



Quarterly Bulletin
1/2017 March

SCHWEIZERISCHE NATIONALBANK
BANQUE NATIONALE SUISSE
BANCA NAZIONALE SVIZZERA
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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 March 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 16 March 2017') is an excerpt from the press release published following the assessment.

This report is based on the data and information available as at 16 March 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 16 March 2017

Swiss National Bank leaves expansionary monetary policy unchanged

The Swiss National Bank (SNB) is maintaining its expansionary monetary policy. 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. The SNB's expansionary monetary policy is aimed at stabilising price developments and supporting economic activity. 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 pressure on the currency.

Compared to December, the new conditional inflation forecast is slightly higher for the next few quarters (cf. chart 1.1). Increased oil prices in particular contribute to the rise in inflation in the short term. Over the longer term, however, the conditional inflation forecast is marginally lower. The inflation forecast for 2017 has risen to 0.3% , compared to 0.1% in the previous quarter (cf. table 1.1). For 2018, the SNB anticipates inflation of 0.4% , compared to 0.5% in the previous quarter. The forecast for 2019 is 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 global economy expanded in line with expectations in the fourth quarter. GDP growth was once again robust in the US, where the labour market has returned to full employment and inflation is approaching the Federal Reserve's target. Against this backdrop, the Federal Reserve decided on 15 March to raise its key interest rate by a further 25 basis points. The other major economic areas likewise developed favourably in the fourth quarter. The euro area, Japan and China all reported encouraging growth rates, and economic growth in the UK was once again surprisingly strong.

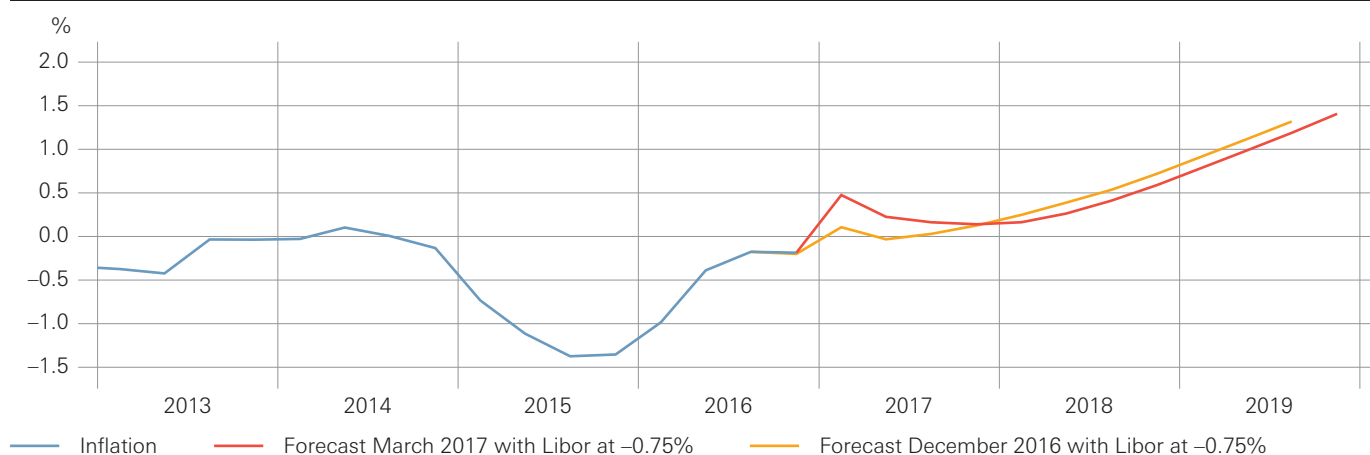
Indicators available at the beginning of the year suggest the outlook for the global economy will continue to improve. Industrial activity and international trade especially have picked up. While the SNB expects international economic developments to remain positive in 2017, its baseline scenario for the global economy is still subject to considerable risks. Chief among these are political uncertainty with respect to the future course of economic policy in the US, upcoming elections in Europe, and the complex exit negotiations between the UK and the EU.

In Switzerland, fourth-quarter GDP growth was lower than expected. According to an initial quarterly estimate, GDP grew – as in the third quarter – at an annualised rate of just 0.3% . However, a more extensive analysis of the available economic indicators points to an ongoing moderate recovery in the final months of the year; developments on the labour market support this view. Although the seasonally adjusted unemployment rate remained stable, the number of people out of work declined slightly from August onwards. Discussions with company representatives conducted by the SNB's delegates for regional economic relations also suggest a moderate improvement of the economic situation.

Chart 1.1

CONDITIONAL INFLATION FORECAST OF MARCH 2017

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



Source: SNB

Given favourable economic developments internationally, the outlook for Switzerland's economy is cautiously optimistic. Overall, the SNB continues to expect GDP growth of roughly 1.5% for 2017. Nonetheless, the forecast for Switzerland, too, is marked by considerable uncertainty emanating from international risks.

Growth on the mortgage and real estate markets remained fairly constant at a relatively low level in the fourth quarter of 2016. At the same time, the slowdown in price momentum in the residential property market continued. Imbalances on the mortgage and real estate markets nevertheless persist. 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 MARCH 2017

	2013				2014				2015				2016				2014	2015	2016
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Inflation	-0.4	-0.4	0.0	0.0	0.0	0.1	0.0	-0.1	-0.7	-1.1	-1.4	-1.4	-1.0	-0.4	-0.2	-0.2	0.0	-1.1	-0.4

CONDITIONAL INFLATION FORECAST OF MARCH 2017

	2016				2017				2018				2019				2017	2018	2019
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Forecast December 2016, with Libor at -0.75%				-0.2	0.1	0.0	0.0	0.1	0.2	0.4	0.5	0.7	0.9	1.1	1.3		0.1	0.5	
Forecast March 2017, with Libor at -0.75%					0.5	0.2	0.2	0.1	0.2	0.3	0.4	0.6	0.8	1.0	1.2	1.4	0.3	0.4	1.1

Source: SNB

2 Global economic environment

The global economy expanded in line with expectations in the fourth quarter. In many countries, domestic demand remained an important buttress of growth. Indicators available at the beginning of 2017 suggested the outlook for the global economy would continue to improve. Industrial activity and international trade especially picked up (cf. chart 2.1).

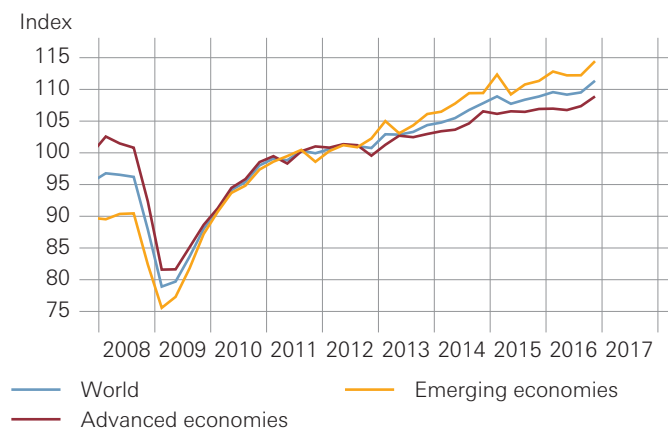
The US economy is in a robust expansionary phase, with GDP growth within the range of potential. The economy is at full employment, and the various inflation indicators are approaching the Federal Reserve's target. Against this backdrop, the US central bank indicated a willingness to gradually normalise monetary conditions.

The recovery in the euro area continued. The output gap narrowed and unemployment declined. While consumer price inflation rose noticeably in recent months due to higher energy prices, core inflation persisted at below 1%. In Japan, too, despite favourable developments in the real economy, inflation continued at a modest level. Both in the euro area and Japan, monetary policy therefore remained expansionary. In the UK, although inflation climbed significantly as a result of the weak pound, the Bank of England maintained its relaxed monetary policy given uncertain prospects for growth.

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

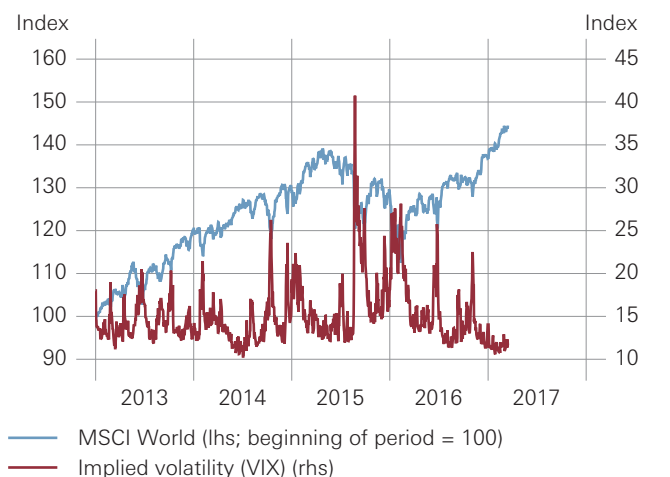
	2013	2014	2015	2016	Scenario	
					2017	2018
GDP, year-on-year change in percent						
Global ¹	3.3	3.5	3.3	3.2	3.6	3.7
US	1.7	2.4	2.6	1.6	2.3	2.3
Euro area	-0.3	1.2	2.0	1.7	1.8	1.6
Japan	2.0	0.2	1.2	1.0	1.1	0.8
Oil price in USD per barrel						
	108.7	99.0	52.5	43.8	56.0	56.0

¹ 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

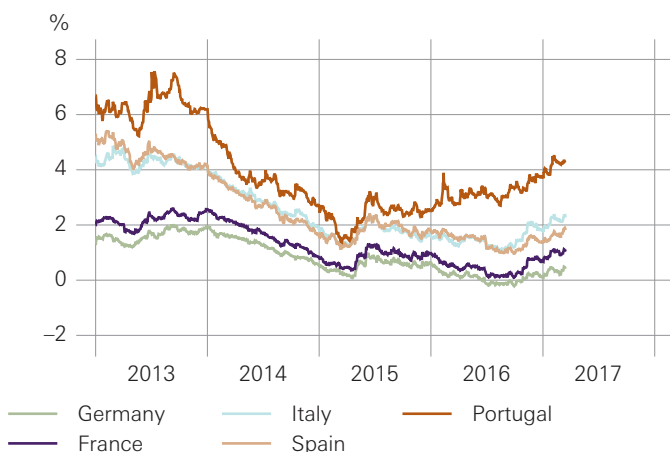


Source: Thomson Reuters Datastream

Chart 2.4

EUROPEAN LONG-TERM INTEREST RATES

10-year government instruments



Source: Thomson Reuters Datastream

In its baseline scenario (cf. table 2.1), the SNB expects positive global economic developments to continue, and that conditions will thereby become more favourable for Switzerland. However, the baseline scenario is still subject to considerable risks. Chief among these are political uncertainty with respect to the future course of economic policy in the US, upcoming elections in Europe, and the complex exit negotiations between the UK and the EU.

The SNB’s forecasts for the global economy are based on assumptions about the oil price and the EUR/USD exchange rate. The SNB is assuming an oil price for Brent crude of USD 56 per barrel and an exchange rate of USD 1.07 to the euro (compared to USD 47 per barrel and USD 1.09 to the euro in December’s baseline scenario). 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-December, stock market performance around the globe has been positive. The primary drivers have been a further improvement in the world economy and the expectation of significantly more expansive fiscal policy in the US. The MSCI World Index and the US stock market index S&P 500 both recorded all-time highs. The volatility of US stocks as measured by option prices (VIX), which serves as an indicator of market uncertainty, remained low (cf. chart 2.2).

By contrast, movements in long-term interest rates were inconsistent (cf. charts 2.3 and 2.4). In the euro area, yields on long-term government bonds rose overall against the backdrop of favourable economic developments. US yields trended sideways, following strong gains at the end of 2016. In Japan, yields on ten-year government bonds were virtually unchanged at slightly above the Bank of Japan’s target value of zero percent.

The US dollar has lost some value on a trade-weighted basis since the beginning of the year, inversely reflecting the Japanese yen’s gain in value. The euro trended sideways (cf. chart 2.5).

On commodity markets, the oil price initially stabilised at USD 55 per barrel, following agreement among major oil-producing countries – both OPEC members and non-members – at the end of 2016 to limit production from the beginning of 2017. In mid-March, the price sank to USD 51 per barrel, due to a marked crude oil inventory increase in the US. The prices of other commodities fluctuated, and were last at the level of mid-December (cf. chart 2.6).

US

Following modest growth in the first half of 2016, the US economy regained momentum in the second half of the year (cf. chart 2.7). The main driver was private consumption. In addition, investment in equipment and inventory picked up again towards year-end. The robust increase in employment continued in the final months of the year. Since the participation rate increased slightly, the unemployment rate remained largely unchanged, amounting to 4.7% in February (cf. chart 2.10).

The outlook for the US economy has brightened further since December. Manufacturing, in particular, has experienced a clear improvement in confidence. Companies also showed an increased willingness to invest. Furthermore, in its new baseline scenario, the SNB expects tax cuts towards year-end, which should bolster business activity in the coming year. The SNB has therefore revised its growth forecast for the US slightly upwards, and projects GDP growth of 2.3% for both 2017 and 2018 (cf. table 2.1). The forecast is still subject to considerable uncertainty, however, given the lack of clarity surrounding key aspects of future economic policy.

