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Quarterly Bulletin  
3/2023 September

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





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Quarterly Bulletin  
3/2023 September

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# Monetary policy report

Report for the attention of the Governing Board of the Swiss National Bank for its quarterly assessment of September 2023

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 21 September 2023') is an excerpt from the press release published following the assessment.

This report is based on the data and information available as at 21 September 2023. Unless otherwise stated, all rates of change from the previous period are based on seasonally adjusted data and are annualised.

## Key points

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- On 21 September 2023, the SNB decided to leave its policy rate unchanged at 1.75%. The significant tightening of monetary policy over recent quarters is countering remaining inflationary pressure. In the medium term, the conditional inflation forecast was below that of June and just within the range of price stability at the end of the forecast horizon.
- Global growth momentum has been moderate in recent months and the outlook for the coming quarters remains subdued. Inflation continued to decline in many countries, however it remains clearly above the respective targets. Numerous central banks thus tightened their monetary policy further, albeit at a slower pace than in the previous quarters. Inflation is likely to remain elevated for the time being.
- In Switzerland, economic activity weakened in the second quarter as expected, and it is likely to remain subdued. For this year, the SNB anticipates GDP growth of around 1%. The level of uncertainty associated with the forecast is still high.
- Annual CPI inflation fell from 2.2% in May to 1.6% in August. The short-term inflation expectations derived from surveys declined slightly. Longer-term inflation expectations barely changed and were still within the range of price stability.
- The Swiss franc appreciated in nominal and real terms. Equity prices and long-term bond yields showed only little change. The development of residential real estate prices was generally less dynamic than in previous years. Monetary aggregates continued to contract; lending growth was weaker, but still robust.

# 1 Monetary policy decision of 21 September 2023

## Swiss National Bank leaves SNB policy rate unchanged at 1.75%

The Swiss National Bank is leaving the SNB policy rate unchanged at 1.75%. The significant tightening of monetary policy over recent quarters is countering remaining inflationary pressure. It cannot be ruled out that a further tightening of monetary policy may become necessary to ensure price stability over the medium term. The SNB will therefore monitor the development of inflation closely in the coming months. To provide appropriate monetary conditions, the SNB is also willing to be active in the foreign exchange market as necessary. In the current environment, the focus is on selling foreign currency.

Banks' sight deposits held at the SNB will continue to be remunerated at the SNB policy rate of 1.75% up to a certain threshold. Sight deposits above this threshold will be remunerated at an interest rate of 1.25%, and thus still at a discount of 0.5 percentage points relative to the SNB policy rate.

Inflation has declined further in recent months, and stood at 1.6% in August. This decrease was above all attributable to lower inflation on imported goods and services.

The new conditional inflation forecast is based on the assumption that the SNB policy rate is 1.75% over the entire forecast horizon (cf. chart 1.1). In the medium term, the new forecast is somewhat below that of June, mainly due to the economic slowdown and slightly lower inflationary pressure from abroad. The inflation forecast puts average annual inflation at 2.2% for 2023 and 2024, and at 1.9% for 2025 (cf. table 1.1). It is thus just within the range of price stability at the end of the forecast horizon.

Global economic growth was moderate in the second quarter of this year. Although inflation continued to decline in many countries, it remains clearly above the respective targets. Against this background, numerous central banks tightened their monetary policy further during the last quarter, albeit at a slower pace than in the previous quarters.

The growth outlook for the global economy in the coming quarters remains subdued. At the same time, inflation is likely to remain elevated worldwide for the time being. Over the medium term, however, it should return to more moderate levels, not least due to more restrictive monetary policy.

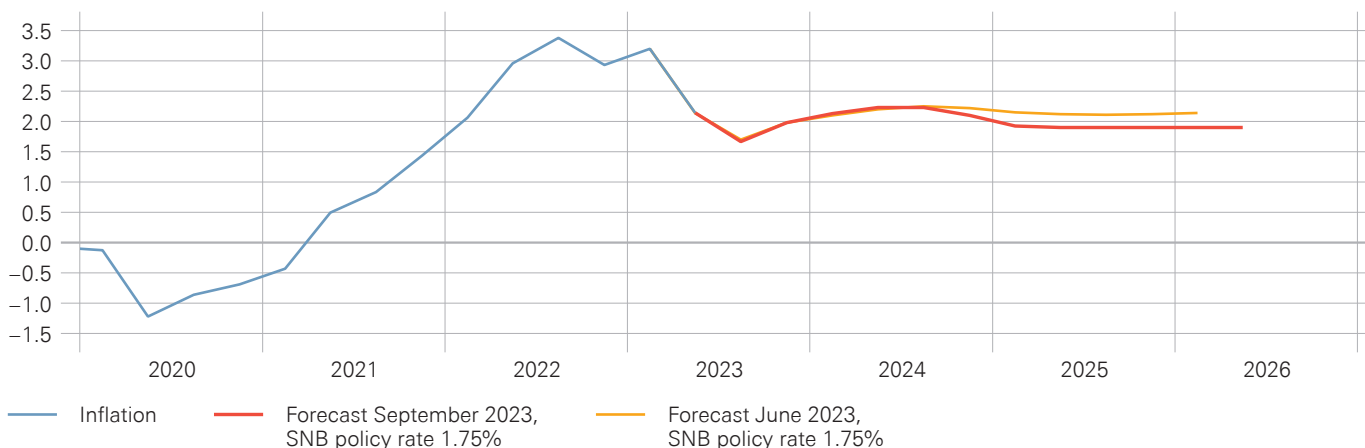
This scenario for the global economy remains subject to large risks. In particular, the high inflation in some countries could be more persistent than expected, necessitating a further tightening of monetary policy there. Equally, the energy situation in Europe could deteriorate again in Q4 2023 and Q1 2024. A pronounced slowdown in the global economy therefore cannot be ruled out.

Swiss GDP stagnated in the second quarter of 2023. The services sector once again grew solidly, while value added in manufacturing contracted significantly. The labour market remained robust, and utilisation of overall production capacity continued to be above average, albeit only slightly.

Chart 1.1

### CONDITIONAL INFLATION FORECAST OF SEPTEMBER 2023

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



Source(s): SFSO, SNB



Growth is expected to remain weak for the rest of the year. Subdued demand from abroad, the loss of purchasing power due to inflation, and more restrictive financing conditions are having a dampening effect. Overall, Switzerland's GDP is likely to grow by around 1% this year. In this environment, unemployment will probably continue to rise slightly, and the utilisation of production capacity is likely to decline somewhat.

The forecast for Switzerland, as for the global economy, is subject to high uncertainty. The main risk is a more pronounced economic slowdown abroad.

Momentum on the mortgage and real estate markets has weakened noticeably in recent quarters. However, the vulnerabilities in these markets remain.

### 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. In addition, the SNB allows inflation to fluctuate somewhat with the economic cycle. Second, the SNB summarises its assessment of inflationary pressure and of the need for monetary policy action in a quarterly inflation forecast. This forecast, which is based on the assumption of a constant SNB policy 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. If necessary, the SNB may also use additional monetary policy measures to influence the exchange rate or the interest rate level.

Table 1.1

#### OBSERVED INFLATION IN SEPTEMBER 2023

	2020				2021				2022				2023				2020	2021	2022	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Inflation	-0.1	-1.2	-0.9	-0.7	-0.4	0.5	0.8	1.4	2.1	3.0	3.4	2.9	3.2	2.1				-0.7	0.6	2.8

Source(s): SFISO

#### CONDITIONAL INFLATION FORECAST OF SEPTEMBER 2023

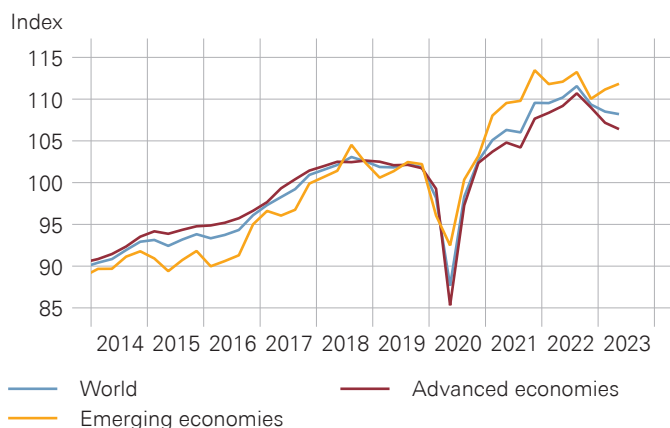
	2023				2024				2025				2026				2023	2024	2025	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Forecast June 2023, SNB policy rate 1.75%		2.1	1.7	2.0	2.1	2.2	2.3	2.2	2.2	2.1	2.1	2.1	2.1					2.2	2.2	2.1
Forecast September 2023, SNB policy rate 1.75%			1.7	2.0	2.1	2.2	2.2	2.1	1.9	1.9	1.9	1.9	1.9	1.9				2.2	2.2	1.9

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

Global economic growth was moderate in the second quarter, with manufacturing performance especially weak but services sector performance solid in many places. In the advanced economies, tighter monetary policy and the loss of purchasing power due to inflation continued to weigh on economic activity. In this context, growth momentum in Europe was subdued, however it remained surprisingly solid in the US. China's economic growth was relatively weak due to a worsening of the real estate crisis. Global economic activity, which was modest overall, was also reflected in a further reduction of global trade in the second quarter (cf. chart 2.1).

Although inflation continued to decline in many countries, it remains clearly above the targets. Against this background, numerous central banks tightened their monetary policy further during the last quarter, albeit at a slower pace than in the previous quarters.

The growth outlook for the global economy in the coming quarters remains subdued, mainly due to tighter monetary policy, less expansionary fiscal policy and the loss of purchasing power due to inflation in the recent past. Inflation is likely to remain elevated worldwide for the time being. Over the medium term, however, it should return to more moderate levels, not least due to more restrictive monetary policy.

Table 2.1

**BASELINE SCENARIO FOR GLOBAL ECONOMIC DEVELOPMENTS**

	2019	2020	2021	2022	Scenario	
					2023	2024
<b>GDP, year-on-year change in percent</b>						
Global <sup>1</sup>	2.8	-2.8	6.3	3.5	3.4	2.9
US	2.3	-2.8	5.9	2.1	2.3	0.9
Euro area	1.6	-6.3	5.6	3.4	0.6	0.7
Japan	-0.4	-4.3	2.3	1.0	2.2	0.8
China	6.0	2.2	8.4	3.0	4.7	4.6
<b>Oil price in USD per barrel</b>						
	64.3	41.8	70.7	100.9	82.0	85.0

<sup>1</sup> World aggregate as defined by the IMF, PPP-weighted.

Source(s): Refinitiv Datastream, SNB

This scenario for the global economy remains subject to large risks. In particular, the high inflation in some countries could be more persistent than expected, necessitating a further tightening of monetary policy there. Equally, the energy situation in Europe could deteriorate again in Q4 2023 and Q1 2024. A pronounced slowdown in the global economy therefore cannot be ruled out.

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 85 per barrel, compared with USD 77 in the last baseline scenario. It assumes an exchange rate of USD 1.10 to the euro, as in the last baseline scenario. Both correspond to the 20-day average when the current baseline scenario was drawn up.

### INTERNATIONAL FINANCIAL AND COMMODITY MARKETS

Since the last monetary policy assessment in June, inflation developments and the associated expectations regarding monetary policy have continued to dominate events in international financial markets. In addition, risk appetite has risen globally on the back of positive economic signals, especially from the US, and an easing of the situation in the US banking sector.

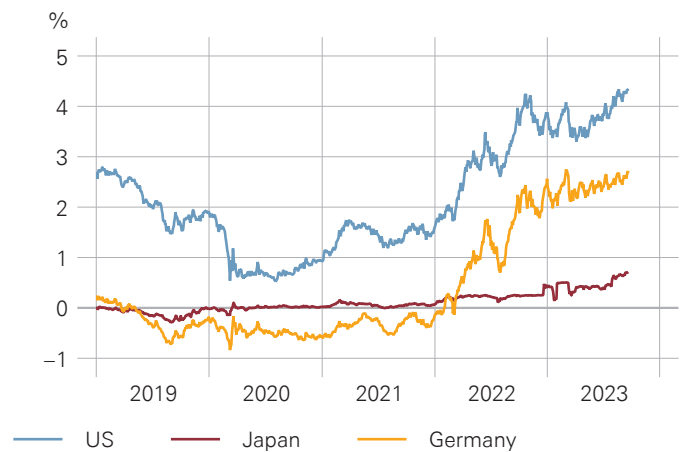
Yields on ten-year government bonds in the advanced economies were higher (cf. charts 2.2 and 2.3). The strongest increase in yields was seen in the US, where surprisingly strong economic data fuelled market participants' expectations that monetary policy will remain tight for longer than previously assumed. The inversion of the yield curve decreased. Furthermore, in July, the Bank of Japan decided as part of its yield curve control programme to allow yields on ten-year government bonds to fluctuate more flexibly around the unchanged target level of 0%. Yields on ten-year Japanese government bonds subsequently increased.

