

Quarterly Bulletin
2/2015 June

SCHWEIZERISCHE NATIONALBANK
BANQUE NATIONALE SUISSE
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2/2015 June

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Monetary policy report

Report for the attention of the Governing Board of the Swiss National Bank for its quarterly assessment of June 2015.

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 18 June 2015') is an excerpt from the press release published following the assessment.

This report is based on the data and information available as at 18 June 2015. 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 18 June 2015

Swiss National Bank leaves monetary policy unchanged

The Swiss National Bank (SNB) is leaving the target range for the three-month Libor unchanged at between -1.25% and -0.25% . The interest rate on sight deposits at the SNB remains at -0.75% . Negative interest rates in Switzerland make holding investments in Swiss francs less attractive and will help to weaken the Swiss franc over time. Overall, the Swiss franc is significantly overvalued. The SNB takes account of the exchange rate situation, and its impact on inflation and economic developments, in formulating its monetary policy. It will therefore remain active in the foreign exchange market, as necessary, in order to influence monetary conditions.

The new conditional inflation forecast does not differ greatly from the one we presented in March (cf. chart 1.1, table 1.1). Inflation will reach its low point in the third quarter of 2015, at -1.2% . For the subsequent period, the new inflation forecast is slightly higher than in March due to the rise in oil prices. The forecasts for 2015 and 2016 are up slightly, by 0.1 percentage points to -1.0% for 2015 and to -0.4% for 2016. The forecast continues to indicate that inflation will move back into positive territory at the beginning of 2017; there will be a slight slowdown in the rate of increase as the year progresses. The inflation

forecast for 2017 is down by 0.1 percentage points, to 0.3% . The conditional forecast assumes that the three-month Libor will remain at -0.75% over the entire forecast horizon, and that the Swiss franc will weaken.

Global economic growth was weaker than expected in the first quarter of 2015, and this development had a detrimental impact on world trade. In the US, GDP declined slightly. In the euro area, however, the economy continued to pick up, supported by persistent euro weakness and improved lending conditions. In Japan, too, the economy gained momentum. In the emerging economies, performance remained uneven, while growth continued to cool in China.

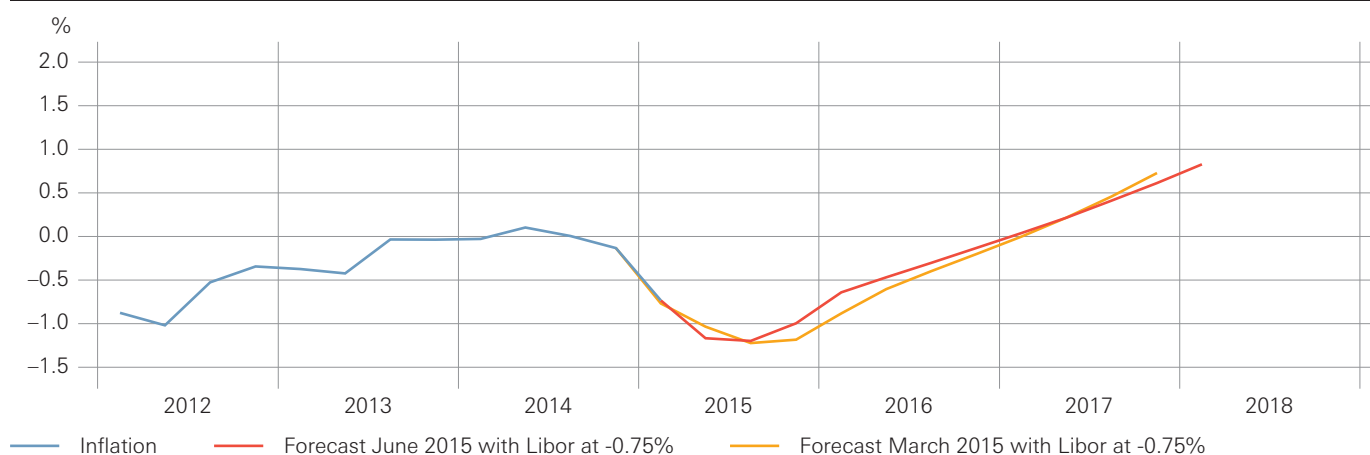
The global economy is expected to gather pace again, reinforced by expansionary monetary policy around the world and ongoing low oil prices. Nonetheless, uncertainty about the future development of the global economy remains high. Various risks – first and foremost the difficult financial situation in Greece and geopolitical tensions – could jeopardise the recovery.

According to initial estimates, Switzerland's real GDP declined slightly in the first quarter. As expected, goods exports suffered from the strong Swiss franc appreciation, but also from a downturn in global trade. Domestic demand, by contrast, developed robustly. The situation varies considerably from one industry to another, however. Profit margins are under significant pressure in several sectors, and this is forcing companies to take steps to reduce production costs and raise efficiency. Against this backdrop, unemployment has increased slightly on a seasonally adjusted basis.

Chart 1.1

CONDITIONAL INFLATION FORECAST OF JUNE 2015

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



Source: SNB

Over the coming months, the global economic recovery is likely to lead to a gradual upturn in demand for Swiss products; this will cushion the impact of the exchange rate shock somewhat. As the global economy gathers

momentum, we expect Switzerland to return to positive growth in the second half of the year. The SNB continues to anticipate growth of just under 1% for 2015 as a whole.

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 JUNE 2015

	2012				2013				2014				2015				2012	2013	2014
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Inflation	-0.9	-1.0	-0.5	-0.3	-0.4	-0.4	0.0	0.0	0.0	0.1	0.0	-0.1	-0.7				-0.7	-0.2	0.0

CONDITIONAL INFLATION FORECAST OF JUNE 2015

	2015				2016				2017				2018				2015	2016	2017	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Forecast March 2015, with Libor at -0.75%	-0.8	-1.0	-1.2	-1.2	-0.9	-0.6	-0.4	-0.2	0.0	0.2	0.5	0.7						-1.1	-0.5	0.4
Forecast June 2015, with Libor at -0.75%		-1.2	-1.2	-1.0	-0.6	-0.5	-0.3	-0.1	0.0	0.2	0.4	0.6	0.8					-1.0	-0.4	0.3

Source: SNB

2 Global economic environment

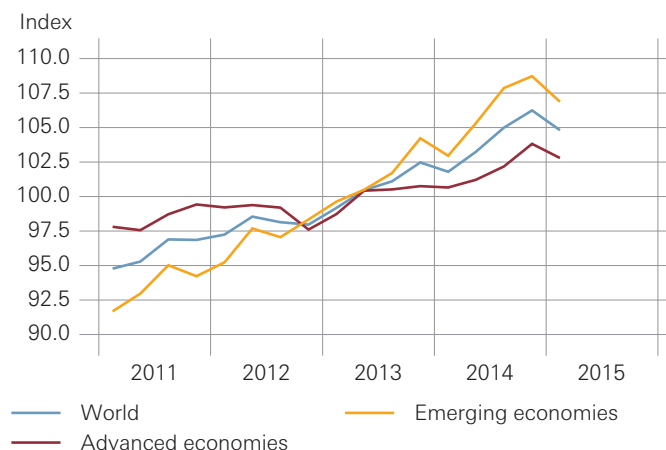
Global economic growth remained below expectations in the first quarter of 2015. The US and several key emerging economies witnessed a significant economic slowdown, which was also reflected in a decline in global trade (cf. chart 2.1). By contrast, economic activity in the euro area continued to firm.

US GDP fell slightly in the first quarter due partly to special factors, including an exceptional cold spell in the winter and strikes at West Coast ports. In addition, the export industry suffered from the marked appreciation of the US dollar. In the euro area, on the other hand, the weaker euro exchange rate as well as improved lending conditions supported further recovery. The Japanese economy also picked up pace. Economic momentum remained rather uneven in the emerging economies. China's economy continued to cool. Brazil and Russia slipped into recession, whereas India saw a substantial increase in activity.

