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Quarterly Bulletin  
3/2017 September

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





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Quarterly Bulletin  
3/2017 September

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 September 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 September 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 September 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 September 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 against the euro and appreciated against the dollar. Overall, this development is helping to reduce, to some extent, the significant overvaluation of the currency. The Swiss franc nevertheless remains 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 as necessary therefore remain essential in order to reduce the attractiveness of Swiss franc investments and thus ease pressure on the currency.

Owing to the exchange rate situation, the conditional inflation forecast has been revised upwards slightly compared to June (cf. chart 1.1). For the current year, the

forecast has risen marginally to  $0.4\%$ , from  $0.3\%$  in the previous quarter (cf. table 1.1). For 2018, too, the SNB anticipates an inflation rate of  $0.4\%$ , compared to  $0.3\%$  last quarter. For 2019, it now expects inflation of  $1.1\%$ , compared to  $1.0\%$  last quarter. 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 second quarter. In the advanced economies, GDP continued to expand above potential, in some cases exceeding expectations. One exception was the UK, where uncertainty over Brexit is weighing on growth. In the emerging economies, too, economic activity was positive overall. In its baseline scenario, the SNB continues to anticipate favourable developments in the global economy for the quarters ahead.

Despite the improved situation in the real economy, inflation has so far remained modest in most advanced economies. Against this backdrop, leading central banks are likely to maintain their expansionary monetary policy and embark only gradually on a normalisation path.

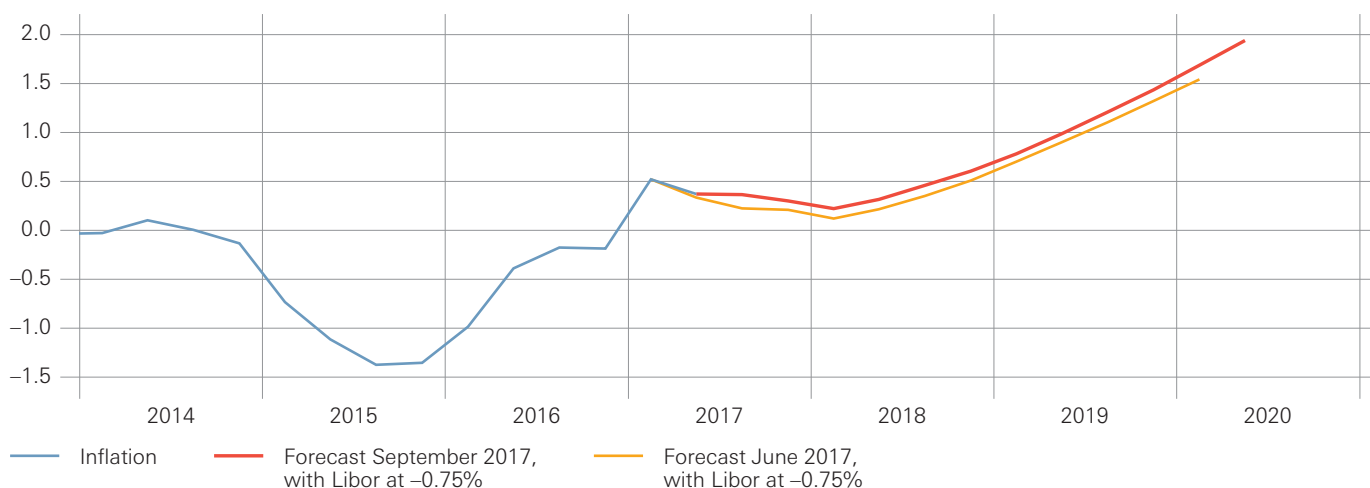
The positive baseline scenario for the global economy continues to be subject to risks. In particular, geopolitical factors and uncertainty regarding the future course of monetary policy at leading central banks could cloud the outlook.

In Switzerland, an analysis of the available economic indicators suggests that the moderate recovery is continuing. The Swiss economy is benefiting from the consolidation of global economic activity. Renewed momentum in goods exports is supporting industrial activity. Capacity utilisation is thus on the rise and companies are also becoming increasingly willing to

Chart 1.1

### CONDITIONAL INFLATION FORECAST OF SEPTEMBER 2017

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



invest. The situation on the labour market is gradually improving.

The recovery is less evident in the quarterly GDP estimates. Owing to weak GDP momentum in late 2016/early 2017, the current year is likely to see growth of just under 1.0%. At its monetary policy assessment in June, the SNB was still expecting growth of roughly 1.5%. The lower forecast is attributable to the weak GDP figures for the previous quarters.

Overall, imbalances on the mortgage and real estate markets persist. While growth in mortgage lending remained relatively low in the second quarter, risks in the residential investment property segment increased. In addition, following a period of stabilisation, prices in the owner-occupied residential property segment rose again slightly. 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 SEPTEMBER 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 |    |    | 0.0  | -1.1 | -0.4 |

#### CONDITIONAL INFLATION FORECAST OF SEPTEMBER 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 June 2017, with Libor at -0.75%      |      | 0.3 | 0.2 | 0.2 | 0.1  | 0.2 | 0.4 | 0.5 | 0.7  | 0.9 | 1.1 | 1.3 | 1.5  |     |    |    | 0.3  | 0.3  | 1.0  |
| 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  |



## 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 second quarter. In the advanced economies, GDP continued to expand above potential, in some cases exceeding expectations. One exception was the UK, where uncertainty over Brexit is weighing on growth. Economic activities in the emerging economies, too, were positive overall.

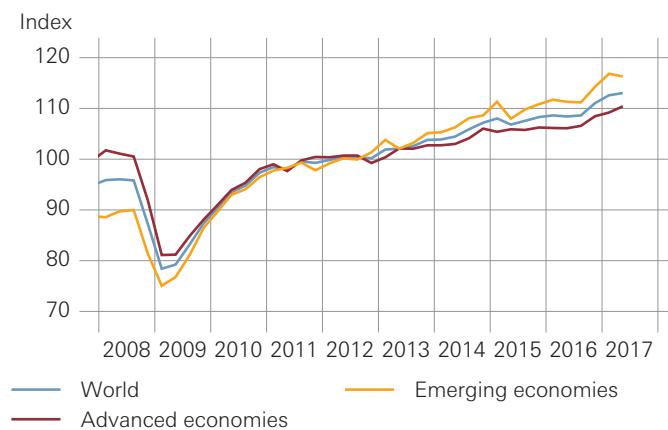
Domestic demand in the advanced economies continued to strengthen on the back of stimulative financing conditions and the improved situation on the labour market. Corporate investment benefited especially from favourable developments in manufacturing and higher capacity utilisation. At the beginning of the third quarter, business cycle signals remained propitious. In its baseline scenario, the SNB expects the positive developments to continue over the coming quarters.

Despite the improved situation in the real economy, wage growth and inflation have so far remained modest in most advanced economies. Against this backdrop, leading central banks are likely to maintain their expansionary monetary policy and embark only gradually on a normalisation path.

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

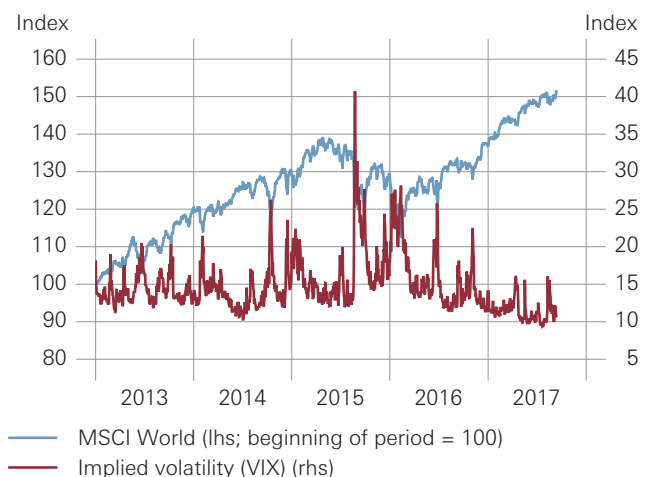
|  | 2013  | 2014 | 2015 | 2016 | Scenario |      |
|--|-------|------|------|------|----------|------|
|  |       |      |      |      | 2017     | 2018 |
| <b>GDP, year-on-year change in percent</b> |       |      |      |      |          |      |
| Global <sup>1</sup>                        | 3.3   | 3.6  | 3.5  | 3.3  | 3.8      | 3.8  |
| US   | 1.7   | 2.6  | 2.9  | 1.5  | 2.1      | 2.2  |
| Euro area                                  | -0.2  | 1.3  | 2.0  | 1.8  | 2.1      | 1.8  |
| Japan                                      | 2.0   | 0.2  | 1.1  | 1.0  | 1.5      | 0.9  |
| <b>Oil price in USD per barrel</b>         |       |      |      |      |          |      |
|  | 108.7 | 99.0 | 52.5 | 43.8 | 50.9     | 50.0 |

<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

Chart 2.3

**INTERNATIONAL LONG-TERM INTEREST RATES**

10-year government instruments

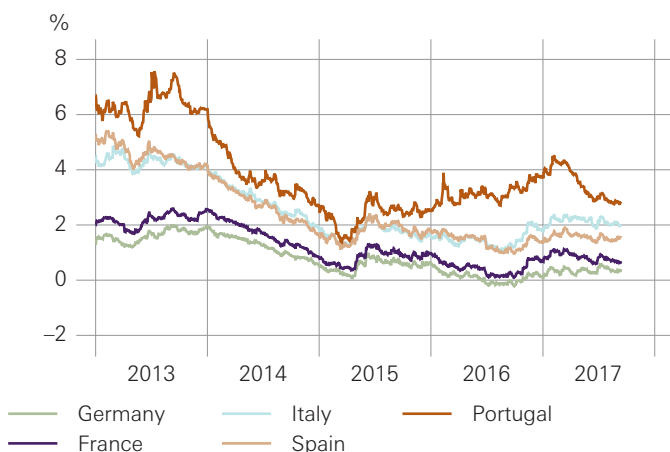


Source: Thomson Reuters Datastream

Chart 2.4

**EUROPEAN LONG-TERM INTEREST RATES**

10-year government instruments



Source: Thomson Reuters Datastream

The positive baseline scenario for the global economy continues to be subject to risks. In particular, geopolitical factors and uncertainty regarding the future course of monetary policy at leading central banks could cloud the outlook.

The SNB’s forecasts for the global economy are based on assumptions about the oil price and the EUR/USD exchange rate. It is assuming an oil price for Brent crude of USD 50 per barrel, which is virtually unchanged from June’s baseline scenario (cf. table 2.1), and an exchange rate of USD 1.16 to the euro, compared with USD 1.09 in June. Both correspond to the 20-day average when the current baseline scenario was drawn up.

**INTERNATIONAL FINANCIAL AND COMMODITY MARKETS**

Since the monetary policy assessment of mid-June, stock market performance around the globe has been generally positive. Bolstered by the further improvement in the global economy, the MSCI World Index recorded a high, as did the S&P 500 in the US. Tensions between the US and North Korea at times dampened the mood on international stock markets, and caused a short-term increase in market uncertainty as measured by the VIX (cf. chart 2.2).

Yields on long-term government bonds in advanced economies fluctuated somewhat, before returning to a level close to that of the monetary policy assessment in June (cf. chart 2.3). These movements mainly reflected changes in expectations regarding monetary policy. Market expectations of a tapering by the European Central Bank (ECB) of its asset purchase programme temporarily affected yields on ten-year government bonds of euro area member states. In the wake of modest inflationary developments, these long-term yields declined again from July onwards (cf. chart 2.4).

In the foreign exchange market, the prevailing trends in the major currencies continued. The US dollar weakened further; the currency has thereby steadily lost value on a trade-weighted basis since the beginning of the year. The euro continued to trend upwards. The yen traded sideways (cf. chart 2.5).

Since mid-year, commodity prices have risen again. Prices for industrial metals increased strongly against the backdrop of a robust global economy. The oil price for Brent crude also edged up somewhat, although at USD 54 per barrel in mid-September, it was still slightly lower than at the beginning of the year (cf. chart 2.6).

## US

The US economy regained momentum in the second quarter of 2017. Driven by a recovery in consumer spending, GDP expanded by 3.0%, following 1.2% in the previous quarter (cf. chart 2.7). Corporate investment continued to prop up growth, while construction investment declined. Employment growth remained robust in recent months. Since the participation rate increased slightly, the unemployment rate in August was largely unchanged, at 4.4% (cf. chart 2.10).