Movements in international stock markets were mixed. In the US, positive economic data and an easing of the situation in the US banking sector resulted in price gains, particularly in the technology industry. Uncertainty about future price movements remained low, as indicated by the VIX, the index for the implied volatility of stocks in the US as measured by options prices (cf. chart 2.4). The share indices of the other major economies trended slightly weaker.

Chart 2.2

### INTERNATIONAL LONG-TERM INTEREST RATES

10-year government instruments

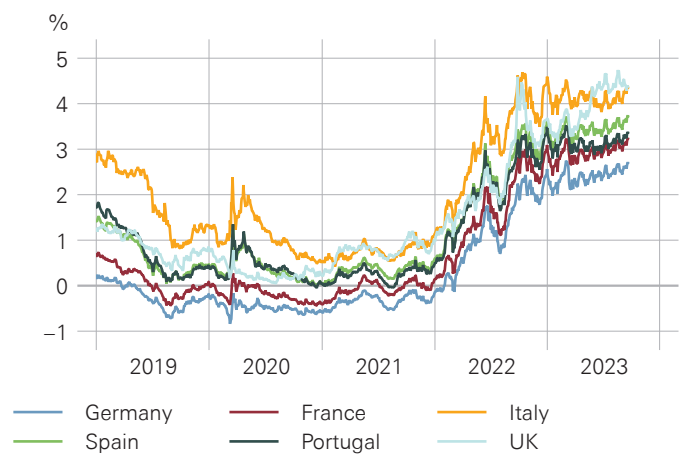


Source(s): Refinitiv Datastream

Chart 2.3

### EUROPEAN LONG-TERM INTEREST RATES

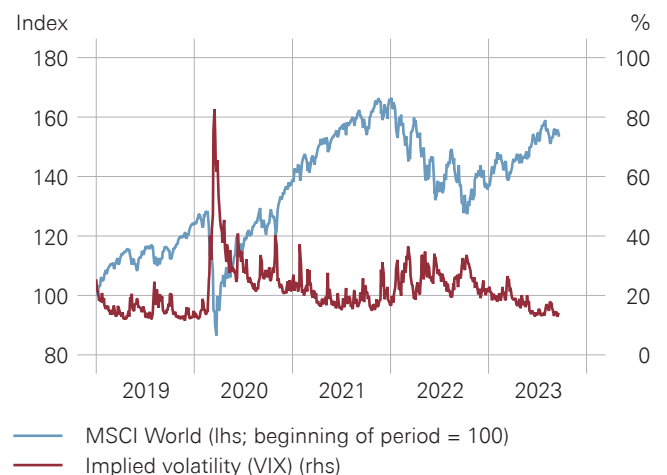
10-year government instruments



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



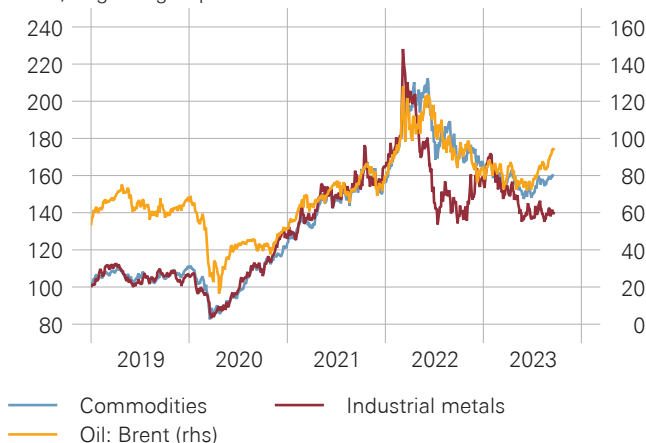
Source(s): Refinitiv Datastream

Chart 2.6

**COMMODITY PRICES**

Index, beginning of period = 100

USD/barrel

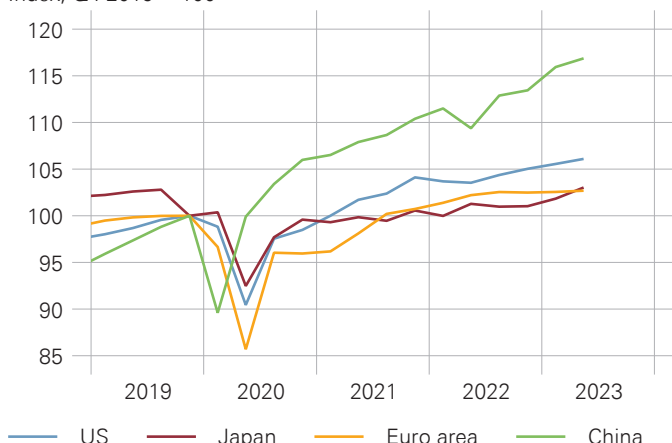


Source(s): Refinitiv Datastream

Chart 2.7

**REAL GDP**

Index, Q4 2019 = 100



Source(s): Refinitiv Datastream

Volatility was also low in the foreign exchange market, with monetary policy expectations remaining a focal point. The US dollar strengthened slightly in trade-weighted terms, while the euro and pound sterling trended sideways (cf. chart 2.5). Meanwhile, the yen continued to depreciate.

Commodity prices increased slightly overall (cf. chart 2.6). The price of Brent crude rose to USD 94 per barrel. Industrial metal prices, by contrast, moved sideways, dampened by concerns about China’s economy.

**UNITED STATES**

In the US, GDP expansion was a solid 2.1% in the second quarter (cf. chart 2.7). This was a reflection of robust domestic demand, whereas exports registered a considerable decrease.

The labour market was well utilised in recent months. At 3.8% in August, unemployment remained at a low level (cf. chart 2.9). However, weakening growth in employment and wages as well as a decline in the number of vacancies recently signalled a slight slowdown.

Key economic indicators – such as private consumption and industrial output – point to a significant increase in economic activity in the third quarter. Nevertheless, growth momentum is likely to slow in the quarters ahead, primarily due to tighter monetary policy and the less expansionary fiscal policy. Owing to the surprisingly positive economic data recently, the SNB is revising its 2023 growth forecast upwards compared to June, to 2.3%. For 2024, too, it expects GDP growth to be higher, at 0.9% (cf. table 2.1).

Consumer price inflation stood at 3.7% in August, down from its level in May (cf. chart 2.10). Food inflation and core inflation decreased further, although the latter remained high, at 4.3% (cf. chart 2.11). Energy inflation, by contrast, rose in the past few months. 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 3.3% in July, thus remaining significantly above the Fed’s target.

Against the background of high inflation and favourable labour market conditions, the Fed increased its target range for the federal funds rate by 25 basis points in July, to stand at 5.25–5.5% (cf. chart 2.12). In September, it decided against a further interest rate adjustment, but at the same time signalled that it would not rule out a further interest rate hike in the months ahead. Additionally, it will continue to reduce its balance sheet, further decreasing its portfolio of Treasury and mortgage-backed securities by up to USD 95 billion per month.

## EURO AREA

In the euro area, GDP expanded by 0.5% in the second quarter, thus continuing to grow at a slow pace (cf. chart 2.7). The persistently high level of inflation and the more restrictive monetary policy still weighed on domestic demand. Furthermore, exports were declining.

Labour market developments, on the other hand, were positive. Employment rose again, while unemployment stood at 6.4% in July, a new all-time low (cf. chart 2.9).

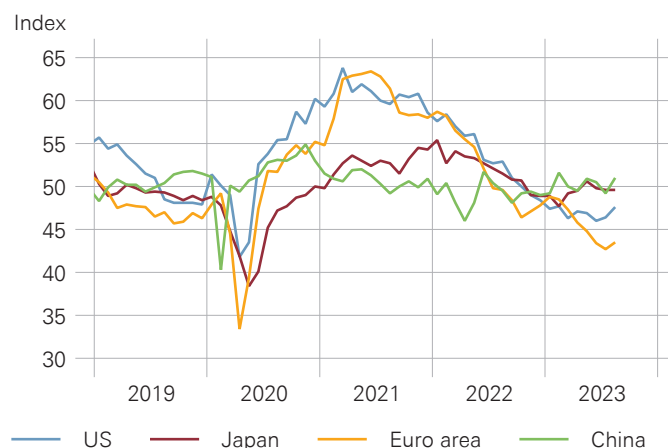
The growth outlook for the months ahead deteriorated according to the most recent company surveys, especially for the services sector. In particular, demand is being dampened by tighter financing conditions for companies, households' loss of purchasing power due to inflation, and less expansionary fiscal policy. The SNB expects GDP growth to be slightly lower for 2023, at 0.6%. For 2024, it is leaving its forecast unchanged at 0.7% (cf. table 2.1).

Consumer price inflation fell in recent months, but at 5.3% in August it was still well above the ECB target (cf. chart 2.10). The decline was attributable to lower inflation for energy and food. Core inflation remained high, at 5.3%, and was broad-based (cf. chart 2.11). It reflects in part the pass-through of high energy costs last year to prices of other goods and services.

The ECB raised its key interest rates by 25 basis points in July, and again in September. The relevant interest rate in the money market – the deposit facility rate – thus latterly stood at 4.0% (cf. chart 2.12). Furthermore, from July on, securities maturing under the asset purchase programme (APP) are no longer renewed. The APP portfolio, which currently amounts to around EUR 3,100 billion, will thus likely shrink by about EUR 25 billion per month.

Chart 2.8

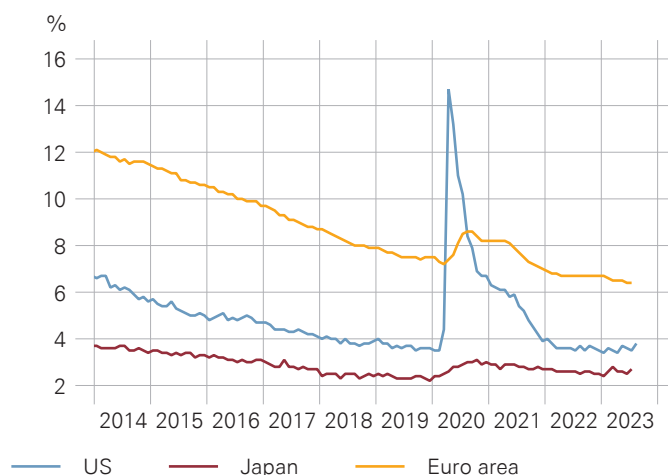
### PURCHASING MANAGERS' INDICES (MANUFACTURING)



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

Chart 2.9

### UNEMPLOYMENT RATES

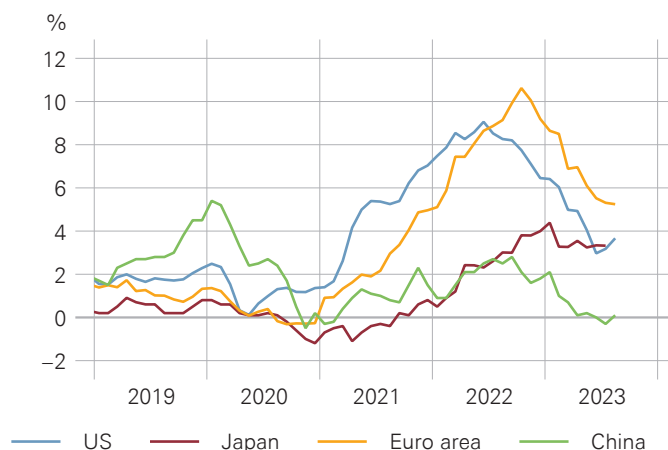


Source(s): Refinitiv Datastream

Chart 2.10

### CONSUMER PRICES

Year-on-year change

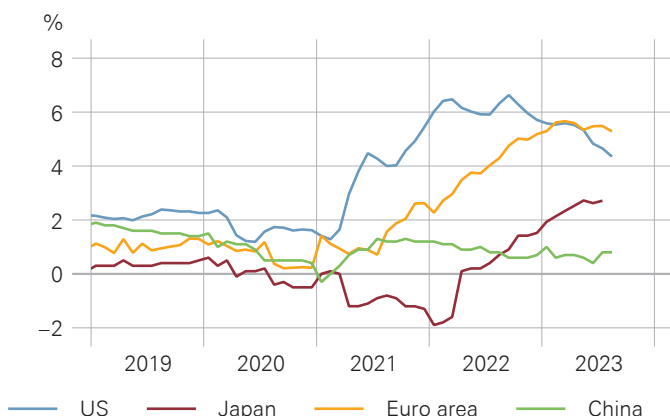


Source(s): Refinitiv Datastream

Chart 2.11

**CORE INFLATION RATES <sup>1</sup>**

Year-on-year change

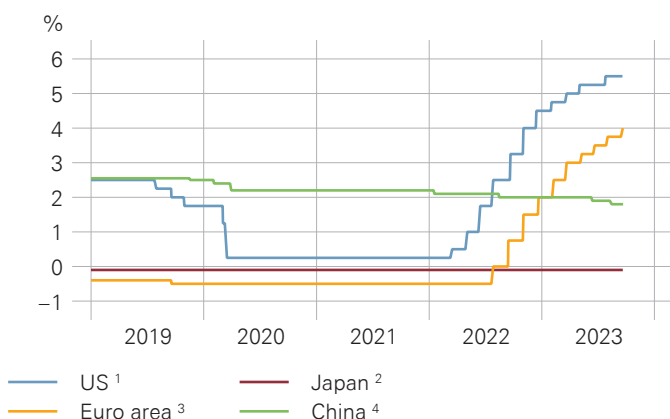


<sup>1</sup> Excluding food and energy.