Chart 2.1

GLOBAL EXPORTS

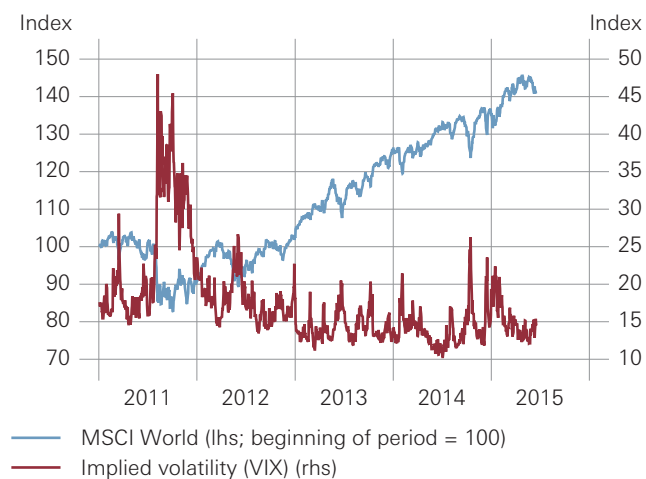
Period average = 100



Sources: CPB, Thomson Reuters Datastream

Chart 2.2

STOCK MARKETS



Source: Thomson Reuters Datastream

Table 2.1

BASELINE SCENARIO FOR GLOBAL ECONOMIC DEVELOPMENTS

	2011	2012	2013	2014	Scenario	
					2015	2016
GDP, year-on-year change in percent						
Global ¹	4.2	3.4	3.3	3.5	3.4	4.0
US	1.6	2.3	2.2	2.4	2.4	3.1
Euro area	1.6	-0.8	-0.4	0.9	1.4	2.0
Japan	-0.4	1.7	1.6	-0.1	0.9	1.5
Oil price in USD per barrel						
	111.4	111.7	108.7	99.0	62.2	65.0

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

Sources: SNB, Thomson Reuters Datastream

Chart 2.3

INTERNATIONAL LONG-TERM INTEREST RATES

10-year government instruments

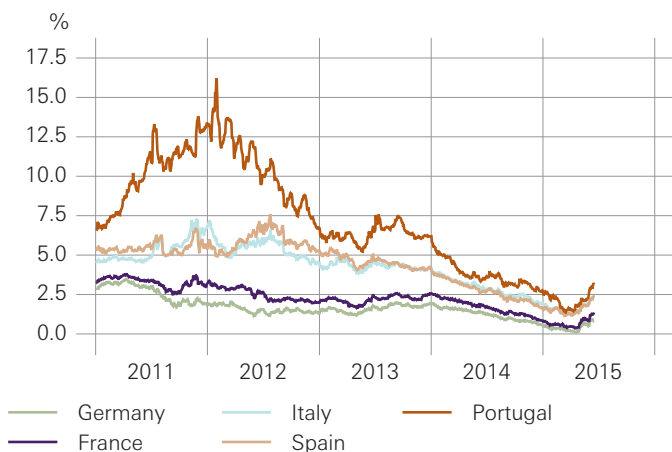


Source: Thomson Reuters Datastream

Chart 2.4

EUROPEAN LONG-TERM INTEREST RATES

10-year government instruments



Source: Thomson Reuters Datastream

Chart 2.5

EXCHANGE RATES

Trade-weighted, beginning of period = 100



Source: Thomson Reuters Datastream

In its baseline scenario for the world economy, the SNB expects an imminent revival of international economic activity, bolstered by expansionary monetary policy across the globe and continued low oil prices. However, uncertainty about the future development of the global economy remains high and the risks are to the downside. Greece’s precarious financial situation and the prevailing geopolitical tensions are at the forefront of concerns. The structural change occurring in China also harbours risks.

The SNB’s forecasts 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 65 per barrel and an exchange rate of USD 1.12 to the euro. This corresponds to the 20-day average when the baseline scenario was drawn up.

INTERNATIONAL FINANCIAL AND COMMODITY MARKETS

The financial markets have remained volatile since the monetary policy assessment in March. Stock markets initially continued to point upwards (cf. chart 2.2). In the intervening period, the US S&P 500 and the German DAX reached new all-time highs. At the beginning of June, however, the stock markets fell to the level of mid-March (cf. chart 2.2). The VIX implied volatility index for US shares – which serves as an indicator of market uncertainty and is derived from option prices – remained significantly below the long-term average.

Yields on long-term government bonds in the advanced economies have trended upwards since mid-March (cf. chart 2.3). In the euro area, in particular, yields increased sharply. The euro gained a little ground on a trade-weighted basis, but persisted at around 10% below the mid-2014 level. Conversely, the US dollar lost a little terrain following a major appreciation phase. The yen fell to the low recorded at the end of 2014 (cf. chart 2.5).

Commodity prices were higher on the whole (cf. chart 2.6). Oil prices recovered, due in part to the International Energy Agency’s (IEA) downward revision of the oil supply in North America and, at the same time, its more positive assessment of the demand outlook worldwide. Food prices also picked up slightly, but remained low given the good supply situation.

UNITED STATES

The US economy recorded a dip in growth in the first quarter of 2015 (cf. chart 2.7). Several factors contributed to this. As was the case one year earlier, cold weather dampened consumer spending and construction activity. The West Coast port strikes also temporarily depressed value added. The strong US dollar continued to slow down activity in the manufacturing industry. Furthermore, low oil prices led to substantial investment cutbacks in the energy sector. Contrary to expectations, domestic demand benefited only to a limited extent from the low price of oil. The unemployment rate stood at 5.5% in May (cf. chart 2.10). A low participation rate and increased part-time work suggest that capacity on the labour market is not yet fully utilised.

The robust increase in employment, higher wage growth as well as pent-up consumer spending and efforts to clear the construction backlog after the cold weather are expected to stimulate aggregate potential output in the following quarters. Moreover, expansionary monetary policy continued to provide positive momentum. The SNB is forecasting economic growth of 2.4% for 2015 and 3.1% for 2016 (cf. table 2.1). Owing to the surprisingly weak first quarter and the effects of the strong US dollar, the growth forecast for 2015 is noticeably lower than three months ago.

Slightly higher oil prices prevented a further weakening of US annual inflation measured in terms of consumer prices. In April it was almost unchanged against January at -0.2% (cf. chart 2.11). Core inflation, however, increased slightly to 1.8% (cf. chart 2.12).

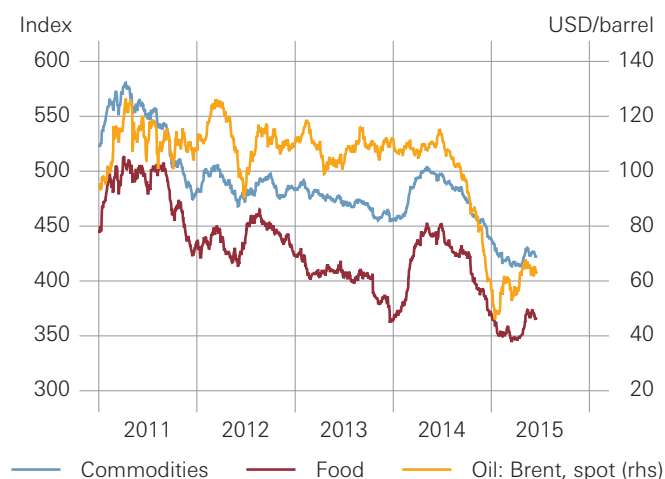
The Federal Reserve left the target range for the federal funds rate unchanged at 0%–0.25% (cf. chart 2.13). It still assumes that the situation in the US economy may, for some time yet, require lower interest rates than usual, even after price stability and full employment have been achieved.

EURO AREA

The economy in the euro area gained somewhat in momentum. Gross domestic product increased by 1.5% in the first quarter (cf. chart 2.7), marking the highest growth in almost two years. Industrial activity has recovered, and domestic demand rose further, with investments, in particular, gaining in strength. Unlike in the previous quarter, all large member states contributed to the growth. Italy, most notably, recorded an increase in GDP after several years in recession. Greece, however, saw its GDP shrink further, due inter alia to the uncertainty surrounding the protracted negotiations between the new government and international creditors on the future reform package. Unemployment in the euro area continued to move down, but at 11.1% in April was still very high (cf. chart 2.10).

