

Quarterly Bulletin 4/2016 December



Quarterly Bulletin 4/2016 December

Contents

		Page
	Monetary policy report	4
1	Monetary policy decision of 15 December 2016 Monetary policy strategy at the SNB	5 6
2	Global economic environment	7
3	Economic developments in Switzerland	13
4	Prices and inflation expectations	19
5	Monetary developments	22
	Business cycle trends	28
	Acknowledgements	32
	Chronicle of monetary events	36

Monetary policy report

Report for the attention of the Governing Board of the Swiss National Bank for its quarterly assessment of December 2016.

The report describes economic and monetary developments in Switzerland and explains the inflation forecast. It shows how the SNB views the economic situation and the implications for monetary policy it draws from this assessment. The first section ('Monetary policy decision of 15 December 2016') is an excerpt from the press release published following the assessment.

This report is based on the data and information available as at 15 December 2016. 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 15 December 2016

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%. At the same time, 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 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. The Swiss franc is still significantly overvalued.

Compared to September, the new conditional inflation forecast has been revised slightly downwards in the short term (cf. chart 1.1). This mainly reflects the fact that inflation in October and November was slightly lower than expected. The SNB nevertheless anticipates an unchanged inflation rate of -0.4% for 2016 (cf. table 1.1). For 2017, however, the forecast is down to 0.1%, from 0.2% in the previous quarter. For 2018, the SNB now expects inflation

of 0.5%, compared to 0.6% in the third 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 global economy has continued to recover in line with the SNB's expectations. In the US, third-quarter GDP growth was again significantly above potential. Furthermore, the situation on the labour market continued to improve. The other major economic areas also recorded favourable economic activity in the third quarter. The euro area and Japan continued to register moderate growth, while in China, growth remained strong thanks to a variety of fiscal measures. In the UK, the economic impact of the Brexit decision has so far proved less pronounced than originally feared.

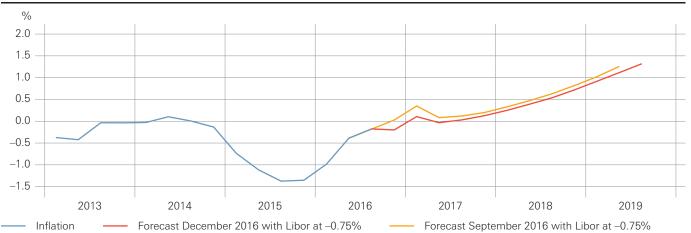
The SNB expects the moderate pace of global growth to continue in 2017. The baseline scenario for the world economy is still subject to considerable risks, however. Structural problems in a number of advanced economies could negatively affect the outlook. Added to this are a multitude of political uncertainties which are particularly associated with the future course of economic policy in the US, upcoming elections in several countries in the euro area as well as the complex and arduous exit negotiations between the UK and the EU.

According to an initial quarterly estimate, GDP in Switzerland grew at an annualised rate of 0.2% in the third quarter. This small increase must also be seen in the context of high growth in the second quarter. Year-on-year, GDP rose by 1.3% in the third quarter. Overall, economic indicators point to a continuation of the moderate economic recovery in Switzerland and are thus consistent with our previous GDP growth forecast of around 1.5% for 2016 as a whole. Developments on the labour market support this view. Up until November, the seasonally

Chart 1.1

CONDITIONAL INFLATION FORECAST OF DECEMBER 2016

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



Source: SNB

adjusted unemployment rate for this year was stable at 3.3%. Survey-based labour demand indicators have recovered further.

The outlook for the coming year is cautiously optimistic. As for 2016, the SNB expects GDP growth for 2017 to be roughly 1.5%. Prevailing international risks mean that forecasts, including Switzerland's, continue to be fraught with considerable uncertainties.

Over the last six months, growth on the mortgage and real estate markets has remained fairly constant at a relatively low level. At the same time, imbalances on these markets have decreased slightly overall due to developments in fundamentals. However, imbalances are still at a similarly high level as in 2014, when the sectoral countercyclical capital buffer was set at 2%. The SNB will continue to monitor developments on these markets closely, and will regularly reassess the need for an adjustment of the countercyclical capital buffer.

Monetary policy strategy at the SNB

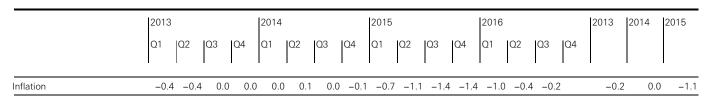
The SNB has a statutory mandate to ensure price stability while taking due account of economic developments.

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

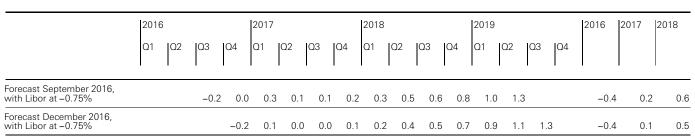
overstates actual inflation. At the same time, it allows inflation to fluctuate somewhat with the economic cycle. Second, the SNB summarises its assessment of the situation and of the need for monetary policy action in a quarterly inflation forecast. This forecast, which is based on the assumption of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

Table 1.1

OBSERVED INFLATION IN DECEMBER 2016



CONDITIONAL INFLATION FORECAST OF DECEMBER 2016



Source: SNB

2 Global economic environment

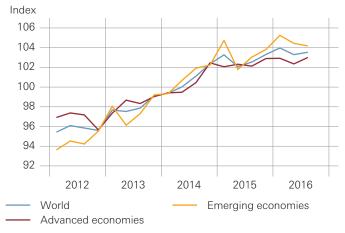
Since the last quarterly assessment in September, the global economy has developed in line with expectations and continued to recover. Capacity utilisation in many countries is improving gradually. This is especially evident in the labour market, where job numbers are on the rise and unemployment is declining. However, global economic growth is not yet broad-based. International trade and demand for investment in particular continue to be subdued. Inflationary pressure abroad also remains low. Although higher energy prices are currently resulting in a marked increase in inflation, core inflation remains at a low level in a number of countries and central banks are thus maintaining their expansionary monetary policy course.

Among advanced economies, the economic cycle has progressed furthest in the US. Third-quarter GDP growth in the US was again significantly above potential. Private consumption was once more the driving force. The situation on the labour market continued to improve as well; the US economy has almost reached full employment. This is also reflected in more robust real wage growth. Inflation is now close to the target set by the US Federal Reserve. Against this backdrop, the Federal Reserve decided on 14 December to raise its key interest rate by 25 basis points.

Chart 2.1

GLOBAL EXPORTS

Reporting period average = 100



Sources: CPB, Thomson Reuters Datastream

Table 2.1

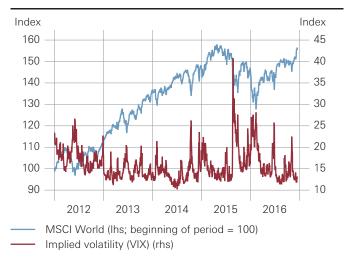
BASELINE SCENARIO FOR GLOBAL ECONOMIC DEVELOPMENTS

	2012	2013	2014	2015	Scenario 2016	o 2017
GDP, year-on-year change in percent						
Global ¹	3.1	3.2	3.5	3.3	3.2	3.6
US	2.2	1.7	2.4	2.6	1.5	2.2
Euro area	-0.9	-0.3	1.2	2.0	1.6	1.4
Japan	1.5	2.0	0.2	1.2	1.0	1.1
Oil price in USD per barrel	111.7	108.7	99.0	52.5	43.2	47.0

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

Sources: SNB, Thomson Reuters Datastream

STOCK MARKETS



Source: Thomson Reuters Datastream

Chart 2.3

INTERNATIONAL LONG-TERM INTEREST RATES

10-year government instruments

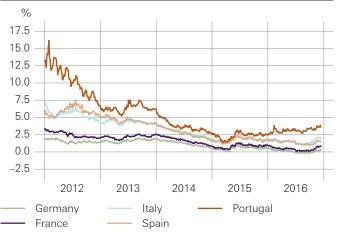


Source: Thomson Reuters Datastream

Chart 2.4

EUROPEAN LONG-TERM INTEREST RATES

10-year government instruments



Source: Thomson Reuters Datastream

The other major economic areas also recorded favourable economic activity in the third quarter. The euro area and Japan continued to register moderate growth, while in China, growth remained strong thanks to a variety of fiscal measures. In the UK, the economic impact of the Brexit decision has so far proved less pronounced than originally feared. However, the country's economic performance is still expected to be impaired by this outcome in the coming quarters.

In its largely unchanged baseline scenario, the SNB expects the moderate pace of global growth to continue in 2017. It is thus likely that the economic situation will continue to improve, particularly in the euro area, and that inflation will also pick up somewhat.

The forecast for the global economy is still subject to considerable risks, however. Structural problems in a number of advanced economies – such as a fragile financial system, high public debt and low growth potential – could negatively affect the outlook. Added to this are a multitude of political uncertainties. First, it is unclear what direction economic policy in the US will take following the presidential and congressional elections. Second, several countries in the euro area have important elections coming up in 2017. And third, exit negotiations between the UK and the EU are likely to be complex and arduous.

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 47 per barrel and an exchange rate of USD 1.09 to the euro. Both correspond to the 20-day average when the current baseline scenario was drawn up.

INTERNATIONAL FINANCIAL AND COMMODITY MARKETS

The international financial markets have remained unsettled since the mid-September quarterly assessment, due not least to the outcome of the US presidential and congressional elections of 8 November. The implied volatility of US stocks as measured by option prices (VIX), which serves as an indicator of market uncertainty, rose significantly as the election results became known, but then normalised again within a few days (cf. chart 2.2). The MSCI World Index receded briefly before climbing to its highest level of the year, while a downward correction on the US stock market index S&P 500 was followed by a new all-time high.

Considerable movement was also observed in long-term interest rates. Driven by developments in the US, yields on long-term government bonds increased perceptibly in nearly all advanced economies. The exception was Japan, where the yield on ten-year government bonds has been stabilised at around zero since the end of September, due to measures by the Bank of Japan. Yields in the US again reached the level recorded in mid-2015. Among other

things, this reflected expectations of higher fiscal expenditure under the new President and a tightening of monetary policy in December. In the euro member states, too, yields on long-term government bonds rose markedly, returning to positive territory in Germany (cf. charts 2.3 and 2.4). This was due in part to markets no longer expecting a further reference rate reduction by the ECB. In several countries on the periphery of the euro area, the yield spread against German government bonds has again widened.

The US dollar gained in value on a trade-weighted basis, inversely reflecting the Japanese yen's loss in value. The euro trended sideways, while pound sterling fluctuated sharply but did not depreciate any further overall (cf. chart 2.5).

On the commodity markets, oil prices rose after OPEC and non-OPEC states agreed to jointly limit their crude oil production. Prices for industrial metals were up as a result of a more positive economic outlook (cf. chart 2.6).

US

The US economy gained momentum in the third quarter, recording GDP growth of 3.2% (cf. chart 2.7). Private consumption remained a significant buttress of growth, and exports picked up markedly. Solid growth in employment continued over the past months and the unemployment rate receded to 4.6% in November (cf. chart 2.10). The labour market's capacity is now well utilised, and wage growth also edged upwards.

The US economy has so far developed in line with the expectations expressed in September. Against this backdrop, the SNB has left its growth forecast for the US economy virtually unchanged at 1.5% for 2016 and 2.2% for 2017 (cf. table 2.1). Given the favourable labour market situation, private consumption is likely to remain the chief driver of growth. Corporate investment in the energy sector should gradually pick up on the back of somewhat higher oil prices. However, a notable degree of uncertainty remains regarding the future shape of US economic policies. As the new government's economic policy course cannot be predicted yet, the SNB has left its assumptions in this area unchanged.