Source(s): Refinitiv Datastream

Chart 2.12

**OFFICIAL INTEREST RATES**



<sup>1</sup> Federal funds rate (upper limit of target range).

<sup>3</sup> Deposit facility rate.

Source(s): Refinitiv Datastream

<sup>2</sup> Call money target rate.

<sup>4</sup> Reverse repo rate (7-day).

**JAPAN**

GDP in Japan grew by 4.8% in the second quarter (cf. chart 2.7). The strong expansion was due, first and foremost, to an exceptionally large contribution by foreign trade as a result of a sharp decline in imports. Meanwhile, domestic demand fell again somewhat, after posting solid growth in the previous quarter. Manufacturing picked up, particularly in the automotive industry.

The labour market remained well utilised. Although the unemployment rate in July, at 2.7%, was slightly higher than in April, it remained low by historical standards (cf. chart 2.9).

Catch-up effects in various areas of the economy are likely to influence future growth. The pay increases planned for this year as per wage negotiations as well as the government’s energy subsidy aimed at reducing the burden on households, effective until autumn, will support the recovery in consumption. Inbound tourism, too, is likely to recover further. In addition, the business situation in the automotive industry has improved on the back of diminishing supply chain problems. Given the surprisingly strong GDP expansion in the first half of the year, the SNB is raising its growth forecast for this year to 2.2%. The forecast for 2024, by contrast, is slightly lower, at 0.8% (cf. table 2.1).

Inflation was stable in recent months and stood at 3.3% in July (cf. chart 2.10). Core inflation rose slightly, latterly to 2.7% (cf. chart 2.11). The increased core inflation reflects not only the pass-through of higher import costs to goods prices, but also the price increases for certain services, such as tourism.

The Bank of Japan expects inflation to return to below the target level of 2% in the medium term. Against this backdrop, it decided to maintain its expansionary monetary policy and leave its targets under the yield curve control programme unchanged (cf. chart 2.12). However, in order to achieve a more sustainable monetary policy, it intends to allow yields on ten-year government bonds to fluctuate more flexibly around the unchanged target level of 0%.

## CHINA

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In China, GDP growth was relatively weak in the second quarter, at 3.2% (cf. chart 2.7). Activity was hampered in particular by a deterioration in the real estate crisis and a dampening of business sentiment. Against this background, investments declined, especially in the real estate sector. In addition, foreign trade exhibited weak growth.

The economic outlook deteriorated amid the worsening of the real estate crisis. The real estate sector is currently burdened by acute funding bottlenecks, which in turn will hold back construction activity. Furthermore, there is a growing risk that activity in other industries will also be increasingly affected by the crisis. To boost the economy, the government announced targeted economic policy measures, including incentives for private companies,

accelerated infrastructure investment and financial assistance for local governments. Moreover, the real estate market is to be stabilised with measures such as an easing of mortgage requirements for home-buyers. Lastly, monetary policy also became more expansionary in recent months. Nevertheless, the SNB is lowering its GDP growth forecast for 2023 to 4.7% and for 2024 to 4.6% (cf. table 2.1). The forecast for this year is thus close to the government's growth target of around 5%.

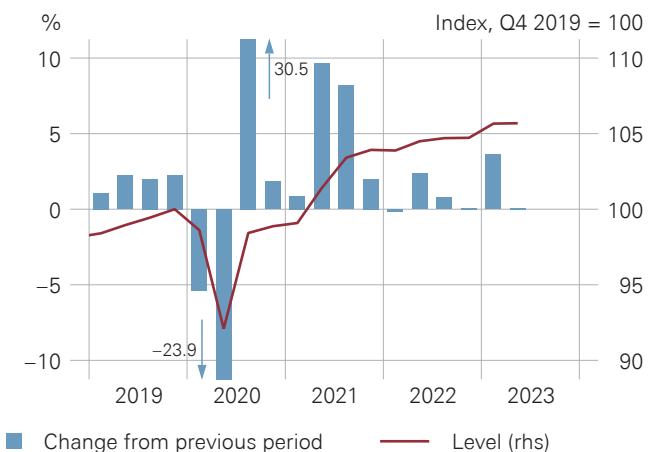
Consumer price inflation remained largely unchanged in August, at 0.1% (cf. chart 2.10). Core inflation, by contrast, increased slightly to 0.8% (cf. chart 2.11).

The People's Bank of China again lowered official interest rates slightly in August, having already reduced them in June (cf. chart 2.12). In addition, in September it also reduced the minimum reserve ratios for banks.

Chart 3.1

**REAL GDP**

Adjusted for sporting events

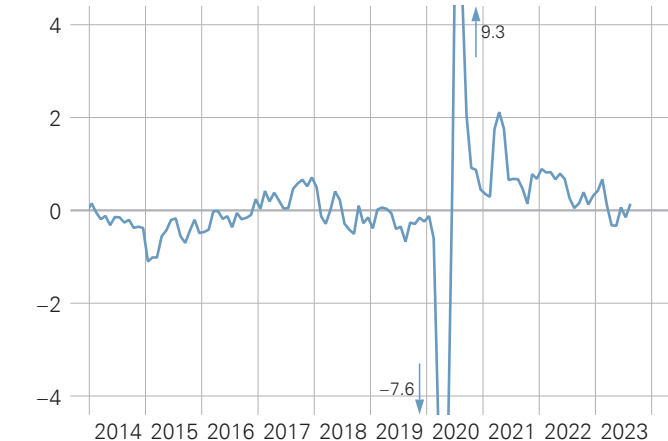


Source(s): SECO

Chart 3.2

**SNB BUSINESS CYCLE INDEX**

Standardised



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

Swiss GDP stagnated in the second quarter of 2023. The services sector once again grew solidly, while value added in manufacturing contracted significantly. The labour market remained robust, and utilisation of overall production capacity continued to be above average, albeit only slightly.

Growth is expected to remain weak for the rest of the year. Subdued demand from abroad, the loss of purchasing power due to inflation, and more restrictive financing conditions are having a dampening effect. Overall, Switzerland’s GDP is likely to grow by around 1% this year. In this environment, unemployment will probably continue to rise slightly, and the utilisation of production capacity is likely to decline somewhat.

The forecast for Switzerland, as for the global economy, is subject to high uncertainty. The main risk is a more pronounced economic slowdown abroad.

**OUTPUT AND DEMAND**

**Faster recovery after pandemic according to revised GDP figures**

According to the annual figures of the System of National Accounts, which are published by the Swiss Federal Statistical Office (SFSO), GDP grew by 2.6% (not adjusted for sporting events) in 2022. This was a more pronounced increase than the provisional figures from May 2023 (2.0%) as estimated by the State Secretariat for Economic Affairs (SECO). This, combined with the upward revisions to figures for 2020 and 2021, means that since mid-2021 GDP has once again been trending close to its pre-pandemic level.

**Stagnation in second quarter of 2023**

According to the initial estimate by SECO, GDP stagnated in the second quarter (0.1%). Momentum thus slowed in line with expectations (cf. chart 3.1).

Having increased slightly in the first quarter, value added in manufacturing declined significantly in the second quarter. Value added also decreased in construction. By contrast, services saw an increase, making a positive contribution to GDP growth.



Developments were mixed on the demand side. Investment declined, whereas private consumption rose at an average rate (cf. table 3.1). Exports stagnated and imports receded. Foreign trade thus made a positive contribution to GDP expansion.

### Weak momentum in third quarter

The SNB takes a wide range of information into account when assessing the economic situation. The signals are currently mixed. Overall, however, they suggest that momentum is likely to remain weak in the third quarter.

The SNB's Business Cycle Index and the KOF Economic Barometer aim to depict overall economic momentum. The KOF Economic Barometer points to below-average economic growth for the third quarter, while the SNB Business Cycle Index indicates average growth (cf. charts 3.2 and 3.3).

The Purchasing Managers' Index (PMI) surveys deteriorated further. In both manufacturing and services, the PMI was lower than in May. In August, the manufacturing survey was well below the growth threshold, while the survey for services came in just at the growth threshold (cf. chart 3.3).

The talks held by the SNB's delegates for regional economic relations with companies present a somewhat more optimistic picture for the third quarter than the PMI surveys. They continue to point to positive, yet muted growth (cf. 'Business cycle signals', pp. 30 et seq.).

Table 3.1

## REAL GDP AND COMPONENTS

Growth rates on previous period in percent, seasonally adjusted, annualised

	2019	2020	2021	2022	2021		2022				2023	
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Private consumption	1.2	-3.4	1.8	4.2	9.4	1.2	2.0	4.9	2.5	2.6	2.5	1.5
Government consumption	0.8	3.8	3.3	-0.8	1.6	-0.9	-2.7	-2.0	0.5	0.9	1.6	0.3
Investment in fixed assets	0.9	-1.4	2.8	1.2	-1.7	11.8	-7.4	4.1	2.1	-3.0	6.7	-10.8
Construction	-0.9	-1.0	-3.1	-5.5	-2.4	-6.0	-8.4	-4.0	-6.7	-2.4	0.0	-3.1
Equipment	1.8	-1.6	6.0	4.6	-1.3	21.5	-6.7	8.1	6.3	-3.2	10.2	-14.2
Domestic final demand	1.1	-1.9	2.3	2.6	4.9	3.9	-1.5	3.7	2.1	0.7	3.6	-2.5
Change in inventories <sup>1</sup>	0.7	-0.7	-0.8	0.4	-6.3	1.5	-7.3	21.4	-16.5	-1.5	4.2	-4.7
Total exports <sup>2,3</sup>	2.0	-4.6	11.5	4.6	24.7	2.2	14.2	-29.2	37.0	-1.7	11.9	-0.5
Goods <sup>2</sup>	3.5	-1.2	12.3	4.0	21.3	-5.8	30.7	-42.5	56.1	0.0	15.0	-4.8
Goods excluding merchanting <sup>2</sup>	4.9	-3.7	12.7	4.6	12.5	11.8	2.4	-2.3	4.9	-7.7	20.1	-9.6
Services <sup>3</sup>	-0.8	-11.1	9.9	6.0	32.9	22.3	-16.7	16.0	1.8	-5.6	4.6	10.8
Total imports <sup>2,3</sup>	2.9	-5.9	5.3	6.2	9.2	9.7	0.5	6.8	13.2	-4.0	22.8	-13.9
Goods <sup>2</sup>	2.8	-6.3	4.3	7.6	14.0	1.8	21.0	-0.9	9.5	-5.7	21.8	-25.8
Services <sup>3</sup>	3.0	-5.2	6.6	4.3	3.0	21.4	-23.1	19.4	18.8	-1.6	24.8	6.3
Net exports <sup>3,4</sup>	-0.2	0.2	3.8	-0.2	10.1	-3.2	8.4	-22.4	15.4	1.0	-3.9	6.9
<b>GDP<sup>3</sup></b>	<b>1.5</b>	<b>-2.2</b>	<b>5.1</b>	<b>2.4</b>	<b>8.2</b>	<b>2.0</b>	<b>-0.2</b>	<b>2.4</b>	<b>0.8</b>	<b>0.1</b>	<b>3.6</b>	<b>0.1</b>

<sup>1</sup> Contribution to growth in percentage points (including statistical discrepancy).

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

<sup>3</sup> Adjusted for sporting events.

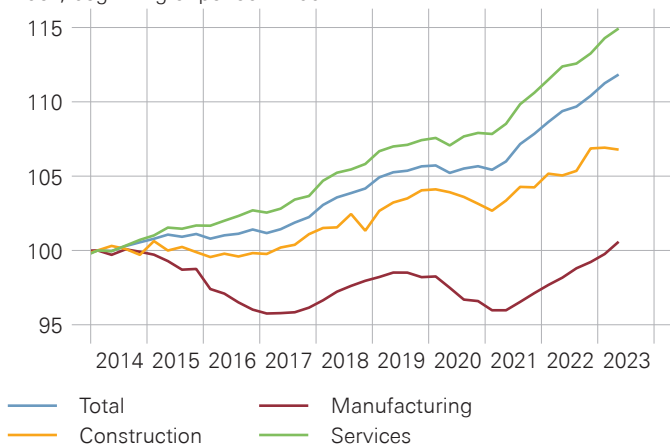
<sup>4</sup> Contribution to growth in percentage points.

