effective → exchange rate is the value of an economy's currency vis-à-vis the currencies of its trading partners. It is calculated using bilateral exchange rates with trading partners, with weightings dependent on trading activity.
Transaction price	The price at which a transaction is actually executed, as opposed to a bid or ask price.
Unemployment rate	The rate of unemployment is the ratio of the number of unemployed people to the number of people in the labour force (i.e. those employed and unemployed), expressed as a percentage.
Utilisation of credit lines	Depending on the type of loan, a borrower can decide whether to use the maximum amount granted by the bank or just some of it. Utilisation refers to the amount drawn down.
Value added	Value added measures the economic output of a sector or industry. It is defined as the difference between the value of goods and services produced in a given sector and the value of inputs obtained from other sectors. Total value added of all sectors, adjusted for taxes and subsidies, gives → GDP.
Volatility	Volatility describes the extent of fluctuations in given variables, e.g. share prices or → interest rates, over a certain period of time.
Yield	Yield refers to the return on financial assets or investments and is usually expressed as a percentage of the → capital invested.
Yield curve	The yield curve, also known as the term structure of interest rates, graphically represents the → yields of fixed-interest investments of the same quality with different maturities. Typically, the yields of → government bonds are used. The yield curve usually slopes upwards as investors demand a → risk premium for bonds with longer maturities.
Yield curve control	Yield curve control involves a central bank setting a target for the yield of government bonds with a specific maturity, typically longer-term, and using bond purchases to ensure that the actual yield is close to the target.

Published by

Swiss National Bank
Economic Affairs
Börsenstrasse 15
P.O. Box
CH-8022 Zurich

Design

Interbrand Ltd, Zurich

Typeset by

Neidhart + Schön Group AG, Zurich

Language versions:

The Quarterly Bulletin is available in printed form in German (ISSN 1423-3789), French (ISSN 1423-3797) and Italian (ISSN 2504-3544), either as single copies or on subscription, from: Swiss National Bank, Library
P.O. Box, CH-8022 Zurich
Telephone +41 58 631 11 50
Fax +41 58 631 50 48
Email: library@snb.ch

The Quarterly Bulletin can also be downloaded from the SNB website in the following language versions:

English: www.snb.ch, Publications/
Economic publications/Quarterly Bulletin
(ISSN 1662-257X)
German: www.snb.ch, Publikationen/
Ökonomische Publikationen/Quartalsheft
(ISSN 1662-2588)
French: www.snb.ch, Publications/
Publications économiques/Bulletin
trimestriel (ISSN 1662-2596)
Italian: www.snb.ch, Pubblicazioni/
Pubblicazioni economiche/
Bollettino trimestrale (ISSN 2504-480X)

Website

www.snb.ch

Copyright ©

The Swiss National Bank (SNB) respects all third-party rights, in particular rights relating to works protected by copyright (information or data, wordings and depictions, to the extent that these are of an individual character).

SNB publications containing a reference to a copyright (© Swiss National Bank/SNB, Zurich/year, or similar) may, under copyright law, only be used (reproduced, used via the internet, etc.) for non-commercial purposes and provided that the source is mentioned. Their use for commercial purposes is only permitted with the prior express consent of the SNB.