Inflation as measured by the consumer price index increased significantly in recent months, mainly on the back of rising energy prices. In February it climbed to 2.7%, its highest level since March 2012 (cf. chart 2.11), while core inflation persisted at slightly over 2% (cf. chart 2.12). The personal consumption expenditure (PCE) deflator index, the US Federal Reserve's preferred measure of inflation, was 1.7% higher than the year-back level, thereby nearing the central bank's target value.

Against this backdrop, the Federal Reserve raised the target range for its policy rate by 0.25 percentage points to between 0.75% and 1.00% (cf. chart 2.13). However, it also reiterated that economic developments in the US would allow for the policy rate to be raised only gradually.

Chart 2.5

EXCHANGE RATES

Trade-weighted, beginning of period = 100

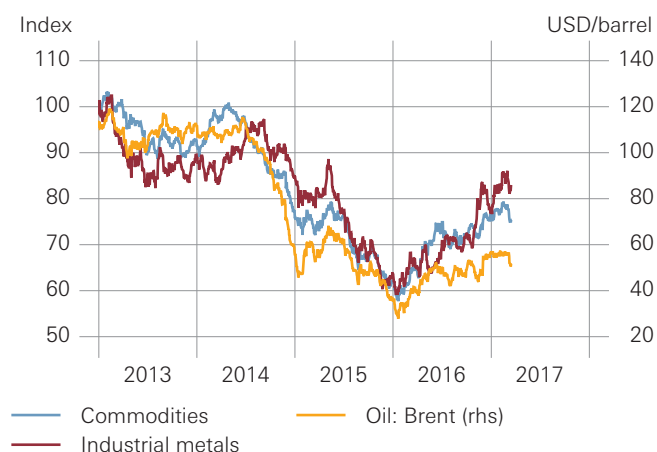


Source: Thomson Reuters Datastream

Chart 2.6

COMMODITY PRICES

Beginning of period = 100

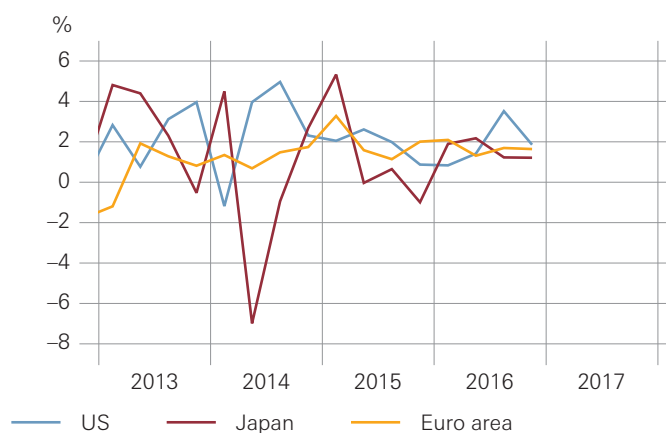


Source: Thomson Reuters Datastream

Chart 2.7

REAL GDP: ADVANCED ECONOMIES

Change from previous period

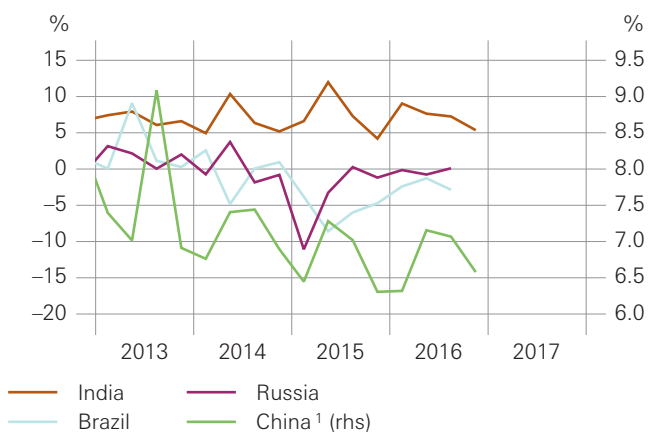


Source: Thomson Reuters Datastream

Chart 2.8

REAL GDP: EMERGING ECONOMIES

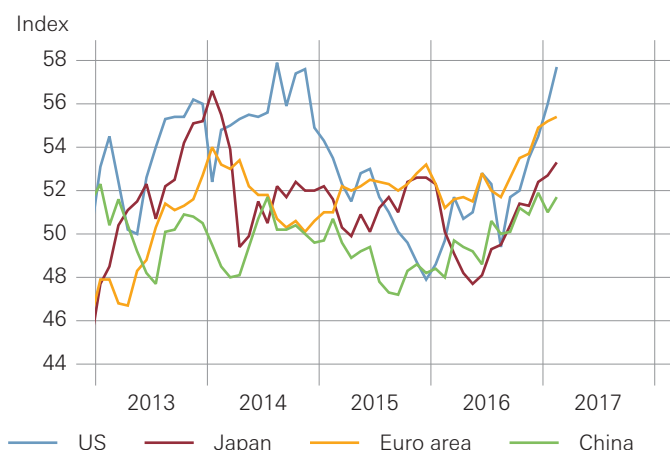
Change from previous period



1 Estimate: SNB.
Source: Thomson Reuters Datastream

Chart 2.9

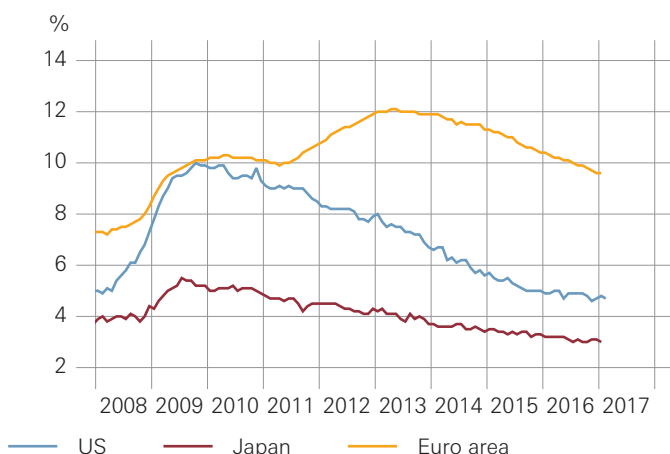
PURCHASING MANAGERS' INDICES (MANUFACTURING)



Source: Markit Economics Ltd 2009; all rights reserved

Chart 2.10

UNEMPLOYMENT RATES



Source: Thomson Reuters Datastream

EURO AREA

The economic recovery in the euro area continued. GDP expanded in the fourth quarter by 1.6% (cf. chart 2.7), with investment and exports gaining momentum. Growth in 2016 amounted to 1.7%. The increase in employment continued, while unemployment in January recorded its lowest level in seven years (cf. chart 2.10).

The economic outlook is favourable. Expansionary monetary policy and relaxed financing conditions continue to underpin recovery in the euro area. Manufacturing has improved considerably, and surveys point to a hike in business confidence. However, the economic outlook is overshadowed by a number of problems. These include political uncertainty relating to this year's elections in major member countries, the future economic relationship between the EU and the UK, and the persistent fragility of banks in Italy. The SNB expects growth in the euro area of 1.8% for 2017 and 1.6% for 2018.

As a result of higher energy and food prices, consumer price inflation rose significantly between November and February to 2.0% (cf. chart 2.11). For the first time in four years, all member countries registered annual inflation in positive territory; in some countries, it climbed to well over 2%. By contrast, core inflation in the euro area persisted at just under 1%, as it has been since the end of 2013 (cf. chart 2.12). Medium-term inflation expectations derived from financial market indicators continued to recover, although they remained well below the ECB's inflation target.

The ECB saw no indication of a convincing upward trend in core inflation. It therefore made no adjustments to its key rate and its programme of securities purchases. It still plans to continue purchasing securities until at least the end of 2017, and to reduce the monthly purchase volume as of April from CHF 80 billion to CHF 60 billion. The purchase of securities is to be continued until inflation nears its target of 'below, but close to 2%' on a lasting basis.

JAPAN

In Japan, GDP expanded by 1.2% in the fourth quarter (cf. chart 2.7). For 2016 as a whole, growth was broad-based and amounted to 1.0%. Export business gained further momentum in the fourth quarter, while domestic demand stagnated. A temporary surge in prices for fresh food at year-end had a dampening effect particularly on household expenditure. The situation on the labour market continued to improve; unemployment in January 2017 was 3.0%, its lowest level since the mid-1990s (cf. chart 2.10). Furthermore, 2016 saw real wages increase slightly, the first rise since 2010.

The economy will be buttressed in coming quarters by favourable developments in manufacturing, infrastructure investment made in connection with stimulus packages adopted in August 2016, and advantageous conditions on the labour market. The SNB continues to forecast growth of around 1.0% for 2017 and 2018, i.e. at slightly above potential (cf. table 2.1).

Consumer price inflation re-entered positive territory at year-end (cf. chart 2.11), due to the temporary price hike in fresh food. Core inflation receded during 2016 under the influence of a strong yen, and has hovered around zero in recent months (cf. chart 2.12); it is likely to gradually rise again. Longer-term inflation expectations based on company surveys edged up again somewhat, but remain significantly below the Japanese central bank's inflation target of 2%.

Since September 2016, the Bank of Japan has made yield curve control the focal point of a monetary policy based on quantitative and qualitative easing. It reiterated its intention to maintain current monetary policy and, in particular, to continue expanding the monetary base until inflation exceeds 2% on a lasting basis.

EMERGING ECONOMIES

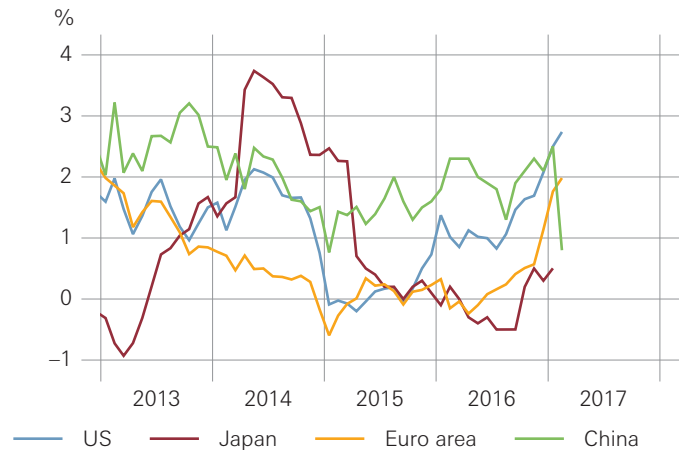
In China, fourth quarter growth was down somewhat, as expected (cf. chart 2.8). Construction, in particular, lost further momentum. By contrast, services gained pace slightly, on the back of robust consumption. GDP growth for 2016 amounted to 6.7%, in line with the government's target. In India, growth in the fourth quarter was slowed perceptibly by the cash reform. Bottlenecks in the supply of cash impeded activity in services, in particular. Despite the slowdown, annual average GDP growth matched its year-back performance of 7.4%. In Russia, available indicators suggest that GDP increased in the fourth quarter. By contrast, the recession in Brazil persisted.

Excluding India, the outlook for these countries has remained largely unchanged since December. In China, growth is likely to slacken further during the year. In particular, the expansion in company investments is likely to slow, in view of continuing high overcapacity in heavy industry and high levels of debt. In India, economic indicators including the purchasing managers' index (PMI) point to sluggish growth in economic activity at year-begin. However, the economy is likely to recover swiftly, given that households are only postponing consumer spending. In Russia and Brazil, economic activity should gradually rally due to higher commodity prices and more favourable monetary conditions.

Chart 2.11

CONSUMER PRICES

Year-on-year change

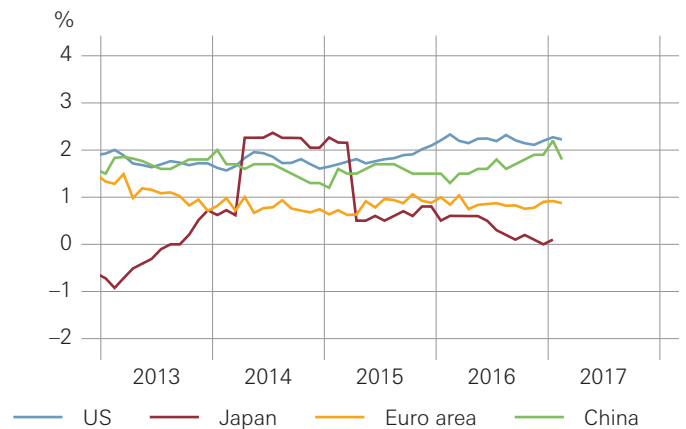


Source: Thomson Reuters Datastream

Chart 2.12

CORE INFLATION RATES ¹

Year-on-year change

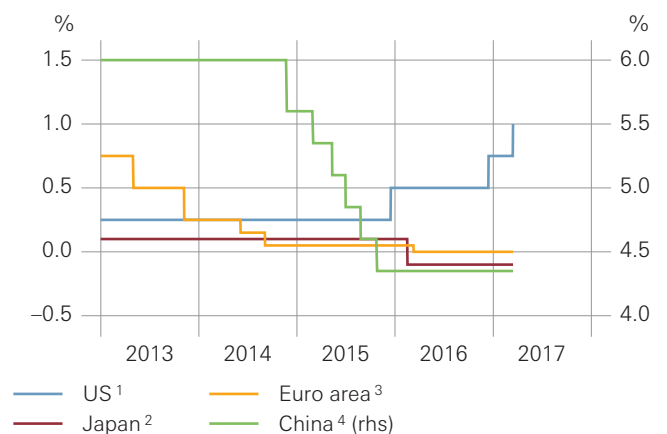


¹ Excluding food and energy.