Source(s): SECO

Chart 3.4

### FULL-TIME EQUIVALENT JOBS

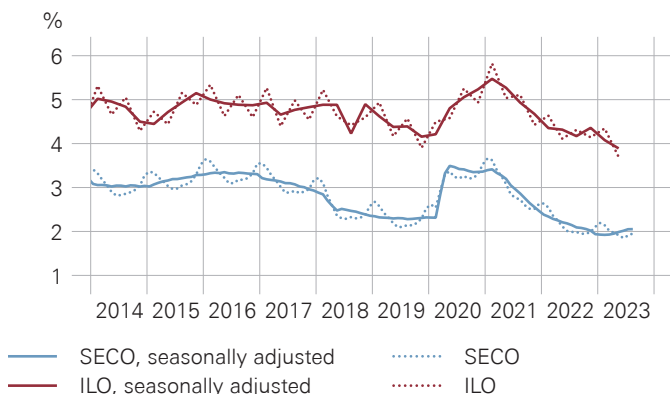
Index, beginning of period = 100



Source(s): SFSSO; seasonal adjustment: SNB

Chart 3.5

### UNEMPLOYMENT RATE

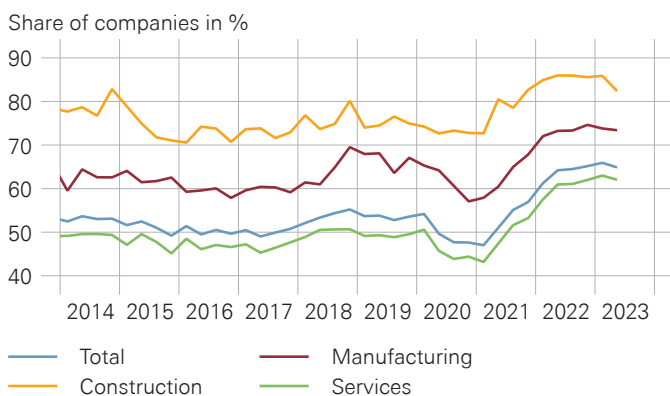


SECO: Unemployed persons registered with the regional employment offices, as a percentage of the labour force (economically active persons).  
 ILO: Unemployment rate based on International Labour Organization definition.  
 Source(s): SECO, SFSSO

Chart 3.6

### RECRUITMENT DIFFICULTIES

Qualified workers



Estimate based on the national job statistics (JOBSTAT). Only companies that are actively recruiting are taken into account.  
 Source(s): SFSSO, SNB

## LABOUR MARKET

The labour market remained in robust shape. Employment increased again, while unemployment stayed at a low level. Recruitment of personnel continued to be difficult for many companies.

### Employment growth in second quarter

According to the national job statistics (JOBSTAT), the seasonally adjusted number of full-time equivalent positions rose further in the second quarter. New jobs were created in both services and manufacturing. In construction, by contrast, employment levels declined slightly (cf. chart 3.4). The Employment Statistics (ES) confirmed the generally positive trend; the seasonally adjusted number of persons employed also registered strong growth.

### Unemployment at low level

In recent months, the unemployment rate published by SECO continued to increase slightly. Excluding seasonal fluctuations, 94,000 people were recorded as unemployed at the end of August. The seasonally adjusted unemployment rate stood at 2.1% and thus remained at a historically low level. Meanwhile, the unemployment figures calculated by the SFSSO in line with the definition of the International Labour Organization (ILO) fell to 3.9% in the second quarter, the lowest level since mid-2008 (cf. chart 3.5).

### Difficulty recruiting personnel

According to JOBSTAT, companies continued to have difficulty recruiting personnel in the second quarter. Although the recruitment situation improved slightly (cf. chart 3.6), numerous vacant positions could still not be filled, or only with considerable effort.

## CAPACITY UTILISATION

### Output gap slightly positive

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 second quarter (0.4%). Other estimation methods indicate a somewhat more positive output gap (cf. chart 3.7).

### Capacity utilisation slightly above average

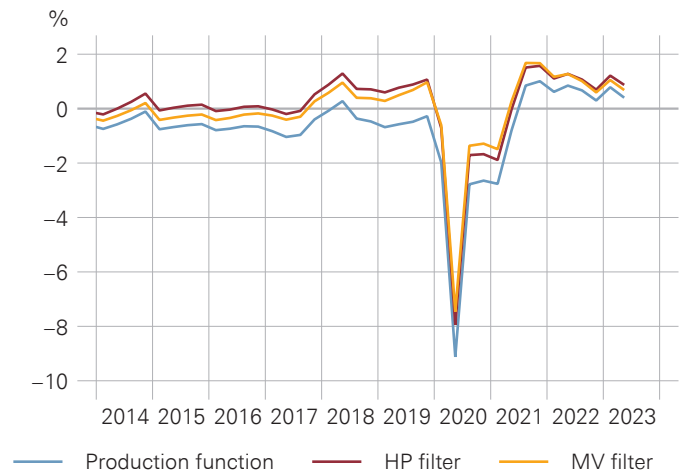
In addition to the estimated aggregate output gap, surveys also play an important role in assessing utilisation levels. The surveys conducted by KOF show that utilisation of technical capacity was normal overall in the second quarter. In line with the decline in manufacturing activity, technical capacity utilisation fell in this sector and is now below the long-term average (cf. chart 3.8). In services, utilisation dropped to a normal level, while in construction, technical capacity utilisation continued to be high despite a marked decline (cf. chart 3.9).

As regards the labour situation, the surveys indicate some improvement. In the second quarter, however, staffing levels remained tight in most industries.

On the whole, the available indicators show that utilisation of overall production capacity continued to be above average, albeit only slightly.

Chart 3.7

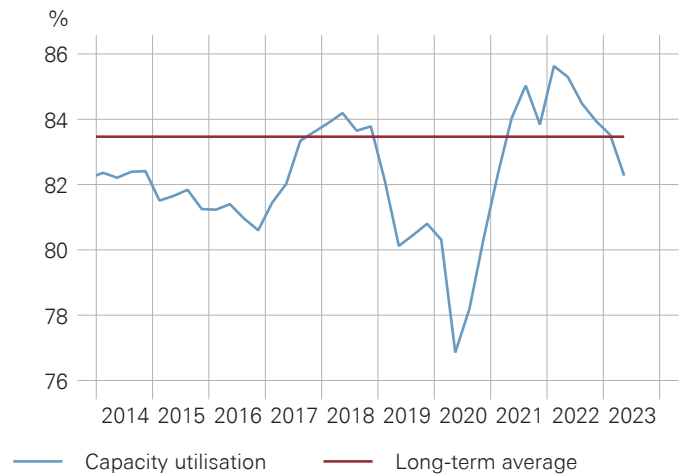
### OUTPUT GAP



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 remains muted. As shown by the export-weighted manufacturing PMI, there are no growth stimuli from abroad (cf. chart 3.10). Accordingly, developments in manufacturing are likely to remain lacklustre. The outlook in the services sector is somewhat more positive, owing to its stronger domestic focus. Overall, Swiss companies are cautiously optimistic with regard to the future business situation (cf. chart 3.11). Conditions on the labour market are likely to ease further. However, the indicators for the employment outlook continue to point to sound employment growth (cf. chart 3.12).

GDP is likely to expand by around 1% this year, due largely to the strong increase at the beginning of the year. After stagnating in the second quarter, GDP growth looks set to be weak in the further course of the year. Foreign demand is not expected to provide much momentum. In addition, the loss of purchasing power due to inflation will weigh on private consumption. Furthermore, the more restrictive financing conditions will likely slow growth. Against this background, it is likely that unemployment will continue to increase slightly, and the utilisation of production capacity looks set to decline somewhat.

The level of uncertainty associated with the forecast remains high. The main risk is a more pronounced economic slowdown abroad.

# 4

## Prices and inflation expectations

The inflation rate as measured by the CPI fell from 2.2% in May to 1.6% in August. This decline was mainly attributable to lower inflation for imported goods and services. Both core inflation measures also decreased; in August, the SFSO1 stood at 1.5% and the TM15 at 1.4%.

While short-term inflation expectations were down slightly, longer-term expectations remained stable and were still within the range consistent with price stability.

### CONSUMER PRICES

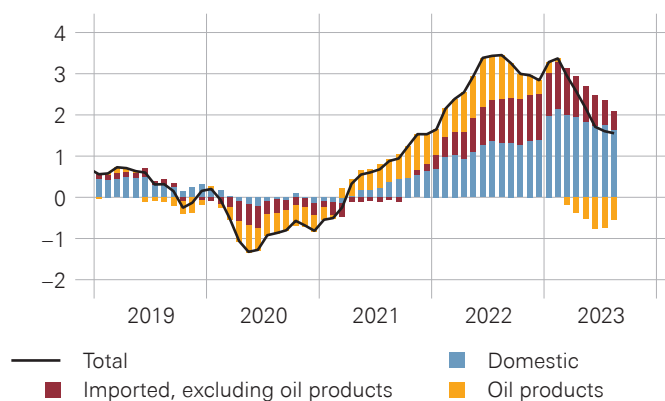
#### Further decline in annual inflation

Annual CPI inflation stood at 1.6% in August, compared with 2.2% in May (cf. chart 4.1, table 4.1). The decline was largely due to inflation for imported goods and services, which fell from 1.4% in May to -0.3% in August. Domestic goods and services inflation decreased only slightly over the same period, thus contributing to inflation almost exclusively.

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.

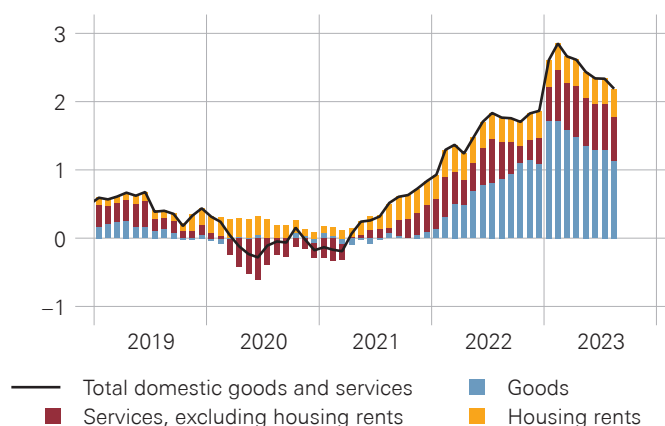


Source(s): SFSO, SNB

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

Table 4.1

### SWISS CONSUMER PRICE INDEX AND COMPONENTS

Year-on-year change in percent

	2022	2022		2023		2023			
		Q3	Q4	Q1	Q2	May	Jun	Jul	Aug
<b>Overall CPI</b>	<b>2.8</b>	<b>3.4</b>	<b>2.9</b>	<b>3.2</b>	<b>2.1</b>	<b>2.2</b>	<b>1.7</b>	<b>1.6</b>	<b>1.6</b>
Domestic goods and services	1.6	1.8	1.8	2.7	2.5	2.4	2.3	2.3	2.2
Goods	2.9	3.3	4.3	6.9	5.8	5.7	5.5	5.5	4.9
Services	1.1	1.2	0.9	1.4	1.4	1.4	1.4	1.3	1.4
Private services excluding housing rents	1.1	1.3	0.4	1.3	1.4	1.4	1.2	1.1	1.7
Housing rents	1.4	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.6
Public services	0.5	0.7	1.2	1.3	1.4	1.4	1.4	1.4	0.0
Imported goods and services	6.7	8.3	6.3	4.6	1.2	1.4	-0.1	-0.6	-0.3
Excluding oil products	3.9	4.7	5.0	5.0	3.9	3.9	3.4	2.7	2.1
Oil products	31.8	39.6	18.0	1.9	-17.2	-16.5	-22.6	-21.7	-16.2

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

**Lower inflation for imported products**

The decrease in imported inflation reflected price developments in imported goods and services excluding oil products. While prices for oil products saw a renewed rise in recent months following a steady decline since mid-2022, prices for other imported goods and services fell slightly of late.

Inflation for imported goods and services excluding oil products retreated between May and August, dropping from 3.9% to 2.1% (cf. table 4.1). In June, inflation for oil products reached a new low of -22.6%, before climbing to -16.2% in August, thus returning to the level recorded in May.

**Lower but still elevated inflation for domestic products**

Domestic inflation fell again slightly, but remained elevated; it was down from 2.4% in May to 2.2% in August (cf. chart 4.2). As in the previous quarter, the decline was attributable to inflation for domestic goods.

While inflation for private domestic services excluding housing rents rose from 1.4% in May to 1.7% in August, inflation for public services decreased from 1.4% to 0.0% in the same period (cf. table 4.1). Inflation for domestic services excluding housing rents declined overall, from 1.4% in May to 1.2% in August.

**Rent inflation up slightly**

Housing rent inflation rose slightly in the last three months, up from 1.5% in May to 1.6% in August (cf. chart 4.3).

This rise in rent inflation is not yet likely to be the result of the reference rate increase from 1.25% to 1.5% at the beginning of June. Changes to the reference rate – a key statutory factor in determining rents – typically do not affect rent inflation for several months owing to contractual notice periods.

**Core inflation down**

Both core inflation rates have declined further since May. Core inflation, as measured by the SNB’s trimmed mean (TM15), decreased from 1.6% in May to 1.4% in August. In the same period, the SFSO core inflation rate 1 (SFSO1) dropped from 1.9% to 1.5% (cf. chart 4.4).

