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# Quarterly Bulletin 4/2017 December

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





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# Quarterly Bulletin 4/2017 December

Volume 35



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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 December 2017.

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 14 December 2017') is an excerpt from the press release published following the assessment.

This report is based on the data and information available as at 14 December 2017. Unless otherwise stated, all rates of change from the previous period are based on seasonally adjusted data and are annualised.

# 1

## Monetary policy decision of 14 December 2017

### Swiss National Bank leaves expansionary monetary policy unchanged

The Swiss National Bank (SNB) is maintaining its expansionary monetary policy, with the aim of stabilising price developments and supporting economic activity. Interest on sight deposits at the SNB is to remain at  $-0.75\%$  and the target range for the three-month Libor is unchanged at between  $-1.25\%$  and  $-0.25\%$ . The SNB will remain active in the foreign exchange market as necessary, while taking the overall currency situation into consideration.

Since the last monetary policy assessment, the Swiss franc has weakened further against the euro and, more recently, has also depreciated against the US dollar. The overvaluation has thus continued to decrease, yet the franc remains highly valued. The depreciation of the Swiss franc reflects the fact that safe havens are currently less sought after. However, this development is still fragile. Therefore, despite the easing of the situation, the negative interest rate and the SNB's willingness to intervene in the foreign exchange market as necessary remain essential. These measures keep the attractiveness of Swiss franc investments low and thus ease pressure on the currency. A renewed appreciation would still be a threat to price and economic developments.

The new conditional inflation forecast for the coming quarters is higher than it was in September (cf. chart 1.1). This is mainly due to increased oil prices and the further weakening of the Swiss franc. The longer-term inflation forecast is virtually unchanged. For the current year, it has risen marginally to  $0.5\%$ , from  $0.4\%$  in the previous quarter. For 2018, the SNB anticipates an inflation rate of  $0.7\%$ , compared to  $0.4\%$  last quarter. For 2019, it continues to expect inflation of  $1.1\%$ . The conditional inflation forecast is based on the assumption that the three-month Libor remains at  $-0.75\%$  over the entire forecast horizon.

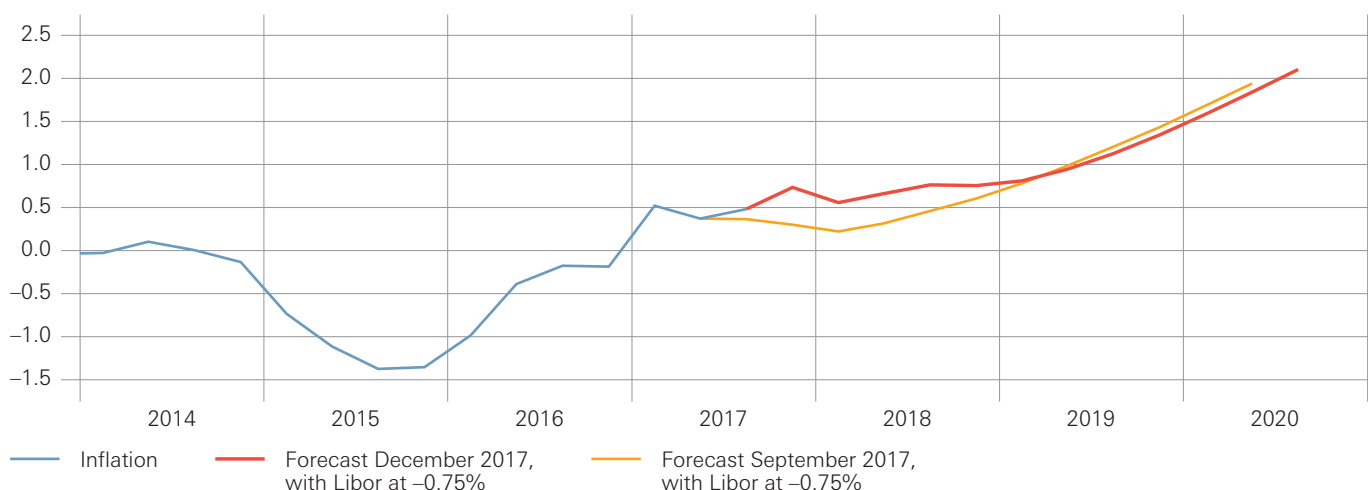
The past few months have seen further improvements in the international environment. The global economy exhibited strong, broad-based growth in the third quarter. The SNB expects it to continue developing favourably in the quarters ahead. The growth forecasts for the euro area and the US have been revised upwards slightly compared to the previous baseline scenario. While the normalisation of monetary policy gradually continues in the US, monetary policy in the euro area and Japan remains highly expansionary. In Switzerland, GDP grew in the third quarter at an annualised  $2.5\%$ . Growth was primarily driven by manufacturing, which benefited from dynamic economic developments abroad and the weaker Swiss franc. In the wake of this development, capacity utilisation in the economy as a whole increased further. The unemployment rate declined again slightly through to November.

Given the supportive global environment and favourable monetary conditions, the recovery in the Swiss economy looks set to continue in the coming months. For 2018, the SNB expects GDP growth of around  $2\%$ , compared to  $1\%$  in the current year.

Chart 1.1

### CONDITIONAL INFLATION FORECAST OF DECEMBER 2017

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



Imbalances on the mortgage and real estate markets persist. While growth in mortgage lending remained relatively low in 2017, residential property prices rose again slightly. In the residential investment property segment, the strong price growth continued. The SNB will continue to monitor developments on these markets closely, and will regularly reassess the need for an adjustment of the countercyclical capital buffer.

### Monetary policy strategy at the SNB

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

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

overstates actual inflation. At the same time, it allows inflation to fluctuate somewhat with the economic cycle. Second, the SNB summarises its assessment of the situation and of the need for monetary policy action in a quarterly inflation forecast. This forecast, which is based on the assumption of a constant short-term interest rate, shows how the SNB expects the CPI to move over the next three years. Third, the SNB sets its operational goal in the form of a target range for the three-month Swiss franc Libor.

Table 1.1

### OBSERVED INFLATION IN DECEMBER 2017

	2014				2015				2016				2017				2014	2015	2016
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Inflation	0.0	0.1	0.0	-0.1	-0.7	-1.1	-1.4	-1.4	-1.0	-0.4	-0.2	-0.2	0.5	0.4	0.5		0.0	-1.1	-0.4

### CONDITIONAL INFLATION FORECAST OF DECEMBER 2017

	2017				2018				2019				2020				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Forecast September 2017, with Libor at -0.75%			0.4	0.3	0.2	0.3	0.5	0.6	0.8	1.0	1.2	1.4	1.7	1.9			0.4	0.4	1.1
Forecast December 2017, with Libor at -0.75%			0.7	0.6	0.7	0.8	0.8	0.8	0.8	0.9	1.1	1.3	1.6	1.8	2.1		0.5	0.7	1.1



## 2 Global economic environment

The past few months have seen further improvements in the international environment. The global economy exhibited strong, broad-based growth in the third quarter. International trade, in particular, remained dynamic (cf. chart 2.1). In view of companies' higher capacity utilisation and growing confidence, investment continued to recover. The employment trend remained positive, which helped to buoy household confidence, too. Inflation in most advanced economies trended sideways in recent months.

Economic signals for the coming months are encouraging. The SNB expects the global economy to continue developing favourably. It has even raised its forecasts slightly for the euro area and the US.

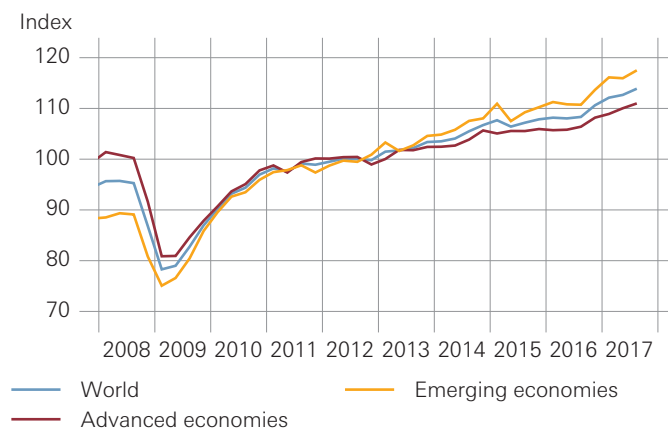
Economic recovery and convergence with the inflation target are most advanced in the US. This prompted the US Federal Reserve to carry out a number of interest rate adjustments and to initiate the reduction of the balance sheet this year. The Federal Reserve plans to continue its gradual policy normalisation. By contrast, the European Central Bank (ECB) intends to pursue its asset purchases until at least September 2018, and to leave its key rate unchanged beyond this horizon. In Japan, the highly expansionary monetary policy also looks set to continue.

The baseline scenario for the global economy is subject to risks. In the short term, growth could be stronger than

Chart 2.1

### GLOBAL EXPORTS

Reporting period average = 100



Sources: CPB Netherlands Bureau for Economic Policy Analysis (CPB), Thomson Reuters Datastream

Table 2.1

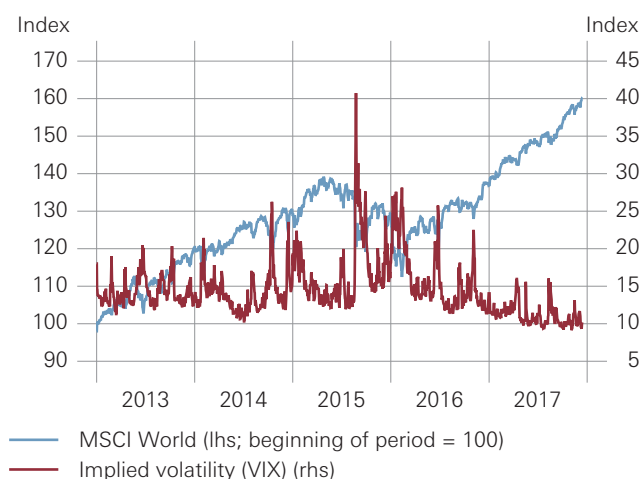
### BASELINE SCENARIO FOR GLOBAL ECONOMIC DEVELOPMENTS

	2013	2014	2015	2016	Scenario	
					2017	2018
<b>GDP, year-on-year change in percent</b>						
Global <sup>1</sup>	3.3	3.6	3.5	3.3	3.8	3.9
US	1.7	2.6	2.9	1.5	2.2	2.4
Euro area	-0.2	1.3	2.1	1.8	2.3	2.1
Japan	2.0	0.3	1.4	0.9	1.8	1.1
<b>Oil price in USD per barrel</b>						
	108.7	99.0	52.5	43.8	54.1	61.0

<sup>1</sup> PPP-weighted (US, euro area, UK, Japan, China, South Korea, India, Brazil and Russia).

Sources: SNB, Thomson Reuters Datastream

Chart 2.2

**STOCK MARKETS**

Source: Thomson Reuters Datastream

forecast in the baseline scenario, due to the significant upturn in household and business confidence. In the medium term, however, risks for the international economy are still to the downside. These risks include political developments in certain countries, as well as potential international tensions. Moreover, the normalisation of monetary policy in the advanced economies presents challenges. An abrupt rise in the currently very low capital market interest rates and risk premia, in particular, could negatively impact the global economy.

The SNB's forecasts for the global economy are based on assumptions about oil prices and the EUR/USD exchange rate. The SNB is assuming an oil price for Brent crude of USD 61 per barrel, which is USD 11 above September's baseline scenario (cf. table 2.1), and an exchange rate of USD 1.17 to the euro, compared to USD 1.16 in September. Both correspond to the 20-day average when the current baseline scenario was drawn up.

Chart 2.3

**INTERNATIONAL LONG-TERM INTEREST RATES**

10-year government instruments



Source: Thomson Reuters Datastream

**INTERNATIONAL FINANCIAL AND COMMODITY MARKETS**

Bolstered by the healthy global economy and robust corporate earnings, international stock market performance has shown a positive trend since the monetary policy assessment of mid-September. The MSCI World Index, the S&P 500 in the US and also, at times, the DAX in Germany recorded new highs. Furthermore, the volatility of US stocks as measured by option prices (VIX) – which serves an indicator of market uncertainty – dropped at the beginning of November to its lowest level since it was introduced in 1990 (cf. chart 2.2).

Yields on long-term government bonds in the advanced economies presented a mixed picture. In several euro area member states, they receded slightly after the ECB's decision to extend its bond purchase programme until September 2018. Yields were slightly higher in the US thanks to the expected tax reform and positive economic data. In Japan, yields on ten-year government bonds persisted close to the Bank of Japan's target of zero percent (cf. charts 2.3 and 2.4).

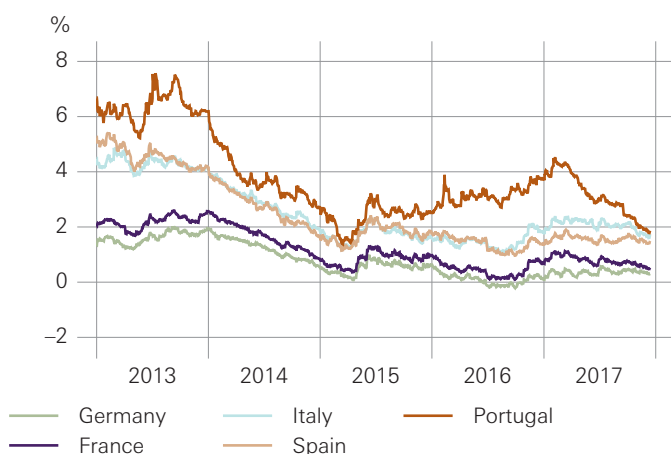
The US dollar – which had been weakening continuously since the beginning of the year – appreciated slightly on a trade-weighted basis. Following the tightening of monetary policy by the Bank of England, the pound sterling also appreciated. Both the euro and the Japanese yen trended sideways (cf. chart 2.5).

Commodity prices maintained the upwards trend they have been experiencing since mid-year. A decline in inventory levels and the agreement among the important oil-producing countries to limit production contributed to a continued rise in oil prices. At mid-December, the oil price for a barrel of Brent crude was just above USD 60 per barrel, the highest level for more than two years. Prices for industrial metals increased overall from mid-year, although they have declined again somewhat since mid-November (cf. chart 2.6).

Chart 2.4

**EUROPEAN LONG-TERM INTEREST RATES**

10-year government instruments



Source: Thomson Reuters Datastream

## US

The US economy grew by 3.3% in the third quarter of 2017, much the same as the previous quarter (cf. chart 2.7). Private consumption and investment in equipment posted further large gains, while construction investment receded slightly once again. The pace of growth has accelerated since the beginning of the year, despite the hurricanes in August and September having a somewhat negative impact on activity and employment. Growth in employment continued over the past few months and the unemployment rate receded to 4.1% in November (cf. chart 2.10).

The outlook for the US economy has improved slightly since the monetary policy assessment in September. Domestic activity remains dynamic, with turnover in the retail sector continuing to increase in recent months, while industrial output recovered well in October from the impact of the hurricanes. Reconstruction efforts will provide additional growth stimulus in the months to come. Favourable financing conditions and the tax cuts planned for 2018 are likely to stimulate private consumption and corporate investment in the next few years. As a result of the stronger economic momentum, the SNB has revised its GDP forecast slightly upwards to 2.2% for 2017 and 2.4% for 2018 (cf. table 2.1). The forecast for the medium term, however, continues to be uncertain, as several planks of US economic policy have yet to be clearly defined.

As a consequence of higher energy prices, annual inflation as measured by the consumer price index increased slightly again in recent months, and stood at 2.2% in November (cf. chart 2.11). Core inflation was virtually unchanged at 1.7% (cf. chart 2.12). The core personal consumption expenditure (PCE) deflator index, the Federal Reserve's preferred price inflation measure, posted modest gains in October. Inflation is still below target, but is set to rise gradually. In October, the Federal Reserve began reducing its balance sheet and in December it increased the target range for its policy rate to between 1.25% and 1.50%. The Federal Reserve plans to continue gradually normalising its monetary policy (cf. chart 2.13).