Source: Thomson Reuters Datastream

Chart 2.13

OFFICIAL INTEREST RATES



¹ Federal funds rate.

² Call money target rate.

Source: Thomson Reuters Datastream

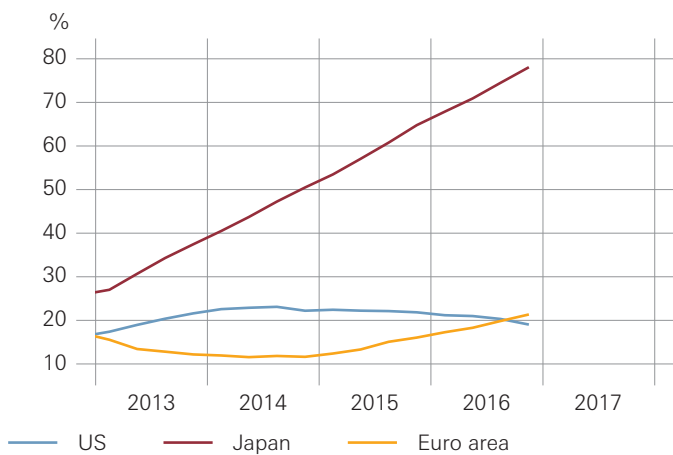
³ Main refinancing rate.

⁴ One-year lending rate.

Chart 2.14

MONETARY BASE

Relative to GDP



Source: Thomson Reuters Datastream

Consumer price inflation in these countries presented a mixed picture. In China, inflation decreased to 0.8% in February, as a result of declining food prices (cf. chart 2.11). The core rate remained virtually unchanged at 1.8% (cf. chart 2.12). In India, inflation weakened to 3.6%, although the core rate persisted at an undesirably high level (4.7%). In Russia and Brazil, inflation fell to 4.6% and 4.8% respectively, thereby approaching the central banks' targets.

The central banks in China and Russia left key rates unchanged. Contrary to general market expectations, the Indian central bank also refrained from lowering the key rate further; the reason given being persistently high core inflation and higher inflation expectations. By contrast, the Brazilian central bank used its room for manoeuvre in monetary policy and lowered the key rate in order to support the economy.

3 Economic developments in Switzerland

Recent economic signals in Switzerland have been contradictory. GDP growth in the fourth quarter was below expectations. A broader view of available economic indicators, however, suggests a gradually recovering economy.

The situation on the labour market has been slowly improving since mid-2016. Employment was again up, while seasonally adjusted unemployment continued to decrease slightly until February.

However, utilisation of overall production capacity remains unsatisfactory. Surveys confirm that technical production capacity was underutilised in a number of industries in the fourth quarter.

Overall, the latest economic indicators suggest that the moderate recovery will continue. The SNB's growth forecast of roughly 1.5% for 2017 remains unchanged.

AGGREGATE DEMAND AND OUTPUT

Disappointing GDP growth in fourth quarter

After momentum had gradually picked up from mid-2015, GDP growth slowed almost to a standstill in the second half of 2016. According to initial estimates by the State Secretariat for Economic Affairs (SECO), GDP increased by a mere 0.3% in the fourth quarter. The weak GDP performance was similar to that of the third quarter (cf. chart 3.1).

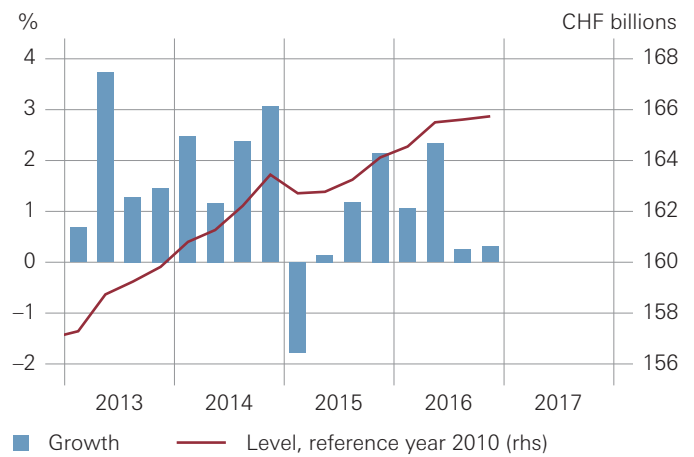
According to SECO's quarterly estimates, value added improved in numerous industries. The upward trend in the services sector continued, and value added was up in the construction industry, too. However, the substantial decline in manufacturing had an adverse impact on the overall result (cf. chart 3.2). On the expenditure side, only consumer spending provided clearly positive stimuli.

With the fourth quarter estimates released, provisional annual figures for 2016 are now also available, according to which GDP rose by 1.3%.

Chart 3.1

REAL GDP

Change from previous period

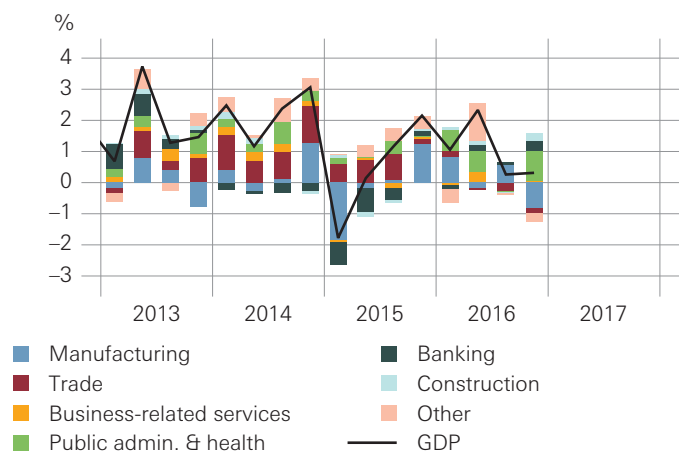


Source: State Secretariat for Economic Affairs (SECO)

Chart 3.2

CONTRIBUTIONS TO GROWTH, BY SECTOR

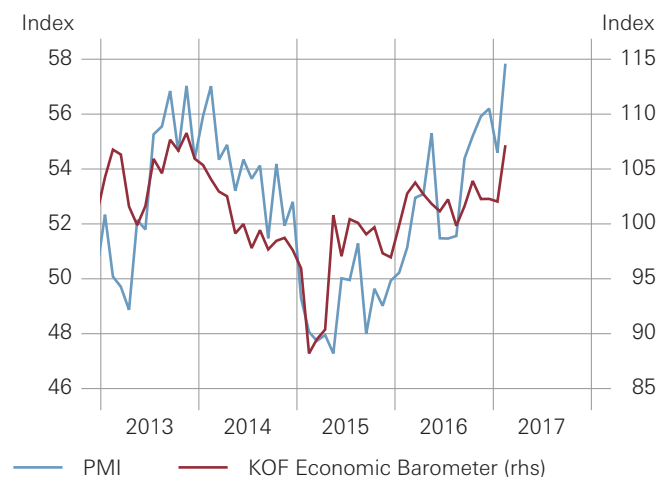
Change from previous period



Source: SECO

Chart 3.3

INDICATORS OF ECONOMIC MOMENTUM



Sources: Credit Suisse, KOF Swiss Economic Institute

More positive picture provided by economic indicators for second half of 2016

If a broad range of information is taken into account, this results in a somewhat more positive picture of economic developments in the second half of 2016 than if only the provisional estimates of the national accounts are considered. It shows that the moderate upward trajectory with regard to potential growth was maintained.

Indications of a positive economic trend can also be found in the outcome of various surveys. These include the purchasing managers' index (PMI), which has been well above the growth threshold for several months, and the KOF Economic Barometer, which has also been above average for some time. 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 third and fourth quarters also suggest a steady improvement of the economic situation in the second half of 2016.

Disparate developments by industry

Not all industries, however, have benefited equally from the upturn in demand. In retailing, for instance, the situation remains difficult. Various lines of manufacturing, too, continue to be faced with subdued demand. Both these industries are seeing only sluggish margin growth.

Table 3.1

REAL GDP AND COMPONENTS

Growth rates on previous period in percent, annualised

	2013	2014	2015	2016	2015				2016			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Private consumption	2.2	1.2	1.1	1.2	0.2	1.5	1.5	-0.1	2.3	0.2	0.6	3.5
Government consumption	2.3	1.5	2.2	1.9	0.9	2.4	0.3	2.5	0.3	6.7	-0.5	0.6
Investment in fixed assets	1.1	2.8	1.6	2.4	-3.9	6.7	-1.6	2.8	8.0	-1.0	1.2	-2.4
Construction	3.1	3.2	2.2	0.0	3.7	2.5	-1.9	2.3	-0.7	-1.4	1.6	-1.7
Equipment	-0.2	2.6	1.3	4.1	-8.6	9.6	-1.4	3.1	14.0	-0.7	1.0	-2.9
Domestic final demand	1.9	1.7	1.3	1.6	-0.8	3.0	0.5	1.0	3.6	0.7	0.6	1.5
Change in inventories ¹	0.6	-0.8	-0.3	-1.6	-2.1	-7.2	-0.1	8.3	-10.7	-0.4	-0.5	2.5
Total exports ²	0.0	5.2	2.2	4.5	3.7	6.7	2.8	4.7	12.9	2.2	1.6	-11.5
Goods ²	-2.3	5.8	2.5	5.7	7.8	9.7	1.8	0.6	23.6	-0.4	3.7	-14.5
Goods excluding merchanting ²	-1.0	4.0	0.7	5.8	-10.5	3.5	5.1	15.4	7.5	1.9	5.6	-9.8
Services	4.7	4.0	1.6	2.3	-3.8	0.9	4.8	13.3	-5.4	7.7	-2.3	-5.2
Total imports ²	1.4	3.2	3.0	2.1	2.2	-3.0	1.4	24.3	-4.6	-2.2	1.7	-6.3
Goods ²	0.7	1.7	0.0	3.9	3.1	-11.7	4.1	20.6	1.0	1.4	1.1	1.0
Services	2.9	6.4	9.0	-1.3	0.4	15.4	-3.4	31.3	-14.0	-8.9	2.8	-19.3
Net exports ³	-0.6	1.3	-0.1	1.5	1.0	4.7	0.9	-7.1	8.6	2.1	0.2	-3.5
GDP	1.8	2.0	0.8	1.3	-1.8	0.1	1.2	2.2	1.1	2.3	0.3	0.3

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

LABOUR MARKET

In parallel to the moderately growing economy, the labour market continued to register a gradual recovery.

Renewed fall in unemployment

Excluding seasonal fluctuations, the number of people registered as unemployed with regional employment offices peaked at 150,000 in August 2016. Since then, it has slowly receded, amounting to 147,000 at the end of February 2017. The decline in the number of people out of work did not, however, suffice to reduce the rate of unemployment. Thus, the seasonally adjusted unemployment rate published by SECO has stood unchanged at 3.3% since October 2015 (cf. chart 3.4).

In addition to this, 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 (SAKE), a quarterly survey of households. This survey includes unemployed people who are not registered, or no longer registered, with the regional employment offices. The unemployment rate calculated by SFSO in accordance with the ILO's definition is therefore higher than the one published by SECO. It reached a peak of 4.9% in the fourth quarter of 2015 and has receded ever since. In the fourth quarter of 2016, it amounted to 4.5%.

Slower rise in employment

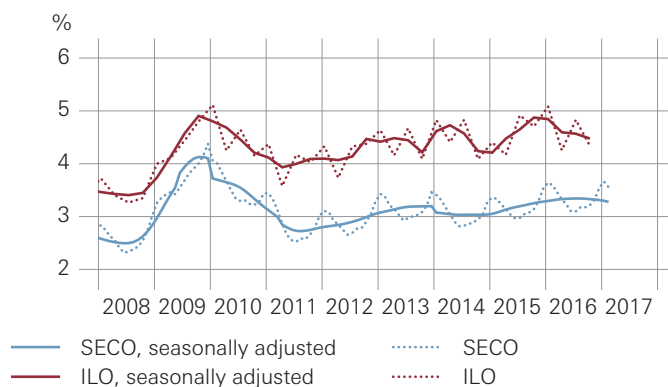
The Employment Statistics (ES), which are also largely based on SAKE data, measure gainful employment on the household side. According to the ES figures, the seasonally adjusted number of gainfully employed persons continued to rise in the fourth quarter. However, growth was slower than in the previous quarters (cf. chart 3.5).

The national job statistics, which are based on a survey of firms, measure employment on the company side and thus complement the ES. They show only a slight advance in full-time equivalent positions in the fourth quarter. Job numbers in services and construction were up somewhat, whereas manufacturing recorded further job losses (cf. chart 3.6).

An overall view of the various labour market statistics reveals moderate growth in employment, enabling a slow decline in unemployment.