Chart 2.6

COMMODITY PRICES

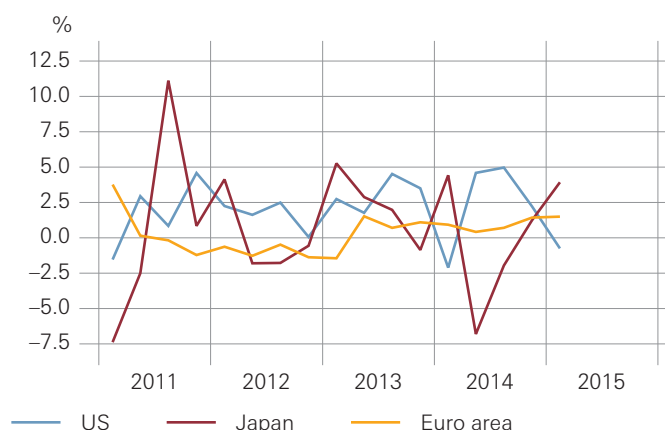


Source: Thomson Reuters Datastream

Chart 2.7

REAL GDP: ADVANCED ECONOMIES

Change from previous period

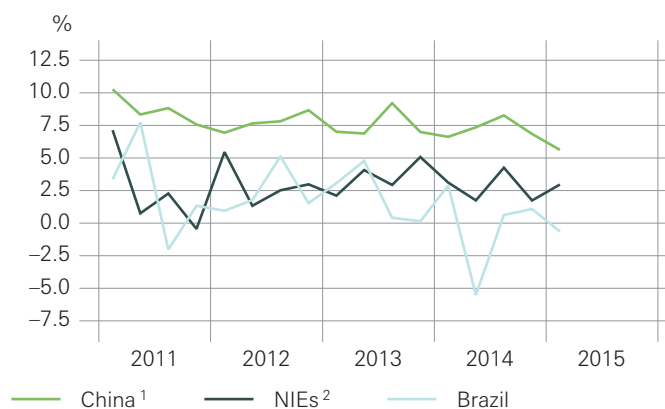


Source: Thomson Reuters Datastream

Chart 2.8

REAL GDP: EMERGING ECONOMIES

Change from previous period



¹ Estimate: SNB.

² PPP-weighted (South Korea, Taiwan, Hong Kong, Singapore).

Source: Thomson Reuters Datastream

Chart 2.9

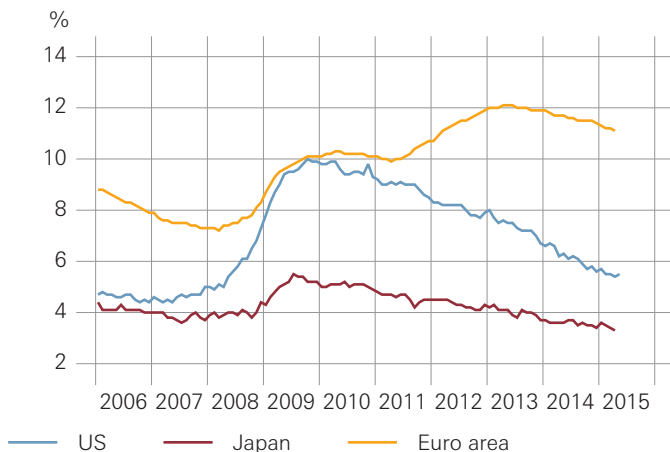
PURCHASING MANAGERS' INDICES (MANUFACTURING)



Source: Markit Economics Ltd 2009; all rights reserved

Chart 2.10

UNEMPLOYMENT RATES



Source: Thomson Reuters Datastream

Chart 2.11

CONSUMER PRICES

Year-on-year change



Source: Thomson Reuters Datastream

The economic outlook has brightened slightly. Expansionary monetary policies, the weak euro and low oil prices continue to have a positive impact. Thanks to favourable financing conditions and increased price competitiveness, business confidence has improved further. Consumers are also more optimistic about the future; in particular, private households are less anxious about job losses. Against this backdrop, domestic demand is likely to witness further moderate growth. The SNB has revised its growth forecast for the euro area upwards slightly, and is projecting GDP growth of 1.4% for 2015 (cf. table 2.1). Overall, though, the economy continues to face downside risks. Greece's reform and financing programme remains fraught with uncertainty. What is more, the restructuring of public-sector finances and the implementation of growth-promoting reforms in the euro area still pose major challenges.

Consumer price inflation in the euro area again increased across a broad front. In May, it stood at 0.3% after a brief spell in negative territory under the impact of low oil prices (cf. chart 2.11). Core inflation rose to 0.9% (cf. chart 2.12). Inflation expectations calculated on the basis of financial indicators advanced slightly in the second quarter.

The European Central Bank left its key rates unchanged (cf. chart 2.13). The asset purchase programme initiated in March is being carried out as planned and will run until at least September 2016. As a consequence of the programme, surplus liquidity and the three-month Euribor dropped into negative territory for the first time since monetary union.

JAPAN

The Japanese economy picked up. GDP expanded by 3.9% in the first quarter (cf. chart 2.7). Exports witnessed another sharp rise and investments gathered pace.

Supported by the weak yen and cheaper energy imports, the recovery is set to continue. In light of the favourable export trend and high corporate earnings, sentiment in the export industry remains upbeat. Employment growth and strong gains on the Japanese stock market also rekindled household confidence somewhat. Owing to the loss of purchasing power attributable to last year's VAT increase, the recovery in private consumption has so far been sluggish at best. Although the initial results of the annual wage negotiations are encouraging in terms of income development, growth in consumer spending is still likely to be no more than modest in the coming quarters. In all, the situation is therefore expected to remain difficult over the short term for sectors with a predominantly domestic customer base. Fiscal policy is also likely to be tightened in order to meet the medium-term budget. The SNB has left its growth forecast for 2015 unchanged.

Japanese consumer price inflation trended sideways between January and March. With last year's VAT hike dropping out of the inflation calculation in April, inflation fell significantly to 0.6% (cf. chart 2.11). Annual inflation is likely to carry on receding temporarily under the impact of oil prices. In the past few months, longer-term inflation expectations have continued to stagnate below the Japanese central bank's inflation target of 2%.

Since its monetary policy easing at the end of October, the Bank of Japan has not made any further adjustments. The monetary base is still to be increased through purchases of long-maturity Japanese government bonds of approximately JPY 80 trillion (roughly 16% of GDP) per year (cf. chart 2.14). This measure is intended to support inflation expectations and lift annual inflation to 2% in the foreseeable future.

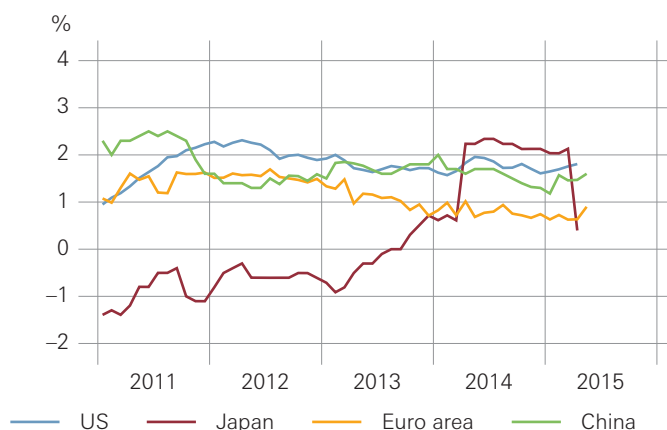
EMERGING ECONOMIES

Economic trends in the emerging economies remained generally muted in the first quarter and foreign trade slowed down. China reported its lowest GDP growth since the financial crisis (cf. chart 2.8). Brazil and Russia even faced a contraction in economic activity. India alone reported firmer GDP, following a weak previous quarter.

Chart 2.12

CORE INFLATION RATES¹

Year-on-year change

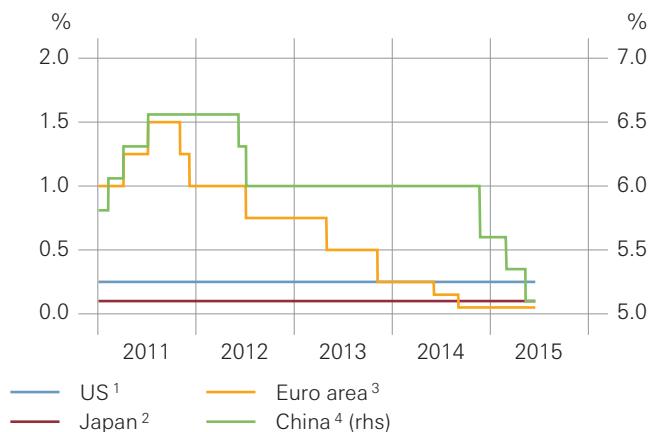


¹ Excluding food and energy.