Chart 2.5

### EXCHANGE RATES

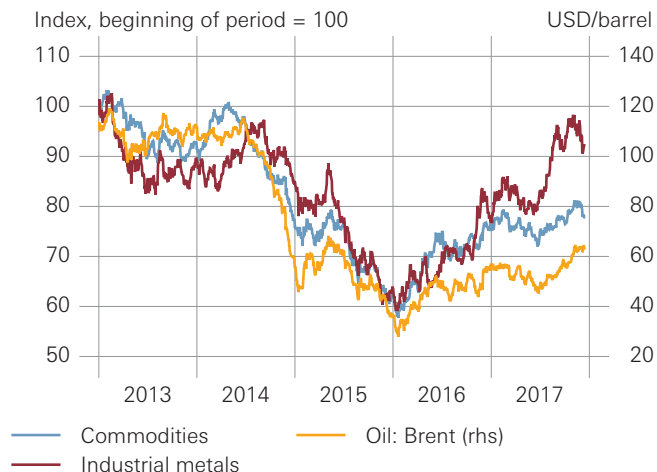
Trade-weighted, beginning of period = 100



Source: Thomson Reuters Datastream

Chart 2.6

### COMMODITY PRICES

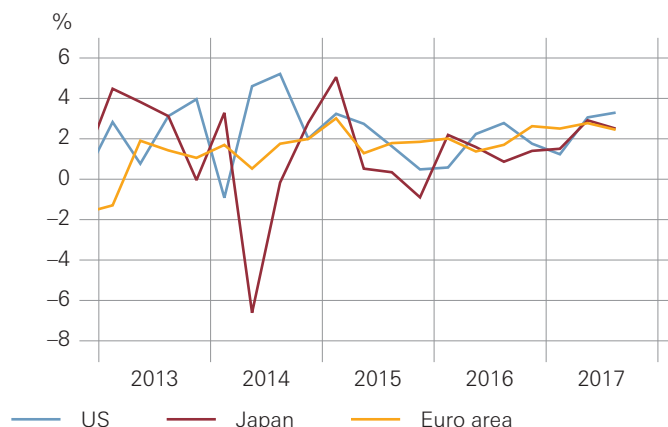


Source: Thomson Reuters Datastream

Chart 2.7

### REAL GDP: ADVANCED ECONOMIES

Change from previous period

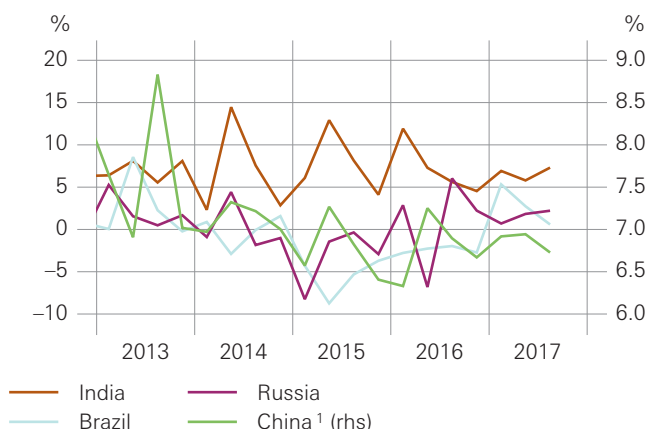


Source: Thomson Reuters Datastream

Chart 2.8

**REAL GDP: EMERGING ECONOMIES**

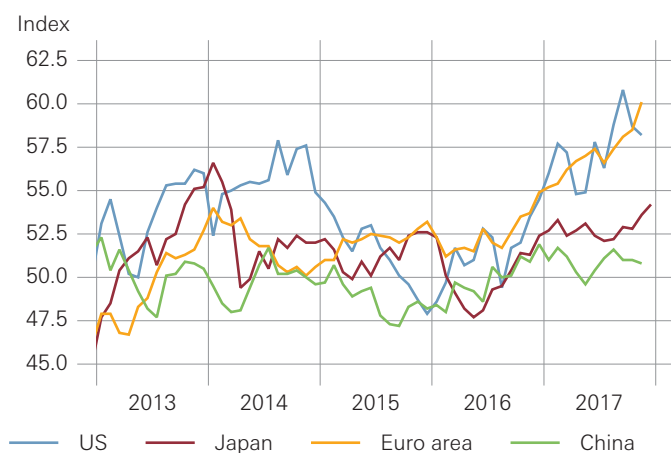
Change from previous period



1 Estimate: SNB.

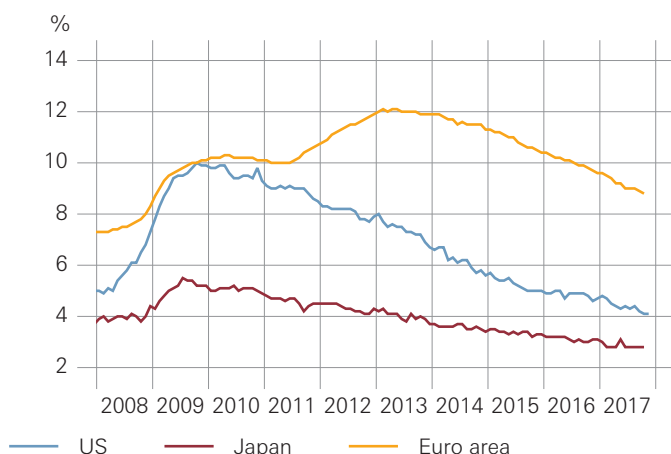
Source: Thomson Reuters Datastream

Chart 2.9

**PURCHASING MANAGERS' INDICES (MANUFACTURING)**

Source: Markit Economics Ltd 2009; all rights reserved

Chart 2.10

**UNEMPLOYMENT RATES**

Source: Thomson Reuters Datastream

**EURO AREA**

In the euro area, the economic uptrend continued. GDP registered a broad-based increase of 2.4% in the third quarter. Growth in Germany, Italy and Spain was significantly above potential. Investment and exports continued to expand strongly. Employment grew further and unemployment declined once again (cf. chart 2.10).

The economic outlook is positive across the board. Confidence in manufacturing and private households is particularly high. Surveys suggest that companies plan to expand their investment and, given the rise in utilisation, perhaps also increase their capacity. Bolstered by propitious financing conditions and improvements in the labour market situation, domestic demand is therefore likely to remain dynamic. Nevertheless, the outlook for the economy is still subject to risks. These include political uncertainties like the future shape of relations between the EU and the UK, and Italy's elections to be held by May 2018. Given the favourable economic indicators, the SNB has once again revised its growth expectations for the euro area upwards, projecting GDP growth of 2.3% for 2017, which amounts to the strongest rise in the last ten years, and 2.1% for 2018.

Consumer price inflation trended sideways in recent months and stood at 1.5% in November (cf. chart 2.11). Core inflation, however, dipped marginally below 1.0%, which was predominantly attributable to prices for services (cf. chart 2.12). Medium-term inflation expectations derived from financial market indicators were up slightly but are still below the ECB's target level of just under 2%. Despite the improvement on the labour market, wage growth in the euro area remained modest.

At the end of October, the ECB decided to extend its monthly asset purchases until at least September 2018, and to leave its key rates unchanged beyond that horizon. The purchase volume, however, is to be reduced from EUR 60 billion to EUR 30 billion per month as of January 2018. Furthermore, the ECB will continue to supply banks with unlimited liquidity until at least the end of 2019 as part of its regular refinancing operations.

## JAPAN

In Japan, GDP has been growing above potential for almost two years. In the third quarter, it was 2.5%, reflecting primarily the strong foreign trade contribution (cf. chart 2.7). Demand has fluctuated widely in recent quarters, however. Since the beginning of the year, GDP has expanded by 2.3% on average, with exports, corporate investment and public sector investment experiencing a particularly sharp rise. The economy picked up pace again compared with the previous year. Aggregate economic capacity is well utilised and, at 2.8%, unemployment is at its lowest level since the mid-1990s.

The upswing in global manufacturing is likely to further support the Japanese economy. Robust corporate earnings, extremely favourable financing conditions and the general improvement in sentiment mean that corporate investment is likely to continue to gain momentum. By contrast, the effects of the economic stimulus package launched in summer last year are likely to taper off. As a result of data revisions, the GDP forecast for 2017 has gone up to 1.8%; this would be the strongest rate of growth since 2013. In 2018 too, GDP growth is set to be above potential (cf. table 2.1).

Inflation momentum has gradually improved. The consumer price index excluding energy and food prices rose slightly in recent months and had regained its year-back level in November (cf. chart 2.12). The trimmed mean calculated by the Bank of Japan, which excludes the products with the greatest price changes, saw a more pronounced rise since the beginning of the year, to 0.5%. In addition, energy inflation also went up. However, due to base effects relating to fresh food prices, the overall rate of inflation decreased to 0.2% in October (cf. chart 2.11). Mounting overall capacity utilisation, the impact of higher oil prices and a weaker yen are likely to cause inflation to rise again in the months to come. Longer-term inflation expectations derived from company surveys trended sideways and remained significantly below the Japanese central bank's inflation target of 2%. Under these conditions, the Bank of Japan is planning to maintain its expansionary monetary policy.

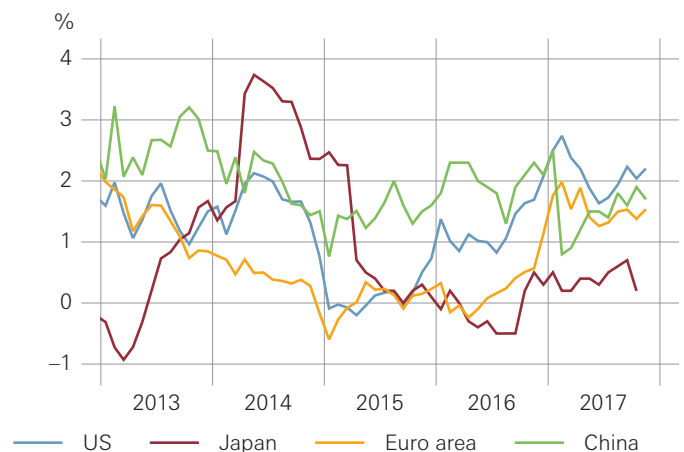
## EMERGING ECONOMIES

In China, GDP continued to expand strongly, at 6.7% in the third quarter (cf. chart 2.8). While both construction and manufacturing lost a little momentum, value added in the services sector posted further large, broad-based gains. At 7.3%, GDP in India advanced in line with potential. In Russia and Brazil, there are firming signs of recovery.

Chart 2.11

### CONSUMER PRICES

Year-on-year change

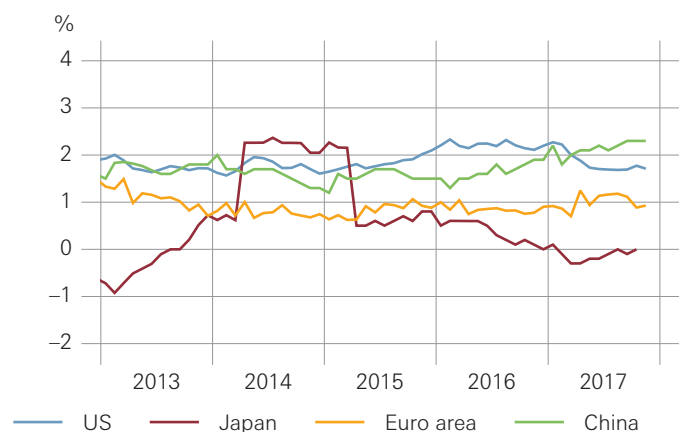


Source: Thomson Reuters Datastream

Chart 2.12

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

Year-on-year change

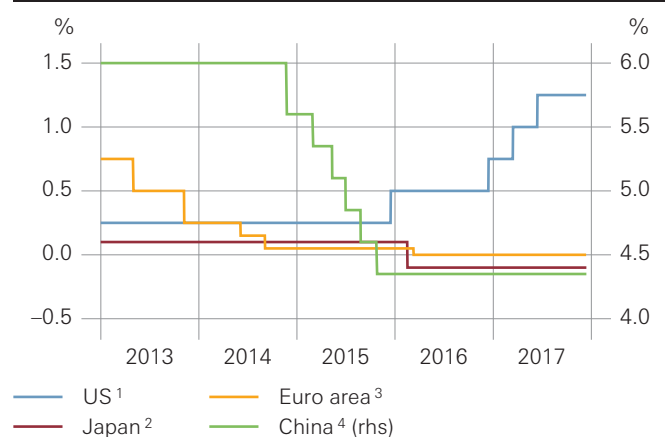


<sup>1</sup> Excluding food and energy.

Source: Thomson Reuters Datastream

Chart 2.13

### OFFICIAL INTEREST RATES



<sup>1</sup> Federal funds rate.

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

Source: Thomson Reuters Datastream

<sup>3</sup> Main refinancing rate.

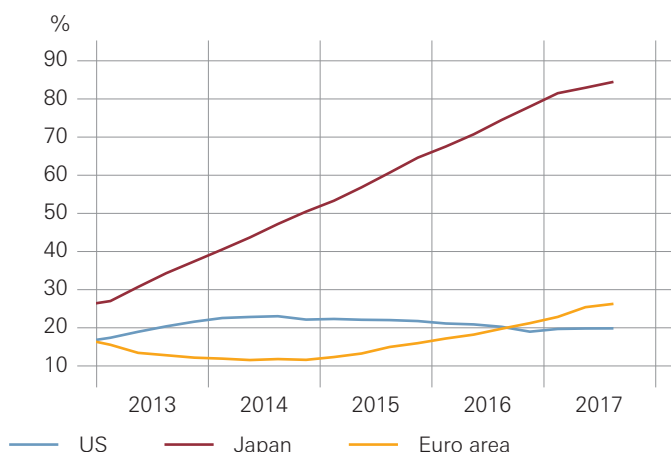
<sup>4</sup> One-year lending rate.



Chart 2.14

**MONETARY BASE**

Relative to GDP



Source: Thomson Reuters Datastream

The outlook for China remains unchanged since the last monetary policy assessment. Consumption looks set to continue expanding strongly, thanks to rising levels of income and upbeat consumer confidence. By contrast, a slowdown in credit growth, as well as macroprudential measures implemented by the government in the real estate market, look set to rein in growth somewhat. GDP growth is expected to be 6.8% in 2017 and slightly lower in 2018. In India, the dampening impact of the tax reform is gradually receding. A more expansionary policy will stimulate the economy in the medium term. In particular, weak, quasi-governmental credit institutions are set to be recapitalised and the road infrastructure improved.

The Russian economic outlook is positive. Consumption is likely to remain a driving force in the coming quarters. As a result of the higher oil prices, investment looks set to gain momentum. In Brazil, recovery is expected to continue on the back of favourable monetary conditions, rising real income and a steady decline in unemployment. However, the investment environment remains difficult on account of the absence of structural reforms.

Inflation in the emerging economies saw different rates of development in recent months. In China it was 1.7% in November, virtually unchanged compared to August (cf. chart 2.11). By contrast, India saw a noticeable increase to 4.9% due to higher food and energy prices. Inflation was slightly up in Brazil, too, though at 2.8% it remained considerably below the central bank's target. By contrast, inflation in Russia continued to decrease, to 2.5%.

Monetary policy also varied across the emerging economies. From January 2018, the People's Bank of China plans to grant a reduction in the minimum reserve rate of up to 150 basis points to commercial banks which increase their lending to small companies or agricultural enterprises. The central bank did stress, however, that this measure does not indicate a general easing of monetary policy, rather, the aim is to provide support to companies which have previously received insufficient loans. The central banks of Russia and Brazil both lowered their key rates in light of low inflation. The Reserve Bank of India left its monetary policy unchanged.

## Economic developments in Switzerland

In Switzerland, the recovery continues. GDP grew by 2.5% in the third quarter, strengthening economic recovery as expected. Manufacturing, in particular, benefited from the favourable economic situation abroad and the depreciation of the Swiss franc.

On the back of solid growth, capacity utilisation has improved and business confidence has continued to pick up. Against this background, the willingness of companies to invest is likely to increase further.

The gradual recovery on the labour market has also continued. Demand for labour is firming progressively and the unemployment rate declined again through to November.

The outlook remains positive. Leading indicators suggest that the recovery will continue to gain momentum. For 2018, the SNB expects GDP growth of around 2.0%, after 1% in the current year.

### AGGREGATE DEMAND AND OUTPUT

The SNB takes a wide range of information into account when assessing the economic situation. At present, many signals are suggesting favourable economic momentum.

#### Vigorous GDP growth in the third quarter of 2017

According to a provisional estimate by the State Secretariat for Economic Affairs (SECO), the rate of growth continued to increase in the third quarter. GDP rose by 2.5%, the strongest advance since the end of 2014 (cf. chart 3.1). In addition, GDP for the previous quarters has been revised upwards. The most recent estimate puts second-quarter growth at 1.8% (originally 1.1%).

Value added increased in most industries in the third quarter. Manufacturing was the main driver of robust GDP growth, with value added again rising sharply (cf. chart 3.2). Most services industries also showed a positive trend. However, in financial services, value added contracted following a marked increase in the previous quarter.