The annual inflation rate as measured by the consumer price index climbed to a two-year high of 1.6% in October. Core inflation amounted to 2.1%. In view of the satisfactory labour market situation and inflation trends, the Federal Reserve decided in December to raise the target range for its policy rate by 25 basis points to between 0.5% and 0.75%. The last policy rate increase had been effected one year before (cf. chart 2.13).

Chart 2.5

EXCHANGE RATES

Trade-weighted, beginning of period = 100

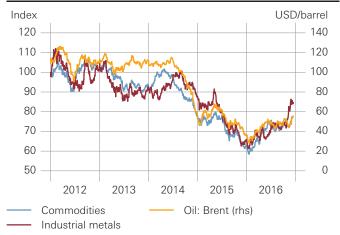


Source: Thomson Reuters Datastream

Chart 2.6

COMMODITY PRICES

Beginning of period = 100

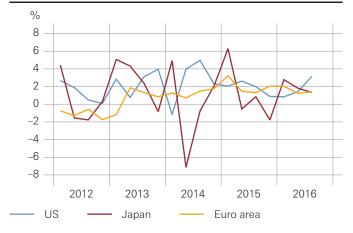


Source: Thomson Reuters Datastream

Chart 2.7

REAL GDP: ADVANCED ECONOMIES

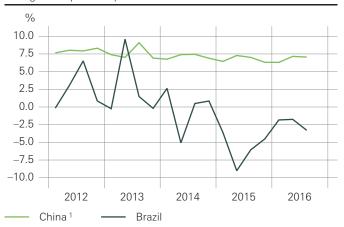
Change from previous period



Source: Thomson Reuters Datastream

REAL GDP: EMERGING ECONOMIES

Change from previous period

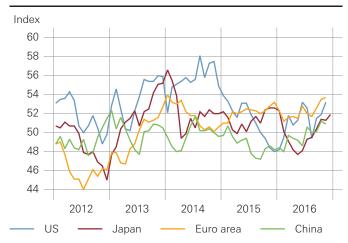


1 Estimate: SNB.

Source: Thomson Reuters Datastream

Chart 2.9

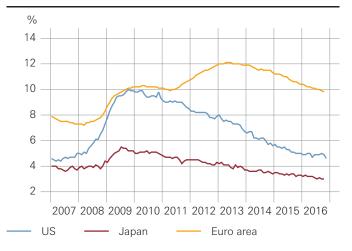
PURCHASING MANAGERS' INDICES (MANUFACTURING)



Source: Markit Economics Ltd 2009; all rights reserved

Chart 2.10

UNEMPLOYMENT RATES



Source: Thomson Reuters Datastream

EURO AREA

In the euro area, GDP grew by 1.4% in the third quarter (cf. chart 2.7). Both manufacturing and construction activities were up. Employment in the euro area picked up somewhat and unemployment in October was at its lowest since July 2009 (cf. chart 2.10).

Supported by expansionary monetary policies and favourable financing conditions, the slow economic recovery in the euro area looks set to continue. Capacity utilisation in manufacturing and services has improved. As a result, according to surveys, the general mood as well as employment plans for the near future indicate a greater amount of confidence. However, the growth outlook is still associated with considerable risks. One such factor is the fragile state of the Italian banking sector. Another source of concern is the impact of the UK vote to leave the EU. It has not as yet hampered economic developments in the euro area, but significant uncertainty remains regarding the shape of future EU-UK relations, which could have a negative impact particularly on investment activities. Finally, there are the political uncertainties to be considered in association with the elections due in major countries in 2017. The SNB still expects GDP growth in the euro area of 1.6% for 2016 and 1.4% for 2017.

Consumer price inflation continued to edge up in connection with rising energy prices, reaching 0.6% in November, while core inflation persisted at close to 1%. Medium-term inflation expectations derived from financial indicators rose slightly, yet remained at a low level overall.

The ECB left its key rate unchanged. Based on the insufficient inflation momentum, it has extended its programme of securities purchases, which was due to end in March 2017, to at least the end of 2017. However, from April 2017 onwards, the purchase volume is to be reduced from currently EUR 80 billion to EUR 60 billion per month.

JAPAN

In Japan, GDP expanded by 1.3% in the third quarter (cf. chart 2.7). Due to a comprehensive revision of data, average economic growth in the past years and especially in the first half of 2016 was somewhat higher than previously assumed. Corporate investment and private consumption in particular were affected by this upward revision. The recovery on the labour market continued. At 3.0%, the unemployment rate in October was at its lowest since the mid-1990s (cf. chart 2.10).

The economic situation is likely to recover further in the coming quarters, with favourable labour market conditions buttressing private consumption. Furthermore, initial effects from the infrastructure investments made in connection with the stimulus packages adopted in August are likely to be felt. The volatile exchange rate developments still present a challenge, but the negative consequences for the export industry of the yen's appreciation, felt until mid-year, are likely to peter out gradually. GDP in the current year is expected to grow by 1.0%, which is slightly above the estimated growth potential. The forecast for 2017 is 1.1%.

Influenced by energy prices and a strong yen, consumer price inflation remained in negative territory up to September. In October, annual inflation moved up to 0.1% on the back of an increase in prices for fresh food (cf. chart 2.11). Based on oil price assumptions (cf. table 2.1), an overall increase in annual inflation is again expected for 2017, yet all in all the inflation momentum remains weak. Core inflation stands at 0.2% (cf. chart 2.12) and long-term inflation expectations derived from company surveys remain well below the Japanese central bank's inflation target of 2%.

Against this backdrop, the Bank of Japan modified its monetary policy strategy in September by placing the yield curve at the centre of its policy (QQE with Yield Curve Control). This includes a target yield of around zero percent for ten-year Japanese government bonds. In addition, the purchase of securities is to be continued until inflation surpasses the 2% mark. The Bank of Japan also reiterated its willingness to ease monetary policy further if necessary. Since then, the yield curve for Japanese government bonds has remained stable.

EMERGING ECONOMIES

Economic activity in the large emerging economies continued to vary from one country to another. In China, GDP again expanded markedly in the third quarter. The growth was driven by manufacturing and services, while construction lost some of its momentum. In India, GDP advanced in line with production potential. Russia reported GDP growth for the first time since entering a long period of recession. By contrast, Brazil remained in the grip of a serious recession.

The outlook for these countries is largely unchanged. In China, growth is likely to decelerate slowly as fiscal stimulus measures gradually come to an end. Moreover, the government has taken measures to prevent the real estate market from overheating. Nevertheless, the domestic economy is likely to remain the driving force in the coming quarters. The SNB expects China's GDP to advance by 6.7% in 2016 and 6.3% in 2017. In India, the economic outlook is associated with greater uncertainty following the government's surprise cash reform in November which declared a large part of the cash in circulation invalid. Potential bottlenecks in the supply of cash could put a short-term damper on growth. In Russia and Brazil, the economy was bolstered by somewhat higher commodity prices. Economic activities in both countries are likely to gradually recover as real incomes stabilise and monetary conditions improve.

Chart 2.11

CONSUMER PRICES

Year-on-year change

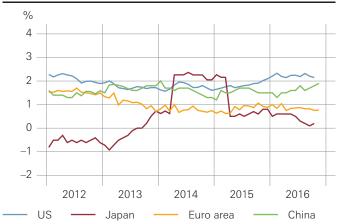


Source: Thomson Reuters Datastream

Chart 2.12

CORE INFLATION RATES 1

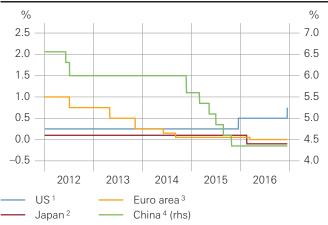
Year-on-year change



1 Excluding food and energy. Source: Thomson Reuters Datastream

Chart 2.13

OFFICIAL INTEREST RATES

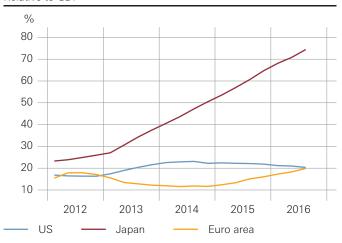


- 1 Federal funds rate.
- 3 Main refinancing rate.
- 2 Call money target rate.
- 4 One-year lending rate.

Source: Thomson Reuters Datastream

MONETARY BASE

Relative to GDP



Source: Thomson Reuters Datastream

Inflation trended downwards in most of the above-mentioned countries. In India, it dropped to 3.6% in November, thus remaining within the target range of 2% to 6%. In Brazil and Russia, too, inflation receded somewhat, but still persisted at an undesirably high level (7.0% and 5.8%, respectively). In China, by contrast, inflation was slightly up again (2.3%).

The central banks of India, Russia and Brazil lowered their key rates in order to support the economy, whereas China's key rate remained unchanged.

Economic developments in Switzerland

According to the first official estimate, GDP in Switzerland increased only slightly in the third quarter. With the exceptions of manufacturing and trade in goods (excluding merchanting), there was no significant growth on either the output or the demand side. This quarterly estimate must also be seen in the context of the strong increases in economic activity of the previous quarter.

Utilisation of overall production capacity remains unsatisfactory. Surveys suggest that technical capacity was underutilised in various industries in the third quarter, particularly manufacturing and retailing. One exception was construction, where utilisation was significantly above the long-term average.

The slow recovery on the labour market continued. Thus the seasonally adjusted unemployment figures marginally declined over recent months. The seasonally adjusted unemployment rate remained unchanged.

Initial quarterly estimates of the national accounts are uncertain by definition. The SNB therefore takes a wide range of additional information into account when assessing the economic situation. Available indicators suggest a gradual recovery since mid-2015, continuing in the second half of 2016. A key factor here is improved business and household sentiment in the euro area and other advanced economies, which in turn creates a more favourable environment for the Swiss export industry. Overall, the signals from the economic indicators are consistent with our previous GDP growth forecast of around 1.5% for 2016 as a whole. Recovery looks set to continue at a moderate pace next year. As for 2016, the SNB expects growth for 2017 to be roughly 1.5%.

AGGREGATE DEMAND AND OUTPUT

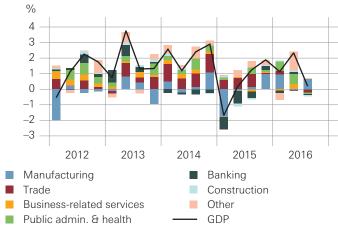
Lacklustre third quarter

According to the first estimate by the State Secretariat for Economic Affairs (SECO), GDP in the third quarter was up by 0.2%, following growth of 2.3% in the prior quarter. On the output side, manufacturing was the only industry to make a significant contribution to growth. Momentum otherwise remained weak. Most industries recorded merely moderate growth or a decline in value added (cf. chart 3.1).

Chart 3.1

CONTRIBUTIONS TO GROWTH, BY SECTOR

Change from previous period

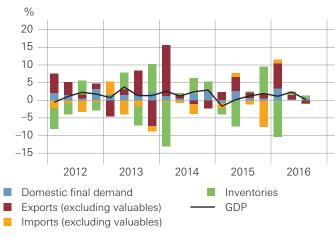


Source: State Secretariat for Economic Affairs (SECO)

Chart 3.2

CONTRIBUTIONS TO GROWTH IN DEMAND

Change from previous period

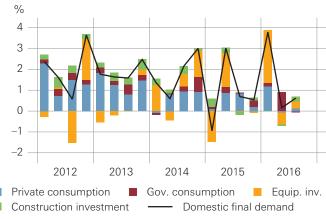


Source: SECO

Chart 3.3

DOMESTIC FINAL DEMAND, GROWTH CONTRIBUTIONS

Change from previous period



Source: SECO

Slowdown in exports

Following the positive development of the previous quarters, exports tapered off slightly in the third quarter, while imports increased marginally. This resulted in a negative net exports contribution (cf. table 3.1).

The decline in exports is primarily down to weak performance in both merchanting and services. By contrast, goods exports (excluding merchanting) continued to expand, driven by demand from the advanced economies, with a considerable rise in exports of pharmaceutical products in particular. Exports of metal products were also favourable.