The outlook for the US economy has not changed significantly since the monetary policy assessment in June. Activity is strong, with industrial output and turnover in the retail sector increasing again in recent months. Consumer confidence remains very high, and exceptionally favourable financing conditions continue to support domestic demand. The SNB still expects tax cuts, which would provide slight stimulus to the economy in coming years. Its GDP forecast remains almost unchanged, at 2.1% for 2017 and 2.2% for 2018 (cf. table 2.1). The forecast for the medium term, however, continues to be very uncertain, especially as key planks of US economic policy have yet to be clearly defined.

Inflation as measured by the consumer price index increased again slightly in recent months, and stood at 1.9% in August (cf. chart 2.11). It had declined significantly in the first half of the year, due to lower energy prices. However, temporary factors continued to weigh on it. The US Federal Reserve's preferred price inflation measure, the core personal consumption expenditure (PCE) deflator index, stood at 1.4% in July, which was well below the Federal Reserve's target value of 2%. The PCE deflator is expected to gradually move closer to the 2% mark again. Given this environment, the Federal Reserve left the target range for the federal funds rate at 1.00–1.25% (cf. chart 2.13). It maintained its growth outlook, and indicated that it would soon begin normalising its balance sheet.

Chart 2.5

### EXCHANGE RATES

Trade-weighted, beginning of period = 100

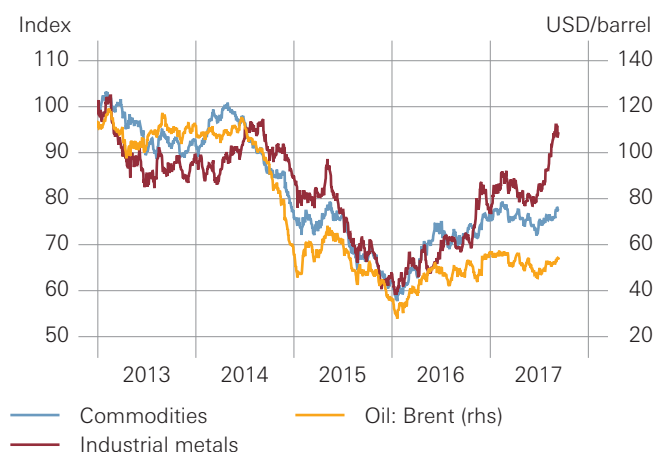


Source: Thomson Reuters Datastream

Chart 2.6

### COMMODITY PRICES

Beginning of period = 100

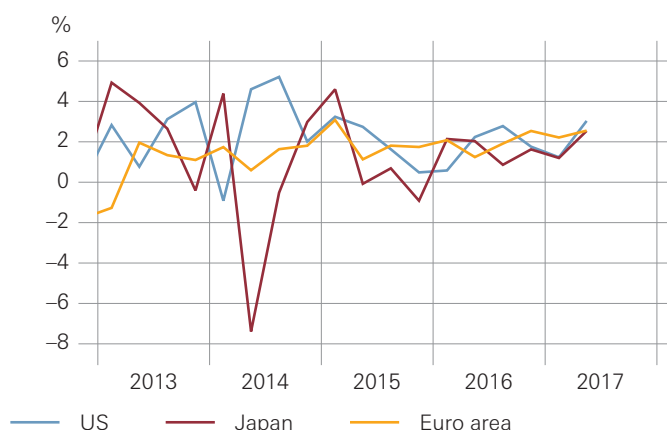


Source: Thomson Reuters Datastream

Chart 2.7

### REAL GDP: ADVANCED ECONOMIES

Change from previous period

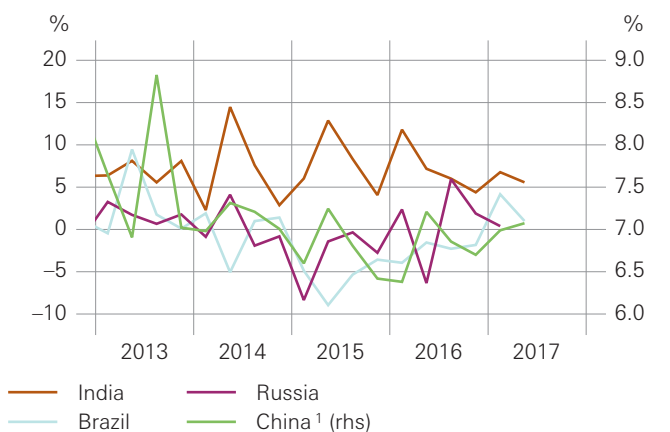


Source: Thomson Reuters Datastream

Chart 2.8

**REAL GDP: EMERGING ECONOMIES**

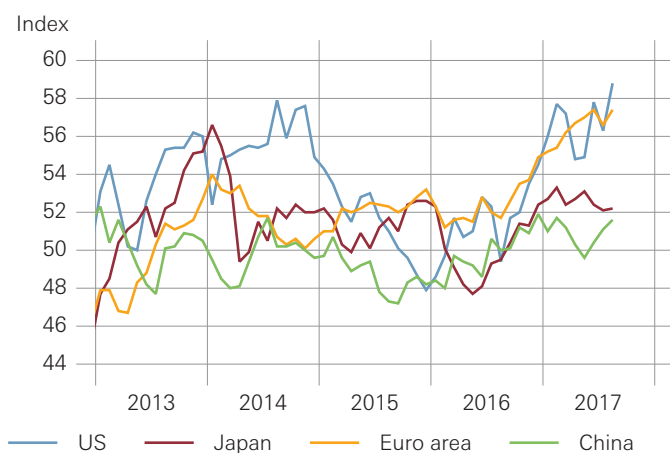
Change from previous period



1 Estimate: SNB.  
Source: Thomson Reuters Datastream

Chart 2.9

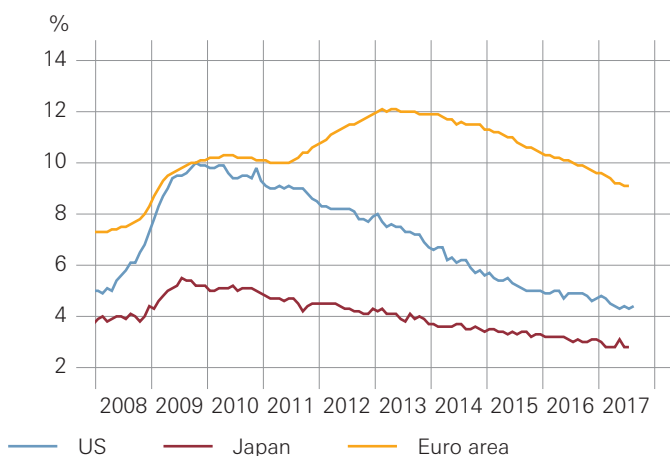
**PURCHASING MANAGERS' INDICES (MANUFACTURING)**



Source: Markit Economics Ltd 2009; all rights reserved

Chart 2.10

**UNEMPLOYMENT RATES**



Source: Thomson Reuters Datastream

**EURO AREA**

The economy in the euro area continues to firm. At 2.6%, GDP growth in the second quarter was still well above potential (cf. chart 2.7). Domestic demand rose sharply. In manufacturing, capacity utilisation increased further. The recovery on the labour market also continued (cf. chart 2.10).

The economic outlook is favourable. Supported by advantageous financing conditions, domestic demand is likely to remain robust. Household and business confidence is still high. Surveys indicate that consumers are significantly less fearful of losing their jobs than a year ago, and also more likely to make larger purchases. In addition, lending surveys point to a further upturn in corporate investment. Accordingly, the sentiment in the capital goods industry has brightened. Nevertheless, the outlook for the economy is still subject to risks. These include political uncertainties like the course of relations between the EU and the UK, and Italy's elections to be held by May 2018, as well as the possibility of a further appreciation of the euro. In light of the favourable economic indicators, the SNB has revised its forecasts for GDP growth in the euro area slightly upwards, to 2.1% for 2017 and 1.8% for 2018.

Driven by rising energy and food prices, consumer price inflation in the euro area was 2.0% in February, its highest level in several years. Since then it has subsided, standing at 1.5% in August (cf. chart 2.11). Core inflation, however, increased slightly to 1.2% (cf. chart 2.12). Medium-term inflation expectations derived from financial market indicators were virtually unchanged, and thus 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.

The ECB made no changes to either its key rates or its asset purchase programme. It will disclose further details in autumn regarding the continuation of its asset purchase programme in the coming year.

## JAPAN

The Japanese economy continued to gain momentum in the second quarter. At 2.5%, GDP growth was still well above potential (cf. chart 2.7). Boosted by the economic stimulus package launched in 2016, domestic demand strengthened, while exports of goods and services slackened somewhat following strong advances in preceding quarters. Aggregate capacity is now well utilised, and unemployment is at its lowest level since the mid-1990s.

Favourable developments in global manufacturing and auspicious conditions on the labour market will continue to buoy the economy in the current year. Following substantial investment in infrastructure in the second quarter, the effects of the economic stimulus package are likely to taper off. GDP looks set to expand by 1.5% in 2017, and in 2018 too, the economy is set to grow slightly above potential (cf. table 2.1).

Despite this healthy momentum, inflation remained weak. Core inflation was still slightly negative in July (cf. chart 2.12). This was partly due to the dampening influence of exchange rate effects, as well as strong price cuts in mobile communications. However, mounting aggregate capacity utilisation and a weaker yen (compared to 2016) are likely to cause core inflation to gradually rise again. Longer-term inflation expectations derived from company surveys trended sideways in recent months and remained significantly below the Japanese central bank's inflation target of 2%. Wage growth was also still modest. Under these conditions, the Bank of Japan is maintaining its expansionary monetary policy.

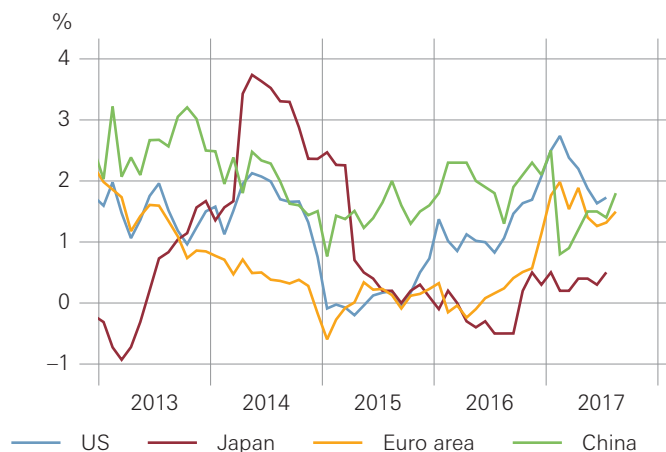
## EMERGING ECONOMIES

In the second quarter, developments in the emerging economies varied from one country to the next. China again experienced powerful and broad-based GDP growth, at 7.1% (cf. chart 2.8), with value added rising in both services and manufacturing. By contrast, the Indian economy slackened in the second quarter: while domestic demand gained some ground, exports declined significantly, and GDP growth therefore remained below potential, at 5.6%. In Russia and Brazil, the economic recovery continued.

Chart 2.11

### CONSUMER PRICES

Year-on-year change

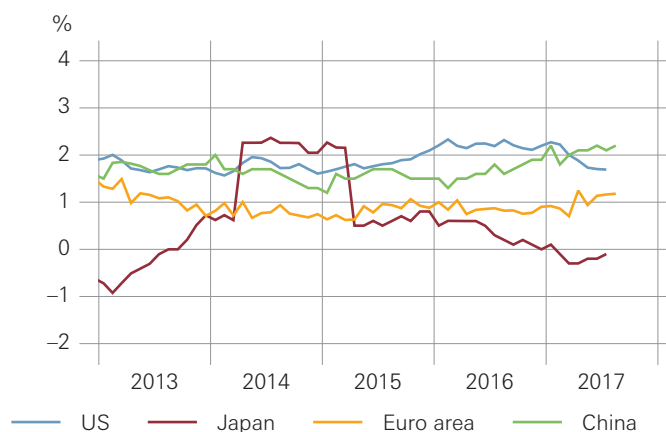


Source: Thomson Reuters Datastream

Chart 2.12

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

Year-on-year change

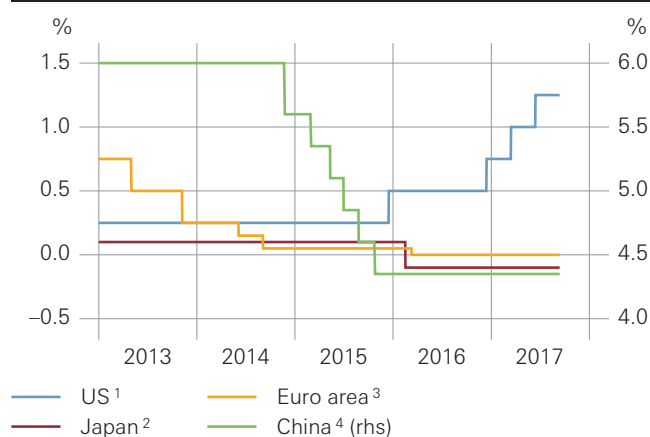


<sup>1</sup> Excluding food and energy.