Chart 3.4

UNEMPLOYMENT RATE

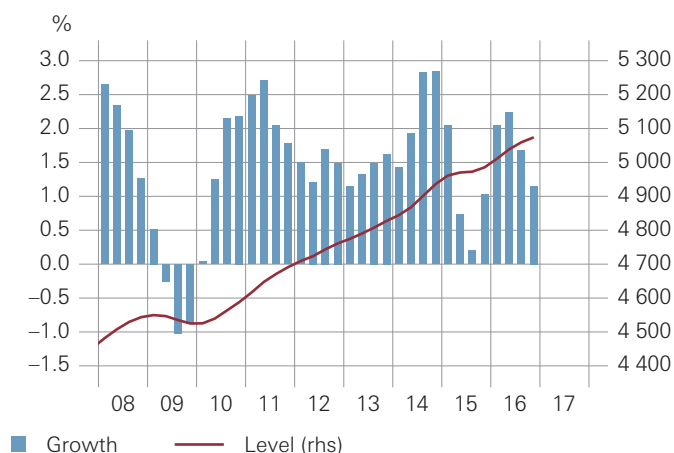


SECO: Unemployed registered with the regional employment offices, as a percentage of the labour force according to the 2000 and 2010 censuses and the 2012 to 2014 structural surveys.
ILO: Unemployment rate based on International Labour Organization definition.
Sources: Swiss Federal Statistical Office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

Chart 3.5

EMPLOYED PERSONS

Change from previous period

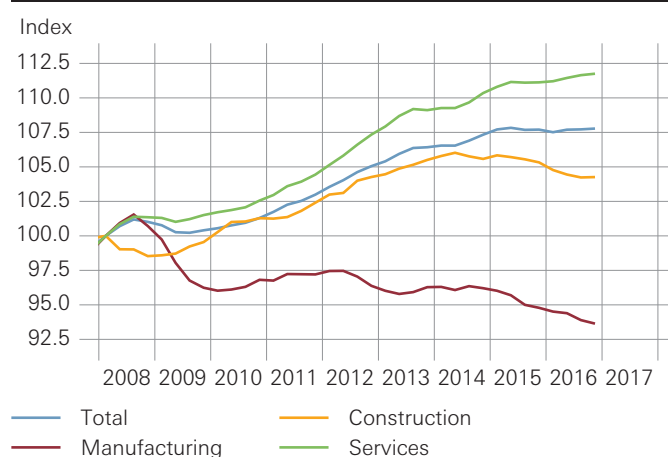


Source: SFSO; seasonal adjustment: SNB

Chart 3.6

FULL-TIME EQUIVALENT JOBS

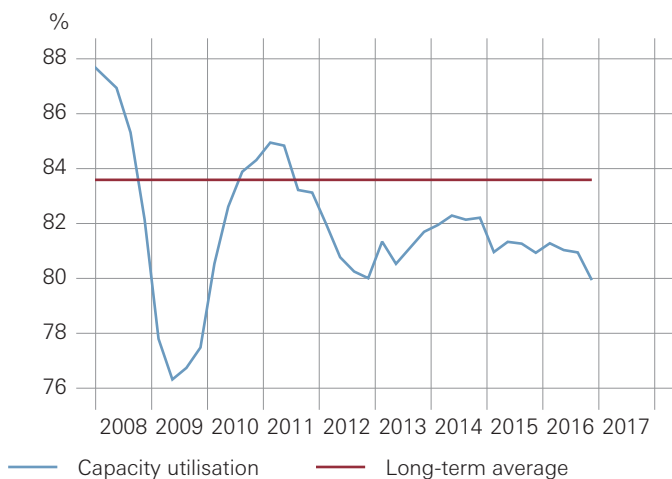
Beginning of period = 100



Source: SFSO; seasonal adjustment: SNB

Chart 3.7

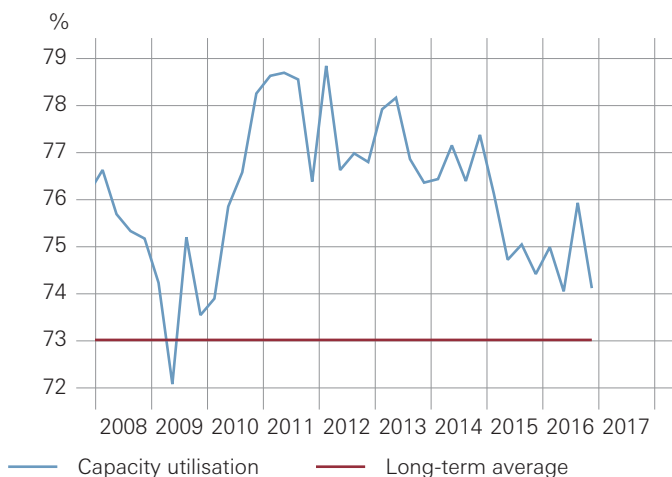
CAPACITY UTILISATION IN MANUFACTURING



Source: KOF Swiss Economic Institute

Chart 3.8

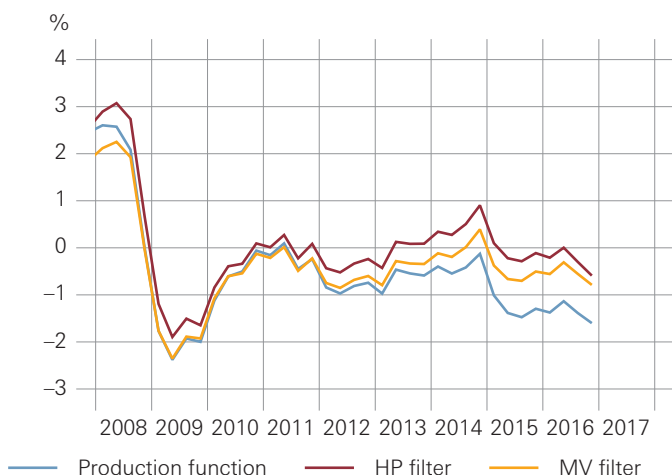
CAPACITY UTILISATION IN CONSTRUCTION



Source: KOF Swiss Economic Institute

Chart 3.9

OUTPUT GAP



Source: SNB

CAPACITY UTILISATION

Underutilisation in manufacturing

According to the KOF survey, utilisation of technical capacity in manufacturing decreased to 79.9% in the fourth quarter and so remained well below the long-term average (cf. chart 3.7). As to services, available surveys suggest average utilisation overall. However, capacity in individual areas, particularly retailing, remains underutilised. By contrast, capacity utilisation in construction is still above its long-term average, despite a decline in the fourth quarter (cf. chart 3.8).

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. Given the weak GDP quarterly estimate, the output gap widened slightly in the fourth quarter. Estimated potential, calculated by means of a production function, showed an output gap of -1.6% for the fourth quarter, compared to -1.4% in the previous quarter. Other methods for estimating potential output, the Hodrick-Prescott filter in particular, suggest a less negative output gap (cf. chart 3.9).

The different estimates reflect the various ways of calculating potential output. The production function approach explicitly takes into account developments in the supply of labour and the stock of capital in the economy. Since the supply of labour, in particular, has risen steadily in recent years – primarily as a result of immigration – potential output and, hence, the output gap are larger when calculated with this method than with the Hodrick-Prescott filter, which is based solely on the development of GDP. The multivariate filter also suggests a slightly more negative output gap for the fourth quarter than the Hodrick-Prescott filter. In addition to GDP, the multivariate filter also factors in developments in inflation, unemployment and capacity utilisation in manufacturing.

OUTLOOK FOR THE REAL ECONOMY

Based on a more favourable international environment, the Swiss economy is likely to recover further in the course of 2017.

Positive economic indicators at beginning of year

Leading indicators suggest that the recovery will continue in the first months of the new year. The export-weighted foreign PMI reflects the consolidation of international economic momentum (cf. chart 3.10), which is likely to take hold in Switzerland, too. Manufacturing companies surveyed by KOF, for instance, expect the situation to improve; in fact, expectations regarding the future business environment are at the highest they have been for more than two years (cf. chart 3.11). Moreover, employment leading indicators from various economic surveys have continued to improve (cf. chart 3.12). Discussions with company representatives conducted by the SNB's delegates for regional economic relations in the first quarter of 2017 also point towards favourable economic developments (cf. Business cycle trends, p. 28).

GDP growth is therefore likely to pick up again in the first quarter. Manufacturing in particular is expected to make a significant contribution to growth in view of the strong advance in goods exports since December. By contrast, service industries are likely to develop at a slower pace.

Favourable medium-term outlook

The SNB anticipates comparatively favourable developments 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 benefit the Swiss economy by stimulating demand from abroad. Second, the solid population growth is likely to continue in the medium term. Third, the interest rate environment is still a favourable factor.

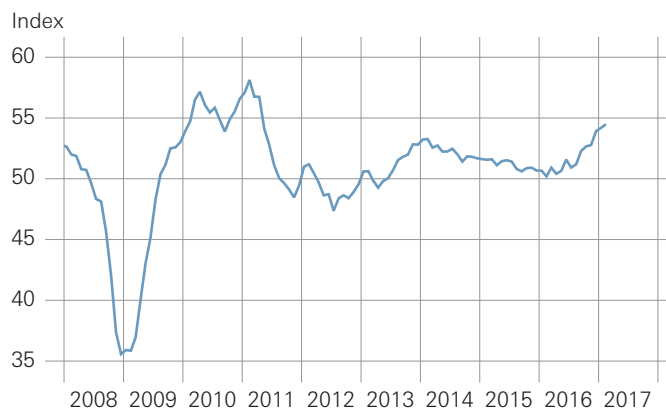
However, the pace of growth is likely to remain moderate. The SNB is continuing to forecast GDP growth of around 1.5% for 2017. The increase in business activities means that production capacities are likely to be better utilised and the margin situation for companies should improve. The labour market, too, is expected to benefit from the recovery.

Major uncertainties remain attached to this forecast, mostly in connection with political 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

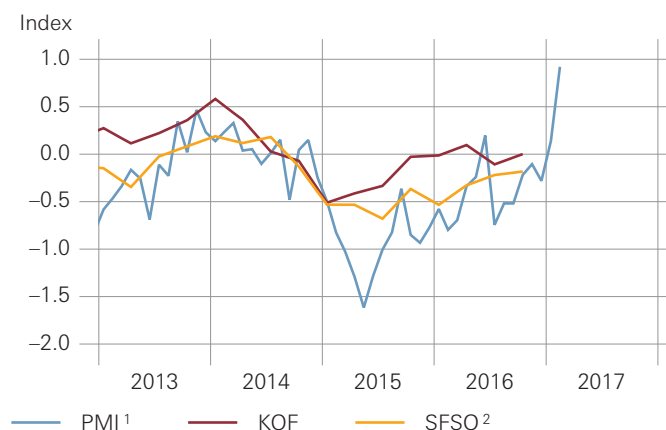


— Deloitte CFO survey
— KOF, business situation in industry (rhs)

Sources: Deloitte, KOF Swiss Economic Institute

Chart 3.12

EMPLOYMENT LEADING INDICATORS



¹ Monthly figures.

² Seasonal adjustment: SNB.

Sources: Credit Suisse, KOF Swiss Economic Institute, SFSO

Annual inflation rates have risen and advanced into positive territory in recent months. This is true for consumer prices as well as producer and import prices, and was primarily attributable to movements in oil prices.

The last time inflation rates were above zero was two and a half years ago, in the case of consumer prices, and three and a half years ago for producer and import prices. Since then, inflation has at times dipped into negative territory under the influence of falling oil prices and Swiss franc appreciation following the discontinuation of the minimum exchange rate.

Inflation expectations for 2017 and the coming years remain in the low positive range and are consistent with price stability, which the SNB equates to a rise in consumer prices of less than 2% per year.

CONSUMER PRICES

CPI inflation rate above zero

In the first two months of 2017, the annual inflation rate as measured by the national consumer price index (CPI) moved into positive territory for the first time since August 2014. It stood at 0.6% in February 2017, after averaging -0.4% in 2016 (cf. table 4.1). This rise into positive territory was mainly driven by the contribution of oil products to inflation.

Oil product prices well above the year-back level

Due to the increase in oil prices since the beginning of 2016, oil products traded well above their year-back level in January and February 2017. Thus, for the first time since 2012, oil products made a large positive contribution to inflation (cf. chart 4.1). This was the main reason why the contribution made to inflation by imported goods exceeded that of domestic goods for the first time in about six years.

Domestic goods and services inflation up slightly

Domestic goods and services inflation is less volatile than imported goods and services inflation. In recent months, it rose slightly, due to the contributions of both goods and services. However, excluding the positive contribution of housing rents, inflation in domestic goods and services would have remained close to zero (cf. chart 4.2).

Table 4.1

SWISS CONSUMER PRICE INDEX AND COMPONENTS

Year-on-year change in percent

	2016	2016				2016	2017	
		Q1	Q2	Q3	Q4	December	January	February
Overall CPI	-0.4	-1.0	-0.4	-0.2	-0.2	0.0	0.3	0.6
Domestic goods and services	-0.1	-0.4	-0.1	-0.1	0.1	0.2	0.2	0.3
Goods	-0.6	-1.3	-0.7	-0.2	-0.1	-0.1	-0.1	0.4
Services	0.0	-0.2	0.1	0.0	0.1	0.3	0.3	0.3
Private services excluding housing rents	0.0	-0.2	0.2	0.1	-0.1	-0.1	0.1	0.2
Housing rents	0.3	0.1	0.2	0.2	0.8	1.2	1.2	1.1
Public services	-0.5	-0.5	-0.4	-0.6	-0.6	-0.2	-0.3	-0.4
Imported goods and services	-1.4	-2.8	-1.2	-0.6	-0.9	-0.6	0.7	1.6
Excluding oil products	-0.7	-1.5	-0.1	0.2	-1.2	-1.5	-1.4	-0.7
Oil products	-6.1	-11.3	-8.5	-5.7	1.4	6.8	17.0	19.9

Sources: SFSO, SNB

Stable rent inflation

The SFSO collects data for the index for housing rents on a quarterly basis and the results are included in the CPI in February, May, August and November. In February, the rate of inflation for rents was very similar to that in November (cf. chart 4.3). This is principally attributable to the stability of the reference interest rate, which has remained unchanged since June 2015.