On the expenditure side, growth in the third quarter also proved broadly based. Given the favourable global economic developments and the weakening of the Swiss franc, exports and equipment investment continued to trend positively. Private consumption also rose more strongly than in the first half of the year. By contrast,

Chart 3.1

### REAL GDP

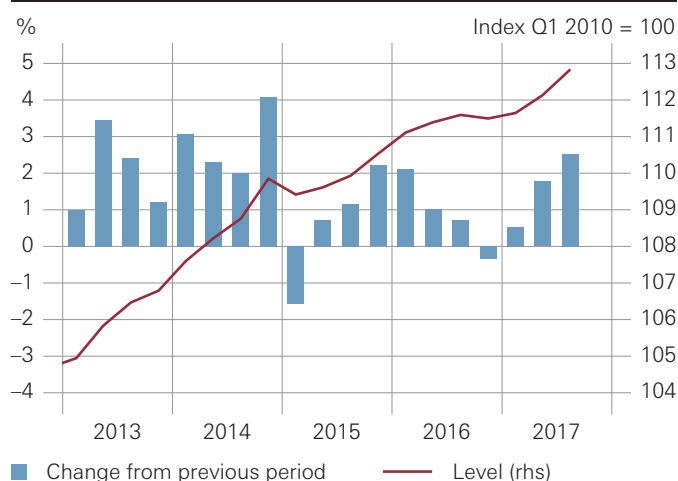


Chart 3.2

### CONTRIBUTIONS TO GROWTH, BY SECTOR

Change from previous period

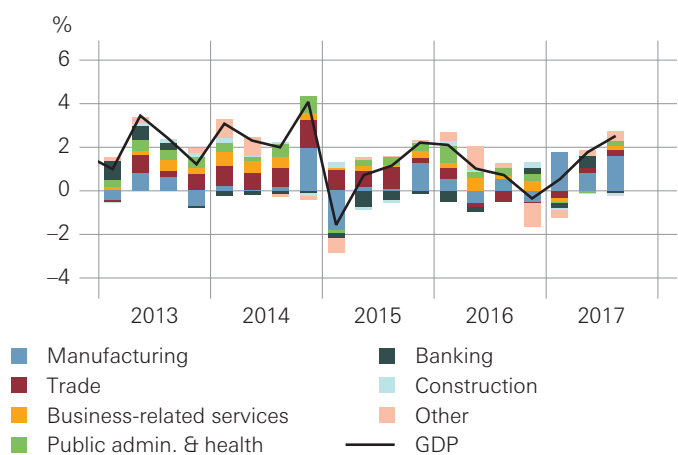
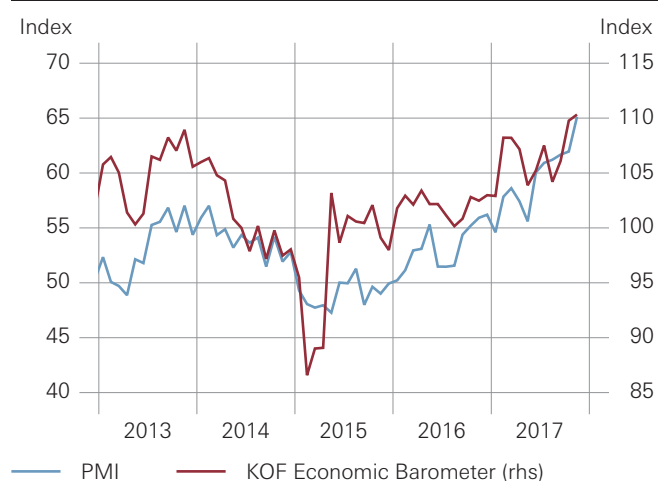


Chart 3.3

### ECONOMIC INDICATORS



construction investment stagnated. After posting extremely strong growth in the previous quarter, imports receded.

### Positive economic indicators

In addition to GDP, other economic indicators are also showing positive momentum. The KOF Economic Barometer has been well above its long-term average for some time now (cf. chart 3.3). As various surveys show, the positive developments are mainly driven by manufacturing. This is also borne out in the high level of the PMI.

The discussions with company representatives conducted by the SNB's delegates for regional economic relations during the course of the year also paint the picture of a significant economic upswing (cf. 'Business cycle signals', p. 28). According to the most recent talks, the positive momentum continued in the fourth quarter. Companies report considerable improvements in the business environment, compared with the previous year.

Despite these positive developments overall, parts of the economy continue to be confronted with substantial challenges. Regulatory or technology factors mean that a number of industries are undergoing structural adjustment and are facing significant pressure on prices and margins.

Table 3.1

### REAL GDP AND COMPONENTS

Growth rates on previous period in percent, annualised

	2013	2014	2015	2016	2015 Q4	2016 Q1	Q2	Q3	Q4	2017 Q1	Q2	Q3
Private consumption	2.6	1.3	1.8	1.5	0.5	2.0	0.9	1.3	2.9	0.3	0.7	1.5
Government consumption	2.3	2.2	1.2	1.6	1.4	2.5	1.8	1.4	2.8	0.8	1.1	1.9
Investment in fixed assets	0.6	3.0	2.2	3.1	-0.9	7.9	1.2	4.8	-1.6	3.5	3.2	2.0
Construction	3.1	3.2	1.6	0.9	2.4	1.7	-2.3	5.1	0.3	0.6	2.6	-0.5
Equipment	-1.0	2.9	2.6	4.5	-2.9	12.1	3.5	4.6	-2.7	5.4	3.6	3.5
Domestic final demand	2.0	1.9	1.8	1.9	0.3	3.7	1.1	2.3	1.7	1.2	1.4	1.7
Change in inventories <sup>1</sup>	0.6	-0.5	-0.3	-1.9	5.3	-7.4	-4.6	5.3	-7.8	-3.6	7.0	-3.9
Total exports <sup>2</sup>	-0.1	5.2	2.3	6.8	6.3	16.5	7.2	-9.3	12.2	3.2	1.0	5.0
Goods <sup>2</sup>	-2.3	5.8	2.6	6.2	1.9	30.1	3.4	-15.2	-3.4	23.5	2.7	8.7
Goods excluding merchanting <sup>2</sup>	-1.0	4.0	0.7	6.6	16.7	7.8	4.8	3.8	-7.1	16.1	6.8	4.9
Services	4.5	4.0	1.7	7.9	15.2	-6.1	15.1	3.2	46.6	-25.2	-2.0	-1.7
Total imports <sup>2</sup>	1.4	3.3	3.2	4.7	16.7	5.6	-2.1	4.1	1.1	-3.3	17.0	-5.1
Goods <sup>2</sup>	0.7	1.7	0.0	4.4	20.4	3.7	0.3	0.4	-0.6	-3.4	21.6	-6.2
Services	3.0	6.8	9.6	5.4	10.2	9.3	-6.4	11.2	4.2	-3.1	9.1	-2.9
Net exports <sup>3</sup>	-0.6	1.3	-0.1	1.6	-3.3	6.2	4.6	-6.6	5.9	3.1	-6.5	4.9
<b>GDP</b>	<b>1.9</b>	<b>2.4</b>	<b>1.2</b>	<b>1.4</b>	<b>2.2</b>	<b>2.1</b>	<b>1.0</b>	<b>0.7</b>	<b>-0.4</b>	<b>0.5</b>	<b>1.8</b>	<b>2.5</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> Contribution to growth in percentage points.

Source: SECO



## LABOUR MARKET

The recovery on the labour market continues. Unemployment has receded further in the past few months, and the number of employed persons has risen again.

### Ongoing decline in unemployment

Excluding seasonal fluctuations, the number of people registered as unemployed with regional employment offices was 136,600 at the end of November. Jobless figures thus declined further, while at end-November the seasonally adjusted unemployment rate published by SECO stood at 3.0% (cf. chart 3.4).

In addition, the Swiss Federal Statistical Office (SFSO) calculates unemployment figures in line with the International Labour Organization (ILO) definition, based on data provided by the Swiss labour force survey of households (SAKE), conducted quarterly. This survey also includes people who are unemployed (although looking for work) but not registered, or no longer registered, with the regional employment offices. The SFSO unemployment rate calculated in accordance with the ILO definition is therefore higher than the one published by SECO. In the third quarter of 2017, the seasonally adjusted unemployment rate amounted to 4.8%, slightly below the peak reached a few quarters ago. It is thus similar to SECO's unemployment rate.

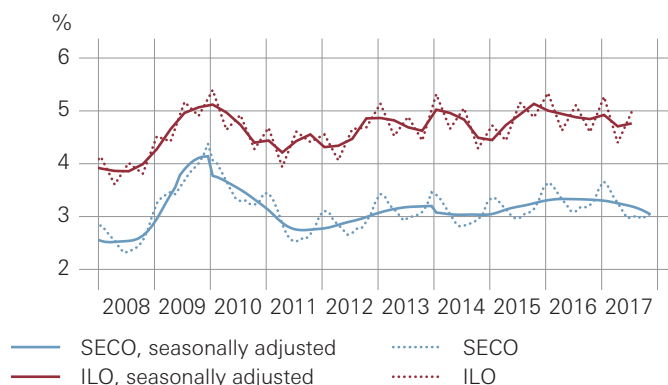
### Employment continues to rise

The Employment Statistics (ES), which are also based on SAKE data, measure the number of employed persons on the household side. These figures suggest that, after rather subdued growth in previous quarters, employment growth had returned to more or less its long-term average in the third quarter (cf. chart 3.5).

The national job statistics, which are based on a survey of firms, measure employment on the company side. They thus complement the ES, especially with regard to developments at industry level. According to these statistics, in the third quarter the number of full-time equivalent positions also increased in line with the average (cf. chart 3.6). Growth in employment was driven by services, which make up roughly three-quarters of jobs. Manufacturing, which includes roughly 15% of jobs, was up again as well. By contrast, in construction, job cuts – ongoing for nearly three years – continued.

Chart 3.4

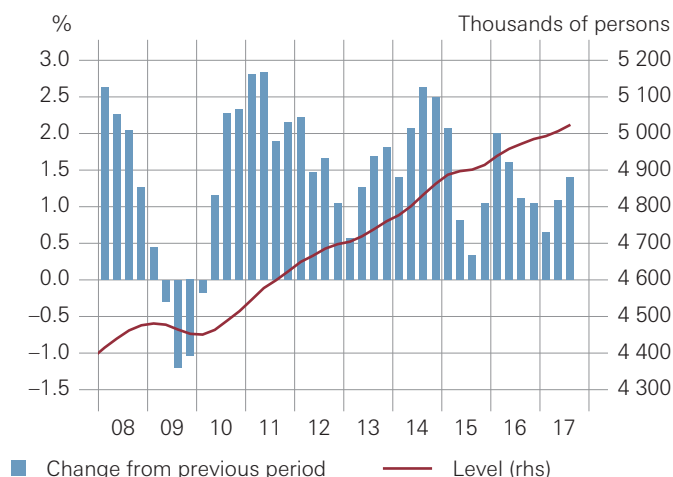
### UNEMPLOYMENT RATE



SECO: Unemployed registered with the regional employment offices, as a percentage of the labour force according to the 2000 and 2010 censuses and the 2012 to 2014 structural surveys.  
ILO: Unemployment rate based on International Labour Organization definition.  
Sources: Swiss Federal Statistical Office (SFSO), SECO

Chart 3.5

### EMPLOYED PERSONS

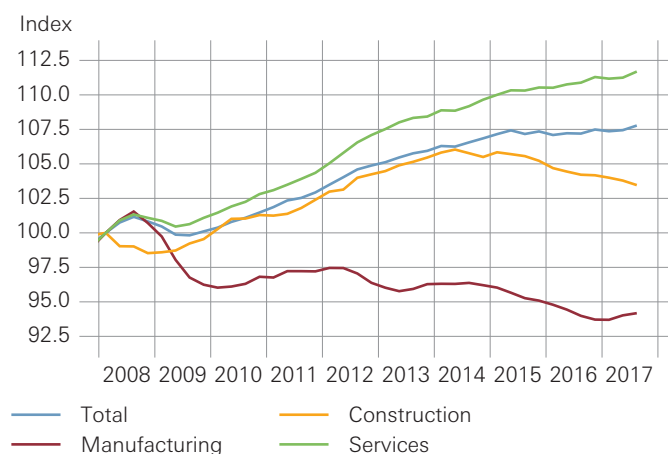


Source: SFSO; seasonal adjustment: SNB

Chart 3.6

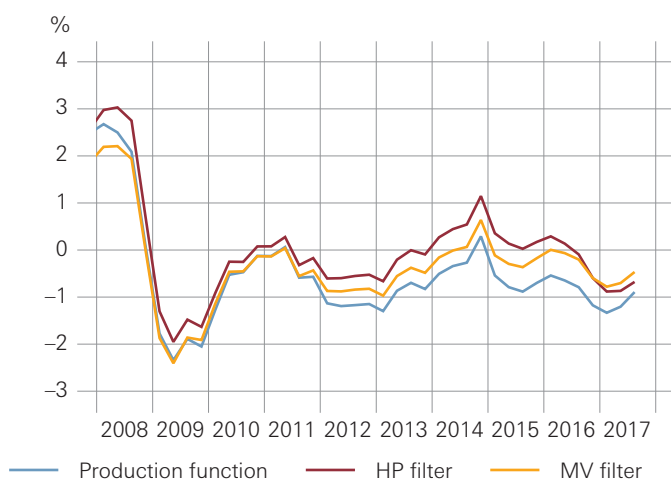
### FULL-TIME EQUIVALENT JOBS

Beginning of period = 100



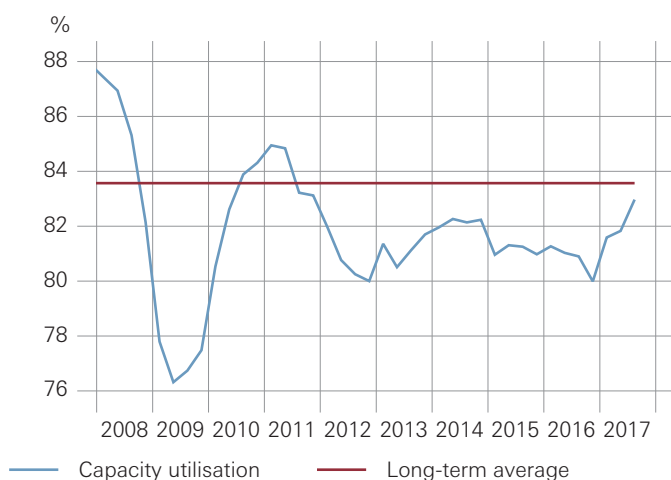
Source: SFSO; seasonal adjustment: SNB

Chart 3.7

**OUTPUT GAP**

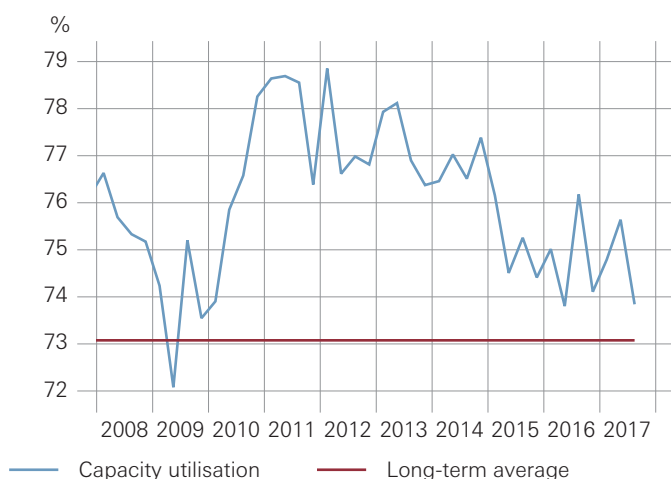
Source: SNB

Chart 3.8

**CAPACITY UTILISATION IN MANUFACTURING**

Source: KOF Swiss Economic Institute

Chart 3.9

**CAPACITY UTILISATION IN CONSTRUCTION**

Source: KOF Swiss Economic Institute

**CAPACITY UTILISATION****Negative output gap**

The output gap, which is defined as the percentage deviation of observed GDP from estimated aggregate potential output, shows how well the production factors in an economy are being utilised. The negative output gap has recently narrowed further. Potential output as estimated by means of a production function showed an output gap of  $-0.9\%$  for the third quarter, compared with  $-1.2\%$  in the previous quarter. Estimates using other methods to establish potential output (Hodrick-Prescott filter and multivariate filter) suggest a somewhat narrower, but also negative output gap (cf. chart 3.7).