Moderate growth in domestic demand

Domestic demand (including changes in stocks) expanded slightly in the third quarter, thereby offsetting the negative net exports contribution to GDP growth (cf. charts 3.2 and 3.3). The moderate upward trend in equipment investment observed since the beginning of 2014 continued. After a period of stagnation, construction investment recorded a small increase again. According to a survey by the Schweizerischer Baumeisterverband (Swiss Federation of Master Builders), this is exclusively due to positive developments in civil engineering. Residential construction, on the other hand, stagnated.

Consumer spending remained lacklustre – a function of somewhat weaker income developments in recent quarters and muted consumer confidence.

Table 3.1

REAL GDP AND COMPONENTS

Growth rates on previous period in percent, annualised

drowii rates on previous period in peri			12014	2015	2014	12015				2016		
	2012	2013	2014	2013	Q4	Q1	Q2	Q3	Q4		Q2	Q3
Private consumption	2.6	2.2	1.2	1.1	1.5	0.1	1.4	1.4	0.3	1.9	-0.1	0.2
Government consumption	2.1	2.3	1.5	2.2	5.5	0.9	2.4	0.4	2.4	1.5	7.2	-0.4
Investment in fixed assets	2.9	1.1	2.8	1.6	5.2	-4.2	7.0	-0.7	0.2	9.2	-2.4	2.1
Construction	2.9	3.1	3.2	2.2	1.2	3.7	2.5	-1.7	1.4	0.0	-0.8	2.1
Equipment	2.8	-0.2	2.6	1.3	7.9	-9.0	10.1	0.0	-0.6	15.7	-3.4	2.0
Domestic final demand	2.6	1.9	1.7	1.3	3.0	-0.9	3.0	0.7	0.5	3.8	0.2	0.6
Change in inventories ¹	-1.0	0.6	-0.8	-0.3	2.6	-1.8	-7.4	0.3	7.6	-10.5	0.8	0.7
Total exports ²	3.0	0.0	5.2	2.2	-4.5	4.4	7.6	2.9	2.8	13.7	2.6	-1.7
Goods ²	0.9	-2.3	5.8	2.5	-8.3	8.7	11.1	1.3	-1.2	24.5	-0.9	-1.0
Goods excluding merchanting ²	1.7	-1.0	4.0	0.7	-4.4	-9.7	5.0	4.5	13.0	8.3	3.8	5.0
Services	7.4	4.7	4.0	1.6	3.3	-3.4	1.0	6.1	11.0	-4.7	9.9	-3.0
Total imports ²	4.4	1.4	3.2	3.0	-0.1	3.2	-2.5	2.9	19.4	-2.7	0.1	0.6
Goods ²	2.3	0.7	1.7	0.0	-6.1	2.5	-10.9	4.3	20.0	0.2	1.8	1.0
Services	9.3	2.9	6.4	9.0	13.2	4.5	15.5	0.5	18.2	-8.0	-3.1	-0.2
Net exports ³	-0.2	-0.6	1.3	-0.1	-2.4	0.9	4.9	0.3	-6.2	8.2	1.3	-1.1
GDP	1.0	1.8	2.0	0.8	2.9	-1.7	0.2	1.2	1.9	1.1	2.3	0.2

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

Source: SECO

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.

Chart 3.4

The very gradual recovery on the labour market continued.

Slight fall in unemployment

The number of people registered as unemployed with regional employment offices peaked in July and has been declining slightly ever since. Excluding seasonal fluctuations, 148,000 people were registered as unemployed at the end of November. The official, seasonally adjusted unemployment rate published by SECO has been at 3.3% since October 2015 (cf. chart 3.4).

In addition to this, the SFSO calculates unemployment figures in line with the International Labour Organization (ILO) definition based on the Swiss Labour Force Survey (SLFS), a survey of households. This figure remained at 4.6% in the third quarter and was thus, as usual, higher than the unemployment figure supplied by SECO. The difference is mainly due to the fact that the survey of households includes unemployed people who are not registered, or no longer registered, with these offices.

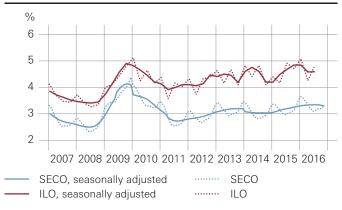
Continued rise in employment

According to the employment statistics of the SFSO, the seasonally adjusted number of gainfully employed persons continued to rise in the third quarter (cf. chart 3.5). These statistics are likewise largely based on the SLFS household survey.

By contrast, the national job statistics, which are based on a survey of companies, suggest that the number of full-time equivalent positions flattened out in the third quarter. In the services sector, employment continued to rise slightly, whereas it declined again in construction and manufacturing (cf. chart 3.6).

The signals from these surveys have recently been contradictory. However, as unemployment has seen a small decrease despite continued net immigration, it is likely that there was a slight growth in employment overall. This assessment is supported by the employment leading indicators collected as part of various industry surveys, which have been gaining in strength since mid-2015 (cf. chart 3.11).

UNEMPLOYMENT RATE



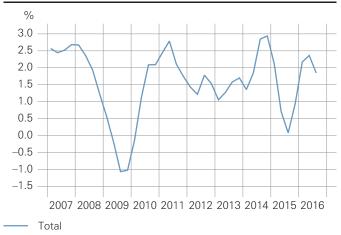
SECO: Unemployed registered with the regional employment offices, as a percentage of the labour force according to the 2000 and 2010 censuses and the 2012 to 2014 structural surveys.

ILO: Unemployment rate based on International Labour Organization definition. Sources: SFSO, SECO

Chart 3.5

EMPLOYED PERSONS

Change from previous period

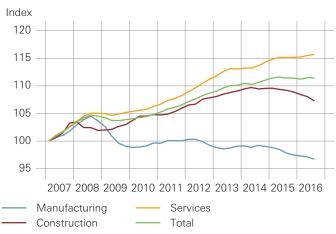


Source: Swiss Federal Statistical Office (SFSO); seasonal adjustment: SNB

Chart 3.6

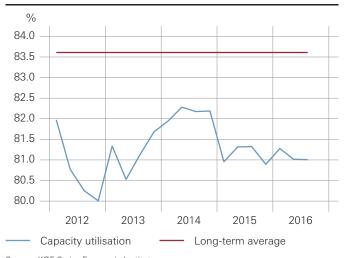
FULL-TIME EQUIVALENT JOBS

Beginning of period = 100



Source: SFSO; seasonal adjustment: SNB

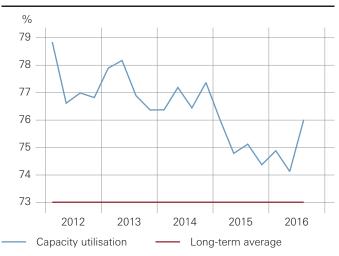
CAPACITY UTILISATION IN MANUFACTURING



Source: KOF Swiss Economic Institute

Chart 3.8

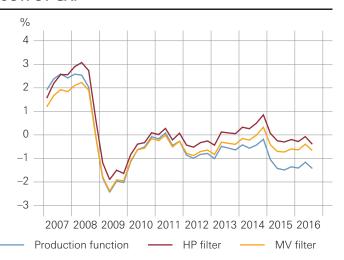
CAPACITY UTILISATION IN CONSTRUCTION



Source: KOF Swiss Economic Institute

Chart 3.9

OUTPUT GAP



Source: SNB

CAPACITY UTILISATION

Underutilisation in manufacturing

Technical capacity utilisation in various areas of the economy remains unsatisfactory. According to the KOF survey, utilisation of technical capacity in manufacturing remained unchanged at 81.0% in the third quarter. It thus is still well below the long-term average (cf. chart 3.7). In the services sector, while available surveys continue to suggest average utilisation overall, capacity in individual areas, retailing in particular, was also underutilised. By contrast, capacity utilisation in construction improved and is thus now significantly above its long-term average again (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. It increased somewhat in the third quarter. Estimated potential, calculated by means of a production function, showed an output gap of -1.4% for the third quarter, compared to -1.2% in the previous quarter. Other methods for estimating potential output, notably the Hodrick-Prescott filter, 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 takes the supply of labour and the stock of capital in the economy into account. 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 third quarter than the Hodrick-Prescott filter. In addition to GDP, the multivariate filter takes inflation, the unemployment rate and capacity utilisation in manufacturing into account (cf. box on the revision of the multivariate filter on page 17).

Revision of the multivariate filter for estimating output gap

Estimates of Switzerland's output gap are regularly discussed in the *Quarterly Bulletin*. They are based on three different approaches: the Hodrick-Prescott filter, the production function approach and the multivariate filter (MV filter). With this edition of the *Quarterly Bulletin*, the SNB has revised the MV filter method. In contrast to the previous estimate, the output gap estimate based on this revised method suggests that, in recent years, the gap was actually predominantly negative (cf. chart).

Unlike univariate approaches, such as the frequently used Hodrick-Prescott filter, multivariate filters do not base their output gap estimates solely on GDP. Additional indicators are also taken into account to improve the precision and interpretability of the estimate. For instance, the change in inflation is included as an additional indicator in the specification used for the *Quarterly Bulletin* as increased inflation suggests improved utilisation of economic capacity.

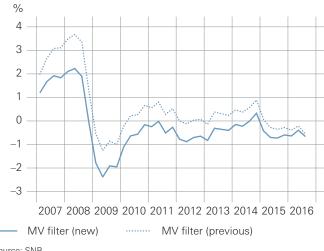
In addition to inflation, the revised estimate also takes information on unemployment and utilisation of technical capacity in manufacturing into consideration. High unemployment and low utilisation of technical capacity suggest a negative output gap, while low unemployment and high utilisation of technical capacity are associated with a positive output gap.

The Kalman filter is used in the revised version. This approach makes it possible to take various indicators into consideration when estimating the output gap.

Furthermore, it allows certain assumptions about the typical course of potential output and the output gap to be factored in. For example, it assumes that deviations from potential output are only temporary in nature or, conversely, that potential output can be permanently altered by technological progress or capital employed.

From a methodological viewpoint, the current implementation largely follows that presented in Blagrave, P., Garcia-Saltos, R., Laxton, D., & Zhang, F. (2015). *A Simple Multivariate Filter for Estimating Potential Output*. IMF Working Paper No. 15/79.

OUTPUT GAP



Source: SNB

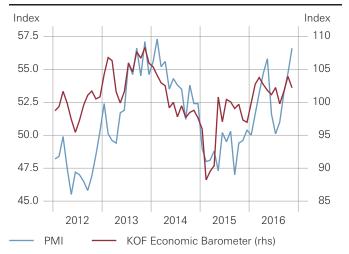
The Swiss economy is likely to recover further in the coming quarters.

Economic indicators are showing positive signals for the short term. For example, the purchasing managers' index (PMI) and the KOF barometer are at above-average levels, which indicates a solid economic growth scenario (cf. chart 3.10). Discussions with representatives of Swiss companies conducted by the SNB's delegates for regional economic relations also suggest positive economic momentum (cf. Business Cycle Trends, p. 28). Nonetheless, GDP growth is likely to be weaker in the fourth quarter of 2016 than in the first half of the year, mainly due to the weak development of goods exports in October. For 2016, the SNB is continuing to forecast GDP growth of around 1.5%.

In the medium term, the global recovery is expected to translate into ongoing positive demand for Swiss goods and services (cf. chapter 2). Moreover, the dampening effect of past Swiss franc appreciation on export growth looks as if it might gradually have run its course. On a real trade-weighted basis, the Swiss franc has been stable since the beginning of the year. New orders in the mechanical and electrical engineering industries (MEM industries) and, according to the SFSO, existing orders in the manufacturing sector have recently risen again. Greater sales volumes are likely to improve capacity utilisation, which in turn will boost companies' margins. Equipment investment is therefore likely to pick up somewhat next year, with the labour market also profiting from the recovery. Overall, as for 2016, the SNB expects GDP growth for 2017 to be roughly 1.5%.