Source: Thomson Reuters Datastream

Chart 2.13

OFFICIAL INTEREST RATES



¹ Federal funds rate.

² Call money target rate.

Source: Thomson Reuters Datastream

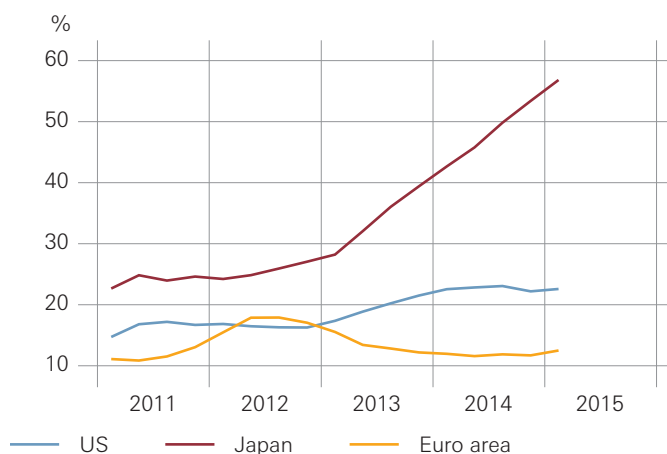
³ Main refinancing rate.

⁴ One-year lending rate.

Chart 2.14

MONETARY BASE

Relative to GDP



Source: Thomson Reuters Datastream

Economic momentum is likely to pick up somewhat in these countries in the coming quarters. China's increasingly expansionary monetary and fiscal policy should translate into more solid growth over the short term at least. Indebtedness and high overcapacity in the manufacturing and construction sectors still pose considerable downside risks. The SNB forecasts growth close to potential (approximately 7%) for India. By contrast, the outlook for Brazil and Russia is subdued. Both countries will probably witness a decline in gross domestic product this year. Brazil's growth is being impeded by high inflation, exceptionally low consumer confidence and slack investment activity in the slipstream of severe economic uncertainties, as well as by restrictive economic policies. The Russian economy, which is dependent on oil and gas exports, is suffering from low commodity prices and from the sanctions imposed by the West.

Inflation in the emerging economies presented a mixed picture. In China, overcapacity in some areas of the economy and the appreciation of the renminbi in trade-weighted terms contributed to keeping inflation well below the central bank target of 3.0% for 2015 (cf. chart 2.11). In India, too, inflation receded perceptibly. In Brazil and Russia, by contrast, inflation lingered at an exceptionally high level, due in part to their weak currencies.

As a result, these countries also pursued diverging monetary policies. In a bid to counter the weak inflation trend, China's central bank again lowered its key interest rate and the minimum reserve ratio for banks (cf. chart 2.13). The central banks in India and Russia also reduced their key interest rates, with the latter adjusting the key interest rate further downwards to 11.5% in an effort to support the economy, while still keeping the level high to prevent a renewed collapse of the rouble. The Brazilian central bank, by contrast, raised its key interest rate further in order to combat inflation and the depreciation of the Brazilian real.

3 Economic developments in Switzerland

Following the robust development seen last year, GDP contracted by 0.8% in the first quarter according to an initial estimate by the State Secretariat for Economic Affairs (SECO). The contribution from foreign trade was well into negative territory. Domestic demand, on the other hand, remained solid. On the output side, trade and the hospitality industry in particular suffered significant setbacks. In manufacturing, too, value added declined slightly. Profit margins are under considerable pressure in numerous industry categories.

The negative output gap widened again in the first quarter. There was a marked decline in capacity utilisation, mainly in the manufacturing industry. Moreover, unemployment in seasonally adjusted terms has risen slightly since the beginning of the year.

The Swiss franc, which is still significantly overvalued, will continue to dampen the economy in the short term. That said, economic indicators were showing initial signs of recovery at the beginning of the second quarter. Demand for Swiss products is likely to gradually pick up on the back of the nascent recovery in the world economy. The SNB expects the Swiss economy to regain momentum in the second half of the year and continues to expect growth of just under 1% for 2015 as a whole.

AGGREGATE DEMAND AND OUTPUT

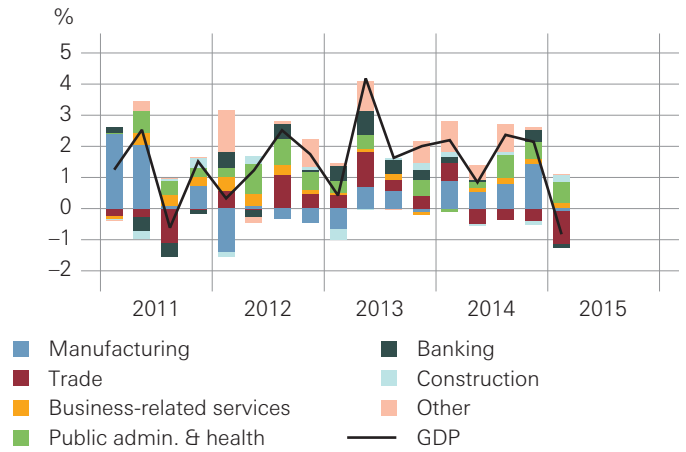
GDP lower in first quarter

Trends varied quite considerably from one industry to another in the first quarter. Owing to the appreciation of the Swiss franc, overall value added decreased slightly (cf. chart 3.1). The principal factor here was a sharp decrease in value added in trade, but transport and communications, hospitality and banking all suffered declines, too. The manufacturing industry witnessed a slight contraction, following strong growth in the previous quarter. By comparison, some services with a largely domestic customer base remained on a positive trend. Significant growth in value added was registered primarily by the health care industry.

Chart 3.1

CONTRIBUTIONS TO GROWTH, BY SECTOR

Change from previous period

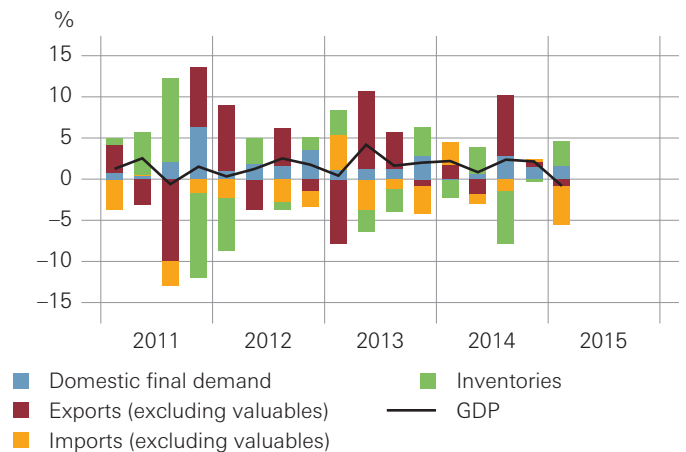


Source: State Secretariat for Economic Affairs (SECO)

Chart 3.2

CONTRIBUTIONS TO GROWTH IN DEMAND

Change from previous period

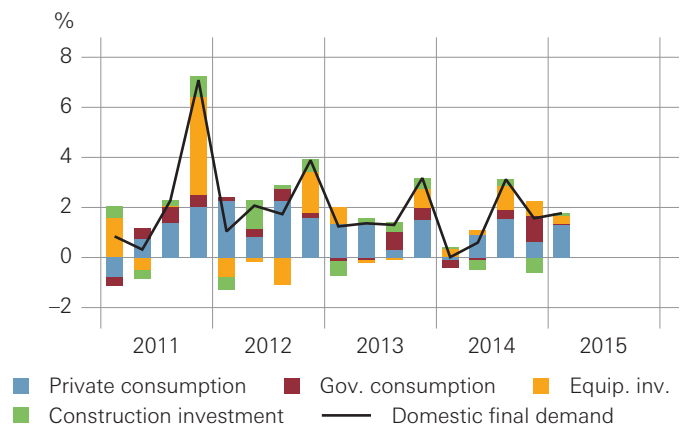


Source: SECO

Chart 3.3

DOMESTIC FINAL DEMAND, GROWTH CONTRIBUTIONS

Change from previous period



Source: SECO

Significantly negative foreign trade contribution

The appreciation of the Swiss franc had a pronounced impact on the majority of goods-exporting industries. Demand, especially from Europe, tapered off substantially in the first quarter. However, since exports of services continued to expand, total exports were only moderately lower. By contrast, imports of services in particular increased sharply. This meant that the contribution of foreign trade to GDP growth was significantly negative (cf. table 3.1).