The reference interest rate is based on banks' average mortgage rates and is decisive for the adjustment of rents based on mortgage rate changes.

Core inflation rates diverge significantly from annual CPI inflation rate

The various measures of core inflation continue to hover close to zero. In February, the SNB's trimmed mean (TM15) stood at 0.2%, while the SFSO core inflation rate 1 (SFSO1) came in at -0.1%. Both core inflation rates were thus significantly below the annual CPI inflation rate of 0.6%. This divergence is due to the fact that the prices of oil products and vegetables, which contributed substantially to the relatively high annual inflation rate in February, had little or no influence on TM15 and SFSO1.

The SNB and SFSO core inflation rates are both based on a reduced CPI goods basket. The TM15 takes the distribution of weighted annual rates of price change for CPI goods, and excludes 15% from each end each month, whereas for SFSO1, the same goods are excluded each month (energy and fuel as well as fresh and seasonal products).

PRODUCER AND IMPORT PRICES

Producer and import price inflation above zero

In recent months, annual inflation for producer and import prices, like the CPI inflation rate, has moved into positive territory (cf. chart 4.5). In December 2016, it was above zero for the first time since August 2013. This is partly attributable to movements in annual energy price inflation.

Both import and producer prices were above their year-back levels in February 2017. The increase in the import price index was greater than that in the producer price index, since the former is more sensitive to rises in energy 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.

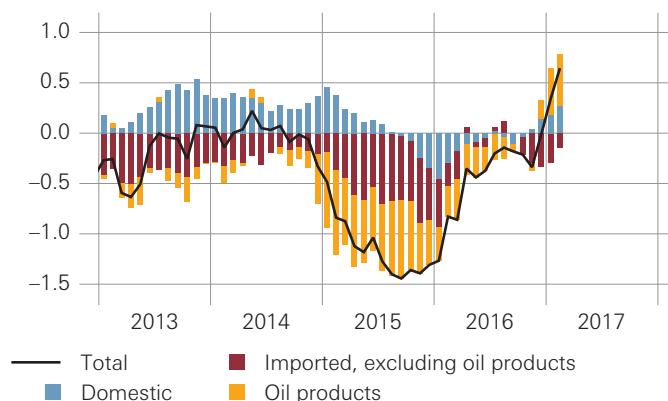


Chart 4.2

CPI: DOMESTIC GOODS AND SERVICES

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

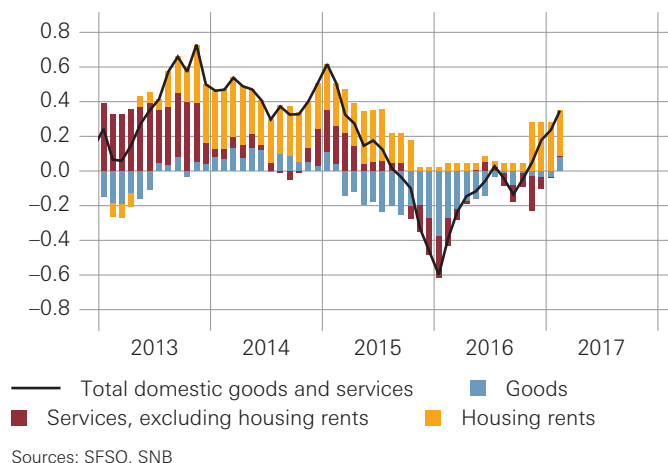


Chart 4.3

HOUSING RENTS

Year-on-year change

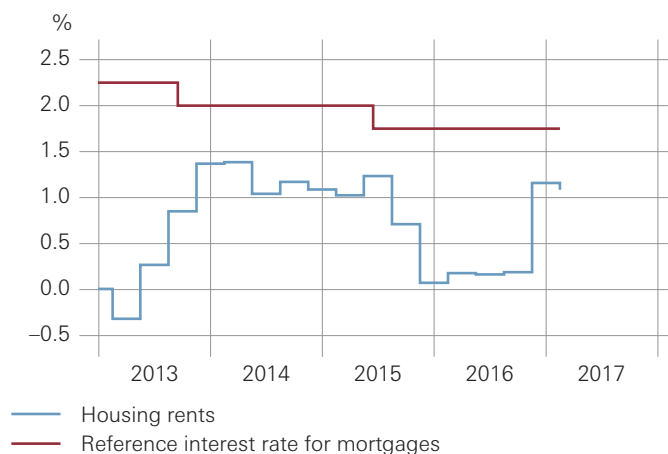
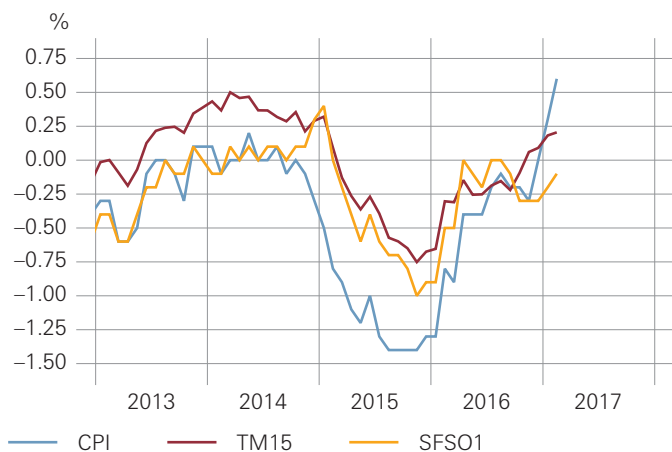


Chart 4.4

CORE INFLATION RATES

Year-on-year change

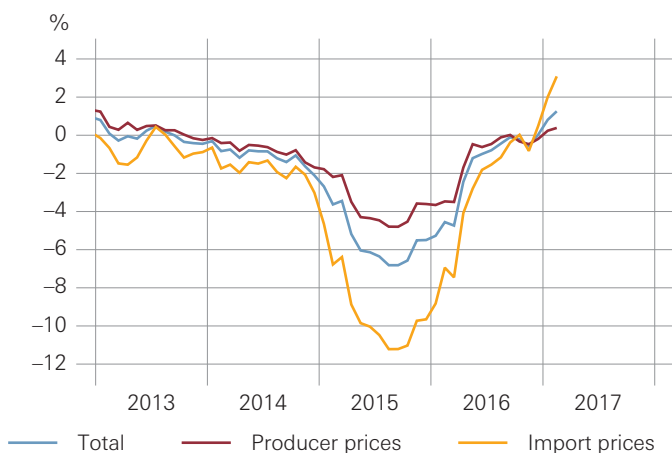


Sources: SFSO, SNB

Chart 4.5

PRODUCER AND IMPORT PRICES

Year-on-year change

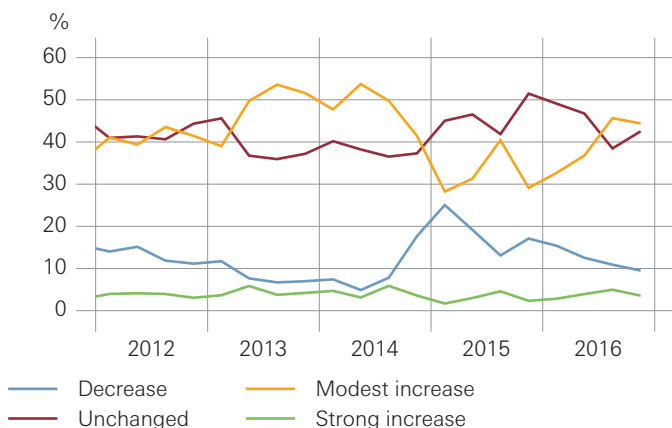


Source: SFSO

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

Overall, available surveys suggest that inflation expectations for 2017 and the years thereafter lie in the low positive range, with a slightly rising trend. They are 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 has only been a slight change in price expectations between October 2016 and January 2017. The share of respondents expecting prices to rise over the next 12 months has declined from 51% to 48%. By contrast, in January somewhat more households than three months previously expected prices to remain unchanged (cf. chart 4.6).

Since November 2016, the share of economists and analysts questioned in the joint monthly financial market surveys by Credit Suisse and CFA Society Switzerland who expected increasing inflation rates in the following six months has regularly exceeded 60%. In February, this percentage was 65% of respondents, while 32% predicted that rates would remain the same and 3% that they would fall.

Talks held by the SNB's delegates for regional economic relations with companies from all sectors of the economy confirm the picture of stable short-term inflation expectations. In the first quarter of 2017, respondents expected the inflation rate to be 0.2% in six to twelve months, compared to 0.0% in the previous quarter.

Slight increase in longer-term inflation expectations

In recent months, longer-term inflation expectations have moved up slightly, according to most surveys. Participants in the CFO survey by Deloitte, which was conducted in the fourth quarter of 2016, predicted an inflation rate of 0.9% in two years' time, compared to 0.8% in the previous quarter. In the first quarter of 2017, company representatives interviewed by the SNB's delegates put the annual rate of inflation in three to five years at 0.9%, compared to 0.8% in the previous quarter.

5

Monetary developments

At its monetary policy assessment of mid-December 2016, the SNB left its monetary policy unchanged. Thus its monetary policy in the first quarter of 2017 continued to be based on two elements: the negative interest rate on banks' sight deposit accounts held at the SNB, and the willingness of the SNB to intervene on the foreign exchange market as necessary.

Since the monetary policy assessment in December, money market interest rates have remained virtually unchanged, while longer-term interest rates, which had risen sharply during the fourth quarter, receded again slightly. On the foreign exchange market, the Swiss franc gained slightly against the US dollar and also at times against the euro.

The monetary base registered another significant increase due to a surge in banks' sight deposits. The growth rates of the M3 monetary aggregate and bank lending to domestic customers, which came under slight pressure in 2015, rose again somewhat during 2016. Bank loans and the M3 monetary aggregate both grew moderately in the fourth quarter of 2016.

SUMMARY OF MONETARY POLICY SINCE THE LAST ASSESSMENT

Expansionary monetary policy remains unchanged

The SNB confirmed its monetary course at its monetary policy assessment on 15 December 2016. 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.

The SNB reaffirmed its willingness to remain active in the foreign exchange market in order to influence exchange rate developments where necessary, while taking the overall exchange rate situation into account. 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

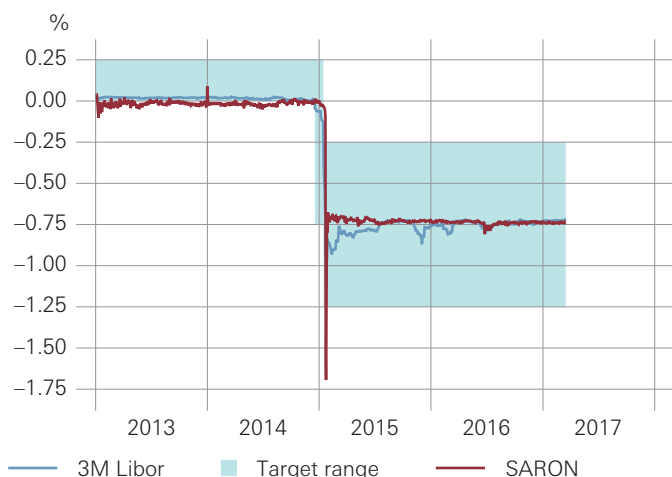
Since the monetary policy assessment of December 2016, total sight deposits held at the SNB have increased markedly. In the week ending 10 March 2017 (last calendar week before the mid-March assessment), they stood at CHF 555.4 billion, a CHF 28.0 billion increase on the same period before the mid-December 2016 assessment (CHF 527.4 billion). Between the assessments of mid-December 2016 and mid-March 2017, sight deposits at the SNB averaged CHF 538.8 billion. Of this amount, CHF 466.4 billion was accounted for by the sight deposits of domestic banks and CHF 72.4 billion by other sight deposits.

High level of banks' surplus reserves

Between 20 November 2016 and 19 February 2017, statutory minimum reserves averaged CHF 15.7 billion. Overall, banks exceeded the requirement by some CHF 453.7 billion (previous period: CHF 437.8 billion). Banks' surplus reserves have thus increased further.