Chart 3.10

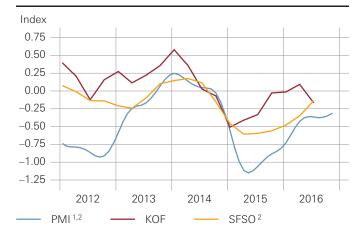
LEADING INDICATORS



Sources: Credit Suisse, KOF Swiss Economic Institute

Chart 3.11

EMPLOYMENT LEADING INDICATORS



- 1 Monthly figures.
- 2 Trend component: SNB.

Sources: Credit Suisse, KOF Swiss Economic Institute, SFSO

Prices and inflation expectations

In recent months, inflation rates have been close to zero. This applies not only to the CPI and its most important components, but also to the producer price and import price indices. Core inflation rates were also around zero.

Inflation expectations for the coming years were within a low positive range, thereby remaining consistent with price stability, which the SNB equates to a rise in the CPI of less than 2% per year.

CONSUMER PRICES

Annual CPI inflation rate stable

The annual inflation rate as measured by the CPI amounted to -0.3% in November 2016, which was almost unchanged from the previous months (cf. table 4.1). The stabilisation of the rate just below zero suggests that the appreciation of the Swiss franc following the discontinuation of the minimum exchange rate in January 2015 had virtually no further effect on the annual inflation rate.

Inflation rates close to zero for all important CPI components

In recent months, all of the important components of the CPI remained close to their year-back levels, so that their contributions to the annual CPI inflation rate were small (cf. charts 4.1 and 4.2). This also applies to the prices of oil products, which had been trading well below their year-back levels until the third quarter of 2016. In October, for the first time, these prices were at practically the same level as they had been twelve months previously.

Rising rents

Figures for rents are collected once a quarter, and in November 2016 they revealed a sharp increase in the annual rate of inflation, which, to some extent, reflects a statistical base effect (cf. chart 4.3). In November 2015, the index for housing rents had dropped below the previous quarter's figure as a result of the decrease in the reference interest rate in June 2015. Since then, housing rents have risen again each quarter.

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

Table 4.1

SWISS CONSUMER PRICE INDEX AND COMPONENTS

Year-on-year change in percent

rear-on-year change in percent								
		2015 Q4	2016 Q1	Q2	Q3	2016 September	October	November
Overall CPI	-1.1	-1.4	-1.0	-0.4	-0.2	-0.2	-0.2	-0.3
Domestic goods and services	0.1	-0.3	-0.4	-0.1	-0.1	-0.1	0.0	0.1
Goods	-0.7	-1.0	-1.3	-0.7	-0.2	-0.4	-0.1	-0.1
Services	0.3	-0.1	-0.2	0.1	0.0	-0.1	0.0	0.1
Private services excluding housing rents	0.4	-0.2	-0.2	0.2	0.1	0.0	0.1	-0.2
Housing rents	0.8	0.3	0.1	0.2	0.2	0.2	0.2	1.2
Public services	-0.8	-0.5	-0.5	-0.4	-0.6	-0.7	-0.7	-0.7
Imported goods and services	-4.7	-4.4	-2.8	-1.2	-0.6	-0.3	-0.7	-1.5
Excluding oil products	-2.5	-2.7	-1.5	-0.1	0.2	0.0	-0.8	-1.3
Oil products	-17.4	-14.9	-11.3	-8.5	-5.7	-2.1	0.2	-2.4

Sources: SFSO, SNB

Core inflation around zero

Core inflation rates were also close to zero in November. The SFSO core inflation rate 1 (SFSO1) amounted to -0.3%, while the SNB's trimmed mean (TM15) came to 0.1%, entering positive territory for the first time since spring 2015.

Chart 4.4 shows that the CPI inflation rate has moved ever closer to the two core inflation rates since the beginning of the year, reflecting mainly the annual inflation rate of oil products, which was still clearly negative at the beginning of 2016. In the past two years, oil product prices have affected core inflation little or not at all, since they were excluded either totally or partially from the calculation of core inflation, depending on the individual definition.

Both SFSO1 and TM15 are calculated on the basis of a reduced CPI basket of goods. For SFSO1, energy and fuel as well as fresh and seasonal products are excluded each month, whereas TM15 takes the distribution of weighted annual rates of price change for CPI products, and excludes 15% from each end. In the past two years, oil products were generally among the products with the greatest annual rates of price change and were therefore often excluded from the goods basket for the calculation of TM15.

PRODUCER AND IMPORT PRICES

Stable producer and import prices

In recent months, producer and import prices have been almost unchanged from their level one year ago. In November, the annual inflation rate for producer prices was -0.5% and for import prices, 0.8% (cf. chart 4.5).

Similar to the situation for the CPI inflation rate, the rise in the producer price inflation rate out of low negative territory to close to zero has been due to waning base effects. Following the discontinuation of the minimum exchange rate, supply prices had dropped significantly due to the appreciation of the Swiss franc, with import prices falling much further than producer prices. Now that the impact of the Swiss franc appreciation on the annual inflation rates of producer and import prices has abated, these rates have drawn closer to each other again.

INFLATION EXPECTATIONS

Inflation expectations in positive territory

Overall, the available surveys suggest that low positive inflation rates are expected for 2017 and subsequent years. Consequently, they are consistent with price stability, which the SNB equates to a rise in the CPI of less than 2% per year.

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.

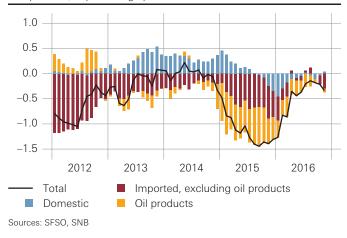


Chart 4.2

CPI: DOMESTIC GOODS AND SERVICES

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

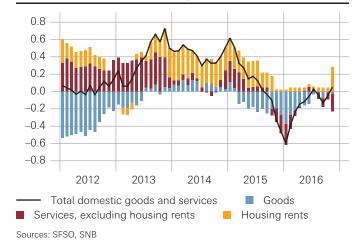


Chart 4.3

HOUSING RENTS

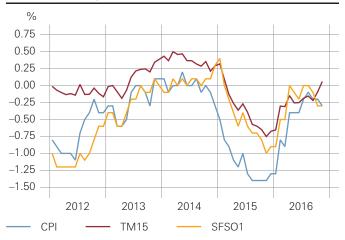
Year-on-year change



Sources: Federal Office for Housing (FOH), SFSO

CORE INFLATION RATES

Year-on-year change

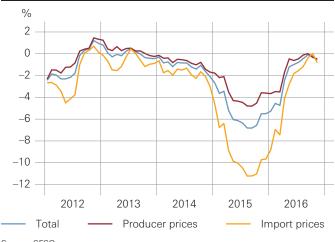


Sources: SFSO, SNB

Chart 4.5

PRODUCER AND IMPORT PRICES

Year-on-year change

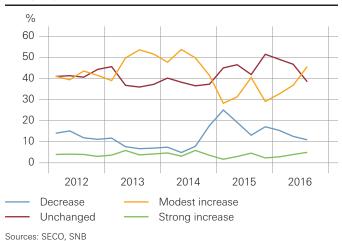


Source: SFSO

Chart 4.6

PRICE EXPECTATIONS

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



Short-term expectations revised upwards

According to the survey of households conducted by SECO in October 2016, the share of respondents expecting prices to rise over the next 12 months has increased, from 41% in July to 51% in October. By contrast, somewhat fewer households than three months ago are expecting no change or a drop in prices (cf. chart 4.6).

According to the *Credit Suisse ZEW Financial Market Report*, the share of financial analysts surveyed who expect inflation rates to rise in the next six months has increased, from 29% in August to 62% in November. Thus, for the first time since May 2011, a majority of analysts surveyed are expecting rising inflation rates in the coming months. However, at the time of the survey, the rate of annual inflation was in positive territory, whereas now analysts are expecting that the current slightly negative annual inflation rate will turn positive. In November 2016, none of those surveyed expected declining inflation rates, in other words, rates dropping further into negative territory.

Talks held by the SNB delegates for regional economic relations with companies from all areas of the economy confirmed the impression of slightly rising short-term inflation expectations. In the fourth quarter of 2016, respondents expected annual inflation of 0% over the next 6-12 months, compared to -0.2% in the previous quarter.

Medium and long-term inflation expectations in positive territory

In addition, the discussions with the SNB's delegates in the fourth quarter of 2016 indicated that respondents expected the inflation rate to be 0.8% in 3–5 years, compared to 0.5% in the previous quarter. Participants in Deloitte's CFO survey conducted in the third quarter put inflation in two years' time at 0.8%, compared to 0.6% in the previous quarter.

Surveys on inflation expectations with horizons longer than five years suggest that expectations also remain stable, in low positive territory.

Monetary developments

The last half year has been shaped by the surprising outcomes of various elections and referendums. The Brexit referendum on 23 June 2016 led to a significant devaluation of the pound sterling and generated upward pressure on safe-haven currencies. Thanks to its willingness to intervene in the foreign exchange market, the SNB was able to cushion the effect of the additional pressure on the Swiss franc, which can often build up in such phases of increased market volatility. Equally, neither the US elections in November nor the Italian constitutional referendum in December caused any significant overall changes in the value of the franc.

On a trade-weighted basis, there was little change in the real external value of the Swiss franc in the course of 2016. An analysis of nominal exchange rates since the June monetary policy assessment shows that the Swiss franc appreciated slightly against the euro while depreciating somewhat against the US dollar. One reason for the appreciation of the US dollar against the Swiss franc and most other currencies was the substantial increase in long-term interest rates in the US, particularly following the presidential and congressional elections. Long-term yields on Confederation bonds also rose, but yield increases were less marked here than in the US. The interest rate differential with the US thus widened. Short-term rates in Switzerland were virtually unchanged, with the yield curve steepening as a result.

Monetary aggregates and bank loans grew moderately over the last 12 months, with loans continuing to rise faster than nominal GDP and the loan ratio continuing to increase.

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 September 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 that it will remain active in the foreign exchange market in order to influence exchange rate developments, as necessary. 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

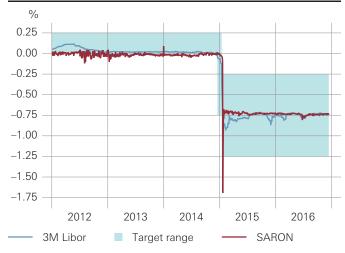
Since the monetary policy assessment of September 2016, total sight deposits held at the SNB have continued to increase. In the week ending 9 December 2016 (last calendar week before the mid-December assessment), they amounted to CHF 527.4 billion, up by CHF 11.6 billion compared to the last calendar week preceding the mid-September assessment (CHF 515.8 billion). Between the assessments in mid-September and mid-December 2016, they averaged CHF 521.3 billion. Of this, CHF 453.2 billion was accounted for by the sight deposits of domestic banks and the remaining CHF 68.1 billion by other sight deposits.

High level of banks' surplus reserves

Between 20 August 2016 and 19 November 2016, statutory minimum reserves averaged CHF 15.4 billion. Overall, banks exceeded the minimum reserve requirement by some CHF 437.8 billion on average (previous period: CHF 419.2 billion). Banks' surplus reserves have thus increased further.