Growth in domestic demand still moderate

Domestic final demand continued to increase moderately (cf. chart 3.3 and table 3.1). Buoyed by favourable income developments and continuing robust immigration, private consumption gained considerable momentum. Above all, spending on energy and health care was substantially higher. Equipment investment, on the other hand, slowed a little. The appreciation of the Swiss franc has caused palpable uncertainty among companies and, in many cases, has sharply reduced profit margins. The fact that a number of companies profited from lower purchase prices for equipment from abroad had a supportive effect. Extraordinary investments in vehicles also had an impact. Following the decrease seen in the previous quarter, construction investment picked up somewhat, driven by a slight recovery in civil engineering. Residential construction, however, receded further, but remained at a high level overall.

Table 3.1

REAL GDP AND COMPONENTS

Growth rates on previous period in percent, annualised

	2011	2012	2013	2014	2013			2014				2015
					Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Private consumption	0.9	2.8	2.2	1.3	2.2	0.5	2.4	-0.1	1.4	2.5	1.0	2.1
Government consumption	2.1	2.9	1.4	1.4	-0.8	5.7	3.9	-2.5	-0.8	2.9	8.2	0.4
Investment in fixed assets	4.4	2.5	1.8	1.8	0.4	1.1	4.6	1.6	-0.7	4.6	-0.1	1.6
Construction	2.5	2.9	1.3	0.9	1.9	3.9	4.3	0.8	-3.6	2.8	-6.1	1.1
Equipment	5.5	2.3	2.1	2.5	-0.5	-0.5	4.8	2.0	1.2	5.8	3.7	1.9
Domestic final demand	1.9	2.7	2.0	1.4	1.4	1.3	3.2	0.0	0.6	3.1	1.6	1.8
Change in inventories ¹	0.3	-1.0	0.7	-0.5	-2.8	-2.9	3.4	-2.3	3.3	-6.4	-0.3	3.1
Total exports ²	3.5	2.6	0.0	3.8	18.7	8.7	-1.4	3.1	-3.4	14.4	1.2	-1.6
Goods ²	6.2	0.9	-2.3	4.7	15.6	13.8	-3.0	-0.5	3.0	19.9	-0.8	-8.1
Services	-2.3	6.1	4.7	1.9	24.7	-0.6	1.8	10.6	-14.9	4.0	5.5	12.6
Total imports ²	5.0	4.2	1.5	1.5	8.8	2.7	8.3	-6.6	2.8	3.5	-1.0	11.3
Goods ²	3.1	2.3	0.7	1.5	5.0	-0.2	14.8	-10.9	8.1	3.0	-5.4	1.5
Services	8.5	8.1	3.3	1.7	17.8	9.4	-4.7	3.3	-7.5	4.7	9.3	33.7
Net exports ³	-0.1	-0.3	-0.6	1.3	5.8	3.4	-4.2	4.4	-3.0	6.0	1.0	-5.5
GDP	1.8	1.1	1.9	2.0	4.2	1.6	2.0	2.2	0.8	2.4	2.1	-0.8

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

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

3 Contribution to growth in percentage points.

Source: SECO

LABOUR MARKET

Developments on the labour market were also impacted by the appreciation of the Swiss franc and the associated decline in GDP. While the first quarter once again saw a sizeable increase in the number of people in gainful employment, unemployment has been on an upward trajectory since the beginning of the year.

Solid rise in employment

According to the employment statistics of the Swiss Federal Statistical Office, the number of employed persons advanced by 3.3% (seasonally adjusted) in the first quarter to 5.005 million (cf. chart 3.4). Most notably, the number of Swiss women in employment has again risen considerably. Moreover, an increasing number of foreign employees have been recruited, as reflected in the continuing robust net immigration from outside Switzerland. As a result, Switzerland's foreign resident population grew by 3.4% year-on-year to just under 2 million.

Based on the national job statistics (JOBSTAT), new jobs were created mainly in the services sector and construction, whereas the manufacturing industry reported job cuts (cf. chart 3.5).

Unemployment higher

Seasonally adjusted unemployment reached a low at the end of 2014. By May 2015, the number of people registered as unemployed with regional employment offices had risen by about 6,000 to 143,000, in seasonally adjusted terms. This trend was driven both by a higher volume of newly unemployed and by a decrease in the number of job seekers who had found employment or for some other reason no longer registered themselves as unemployed. The seasonally adjusted unemployment rate increased to 3.3% in May (cf. chart 3.6).

Chart 3.4

EMPLOYED PERSONS

Change from previous period

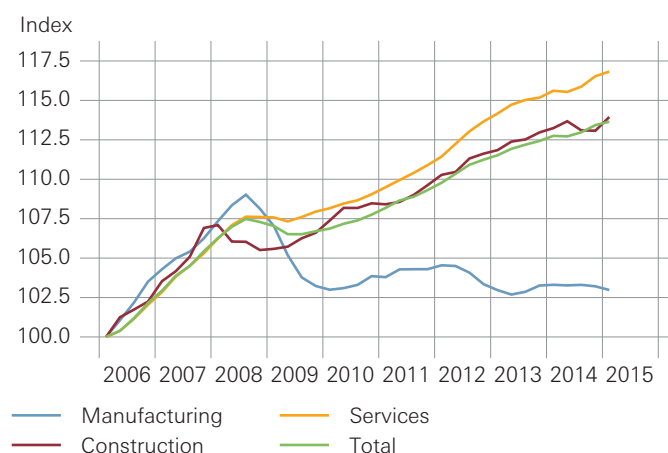


Source: Swiss Federal Statistical Office (SFSO); seasonal adjustment: SNB

Chart 3.5

FULL-TIME EQUIVALENT JOBS

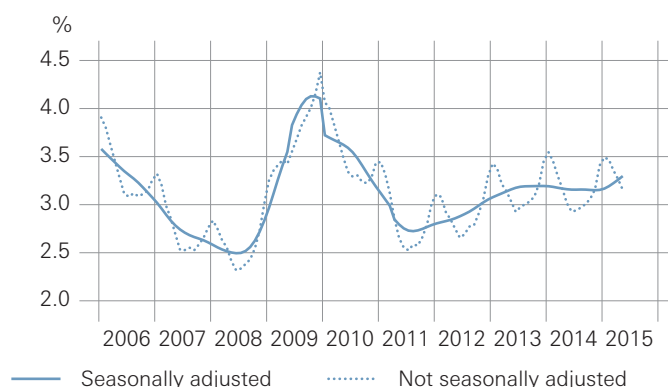
Q1 2006 = 100



Source: SFSO; seasonal adjustment: SNB

Chart 3.6

UNEMPLOYMENT RATE

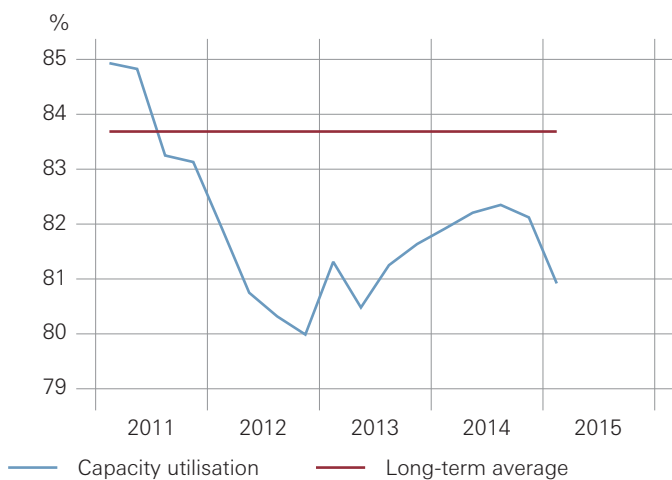


Unemployed registered with the regional employment offices, as a percentage of the labour force according to the 2000 census (labour force: 3,946,988 persons) up to 2009, and according to the 2010 census (labour force: 4,322,899 persons) from 2010.