## PRODUCER AND IMPORT PRICES

### Lower inflation for producer and import prices

Owing to developments in producer prices, inflation for total producer and import prices declined from  $-0.3\%$  in May to  $-0.8\%$  in August (cf. chart 4.5). While import prices saw a slight rise in inflation, up from  $-4.6\%$  in May to  $-4.1\%$  in August, producer prices recorded a decline from  $2.0\%$  to  $1.0\%$ . Intermediate goods as well as durable and non-durable consumer goods contributed to the drop in producer price inflation. By contrast, the inflation contribution made by energy products remained unchanged.

## INFLATION EXPECTATIONS

### Short-term inflation expectations down slightly

The indicators for short-term inflation expectations declined slightly overall this quarter.

The index on the expected development of prices over the next twelve months – which is based on the consumer sentiment survey conducted by SECO – fell again marginally (cf. chart 4.6). However, as in the previous quarter, the survey conducted in July indicated that just under three-quarters of households still anticipated an increase in prices in the short term.

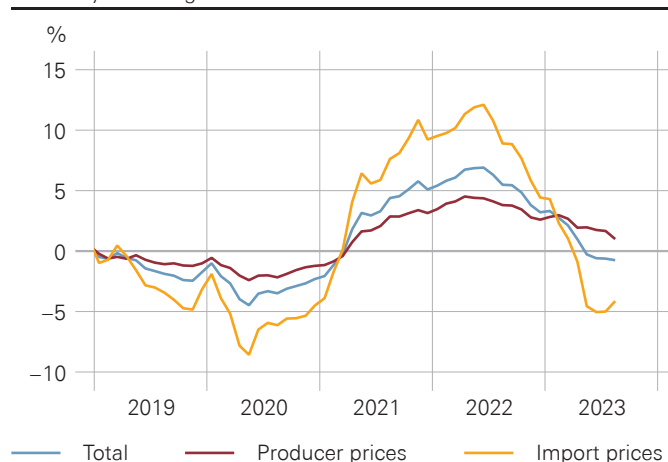
Although the index based on the joint monthly financial market survey by Credit Suisse and the CFA Society Switzerland recently rose somewhat again, it remained in negative territory (cf. chart 4.6). According to the August survey, the share of respondents expecting inflation to rise in the next six months was still lower than the share of those anticipating a decline in inflation.

In the talks conducted by the SNB's delegates for regional economic relations this quarter, companies expected inflation to fall noticeably in the short term (cf. chart 10 in 'Business cycle signals'). The expected annual inflation rate for the next six to twelve months stood at  $2.0\%$ , compared with  $2.4\%$  in the previous quarter.

Chart 4.5

## PRODUCER AND IMPORT PRICES

Year-on-year change



Source(s): SFSO

Chart 4.6

## SHORT-TERM PRICE AND INFLATION EXPECTATIONS

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

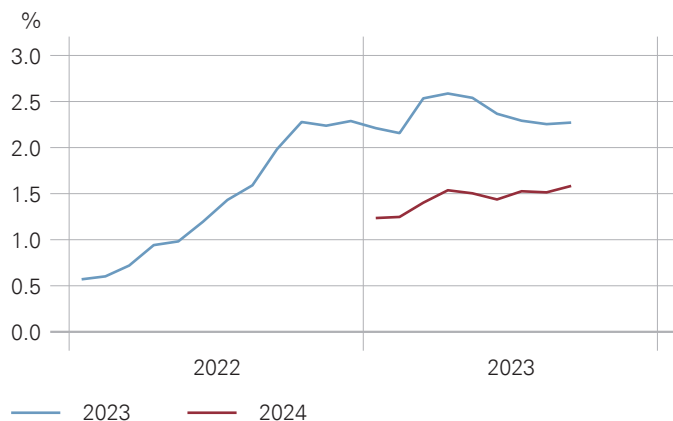


Source(s): CFA Society Switzerland, Credit Suisse, SECO

Chart 4.7

### SHORT-TERM INFLATION EXPECTATIONS FROM CONSENSUS ECONOMICS

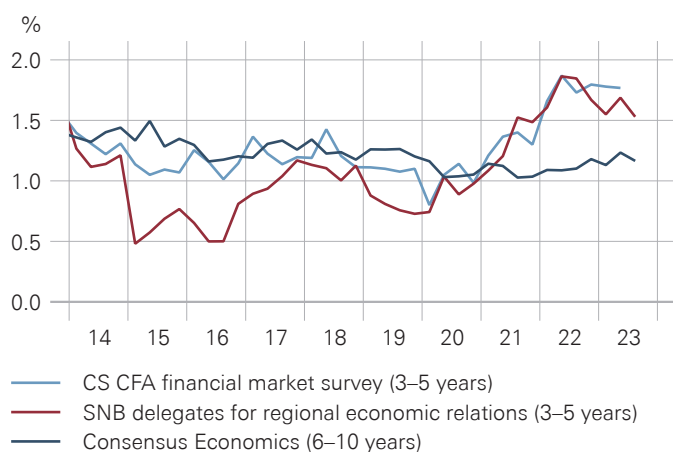
Monthly forecasts for annual inflation



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

The forecast of the banks and economic institutions participating in the monthly survey conducted by Consensus Economics for expected inflation in 2023 stabilised and stood at 2.3% in September (cf. chart 4.7). For 2024, the panel of experts anticipated a decline in inflation to 1.6%.

#### Longer-term inflation expectations largely unchanged and still consistent with price stability

Longer-term inflation expectations saw virtually no change.

For CS CFA financial market survey respondents, average inflation expectations for a time horizon of three to five years remained unchanged in June at 1.8% (cf. chart 4.8). Meanwhile, in the third quarter, company representatives interviewed by the SNB's delegates put inflation for the same time frame at a lower rate of 1.5%, compared with 1.7% in the previous quarter.

According to the Consensus Economics survey conducted in July, the long-term inflation expectations of participating banks and economic institutions stood again at 1.2%.

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.



# 5

## Monetary developments

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Yields on long-term Confederation bonds and Swiss stock market prices moved only slightly following the June monetary policy assessment. The Swiss franc appreciated in nominal and real terms against the currencies of major trading partners.

The monetary base declined in the period under review. The broad monetary aggregates contracted further, as has been the case during previous monetary tightening cycles. Growth in bank lending weakened, but remained robust.

### MONETARY POLICY MEASURES SINCE JUNE 2023 ASSESSMENT

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#### Monetary policy tightened in June

At its monetary policy assessment of 22 June 2023, the SNB decided to tighten its monetary policy further. In doing so, it was countering inflationary pressure, which had increased again over the medium term. It raised the SNB policy rate by 0.25 percentage points to 1.75%. Furthermore, it confirmed its willingness to be active in the foreign exchange market as necessary so as to provide appropriate monetary conditions. In the environment at the time, the focus was on selling foreign currency.

#### Remuneration of sight deposits

Following the increase in the SNB policy rate at the monetary policy assessment in June, sight deposits up to the threshold were remunerated at an interest rate of 1.75%. At the same time, the SNB also raised the interest rate on sight deposits above the threshold by 0.25 percentage points to 1.25%. A discount of 0.5 percentage points relative to the SNB policy rate thus continued to apply to such sight deposits. Together with the absorption of sight deposits via open market operations, this tiered remuneration of sight deposits ensures that monetary policy will be passed through efficiently to interest rates in the money market overall.

#### Absorption of sight deposits via repo transactions and SNB Bills

Since the monetary policy assessment in June 2023, the SNB has continued to absorb sight deposits by way of repo transactions and the issuance of SNB Bills. 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. By absorbing sight deposits, the SNB reduced the liquidity supply in the money market, and thus ensured that the secured short-term Swiss franc money market rates remained close to the SNB policy rate. Since the June assessment, outstanding liquidity-absorbing repo transactions have averaged CHF 67.9 billion. In the same period, the average level of outstanding SNB Bills amounted to CHF 113.3 billion.

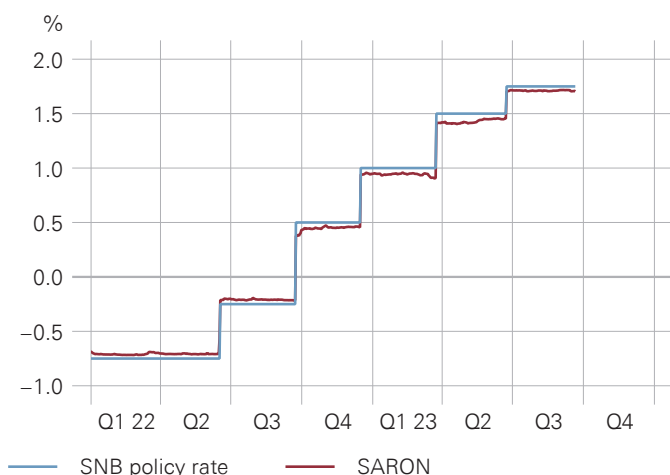
#### Slight reduction in sight deposits at SNB

Sight deposits held at the SNB have decreased since the June monetary policy assessment as a result of the SNB's open market operations and the repayment of the liquidity assistance provided to Credit Suisse. In the week ending 15 September 2023 (last calendar week before the assessment of September 2023), sight deposits amounted on average to CHF 473.0 billion. This was somewhat lower than in the last calendar week preceding the 16 June 2023 assessment (CHF 510.6 billion). Between these two assessments, they averaged CHF 482.2 billion. Of this amount, CHF 471.6 billion were sight deposits of domestic banks and the remaining CHF 10.6 billion were other sight deposits.

Statutory minimum reserves averaged CHF 22.3 billion between 20 May and 19 August 2023. Overall, banks still exceeded the minimum reserve requirement by CHF 468.5 billion (previous period: CHF 492.4 billion). Banks' excess reserves thus remain very high.

Chart 5.1

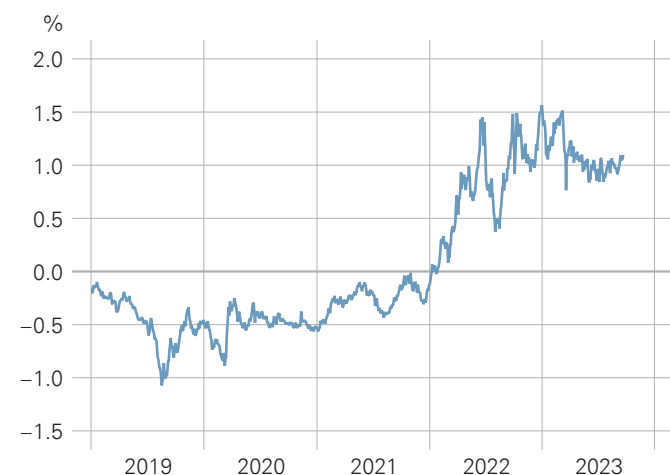
### SNB POLICY RATE AND SARON



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

Chart 5.2

### 10-YEAR SWISS CONFEDERATION BOND YIELD

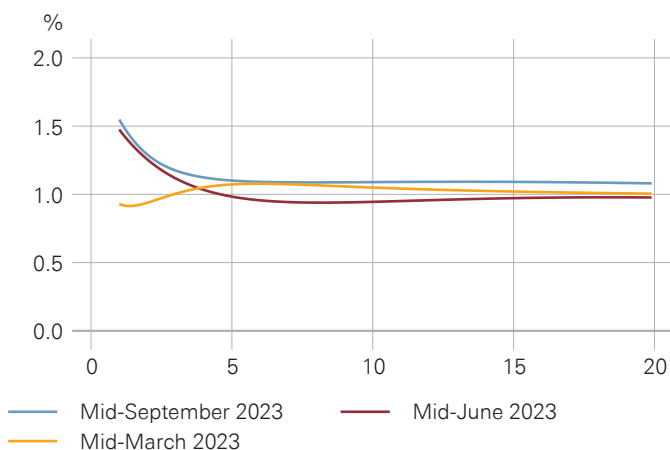


Source(s): SNB

Chart 5.3

### TERM STRUCTURE OF CONFEDERATION BONDS

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



Source(s): SNB

## MONEY AND CAPITAL MARKET INTEREST RATES

### SARON close to SNB policy rate

Following the increase in the SNB policy rate by 0.25 percentage points to 1.75% in June, SARON – the average overnight interest rate on the secured money market – also rose (cf. chart 5.1). In mid-September, it stood at 1.71%, compared with 1.45% in mid-June.

### Long-term yields slightly higher

Yields on Confederation bonds have changed little since the monetary policy assessment in June. In mid-September, the yield on ten-year Confederation bonds stood at 1.1%, compared with 0.95% at the time of the June assessment (cf. chart 5.2). Although yields on long-term Confederation bonds fluctuated slightly over the course of the third quarter, they consistently remained relatively close to their mid-June levels.

### Yield curve still inverted

In mid-September, yields on short-term Confederation bonds were roughly at the levels recorded at the June assessment, while yields on long-term bonds rose somewhat (cf. chart 5.3). Despite this slight rise, high demand for safe long-term investments kept yields on long-term Confederation bonds lower than those with short maturities, as in the previous quarter. In mid-September, for instance, yields on one-year Confederation bonds were 45 basis points higher than yields on ten-year bonds.

### Little change in real interest rates

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.

Long-term real interest rates in mid-September remained roughly on par with the mid-June level, given that both long-term nominal interest rates and long-term inflation expectations changed little (cf. chapter 4).