MONEY AND CAPITAL MARKET INTEREST RATES

MONEY MARKET RATES

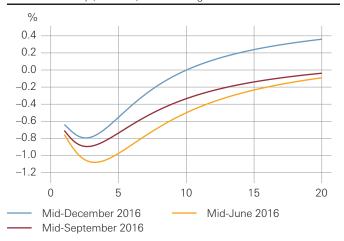


Sources: Bloomberg, SIX Swiss Exchange Ltd, SNB

Chart 5.2

TERM STRUCTURE OF CONFEDERATION BONDS

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

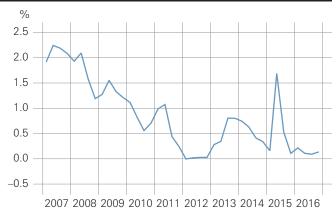


Source: SNB

Chart 5.3

ESTIMATED REAL INTEREST RATE

10-year Confederation bonds Inflation expectations estimated with VAR model



Source: SNB

Money market rates unchanged

The situation on the Swiss franc money market has remained stable since the mid-September 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).

Rise in long-term interest rates

Interest rate movements were larger on the capital market than on the money market. The yield on ten-year Confederation bonds has fluctuated between -0.5% and 0.0% over the last three months. In mid-December, it stood at 0.0%, around 0.3 percentage points higher than at the time of the September assessment (cf. chart 5.2).

The rise in the yield on ten-year Confederation bonds is a response to international developments. Yields on longterm bonds have risen in all major economies, most markedly in the US, where yields on government bonds increased sharply in the wake of the presidential and congressional elections in November.

Steeper yield curve

In mid-December, yields on Confederation bonds across the full maturity spectrum were higher than at the mid-September monetary policy assessment (cf. chart 5.2). As long-term yields have risen more strongly than short-term yields, the yield curve was somewhat steeper in mid-December than it had been in mid-September. Yields on Confederation bonds with maturities in excess of ten years had moved above zero, whereas three to six months ago, the full maturity spectrum had been trading in negative territory.

Long-term real interest rates still close to zero

The estimated long-term real interest rate was just below 0.1% in mid-December; in other words, it remained close to zero (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 using a vector autoregressive (VAR) model.

Swiss franc slightly stronger against euro, but weaker against US dollar

In October and early November 2016, the Swiss franc appreciated slightly against the euro (cf. chart 5.4). This development reflected a general weakening of the euro, however the losses suffered by the euro were less pronounced against the Swiss franc than against most other currencies. At the beginning of November, the cost of purchasing one euro fell below CHF 1.08 for the first time since June.

The Swiss franc lost value against the US dollar in the first few weeks of October, but managed to recoup these losses at the end of October and beginning of November in the run-up to the US presidential and congressional elections. Following these elections, the US dollar appreciated considerably.

Monetary conditions virtually unchanged

In nominal, export-weighted terms, the Swiss franc was worth only slightly more at the time of the December monetary policy assessment than it had been three months earlier. With short-term interest rates virtually unchanged, monetary conditions therefore remained almost unchanged.

The Monetary Conditions Index (MCI) in chart 5.5 combines changes in the three-month Libor with the nominal, export-weighted external value of the Swiss franc to provide a measure of monetary conditions. To take account of uncertainty regarding the relative impact of changes in interest rates and the exchange rate, two versions of the index are shown, with each version assigning a different weight to the two components. The index is reset to zero at the time of the last monetary policy assessment. Positive MCI values indicate more restrictive monetary conditions.

Real external value of Swiss franc stable

The export-weighted real external value of the Swiss franc has changed little over the last 12 months (cf. chart 5.6), however it remains well above the long-term average.

The minimal change in the real external value of the franc over the last 12 months is principally due to the relatively stable nominal exchange rates of the Swiss franc against the euro and the US dollar as well as to low inflation differentials with the euro area and the US. Significantly larger exchange rate fluctuations were recorded at times between the Swiss franc and other major currencies. While the franc appreciated substantially against the pound sterling in the course of the last 12 months, it depreciated significantly against the Japanese yen.

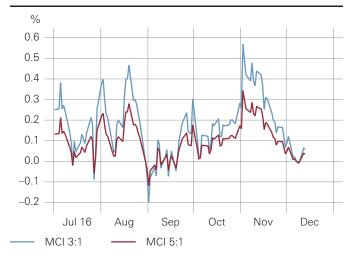
EXCHANGE RATES



Source: SNB

Chart 5.5

MCI NOMINAL

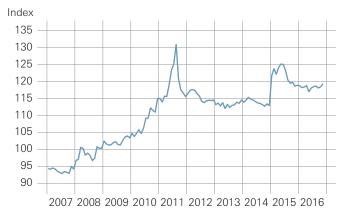


Source: SNB

Chart 5.6

REAL EXTERNAL VALUE OF SWISS FRANC

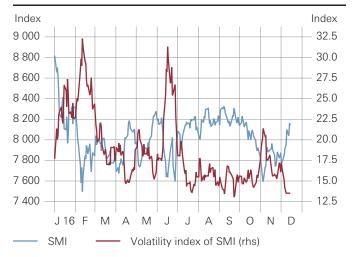
Export-weighted, January 1999 = 100



—— In real terms (24 countries)

Source: SNB

SHARE PRICES AND VOLATILITY

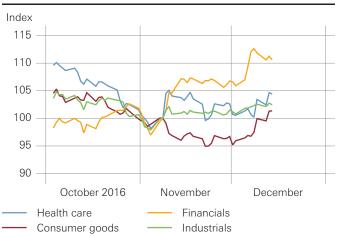


Sources: Bloomberg, Thomson Reuters Datastream

Chart 5.8

SELECTED SPI SECTORS

8 November 2016 = 100

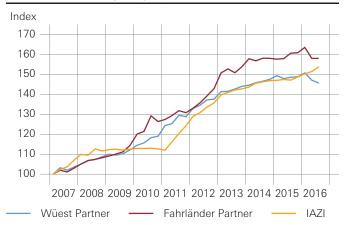


Source: Thomson Reuters Datastream

Chart 5.9

TRANSACTION PRICES, PRIVATELY OWNED APARTMENTS

Nominal (hedonic), beginning of period = 100



Sources: Fahrländer Partner, IAZI, Wüest Partner

SHARE AND REAL ESTATE PRICES

Temporary stock market losses

The Swiss Market Index (SMI) lost considerable ground in October and early November. At the beginning of November it was trading close to the lows recorded in February after the surprising EU referendum result in the UK in June (cf. chart 5.7). Following the presidential and congressional elections in the US, the SMI managed to regain most of the ground lost in the prior weeks. Notwithstanding this, in mid-December the index was down around 8% from its end-2015 level.

Increased uncertainty in run-up to US elections

While the volatility index, derived from options on SMI futures contracts and used to gauge uncertainty on the stock market, did increase in the days leading up to the US elections, the increase was significantly less pronounced than it had been in February and June of this year. Once the US elections were over, the volatility index normalised within a couple of days.

Gains for financials after US elections

Chart 5.8 shows movements in four important sub-indices in the Swiss Performance Index (SPI) between the beginning of October and the monetary policy assessment in December. The indices were set at 100 on 8 November 2016, the day of the presidential and congressional elections in the US. The chart shows that the financials sub-index, which is dominated by the big banks and insurance companies, increased substantially following the unexpected US election result. The trajectory was thus similar to that of the other major stock markets, where bank shares were also among the main winners. According to market commentators, this development reflects a belief among investors that the new US administration will take a less stringent approach to financial regulation.

Mixed developments in residential property prices

Available transaction price indices for privately owned apartments developed unevenly in the third quarter (cf. chart 5.9). However, overall they confirm the trend towards a levelling-off of prices over the last two to three years.

According to a survey conducted by Wüest Partner, transaction prices for high-end privately owned apartments continued to decrease in the third quarter, while prices for the low-end equivalent increased. This trend, which was already discernible in 2015, became more pronounced in 2016. The price of single-family houses, too, decreased in the high-end segment, but increased in the low-end segment in 2016.

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 529.8 billion in November 2016 (cf. chart 5.10). This increase primarily reflects movements in domestic banks' sight deposits, which grew by CHF 19.4 billion between August and November 2016. There was little change in banknotes in circulation.

Stable growth in broad monetary aggregates

The M1, M2 and M3 monetary aggregates, which measure monetary aggregates held by the public, were, respectively, 5.5%, 3.2% and 2.0% higher than a year earlier (cf. table 5.1). The relatively high growth rate of M1 is due to a statistical base effect caused by the introduction of new account products by one of the banks in 2015. At the time, these new account products resulted in deposits being moved from transaction accounts to savings accounts, which reduced the M1 monetary aggregate (cf. chart 5.11). The M2 and M3 aggregates were unaffected. In November 2016, the M1 monetary aggregate (notes and coins in circulation, sight deposits and transaction accounts) stood

Chart 5.10

MONETARY BASE

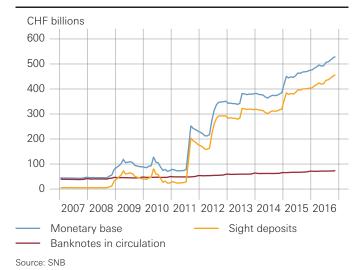


Chart 5 11

MONETARY AGGREGATES

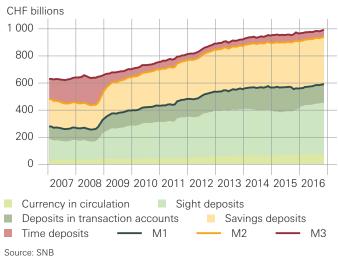


Table 5.1

MONETARY AGGREGATES AND BANK LOANS

Year-on-year change in percent

rear-on-year change in percent									
	2015	20	15 20	016		2	016		
		Q4	Q	1 Q	2 Q	3	September O	ctober N	lovember
M1		-0.1	-2.3	-0.6	1.2	2.4	2.7	6.1	5.5
M2		1.1	1.1	1.8	2.7	3.3	3.5	3.4	3.2
M3		1.9	1.7	1.6	2.3	2.8	2.9	2.9	2.0
Bank loans, total ^{1, 3}		1.9	1.7	1.5	2.0	2.1	2.1	2.1	
Mortgage claims ^{1, 3}		3.3	2.9	2.6	2.6	2.6	2.6	2.5	
Households ^{2, 3}		3.4	3.2	2.9	2.8	2.7	2.8	2.6	
Private companies ^{2, 3}		3.3	2.6	2.4	2.8	2.7	2.5	2.7	
Other loans ^{1, 3}		-5.3	-4.4	-4.5	-1.5	-0.9	-0.8	-0.1	
Secured ^{1, 3}		-0.4	-5.8	-3.0	-1.4	-2.4	-2.3	1.6	
Unsecured ^{1, 3}		-8.5	-3.4	-5.6	-1.5	0.2	0.3	-1.3	

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

Source: SNB

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.

BANK LOANS, IN SWISS FRANCS

Year-on-year change

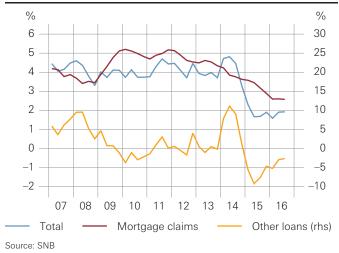
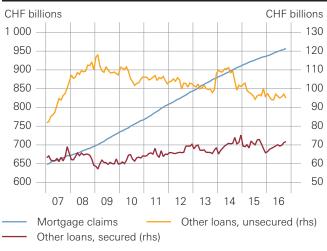


Chart 5.13

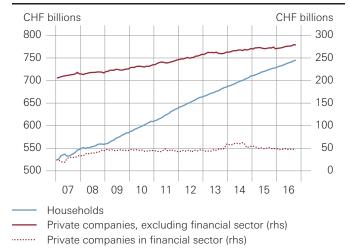
MORTGAGE CLAIMS AND OTHER LOANS



Source: SNB

Chart 5.14

LOANS TO HOUSEHOLDS AND COMPANIES



Source: SNB

at CHF 591.8 billion, whereas M2 (M1 plus savings deposits) amounted to CHF 941.4 billion and M3 (M2 plus time deposits) to CHF 992.8 billion.