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

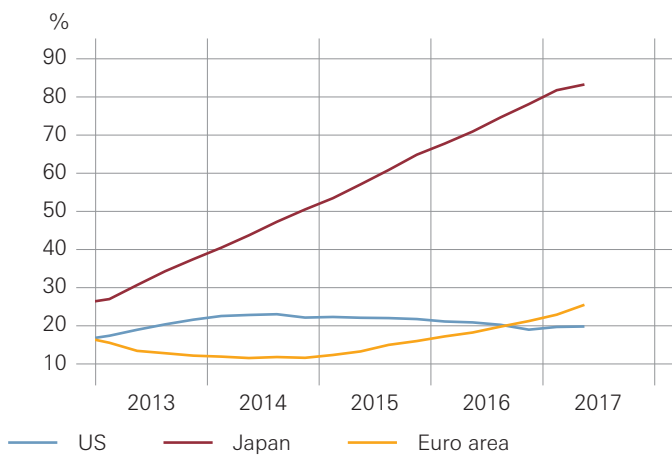
<sup>3</sup> Main refinancing rate.

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

Chart 2.14

**MONETARY BASE**

Relative to GDP



Source: Thomson Reuters Datastream

China’s economic momentum is likely to gradually lose pace in the coming quarters. In the first half of the year, more restrictive financial market regulation and banks’ higher refinancing costs led to an increase in lending and bond interest rates. Accordingly, corporate investment and residential construction investment are likely to experience more moderate growth. On the other hand, consumption looks set to continue to provide a strong stimulus to the economy, thanks to rising levels of income and high confidence. In India, a goods and services tax reform was launched in July to harmonise the regional tax systems. While the reform is likely to hamper the economy in the short term, beyond that the gains in efficiency should stimulate growth. Russia’s economy looks set to continue recovering, mainly on the back of consumption. In Brazil, growth is expected to gradually take hold again as a result 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 and high political uncertainty.

Inflation in China advanced by 1.8% in August. In India, after temporarily hitting a multi-year low, inflation rose significantly, due to increasing food prices. Core inflation edged up only slightly, standing at 4.3% in August, and thereby corresponding to the central bank’s medium-term target. In Russia and Brazil, inflation was dampened by food prices, and amounted to 3.3% and 2.5% respectively.

The central banks of China and Russia left their key rates unchanged. The Indian central bank reduced its key rate by 25 basis points to 6.0% in August, justifying this step on the grounds of considerably lower inflation risks and sluggish lending activity. In Brazil, the central bank relaxed its monetary policy in both July and September, in view of low capacity utilisation and declining inflation.



# 3 Economic developments in Switzerland

In Switzerland, an analysis of the available economic indicators suggests that the moderate recovery is continuing. The Swiss economy is benefiting from the consolidation of global economic activity. Exports of goods are gradually gaining momentum and are supporting industrial activity. On the back of better capacity utilisation, companies are also more willing to invest. The situation on the labour market is gradually improving.

Moreover, the new data of the System of National Accounts (SNA) present a somewhat more positive picture of economic developments in recent years. According to the revised annual figures, the Swiss economy saw considerably stronger growth between 2013 and 2016 than previously assumed.

The recovery is less evident in the quarterly GDP estimate. While GDP growth firmed somewhat in the second quarter of 2017 – after two very weak quarters – it remained subdued at 1.1%.

As a result of the weak GDP momentum in recent quarters, the current year is likely to see growth of just under 1.0%. At the monetary policy assessment of June 2017, the SNB had still expected growth of around 1.5%. The forecast adjustment is attributable to the data revision for the previous quarters. For the second half of the year, the SNB expects above-average economic growth. Capacity utilisation – which is still unsatisfactory – is therefore likely to improve.

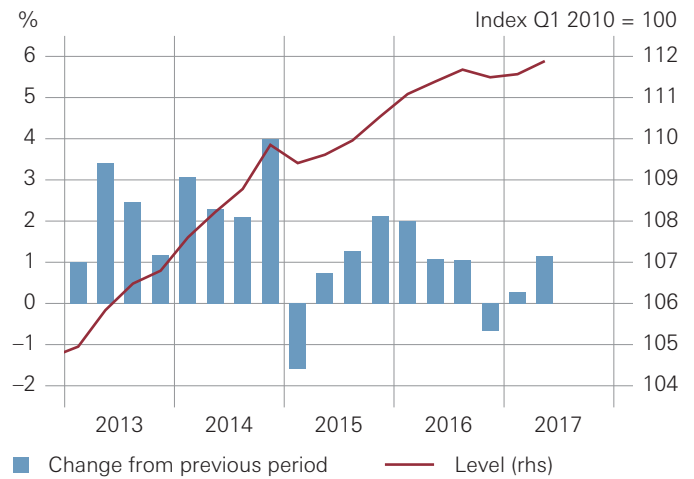
## AGGREGATE DEMAND AND OUTPUT

### Growth in recent years higher than previously assumed

In August, the Swiss Federal Statistical Office (SFSO) revised the annual figures of the SNA back to 1995. As a result of adjustments to underlying basic data, the revisions were more extensive than usual.

Chart 3.1

### REAL GDP

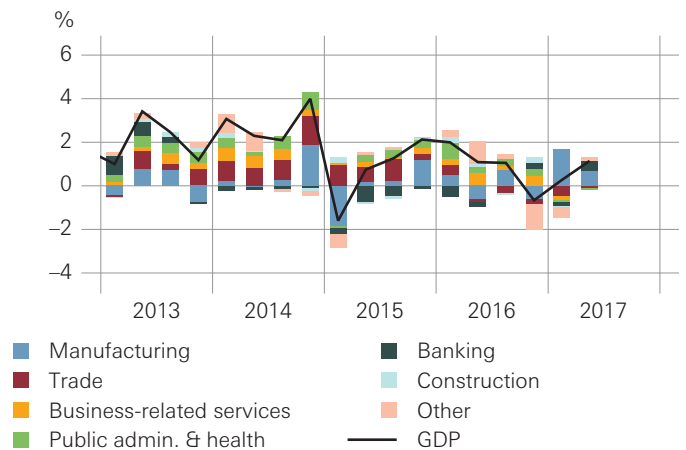


Source: State Secretariat for Economic Affairs (SECO)

Chart 3.2

### CONTRIBUTIONS TO GROWTH, BY SECTOR

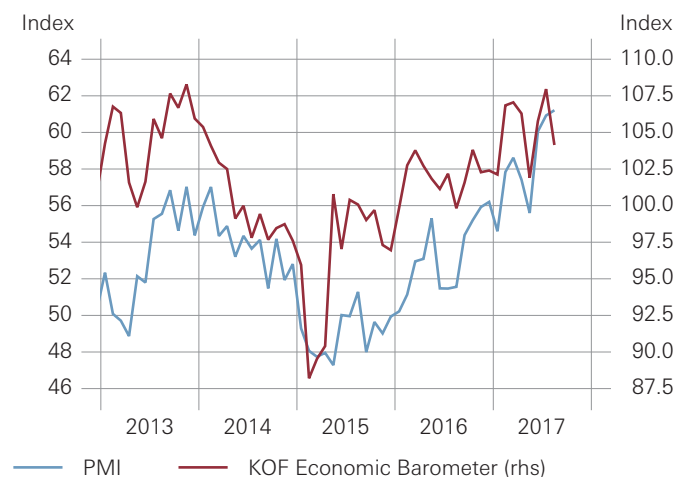
Change from previous period



Source: SECO

Chart 3.3

### ECONOMIC INDICATORS



Sources: Credit Suisse, KOF Swiss Economic Institute

According to the new estimates, the Swiss economy fared better in recent years than originally thought. In 2014 and 2015, GDP expanded by 2.4% and 1.2% respectively, just less than half a percentage point up from the previous figures. In 2016, GDP advanced by 1.4%, which was slightly higher than the March estimate (1.3%) by the State Secretariat for Economic Affairs (SECO).

#### Moderate GDP growth in the second quarter of 2017

GDP developments in the past few quarters have been disappointing, however. According to a provisional estimate by SECO, GDP grew by 1.1% in the second quarter of 2017 – after 0.3% in the previous quarter – and exceeded its year-earlier level by only 0.3%. GDP growth thus remained very subdued in the first half of the year (cf. chart 3.1).

Value added varied significantly from one industry to another. Financial services and the hospitality industry recorded a strong increase. Value added rose at an above-average rate in manufacturing as well. By contrast, in various other areas of the services sector, value added declined, which had a dampening impact on the overall result (cf. chart 3.2).

On the expenditure side, growth proved broad based. Both domestic demand and exports witnessed a rise in the second quarter. However, as imports increased significantly more strongly than exports, net exports were negative.

#### Positive economic indicators

Taking into account a wide range of economic indicators once again leads to a more positive picture of economic developments for the period since mid-2016 than if only the provisional figures of the quarterly GDP estimate are considered.

Indications of a favourable economic trend can, for example, be found in the results of various surveys. The purchasing managers' index (PMI) and the KOF Economic Barometer have remained well above their long-term averages for some time now. Both indicators point towards solid economic growth (cf. chart 3.3).

Discussions with representatives of companies conducted by the SNB's delegates for regional economic relations in the past few quarters also suggest a continuous improvement of the economic situation since mid-2016 (cf. 'Business cycle signals', p. 28). Business activity has improved considerably year-on-year.