## EXCHANGE RATES

### Swiss franc appreciates against euro

In mid-September, one euro was worth CHF 0.96, and thus around 2% less than at the time of the monetary policy assessment in June. The US dollar in Swiss francs stood in mid-September at 0.90, which is the same as the value recorded in mid-June (cf. chart 5.4).

While the interest rate differential between Switzerland and the euro area remained more or less unchanged in the period under review, the euro depreciated against the Swiss franc in July. This depreciation of the euro largely reflected weak economic data in several euro area countries. The euro exchange rate against the Swiss franc scarcely changed from August on.

In mid-July, the value of the US dollar initially fell by 4% as a result of the lower-than-expected inflation rate in the US. Robust US economic data pushed up interest rates in the US in July and August, thus widening the interest rate differential between the US and Switzerland. The US dollar subsequently strengthened once again against the Swiss franc, allowing it to recoup the losses suffered in July.

### Trade-weighted Swiss franc exchange rate up 2%

In trade-weighted terms, the Swiss franc appreciated across a broad front, and temporarily reached a new high at the end of July (cf. chart 5.5). This was driven not only by the franc's appreciation against the euro (index weighting almost 40%), but also by its appreciation against the pound sterling (just under 3%, index weighting 7.5%), the yen (around 4%, index weighting 2.7%) and the renminbi (around 1%, index weighting 8.6%). Other currencies, whose index weightings are less significant, also contributed to the effective appreciation of the Swiss franc this quarter.

### Real appreciation of Swiss franc

Since the monetary policy assessment in June, the Swiss franc gained in value in both nominal and real terms (cf. chart 5.6). Although inflation with most trading partners remained higher compared to Switzerland, the nominal appreciation was only partially offset by the inflation differential with other countries. As a result, the Swiss franc strengthened by around 2% in real terms, the highest it has been since 2015.

Chart 5.4

## EXCHANGE RATES



Source(s): SNB

Chart 5.5

## NOMINAL EXTERNAL VALUE OF SWISS FRANC

Index, June 2023 monetary policy assessment = 100



Source(s): SNB

Chart 5.6

## REAL EXTERNAL VALUE OF SWISS FRANC

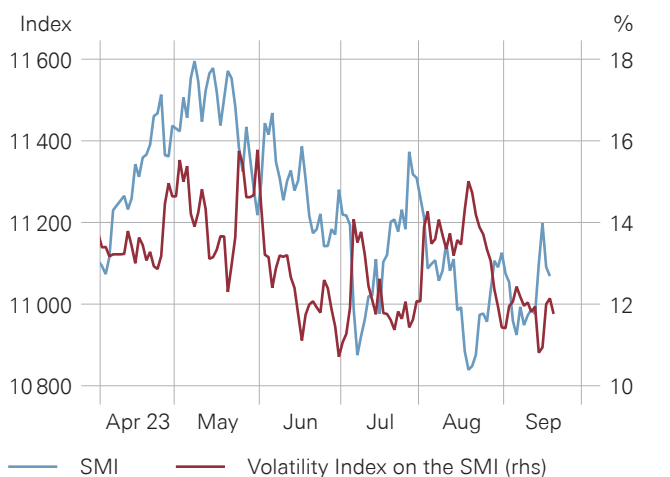
Index, December 2000 = 100



Source(s): SNB

Chart 5.7

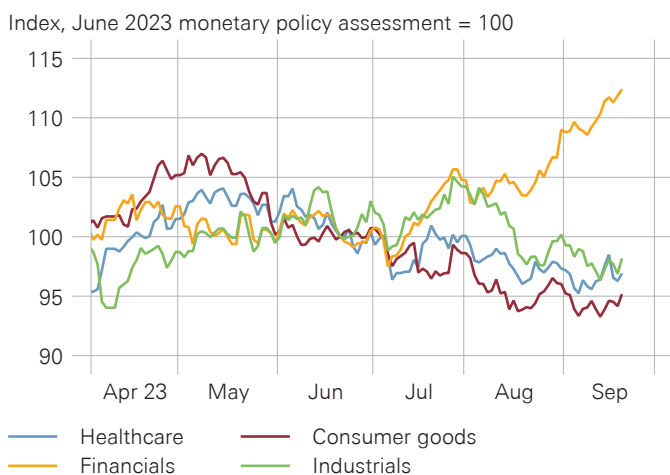
### SHARE PRICES AND VOLATILITY



Source(s): SIX Swiss Exchange Ltd

Chart 5.8

### SELECTED SPI SECTORS

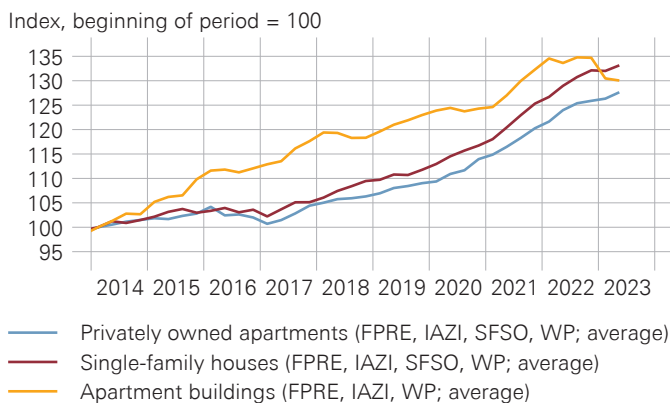


Source(s): SIX Swiss Exchange Ltd

Chart 5.9

### TRANSACTION PRICES FOR RESIDENTIAL REAL ESTATE

Nominal (hedonic)



Source(s): Fahlränder Partner Raumentwicklung (FPRE), IAZI, SFSO (from 2017), Wüest Partner (WP)

### SHARE AND REAL ESTATE PRICES

#### Swiss share prices hardly changed

Since the last monetary policy assessment in June, movements on the global stock markets primarily reflected new economic data. Although the Swiss Market Index (SMI) lost value in August following an increase in July, it fluctuated at all times during the period under review relatively close to its mid-June level (cf. chart 5.7). In mid-September, the SMI stood at roughly its value at the time of the June assessment.

#### Little change 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). While the index temporarily recorded a slight increase in August, it returned in mid-September roughly to the level at the time of the June assessment.

#### Movements in sector indices mixed

Chart 5.8 shows the movements of important sector indices in the broad-based Swiss Performance Index (SPI). Immediately after the monetary policy assessment in June, sector indices moved virtually in unison, before diverging from July. Between mid-June and mid-September, for instance, share prices for financial services companies rose by around 12%. A key factor in this development was the substantial increase in UBS's share price during this period. By contrast, the indices for the other major sectors were between 2% and 5% lower in mid-September than in mid-June.

#### Momentum in residential real estate prices subdued

Although transaction prices for privately owned apartments and single-family houses rose slightly in the second quarter of 2023, momentum remained weaker overall than in previous years (cf. chart 5.9). The apartment buildings segment – which includes residential investment property of private and institutional investors – registered a decline in prices for the second consecutive quarter, with the result that prices were lower than a year ago.

## MONETARY AND CREDIT AGGREGATES

### Decline in monetary base

Initially, the monetary base had changed only little since December 2022. The substantial liquidity assistance provided by the SNB to Credit Suisse in March to safeguard financial stability was absorbed by open market operations in order to continue keeping SARON close to the SNB policy rate. Between May and August, sight deposits of domestic banks held at the SNB declined again with the repayment of the liquidity assistance and the SNB's open market operations. The monetary base thus fell by around CHF 40.5 billion compared with May, and averaged CHF 542.3 billion in August (cf. chart 5.10).

### Broad monetary aggregates contract

In August, the M1 aggregate (currency in circulation, as well as sight deposits and transaction accounts of resident bank customers) fell by 17.8% year-on-year. During the same period, M2 (M1 plus savings deposits) and M3 (M2 plus time deposits) contracted by 13.1% and 2.1%, respectively, year-on-year (cf. table 5.1). The negative growth rates are primarily due to the fact that the increased interest rate level reduces the incentive to hold short-term bank deposits at lower rates of interest. This development is consistent with experience gained from prior cycles of monetary policy tightening.

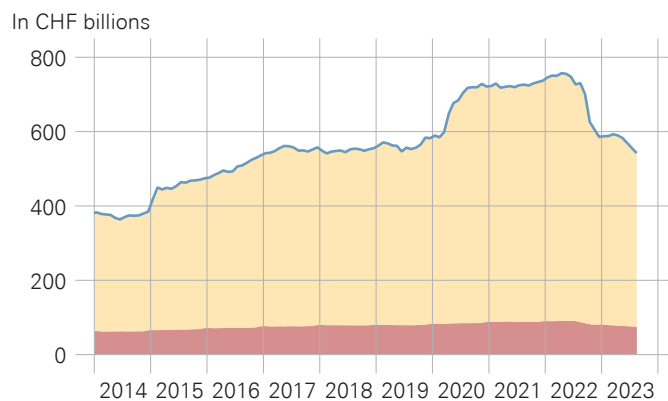
### Weaker growth in mortgage claims

Banks' mortgage claims, which make up roughly 85% of all bank lending to domestic customers, were up 3.1% year-on-year in the second quarter of 2023, having increased in the previous quarter by an annualised 3.4% (cf. table 5.1). This slowdown in growth, which continued in July, is attributable to mortgage lending to households and to private companies alike.

In line with interest rate movements in the capital market, published interest rates for fixed-rate mortgages saw only slight change. As in the previous quarter, the ten-year mortgage interest rate remained at around 3%, and thus at its highest level in eleven years (cf. chart 5.11). Money market mortgage rates have also risen significantly since the end of September 2022, after the SNB raised its policy rate above zero.

Chart 5.10

### MONETARY BASE

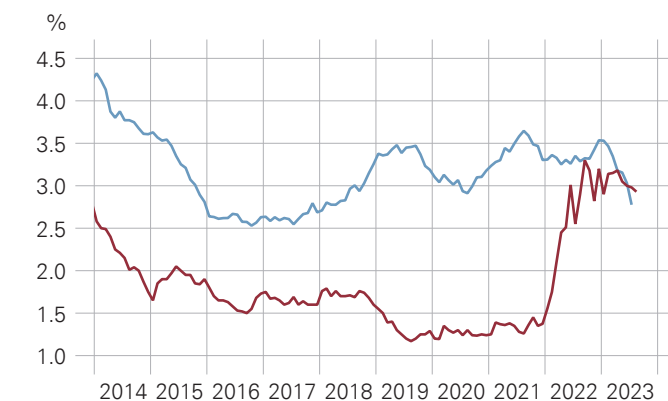


— Monetary base    ■ Banknotes in circulation  
 ■ Sight deposits

Source(s): SNB

Chart 5.11

### MORTGAGE CLAIMS AND INTEREST RATES

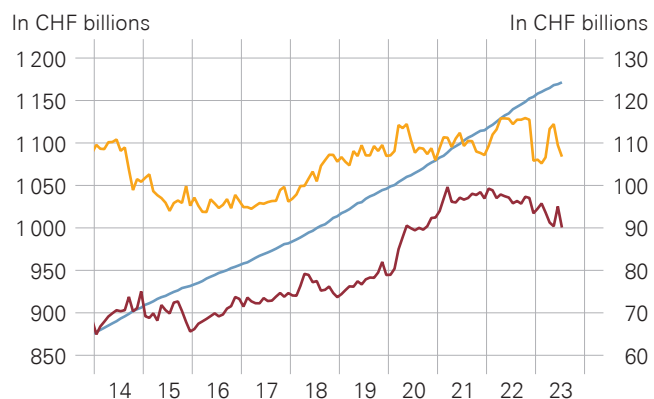


— Mortgage claims (year-on-year change)  
 — 10-year mortgage rate

Source(s): SNB

Chart 5.12

### MORTGAGE CLAIMS AND OTHER LOANS



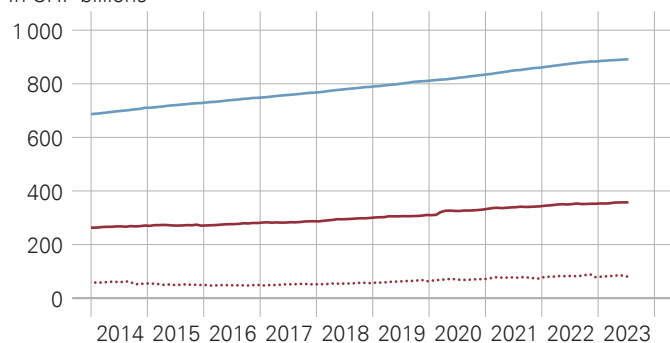
— Mortgage claims    — Other loans, secured (rhs)  
 — Other loans, unsecured (rhs)

Source(s): SNB

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

**Decline in other loans**

Other loans are considerably more volatile than mortgage loans (cf. chart 5.12). They contracted in the second quarter of 2023 by an annualised 4.0%. The volume of secured other loans has declined slightly since the beginning of 2022, which is attributable to the repayments of COVID-19 loans in the amount of over CHF 9 billion. In mid-September, it was estimated that somewhat more than CHF 6 billion in COVID-19 loans was still outstanding. The volume of unsecured other loans has remained largely stable since 2020, with the fluctuations primarily reflecting developments in other loans to financial companies.