Source: SECO

Chart 3.7

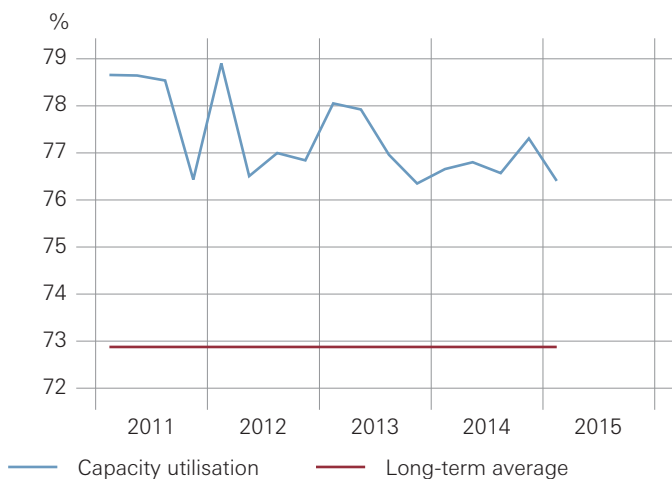
CAPACITY UTILISATION IN MANUFACTURING



Source: KOF Swiss Economic Institute

Chart 3.8

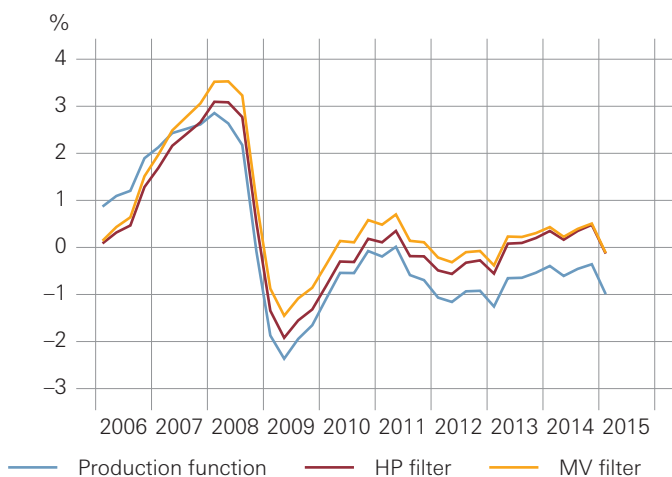
CAPACITY UTILISATION IN CONSTRUCTION



Source: KOF Swiss Economic Institute

Chart 3.9

OUTPUT GAP



Source: SNB

CAPACITY UTILISATION

Underutilisation in manufacturing

According to the survey by KOF Swiss Economic Institute, utilisation of technical capacity in manufacturing decreased to 80.9%. Although well below the long-term average, this is still higher than the previous low, recorded in 2012 (cf. chart 3.7). Machine utilisation in the construction industry was also down in the first quarter. Unlike the situation in manufacturing, capacity utilisation in construction remains clearly above the long-term average (cf. chart 3.8). The surveys continue to point to an average level of capacity utilisation in the services sector.

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. This gap widened in the first quarter as a result of the fall in GDP. Estimated potential output calculated by means of a production function showed a gap of -1.0% for the first quarter as against -0.4% in the previous quarter, signalling an underutilisation of production factors. Estimates using other methods to establish potential output (Hodrick-Prescott filter and multivariate filter) suggest only a slightly negative gap (cf. chart 3.9).

The different estimates reflect the various ways of calculating potential output. The production function approach considers the labour market situation and the stock of capital in the economy. Since the supply of labour, in particular, has risen steadily in recent years – primarily as a result of immigration – potential output and, hence, the output gap are larger when calculated with this method than with purely statistical filtering methods.

OUTLOOK FOR THE REAL ECONOMY

The outlook for the current year remains subdued. Business confidence recently picked up somewhat, having slumped in the immediate wake of the minimum exchange rate discontinuation. This is borne out, for instance, by the KOF barometer and the manufacturing purchasing managers' index, which have latterly both moved slightly upwards again (cf. chart 3.10).

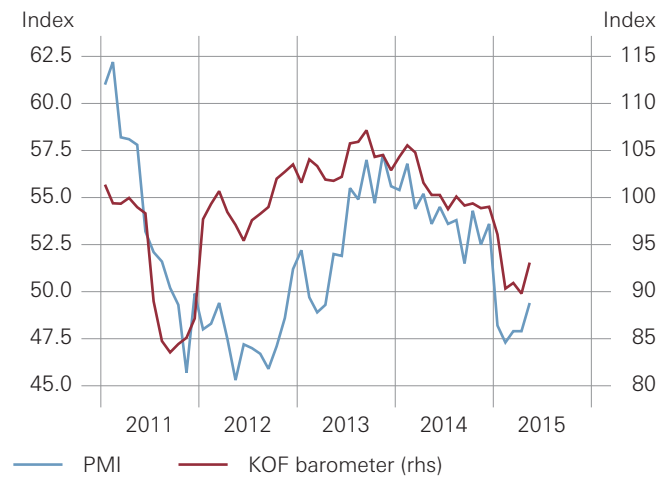
Various surveys show that the impact of Swiss franc appreciation currently varies greatly from one industry or company to another. The biggest challenge for many companies is the pressure on prices, which has squeezed profit margins. Companies operating in the export business have been hit hardest. However, those whose activities are focused mainly on the domestic market are also facing increased pressure on prices as a result of exposure to import competition. Surveys indicate that a large proportion of the companies affected have taken steps to raise efficiency and cut costs, which is reflected in a reluctance to recruit or invest.

In its baseline scenario for the world economy, the SNB still expects the global recovery to strengthen, particularly in Europe (cf. chapter 2). This should gradually revitalise foreign demand for Swiss goods and services, and counteract the unfavourable exchange rate situation. In addition, negative inflation will have a beneficial effect on the real disposable income of households and on real consumer spending.

The SNB expects that the Swiss economy will return to growth in the second half of the year, and thus continues to expect GDP growth of just under 1% for 2015 as whole.

Chart 3.10

LEADING INDICATORS

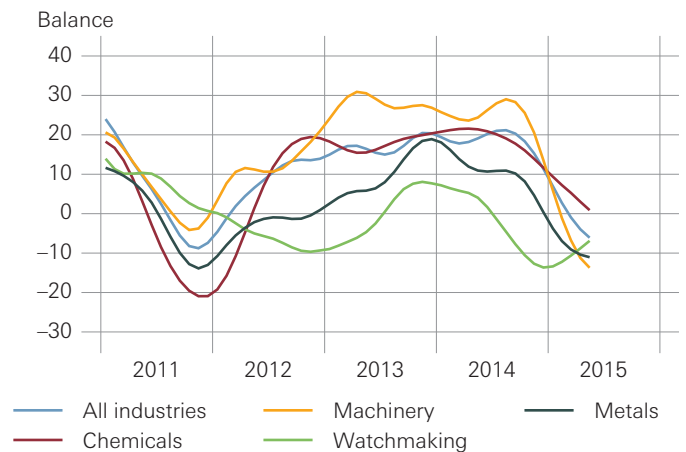


Sources: Credit Suisse, KOF Swiss Economic Institute

Chart 3.11

EXPECTED NEW ORDERS

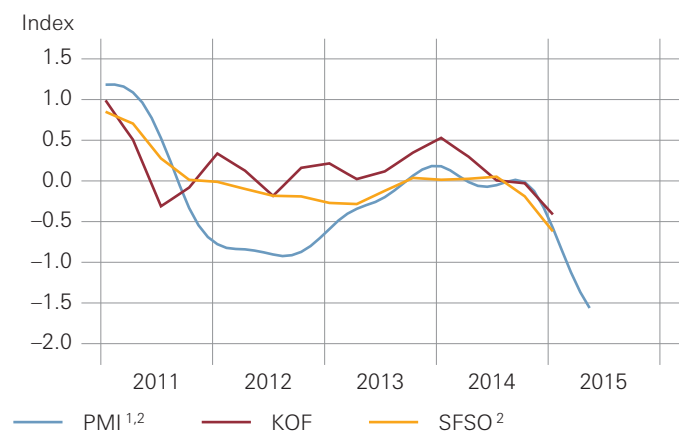
Trend component



Source: KOF Swiss Economic Institute

Chart 3.12

EMPLOYMENT LEADING INDICATORS



1 Monthly figures

2 Trend component: SNB

Sources: Credit Suisse, KOF Swiss Economic Institute, SFSO

4

Prices and inflation expectations

Unlike prices for goods, prices for residential property increased further in the first quarter of 2015. That means risks on the real estate market are still present.