Table 3.1

### REAL GDP AND COMPONENTS

Growth rates on previous period in percent, annualised

|  | 2013       | 2014       | 2015       | 2016       | 2015       |            | 2016       |            |            |             | 2017       |            |
|--|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|------------|
|  |            |            |            |            | Q3         | Q4         | Q1         | Q2         | Q3         | Q4          | Q1         | Q2         |
| Private consumption                      | 2.6        | 1.3        | 1.8        | 1.5        | 2.0        | 0.5        | 2.1        | 0.9        | 1.2        | 3.0         | 0.5        | 0.9        |
| Government consumption                   | 2.3        | 2.2        | 1.2        | 1.6        | -0.1       | 1.3        | 2.5        | 1.8        | 1.6        | 2.7         | 0.8        | 1.1        |
| Investment in fixed assets               | 0.6        | 3.0        | 2.2        | 3.1        | 1.2        | -1.4       | 8.0        | 1.2        | 5.4        | -2.0        | 3.9        | 2.1        |
| Construction                             | 3.1        | 3.2        | 1.6        | 0.9        | -3.2       | 2.4        | 1.7        | -2.3       | 4.7        | 0.8         | 1.0        | 3.2        |
| Equipment                                | -1.0       | 2.9        | 2.6        | 4.5        | 4.0        | -3.7       | 12.1       | 3.4        | 5.8        | -3.8        | 5.8        | 1.4        |
| Domestic final demand                    | 2.0        | 1.9        | 1.8        | 1.9        | 1.5        | 0.1        | 3.7        | 1.1        | 2.4        | 1.6         | 1.4        | 1.3        |
| Change in inventories <sup>1</sup>       | 0.6        | -0.5       | -0.3       | -1.9       | -1.1       | 5.2        | -7.7       | -4.2       | 5.4        | -8.1        | -2.4       | 6.7        |
| Total exports <sup>2</sup>               | -0.1       | 5.2        | 2.3        | 6.8        | 4.2        | 6.4        | 17.2       | 6.6        | -9.7       | 12.5        | 0.5        | 1.0        |
| Goods <sup>2</sup>                       | -2.3       | 5.8        | 2.6        | 6.2        | 2.3        | 1.7        | 30.6       | 2.9        | -14.8      | -3.9        | 24.9       | 2.1        |
| Goods excluding merchanting <sup>2</sup> | -1.0       | 4.0        | 0.7        | 6.6        | 5.9        | 16.3       | 8.3        | 4.2        | 4.3        | -7.6        | 16.8       | 6.4        |
| Services                                 | 4.5        | 4.0        | 1.7        | 7.9        | 8.1        | 16.4       | -5.1       | 14.4       | 1.2        | 48.7        | -32.2      | -1.3       |
| Total imports <sup>2</sup>               | 1.4        | 3.3        | 3.2        | 4.7        | 2.9        | 16.5       | 6.2        | -2.1       | 3.2        | 1.0         | -2.6       | 17.3       |
| Goods <sup>2</sup>                       | 0.7        | 1.7        | 0.0        | 4.4        | 6.1        | 20.1       | 4.7        | -0.7       | 0.5        | -0.9        | -3.0       | 23.7       |
| Services                                 | 3.0        | 6.8        | 9.6        | 5.4        | -2.6       | 10.3       | 9.0        | -4.6       | 8.3        | 4.6         | -2.1       | 6.8        |
| Net exports <sup>3</sup>                 | -0.6       | 1.3        | -0.1       | 1.6        | 1.0        | -3.2       | 6.3        | 4.3        | -6.4       | 6.0         | 1.4        | -6.7       |
| <b>GDP</b>                               | <b>1.9</b> | <b>2.4</b> | <b>1.2</b> | <b>1.4</b> | <b>1.3</b> | <b>2.1</b> | <b>2.0</b> | <b>1.1</b> | <b>1.1</b> | <b>-0.7</b> | <b>0.3</b> | <b>1.1</b> |

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

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

3 Contribution to growth in percentage points.

Source: SECO



The picture in the different industries remains mixed, however, which can be explained by a number of factors. First, demand has not recovered in equal measure in all industries. Second, consumer-related industries and some areas of manufacturing continue to suffer from the strong Swiss franc. Third, several industries are currently in a restructuring process for technological or regulatory reasons.

## LABOUR MARKET

The gradual recovery on the labour market continues. Unemployment has receded further in the past few months, and the number of employed persons has risen again somewhat more strongly. Employment (measured in terms of full-time equivalents) has grown only slightly, however.

### Further fall in unemployment

Excluding seasonal fluctuations, the number of people registered as unemployed with regional employment offices stood at 142,500 people. Jobless figures have thus declined further. The seasonally adjusted unemployment rate published by SECO stood at 3.2% at the end of August (cf. chart 3.4).

In addition, the SFSO calculates unemployment figures in line with the International Labour Organization (ILO) definition, based on data provided by the Swiss labour force survey (SAKE), a quarterly survey of households. This survey includes unemployed people who are not registered, or are no longer registered, with the regional employment offices. The unemployment rate calculated by the SFSO in accordance with the ILO definition is therefore higher than the one published by SECO. In the second quarter of 2017, the seasonally adjusted unemployment rate amounted to 4.7% and was thus slightly below the peak reached a few quarters ago. It follows a similar pattern to SECO's unemployment rate.

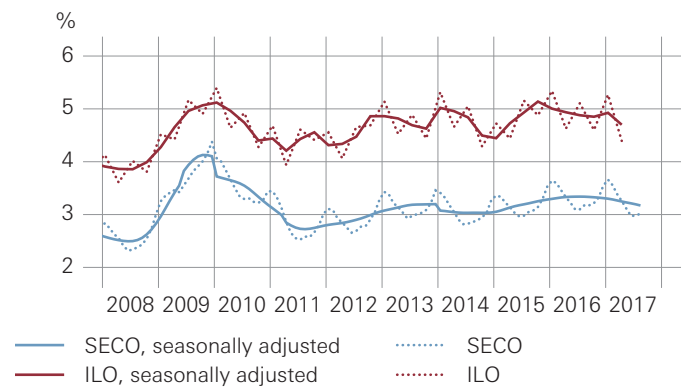
### Moderate growth in employment

The Employment Statistics (ES), which are also based on SAKE data, measure the number of employed persons on the household side. According to ES figures, the number of gainfully employed persons rose again more strongly in the second quarter and exceeded the threshold of 5 million people for the first time (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. Overall, according to these statistics, the number of full-time equivalent positions only registered a marginal increase in the second quarter (cf. chart 3.6). In services, accounting for around three-quarters of jobs, employment stagnated. Meanwhile, employment in manufacturing, which includes roughly 15% of jobs, rose strongly again for the first time in almost three years. In construction, job cuts – ongoing for nearly three years – continued.

Chart 3.4

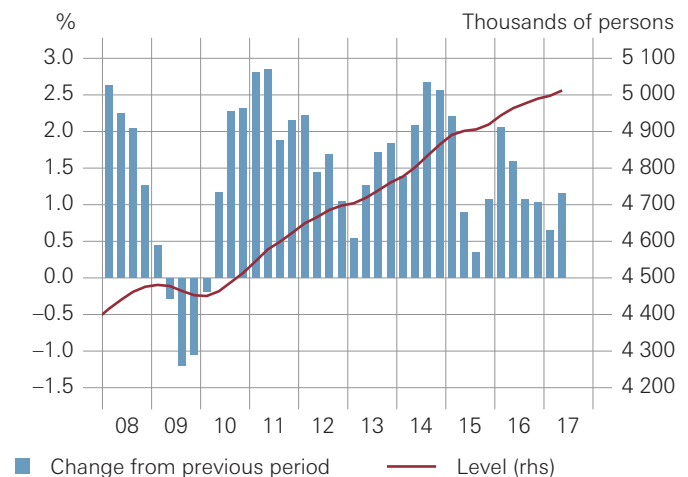
## UNEMPLOYMENT RATE



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

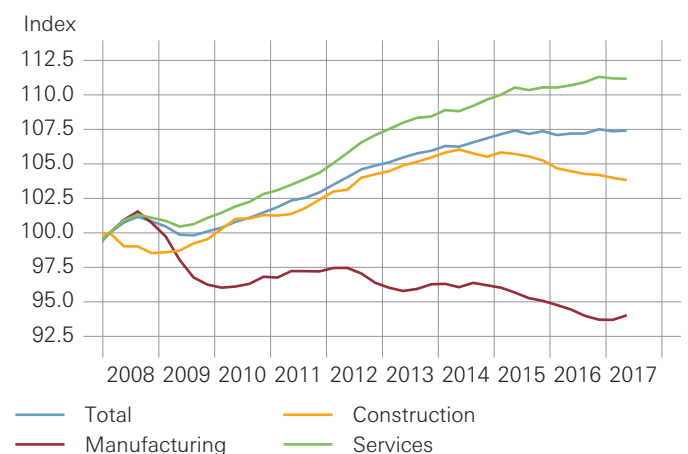


Source: SFSO; seasonal adjustment: SNB

Chart 3.6

## FULL-TIME EQUIVALENT JOBS

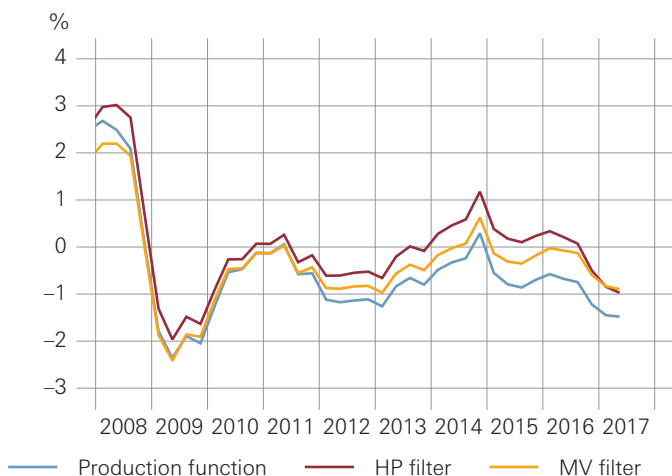
Beginning of period = 100



Source: SFSO; seasonal adjustment: SNB

Chart 3.7

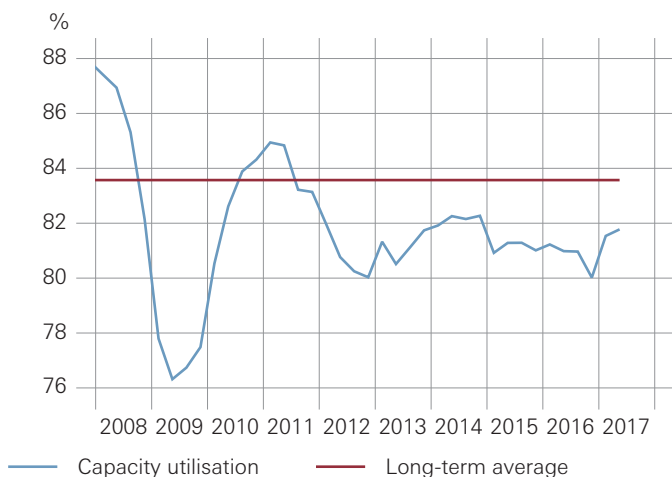
**OUTPUT GAP**



Source: SNB

Chart 3.8

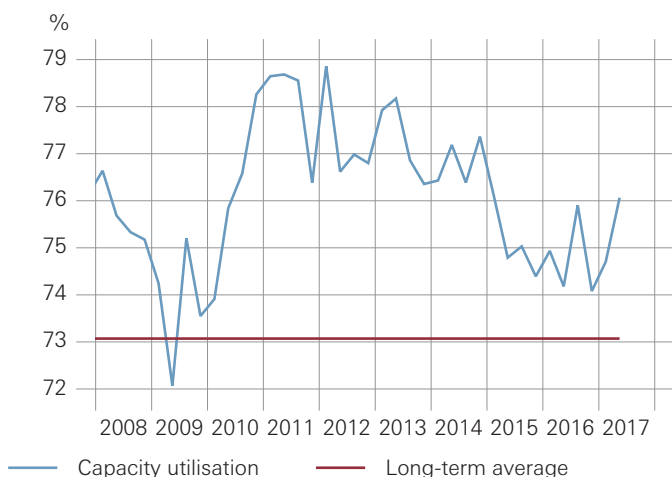
**CAPACITY UTILISATION IN MANUFACTURING**



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. It remained negative in the second quarter. At this time, however, it is particularly difficult to gauge the exact size of the gap.

Owing to the robust expansion of capital stock and the number of jobs on offer, potential output has increased at a higher rate than GDP in recent quarters. As a result, the estimated output gap widened further between the beginning of 2016 and mid-2017. This is substantiated by all the methods used as a basis for quarterly GDP estimates (cf. chart 3.7).

**Higher capacity utilisation in manufacturing**

Other indicators suggest a negative output gap overall. However, the trajectory is more favourable than in the case of the GDP-based measures for the output gap.

Unemployment has receded since the middle of last year and capacity utilisation in manufacturing has risen sharply in the last six months (cf. chart 3.8). Capacity utilisation also trended upwards in tourism and in construction (cf. chart 3.9). Consequently, these indicators support the assessment that the weak GDP growth of the previous quarters does not fully reflect economic momentum.

## OUTLOOK FOR THE REAL ECONOMY

The leading indicators suggest that the recovery will continue for the second half of the year. Since the beginning of 2017, the export-weighted PMI abroad has been at its highest level since 2011 and has recently registered another increase (cf. chart 3.10). Export-oriented industries are likely to benefit from the stimulus from abroad. Surveys among manufacturing companies thus suggest that the economic outlook will continue to improve (cf. chart 3.11). As a result, the services sector, too, is likely to pick up momentum. The leading indicators also suggest a further improvement on the labour market (cf. chart 3.12).