**Surveys show lower level of underutilisation**

According to the KOF survey, utilisation of technical capacity in manufacturing increased in the third quarter by 1.1 percentage points to 83.0%. Owing to this significant increase, capacity utilisation in manufacturing was just slightly below its long-term average (cf. chart 3.8). While machine utilisation in construction has recorded a marked decline, it remains above its long-term average (cf. chart 3.9). As for the different services industries, the surveys point to an average level of capacity utilisation. Overall, these indicators of utilisation thus show a more positive picture than GDP-based measures of the output gap.

## OUTLOOK FOR THE REAL ECONOMY

In the context of strong economic growth worldwide, the outlook for Switzerland remains positive. The export-weighted PMI abroad has continued to improve in the past few months and has thus moved closer to the peak values of 2010 and 2011 (cf. chart 3.10). Export-oriented industries, in particular, will benefit from the stimulus from abroad. Surveys among manufacturing companies thus suggest a further improvement in the economic outlook (cf. chart 3.11). As a result, services industries, too, are likely to pick up momentum. Most other indicators also suggest that the recovery will continue. For example, there is evidence of a consolidation of demand on the labour market (cf. chart 3.12).

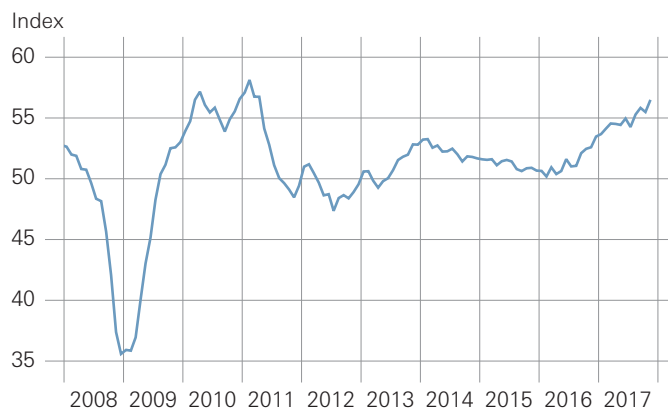
The SNB expects a positive economic trend in Switzerland in the medium term, too. This favourable outlook is based on a number of factors. First, according to the baseline scenario (cf. chapter 2), global economic developments will continue to stimulate the Swiss economy. Second, the depreciation of the Swiss franc in the past few months has resulted in improved price competitiveness. Third, the solid population growth is likely to persist for the time being. Fourth, low interest rates are supporting this growth.

For 2017, the SNB expects GDP growth of 1.0%. In 2018, growth is likely to rise noticeably; the SNB is expecting roughly 2.0%. The higher growth mainly reflects greater momentum in exports and equipment investment. Major uncertainties remain attached to the forecast, mostly in connection with developments abroad (cf. chapter 2).

Chart 3.10

### PMI ABROAD

Export-weighted, 27 countries

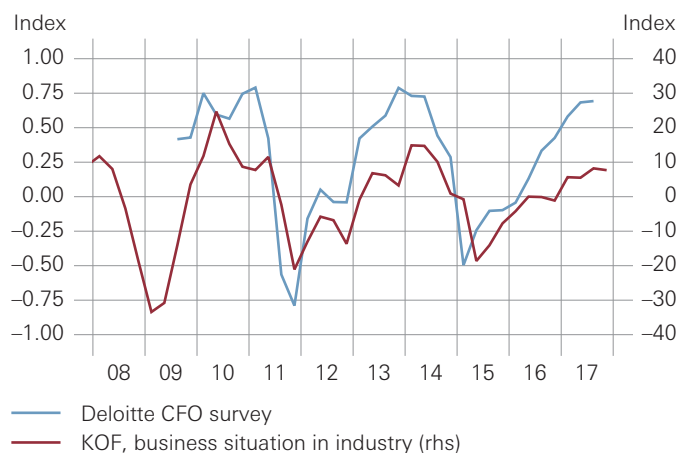


Sources: International Monetary Fund – Direction of Trade Statistics (IMF – DOTS), SNB, Thomson Reuters Datastream

Chart 3.11

### ECONOMIC OUTLOOK

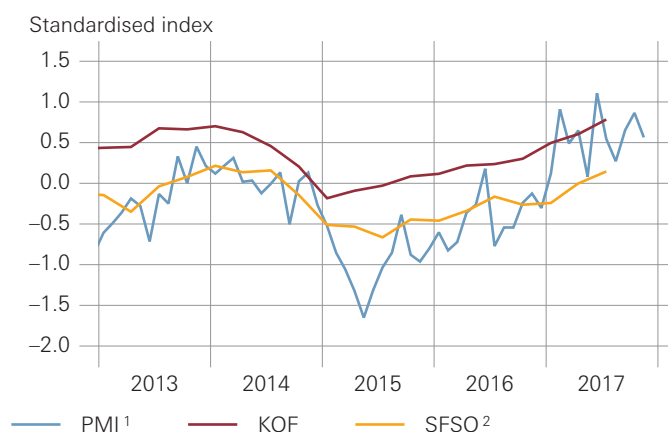
Next 6 (KOF) and 12 (Deloitte) months



Sources: Deloitte, KOF Swiss Economic Institute

Chart 3.12

### EMPLOYMENT LEADING INDICATORS



1 Monthly figures.

2 Seasonal adjustment: SNB.

Sources: Credit Suisse, KOF Swiss Economic Institute, SFSO

# Prices and inflation expectations

Rates of inflation rose slightly against the backdrop of a weakening Swiss franc. This was true for both consumer and producer prices. Core inflation rates were also up, albeit to a lesser extent than the unadjusted rates.

Inflation expectations remained largely unchanged, persisting within a range that is consistent with the SNB's definition of price stability.

## CONSUMER PRICES

### Slight rise in annual inflation rate

The annual inflation rate as measured by the national consumer price index (CPI) increased slightly in autumn 2017 (cf. chart 4.1). It stood at 0.8% in November 2017, after averaging 0.5% in the first three quarters of the year (cf. table 4.1). The increase was mainly due to the depreciation of the Swiss franc, which set in at the end of July.

### Higher inflation for imported goods and services

Inflation for imported goods and services rose threefold between August and November to 2.2%, owing predominantly to higher inflation for imported goods excluding oil products. Inflation contribution by oil products remained largely unchanged over the same period (cf. chart 4.1).

Table 4.1

## SWISS CONSUMER PRICE INDEX AND COMPONENTS

Year-on-year change in percent

	2016	2016	2017			2017		
		Q4	Q1	Q2	Q3	September	October	November
<b>Overall CPI</b>	<b>-0.4</b>	<b>-0.2</b>	<b>0.5</b>	<b>0.4</b>	<b>0.5</b>	<b>0.7</b>	<b>0.7</b>	<b>0.8</b>
Domestic goods and services	-0.1	0.1	0.3	0.3	0.4	0.4	0.4	0.3
Goods	-0.6	-0.1	0.0	-0.3	-0.3	-0.2	-0.2	-0.2
Services	0.0	0.1	0.4	0.4	0.6	0.6	0.6	0.5
Private services excluding housing rents	0.0	-0.1	0.2	0.4	0.3	0.2	0.2	0.4
Housing rents	0.3	0.8	1.1	1.1	1.3	1.4	1.4	0.7
Public services	-0.5	-0.6	-0.4	-0.4	0.1	0.3	0.3	0.3
Imported goods and services	-1.4	-0.9	1.3	0.6	0.8	1.3	1.4	2.2
Excluding oil products	-0.7	-1.2	-0.7	-0.1	0.2	0.6	0.9	1.3
Oil products	-6.1	1.4	17.3	6.1	5.5	6.8	5.4	8.4

Sources: SFSO, SNB

### Stable inflation for domestic goods and services

Inflation for domestic goods and services barely changed. While housing rents and other services made a positive contribution to inflation, prices for goods were again slightly below the year-back level (cf. chart 4.2).

### Slight decline in inflation for rents

Inflation for rents as measured by the index for housing rents dropped to 0.7% in November, down from 1.4% in August (cf. chart 4.3). The decline reflects both a base effect and reference interest rate developments. The reference interest rate, based on the average of current mortgage interest rates, receded by 0.25 percentage points in June 2017. It is a key variable for rent adjustments and normally impacts the index for housing rent with a lag of several months.

### Slight rise in core inflation rates

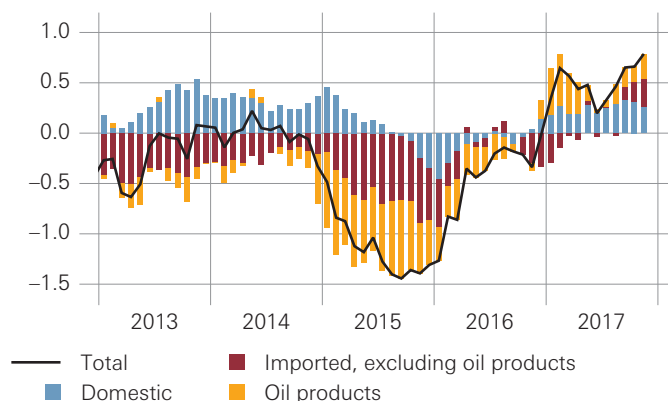
Similar to the CPI annual inflation rate, core inflation rates recorded a slight upward trend (cf. chart 4.4). The trimmed mean calculated by the SNB (TM15) and the SFSO's core inflation 1 (SFSO1) amounted to 0.5% and 0.6%, respectively, in November. They were thus slightly below the annual CPI inflation rate of 0.8%.

Both core inflation rates are based on the prices of a reduced version of the CPI basket of goods. SFSO1 excludes the same CPI products every month (fresh and seasonal products, energy and fuel), whereas TM15 excludes the products with the greatest price changes every month (15% at either end of the distribution curve of annual rates of change in product prices).

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.

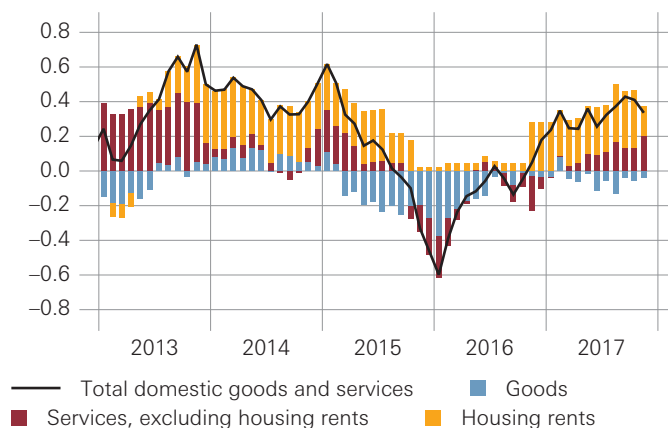


Sources: SFSO, SNB

Chart 4.2

### CPI: DOMESTIC GOODS AND SERVICES

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

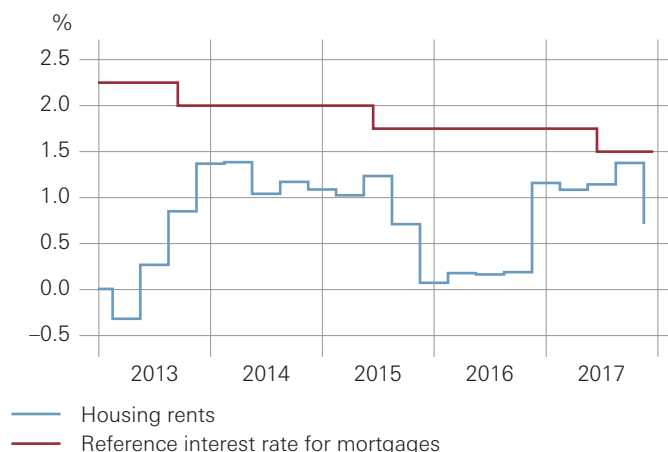


Sources: SFSO, SNB

Chart 4.3

### HOUSING RENTS

Year-on-year change

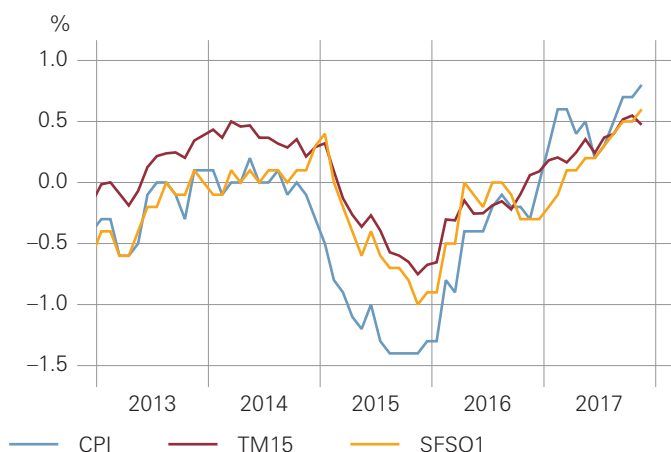


Sources: Federal Office for Housing (FOH), SFSO

Chart 4.4

**CORE INFLATION RATES**

Year-on-year change

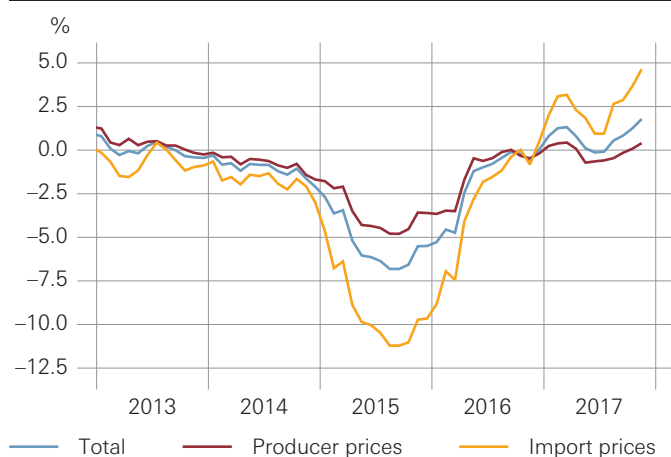


Sources: SFSO, SNB

Chart 4.5

**PRODUCER AND IMPORT PRICES**

Year-on-year change

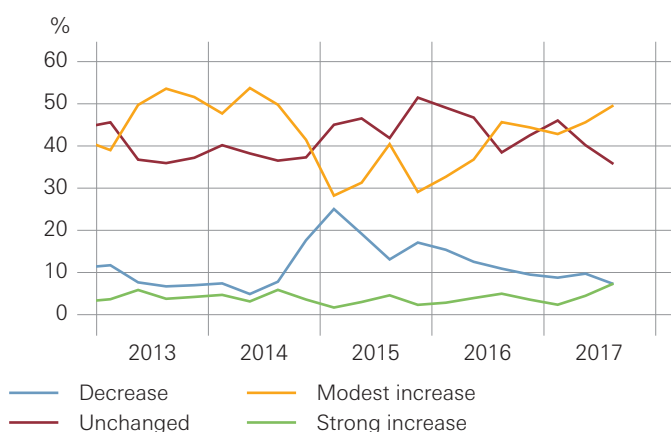


Source: SFSO

Chart 4.6

**PRICE EXPECTATIONS**

Survey of households on expected movements in prices for coming 12 months



Sources: SECO, SNB

**PRODUCER AND IMPORT PRICES****Exchange rate drives import prices**

In November, the index of producer and import prices was 1.8% higher than the year before (cf. chart 4.5). Influenced by the Swiss franc's depreciation, import prices rose significantly over the past few months. Producer prices, by contrast, remained close to last year's level.

**INFLATION EXPECTATIONS****Inflation expectations in price stability territory**

Inflation expectations continue to be in the low positive range. They thus remain consistent with price stability, which the SNB equates to a rise in the CPI of less than 2% per year.

**Short-term expectations largely unchanged**

The quarterly survey of households conducted by SECO shows that a majority of respondents anticipate an increase in prices over the next 12 months (cf. chart 4.6), while the remainder expect that prices will remain more or less unchanged. The proportion of households expecting prices to rise was slightly up in October 2017, whereas the share of those anticipating unchanged or lower prices declined marginally.

According to the joint monthly financial market surveys by CFA Society Switzerland and Credit Suisse, 58% of the economists and analysts questioned in November expect inflation rates to persist at their present level in the next six months. The remaining 42% anticipate a rise in inflation. These figures have changed only slightly since the summer.

Talks held by the SNB's delegates for regional economic relations with companies from all parts of Switzerland present a similar picture. On average, in the fourth quarter, the company representatives expected annual inflation to stand at 0.6% in six to twelve months, compared to 0.5% in the previous quarter.