CONSUMER PRICES

Substantial fall in consumer prices

Between November and February, the Swiss consumer price index (CPI) fell significantly (cf. chart 4.1).

This mainly reflects the decline in oil price and the discontinuation of the minimum exchange rate. Since then, the CPI has hardly changed, but this is in part due to seasonal factors. The CPI annual inflation rate, which stood at -0.1% in the fourth quarter of 2014, decreased to -0.7% in the first quarter of 2015 and -1.2% in May 2015 (cf. table 4.1).

Annual consumer price inflation has been negative since autumn 2014, moving ever further into negative territory in this period. This is due to the decline in the oil price and Swiss franc appreciation. Producer and import prices, which generally feed through to consumer prices after a time lag, also fell significantly.

The discontinuation of the minimum exchange rate put pressure on short and mid-term inflation expectations. In contrast, longer-term inflation expectations remained largely stable.

Table 4.1

SWISS CONSUMER PRICE INDEX AND COMPONENTS

Year-on-year change in percent

	2014	2014			2015	2015		
		Q2	Q3	Q4	Q1	March	April	May
Overall CPI	0.0	0.1	0.0	-0.1	-0.7	-0.9	-1.1	-1.2
Domestic goods and services	0.4	0.5	0.3	0.4	0.5	0.3	0.3	0.1
Goods	0.3	0.5	0.3	0.2	0.0	-0.7	-0.5	-0.9
Services	0.4	0.4	0.3	0.5	0.6	0.6	0.5	0.4
Private services excluding rents	0.4	0.3	0.3	0.6	0.8	0.8	0.6	0.4
Rents	1.2	1.2	1.1	1.1	1.0	1.0	1.0	1.2
Public services	-0.8	-0.5	-0.9	-1.2	-0.8	-0.8	-0.8	-1.0
Imported goods and services	-1.2	-0.9	-0.9	-1.6	-4.2	-4.3	-5.0	-4.9
Excluding oil products	-1.0	-1.3	-0.7	-0.8	-1.5	-2.0	-2.8	-3.0
Oil products	-2.4	1.1	-1.8	-6.7	-19.3	-17.2	-18.0	-15.8

Sources: SFSO, SNB

Prices for imported goods well below year-back level

The movement in annual consumer price inflation recorded since January is mainly due to appreciation of the Swiss franc against the euro and other currencies. The contribution to inflation made by imported goods excluding oil products has moved well into negative territory. The negative contribution to inflation made by oil products, which increased substantially up to January, has remained almost unchanged since (cf. chart 4.2).

Prices for domestic goods still above year-back level

Inflation for domestic goods has decreased slightly since the beginning of the year. However, because of developments in prices for services, it remains positive. Both rents and prices for other services have increased compared with the year-back month. Prices for goods, by contrast, have been lower than the year-back month since March (cf. table 4.1).

Negative core inflation rates

Core inflation rates have fallen considerably in recent months, although less sharply than the CPI inflation rate (cf. chart 4.3). In May 2015, the SFSO core inflation rate 1 (SFSO1) and the trimmed mean calculated by the SNB (TM15) were -0.6% and -0.4% respectively.

The difference between the CPI inflation rate and the core inflation rates is mainly attributable to movement in prices for oil products. When calculating SFSO1, fresh and seasonal products as well as energy and fuel are excluded, whereas TM15 takes the distribution of weighted annual rates of price change for CPI products, and excludes 15% from each extreme. The goods for which prices have fallen most sharply over the past 12 months are mainly oil products.

Chart 4.1

NATIONAL CONSUMER PRICE INDEX (CPI)

December 2010 = 100

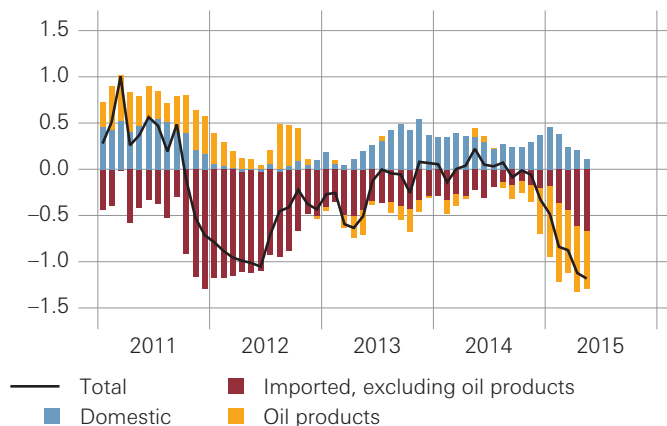


Source: SFSO

Chart 4.2

CPI: DOMESTIC AND IMPORTED GOODS

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

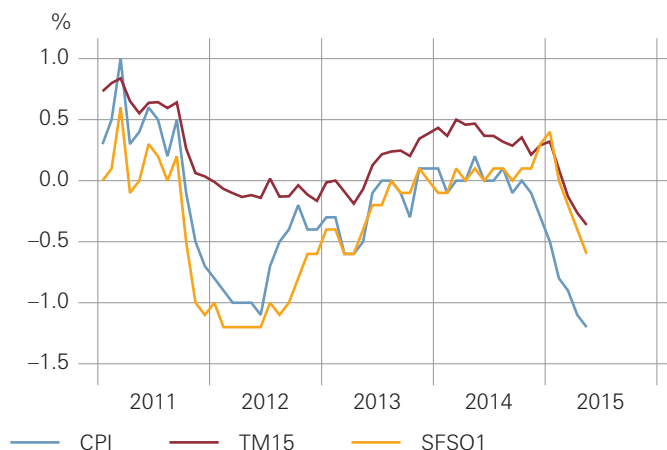


Sources: SFSO, SNB

Chart 4.3

CORE INFLATION RATES

Year-on-year change

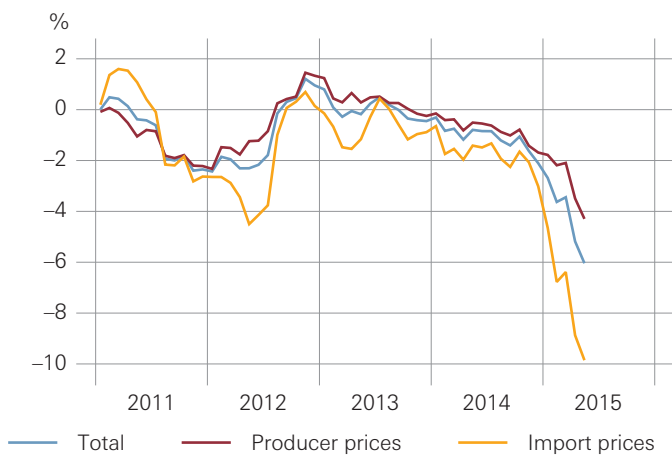


Sources: SFSO, SNB

Chart 4.4

PRODUCER AND IMPORT PRICES

Year-on-year change

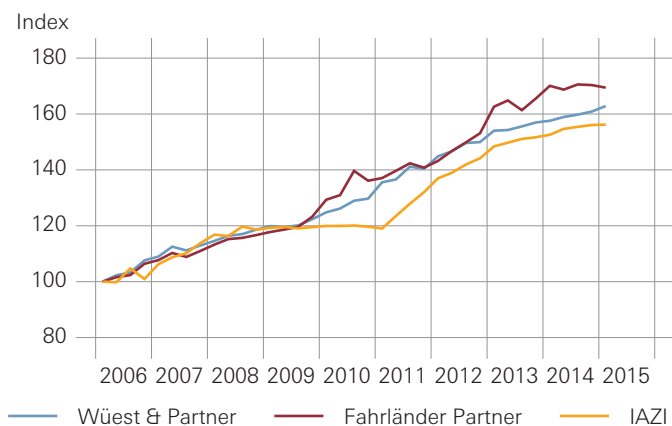


Source: SFSO

Chart 4.5

TRANSACTION PRICES, OWNER-OCCUPIED APARTMENTS

Nominal (hedonic), beginning of period = 100

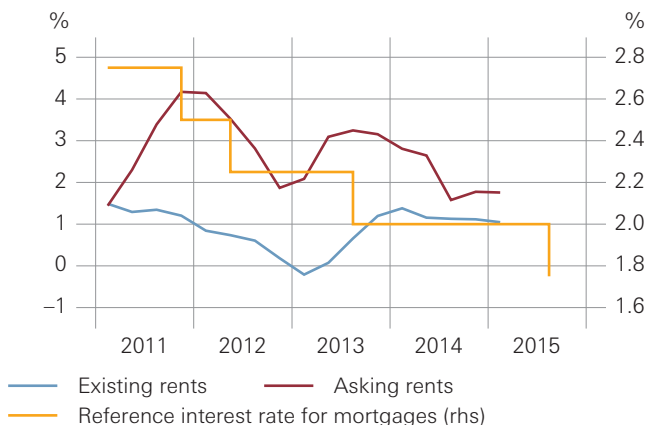


Sources: Fahrländer Partner, IAZI, Wüest & Partner

Chart 4.6

APARTMENT RENTS AND REFERENCE INTEREST RATE

Nominal, year-on-year change (lhs)



Sources: Federal Office for Housing (FOH), SFSO, Wüest & Partner

PRODUCER AND IMPORT PRICES

Substantial fall in producer and import prices

The Swiss franc appreciation accelerated the decrease in supply prices (cf. chart 4.4). As expected, the decrease was greater for import prices than for producer prices. By May 2015, the annual inflation rate for supply prices fell to -6.0%.