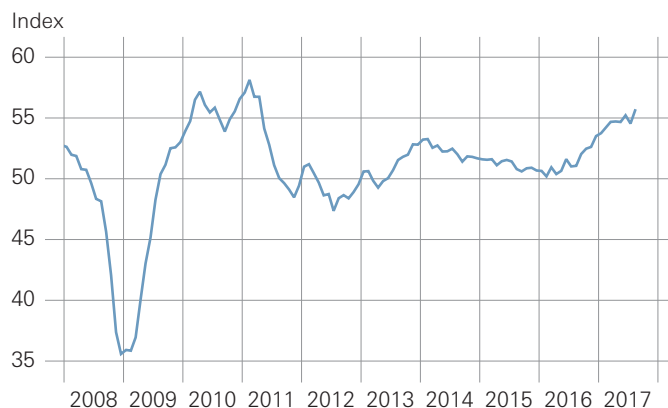
The SNB expects the economic recovery to continue in the medium term, too. This positive outlook is based on a number of factors. First, according to the baseline scenario (cf. chapter 2), global economic developments are expected to stimulate demand in Switzerland. Second, the depreciation of the Swiss franc in the past few weeks has resulted in improved competitiveness. Third, the strong population growth is likely to persist. Fourth, the low interest rate environment continues to support economic recovery.

Owing to the weak GDP figures in the recent past, the annual growth rate for 2017 is likely to be only just under 1.0%. As usual, 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



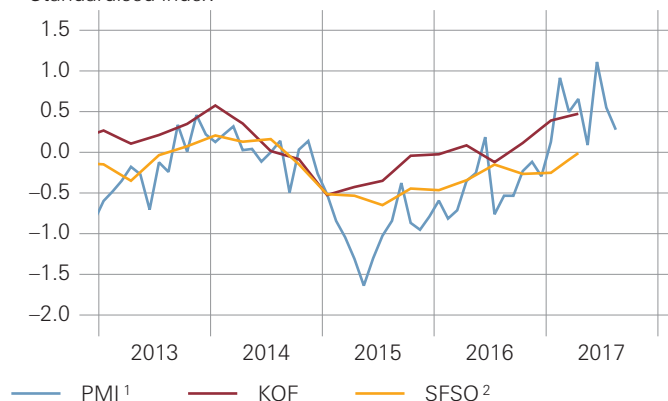
— Deloitte CFO survey  
— KOF, business situation in industry (rhs)

Sources: Deloitte, KOF Swiss Economic Institute

Chart 3.12

### EMPLOYMENT LEADING INDICATORS

Standardised index



— PMI<sup>1</sup> — KOF — SFSO<sup>2</sup>  
1 Monthly figures.  
2 Seasonal adjustment: SNB.  
Sources: Credit Suisse, KOF Swiss Economic Institute, SFSO

# 4

## Prices and inflation expectations

Inflation has remained largely stable in recent months. Consumer prices were slightly higher than a year earlier, as were prices for products upstream in the value chain (index of producer and import prices). The differences between these rates of price inflation and core inflation were minimal.

Inflation expectations have also remained low – and, across all time horizons, they were within a range that is consistent with the SNB's definition of price stability.

### CONSUMER PRICES

#### Slight decline in annual inflation rate

The annual inflation rate as measured by the Swiss consumer price index (CPI) has consistently been in low positive territory since the beginning of the year (cf. chart 4.1). It stood at 0.5% in August 2017, having averaged 0.4% over the first seven months of the year (cf. table 4.1).

#### Volatile inflation contribution from oil products

Fluctuations in the annual CPI inflation rate mainly reflect developments in the price of oil products. After falling significantly in the first half of 2017, inflation for oil products rose again in July and August.

Table 4.1

### SWISS CONSUMER PRICE INDEX AND COMPONENTS

Year-on-year change in percent

|  | 2016        | 2016        |             | 2017       |            | 2017       |            |            |
|--|-------------|-------------|-------------|------------|------------|------------|------------|------------|
|  |             | Q3          | Q4          | Q1         | Q2         | June       | July       | August     |
| <b>Overall CPI</b>                       | <b>-0.4</b> | <b>-0.2</b> | <b>-0.2</b> | <b>0.5</b> | <b>0.4</b> | <b>0.2</b> | <b>0.3</b> | <b>0.5</b> |
| Domestic goods and services              | -0.1        | -0.1        | 0.1         | 0.3        | 0.3        | 0.3        | 0.3        | 0.4        |
| Goods                                    | -0.6        | -0.2        | -0.1        | 0.0        | -0.3       | -0.5       | -0.3       | -0.6       |
| Services                                 | 0.0         | 0.0         | 0.1         | 0.4        | 0.4        | 0.5        | 0.5        | 0.6        |
| Private services excluding housing rents | 0.0         | 0.1         | -0.1        | 0.2        | 0.4        | 0.4        | 0.4        | 0.3        |
| Housing rents                            | 0.3         | 0.2         | 0.8         | 1.1        | 1.1        | 1.1        | 1.1        | 1.4        |
| Public services                          | -0.5        | -0.6        | -0.6        | -0.4       | -0.4       | -0.3       | -0.3       | 0.3        |
| Imported goods and services              | -1.4        | -0.6        | -0.9        | 1.3        | 0.6        | 0.0        | 0.3        | 0.7        |
| Excluding oil products                   | -0.7        | 0.2         | -1.2        | -0.7       | -0.1       | -0.2       | 0.1        | -0.1       |
| Oil products                             | -6.1        | -5.7        | 1.4         | 17.3       | 6.1        | 1.4        | 2.3        | 7.3        |

Sources: SFSO, SNB

### Minimal inflation contribution from most CPI components

The contribution to inflation of almost all of the most important CPI components has been very small in the past few months. This is true for both goods and the majority of services. The only notable exception – other than oil products in August – was housing rents (cf. chart 4.2).

### Slight rise in rate of inflation for rents

The SFSO collects data on rents on a quarterly basis, with a view to updating the index for housing rents in February, May, August and November. In August 2017, annual inflation as measured by the index for rents was 1.4%, having been 1.1% in May. This increase occurred despite the lowering of the reference interest rate announced in June (cf. chart 4.3). As changes to the reference interest rate generally take some time to feed through to rents, the lowering of the interest rate is expected to show up in the rent index from November.

### Core inflation rates close to annual CPI inflation rate

In recent months, both core inflation rates shown in chart 4.4 have been at almost the same level as the CPI annual inflation rate. The SNB's trimmed mean (TM15) stood at 0.4% in August 2017, as did the SFSO core inflation rate 1 (SFSO1).

Both core inflation rates are based on the prices of a reduced version of the CPI basket of goods and services. 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). Inflation on the CPI items excluded for the calculation of core inflation currently only differs slightly from CPI inflation.

## PRODUCER AND IMPORT PRICES

### Producer and import price inflation close to zero

Producer and import price inflation has approached zero in recent months (cf. chart 4.5). While import prices were up year-on-year, producer prices softened marginally over the same period. The rise in import inflation in August is principally due to the latest depreciation of the Swiss franc.

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.

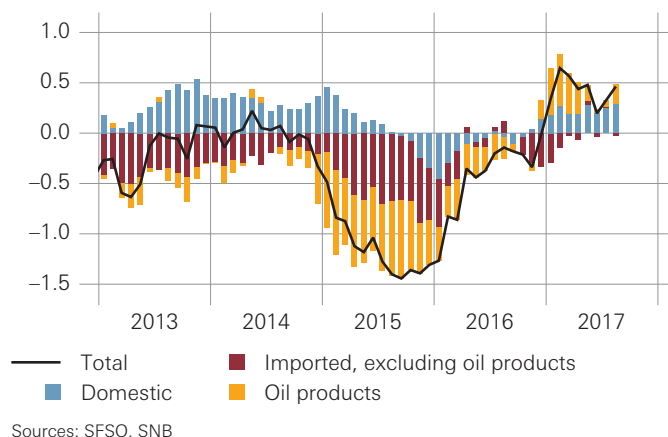


Chart 4.2

### CPI: DOMESTIC GOODS AND SERVICES

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

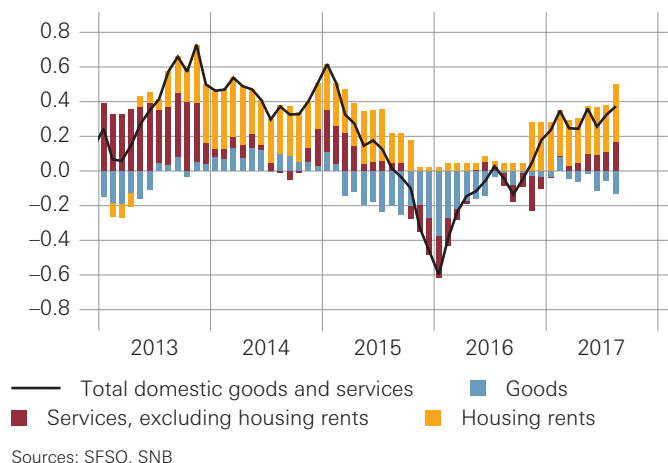


Chart 4.3

### HOUSING RENTS

Year-on-year change

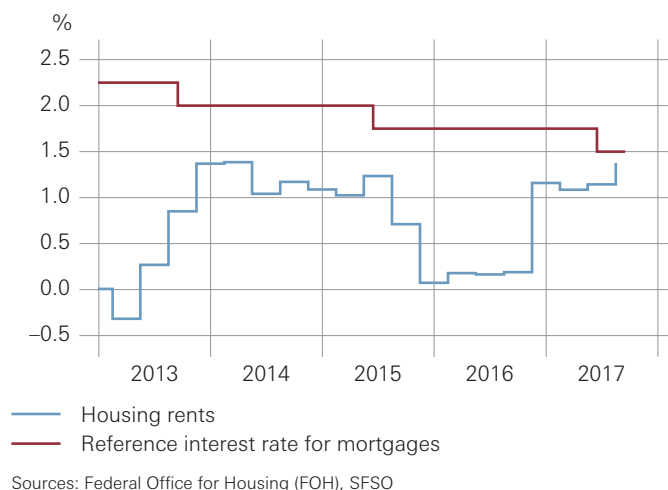
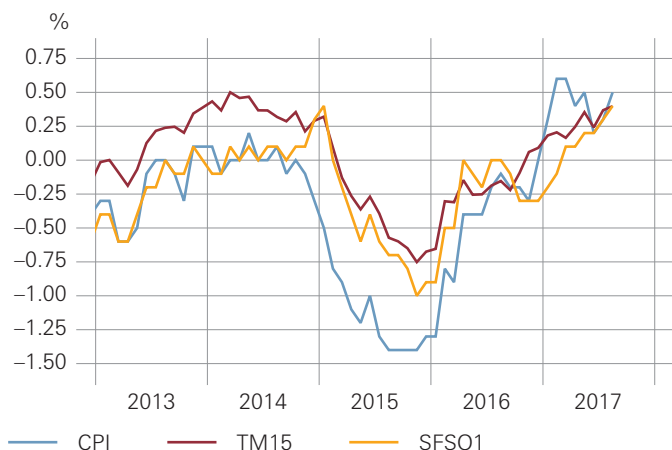


Chart 4.4

### CORE INFLATION RATES

Year-on-year change

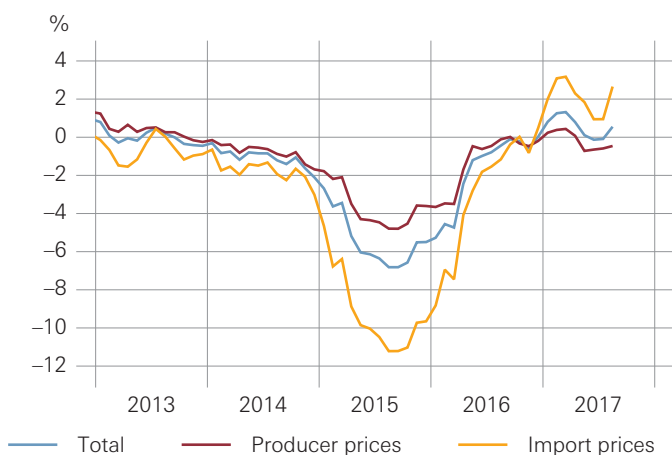


Sources: SFSO, SNB

Chart 4.5

### PRODUCER AND IMPORT PRICES

Year-on-year change

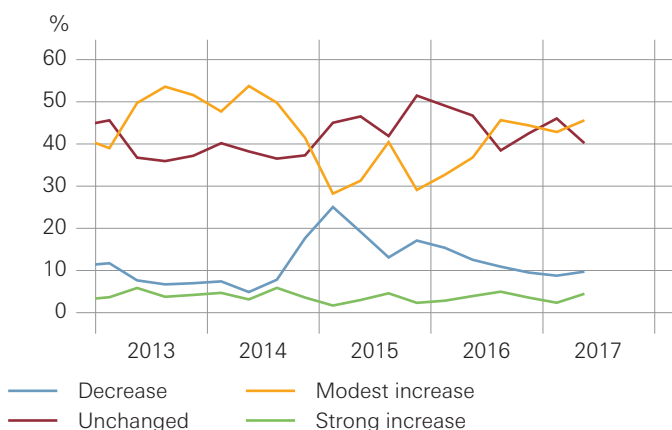


Source: SFSO

Chart 4.6

### PRICE EXPECTATIONS

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



Sources: SECO, SNB

## INFLATION EXPECTATIONS

### Inflation expectations consistent with price stability

Surveys show that inflation expectations have barely changed throughout the year, thus remaining consistent with price stability, which the SNB equates to a rise in the CPI of less than 2% per year.