Stable lending growth

Growth in total domestic bank lending halved between mid-2014 and mid-2015 and has since remained largely stable (cf. chart 5.12). While the annual growth rate of bank lending had consistently hovered around 4% from the onset of the financial and economic crisis until mid-2014 — with only modest fluctuations — it stood at 2.1% in the third quarter of 2016 (cf. table 5.1).

Banks' mortgage claims, which make up roughly 85% of all bank lending, recorded a 2.6% year-on-year increase in the third quarter of 2016. The annual growth rate of mortgage claims has remained very stable since the beginning of the year, despite the fact that mortgage interest rates have fallen slightly. The ten-year mortgage rate, which had stood at 1.8% in January 2016, had fallen to a new all-time low of 1.5% by September.

In the third quarter, the volume of other loans was down 0.9% on a year earlier. Despite substantial fluctuations, the trend line for other loans has been flat since the onset of the financial and economic crisis in 2008 (cf. chart 5.13). The decline in unsecured other loans recorded over this period is largely offset by the rise in secured other loans.

Lending growth by sector

Both households and non-financial companies have benefited from favourable financing conditions since the beginning of the financial and economic crisis, as evidenced by a steady rise in bank loans extended to these two important client groups (cf. chart 5.14). At the end of September 2016, loans to households were up by CHF 19.5 billion or 2.7% and loans to non-financial companies were up by CHF 7.1 billion (2.6%) year-on-year. Loans to financial companies, which exhibit greater volatility at a significantly lower volume, declined by CHF 3.7 billion (or 7.1%) compared to the previous year.

Business cycle trends

SNB regional network

Report for the attention of the Governing Board of the Swiss National Bank for its quarterly assessment of December 2016

Fourth quarter of 2016

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-October to the end of November 2016 with 241 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	Delegates
Central Switzerland	Walter Näf
Eastern Switzerland	Urs Schönholzer
Geneva	Jean-Marc Falter
Italian-speaking Switzerland	Fabio Bossi
Mittelland	Martin Wyss
	Roland Scheurer
Northwestern Switzerland	Daniel Hanimann
Vaud-Valais	Aline Chabloz
Zurich	Rita Kobel

Overall, the results of the company surveys conducted in the quarter under review point towards positive economic growth. Despite the distinctly heterogeneous nature of the results, this applies to all three sectors: manufacturing, construction and services. Momentum remains moderate, but appears to have strengthened somewhat since the third quarter. While the margin situation and capacity utilisation continue to be unsatisfactory, the outlook has become significantly more upbeat.

Companies expect a further increase in real turnover over the coming months, and an upturn in foreign demand. Stable exchange rate conditions are considered a key prerequisite for this cautiously optimistic assessment.

Staff numbers in the services sector are likely to increase somewhat in the next few months, while remaining stable in manufacturing and construction. The willingness to invest has risen slightly in the manufacturing and services sectors.

For the first time since the discontinuation of the minimum exchange rate, short-term inflation expectations are no longer in negative territory.

BUSINESS ACTIVITY

Higher turnover in all sectors

Business performance in manufacturing continued to improve perceptibly, with real turnover up on the previous quarter. This progress was reflected in all industry categories, with the exception of plastics and metal processing. The watchmaking industry continued to contract, although significant differences were recorded from one manufacturer to another; these discrepancies, in turn, depended largely on the degree of focus on the Asian market.

While domestic demand was frequently characterised as stable, a number of companies active in export business profited from fairly dynamic demand from the US. Looking at Asia, the assessments of China were very heterogeneous. Germany, Scandinavia and the UK were named as attractive sales markets in Europe. Some respondents also reported an increase in positive economic signals from France and Italy. Business with Russia, Brazil and the Arab countries remained slack. With regard to the individual industry categories, demand from automotive and medical technology companies was especially dynamic.

In construction, turnover continued to rise overall due to developments in structural engineering and the finishing trade.

The services sector saw most industries record higher real turnover than in the previous quarter. This was especially evident in transport and restoration companies, auditing companies and the IT sector, which is benefiting from the trend towards digitalisation. Retailing, however, experienced a slump, with lower turnover than in the previous quarter and the year-on-year value.

Ongoing underutilisation

Overall, the production capacities of the companies surveyed remained underutilised, with 41% of respondents rating their utilisation as lower than usual.

Half of the manufacturing companies reported underutilisation. While most industry categories were affected, underutilisation was particularly pronounced at companies working with plastics and metals, as well as producers of precision instruments. Utilisation was good in the pharmaceutical industry.

In the services sector, representatives of many categories – especially trade, hotels and banks – complained of an underutilisation of infrastructure (office and sales spaces as well as IT and transport capacities). Besides weak demand caused by economic conditions, structural factors in particular have been exerting a negative influence. Previous quarters had already presented a similar picture.

DEMAND FOR LABOUR

Staff numbers appropriate overall

Overall, staff numbers are currently considered in line with or slightly higher than demand.

Some manufacturing company representatives considered staff numbers as still somewhat too high. This applies in particular to the metals industry and to producers of electrical equipment. However, fewer industry categories were affected than in the previous quarter.

In the services sector, headcounts were seen as appropriate. Finance company representatives, however, regarded staff numbers as too high, while IT companies reported a significant staff shortfall and corresponding need for recruitment.

Overall, efforts required to recruit staff were rated as normal. IT companies found it harder than usual to find staff, due in part to an increased demand for this kind of specialist in various other industries. Banks reported that recruitment had become easier.

PRICES, MARGINS AND EARNINGS SITUATION

Margins still under pressure

Over half the respondents described margins at their companies as lower than usual. No improvement on the previous quarter's assessment could therefore be observed.

In manufacturing, pressure on margins remained pronounced; efforts to increase efficiency and reduce costs continued to play an important role. Nor has margin pressure eased in the services sector — while almost all categories are affected, the situation is especially acute in finance and trade companies. As is frequently the case towards the end of the year, there was a tendency in construction to 'buy orders' through quotes which do not cover costs, thereby intensifying margin pressure.

The tendency towards mildly declining purchase and sales prices in the coming months remained evident in all three sectors. Once again, numerous respondents reported stiff price competition both in Switzerland and in foreign markets.

Budding optimism

Respondents were noticeably more optimistic about business prospects in the coming months. Real turnover is expected to increase in all three sectors.

In manufacturing, in particular, there is palpably more confidence than has previously been the case, and that in practically all industry categories. Reasons for this optimism include the generally more stable exchange rate conditions, anticipated economic developments abroad, the impact of measures taken to raise efficiency and promote innovation, and the – in some cases –backlog of orders already on hand.

This bolstered optimism is also evident in investment plans for the coming twelve months. In both the manufacturing and services sectors, slightly higher investment is foreseen in equipment, but also in building activities. Improving efficiency and thereby margins continue to play a key role.

As to employment plans, survey respondents in almost all categories of the services sector anticipate a further slight increase in the approaching two quarters. The plans of respondents from manufacturing and construction point towards stability, which also represents an improvement on the situation in the previous quarter.

The plans for somewhat higher staff numbers in the services sector are accompanied by an expectation of slightly greater infrastructure utilisation. In both other sectors, the future utilisation of production capacities was assessed as stable.

Based on the surveys, the wage increases planned so far for 2017 average 0.7%.

Most companies have found ways of coping with the current exchange rate conditions, although for others, especially those in manufacturing, they remain more of a challenge. At the same time, there are fears that global events could place renewed upward pressure on the Swiss franc. Survey respondents see further risks in a possible rise in protectionism, accelerated structural transformation in Switzerland, stricter regulatory requirements, as well as in the uncertainty surrounding the form in which the mass immigration initiative will be implemented. Once again, potentially negative consequences associated with Brexit were hardly mentioned. The low interest rate environment in relation to the long-term outlook for pension funds remains a source of concern, although sufficient understanding was demonstrated for the SNB's monetary policy measures.

The inflation expectations of the survey respondents – as measured by the consumer price index – generally point upwards. Expectations for the next 6–12 months average 0% (third quarter: –0.2%), thereby leaving negative territory for the first time since the first quarter of 2015. Medium-term inflation expectations (horizon of three to five years) expressed in the period under review were at 0.8% (third quarter: 0.5%).

Acknowledgements

The SNB would like to thank the representatives from around 900 companies that have consented to take part in interviews with the delegates for regional economic relations during the course of 2016. In doing so, they have made a significant contribution to the evaluation of economic developments. The companies listed below have agreed that their names may be published:

Α

A&F Computersysteme AG. A. Marchon SA. A. Trachsel Fruchtimporte AG. A. Tschümperlin AG. Aare Energie AG. AargauHotels.ch Holding. ab ingénieurs sa. ABB Schweiz AG. ABCD Ciné-Dance SA, Carte Blanche SA. ACO Passavant AG. acrevis Bank AG. Acutronic Schweiz AG. adidas sport gmbh. Admeira AG. AdNovum Informatik AG. Adobe Systems. Aduno Gruppe. Advis AG. AEK Energie AG. Aeschlimann AG, Décolletages. AG Cilander. ag möbelfabrik horgenglarus. Agathon AG. Agie Charmilles SA. Air Zermatt AG. AISA Automation Industrielle SA. Albergo Losone. Albert Pougnier SA. Albiro AG. Aldo Lepori SA Impresa Costruzioni. Alfred Müller AG. Alice Allison SA. Allreal Holding AG. alltitude SA. Alpiq. Alsco Swiss. Altes Tramdepot Brauerei Restaurant AG. Aluminium Laufen AG. Aluwag AG. amag. Amaudruz SA. AMC (Schweiz) Alfa Metalcraft AG. Ampac Flexibles AG. Amstein SA. André SA. Angela Bruderer AG. Angenstein AG. Angst+Pfister Gruppe. Anliker AG. Antalis AG. AOT Trading AG. Appenzeller Kantonalbank. APR Applied Pharma Research SA. Aquabasilea AG. Aguametro AG. Aguila & Co. AG. Architetti Tibiletti Associati SA. Arnold & Co. AG Sand- und Kieswerke. Arnold Magnetic Technologies AG. Art Deco Hotel Montana. Arvi SA. Ascenseurs Menétrey SA. Atelier d'architecture Brodbeck-Roulet SA. Audemars Piquet. Auto Windlin. AutoGlobalTrade AG. avobis. AXA Winterthur, AZ Medien AG.

В

B. Bigler AG. B+S AG. Baechler Teinturiers SA. Balestrafic SA. Balmer Bücherdienst AG. Baloise Bank SoBa AG. Balthasar + Co. AG. Banca Coop. Banca del Ceresio SA. Banca Popolare di Sondrio (Suisse) SA. Bangerter Microtechnik AG. Bank J. Safra Sarasin. Bank Julius Bär AG. Bank Linth LLB AG. Bank Thalwil Genossenschaft. Bank Vontobel AG. Banque Cantonale de Fribourg. Banque Cantonale de Genève. Banque Cantonale du Jura. Banque Cantonale du Valais. Banque Cantonale Neuchâteloise. Banque Cantonale Vaudoise. Banque Pictet & Cie SA. BASF Schweiz AG. Basler & Hofmann Innerschweiz AG. Bättig Treuhand AG. BAUHAG Produkte zum Bauen AG. BBGI Group SA. BDO AG. BE Netz AG. Beau-Rivage Neuchâtel SA. Beckman Coulter. Beiersdorf AG. Belimo Holding AG. BELWAG AG Bern. Berest AG. Bergbahnen Engelberg-Trübsee-Titlis AG. Berlinger Group. Bernensis Hotel AG, Interlaken. Bernerland Bank AG. Bertholet + Mathis SA.