**Longer-term expectations slightly above short-term expectations**

Longer-term inflation expectations were again slightly higher than short-term inflation expectations. Participants in the CFO survey by Deloitte, which was conducted in the third quarter of 2017, anticipate an inflation rate of 1.0% in two years' time. Company representatives interviewed by the SNB's delegates put the rate of inflation in three to five years at 1.2%, up from the 1.0% predicted in the previous quarter.

## 5 Monetary developments

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At its monetary policy assessment of mid-September 2017, the SNB left its expansionary monetary policy unchanged. This means that, over the last three months, monetary policy has continued to be based on the negative interest rate on sight deposits held at the SNB and on the SNB's willingness to intervene in the foreign exchange market as necessary.

In recent months, short and long-term interest rates have hardly changed. The three-month Libor rate was on a par with the SNB's negative interest rate, while the yield on ten-year Confederation bonds hovered around 0% to -0.2%.

There has, however, been movement with respect to exchange rates. At the end of July, the Swiss franc weakened considerably against the euro; in the months that followed, it also lost ground against the US dollar. Although the overvaluation of the franc has decreased, the currency is still highly valued.

As in the previous quarter, the M3 monetary aggregate and bank loans have grown at a moderate pace.

### SUMMARY OF MONETARY POLICY SINCE THE LAST ASSESSMENT

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#### **Expansionary monetary policy remains unchanged**

The SNB confirmed its expansionary monetary policy stance at its assessment on 14 September 2017. It decided to leave the target range for the three-month Libor unchanged at between -1.25% and -0.25%. It also left unchanged, at -0.75%, the interest rate on sight deposits held by banks and other financial market participants at the SNB which exceed a given threshold. Furthermore, the SNB reaffirmed that it will remain active in the foreign exchange market as necessary, while taking the overall currency situation into consideration.

The negative interest rate and the SNB's willingness to intervene in the foreign exchange market serve to ease upward pressure on the Swiss franc. The SNB's monetary policy thus helps to stabilise price developments and support economic activity.

#### **Sight deposits at SNB virtually unchanged**

Since the monetary policy assessment of September 2017, total sight deposits held at the SNB have decreased slightly. In the week ending 8 December 2017 (last calendar week before the mid-December assessment), they amounted to CHF 575.9 billion, or CHF 3.1 billion less than in the last calendar week preceding the mid-September 2017 assessment (CHF 579 billion). Between the assessments in mid-September and mid-December 2017, they averaged CHF 577.9 billion. Of this amount, CHF 473.6 billion was accounted for by the sight deposits of domestic banks and the remaining CHF 104.3 billion by other sight deposits.

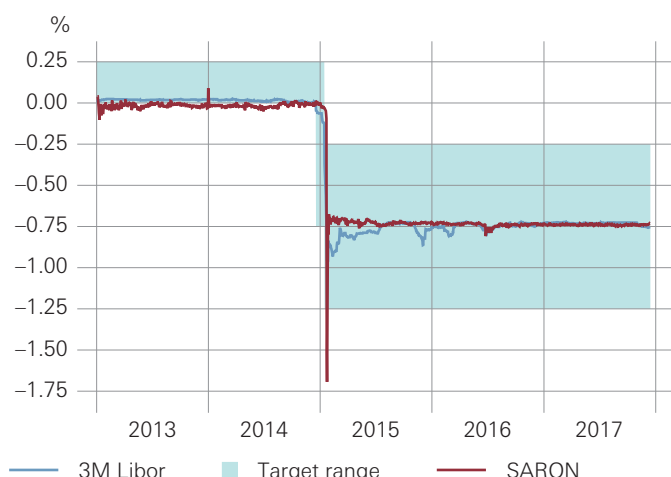
#### **High level of banks' surplus reserves**

Statutory minimum reserves averaged CHF 16 billion between 20 August and 19 November 2017. Overall, banks exceeded the minimum reserve requirement by some CHF 459.3 billion (previous period: CHF 471.2 billion) on average. Banks' surplus reserves have thus decreased slightly.



Chart 5.1

## MONEY MARKET RATES

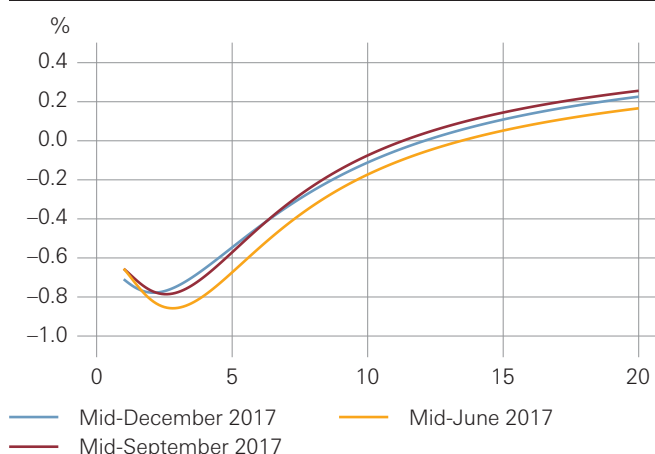


Sources: Bloomberg, SIX Swiss Exchange Ltd, SNB

Chart 5.2

## TERM STRUCTURE OF CONFEDERATION BONDS

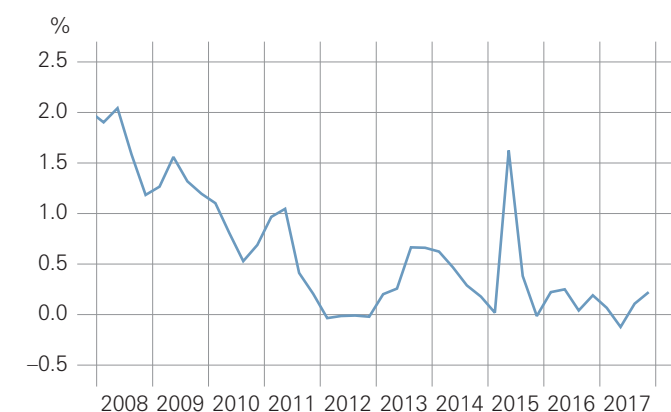
Years to maturity (hor. axis); Nelson-Siegel-Svensson method



Source: SNB

Chart 5.3

## ESTIMATED REAL INTEREST RATE

10-year Confederation bonds  
Inflation expectations estimated with VAR model

Source: SNB

## MONEY AND CAPITAL MARKET INTEREST RATES

### Money market rates practically unchanged

Conditions on the Swiss franc money market continue to be stable. Over the last few quarters, interest rates on secured (SARON) and unsecured (three-month Libor) money market transactions have hardly moved, remaining close to the rate on sight deposits held at the SNB, which has been  $-0.75\%$  since January 2015 (cf. chart 5.1).

### Long-term interest rates move sideways

The yield on ten-year Confederation bonds was similar to that in the previous quarter, fluctuating between just under  $-0.2\%$  and  $0\%$ . The sideways movement in the Confederation bond yield mirrored the trend in long-term bonds of other sovereigns. In mid-December, the return on ten-year Confederation bonds stood at  $-0.1\%$ .

### Almost no change in yield curve

The yield curve for Confederation bonds is virtually the same as three months earlier (cf. chart 5.2). Yields on Confederation bonds with terms of up to about 12 years continue to be negative.

### Long-term real interest rates still low

In December 2017, the estimated long-term real interest rate was low but positive (cf. chart 5.3). It was more or less unchanged compared to the previous quarter.

The real interest rate estimate is based on the development of the ten-year yield on Confederation bonds and inflation expectations for the same time horizon estimated with a vector autoregressive (VAR) model.



## EXCHANGE RATES

### Further weakening of Swiss franc

Since the September monetary policy assessment, the Swiss franc has lost ground against the major currencies (cf. chart 5.4). Against the euro, it weakened by more than 1%, despite the ECB's announcement at end-October that it would continue to pursue its expansionary monetary policy, as well as the bouts of market uncertainty caused by the referendum in Catalonia. At times, one euro was worth CHF 1.17, the highest value since the minimum exchange rate was discontinued in January 2015.

The Swiss franc also depreciated against the US dollar, the pound sterling and the Japanese yen. It lost just under 3% against the US dollar, and in mid-December was trading at 99 centimes to the dollar. The franc depreciated slightly more against the pound sterling, which was buoyed by the Bank of England raising its reference rate.

### Decline in trade-weighted exchange rate index

On a trade-weighted basis, the nominal external value of the Swiss franc fell by more than 1% between mid-September and mid-December (cf. chart 5.5). The slight countermovement in November was primarily driven by the exchange rate to the US dollar.

Over the same three-month period, the real trade-weighted external value of the Swiss franc fell somewhat more than the nominal rate. This reflects the inflation differential vis-à-vis other countries: inflation in Switzerland is lower than elsewhere.

### Real trade-weighted exchange rate still high

The real trade-weighted exchange rate index calculated by the SNB (on the basis of consumer prices) is now back at roughly the same level as before the discontinuation of the minimum exchange rate, although it remains above its long-term average. The same is true for the indices calculated by the Bank for International Settlements (BIS) and the International Monetary Fund (IMF) (cf. chart 5.6).

Chart 5.4

### EXCHANGE RATES

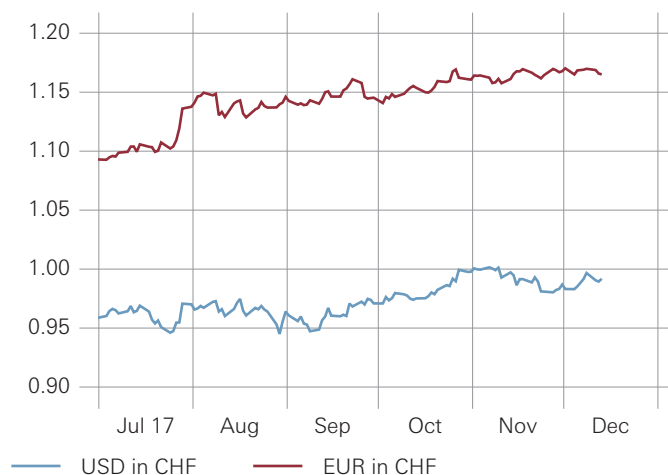


Chart 5.5

### NOMINAL EXTERNAL VALUE OF SWISS FRANC

December 2000 = 100



Chart 5.6

### REAL EXTERNAL VALUE OF SWISS FRANC

December 2000 = 100

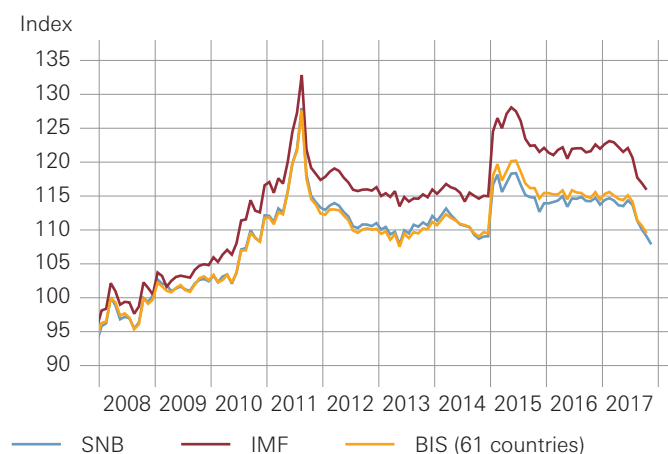
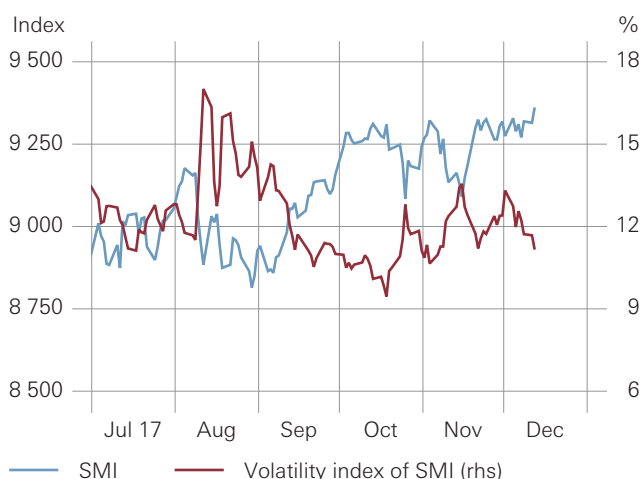


Chart 5.7

### SHARE PRICES AND VOLATILITY

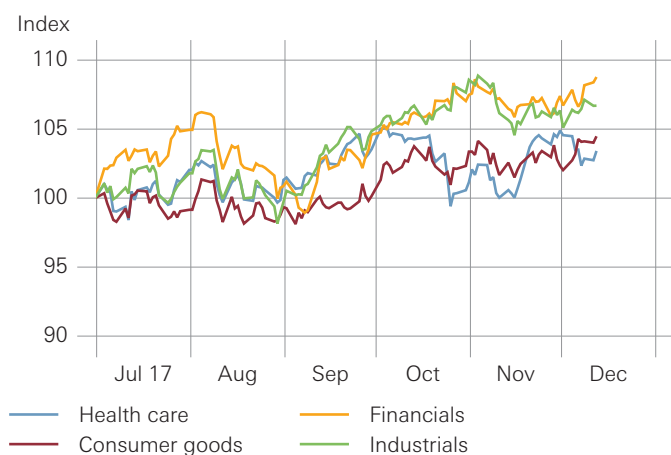


Sources: Bloomberg, Thomson Reuters Datastream

Chart 5.8

### SELECTED SPI SECTORS

1 July 2017 = 100

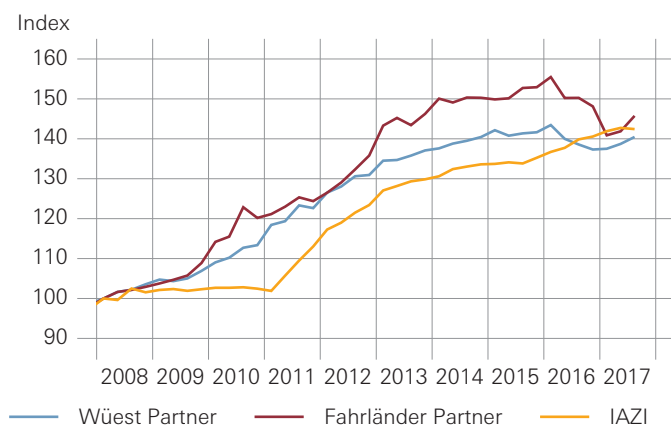


Source: Thomson Reuters Datastream

Chart 5.9

### TRANSACTION PRICES, PRIVATELY OWNED APARTMENTS

Nominal (hedonic), beginning of period = 100



Sources: Fahrlander Partner, IAZI, Wuest Partner

## SHARE AND REAL ESTATE PRICES

### Slight rise in share prices

The Swiss Market Index (SMI) rose by around 5% between the beginning of September and mid-December, having shown little change in the preceding months (cf. chart 5.7). As such, its movements were in line with those in the main equity indices in Europe and North America.

Although in December 2017 the SMI rose to a new high for the year, this was nonetheless slightly below the record level of June 2007 or the multi-year high of August 2015.

### Market uncertainty on the wane

The volatility index derived from options on SMI futures contracts is used to gauge uncertainty on the stock market. It rose slightly in August, on the back of growing concern about an escalation of tensions over North Korea, and has since fallen back to its previous low level (cf. chart 5.7).

### Moderate differences between SPI sub-indices

The main sub-indices of the Swiss Performance Index (SPI) fluctuated moderately, but developed on largely parallel paths during the second half of the year (cf. chart 5.8). Whereas the financials and industrials sub-indices briefly rose somewhat more strongly than health care and consumer goods, the differences were nevertheless small.

### Rise in residential property prices

Most available price indices for privately owned apartments and single-family houses rose slightly in the second and third quarters. The rise encompassed almost all regions and price segments.

Despite the recent increase in residential property prices, the available indices show that a marked stabilisation has taken place in recent years. Chart 5.9 shows transaction prices for privately owned apartments. While two of the three indices shown have recently posted slight gains, they are still well below their peak values.

## MONETARY AND CREDIT AGGREGATES

### Slight decline in monetary base

The monetary base, which consists of banknotes in circulation and sight deposits of domestic banks held at the SNB, has marginally declined over recent months and stood at an average of CHF 551.9 billion in November 2017 (cf. chart 5.10).

This slight decline primarily reflects movements in domestic banks' sight deposits, which fell by CHF 9.5 billion between June and November 2017. However, other sight deposits at the SNB increased during the same period. Total sight deposits at the SNB were largely unchanged for the second half of the year.