### Stable short-term expectations

According to the quarterly survey of households conducted by SECO, there was only a minor change in price expectations between April and July 2017. The percentage of respondents expecting prices to either rise or fall over the next 12 months increased somewhat. By contrast, slightly fewer households expected prices to remain unchanged (cf. chart 4.6).

According to the joint monthly financial market survey by CFA Society Switzerland and Credit Suisse, half of the analysts questioned in August expected inflation rates to remain unchanged in the following six months, while 46% expected them to increase. The percentage of survey participants anticipating declining inflation rates remained low.

Talks held by the SNB's delegates for regional economic relations with companies from all sectors of the economy also indicate generally stable, slightly positive short-term inflation expectations. On average, in the third quarter, the company representatives expected the annual inflation rate to come in at 0.5% in six to twelve months, compared to 0.3% in the previous quarter.

### Longer-term expectations slightly above short-term expectations

Longer-term inflation expectations likewise remained largely unchanged – they continue to be slightly higher than short-term inflation expectations. Participants in the CFO survey by Deloitte, which was conducted in the second quarter of 2017, continue to predict an inflation rate of 1.1% in two years' time, as in the previous quarter. Also unchanged quarter-on-quarter, company representatives interviewed by the SNB's delegates put the annual rate of inflation in three to five years at 1.0%.



# 5

## Monetary developments

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At its monetary policy assessment of mid-June 2017, the SNB left its expansionary monetary policy unchanged. This means that, over the last three months, monetary policy has again been 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.

Money market interest rates have remained at the same level as the SNB's negative interest rate. Although long-term interest rates fluctuated somewhat more widely, they stood at about the same level in mid-September as three months previously.

The Swiss franc weakened against the euro in late July and early August. Between mid-June and mid-September, the trade-weighted external value of the Swiss franc also fell, although the Swiss currency strengthened slightly against the US dollar. With short-term interest rates virtually unchanged, monetary conditions overall have therefore eased somewhat.

As in the previous quarter, growth rates of the M3 monetary aggregate and bank loans have been in low positive territory.

### SUMMARY OF MONETARY POLICY SINCE THE LAST ASSESSMENT

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

The SNB confirmed its monetary policy stance at its assessment on 15 June 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.

#### **Higher sight deposits at the SNB**

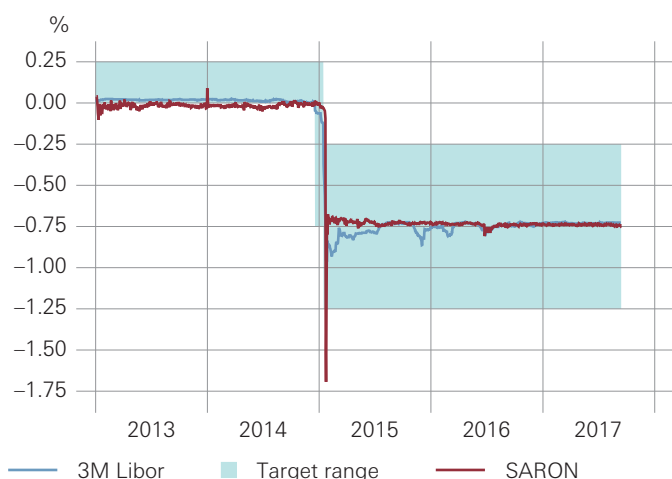
Since the monetary policy assessment of June 2017, total sight deposits held at the SNB have increased. In the week ending 8 September 2017 (last calendar week before the mid-September assessment), they amounted to CHF 579 billion, or CHF 2.6 billion more than in the last calendar week preceding the mid-June assessment (CHF 576.4 billion). Between the assessments in mid-June and mid-September 2017, sight deposits at the SNB averaged CHF 578.9 billion. Of this amount, CHF 478.4 billion was accounted for by the sight deposits of domestic banks and the remaining CHF 100.5 billion by other sight deposits.

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

Between 20 May and 19 August 2017, statutory minimum reserves averaged CHF 16.1 billion. Overall, banks exceeded the minimum reserve requirement by some CHF 471.2 billion on average (previous period: CHF 466.7 billion). Banks' surplus reserves have thus increased further.

Chart 5.1

### MONEY MARKET RATES

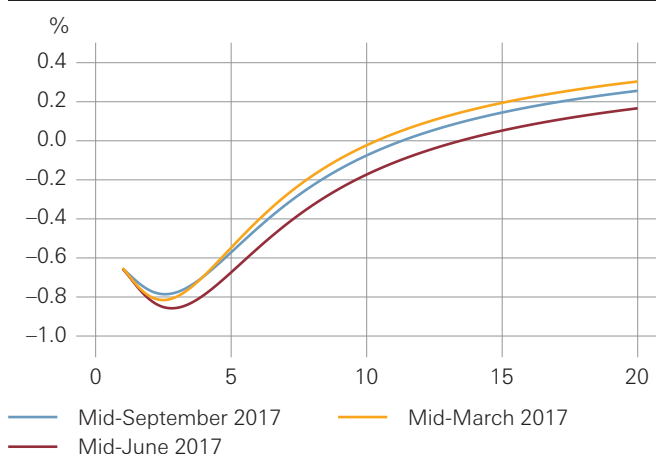


Sources: Bloomberg, SIX Swiss Exchange Ltd, SNB

Chart 5.2

### TERM STRUCTURE OF CONFEDERATION BONDS

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

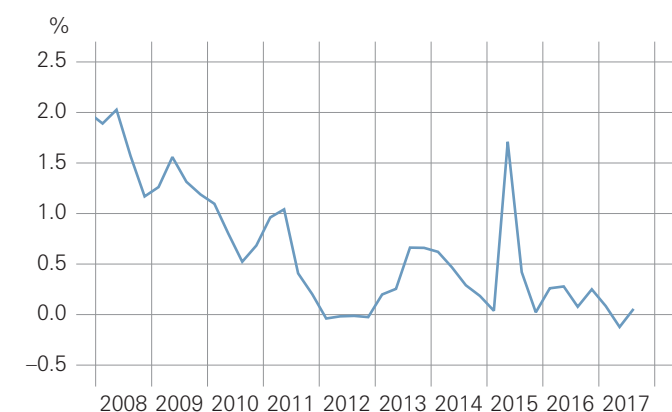


Source: SNB

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 interest rates stable

The situation on the Swiss franc money market has hardly changed since the June 2017 assessment. There has been little movement in interest rates on secured (SARON) and unsecured (three-month Libor) money market transactions, and both have been close to the interest rate on sight deposits held at the SNB, which has amounted to  $-0.75\%$  since January 2015 (cf. chart 5.1).

### Fluctuations in long-term interest rates

The yield on ten-year Confederation bonds has fluctuated between just under  $-0.2\%$  and almost  $0.1\%$  over the last three months. These movements are in line with the fluctuations in long-term interest rates abroad.

In mid-September, the return on ten-year Confederation bonds stood at  $-0.1\%$ , which was close to its mid-June level.

### Yield curve shifts very slightly upwards

The yield curve for Confederation bonds has shifted very slightly upwards since the June assessment (cf. chart 5.2). Nevertheless, Confederation bond yields for terms up to eleven years were in negative territory in mid-September.

### Little change in long-term real interest rates

The estimated long-term real interest rate stood at  $0.1\%$  in September 2017, thus remaining close to zero, as in previous quarters (cf. chart 5.3).

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

### Weakening of Swiss franc against the euro

The Swiss franc has weakened against the euro since the June assessment. Most of this depreciation occurred at the end of July, when the euro rose against the Swiss franc by several centimes within a few days. In mid-September, the exchange rate stood at CHF 1.15 to the euro (cf. chart 5.4).

The Swiss franc has appreciated slightly against the US dollar since the monetary policy assessment in June. The weakening of the dollar against the Swiss franc and other currencies was driven by political uncertainty in the US. In mid-September, the US dollar was trading at CHF 0.96.

### Nominal trade-weighted exchange rate index weaker

As a result of the Swiss franc's depreciation against the euro, its nominal trade-weighted external value has declined approximately 2% in the period since the June assessment (cf. chart 5.5). The depreciation of the Swiss franc against the euro has been partially offset by its slight appreciation against the US dollar and other currencies.

### Real trade-weighted exchange rate index still high

The real trade-weighted external value of the Swiss franc has also fallen slightly since June. As the inflation rate in Switzerland is somewhat lower than in other countries, the decline in the real external value was somewhat more pronounced than that in the nominal value.

Despite the recent fall in its real trade-weighted external value, the Swiss franc is still highly valued. The real trade-weighted Swiss franc indices calculated by the SNB, the Bank for International Settlements and the International Monetary Fund are all well above their long-term averages (cf. chart 5.6).