Biketec AG. Bindella Handwerksbetriebe AG. Bindella terra vite vita SA. Binelli & Ehrsam AG. Birchmeier Sprühtechnik AG. Bischoff Textil AG. BJ-Office SA. Blöchlinger AG. BMW (Schweiz) AG. BNP Paribas (Suisse) SA. Board International SA. Bobst SA. Bodum AG. Boehringer Ingelheim (Schweiz) GmbH. Bolliger Nutzfahrzeuge AG. Boost Group. Boschung Holding AG. Bottomline Technologies. Boucledor SA. Braloba AG. Brauerei Schützengarten AG. Brico SA. Briner AG. Bringhen SA. Bron Elektronik AG. Brunschwig Group. BRZ Schweiz AG / Informatik in der Baubranche. Bucher Leichtbau AG. Büchi Labor-technik AG. Bühler + Scherler AG. Bühler AG. Bultech Précision SA. Burckhardt Compression AG. Burger Söhne AG. Burkhalter Holding AG. BWB Holding AG. Bystronic Laser AG.

C

C. Vanoli Generalunternehmung AG. CA Indosuez (Switzerland) SA. Camille Bauer Metrawatt AG. Camion Transport AG. Cargill International SA. Carl Spaeter AG. Carletto AG. Carlo Bernasconi AG. Cartonnages Delavy SA. Cäsar Bay AG. Casinò Locarno SA. Casino Restaurants Bern AG. Casram SA. Catrade AG. CCV Suisse SA. CDM hotels & restaurants SA. Cebi Micromotors Switzerland SA. Cembra Money Bank. Centris AG. Ceramaret SA. Cercle des Agriculteurs de Genève et environs. Chaletbau Matti Holding AG. Chemspeed Technologies AG. Chiquita Brands International Sàrl. Chocolats Camille Bloch SA. Chopard & Cie SA. Chromos AG. Cicorel SA. Cimo SA. Ciolina AG. Cippà Trasporti SA. Clarins SA. Cleaning Service SA. Clientis EB Entlebucher Bank. Clientis Zürcher Regionalbank. Codec SA. Coltène Holding AG. Columbus Treppen AG. Comet AG. Comfone AG. Commerce de fer fribourgeois SA. comparis.ch. Comptoir Immobilier SA. Confiserie Al Porto. Confiseur Läderach AG. Construction Perret SA. Convisa Holding AG. Coop. Cornaz SA. Cornèr Banca SA. Corti Gruppe. Covance Central Laboratory Services SA. Covedis SA, Sushizen SA. CPA Group SA. Création Baumann AG. Creative Electronic Systems SA. Credit Suisse AG. Cross Systems SA. Crowne Plaza Geneva. CSL Behring AG. CTA AG, Klima-Kälte-Wärme. Curaden AG. CWA Constructions SA. CWS-boco Suisse SA.

D

Dallmayr Automaten-Service (Ticino) SA. Daniel Kohler AG. Dätwyler Holding AG. DC Swiss SA. de Planta et Portier

Architectes. Debrunner Acifer AG. Della Santa AG Transporte. Deloitte. Demoscope AG. Denogent SA. Die Mobiliar. Dieci AG. diga möbel ag. Diogenes Verlag AG. Dipl. Ing. Fust AG. Disch AG. Distriba AG. Dixi Polytool SA. Dosenbach-Ochsner AG. Dr. Röthlisberger AG. Dreier AG Transporte Logistik. Duferco SA. DuPont de Nemours International Sàrl.

E

E. J. Gmür AG. EAO Group. ebi-pharm ag. EBM. eboutic.ch. Edelweiss Market. Edilcentro Wullschleger SA. Edwards Lifesciences. Edy Toscano AG. Egli Gartenbau AG Sursee. EGS Sécurité SA. EJOT Schweiz AG. Elco AG. Elektrizitätswerk des Kantons Schaffhausen AG. Elektro-Material AG. Eli Lilly. Elma Electronic AG. Emch Aufzüge AG. Emch+Berger AG Bern. Emil Frey AG. Emil Gisler AG. emmental versicherung. Endress + Hauser AG. Energie Wasser Bern. énergies sion région. Engadiner Kraftwerke AG. Enics Schweiz AG. Ennio Ferrari Impresa Generale SA. Entrecôte Fédérale & Brasserie Obstberg. Erdgas Obersee AG. Ergon Informatik AG. Erne AG Bauunternehmung. Ernst & Young AG. Ernst Sutter AG. Etel SA. Eugen Seitz AG. Eventmore SA. Evéquoz SA. ewl energie wasser luzern.

F

F. Hoffmann-La Roche AG. F. Murpf AG, Transporte und Logistik. Fabbri SA. FAES AG. Farner Consulting AG. Faulhaber Minimotor SA. Fehlmann AG. Felss Rotaform AG. fenaco Genossenschaft. Fidinam Group Holding SA. Fiduciaire Fidinter SA. fiduciariaMega SA. Fiedler SA. Fielmann AG. Filippi SA. Fischer Spindle Group AG. FKG Dentaire SA. Flughafen Zürich AG. Fluid Automation Systems SA. Flumroc AG. FNAC (Suisse) SA succursale de Lausanne. Fossil Group Europe GmbH. Fracht AG. Fraisa SA. Franck Muller Watchland SA. Franke Group. Fraporlux Swiss SA. Freiburger Nachrichten AG. Fretz Men AG. Frieden SA. Frigerio SA. Frigosuisse AG. Fritz Studer AG. FrymaKoruma AG. futura Ristoranti.

G

G. et F. Châtelain SA. g.b.c. frutta verdura import sa. Gadola Unternehmungen. Galliker Transport AG. Gallus Ferd. Rüesch AG. gammaRenax AG. Garage Nepple AG. Garaio AG. Garbani AG Bern. Gasser Ceramic AG. Gautschi AG. Gebr. Hodel AG. Gebr. Kuoni Transport AG. Gefco Suisse SA. Gehri Rivestimenti SA. Genecand Traiteur SA. Genedata AG. General Dynamics European Land Systems - Mowag GmbH. Geosud SA. Gerber-Vogt AG. Gerresheimer Küssnacht AG. Gesitronic SA. Gewerbe-Treuhand AG. Gfeller + Partner AG. Gfeller Elektro AG. Ginsana SA. Glassconcept SA. GLB. Global Blue SA. Globus Travel Services SA. Glutz AG. Golfhotel Les Hauts de Gstaad SA. Gorba AG. Gotec SA. Grand Hôtel Kempinski. Grand Hotel les Trois Rois SA. Grand Hotel Villa Castagnola. Grand Hotel Zermatterhof. Graphax AG. greiner packaging ag. Grosspeter AG. Groupe Barec. Groupe BeMore. Groupe E Celsius. Groupe Eldora SA. Groupe Gilles Desplanches. Groupe T2i. Gruenenfelder SA. Grünenthal Pharma AG. Gruppo Rezzonico SA. Gruppo Sicurezza Holding SA. Gruyère Energie SA. GS Swiss PCB AG. Gstaad Palace. Guillod-Günther SA. Gunvor SA. Gysi AG Chocolatier Suisse.

Н

H + R Gastro AG. Haag-Streit Holding AG. Habib Bank AG Zurich. Haco AG. HakaGerodur AG. Hans Eisenring AG. Hans Kohler AG. Hasler Transport AG. HASTAG St. Gallen Bau AG. Häusermann + Partner AG. Havas AG. Helbling Holding AG. Helsinn Holding SA. Henkel & Cie. AG. Herbamed AG. HG Commerciale. Hochdorf Swiss Nutrition AG. Hocoma AG. Holy Cow!. Homburger AG. Hotel Adula. Hotel Bellevue Palace AG. Hotel Belvedere Locarno, Hotel Continental-Park Luzern, Hotel de la Paix, Lugano. Hotel Giardino Ascona. Hotel Lenkerhof AG, Lenk im Simmental. Hôtel Montreux Palace SA. Hotel Schweizerhof Luzern. Hotel Schweizerhof, Lenzerheide. Hotel Seedamm Plaza. Hotel Splendide Royal. Hotel Toggenburgerhof AG. Hotelbusiness Zug AG. Hotelplan Holding AG. HSBC Private Bank (Suisse) SA. Huawei Technologies Switzerland AG. Huber+Suhner AG. Humard Automation SA. HWB Kunststoffwerke AG. Hypothekarbank Lenzburg AG.

I.T. International Transmissions SA. IBAarau AG. IBC Insurance Broking and Consulting SA. IBG B. Graf AG Engineering. Ilem SA. IMA Medtech Switzerland SA. Imbach & Cie. AG. Imoberdorf AG. Indermühle Holding AG. Induni & Cie SA. Infra-Com Swiss AG. Ingram Micro GmbH. Institut Straumann AG. Interfida Holding. Interiman Group. Intersport Schweiz AG. Inventx AG. Investas AG. Ipsos SA. Ismeca Europe Semiconductor SA. ISS Kanal Services AG. ITECOR Suisse SA. Itris. IVF Hartmann AG. IWB Basel.

J

JAG Jakob AG. Jaquet Technology Group AG. Jean Gallay SA. Johann Müller AG. Jörg Lienert AG Selektion von Fach- und Führungskräften. Josef Meyer Stahl und Metall AG. Josias Gasser Baumaterialien AG. Jowissa Uhren AG. Jura Elektroapparate AG. Just Schweiz AG.

K

K. Dysli AG. Käppeli Strassen- und Tiefbau AG. Karl Bubenhofer AG. Katadyn Holding AG. Kaufmann Holding AG. Kirchhofer AG. Kistler Group. KKL Luzern Management AG. Klarer Fenster AG. Knecht Brugg Holding AG. Komax AG. Kowner AG. Krafft Gruppe. Kraftwerke Hinterrhein AG. Kramer Gastronomie. Kudelski SA. Kuhn Rikon AG. Küng Platten AG. Künzli SwissSchuh AG. Kuoni Viaggi SA.

L

La Redoute Suisse SA. Laboratoires Biologiques
Arval SA. Laiteries Réunies Genève société coopérative.
Lalive SA. Landis + Gyr AG. Lanz + Marti AG. Lässer AG.
lastminute.comgroup. Laubscher Präzision AG.
Lebert AG. Léguriviera Groupe. Leica Geosystems AG.
LEM Holding SA. Lenz & Staehelin. Lenzlinger
Söhne AG. Leoni Studer AG. Leonteq. Les Boutiques
Angéloz SA. LeShop.ch. Let's Go Fitness Holding SA.
Liegenschaften-Betrieb AG. Ligo Electric SA.
LN Industries SA. Lombardi SA Ingegneri Consulenti.
Lonstroff AG. Lotti Impianti SA. Lottner AG. Louis
Bélet SA. LURAG Luzerner Raststätten AG. Luxury
Goods International (L.G.I.) SA. Luzerner Kantonalbank.
Lyreco Switzerland AG.

M

M+R Spedag Group. m3 Real Estate SA. Maagtechnic AG. Maestrani Schweizer Schokolade AG. Magazine zum Globus. Magnolia International AG. Makies AG. Maltech Müller AG. Mancini & Marti SA. Mandozzi elettronica SA. Manor AG. Manotel SA. Manufacture La Joux-Perret SA. Manufacture Roger Dubuis SA. Marvinpac SA. Matériaux Sabag SA. Mathys AG Bettlach. Mechtronik AG. Medartis AG. Medela AG. MediaCom AG. Medtronic Europe Sàrl. Mega Gossau AG. Merlini & Ferrari SA. Messe Luzern AG. Metallizzazione SA. Metallux SA. Metalor Technologies SA. Metaltex SA. Metanord SA. Metoxit AG. Michael Page International (Switzerland) SA. Microsoft Schweiz GmbH. Miele Schweiz AG. Migros. Migros Bank AG. Migros Gastronomie. Mikron SA. Minit Suisse SA. Mobility Genossenschaft. Mökah AG. Monn SA. Montanstahl SA. Moser-Baer AG. MSC Cruises SA. Mulino Maroggia. Müller Frauenfeld AG. Müller Gruppe, Münchenstein. Müller Martini. MultiNet Communication GmbH. Muttoni SA.