### Stable growth in broad monetary aggregates

Despite the stabilisation of the monetary base, the M1, M2 and M3 monetary aggregates grew further (cf. chart 5.11). These broader monetary aggregates, which measure the money supply in the hands of the public, are currently growing irrespective of fluctuations in the monetary base as the banks have a large amount of liquidity; in other words, sight deposits held by banks at the SNB substantially exceed the statutory minimum reserve requirement.

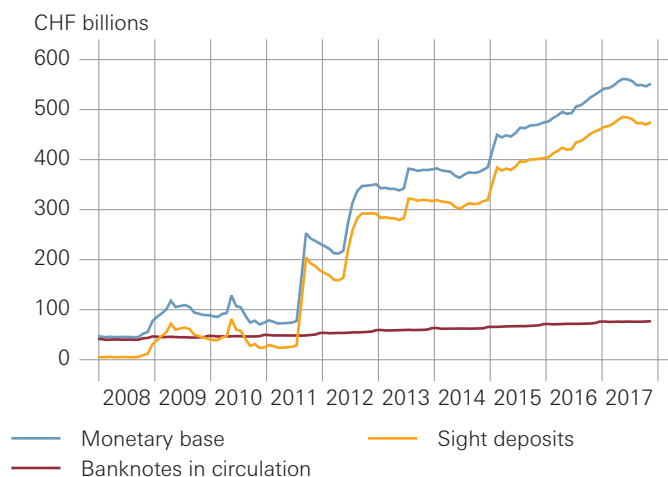
At the end of November, M1 (cash in circulation, sight deposits and transaction accounts) was 8.1% above its level a year earlier, while M2 (M1 plus savings deposits) had risen by 4.8% and M3 (M2 plus time deposits) by 4.4% over the same period (cf. table 5.1).

### Parallel movement of monetary aggregates and loans

Over the last few years, Swiss franc-denominated loans by domestic banks have developed roughly in parallel with domestic customers' Swiss franc deposits, which, together with cash in circulation, make up the M3 monetary aggregate. Chart 5.12 plots the cumulative changes in Swiss franc balance sheet positions of domestic banks since the beginning of 2014. During this period, loans grew by CHF 86 billion, and customer deposits by CHF 89 billion. Moreover, there was a noticeable increase in the Swiss franc liquidity of domestic banks, i.e. sight deposits held at the SNB. Yet this increase in liquidity did not result in either an acceleration in lending growth or an expansion of customer deposits beyond what was caused by the granting of loans.

Chart 5.10

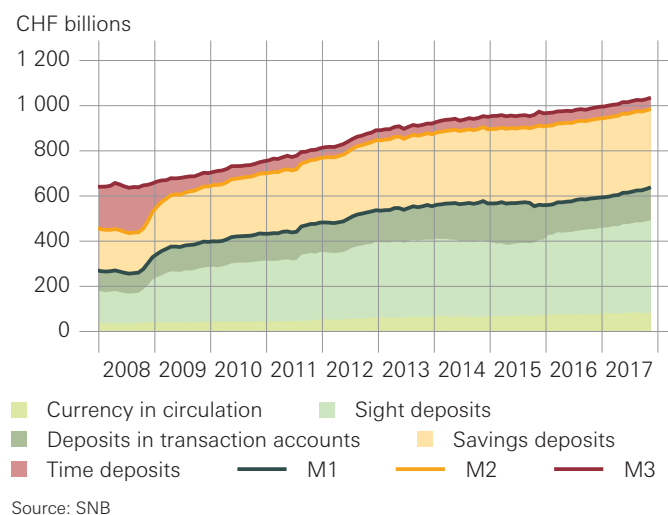
### MONETARY BASE



Source: SNB

Chart 5.11

### MONETARY AGGREGATES



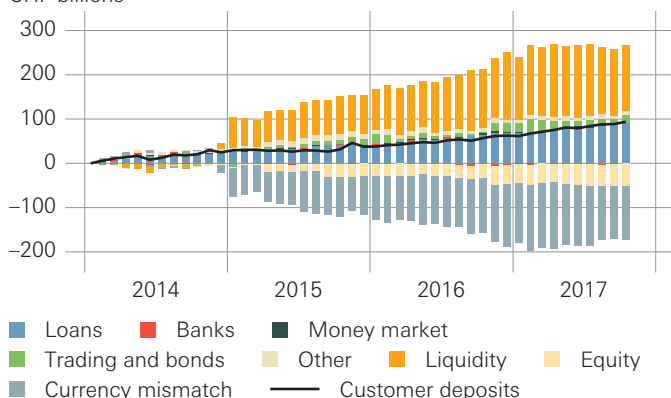
Source: SNB

Chart 5.12

### DEPOSITS COUNTERPARTS, CUMULATIVE CHANGE SINCE JANUARY 2014

Domestic bank offices, domestic positions in CHF

CHF billions



Source: SNB

The expansion in domestic banks' liquidity is offset primarily by the currency mismatch item. This is an offsetting item in the balance sheet, and is made up of domestic banks' net domestic and foreign liabilities in foreign currency, as well as foreign liabilities in Swiss francs (although the latter are negligible). As the banks usually hedge their exchange rate risk, a rise in the currency mismatch item indicates that other economic agents have increased their Swiss franc exposure in the form of derivatives (for a general discussion of the method, cf. 'The effect of the monetary base expansion on the balance sheet of domestic banks' by L. Altermatt and R. Baeriswyl, SNB, *Quarterly Bulletin* 1/2015, pp. 34 et seq.).

Table 5.1

### MONETARY AGGREGATES AND BANK LOANS

Year-on-year change in percent

	2016	2016	2017			2017		
		Q4	Q1	Q2	Q3	September	October	November
<b>M1</b>	<b>2.1</b>	<b>5.8</b>	<b>5.8</b>	<b>6.4</b>	<b>6.6</b>	<b>6.9</b>	<b>7.2</b>	<b>8.1</b>
<b>M2</b>	<b>2.8</b>	<b>3.5</b>	<b>3.7</b>	<b>4.1</b>	<b>4.4</b>	<b>4.6</b>	<b>4.5</b>	<b>4.8</b>
<b>M3</b>	<b>2.3</b>	<b>2.6</b>	<b>3.1</b>	<b>3.7</b>	<b>4.1</b>	<b>4.3</b>	<b>4.2</b>	<b>4.4</b>
<b>Bank loans, total</b> <sup>1, 3</sup>	<b>2.0</b>	<b>2.6</b>	<b>2.7</b>	<b>2.5</b>	<b>2.6</b>	<b>2.5</b>	<b>2.9</b>	
Mortgage claims <sup>1, 3</sup>	2.6	2.6	2.6	2.6	2.6	2.7	2.7	
Households <sup>2, 3</sup>	2.8	2.6	2.6	2.6	2.5	2.5	2.6	
Private companies <sup>2, 3</sup>	2.6	2.7	3.2	3.2	3.5	4.0	3.6	
Other loans <sup>1, 3</sup>	-1.1	2.5	2.9	2.2	2.3	1.4	4.4	
Secured <sup>1, 3</sup>	0.0	7.2	8.0	5.0	4.6	4.0	4.3	
Unsecured <sup>1, 3</sup>	-2.0	-0.7	-0.7	0.2	0.7	-0.4	4.5	

1 Monthly balance sheets (domestic bank offices, domestic positions, all currencies).

2 Credit volume statistics (domestic bank offices, domestic positions, 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: SNB

### Stable growth in mortgage lending

Banks' mortgage claims, which make up roughly 85% of all bank lending to domestic customers, recorded a 2.6% year-on-year increase in the third quarter of 2017 (cf. table 5.1). Thus, since the beginning of 2016, growth in mortgage claims has been largely stable, against a background of historically low mortgage interest rates (cf. chart 5.13).

Other loans were up by 2.3% year-on-year in the third quarter. However, if short-term fluctuations are disregarded, other loans are still at roughly the same level as ten years ago.

### Rising loan ratio

The strong growth in lending recorded in the last ten years is reflected in the loan ratio, i.e. the ratio of bank loans to nominal GDP (cf. chart 5.14). After a sharp rise in the 1980s, this ratio remained largely unchanged until 2008. Since the onset of the financial and economic crisis, it has increased again substantially. Despite the slowdown in lending growth that began in 2015, bank loans continue to grow more strongly than nominal GDP. Thus, the risks for financial stability arising from the increase in the loan ratio continue to be present.

Chart 5.13

### MORTGAGE CLAIMS AND INTEREST RATES

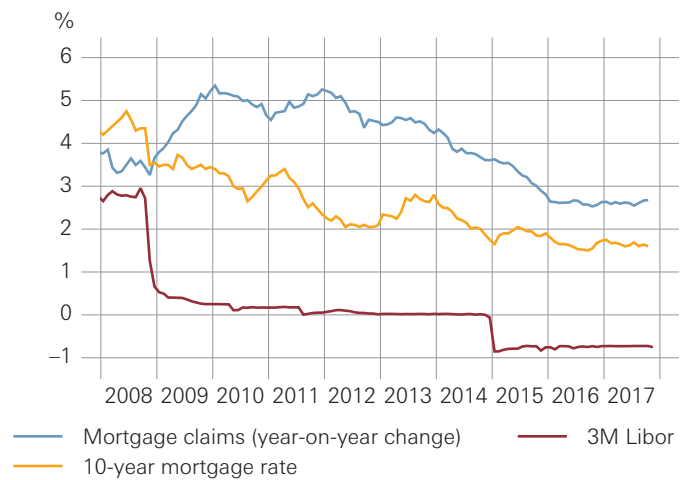
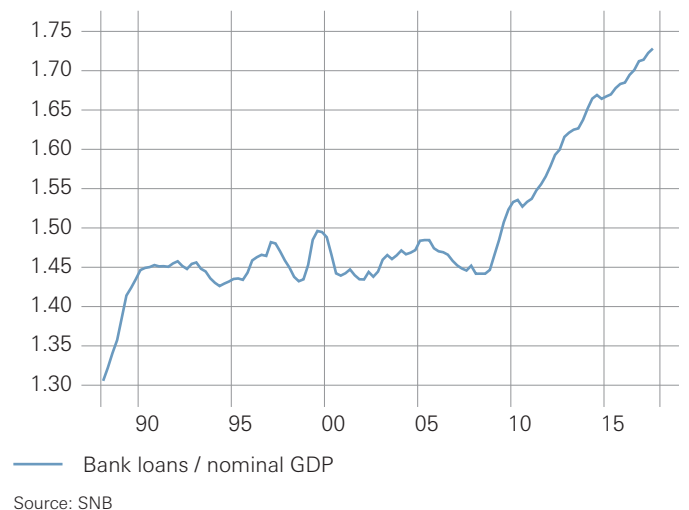


Chart 5.14

### BANK LOANS RELATIVE TO GDP



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# Business cycle signals

## Results of the SNB company talks

### **Fourth quarter of 2017**

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

The appraisals presented here are based on discussions between the SNB's delegates for regional economic relations and company managers. A total of 237 company talks were conducted between mid-October and the end of November.

#### **Regions**

Geneva  
Italian-speaking Switzerland  
Mittelland  
Northwestern Switzerland  
Eastern Switzerland  
Vaud-Valais  
Central Switzerland  
Zurich

#### **Delegates**

Jean-Marc Falter  
Fabio Bossi  
Roland Scheurer  
Daniel Hanimann  
Urs Schönholzer  
Aline Chabloz  
Walter Näf  
Rita Kobel

## Key points

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- Discussions with company representatives indicate that growth in the Swiss economy was robust and broad-based in the fourth quarter and that this momentum will be maintained in the first half of 2018.
- Quarter-on-quarter, real turnover once again increased noticeably – and over the corresponding quarter a year ago the increase was substantial.
- Companies' utilisation of technical production capacity has almost normalised, although in a few industries the situation remains unsatisfactory.
- Margins continue to improve, particularly in manufacturing. However, overall, they still remain slightly below what company representatives regard as usual. The situation continues to vary considerably between industries.
- In the coming six months, company representatives expect somewhat stronger advances in real turnover due in large part to the favourable international economic environment and the weakening of the Swiss franc. Companies are therefore planning to increase investment slightly and make some additional hires; the lack of specialised staff was mentioned more frequently than in the past.
- Overall, risk perception has eased. Apart from geopolitical risk, company representatives are now expressing more concern about imbalances on the stock exchange and the real estate market.

## CURRENT SITUATION

### Strong turnover growth continues

Discussions with companies suggest that economic growth in Switzerland has continued to accelerate. Since mid-year, a number of companies have experienced a significant upturn in business; as in the previous quarter, this has been especially noticeable in manufacturing.

Company representatives report robust quarter-on-quarter growth in real turnover, i.e. turnover adjusted for changes in sale prices (cf. chart 1; for guidance on interpreting the charts, see the relevant section at the end of this report). A comparison with the corresponding quarter a year ago is even more striking. All three sectors – services, manufacturing and construction – are contributing equally to this favourable overall picture.

Export industries are experiencing continued positive or even improved momentum in business, with companies supplying goods to the automotive, medical products and telecom sectors recording particularly good results. Sales to Europe are doing well across a wide geographical area and company representatives also mention the US and Asia as drivers of current developments. Signals from Russia, on the other hand, are mixed.

In addition to the success of the export sector, domestic turnover is also trending better than in previous quarters.

### Utilisation of production capacity normal

Utilisation of technical production capacity has now almost normalised. The gradual improvement in utilisation began in the second half of 2016 (cf. chart 2).

Half of the companies interviewed rate their technical capacity utilisation as normal. Of the remaining 50%, around half report underutilisation and half overutilisation. Certain firms have added more shifts to meet higher demand. In some cases, staff are working more overtime or at weekends.

### Staff numbers appropriate

At present, staff numbers are judged to be in line with needs in all three sectors, although in isolated cases there are indications that they are a little too low. By contrast, during 2016, staff numbers were still considered somewhat too high.

Recruitment problems have increased during the quarter under review, particularly in the services sector. Apart from the improvement in the domestic labour market, there have been fewer job applications from Germany, Austria and Italy, where the economic situation has picked up.

### Margins normalise

Margins continue to follow a trajectory of normalisation that began in early 2016. Key factors in this development are rising turnover volumes as well as, more recently, the potential for price increases. While, overall, profit margins remain slightly below what company representatives regard as usual, their general assessment is on a par with their assessment before the discontinuation of the minimum exchange rate against the euro. However, margins continue to vary widely within the sectors and between companies.

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: SNB

Chart 2

### CAPACITY UTILISATION



Current utilisation of technical capacity or infrastructure compared to a normal level. A positive (negative) index value signals a higher (lower) utilisation than normal.  
Source: SNB



## DEVELOPMENTS IN INDIVIDUAL INDUSTRIES

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In wholesale trade, real turnover is quite significantly up, both quarter-on-quarter and also with respect to the year-back quarter. This development is less pronounced in retail trade, which continues to be affected by structural changes such as the shift to e-commerce. Conventional retailing therefore faces a challenging operating environment with considerable pressure on margins. Notwithstanding this, price erosion appears to have come to a halt in the quarter under review.

Once again, the finance sector has made a positive showing with contributions from commission, trading and interest business. Utilisation of bank infrastructure (office and sales space as well as IT capacity) has improved, although margins remain below what is considered normal.

In the hospitality industry, business has mostly been good since summer. Various regions have recorded an increase in tourism, particularly from Asia but also from the US. Switzerland's reputation as a safe destination has been a decisive factor in driving demand. Margins are within the normal range due to cost-cutting – as well as price increases in some areas.

The vast majority of transportation and logistics companies are showing sound business results.

The business situation remains favourable for the ICT industry, with turnover substantially up quarter-on-quarter and with respect to the year-back quarter. Business drivers include digitalisation, automation and regulation, although margin pressure is still on the high side.

In manufacturing, almost all industries report higher turnover than in the previous quarter. Overall, utilisation is still slightly below normal levels. A noticeable improvement in the watchmaking industry and its supplier companies is evident, although margin pressures continue. Companies in printing and packaging as well as in mechanical engineering are recording tighter-than-usual margins.

In construction, business performance has retained its momentum in both the building industry and ancillary trades, with residential construction as the main driver. However, margins are under severe pressure due to intense predatory competition. In structural engineering, the low barriers to market entry are often cited as the reason for this intense competition.