Chart 5.1

MONEY MARKET RATES

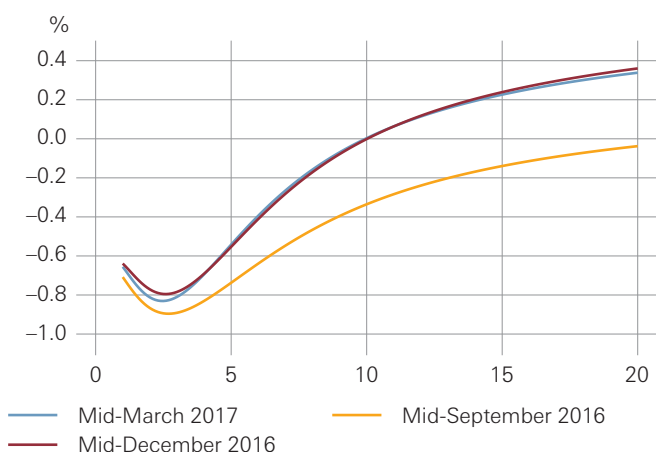


Sources: Bloomberg, SIX Swiss Exchange Ltd, SNB

Chart 5.2

TERM STRUCTURE OF CONFEDERATION BONDS

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

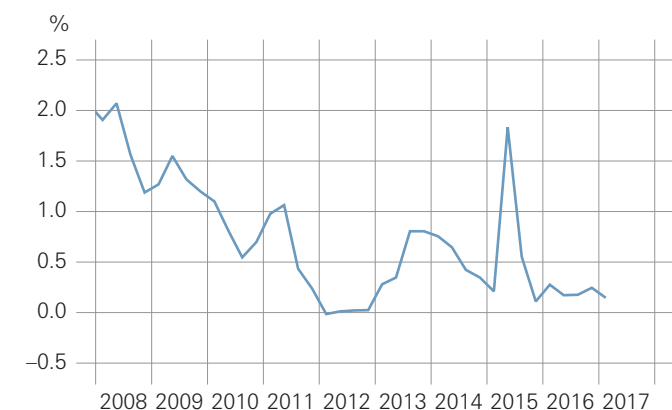


Source: SNB

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 rates unchanged

The situation on the Swiss franc money market has hardly changed since the mid-December 2016 assessment. Interest rates on both secured (SARON) and unsecured (three-month Libor) money market transactions consistently tracked close to the interest rate on sight deposits held at the SNB, which has been set at -0.75% since January 2015 (cf. chart 5.1).

Temporary decline in long-term interest rates

Long-term interest rates, which had risen sharply during the fourth quarter of 2016, eased back slightly between mid-December and end-February. In mid-March, the yield on ten-year Confederation bonds was at 0%, the same as at the December assessment (cf. chart 5.2).

Unchanged yield curve

In mid-March, the yield curve for long-term Confederation bonds was unchanged from three months earlier. Confederation bond yields for terms of less than ten years were negative (cf. chart 5.2).

Long-term real interest rates still close to zero

The estimated long-term real interest rate was around 0.1% in mid-March 2017; in other words, it remained 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 the estimated inflation expectations for the same time horizon, using a vector autoregressive (VAR) model.

EXCHANGE RATES

Slight appreciation of Swiss franc against US dollar

Between mid-December and the beginning of February, the US dollar depreciated substantially against the Swiss franc and most other currencies, although it has since made good some of this loss (cf. chart 5.4). Overall, exchange rate movements of the Swiss franc to the US dollar closely tracked those of the euro to the US dollar. As a result, there was comparatively little fluctuation in the Swiss franc/euro exchange rate.

At the end of January, the Swiss franc/euro exchange rate fell below CHF 1.07 to the euro; it had already briefly dipped below that level in December. The pressure on the exchange rate reflects political and economic uncertainty arising in connection with upcoming elections in major EU countries, as well as the ECB's decision in January to keep monetary policy expansive despite rising inflation. In mid-March, the Swiss franc/euro exchange rate was at more or less the same level as at the monetary policy assessment in December.

Slight increase in nominal effective exchange rate index

The appreciation of the Swiss franc against the US dollar was reflected in a slight increase in the Swiss franc's nominal trade-weighted external value. As the SNB has revised its exchange rate calculation method, aligning it with current international standards, chart 5.5 shows the new nominal effective exchange rate index together with the previous index (24 countries). Short-term movements in both indices are largely identical. The difference in levels, which reflects the cumulative differences since December 2000, is clearly visible, although it is modest when annually adjusted.

Real effective exchange rate index still very high

Concurrently with the revision of its nominal index, the SNB also revised its real trade-weighted exchange rate index. Chart 5.6 shows the path of the previous and the new real exchange rate indices over the last ten years. The level of the new index is below that of the previous index, i.e. according to the new index, since 2000 the Swiss franc has appreciated in real and trade-weighted terms somewhat less markedly than under the previous index. However, both indices are currently well above their long-term average. Thus, the assessment that the franc is substantially overvalued remains unchanged.

Chart 5.4

EXCHANGE RATES



Source: SNB

Chart 5.5

NOMINAL EXTERNAL VALUE OF SWISS FRANC

December 2000 = 100

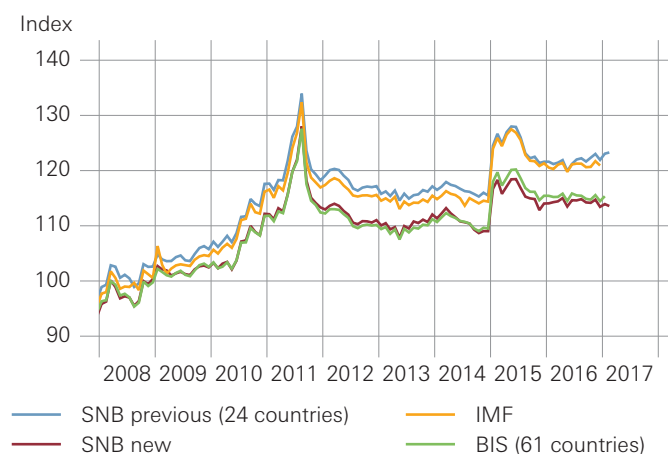


Source: SNB

Chart 5.6

REAL EXTERNAL VALUE OF SWISS FRANC

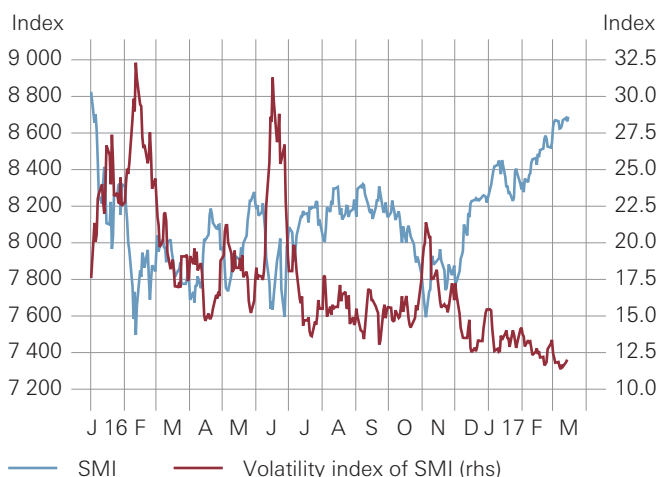
December 2000 = 100



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

Chart 5.7

SHARE PRICES AND VOLATILITY

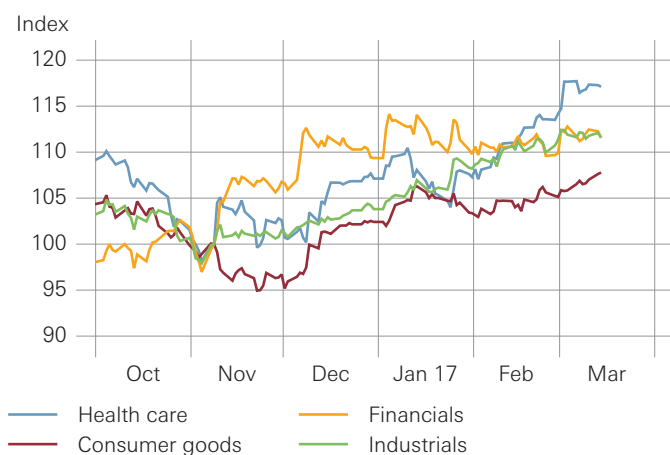


Sources: Bloomberg, Thomson Reuters Datastream

Chart 5.8

SELECTED SPI SECTORS

8 November 2016 = 100

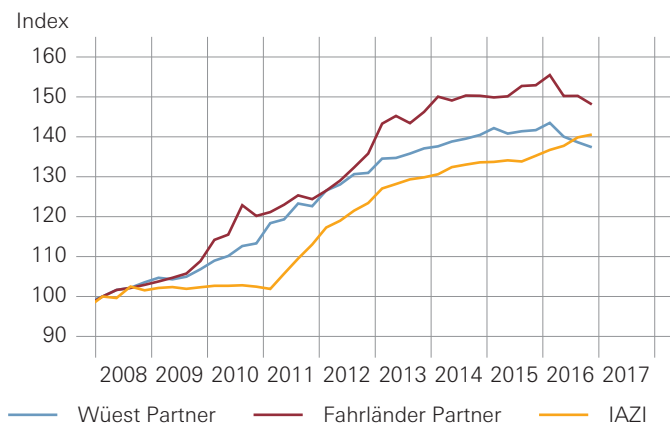


Source: Thomson Reuters Datastream

Chart 5.9

TRANSACTION PRICES, PRIVATELY OWNED APARTMENTS

Nominal (hedonic), beginning of period = 100



Sources: Fahrländer Partner, IAZI, Wüest Partner

Chart 5.6 shows the SNB's real exchange rate index as well as the corresponding indices of international organisations (all indexed to December 2000 = 100). As can be seen, the movements in the various indices are all very similar. Based on current data, the IMF index is roughly tracking the SNB's previous index, while the BIS index (61 countries) is close to the SNB's new index. The OECD index (not shown) is also at roughly the same level as the new SNB index. The difference between old and new SNB exchange rate indices is thus within the bounds of what can be expected from comparable but non-identical real exchange rate indices. The SNB, BIS, IMF and OECD indices all show that the real trade-weighted external value of the Swiss franc is very high in a long-term comparison.

Descriptions of the new exchange rate indices

Information on the calculation method for the new SNB exchange rate indices, and the differences between the new and old indices, can be found in the special report featured in this edition of the *Quarterly Bulletin* ('The new SNB exchange rate index'), and the *SNB Economic Studies* (11/2017).

SHARE AND REAL ESTATE PRICES

Price gains on the stock market

The Swiss Market Index (SMI), which at the beginning of November 2016 was still languishing close to the annual lows registered in mid-February and end-June 2016, has risen by nearly 10% since the US elections on 8 November 2016 (cf. chart 5.7). Even so, in mid-March, the SMI was still just over 10% lower than the peak recorded in August 2015 for the period since the financial and economic crisis.

Movements in the SMI over the last few months have largely tracked those in the major share indices in Europe, Japan and the US. Bankers and investors attributed the generally positive mood on the stock markets to the overall economic situation and to expectations that the new US administration would implement market-friendly economic reforms.

Decline in market uncertainty

The volatility index derived from options on SMI futures contracts is used to gauge uncertainty on the stock market. It declined markedly following the US elections and, since the beginning of February 2017, has been at levels last seen in mid-2014.

Health care and manufacturing among the winners

Chart 5.8 shows movements in four important sub-indices in the Swiss Performance Index (SPI) since the beginning of October 2016. The four indices are set to 100 as at 8 November 2016, the day of the US elections. In the first few weeks following the elections, the financial services sub-index, which is dominated by the big banks and insurance companies, posted the largest gains. Since the beginning of 2017, however, this index has shown little change, whereas the health care index, which is dominated by large pharmaceutical companies, and the manufacturing index have posted further gains.

Further slowdown in price rises on residential real estate market

Overall, prices for residential real estate rose only slightly in 2016. A longer-term comparison shows that the annual price rise in each of the previous 13 years consistently exceeded that in the year before. The slowdown in price momentum was observable for both privately owned apartments and single-family houses. According to surveys by Wüest Partner, transaction prices in high-end real estate actually fell substantially.

In the fourth quarter of 2016, movements in the available indices for residential real estate were once again uneven. Transaction prices for privately owned apartments compiled by Wüest Partner and Fahrländer Partner fell back from the previous quarter, while IAZI's transaction price index increased further (cf. chart 5.9).

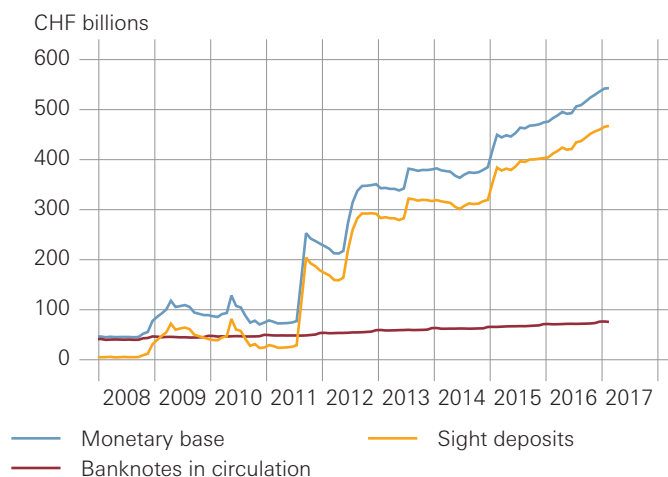
MONETARY AND CREDIT AGGREGATES

Continuing growth in monetary base

The monetary base, which consists of banknotes in circulation and sight deposits of domestic banks held at the SNB, increased further over recent months and stood at an average of CHF 543.0 billion in February 2017 (cf. chart 5.10). This increase primarily reflects movements in domestic banks' sight deposits, which grew by CHF 10.9 billion between November 2016 and February 2017. Banknotes in circulation increased by CHF 2.3 billion over the same period.