**Lending growth by sector**

Bank loans to households and non-financial companies continued to grow on an annual basis (cf. chart 5.13). At the end of July 2023, loans to households recorded a year-on-year increase of CHF 15.6 billion (1.8%) and loans to non-financial companies a rise of CHF 6.5 billion (1.9%). Loans to financial companies, by contrast, decreased in the same period by CHF 3.4 billion (−4.2%).

Table 5.1

**MONETARY AGGREGATES AND BANK LOANS**

Year-on-year change in percent

	2022	2022		2023		2023		
		Q3	Q4	Q1	Q2	Jun	Jul	Aug
<b>M1</b>	<b>2.3</b>	<b>2.2</b>	<b>-0.6</b>	<b>-7.0</b>	<b>-12.1</b>	<b>-13.9</b>	<b>-16.3</b>	<b>-17.8</b>
<b>M2</b>	<b>-0.2</b>	<b>0.0</b>	<b>-2.0</b>	<b>-5.8</b>	<b>-9.3</b>	<b>-10.5</b>	<b>-12.0</b>	<b>-13.1</b>
<b>M3</b>	<b>0.3</b>	<b>-0.1</b>	<b>0.3</b>	<b>-0.1</b>	<b>-0.9</b>	<b>-1.4</b>	<b>-1.6</b>	<b>-2.1</b>
<b>Bank loans, total</b> <sup>1,3</sup>	<b>3.1</b>	<b>3.1</b>	<b>3.1</b>	<b>2.2</b>	<b>2.0</b>	<b>1.9</b>	<b>1.4</b>	
Mortgage claims <sup>1,3</sup>	3.3	3.3	3.4	3.4	3.1	3.0	2.8	
Households <sup>2,3</sup>	3.0	3.0	2.9	2.6	2.3	2.1	2.0	
Private companies <sup>2,3</sup>	4.2	4.1	4.9	5.7	5.5	5.5	5.1	
Other loans <sup>1,3</sup>	1.9	1.8	1.5	-4.4	-4.0	-3.9	-6.4	
Secured <sup>1,3</sup>	-0.1	-1.3	-1.8	-3.8	-5.4	-2.2	-5.9	
Unsecured <sup>1,3</sup>	3.6	4.6	4.5	-5.0	-2.9	-5.4	-6.7	

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



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# Business cycle signals

Results of the SNB company talks

## Third quarter of 2023

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 members of management at companies throughout Switzerland. In its evaluation, the SNB aggregates and interprets the information received. A total of 205 company talks were conducted between 18 July and 5 September.

### 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  
Marco Huwiler



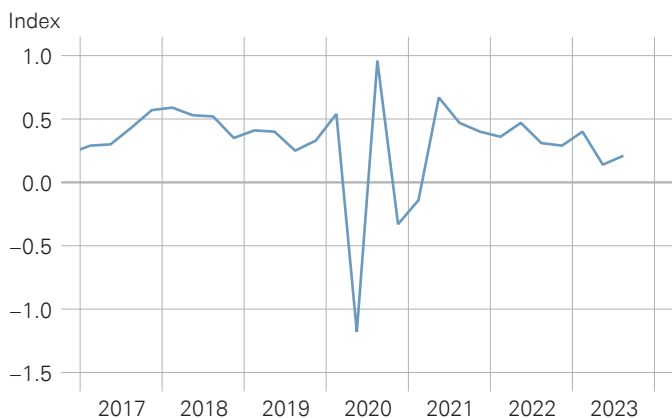
## Key points

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- Growth in the Swiss economy was modest in the third quarter. While turnover is increasing moderately in the services sector, in construction it is rising only marginally and in manufacturing it is stagnating.
- The growth outlook for Q4 2023 and Q1 2024 has deteriorated. In manufacturing, significant declines in order intake are creating uncertainty. Added to this, higher interest rates are increasingly seen as having a dampening effect, especially in construction.
- Utilisation of technical production capacity and infrastructure remains satisfactory. Margins are also mostly at a good level. Some manufacturing companies, however, are experiencing increased pressure on margins due to weak growth and the stronger Swiss franc.
- There are increasing signs that the situation on the labour market is easing. Recruitment difficulties are receding slightly and staff shortages are no longer quite as pronounced as they were a year ago. For many companies, however, recruitment remains a major challenge.
- Against the backdrop of the recent declines in inflation rates, companies expect wages to rise by an average of 1.8% in 2024, after 2.6% this year.

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**

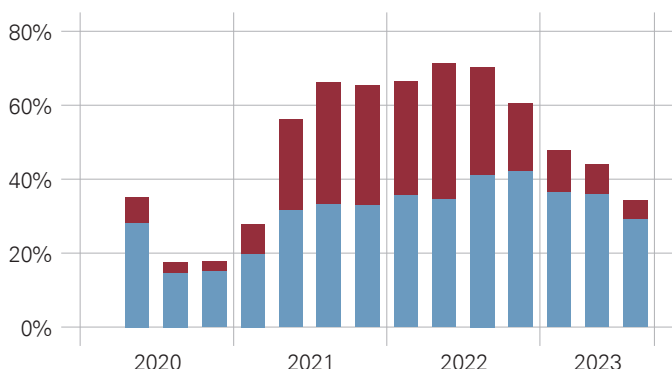


Utilisation of technical capacity and/or business infrastructure compared to a normal level. A positive (negative) index value signals utilisation is higher (lower) than normal.

Source(s): SNB

Chart 3

**PROCUREMENT SITUATION**



■ Slightly more difficult    ■ Considerably more difficult

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

Source(s): SNB

**CURRENT SITUATION**

**Growth in turnover modest**

Real turnover growth, in other words turnover growth adjusted for price changes, remained modest in the third quarter (cf. chart 1). In the services sector there was a moderate quarter-on-quarter increase in turnover. Turnover in construction, by contrast, is only marginally higher than in Q2, and in manufacturing it is stagnating.

Exported-oriented manufacturing companies are feeling the effects of a weak environment in their sales markets. Demand from Europe in particular remains subdued, especially from Germany and the UK, where an inflation-related loss of household purchasing power is weighing on demand for high-price consumer goods and higher financing costs are curbing demand for capital goods. In addition, many customers are seeking to draw down their inventories, which is reducing orders for intermediate goods. In addition to the weak development of demand in Europe, sales in China are proving difficult for many companies. On the other hand, companies describe the development of turnover in the US as comparatively robust. Some representatives also made positive mention of demand from the Middle East and India.

As regards the domestic economy, momentum has been mixed. Domestically-oriented financial services providers are benefiting from a favourable business environment. The same applies to providers of goods and services in the areas of digitalisation and sustainability, including sections of the construction sector in particular. Transport services, the motor vehicle trade and food services, by contrast, have been unable to maintain the momentum of previous quarters.

**Capacity utilisation near normal levels**

Despite weak growth in turnover, utilisation of technical production capacity and infrastructure has deteriorated only marginally and is near normal levels (cf. chart 2). However, some companies report a marked decline in order intake in recent months. They therefore anticipate significantly weaker utilisation in the coming months.

**Easing regarding procurement**

The procurement situation continues to ease. While around one-third of companies still say they are having to contend with a difficult situation (cf. chart 3), the proportion facing serious supply problems has declined from about one-third in summer 2022 to around 5% most recently. There are hardly any supply problems any more for raw materials such as steel and timber. However, the procurement situation remains difficult for specific electronic components and some internationally traded agricultural products.

### Reduction in staff shortages

Staff shortages have decreased appreciably (cf. chart 4). Recruitment difficulties are also somewhat less pronounced than in previous quarters. For example, there are certain signs of improvement in the availability of commercial staff and IT specialists. Downsizing at some large international companies is helping to fill vacancies a little faster. Added to this, recruiting unskilled workers is seen as being relatively unproblematic. However, when it comes to technical professions such as engineering, but also specialists with customer-facing roles or irregular working hours, the recruitment difficulties remain pronounced.

### Largely robust profit margins and stable liquidity situation

For the majority of companies, margins are still sufficient to conduct business profitably and make the necessary investments (cf. chart 5). Margins in services and construction have improved and are now slightly above the historic average. The financial industry in particular is able to generate above-average margins. However, the margin situation is becoming increasingly problematic for individual manufacturing companies that are exposed to intensified price competition because of the weak global economy and the firmer Swiss franc.

Most companies view their liquidity situation as being comfortable. However, a few mention that elevated inventories are a strain on liquidity. There are also some reports of late customer payments. Despite higher interest costs, access to credit remains unproblematic for the majority of companies. A slightly increasing, but still limited number of companies say they are facing more restrictive lending conditions. Companies reliant on private venture capital are also observing greater restraint in this being made available.

Chart 4

### STAFF SHORTAGES



Assessment of staff numbers. Positive (negative) index values signal staff numbers that are lower (higher) than necessary.

Source(s): SNB

Chart 5

### CHARACTERISATION OF MARGINS



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

Source(s): SNB

## DEVELOPMENTS IN INDIVIDUAL INDUSTRIES

### **Slowdown in broad sections of manufacturing**

The global economic slowdown is affecting broad sections of the manufacturing sector. Producers of intermediate products such as metals, plastics and packaging materials, for example, report a significant weakening. Business is also modest for consumer goods manufacturers, which are experiencing subdued demand for durable goods as well as for high-price foods. In the meantime, the first declines in demand are also becoming apparent in the luxury goods industry, which was still recording very good results in the previous quarters. By contrast, manufacturers of energy transition-related products continue to see strong demand. This also applies to certain suppliers to the construction industry, in particular those supplying wood products. Added to this, highly specialised companies in the life sciences industry are profiting from continued high demand from Switzerland and abroad.

### **Growth in the trade and logistics industries subdued**

There is little positive impetus to report in the trade and logistics industries. While retail companies are experiencing stable demand for everyday items, consumers are frequently avoiding higher-priced products and are also showing restraint when it comes to durable goods such as clothing and furniture. Motor vehicle traders also report a marked hesitancy among customers with regard to purchasing new cars, and they have only been able to cushion the effects of significant declines in turnover with solid spares and repairs business. In addition, the weak turnover of goods in the manufacturing sector, made even more pronounced by increased inventories, is having a curbing effect in wholesale and logistics.

### **Turnover development in hospitality weak**

For the most part, food services companies are reporting weak and in some cases negative development in turnover. The reasons are manifold and include unfavourable weather effects and decreased purchasing power. The hotel industry, too, has recorded only slight increases in turnover. However, capacity utilisation is described as being robust overall, and in the upmarket segment even as very satisfactory. Swiss tourists are increasingly spending their holidays abroad again and hotels geared to an international clientele are suffering from the fact that there are fewer Chinese guests than before the pandemic because of the limited availability of flights and visas. However, this shortfall has largely been made up for by travellers from other regions of Asia, the US and the Middle East.

### **Financial and ICT industries see positive development**

The financial industry is showing sustained positive momentum. Domestically-oriented financial services providers say that business has developed very well, highlighting their interest business in particular. Asset managers and fiduciaries also report a successful quarter. Insurers describe their development as stable overall. While inflation is leading to higher loss amounts, higher investment returns are underpinning results.

Utilisation in business-related services, and in particular in the ICT industry, remains good due to the digital transformation taking place at many companies and the pronounced need for cybersecurity solutions. However, growth is limited by the fact that companies' budgets are somewhat tighter in some cases.

### **Utilisation good but outlook increasingly pessimistic in construction**

Utilisation at construction companies remains good. Demand is underpinned by the significant need for energy-efficient renovations, the trend to sustainable and high-quality materials, and the general shortage of residential space. The public sector is also an important source of support for some companies. However, construction companies are increasingly pessimistic about the outlook, particularly for building construction. There are fears that the higher level of interest rates will curb investment activity, especially on the part of institutional investors. Planning firms also indicate that they were not quite able to maintain the order levels of previous quarters.

## OUTLOOK

### Deteriorating business outlook

Expectations of future growth have deteriorated (cf. chart 6). Some companies, particularly in manufacturing, report a significant decline in new orders, which is likely to curb turnover growth in the coming quarters. Owing to weak sales momentum, companies are planning a somewhat less marked expansion of their workforce (cf. chart 7).

On the other hand, they are planning a robust increase in investment volumes. Although the higher level of interest rates makes financing more expensive, in only a few cases so far has this resulted in a greater reluctance to invest. In particular, the trend to investment in sustainable and energy-efficient technologies remains intact. Companies are also investing in automation and IT infrastructure to optimise processes and thus counter the structural shortage of staff.