Chart 5.4

### EXCHANGE RATES



Source: SNB

Chart 5.5

### NOMINAL EXTERNAL VALUE OF SWISS FRANC

December 2000 = 100

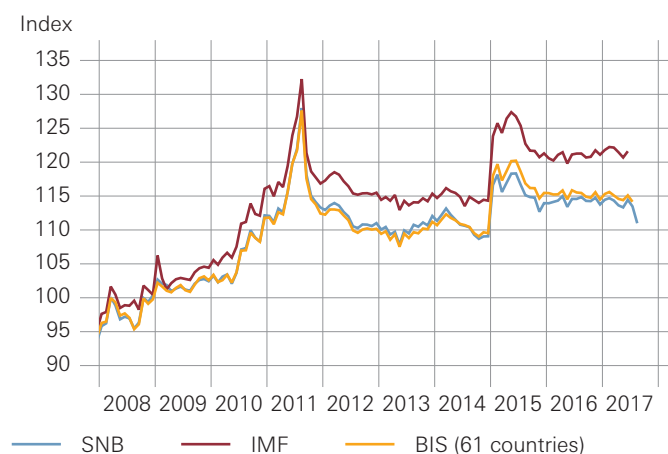


Source: SNB

Chart 5.6

### REAL EXTERNAL VALUE OF SWISS FRANC

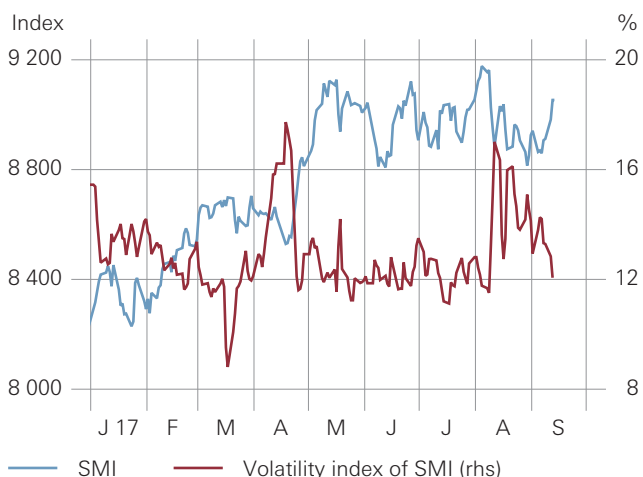
December 2000 = 100



Sources: Bank for International Settlements (BIS), IMF, SNB

Chart 5.7

**SHARE PRICES AND VOLATILITY**

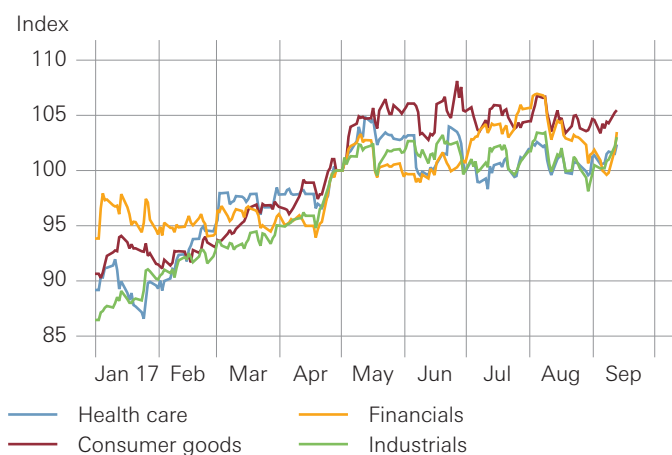


Sources: Bloomberg, Thomson Reuters Datastream

Chart 5.8

**SELECTED SPI SECTORS**

1 May 2017 = 100

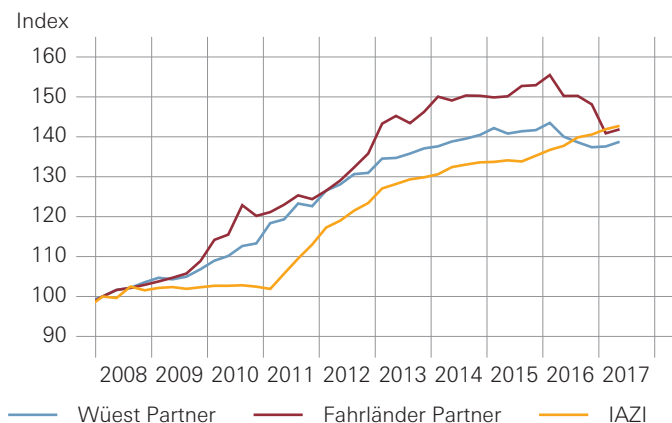


Source: Thomson Reuters Datastream

Chart 5.9

**TRANSACTION PRICES, PRIVATELY OWNED APARTMENTS**

Nominal (hedonic), beginning of period = 100



Sources: Fahrländer Partner, IAZI, Wüest Partner

**SHARE AND REAL ESTATE PRICES**

**Slight rise in share prices**

The Swiss Market Index (SMI) advanced by over 7% in the first third of 2017 but has since only risen by some 2% (cf. chart 5.7). The movements in the SMI in the second third of the year have largely reflected corresponding developments in the stock markets in Europe and North America.

When the Swiss franc weakened significantly against the euro in late July and early August, the SMI climbed to a new annual high. However, it soon relinquished these gains when tensions between the US and North Korea depressed market sentiment and the Swiss franc appreciated again somewhat against other currencies.

**Heightened market uncertainty in August**

The volatility index derived from options on SMI futures contracts is used to gauge uncertainty on the stock market. This index was at a low level from May to July, but temporarily rose sharply in August as share prices fell (cf. chart 5.7).

**Restrained fluctuations in the SPI sub-indices**

The Swiss Performance Index (SPI) sub-indices shown in chart 5.8 have fluctuated slightly while moving largely in parallel since the beginning of May. Although consumer goods rose slightly more strongly than health care, financials and industrials, the differences were moderate.

**Rise in residential property prices**

Following a period of stabilisation, the available price indices for privately owned apartments increased slightly in the second quarter (cf. chart 5.9). The rise was broad based and thereby included almost all regions and price segments. Similar developments were observed in prices for single-family houses.

## 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 548.8 billion in August 2017 (cf. chart 5.10).

This slight dip primarily reflects movements in domestic banks' sight deposits, which were down by CHF 12.7 billion between May and August 2017. Banknotes in circulation remained largely stable over the same period.

The minor decline in domestic banks' sight deposits contrasts with a rise in other sight deposits. Total sight deposits at the SNB thus only marginally changed between May and August.

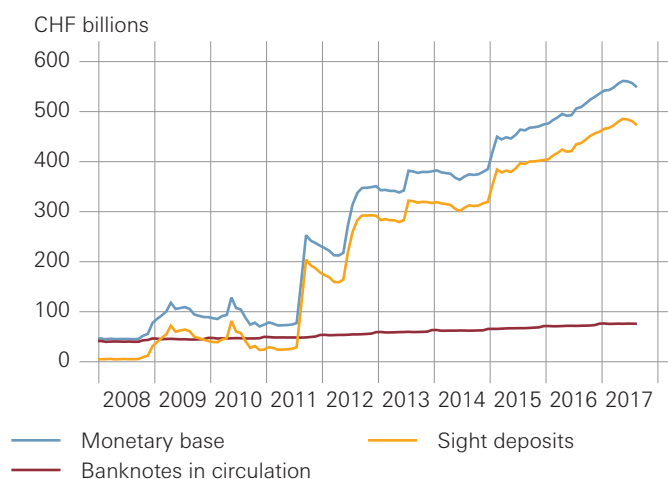
### Further growth in broad monetary aggregates

Despite the stabilisation of the monetary base, the M1, M2 and M3 monetary aggregates, which measure the money supply in the hands of the public, continued to grow (cf. chart 5.11). These broader monetary aggregates are currently able to grow irrespective of fluctuations in the monetary base because the banks have a large amount of liquidity – in other words, sight deposits held by banks at the SNB significantly exceed the statutory minimum reserve requirement.

After the slowdown in growth between 2013 and 2015, the monetary base began to grow again in 2016 and at the beginning of 2017. At the end of August, M1 (cash in circulation, sight deposits and transaction accounts) was 6.4% above its level a year earlier, while M2 (M1 plus savings deposits) had risen by 4.4% and M3 (M2 plus time deposits) by 4.0% over the same period (cf. table 5.1).

Chart 5.10

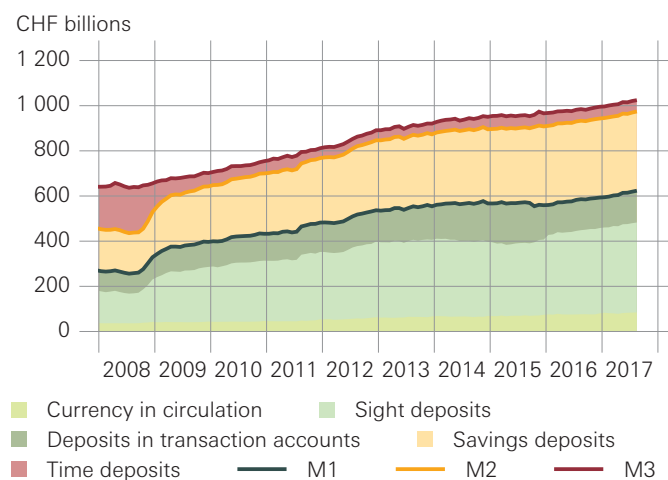
### MONETARY BASE



Source: SNB

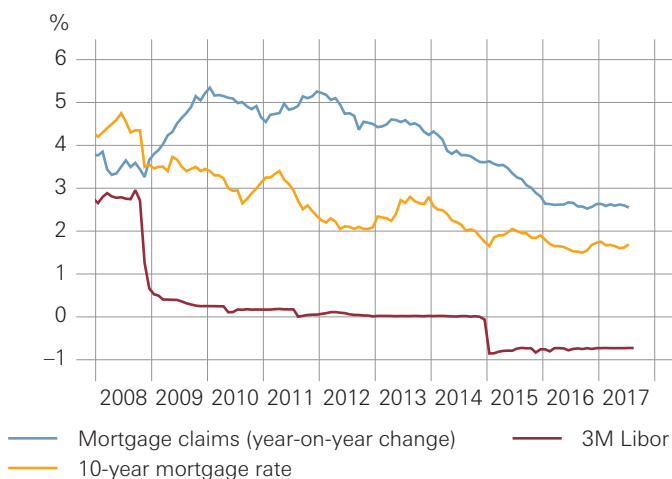
Chart 5.11

### MONETARY AGGREGATES



Source: SNB

Chart 5.12

**MORTGAGE CLAIMS AND INTEREST RATES**

Sources: Bloomberg, SNB

**Moderate 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 second quarter of 2017 (cf. table 5.1). Between 2012 and 2015, growth in this area halved, and has remained more or less stable since then.

In recent quarters, mortgage interest rates have persisted at a historically very low level. The ten-year mortgage interest rate stood at 1.7% in July 2017 (cf. chart 5.12).

Table 5.1

**MONETARY AGGREGATES AND BANK LOANS**

Year-on-year change in percent

|  | 2016       | 2016       | 2017       |            | 2017       |            |            |            |
|--|------------|------------|------------|------------|------------|------------|------------|------------|
|  |            | Q3         | Q4         | Q1         | Q2         | June       | July       | August     |
| <b>M1</b>                                | <b>2.1</b> | <b>2.4</b> | <b>5.8</b> | <b>5.8</b> | <b>6.3</b> | <b>6.7</b> | <b>6.2</b> | <b>6.4</b> |
| <b>M2</b>                                | <b>2.8</b> | <b>3.3</b> | <b>3.5</b> | <b>3.7</b> | <b>4.1</b> | <b>4.3</b> | <b>4.2</b> | <b>4.4</b> |
| <b>M3</b>                                | <b>2.3</b> | <b>2.8</b> | <b>2.6</b> | <b>3.1</b> | <b>3.7</b> | <b>4.0</b> | <b>4.0</b> | <b>4.0</b> |
| <b>Bank loans, total</b> <sup>1, 3</sup> | <b>2.0</b> | <b>2.1</b> | <b>2.6</b> | <b>2.7</b> | <b>2.5</b> | <b>2.5</b> | <b>2.6</b> |            |
| Mortgage claims <sup>1, 3</sup>          | 2.6        | 2.6        | 2.6        | 2.6        | 2.6        | 2.6        | 2.5        |            |
| Households <sup>2, 3</sup>               | 2.8        | 2.7        | 2.6        | 2.6        | 2.6        | 2.6        | 2.6        |            |
| Private companies <sup>2, 3</sup>        | 2.6        | 2.7        | 2.7        | 3.2        | 3.2        | 3.4        | 3.1        |            |
| Other loans <sup>1, 3</sup>              | -1.1       | -0.9       | 2.5        | 2.9        | 2.2        | 2.1        | 3.0        |            |
| Secured <sup>1, 3</sup>                  | 0.0        | -2.4       | 7.2        | 8.0        | 4.9        | 5.0        | 5.2        |            |
| Unsecured <sup>1, 3</sup>                | -2.0       | 0.2        | -0.7       | -0.7       | 0.2        | -0.1       | 1.5        |            |

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

**... and other loans**

Other loans increased by 2.2% year-on-year in the second quarter. Apart from short-term fluctuations, the volume of other loans remained at more or less the same level as in 2008. Although unsecured other loans, while experiencing wide fluctuations, have receded slightly, this decrease has been largely offset by the rise in secured other loans (cf. chart 5.13).

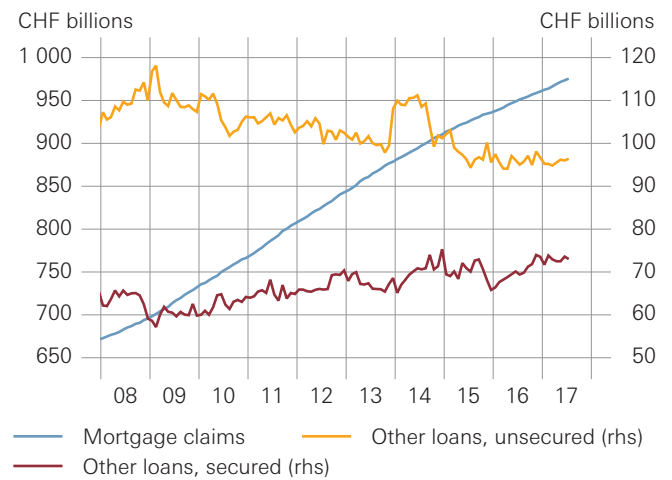
**Lending growth by sector**

Both households and non-financial companies have benefited from low interest rates over the last ten years, as shown by a steady rise in bank loans extended to these two important customer groups (cf. chart 5.14).

At the end of June 2017, loans to households and loans to non-financial companies increased year-on-year by 2.6% and 2.2% respectively. Loans to financial companies, which exhibit greater volatility at a significantly lower volume, were up 8.5%.