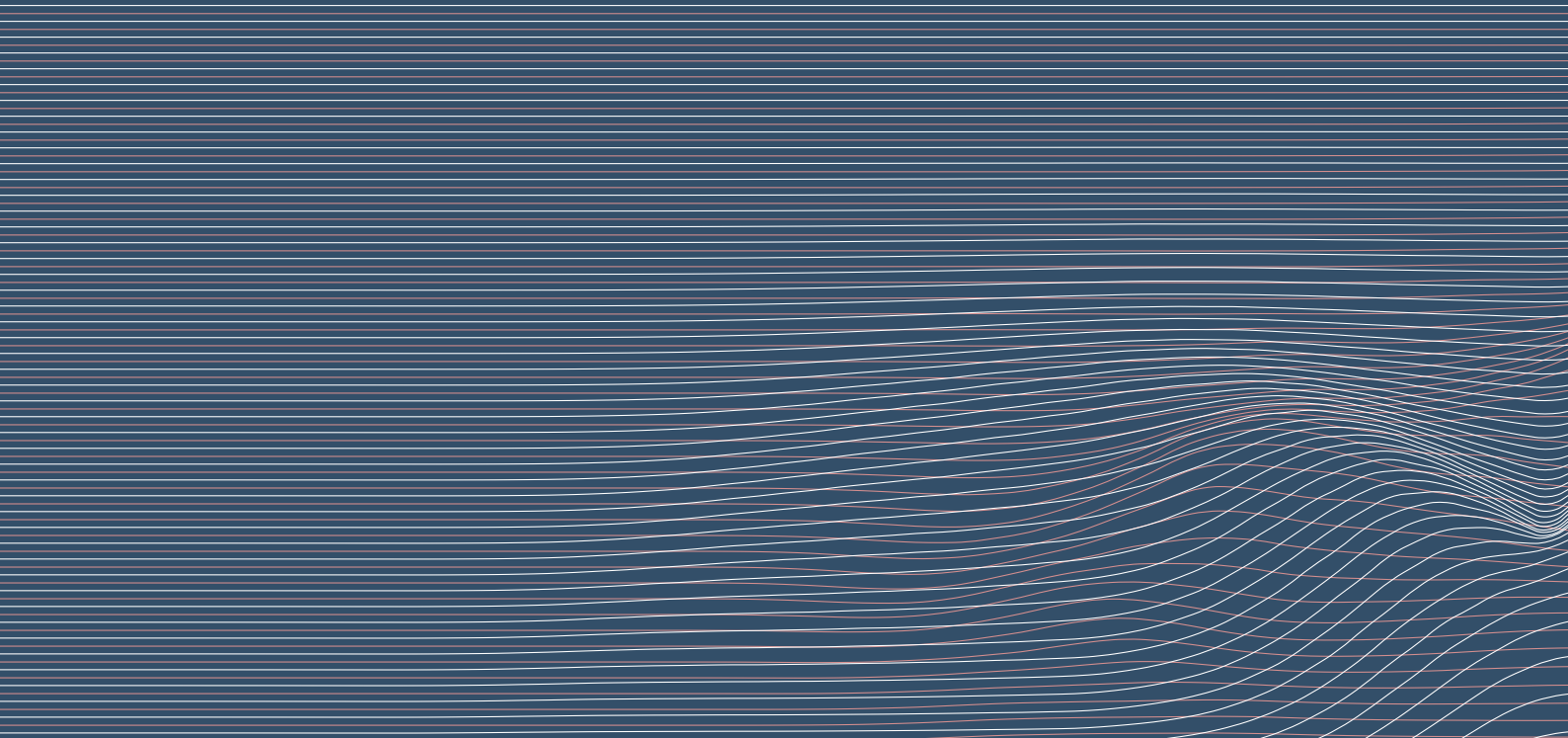
General information and data published without reference to a copyright may be used without mentioning the source.

To the extent that the information and data clearly derive from outside sources, the users of such information and data are obliged to respect any existing copyrights and to obtain the right of use from the relevant outside source themselves.

Limitation of liability

The SNB accepts no responsibility for any information it provides. Under no circumstances will it accept any liability for losses or damage which may result from the use of such information. This limitation of liability applies, in particular, to the topicality, accuracy, validity and availability of the information.

© Swiss National Bank, Zurich/Berne 2022



SCHWEIZERISCHE NATIONALBANK
BANQUE NATIONALE SUISSE
BANCA NAZIONALE SVIZZERA
BANCA NAZIUNALA SVIZRA
SWISS NATIONAL BANK