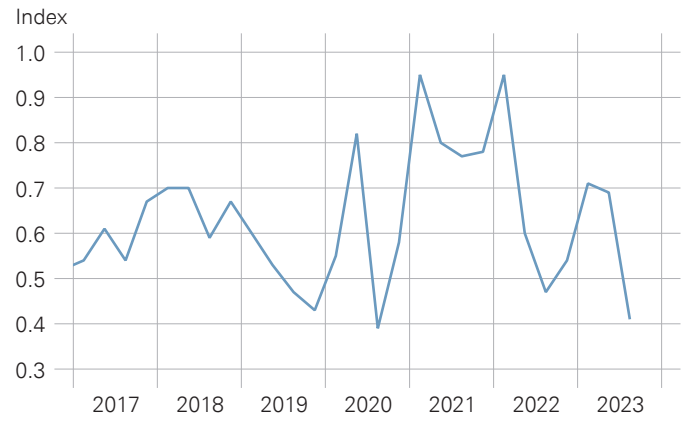
Given declining inflation rates and the less optimistic business outlook, companies expect wage growth to weaken to a certain extent. They currently expect wages to increase by an average of 1.8% in 2024 after 2.6% this year. In many cases companies point out that the development of their business and inflation measured at the time of wage negotiations will have a significant influence on the agreements reached.

### Minor changes in purchase prices and moderate increases in sales prices

Most companies envisage only minor changes in purchase prices in the coming two quarters (cf. chart 8). Manufacturing companies in particular anticipate slight declines in prices, while some services companies expect to see increases to a certain extent. As regards sales, companies expect price increases somewhat more frequently, primarily citing higher wage and energy costs as reasons. However, in most cases the price rises are likely to be moderate. While the general upward trend in prices made increases easier until the beginning of the year, various companies are now facing more intense price competition again and the window of opportunity for major price rises is closing.

Chart 6

### EXPECTED TURNOVER

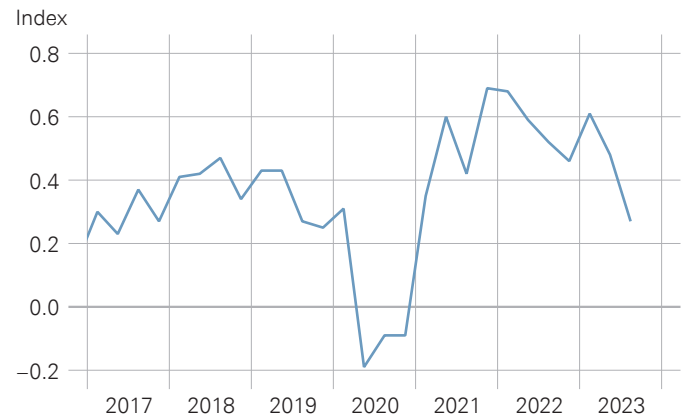


Expected developments in real turnover over the coming two quarters. Positive (negative) index values indicate turnover is expected to be higher (lower).

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

### EXPECTED CHANGE IN PURCHASE AND SALES PRICES

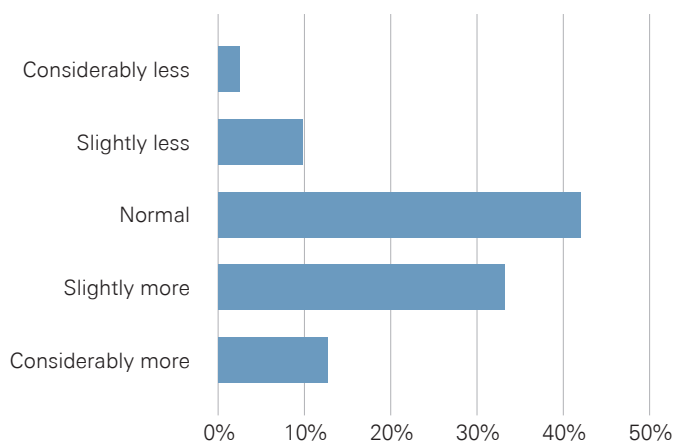


Expected price development for the next 12 months. Positive (negative) index values indicate higher (lower) prices are expected.

Source(s): SNB

Chart 9

## UNCERTAINTY



Uncertainty about development of business over the next two quarters.

Source(s): SNB

### Uncertainty remains elevated

Owing to a number of factors, uncertainty as to the development of turnover in the coming quarters remains elevated (cf. chart 9).

In manufacturing, weak order intake is leading to growing concerns about the economic outlook. The geopolitical situation is cited as an additional source of uncertainty, above all the war in Ukraine and the tensions between the US and China. Some companies also see their sales prospects jeopardised by stronger industrial policies in the major economies and the resulting competitive disadvantages. Some companies, however, are also benefiting from government investment programmes, particularly in the US.

Staff shortages are still frequently cited as a risk factor. These shortages are described not only as a temporary challenge, but also as a long-term structural problem. Companies are therefore investing in process optimisation and digitalisation. They are also attempting to increase their attractiveness for workers. Companies whose staff levels are currently too high are cutting jobs cautiously to be able to deliver when demand picks up and to cope with foreseeable retirements.

The acquisition of Credit Suisse by UBS is giving some suppliers cause for concern. Particularly at IT and consulting companies, order volumes are at risk in the medium term. Some companies also fear that competition in the corporate banking business could weaken because of the integration of CS into UBS.

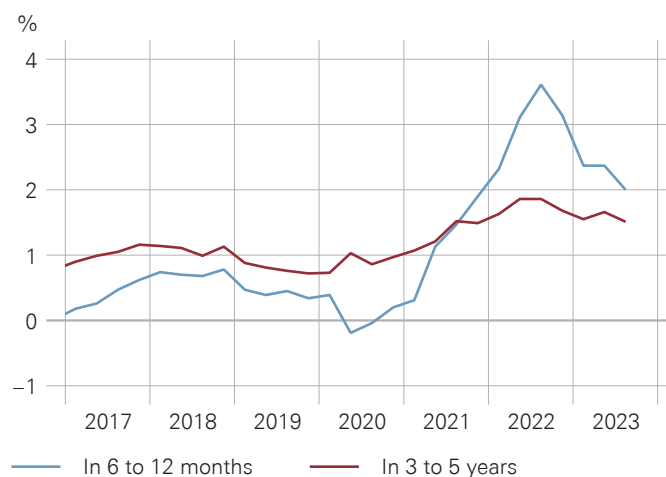
## INFLATION EXPECTATIONS

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

Short-term inflation expectations as measured by the consumer price index have declined: The average for the next six to twelve months is now 2.0%, compared with 2.4% in the previous quarter (cf. chart 10). Inflation expectations over a three to five-year horizon are 1.5%, also a somewhat lower figure than the previous quarter.

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](http://www.snb.ch), The SNB/SNB regional network.

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# 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](http://www.snb.ch).



At its quarterly assessment of 21 September, the SNB leaves its policy rate unchanged at 1.75%. The significant tightening of monetary policy over recent quarters is countering remaining inflationary pressure. The SNB does not rule out that a further tightening of monetary policy may become 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. Banks' sight deposits held at the SNB will continue to be remunerated at the SNB policy rate of 1.75% up to a certain threshold. Sight deposits above this threshold will be remunerated at an interest rate of 1.25%, and thus still at a discount of 0.5 percentage points relative to the SNB policy rate.

June 2023

At its quarterly assessment of 22 June, the SNB tightens its monetary policy further and raises the SNB policy rate by 0.25 percentage points to 1.75%. In doing so, it is countering inflationary pressure, which has increased again over the medium term. To provide appropriate monetary conditions, the SNB also remains 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 1.25%, and thus still at a discount of 0.5 percentage points relative to the SNB policy rate.

March 2023

At its quarterly assessment of 23 March, the SNB tightens its monetary policy further and raises the SNB policy rate by 0.5 percentage points to 1.5%. In doing so, it is countering the renewed increase in inflationary pressure. To provide appropriate monetary conditions, the SNB also remains 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 1.0%. 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.

On 19 March, the SNB announces it will provide ample liquidity assistance to support the implementation of the acquisition of Credit Suisse by UBS. Based on the Federal Council's Emergency Ordinance, in addition to the SNB's existing facilities, Credit Suisse and UBS can obtain further liquidity assistance loans for a total amount of up to CHF 200 billion. These loans are secured by preferential rights in bankruptcy proceedings and some also by a federal default guarantee. This ensures that Credit Suisse is solvent at all times during the crisis. In particular, substantial amounts in foreign currencies have to be provided. In so doing, the SNB performs its statutory task to contribute to the stability of the financial system. With the acquisition of Credit Suisse by UBS, supported by the federal government, the Swiss Financial Market Supervisory Authority (FINMA) and the SNB, a solution has been found to secure financial stability and protect the Swiss economy in an exceptional situation.

December 2022

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.

# Glossary

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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).
Excess reserves	Excess reserves are → sight deposits held by banks at the SNB that exceed their → minimum reserve requirement.
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.
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 2000, consists of three elements: the definition of → price stability, the conditional → inflation forecast over the subsequent three years, and the implementation of monetary policy by means of the → SNB policy rate and, if needed, additional measures.
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 Bills	SNB Bills are interest-bearing debt certificates issued by the SNB and denominated in Swiss francs. They were first issued in autumn 2008. The SNB uses this instrument to temporarily absorb → liquidity from the market. The amount of the SNB Bill is withdrawn from the counterparty's sight deposit at the SNB, and the SNB increases the liability item SNB debt certificates. SNB Bills have a maximum term of 12 months. They are eligible as → collateral in → repo transactions with the SNB.
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.
Sporting-event adjustment	Adjustment for sporting events smooths the data associated with such events symmetrically throughout the year in which the event takes place. This involves the → gross domestic product, the → value added by the entertainment industry, and the import and export of services. Adjusted for sporting events, the data provide a clearer picture of the economic situation as they are no longer affected by the fluctuations caused by major events.
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.



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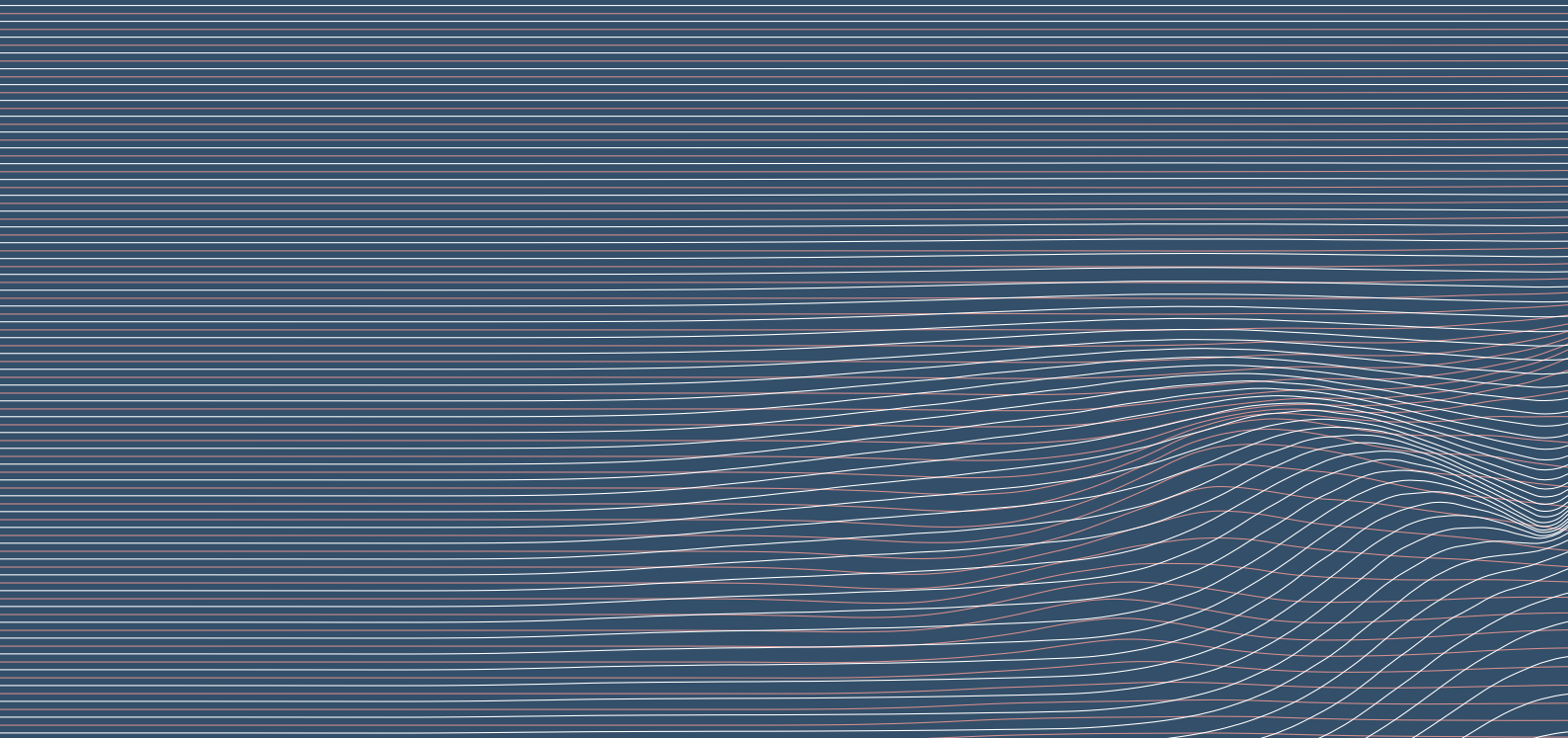
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