Ν

Naef Holding SA. Naville Distribution SA. NeoVac Gruppe. Neue Aargauer Bank AG. Neuweiler AG. New Work Human Resources SA. Newrest Canonica Catering SA. NewSat Communications SA. Nidwaldner Kantonalbank. Notenstein La Roche Banca Privata SA. Notter Gruppe. Notz Stucki & Cie SA. Novae Restauration SA. Novametal SA. Novartis. Novelis Switzerland SA. Novex AG. Novo Cristal SA. Novoplast AG.

0

Obwaldner Kantonalbank. Odier Excursions SA.
Oertli Instrumente AG. Oertli Werkzeuge AG.
Oettinger Davidoff AG. Officine Ghidoni SA. Ofisa SA.
OLZ & Partners. ONE Training Center AG. Oris SA.
Osmopharm SA. OVD Kinegram AG.

F

Pamp SA. Panalpina. Papyrus Schweiz AG. Pargger AG. Park Hyatt Zürich. Park Weggis. Patric métal SA. Paul Büetiger AG. PB Swiss Tools GmbH. PCP.CH AG. Periso SA. Permapack AG. Perrin Holding SA. Phoenix Mecano Komponenten AG. Piccadilly SA. Pini Swiss Engineers SA. Pirelli Tyre (Suisse) SA. Plastex SA. Plaston Holding AG. Polytrona AG. Polytype AG. PPCmetrics AG. PPG Industries Europe Sàrl. Préci-Dip SA. Presto Presse-Vertriebs AG. PricewaterhouseCoopers Ltd. Procter & Gamble International Operations. Protectas SA. Punto Fresco SA. PVA AG. PX Group SA. Python Sécurité Sàrl.

Q

QoQa Services SA. Quickline AG. Quickmail AG.

R

R. Mazzoli SA. R. Morand et Fils SA. R. Nussbaum AG. Raiffeisenbanken. Rainbow SA Servizi di sicurezza. Rapp Gruppe. Rausch AG. RCSmobility SA. RealSport Group. Reasco AG. redtoo ag. Regazzi Holding SA. Régie du Rhône SA. Regiopress SA. Reinhard AG Sachseln. Reitzel (suisse) SA. Reka Schweizer Reisekasse. René Schweizer AG. Rero AG. Restaurant Florida AG Studen. Revaz SA. Richter Dahl Rocha & Associés architectes SA. Ricoh Schweiz AG. Riedo clima AG Düdingen. Righi Licht AG. Ringier AG. Riri SA. Ristoranti Fred Feldpausch SA. Ritschard SA. Rivopharm SA. Robatech AG. Rockwell Automation Switzerland GmbH. Rofra Bau AG. Rollomatic SA. Romande Energie SA. Roth Gerüste AG. Rotronic AG. Ruckstuhlgaragen. Rüeger SA. Rugenbräu AG. Rutishauser Weinkellerei AG. Rutronik Elektronische Bauelemente AG. Rychiger AG.

S

S. Facchinetti SA. SA Vini Bée. Sabag Holding AG. Sage Schweiz AG. Salanitro SA. Samaplast AG. Sandro Sormani SA. Sanitas Krankenversicherung. sanofiaventis (suisse) sa. Sanvortec AG. Sarix SA. Satom SA. Saudan-Zurbuchen SA. Sauter, Bachmann AG. Saviva AG Geschäftsbereich CCA Angehrn. SB Saanen Bank AG. Schätti AG Metallwarenfabrik. Schaublin SA. Schenk SA. Schiller Holding AG. Schilthornbahn AG. Schindler Elettronica SA. Schlumpf AG. Schmiedewerk Stooss AG. Schmolz + Bickenbach Stahlcenter AG. Schollglas AG. Schubiger AG Bauingenieure. Schumacher AG. Schurter Holding AG. Schweizerische Bodenseeschifffahrtsgesellschaft AG. Schwob AG. Schwyzer Kantonalbank. Scrasa SA. Sefa SA. Sefar Holding AG. Sekisui Alveo AG. Sellita Watch Co SA. Semadeni AG. Sensirion AG. Sercab SA. Settelen AG. Sferax. SHG SA. Shiptec AG. Shopping Arena St. Gallen. Siegfried AG. Sierre-Energie SA. Sigrist-Photometer AG. Simex Trading AG. Similasan. Sintetica SA. SIR SA. SISKA Heuberger Holding AG. SIX Swiss Exchange AG. Skan AG. Sky-Frame AG. Smart Gorla Services SA. SMB Medical SA. SMB SA. Smith & Nephew Schweiz AG. Société anonyme du Grand Hôtel de la Paix. Société Electrique de la Vallée de Joux SA. Société fribourgeoise d'animation touristique SA. SolvAxis SA. Solvay (Schweiz) AG. Somedia Production AG. Sonova Holding AG. Sontex SA. Sorrel Holding SA. SOS Surveillance SA. Soudronic AG. Spar- und Leihkasse Frutigen AG. Spectros AG. SPIE ICS AG. SpineArt SA. Spinelli SA. spirella s.a. Spross-Holding AG. SR Technics Switzerland. Starrag Group Holding AG. Steeltec AG. Steinel Solutions AG. Stettler Sapphire AG. Stierlin AG. Stirnimann AG, Baumaschinen. Stoppani AG. Storchen Zürich. Storz Medical AG. Straub Werke AG. Streuli Bau AG. Studer Innotec SA. Studio d'ingegneria Visani Rusconi Talleri SA. Studio Ingegneria Sciarini SA. Stüdli Plast AG. Südpack Bioggio SA. Suiten Hotel Parco Paradiso. Sulzer Management AG. Surer Kipper Transport AG. Sutter AG. Swatch Group SA. Swiss Automotive Group AG. Swiss Caps AG. Swiss Krono AG. Swiss Prime Site AG. Swisscom AG. Swissôtel Zürich. SwissPrimePack AG. Swissquote Bank SA. Swissray Medical AG. Sylvac SA. Syngenta AG.

Synthes Produktions GmbH.

т

T+R AG. Tally Weijl. Tamedia Publications romandes. TBF + Partner AG. Tecan Group AG. Tenconi SA. Terrani SA. Theiler Druck AG. Thermalbad Zurzach AG. Thermex SA. Thermo Fisher Scientific (Ecublens) Sàrl. Thermoplan AG. Thurgauer Kantonalbank. Ticino Hotels Group. Tillotts Pharma AG. Time pieces SA. TISCA Tischhauser & Co. AG. TM Concept AG. TMR Transports de Martigny et Régions SA. Tobi Seeobst AG. Toggenburger Unternehmungen. Tokheim Switzerland SA. Toldo Strassen- und Tiefbau AG. Tony Brändle AG Wil. Tormax Schweiz AG. Tornos SA. Touristische Unternehmung Grächen AG. Tozzo Gruppe. Trasfor SA. Trecor SA. Treier AG. Triumph Holding AG. Trüb by Gemalto. Trumpf Grüsch AG. Trumpf Maschinen AG. Turbomach SA. Turck Duotec SA.

U

u-blox Holding AG. UBS AG. UEFA. Ugo Bassi SA. Unigestion SA. Union Bancaire Privée, UBP SA. Unione Farmaceutica Distribuzione SA. Unitechnologies AG. Urner Kantonalbank. Usines Métallurgiques de Vallorbe SA. Utilis AG.

V

Vale International SA. Valtronic Technologies (Suisse) SA. Valtube SA. Van Baerle AG. Varioprint AG. Vaudoise Assurances Holding SA. Vectronix AG. VF International Sagl. Vischer Rechtsanwälte und Notare. Visilab SA. Vitogaz Switzerland AG. Vitol SA. Vogt AG Lostorf. Vogt-Schild Druck AG. VTX Telecom SA. VZ Holding AG.

W

W. Gassmann AG. Wago Contact AG. Walo
Bertschinger AG. Walter Matter SA. Walter Meier AG.
Wäscherei Bodensee AG. Waser + CO AG. Weisse Arena
Gruppe. Weleda AG. Welti-Furrer. Wey Technology AG.
WICOR Holding AG. Widder Hotel Zürich.
Wiederkehr AG. Willemin-Macodel SA. wincasa AG.
Winterthur Gas & Diesel AG. Wirz AG Bauunternehmung.
Woodpecker Holding AG. Wyss Holding AG.

Υ

Ypsomed AG.

Z

Zambon Svizzera SA. Ziegelei Hochdorf Holding AG. Ziegler AG Bauunternehmung. Ziemer Ophthalmic Systems AG. Zile AG. Zimmer Biomet. Zindel Gruppe AG. Zingg Transporte AG. Zuger Kantonalbank. Zühlke. Zünd Transport AG. Zur Rose Suisse AG. Zürcher Kantonalbank. Zürich Marriott Hotel. Zürich Tourismus. Zürich Versicherungsgesellschaft AG. zweifel metall ag. ZWZ AG.

3

3M EMEA GmbH.

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.

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 9 November, the Federal Council issues a message on the popular initiative 'For crisis-resistant money: end fractional-reserve banking' (Vollgeldinitiative). It proposes that the two chambers of parliament reject the initiative without a counterproposal.

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.

September 2016

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.

June 2016

At its quarterly assessment of 16 June 2016, the SNB maintains its expansionary monetary policy. Interest on sight deposits at the SNB remains at -0.75% and the target range for the three-month Libor is unchanged at between -1.25% and -0.25%. The SNB reaffirms that the Swiss franc is still significantly overvalued and that it will remain active in the foreign exchange market, as necessary. 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.

March 2016

At its quarterly assessment of 17 March 2016, the SNB leaves its target range for the three-month Libor unchanged at between -1.25% and -0.25% and the interest rate on sight deposits with the SNB at -0.75%. The SNB reaffirms that it will remain active in the foreign exchange market, in order to influence exchange rate developments where 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 serve to ease pressure on the Swiss franc. The SNB's monetary policy thus helps to stabilise price developments and support economic activity.

Published by

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

Design

Interbrand Ltd, Zurich

Typeset and printed by Neidhart + Schön AG, Zurich

Language versions:

The *Quarterly Bulletin* is available in printed form in German (ISSN 1423–3789) and French (ISSN 1423–3797).



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

English: www.snb.ch, *Publications*, *Quarterly Bulletin* (ISSN 1662–257X)
German: www.snb.ch, *Publikationen*, *Quartalsheft* (ISSN 1662–2588)
French: www.snb.ch, *Publications*, *Bulletin trimestriel* (ISSN 1662–2596)
Italian (Business cycle trends): www.snb.ch, *Pubblicazioni*, *Pubblicazioni economiche*, *Bollettino trimestrale*

Website

www.snb.ch

Copyright ©

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

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

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

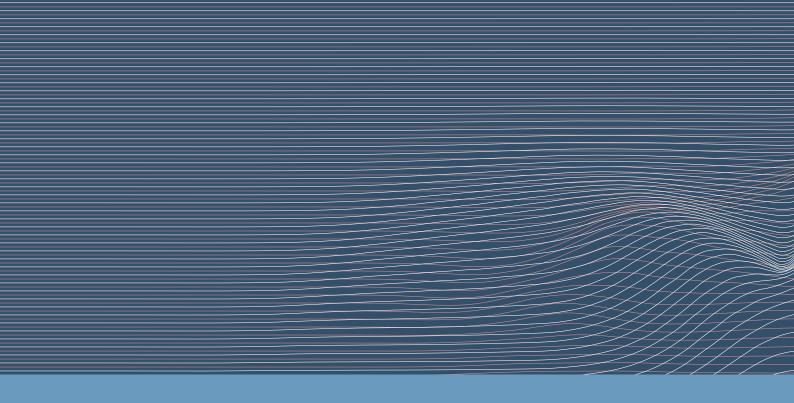
To the extent that the information and data clearly derive from outside sources, the users of such information and data are obliged to respect any existing copyrights and to obtain the right of use from the relevant outside source themselves.

Limitation of liability

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

© Swiss National Bank, Zurich/Berne 2016





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