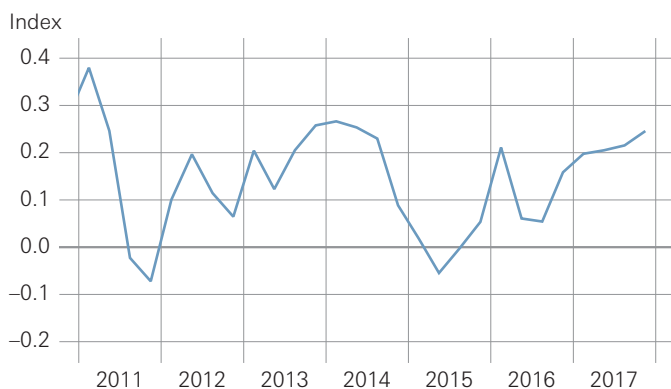
Chart 3

**EXPECTED TURNOVER**

Expected developments in real turnover in the coming six months. Positive (negative) index values indicate higher (lower) turnover expectations.

Source: SNB

Chart 4

**EXPECTED CAPACITY UTILISATION**

Expected developments in utilisation of technical capacity or infrastructure in the coming six months. Positive (negative) index values indicate higher (lower) utilisation expectations.

Source: SNB

Chart 5

**EXPECTED EMPLOYMENT**

Expected developments in staff numbers in the coming six months. Positive (negative) index values indicate higher (lower) expectations.

Source: SNB

**OUTLOOK****Broad-based confidence**

The company representatives interviewed by the SNB are distinctly optimistic about their business prospects for the coming six months. Overall, a further increase in real turnover is expected (cf. chart 3), attributable to services and to manufacturing. Factors responsible for this assessment include the favourable international economic situation, improved exchange rate conditions (namely the stronger euro), and the clear impact of efficiency drives. Orders are looking extremely positive for many companies in 2018.

The confidence of company representatives is also reflected in slightly higher expected utilisation of technical capacity and/or infrastructure in the next six months (cf. chart 4). Moreover, their willingness to invest – both in equipment and in buildings – is greater than last year. Almost a third of the companies investing in equipment are simultaneously expanding their production capacity.

In the coming six months, the company representatives expect both purchase and sales prices to move upwards – in the latter case, for the first time since 2011. Many of them attribute this to higher raw material prices and the weaker Swiss franc; they also note that it is easier to push through sales price increases than it has been in the past.

**Moderate staff increases planned**

The prospect of higher capacity utilisation as well as the slight shortage of personnel indicated in some cases are also affecting companies' recruitment plans, with company representatives planning moderate increases in staff numbers (cf. chart 5). This is particularly true of the services sector. In order to counter staff shortages, some temporary hires are being contracted on a permanent basis. In certain industries such as printing, companies will reduce staff numbers for structural reasons.

**Rising wages**

Based on the information obtained in the talks, already planned salary increases for 2018 come to an average of 1.1% and a number of companies intend to grant a general bonus for the first time in many years.

## ENVIRONMENT AND RISKS

Companies rate uncertainty in their operating environment as relatively low. Potential risks mentioned include geopolitical risk, protectionist trends and a certain fragility in the global economic recovery. Risk perception with regard to Europe has eased, although a number of company representatives point to unsolved structural problems. The consequences of Brexit remain difficult to assess.

Many company representatives find the complex domestic regulatory environment to be very burdensome. Other risks highlighted include the increasing lack of specialised staff and a renewed appreciation of the Swiss franc. In a large number of industries, company representatives mention digitalisation, which is seen as both a risk and an opportunity. Some company representatives, particularly in the finance industry, draw attention to threats associated with cybercrime.

Some company representatives see persistently low interest rates as a problem for pension funds. They express increasing unease about the impact on the real estate market, where institutional investors are embarking on large investment projects despite the increase in vacant housing units. More and more company representatives are sceptical about stock exchange developments.

Although most company representatives describe the weakening of the Swiss franc against the euro since the summer as 'helpful', they remain cautious, noting that the development will have to be lasting to have a meaningful impact.

### About this report

#### Approach

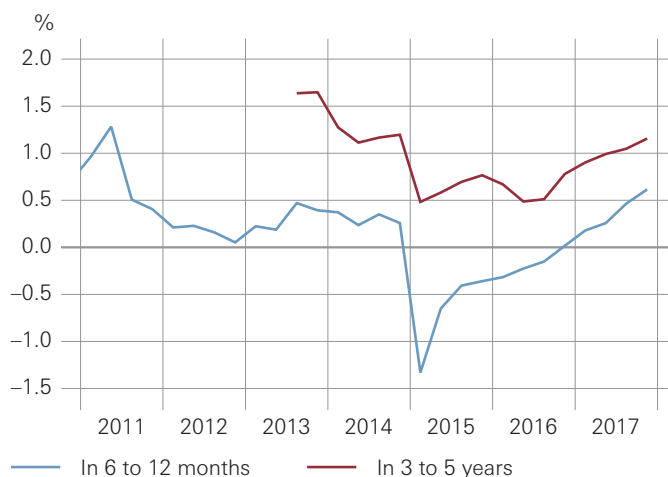
Each quarter, the SNB's delegates for regional economic relations hold talks with managers of companies throughout Switzerland. The main results of these discussions are summarised in the 'Business cycle signals' report.

Approximately 240 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 sector and agriculture are not taken into consideration. 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 a part of the received qualitative information according to a numeric scale. This enables the results to be aggregated and represented graphically.

Chart 6

### EXPECTED INFLATION



Source: SNB

### INFLATION EXPECTATIONS

As part of the exchange of views, the delegates regularly ask company representatives about their short and long-term inflation expectations (in terms of the consumer price index) as consumers.

In the fourth quarter of 2017, the upward trend in short and long-term inflation expectations, which had begun during 2015, continued. Expectations for the next six to twelve months now average 0.6%, compared to 0.5% in the previous quarter (blue line in chart 6). Mid-term inflation expectations (time horizon of 3–5 years) are 1.2%, compared to 1.0% in the previous quarter (red line in the chart).

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, particular 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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## Acknowledgements

The SNB would like to thank the representatives from around 900 companies that have consented to take part in interviews with the delegates for regional economic relations during the course of 2017. In doing so, they have made a significant contribution to the evaluation of economic developments. The companies listed below have agreed that their names may be published:

---

### A

A. Boss & Co AG. Aare Energie AG. Aargauische Kantonalbank. ABB Schweiz AG. AbbVie AG. Abicht Gruppe AG. Accenture AG. Accuro. Acino. Adam Touring GmbH. adesso Schweiz AG. Aduno Holding AG. Aebi & Vincent Architekten SIA AG. AEK onyx Gruppe. Aerne Engineering AG. Aerni Gruppe. Aeschlimann AG, Décolletages. AEW Energie AG. AF-Consult Switzerland AG. Agility Logistics AG. AGZ Ziegeleien AG. AHG-Holding AG. Albinati Aeronautics SA. Albiro AG. Aligro-Demaurex & Cie SA. Alpex Pharma SA. Alpha Solutions AG. Alpinamed AG. amag. Amalthea Holding AG. Ameropa AG. AMI Immobiliare SA. Amici Caffè AG. Ammann Schweiz AG. amPuls Marktforschung AG. André Repond SA. Andrey Transports SA. Andritz Hydro AG. Anton Häfliger AG. Aptar Mezzovico SA. Arcolor AG. Aregger AG Bauunternehmung. Argor-Heraeus SA. Argus der Presse AG. Aricon-Küng Treuhand AG. Ascensia Diabetes Care Holding. Assos of Switzerland GmbH. Atos Consulting SA. Audemars Holding SA. Autogrill Schweiz AG. Autoneum Holding AG. AVS Systeme AG.

### B

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berg. Bosch Packaging Systems AG. Bosch Rexroth Schweiz AG. Boschung Holding SA. Bossard AG. Bossi e Bersani SA. Boulangerie Michellod SA. Boulangerie-Pâtisserie Wolfisberg SA. Boutique Hotel Villa Orselina. Brac Werke AG. brack.ch. Brandis Finanz Holding AG. Brauhaus Sternen AG. Brevan Howard Investment. Brolliet SA. Bruker BioSpin AG. BSB + Partner Ingenieure und Planer AG. Bucher Travel Inc. Bunge SA. Burckhardt of Switzerland AG. Bureau d'ingénieurs civils Daniel Willi SA. Burger Söhne AG.

### C

Café de Grancy Sàrl, Souffood SA, Tricycle SA. Cafina AG. Caisse d'Epargne CEC SA. Calendaria AG. Camillo Vismara SA. Candrian Catering AG. Canoo Engineering AG. Capital Group. Caprez Ingenieure AG. Carlo Bernasconi AG. Carrosserie A. Wenger & Cie. Casinò Admiral SA. Casino du Lac Meyrin SA. Casinò Lugano SA. Casino Neuchâtel SA. Casram SA. Castello del Sole Ascona. Caterpillar Sàrl. CCHE Architecture et Design SA. Cebi Micromotors Switzerland SA. Cendres & Métaux SA. Censi & Ferrari SA. Chalet de Gruyères SA. Chaletbau Matti Holding AG. Chaussures Aeschbach SA. Chiquita Brands International Sàrl. Chocolats Camille Bloch SA. Christian Cavegn AG. Cilag AG. Ciolina AG. Cipag SA. Clinica Ars Medica. Coloral SA. Comet AG. Commerzbank Schweiz. Compass Group (Schweiz) AG. Confiserie Sprüngli AG. Congress Centre Kursaal Interlaken AG. Consitex SA. Contrinex SA. Coop. Cornèr Banca SA. Cornu & Cie SA. Coutaz SA. Creabeton Matériaux SA. Création Baumann AG. Credit Suisse AG. Cremo SA. Crevoisier SA. Cross Systems SA. CSC Impresa di costruzione SA. CSD Ingénieurs. CTC Analytics AG.

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Daniel Jenny & Co. Darest Informatic SA. Datamars SA. De Capitani Baugeschäft AG. De Martin AG Surface Technology. Debiopharm Group. Debrunner Acifer AG St. Gallen. DeLaval AG. Dell EMC. Delta Möbel AG. Deltacarb SA. Desinfesta AG. Detech SA. Deutsche Bank (Suisse) SA. DGS Druckguss Systeme AG. DHL Logistics (Schweiz) AG. Die Mobiliar. Dietiker AG. Dietsche MontageProfis Holding AG. DIWISA Distillerie Willisau AG. dmb SA. Dorier SA. dormakaba Gruppe. Dreieck-Transfer Transport und Logistik AG. DSM Nutritional Products Ltd. Duferco SA. Dumont & Dupraz SA. Dupasquier & Cie SA. Dupin 1820. Dyconex AG.

## E

E. Kalt AG, Klima- und Energietechnik. E.M.S. Electro Medical Systems SA. EAO Group. Ebauches Micromécanique Precitrame SA. Eberhard Unternehmungen. ebi-pharm ag. EBL. Ecofin Holding AG. Edilcentro Wullschleger SA. EKT Holding AG. Elbau Küchen AG. Elektro Compagnoni AG. Element AG. Elesta GmbH. ElringKlinger Abschirmtechnik (Schweiz) AG. Emanuele Centonze Holding SA. Emch AG Bauunternehmung. Emch + Berger AG Bern. Emil Frey AG. Emile Egger & Cie SA. emmental versicherung. Emmi AG. EnAlpin AG. Energie Wasser Bern. Energie Zürichsee Linth AG. énergies sion région. Engelberger Druck AG. Entrecôte Fédérale & Brasserie Obstberg. Entreprise Belloni SA. Enz Technik AG. Erbas SA. Erbicor SA. ERI Bancaire SA. Ernst & Young AG. Ernst Frey AG. Esco SA. Essemtec AG. EuroAirport Basel, Mulhouse, Freiburg. Evatec AG. Eventmore SA. Expersoft Systems AG. Extramet AG.

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Zürich. Ghelma AG. Giesserei Hegi AG. Gilli Garten AG. Gimmel Rouages SA. Gindraux Fenêtres SA. Ginsana SA. Giovanelli Fruchtimport AG. Givaudan SA. Glaeser Wogg AG. Glarner Kantonalbank. Globetrotter Travel Service AG. Globus Travel Services SA. Glutz AG. Goldbach Group AG. Google Switzerland GmbH. Gotthard Raststätte A2 Uri AG. GPA Guardian Protection SA. Grand Casino St. Gallen AG. Grand Hôtel Suisse Majestic. Grand Resort Bad Ragaz AG. Grange SA. Granol AG. Graubündner Kantonalbank. Gravag Erdgas AG. Gregor Furrer & Partner Holding AG. Group TrackNet. Groupe Ardentis. Groupe E Connect SA. Groupe JPF. Groupe Lathion. Groupe Mutuel. Groupe Orllati. Groupe Rhône Média. Groupe Sidin Hôtels. Groupe VO Energies. Grund AG Fahrzeuge. Grundfos Pumpen AG. Grünenfelder SA. Grünenwald AG. Gstaad Saanenland Tourismus. GTK Timek Group SA. Gustav Spiess AG. Gysi AG. Gysi AG Chocolatier Suisse.

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## I

IBSA Institut Biochimique SA. IFEC Ingegneria SA. Iftest AG. Ilapak International SA. IM Maggia Engineering SA. IMTF. Induserv AG. Ineichen AG. Infomaniak Network SA. Intensiv SA. InterCheese AG.



Intersport Schweiz AG. Investas AG. Iseppi Frutta SA.  
ISS Schweiz AG. Itten + Brechbühl AG.

## J

J3C Holding SA. Jakob Müller Holding AG. Janico Holding AG. Jansen AG. Japan Tobacco International SA. Jaquet Technology Group. Jean Singer et Cie SA. Jehle AG. Jenny Science AG. Jermann Ingenieure und Geometer AG. JESA SA. Jetpharma SA. JL Services SA. Johnson & Johnson. Josef Gut AG. Joseph Baume SA. JP Morgan (Suisse) SA. Juggers Sécurité SA.

## K

K+D Gruppe. Kabelwerke Brugg AG Holding. Kablan AG. Kalkfabrik Netstal AG. Karger Publishers. Kasag Swiss AG. Kebo AG. Kestenholz Automobil AG. Keystone AG. Kindlimann AG. Knecht Brugg Holding AG. Koch AG. Konapharma AG. Kromer AG. KUK Electronic AG. Kunststoff-Packungen AG. Kuny AG. Kuoni Viaggi. KurierZentrale GmbH.

## L

La goccia SA. La Rapida SA. La Semeuse SA-Choco-Diffusion SA. Lamprecht Transport AG. Landis Bau AG. Landqart AG. Landquart Fashion Outlet. Lang Energie AG. Larag AG. Laube SA. Laubscher Präzision AG. Lauener et Cie SA. Lausanne Palace & SPA. LB (Swiss) Investment AG. Le Coultre SA. Leicom AG. Leister AG. Lekkerland (Schweiz) AG. Lenovo (Schweiz). Lenzerheide Bergbahnen AG. Leoni Studer AG. Lerch AG Bauunternehmung. Les Toises – Centre de psychiatrie et psychothérapie. Liaudet Pial SA. Liebherr Machines Bulle SA. Lifeware SA. Liip AG. Linnea SA. LK International AG. Loacker Swiss Recycling AG. Loeb Holding AG. Logitech. Lombardi SA Ingegneri Consulenti. Lonza AG. Loomis Schweiz AG. L'Oréal Suisse SA. LumX Asset Management (Suisse) SA. Luzerner Kantonalbank. LV-St. Gallen. M. Opitz & Co AG.

## M

Mad Productions SA. Maerki Baumann & Co AG. Mägerle AG Maschinenfabrik. Magtrol SA. Maison V. Guimet Fils. MAN Diesel & Turbo Schweiz AG. Manor. Manpower SA. Manufactures d'outils Dumont SA. Maréchaux Holding AG. Marmobisa AG. Marquis AG. Mars Schweiz AG. Marti Bauunternehmung AG. Marvinpac SA. Mathys AG Bettlach. maxon motor AG. MB Barter & Trading SA. McDonald's Restaurants Sven Matthisson. Medacta International SA. Medipack AG. Meggitt SA. Mercedes Benz Automobil AG. Mercier SA. Mercuria Energy Trading SA. Metalem SA. Metallux SA. Metaltex SA. Metrohm AG. Metron AG. Meubles Descartes SA. Mibelle Group. Michelin Suisse SA. Micro-Sphere SA. Migros. Mikron SA. Mikron Tool SA Agno. mikrop ag. Mister Minit. MIT-Group. Möbel Pfister AG. mobilezone. Mobimo Holding AG. Mode Weber. Mondaine Watch Ltd. Monnat.ch SA. Montremo SA. Montres Corum Sàrl. Moser Schaffhausen AG. Mosterei Möhl AG. Motomix SA. MPM Facility

Services SA. Mubea Fabbrica Molle SA. Mubea Präzisionsstahlrohr AG. Mueller AG. Müller Beck AG. Müller Handels AG Schweiz.