Chart 5.13

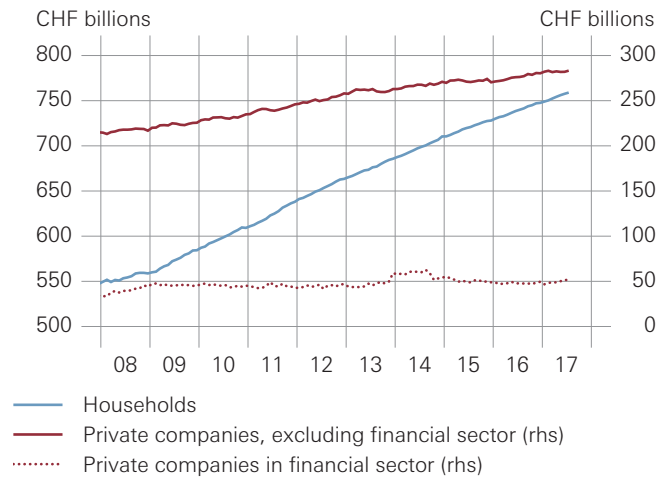
**MORTGAGE CLAIMS AND OTHER LOANS**



Source: SNB

Chart 5.14

**LOANS TO HOUSEHOLDS AND COMPANIES**



Source: SNB

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# Business cycle signals

## Results of the SNB company talks

### **Third 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 213 company talks were conducted between mid-July and the end of August.

#### **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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- Interviews conducted with companies in the third quarter suggest Switzerland's economic situation is brightening appreciably and that the outlook for the next six months remains favourable.
- Quarter-on-quarter, real turnover once again increased – and year-on-year, it even increased significantly.
- Companies' utilisation of technical production capacity is now close to normal levels, however some industries undoubtedly still face difficulties.
- Margins continue to improve, but on the whole they remain below what company representatives regard as usual.
- Company managers expect real turnover to continue rising in the coming six months thanks in large part to the more favourable international economic situation.
- There is a noticeable uptick in companies' willingness to invest as well as in their demand for staff.
- Company representatives rate the international environment as less uncertain than during the second quarter, however they are cautious in their assessment of recent exchange rate developments.

## CURRENT SITUATION

### Stronger turnover growth

Discussions with companies in the third quarter suggest that economic activity in Switzerland is continuing to gather pace, most notably in manufacturing.

Company representatives reported 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 chapter). Year-on-year, turnover was even significantly higher. These gains were broad based in that they were observable across all three sectors, i.e. services, manufacturing and construction.

Turnover growth was principally driven by exports, with most export industries enjoying solid and sustained momentum. Sales to various European countries are strong and company representatives also mention Asia, especially China, as an important growth driver. Signals from the US are mixed but predominantly positive. Business is particularly dynamic for companies supplying goods to the automotive and railway industries as well as to healthcare and aviation.

In addition to strong exports, companies reported somewhat brisker domestic sales.

### Capacity utilisation close to normal

Having deteriorated between the beginning of 2014 and mid-2016 (cf. chart 2), the utilisation of technical production capacity stabilised from the second half of 2016. Since then, underutilisation has been falling consistently.

Half of the companies interviewed rated their technical capacity utilisation as normal. Of the remaining 50%, around half reported underutilisation and half overutilisation. Certain firms have added more shifts to meet increased demand.

### Staff numbers adequate

As in the two previous quarters, staff numbers are currently considered to be in line with demand across all three sectors. In the course of 2016, staff numbers were still considered somewhat too high.

While in the previous quarter managers had reported that recruitment was as challenging as ever, in the quarter under review they noted that hiring had become more difficult. In particular, they claim they have seen a decline in the availability of staff from Germany. A further observation was that companies are increasingly poaching staff from one another.

### Lower margin pressure

Margins continue to follow the trajectory of normalisation that began in early 2016, with rising sales volumes playing a major role. On the whole, profit margins remain below what the company representatives regard as usual; nevertheless, their overall assessment is now on a par with their assessment prior to the discontinuation of the minimum exchange rate against the euro. 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

While the situation has improved slightly, trade continues to be affected by structural changes, such as the shift to online shopping. Industries and segments that have hitherto not offered their products on the internet are now also jumping on this bandwagon. The environment for stationary retail remains challenging – there is talk of an ‘overstore’ (too many shops) in some areas. Notwithstanding this, there are some signs that price erosion may be slowing or stopping altogether. In wholesale trade, the trend points towards slightly increasing real turnover and improved capacity utilisation.

The finance sector once again made a positive showing. Margin pressure remains, but it is falling in places thanks to cost-cutting measures. Infrastructure (office and retail space as well as IT capacity) continues to be underutilised or oversized; companies are thus typically reducing their store count. Companies in commission business have profited from ongoing favourable stock market conditions, although the low interest rate environment continues to be a challenge.

The hotel industry reported very strong third-quarter performance. Tourism has increased in various regions, with Switzerland’s reputation as a safe destination helping to stimulate demand. Infrastructure utilisation has practically returned to normal and margins have improved considerably, not least due to cost savings and, where possible, price increases.

The ICT industry, which had already reported very strong performance and high turnover growth in previous quarters, recorded a substantial year-on-year turnover increase in the third quarter.

The situation continues to brighten in manufacturing, with the majority of industries reporting higher turnover than in the previous quarter. Signs that the watchmaking industry was emerging from its low have been confirmed, although production capacity continues to be underutilised and margin pressure persists. Companies in food production as well as in metal and plastic processing, mechanical engineering and energy supply have also recorded tighter-than-usual margins.

In construction, in both the building industry and ancillary trades, business performance remains positive. There was once again talk in a number of regions of intensified predatory competition.

Digitalisation and cybersecurity are a focus of concern in numerous industries, with virtually all companies giving thought to the subject and/or initiating projects.

Chart 3

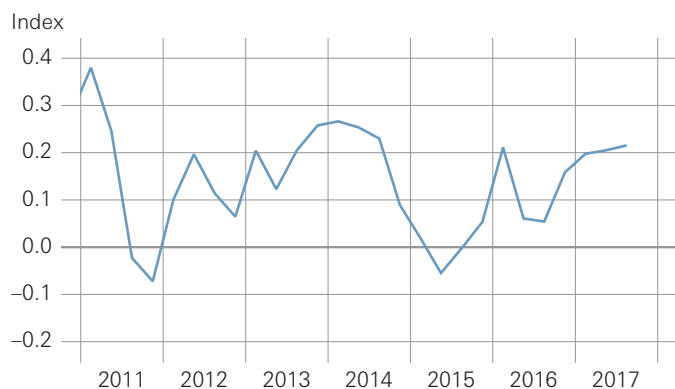
**EXPECTED TURNOVER**



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

Chart 4

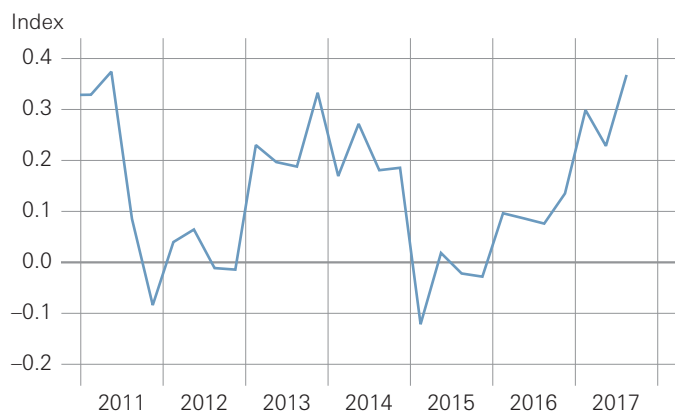
**EXPECTED CAPACITY UTILISATION**



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**

**Continued confidence**

The company representatives interviewed by the SNB remain optimistic about their business prospects for the coming six months; real turnover is expected to rise in all three sectors (cf. chart 3). This assessment is principally based on the favourable global economic outlook. Companies also highlighted the importance of somewhat more advantageous exchange rate conditions – notably a stronger euro – and the clear effects of efficiency drives.

The confidence of company representatives is also reflected in slightly higher expected utilisation of technical production capacity and/or infrastructure in the next two quarters (cf. chart 4). Their willingness to invest – both in equipment and in buildings – has likewise increased notably compared to previous quarters. In investing in equipment, over a quarter of the companies are simultaneously expanding their production capacity.

For the first time since the beginning of 2014, the managers interviewed by the SNB say they expect to see a slight uptrend in both purchase and sales prices over the coming six months. They attribute this partly to higher prices for raw materials.

**Moderate staff increases planned**

The prospect of higher capacity utilisation is also affecting companies’ recruitment plans: company representatives are planning moderate increases in staff numbers (cf. chart 5); these increases will affect all three sectors, but especially services. Manufacturing companies remain slightly more cautious on the hiring front.

**ENVIRONMENT AND RISKS**

Company representatives rate the environment as less uncertain than during the second quarter. While risks in Europe are perceived as having receded further, the consequences of Brexit remain hard to quantify. When asked about potential dangers, companies mainly expressed concern about geopolitical risks and, to a lesser extent, protectionist tendencies. Domestically, the complex regulatory environment is perceived as a burden and cybercrime was mentioned as a serious threat in certain segments. Company representatives are counting on a pragmatic outcome with respect to corporate tax reform.

Some company representatives see the low interest rate environment as problematic for the long-term position of pension funds. They also indicated some unease regarding the effects of low interest rates on the real estate market. It was noted that the considerable investment needs of institutional investors are making themselves felt. Growing vacancy rates in residential property are also a concern.

While the weakening of the Swiss franc against the euro during the third quarter was welcomed by most of the company representatives, caution prevails, as the movement will only have an effect if it turns out to be sustainable. The large majority of those surveyed said the impact of the weaker Swiss franc had yet to feed through to their businesses.

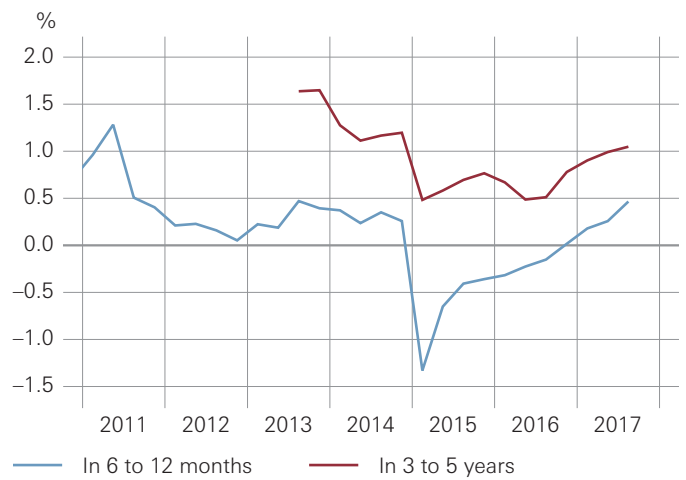
## INFLATION EXPECTATIONS

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

At the beginning of 2015, both short and medium-term inflation expectations dipped sharply in the wake of the Swiss franc's strong appreciation. However, both have gradually risen again in the interim. Inflation expectations continued to trend upwards in the third quarter, with average expectations for the next six to twelve months increasing from 0.3% in the previous quarter to 0.5% in the quarter under review; however, expectations for the next three to five years remained unchanged, at 1.0% (these short and medium-term expectations are represented in chart 6 by the blue and red lines respectively). Inflation expectations have thus returned to the kind of levels recorded at the end of 2014.

Chart 6

## EXPECTED INFLATION



Source: SNB

## 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 strong business cycle 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 part of the qualitative information received according to a numeric scale. This enables the results to be aggregated and represented graphically.

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

### Interpreting the charts

The charts are to be regarded as a numeric summary of the qualitative information received. The index value shown represents the average of the findings from all companies visited. When interpreting the curves, 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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# 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).

September 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.

June 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.

March 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.

December 2016

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.

November 2016

On 10 November 2016, the Federal Department of Finance (FDF) and the SNB announce that they have signed a new agreement on the distribution of the SNB's profits for 2016 to 2020. Subject to a positive distribution reserve, the SNB will in future pay CHF 1 billion p.a. to the Confederation and the cantons, as was previously the case. In future, however, omitted distributions will be compensated for in subsequent years if the distribution reserve allows this.

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