Chart 5.10

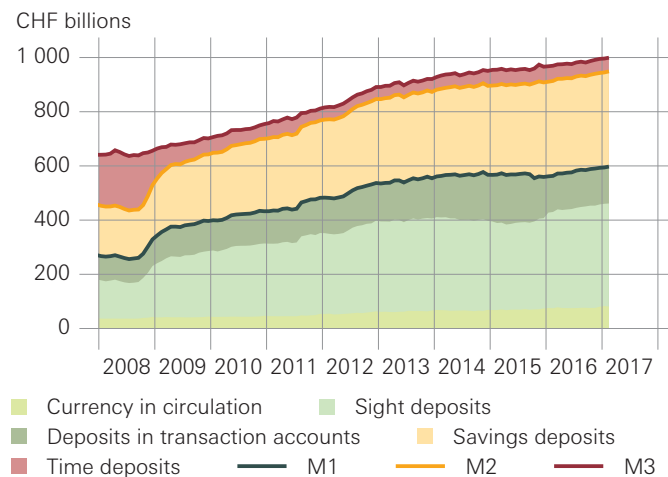
MONETARY BASE



Source: SNB

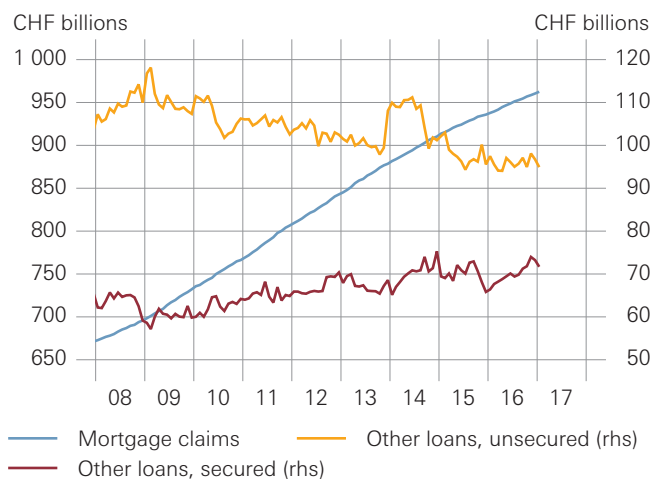
Chart 5.11

MONETARY AGGREGATES



Source: SNB

Chart 5.12

MORTGAGE CLAIMS AND OTHER LOANS

Source: SNB

Stable growth in broad monetary aggregates

The M1, M2 and M3 monetary aggregates, which measure monetary aggregates held by the public, continued to grow moderately in the first quarter. At the end of February, M1 (cash in circulation, sight deposits and transaction accounts) was 6.1% above its level a year earlier, while M2 (M1 plus savings deposits) was 3.9% higher and M3 (M2 plus time deposits) rose by 3.1% in the same period (cf. table 5.1).

The growth rate of M1 increased sharply in October 2016, owing to a statistical base effect resulting from the introduction of new account products by one bank in the previous year. These new account products had caused a shift from transaction accounts to savings accounts in October 2015, which reduced the M1 monetary aggregate (cf. chart 5.11) and had a substantial impact on annual rates of change in M1 up until September 2016. Since October 2016, the annual growth rate of M1 has thus been higher than that of M2 or M3.

Parallel developments in money and credit aggregates

Loans by domestic bank offices to domestic customers last year grew at roughly the same pace as the M3 monetary aggregate. Measured in terms of growth rates, this applies to both loans in all currencies and to loans in Swiss francs. In the fourth quarter, loans in all currencies rose by 2.6%, the same as M3, while loans in Swiss francs increased by 2.5%.

Table 5.1

MONETARY AGGREGATES AND BANK LOANS

Year-on-year change in percent

	2016	2016	2016	2016	2016	2016	2017	2017
		Q1	Q2	Q3	Q4	December	January	February
M1	2.1	-0.6	1.2	2.4	5.8	6.0	5.8	6.1
M2	2.8	1.8	2.7	3.3	3.4	3.8	3.8	3.9
M3	2.3	1.6	2.3	2.8	2.6	3.0	2.9	3.1
Bank loans, total ^{1, 3}	2.0	1.5	2.0	2.1	2.6	3.0	2.5	
Mortgage claims ^{1, 3}	2.6	2.6	2.6	2.6	2.6	2.6	2.6	
Households ^{2, 3}	2.8	2.9	2.8	2.7	2.7	2.7	2.6	
Private companies ^{2, 3}	2.6	2.4	2.8	2.7	2.7	2.9	3.3	
Other loans ^{1, 3}	-1.1	-4.5	-1.5	-0.9	2.5	5.3	1.7	
Secured ^{1, 3}	0.0	-3.0	-1.4	-2.4	7.1	11.3	8.0	
Unsecured ^{1, 3}	-2.0	-5.6	-1.5	0.2	-0.7	1.2	-2.6	

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

Sustained growth in mortgage lending

Banks' mortgage claims, which make up roughly 85% of all bank lending to domestic customers, recorded a year-on-year increase in the fourth quarter of 2.6%, the same as in the first three quarters of 2016. Other loans, which are subject to much greater fluctuation, registered roughly the same growth rate in the fourth quarter, at 2.5%, as mortgage claims (cf. table 5.1).

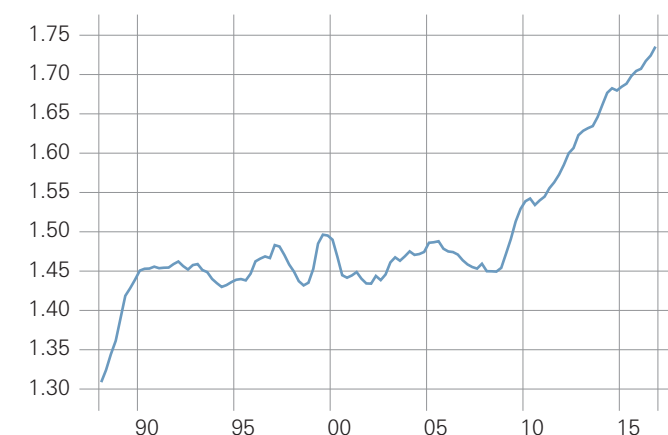
In the last ten years, mortgage claims have risen fairly steadily by around CHF 300 billion overall. By contrast, the volume of other loans has been more or less at the same level as in 2008. Unsecured other loans did recede slightly, while experiencing considerable fluctuations, but this decrease was largely offset by the rise in secured loans (cf. chart 5.12).

Rising loan ratio

The strong growth in bank 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 5.13). 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 in the past two years, 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

BANK LOANS RELATIVE TO GDP



— Bank loans / nominal GDP

Source: SNB

Business cycle trends

SNB regional network

Report for the attention of the Governing Board of the Swiss National Bank for its quarterly assessment of March 2017

First quarter of 2017

The Swiss National Bank's delegates for regional economic relations are constantly in touch with companies from different areas of the economy. This report is based on discussions conducted from mid-January to the end of February 2017 with 240 managers and entrepreneurs on the current and future situation of their companies and on the economy in general. The selection of companies differs from one quarter to the next. It reflects the industrial structure of the Swiss economy, based on the composition of GDP (excluding agriculture and public services).

Regions

Central Switzerland
Eastern Switzerland
Geneva
Italian-speaking Switzerland
Mittelland

Northwestern Switzerland
Vaud-Valais
Zurich

Delegates

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

SUMMARY

As in the previous quarters, the results of talks with company representatives conducted in the quarter under review point towards positive economic growth. This applies to manufacturing, construction and services, with greater homogeneity between the industries than before. Momentum remains moderate and, although the margin situation is improving, production capacities continue to be underutilised.

Despite the oft-cited higher political risks, the assessment of the general outlook is cautiously positive. Company representatives anticipate a further rise in real turnover over the coming months. An important proviso is that exchange rate conditions remain comparatively stable. This optimism is also reflected in expectations of slight increases in staff numbers in manufacturing and services over the next few months.

For the first time since the discontinuation of the minimum exchange rate, short-term inflation expectations are in positive territory. Medium-term inflation expectations have also risen slightly again.

BUSINESS ACTIVITY

Increased turnover in all sectors

Business performance in manufacturing continues to improve, with real turnover up on the previous quarter. This progress is reflected in almost all industry categories. A notable exception is the watchmaking industry, which continues to contract, although significant differences are still observed between manufacturers.

As to export business, a number of companies are benefitting from fairly dynamic demand from the US and partly also from Japan. There are signs of improved sales to China while, in Europe, Germany is most often cited as a thriving sales market. Moreover, as in the last quarter, company representatives are mentioning positive economic signals from southern Europe. Business with Russia and Brazil, however, remains slack. Looking at individual industry categories, there is sustained strong demand from the automotive, medical technology and aircraft industries.

In construction, turnover continues to rise slightly, helped by ongoing high activity in structural engineering – particularly in residential construction – and in the finishing trade. Nevertheless, some companies report growing vacancy rates in residential property and longer advertising periods.

In the services sector, most industries are recording higher real turnover than in the previous quarter. This is especially evident in transport companies, the IT industry and wholesale trade. The lull in retailing continues, with sales still below the previous year's level while, in tourism, there are signs that the downturn might have bottomed out.

CAPACITY UTILISATION

Low but stable capacity utilisation

Production capacity utilisation has stabilised at a low level over the past three quarters. In the current quarter, almost 40% of the companies surveyed rate their utilisation as lower than usual.

In manufacturing, representatives from plastics and metal processing companies, in particular, as well as precision tool manufacturers (strongly influenced by developments in the watchmaking industry) report underutilisation.

In the services sector, representatives from a number of categories, especially trade, hotels and catering, are complaining of underutilisation of infrastructure (office and sales space as well as IT and transport capacities).

DEMAND FOR LABOUR

Staff numbers in line with demand

Overall, staff numbers are currently considered in line with or slightly below demand. The situation has improved noticeably since the previous quarter.

In manufacturing, industry categories which were still reporting excessive staff numbers in the last quarter now rate headcounts as appropriate. In watchmaking, however, staff numbers continue to exceed requirements.

Headcounts in the services sector are regarded as marginally too low, particularly in IT, transport, and architecture and engineering firms. While overstaffing in trading and the financial industry has decreased, staff numbers in the hotel industry are still considered slightly too high.

Overall, efforts required to hire staff are rated as normal. Representatives from the energy and financial sectors report the process of recruitment to be somewhat easier than usual.

PRICES, MARGINS AND EARNINGS SITUATION

Improved margin situation

The margin situation has improved a little, partly due to the success of measures taken to achieve efficiency gains. Margins in all areas, however, are still reported to be lower than usual. Around 40% of company representatives rate current margins in their firms as lower than normal; a further 40% consider them to be within the normal range.

In manufacturing, representatives from the mechanical and electrical engineering (MEM) industries, in particular, continue to rate margins as weaker than usual. Margin pressure also remains high in trade and finance companies. A similar situation in construction can be explained by overcapacity in certain areas.

While sales prices in all areas are expected to continue their slight downward trend in the coming months, companies are anticipating stable purchase prices for the first time since the discontinuation of the minimum exchange rate.

OUTLOOK

Optimism prevails

Company representatives are optimistic about their business prospects in the coming months. Increases in real turnover and higher capacity or infrastructure utilisation are expected in all areas and almost all industries. The reasons lie in anticipated economic developments abroad, a gratifying volume of new orders in many cases, generally more stable exchange rate conditions and the impact of efficiency drives.

Companies are also expressing somewhat greater willingness to invest, with slightly higher investment plans in both manufacturing and the services sector. Over a quarter of companies surveyed who are investing in equipment will be expanding their production capacities.

As to employment plans, companies in the services sector and, more recently, also manufacturing, anticipate a slight increase in the next six months. This applies to virtually all industry categories. Particularly high recruitment needs are reported by precision tool manufacturers (excluding watches) and the IT industry.

Based on information provided by company representatives, the wage increases planned so far for 2017, or those already carried out, average 0.8%.

Most companies have found ways of coping with the current exchange rate conditions. Any difficulties that may have been encountered, or fears of renewed Swiss franc appreciation, are often mentioned in connection with other (structural) problems or (political) risks. These include the risk of growing protectionism, the forthcoming elections in Europe and the challenges caused by digitalisation and the boom in online trading. However, especially in view of the uncertain international environment, many companies also emphasise the advantages of Switzerland as a production location, with its liberal labour market, high-quality labour force, political stability, excellent infrastructure and strong innovative capacity. At the same time, they continue to criticise the tendency towards overregulation.

Companies are concerned about the impact of the low interest rate environment on the long-term outlook for pension funds. Restrained criticism of negative interest rates is expressed by representatives from the banking sector.

Expectations with regard to inflation – as measured by the consumer price index – continue to point upwards. For the next 6–12 months, they now average 0.2% (fourth quarter 2016: 0%), thereby moving into positive territory for the first time since the first quarter of 2015. Medium-term inflation expectations (horizon of three to five years) in the period under review stand at 0.9% (fourth quarter 2016: 0.8%).



The new SNB exchange rate index

Robert Müller¹

The Swiss National Bank (SNB) is putting the exchange rate indices it calculates and publishes on a new footing. This article describes the construction elements of the new exchange rate index and the results obtained from it. The key aspects of the revision are, first, a weighting of countries on the basis of imports, exports and so-called third-market effects; second, the inclusion of trade in services in the weighting; and third, a continuous updating of the countries incorporated into the index. The methodological changes in the calculation of the new index have almost no effect on the development of the nominal index. The difference between the nominal and real index (CPI-based) has increased slightly with the new calculation. This is explained by the fact that a number of countries with above-average rates of inflation have been allotted a greater weighting in the new index.