## N

Nant de Drance SA. Natur- und Tierpark Goldau. Nestlé Suisse SA. Netcetera. Netstal-Maschinen AG. Nextthink. NGL Cleaning Technology. NH Akustik + Design AG. Nidwaldner Kantonalbank. Niederer Kraft & Frey AG. Nikon Schweiz. Noël Ruffieux & Fils SA. Norba SA. Notenstein La Roche Privatbank AG. Nova Werke AG. Novartis. Novo Business Consultants AG. Noyfil SA. NZZ Mediengruppe.

## O

O. Küttel AG. Obrist Bauunternehmung AG. Obwaldner Kantonalbank. OLZ & Partners. Omida AG. Omya. Onet (Suisse) SA. Opernhaus Zürich AG. Ortho-Team AG. Oryx Energies. Otis SA. Otto Fischer. Otto Keller AG.

## P

Paci SA. Page et Fils SA. Pallas Kliniken AG. Pamasol Willi Mäder AG. Panalpina AG. Panetarium AG. PanGas AG. Parkresort Rheinfelden Holding AG. Parmigiani Fleurier SA. Pastifil SA. Paul Bütiger AG. Pax. PaxVax Berna GmbH. PB Swiss Tools GmbH. pemsä. Perosa AG. Pestalozzi Gruppe. Pfefferlé & Cie SA. Pfisterer Sefag AG. Pharmacie Populaire société coopérative. Piaget SA. Pibomulti SA, Emissa. Pietro Calderari SA. Piguet Galland & Cie SA. Pilatus-Bahnen AG. Pini Swiss Engineers SA. PKB Privabank AG. PKZ Burger-Kehl & Co AG. Planzer Transport AG. Plastigum AG. Plumettaz SA. Pneu Egger AG. point vert Groupe SA. Poretti-Gaggini SA. PPG Industries Europe Sàrl. Precicast SA. Premec SA. Pricewaterhouse-Coopers AG. Privatbank IHAG. Proderma AG. Promena AG. Pronto AG. Prosegur SA. Provins.

## Q

Quickline Holding AG.

## R

R. Nussbaum AG. Raboud Group. Radisson Blu. Raiffeisen. Rapelli SA. RATP Dev Suisse SA. Regazzi Holding SA. Regena AG. Régence Production SA. Regine Switzerland SA. Regionalverkehr Bern-Solothurn AG. Rego-Fix AG. Reichle & De-Massari AG. Reiden Technik AG. Reka Schweizer Reisekasse. Reka AG. Remaco Holding AG. Remimag Gastronomie AG. Renault Suisse SA. Retraites Populaires. Rezidor Hotel Group Schweiz. Rhätische Bahn AG. Rhenus Alpina AG. Richard Mille. Riedo clima AG. Rieter Holding AG. Ringele AG. Ristoranti Fred Feldpausch SA. Rittmeyer AG. RLC Architekten AG. RobecoSAM AG. Roduit SA. Roland Berger AG. Romag aquacare AG. Ronda AG. Roth Gerüste AG. Rotho Kunststoff AG. Rotzinger AG. Ruch Metallbau AG. Ruckstuhlgaragen Zürich. RWB Groupe SA. Rychiger AG.

## S

SA di Gestione Shopping Center Morbio Inferiore. Sabag Holding AG. Sägerei Trachsel AG. Sajet SA. Samvaz SA. Sandro Vanini SA. Sanitas Troesch AG, St. Gallen. Santex Rimar AG. santis packaging ag. SAP (Schweiz) AG. Saviva AG. Savoy SA. Schaeppi Grundstücke Verwaltungen KG. Schibli Holding AG. Schifffahrtsgesellschaft des Vierwaldstättersees AG. Schilliger Holz AG. Schindler Aufzüge AG. Schindler Elettronica SA. Schlagenhauf Gruppe. Schleuniger AG. Schoeller Textil AG. Schöpfer Gastronomie AG. Schöttli AG. Schulthess Maschinen AG. Schweizer Electronic AG. Schwendimann AG Abfallentsorgung + Transporte. Schwob AG. Schwyzer Kantonalbank. Scott Sports SA. Scout24 Schweiz AG. Sécheron SA. Seehotel Hermitage Luzern. Seehotel Waldstätterhof AG. Sefar Holding AG. Seiler Hotels Zermatt AG. Selmoni Gruppe. Serbeco SA. Serfre' SA. Seven Group. SFS Group AG. Shell (Switzerland) AG. Sheraton Zürich Hotel. sia Abrasives Industries AG. Sicas SA. Silhouette Wellness SA. Sisag AG. Sistag AG. Sitzplatz Schweiz AG. Skynight SA. SkyWork Airlines AG. Smart Gorla Services SA. SNP Société Neuchâteloise de Presse SA. Socar Trading SA. Société du Casino de Crans-Montana SA. Société électrique intercommunale de la Côte. Société Privée de Gérance SA. Solo Swiss SA. Solvias AG. Sonceboz SA. Sonova Holding AG. Soprod SA. Sotax AG. Spar- und Leihkasse Frutigen AG. sparkasse schwyz ag. Splash & Spa Tamaro SA. Spühl GmbH. Square Danses SA. SRS Swiss Recycling Services SA. St. Galler Kantonalbank. Stade de Suisse Wankdorf Nationalstadion AG. Stahl Gerlafingen AG. Stahlton Bauteile AG. Stettler Holding SA. Stirnimann AG, Baumaschinen. STMicroelectronics SA. Stöckli Metall AG. Stöcklin Logistik AG. Stoppani AG. Straumann Group. Straumann-Hipp AG. Studio d'ingegneria Visani Rusconi Telleri SA. Studio Ingegneria Sciarini SA. Stutz Holding AG. Sucafina SA. Suisselearn Media AG. Sunrise Communications AG. Sushizen SA. Suter Viandes SA & Boucherie du Palais. Suteria Chokolata AG. Sutter Ingenieur- und Planungsbüro AG. SV (Schweiz) AG. Swagelok AG. Swan Analytische Instrumente AG. Swatch Group SA. Swiss Capital Alternative Investments AG. Swiss Helicopter Group AG. Swiss Life Schweiz. Swiss Risk & Care. Swisscom AG. Swissgrid AG. Swisslog Holding AG. swisstulle AG. Switel SA. Syngenta AG.

## T

T.E.A.M. Television Event And Media Marketing AG. T+R AG. TAG Aviation SA. TAG Heuer. Taiana SA. Talan SA. talsee AG. Talus Informatik AG. TE Connectivity Solutions GmbH. Teca-Print AG. Tech Insta SA. Techniques-Laser SA. Tefag Elektronik AG. Tekka Digital SA. Teleclub AG. Télé-Restaurant SA. TEM AG. Tenconi SA. TESA SA. Texaid Textilverwertungs-AG. Thales Suisse SA. Thommen Gastronomie AG. Thommen Gruppe. tibits ag. Titoni AG. TNT Swiss Post AG. Tomy Transporte GmbH. Tool-Temp AG. Tornos SA. Totsa Total Oil Trading SA. Trafag AG. Trafigura Holding GmbH. Trauffer AG. Travys SA. Treier AG. Treuhand- und

Revisionsgesellschaft Mattig-Suter und Partner. Trisa AG. Trümpi AG. Trunz Holding AG. Truvag Treuhand AG. Tschümperlin & Co AG. Tuchs Schmid AG. TUI Suisse. Tyco Integrated Fire & Security (Schweiz) AG.

## U

UBS AG. UCB Farchim SA. Ulrich Imboden AG. Ulysse Nardin SA. Unione Farmaceutica Distribuzione SA. Unisto AG. Unitechnologies AG. Urner Kantonalbank. Usines Métallurgiques de Vallorbe SA. Uster Technologies AG.

## V

Vacheron Constantin SA. Valcambi SA. Vale International SA. Valora Holding AG. Variosystems AG. Vaudoise Assurances Holding SA. VBG Verkehrsbetriebe Glattal AG. Verlag Finanz und Wirtschaft AG. Veronelli SA. Veuthey & Cie SA. VF International Sagl. VICI AG International. Vignal CEA SA. Visilab SA. Vogt AG Lostorf. Vogt-Schild Druck AG. Voigt AG. Volkshaus Basel. Volvo Car Switzerland AG. von Bergen SA. Vonplon Strassenbau AG. VonRoll casting AG. VP Bank (Schweiz) AG.

## W

W. Gassmann AG. Wagner AG. Walo Bertschinger. Wander AG. weba Weberei Appenzell AG. Weber AG Stahl- und Handwerkerzentrum. Weinmann-Energies SA. Wild & Küpfer AG. Wirz AG Bauunternehmung. Wirz Gruppe. WMC IT Solutions AG. WR Weberei Russikon AG. WWZ AG.

## Y

Y & R Group Switzerland AG.

## Z

Zambon Svizzera SA. Ziegelei Schumacher AG. Züger Frischkäse AG. Zuger Kantonalbank. Zühlke. Zünd Systemtechnik AG. Zürcher Kantonalbank. Zürcher Kunstgesellschaft. Zürcher Landbank AG. Zürcher Oberland Medien AG. Zurich Suisse. Zweifel Pomy-Chips AG.

## 1

1875 Finance SA.

## II

II-VI Laser Enterprise GmbH.

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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 14 December 2017, the SNB leaves the interest rate on sight deposits with the SNB at  $-0.75\%$  and its target range for the three-month Libor unchanged at between  $-1.25\%$  and  $-0.25\%$ . The SNB reaffirms that it will remain active in the foreign exchange market, as necessary. The depreciation of the Swiss franc reflects the fact that safe havens are currently less sought after. The situation on the foreign exchange market continues to be fragile. In the SNB's view, the Swiss franc remains highly valued. The negative interest rate and the SNB's willingness to intervene in the foreign exchange market as necessary remain essential. The expansionary monetary policy aims to stabilise price developments and support economic activity.

December 2017

At its quarterly assessment of 14 September 2017, the SNB leaves the interest rate on sight deposits with the SNB at  $-0.75\%$  and its target range for the three-month Libor at between  $-1.25\%$  and  $-0.25\%$ . The SNB reaffirms that it will remain active in the foreign exchange market, as necessary. In the SNB's view, the Swiss franc is still highly valued, and the situation on the foreign exchange market is still fragile. The negative interest rate and the SNB's willingness to intervene in the foreign exchange market are intended to make Swiss franc investments less attractive, thereby easing upward pressure on the currency. The expansionary monetary policy aims to stabilise price developments and support economic activity.

September 2017

At its quarterly assessment of 15 June 2017, the SNB leaves the interest rate on sight deposits with the SNB at  $-0.75\%$  and its target range for the three-month Libor at between  $-1.25\%$  and  $-0.25\%$ . The SNB reaffirms that it will remain active in the foreign exchange market, as necessary. In the SNB's view, the Swiss franc is still significantly overvalued. The negative interest rate and the SNB's willingness to intervene in the foreign exchange market are intended to make Swiss franc investments less attractive, thereby easing upward pressure on the currency. The expansionary monetary policy aims to stabilise price developments and support economic activity.

June 2017

At its quarterly assessment of 16 March 2017, the SNB leaves the interest rate on sight deposits with the SNB at  $-0.75\%$  and its target range for the three-month Libor at between  $-1.25\%$  and  $-0.25\%$ . The SNB reaffirms that it will remain active in the foreign exchange market, as necessary. In the SNB's view, the Swiss franc is still significantly overvalued. The negative interest rate and the SNB's willingness to intervene in the foreign exchange market are intended to make Swiss franc investments less attractive, thereby easing upward pressure on the currency. The expansionary monetary policy aims to stabilise price developments and support economic activity.

March 2017

On 19 December 2016, the SNB announces the further strengthening of provisions for currency reserves. The annual allocation will continue to be determined on the basis of double the average nominal economic growth rate over the previous five years. However, a minimum annual allocation of 8% of the provisions will now also apply. This is aimed at ensuring that sufficient allocations are made to the provisions and the balance sheet is strengthened even in periods of low nominal GDP growth. Since nominal GDP growth over the last five years has averaged just 1.9%, the minimum rate of 8% will be applied for the 2016 financial year.

December 2016

At its quarterly assessment of 15 December 2016, the SNB leaves the interest rate on sight deposits with the SNB at  $-0.75\%$  and its target range for the three-month Libor at between  $-1.25\%$  and  $-0.25\%$ . The SNB reaffirms that it will remain active in the foreign exchange market, as necessary. In the SNB's view, the Swiss franc is still significantly overvalued. The negative interest rate and the SNB's willingness to intervene in the foreign exchange market are intended to make Swiss franc investments less attractive, thereby easing upward pressure on the currency. The expansionary monetary policy aims to stabilise price developments and support economic activity.

December 2016

**Published by**

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

**Design**

Interbrand Ltd, Zurich

**Typeset and printed by**

Neidhart + Schön Group AG, Zurich

**Language versions:**

The *Quarterly Bulletin* is available in printed form in German (ISSN 1423-3789), French (ISSN 1423-3797) and Italian (ISSN 2504-3544).

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

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

**Website**

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

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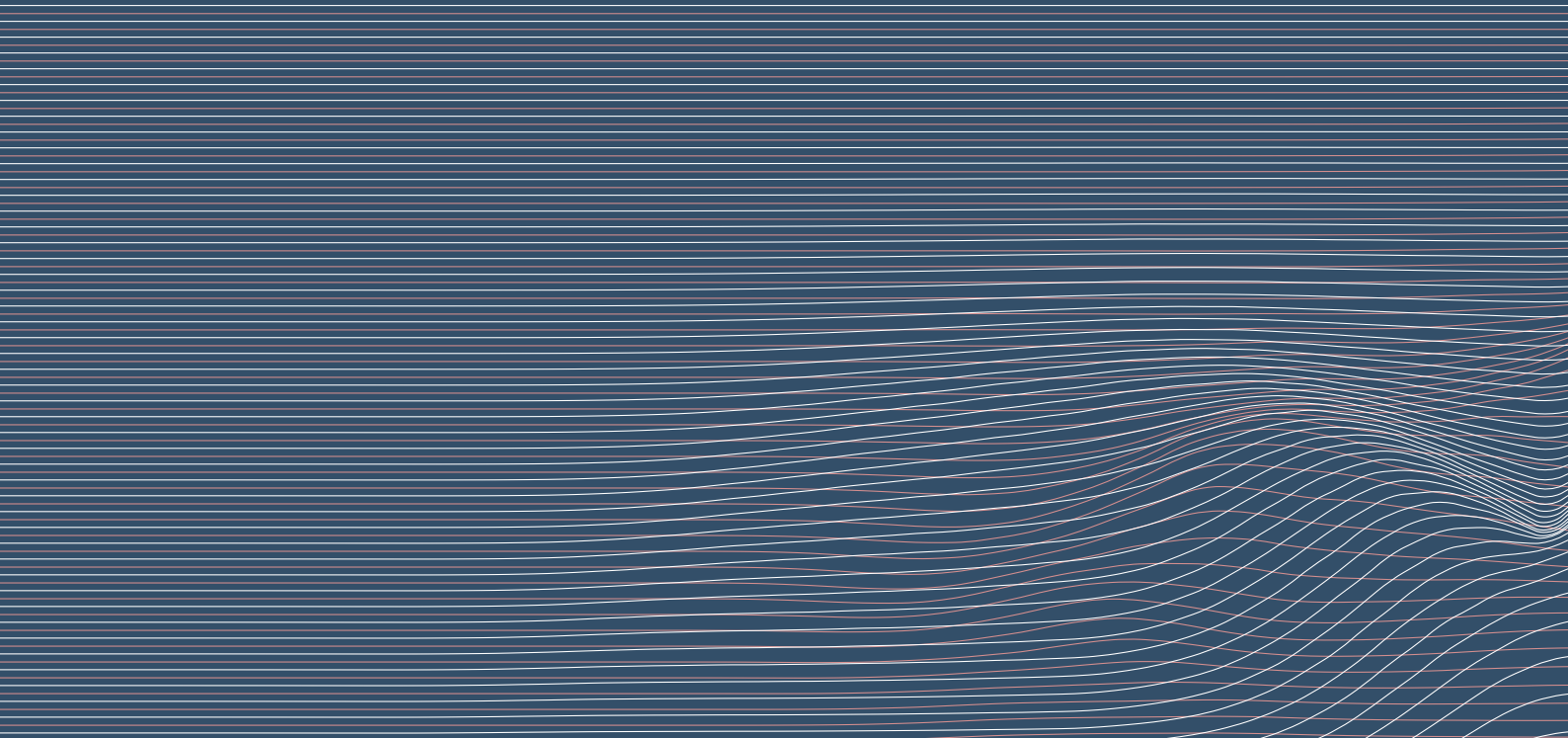
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