¹ The author would like to thank Katrin Assenmacher, Guido Boller, Christian Grisse, Daniel Kromer, Niklaus Leu, Matthias Lutz, Christoph Meyer, Enzo Rossi, Stefanie Schnyder and Pascal Towbin for their useful comments.

The Swiss National Bank (SNB) has calculated and published effective exchange rate indices for many years. Exchange rate indices serve as an indicator of the price competitiveness of a country. They are calculated on the basis of bilateral exchange rates, information on trade flows, and – in the case of real effective indices – information on price developments.

The SNB has decided to put the exchange rate indices it calculates and publishes on a new footing. Due to the improved data situation, it can draw on new calculation methods in this respect. These methods are applied internationally – such as by the International Monetary Fund (IMF) and the Bank for International Settlements (BIS) – and are viewed as the standard for the calculation of exchange rate indices. Where implementation is concerned, the SNB has sought to design the index in such a way that it is transparent and robust with regard to methodology and data sources, and can be calculated on a daily basis.

The key aspects of the revision are:

- Application of the weighting method used by the IMF, which takes into account so-called third-market effects.
- Continuous updating of the countries incorporated into the index.
- Calculation of a chained index.

As a result of these adjustments, the new effective exchange rate index replicates the multifaceted competitive and trading relationships of the Swiss economy in a more comprehensive and up-to-date way. In addition, the SNB now also provides exchange rate indices that have been deflated with producer prices.

Section 1 of this article describes the main elements of the new effective exchange rate index, while section 2 sets out the corresponding results. Finally, section 3 provides information on the future publication of these data. More detailed information on the methodology applied can be found in the *SNB Economic Studies* (11/2017). The new exchange rate index is also commented on in the monetary policy report section of this *Quarterly Bulletin* (cf. p. 23).

KEY ELEMENTS OF THE NEW EFFECTIVE EXCHANGE RATE INDEX

More comprehensive incorporation of competitive relationships and trading in services

In the calculation of the effective index, bilateral exchange rates are weighted in keeping with the significance of the trading partners as competitors of the Swiss economy. In the previously published effective exchange rate of the SNB, the country weightings were based solely on Swiss goods exports. However, an export-weighted index of this kind only reflects the competition between Switzerland and its trading partners in the latter's domestic markets. In reality, competition between trading partners A and B can be found not only in B's domestic market, but also in A's domestic market and in third markets where A and B compete with one another.

The IMF's 'weighting scheme'¹ – or weighting method – replicates these multifaceted competitive relationships. Three aspects play an important role here: First, competition with foreign suppliers in their own domestic markets (bilateral export competition); second, competition between domestic suppliers and foreign suppliers in the Swiss domestic market (import competition); and third, competition between foreign suppliers in third markets (export competition in third markets).

For the calculation of the weightings, data on global trade flows are used – which now also include trade in services, which is significant for Switzerland.

Variable group of countries

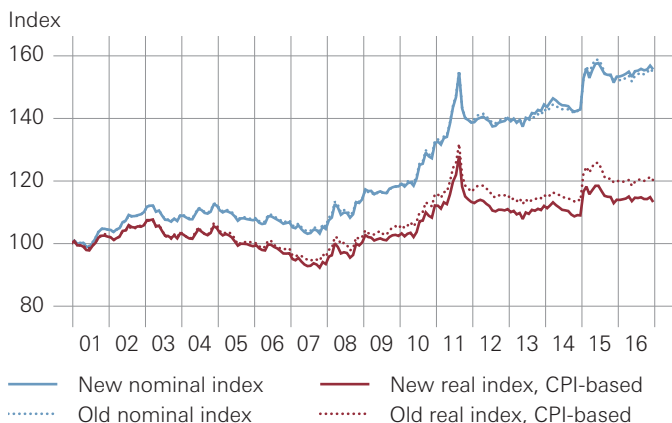
The global economy has experienced some major upheavals in recent decades. Countries that formerly played only a minor role in the international flow of services and goods have become important trading partners for Switzerland. The fixed group of countries that was previously used to calculate the effective exchange rate index failed to take sufficient account of this development. Accordingly, from now on all countries that account for an export share or import share of more than 0.2% in either the current or the previous period will be included. The threshold of 0.2% ensures that all key countries are represented in this group of countries. If the threshold were to be set lower, problems would rapidly emerge with respect to the availability of data. This would run counter to the SNB's objective of being able to calculate an index on a daily basis that is robust from a data standpoint. On average, 43 countries are included in the new calculation, of which a core group of 39 has been permanently represented in the index since 2000.

¹ Cf. Zanello and Desruelle (1997), A primer on the IMF's information notice system, *IMF Working Papers*, WP/97/71.

Chart 1

COMPARISON OF OLD AND NEW EFFECTIVE EXCHANGE RATE INDEX

December 2000 = 100



Source: SNB

Chained index

The new index is a chained Törnqvist index. The country weightings are calculated as the arithmetic mean of the weightings from both the current period and the previous period. By contrast, the previous Törnqvist index had a fixed basis. Here the weightings were an arithmetic mean of the weightings of the current period and a base period (1999).

The selection of a chained index ensures that the group of countries can be variable, so that current developments in the trading of goods and services can be rapidly replicated in the index. If the significance of a country for Swiss foreign trade rises sharply (e.g. in the case of China), the previous index would only capture this development with a time lag. Now, changes in the structure of international trade flows show up quickly in the index weightings, as the base period for the comparison of current observation values no longer lies far in the past.

Real indices now also based on producer prices

The SNB will continue to calculate not only a nominal but also a real effective exchange rate index. Up until now, the only deflator used has been the consumer price index (CPI). In future, the SNB will also calculate and publish a real effective exchange rate index which is deflated with the producer price index (PPI). The CPI has the advantage of being internationally harmonised to a significant degree, and also available rapidly in most cases. However, it also includes the prices of goods that are not traded internationally. Moreover, the prices of capital goods are not taken into consideration. While the PPI does capture capital goods, it is only comparable internationally to a limited extent, as the underlying basket of goods is heavily influenced by country-specific production structures. In addition, it is only available with a time lag. These advantages and disadvantages need to be weighed up when using a real exchange rate index.

RESULTS

The methodological changes in the calculation of the effective index have virtually no effect on the development of the new nominal index. As chart 1 shows, however, the difference between the nominal and real index (CPI-based) has increased with the new calculation. This is explained by the fact that countries with a greater weighting in the new index have higher average rates of inflation than those whose weighting has been reduced.

The above-mentioned shift in country weightings is essentially attributable to two factors.

- The new index uses the IMF weighting method, whereas the weightings of the previous index were exclusively export based. The additional incorporation of import and third-market components has an impact on the country weightings.
- As the new index is a chained index, any change in the foreign trade importance of a trading partner feeds into the new index more quickly than in the previous version.

Table 1 shows the resulting changes in the weightings of Switzerland's key trading partners.

Finally, chart 2 compares the new real exchange rate indices on the basis of consumer prices (CPI-based) and producer prices (PPI-based).

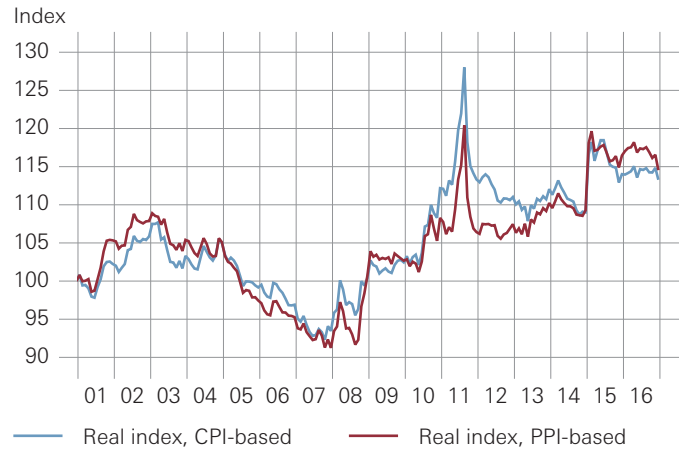
PUBLICATION OF DATA

Data for the new exchange rate indices from 1973 onward are available on the SNB's data portal (data.snb.ch). In order to help data users adjust to the new indices, the SNB will continue to calculate the exchange rate index under the previous method for one more year. These results will likewise be published – alongside the new data – on the SNB's data portal.

Chart 2

REAL EFFECTIVE INDEX

December 2000 = 100



Source: SNB

Table 1

WEIGHTINGS OF KEY TRADING PARTNERS IN THE OLD AND NEW INDICES FOR 2016

Weightings in percent

	Germany	France	Italy	Euro area	United Kingdom	United States	Hong Kong	China	Japan	India
Old index	22.0	8.9	7.6	52.9	10.1	14.8	2.2	2.6	3.9	0.6
New index	17.2	6.6	6.1	42.7	8.3	13.9	2.9	8.1	2.5	3.7

Chronicle of monetary events

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

<p>At its quarterly assessment of 16 March 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.</p>	<p>March 2017</p>
<p>On 19 December, 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.</p>	<p>December 2016</p>
<p>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.</p>	<p>December 2016</p>
<p>On 10 November, 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.</p>	<p>November 2016</p>
<p>On 9 November, the Federal Council issues a message on the popular initiative 'For crisis-resistant money: end fractional-reserve banking' (<i>Vollgeldinitiative</i>). It proposes that the two chambers of parliament reject the initiative without a counterproposal.</p>	<p>November 2016</p>
<p>At its quarterly assessment of 15 September 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 unchanged 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.</p>	<p>September 2016</p>

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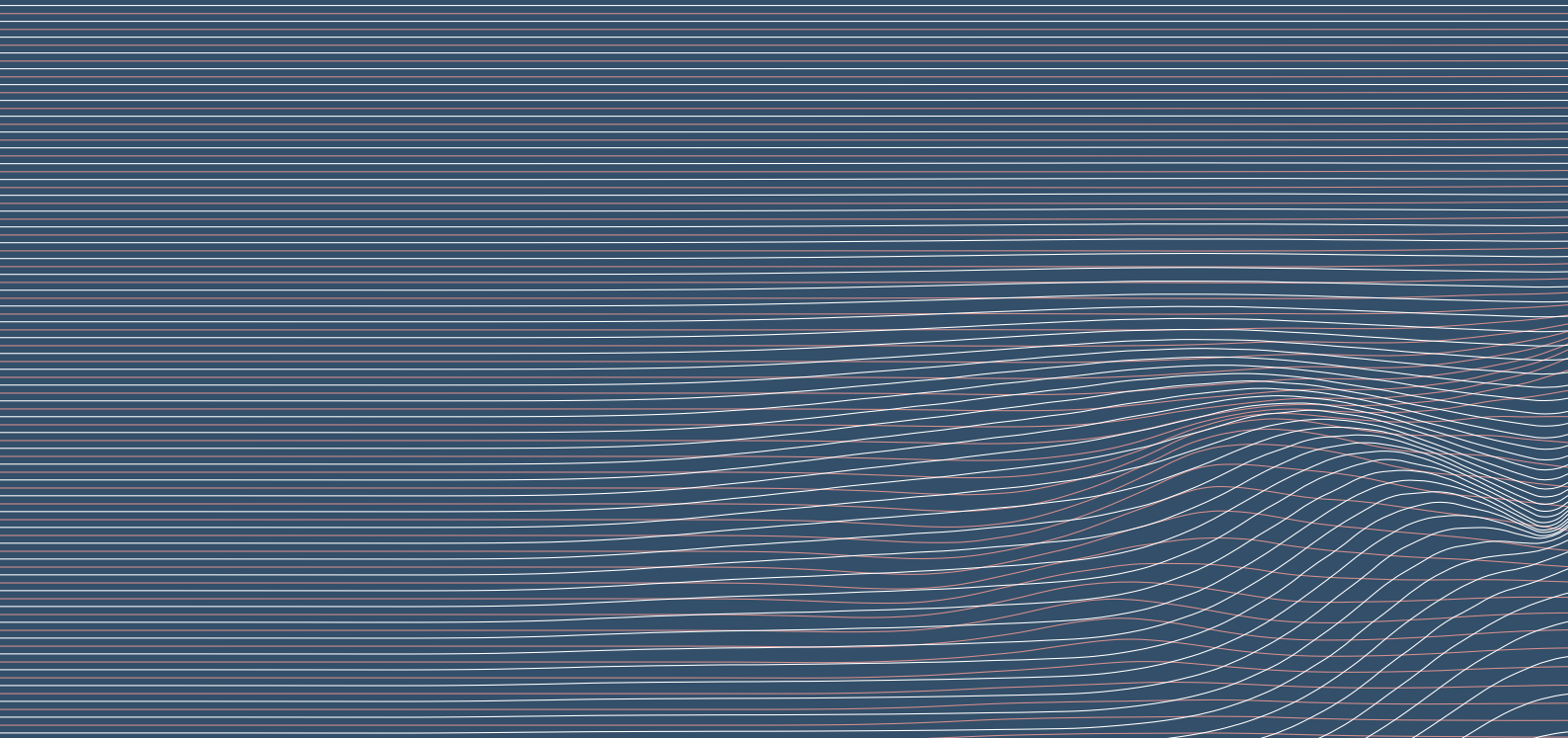
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