Producer and import prices are far more volatile than consumer prices. For example, producer and import prices decreased significantly in 2008/9 and 2011. Currently, the decline in producer and import prices is just as strong as in the second half of 2008, but not as strong as in 2011.

REAL ESTATE PRICES

Continuing rise in prices for residential property

According to most available indices, the rise in residential property prices continued in the first quarter of 2015. One exception was the Fahrländer Partner transaction price index (cf. chart 4.5).

At regional level, trends evident in the previous quarters continued. Prices continue to increase significantly in eastern Switzerland, while there has been a slight decrease in the Lake Geneva region since the beginning of 2013.

Moderate rise in existing rents

The annual inflation on asking rents recorded by Wüest & Partner (rents for apartments offered on the market) remained largely unchanged in the first quarter of 2015. Inflation for these rents thus remained above inflation for the rents recorded in the CPI, which may be regarded as a benchmark for existing rents (cf. chart 4.6).

Inflation in existing rents has been slowed over the past few years by the steady decline in the mortgage reference rate relevant to the formulation of interest on rents. It was reduced by a further quarter of a percentage point with effect on 1 June 2015, which should keep inflation in existing rents low.

INFLATION EXPECTATIONS

Short-term negative interest rates expected

The majority of the financial analysts surveyed for the Credit Suisse ZEW Financial Market Report expect the inflation rate to remain stable over the next six months. The share of respondents expecting inflation rates to remain unchanged increased from 35% in February to 63% in May 2015. The share of respondents expecting inflation rates to increase rose from 3% to 16%, while only 21% expected inflation rates to decrease, down from 62% in February. Consequently, expectations of falling inflation – which peaked with the substantial drop in oil prices and the discontinuation of the minimum exchange rate – have eased.

This impression was confirmed by talks between the SNB delegates for regional economic relations and company representatives from all sectors of the economy. In the second quarter, respondents expected the inflation rate to be -0.6% in six to twelve months, compared with -1.3% in the previous quarter.

The survey of households conducted by SECO in April shows that 25% of respondents expected prices to fall over the next twelve months and 30% expected an increase. Almost half of the respondents expected prices to remain unchanged (cf. chart 4.7).

Well anchored long-term expectations

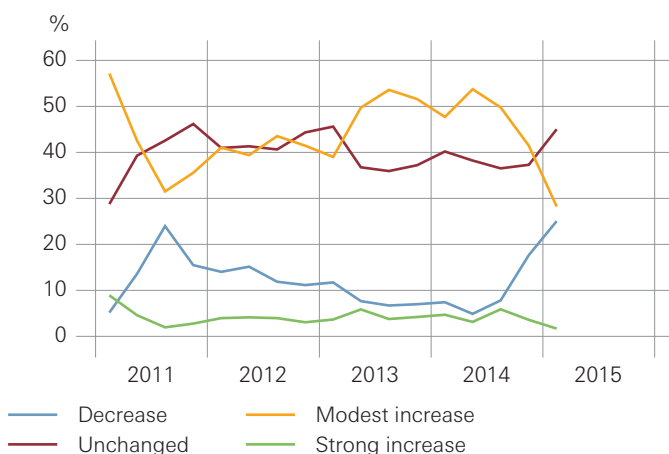
Participants in Deloitte's CFO survey in the first quarter put inflation in two years' time at 0.6% . Talks held by the SNB delegates for regional economic relations provided similar mid-term inflation expectations. In the second quarter, respondents expected the inflation rate to be 0.5% in three to five years (first quarter expectation: 0.4%).

These surveys confirm that mid-term inflation expectations have declined following the discontinuation of the minimum exchange rate; the longer the time horizon, the less pronounced the correction. Surveys with a horizon of six to ten years show that long-term inflation expectations have hardly been affected by the discontinuation of the minimum exchange rate.

Chart 4.7

PRICE EXPECTATIONS

Survey on expected movements in prices for coming 12 months



Sources: SECO, SNB

5 Monetary developments

In recent months, short-term interest rates on the money market approached the interest on sight deposits at the SNB of -0.75% ; interest rates in Switzerland were thus lower than in most other countries. However, due to negative inflation, Switzerland's real interest rates, which ultimately determine investment returns, were higher than its nominal rates. Moreover, they were also higher than real interest rates in other countries, such as the US, Germany and the UK.

Despite the low interest rates, mortgage growth has continued to weaken slightly in recent months. Notwithstanding this, imbalances on the mortgage and real estate markets remained high.

In light of uncertainty regarding the future of Greece, the Swiss franc continues to serve as a safe haven currency. Thus the export-weighted external value of the Swiss franc was approximately 12% higher in mid-June than at the beginning of the year. Over time, negative interest rates on the Swiss money and capital markets should help to correct the overvaluation of the Swiss franc. The rise in long-term interest rates abroad has also led to a widening of the interest rate differential with these countries of late. As conditions continue to normalise on international financial markets, investments in other currencies should become more attractive; this, in turn, is likely to help ease the overvaluation of the Swiss franc. The slowdown we are now observing in the economy also suggests that the Swiss franc is very unlikely to remain persistently high.

SUMMARY OF MONETARY POLICY SINCE THE LAST ASSESSMENT

Continuation of the monetary policy measures of 15 January 2015

At its monetary policy assessment on 19 March 2015, the SNB affirmed its continuation of the monetary policy measures announced on 15 January 2015 and decided to leave the target range for the three-month Libor unchanged at -1.25% to -0.25% . It also left unchanged, at -0.75% , the interest rate on sight deposits held by banks and other financial market participants at the SNB which exceed a given threshold. Furthermore, the SNB underlined its commitment to taking account of the exchange rate situation, and its impact on inflation and economic developments, in formulating its monetary policy. It remains active in the foreign exchange market to influence monetary conditions as necessary.

Fewer exemptions from negative interest on sight deposit accounts at SNB

On 22 April 2015, the SNB completed its review of exemptions from negative interest rates and considerably reduced the group of sight deposit account holders that are exempt. Since then, the only sight deposit accounts to be exempt from negative interest are those of the central Federal Administration and the compensation funds for old age and survivors' insurance, disability insurance and the fund for loss of earned income (AHV/AVS; IV/AI; EO/APG).

Higher sight deposits at the SNB

Since the monetary policy assessment of March 2015, total sight deposits held at the SNB have increased slightly. They were up by CHF 12.1 billion, from CHF 443.0 billion to CHF 455.1 billion, as measured in the last calendar week before the assessments in mid-March 2015 and mid-June 2015, respectively. Between the assessments in mid-March 2015 and mid-June 2015, sight deposits averaged CHF 449.5 billion, of which CHF 380.9 billion was accounted for by domestic banks and the remaining CHF 68.6 billion by other financial market participants.

High level of banks' surplus reserves

Between 20 February and 19 May 2015, statutory minimum reserves averaged CHF 14.8 billion. This represents a slight increase since the previous period (20 November 2014 to 19 February 2015). Overall, banks exceeded the requirement by some CHF 372.1 billion (previous period: CHF 336.3 billion). Thus banks' surplus reserves have again increased somewhat.

MONEY AND CAPITAL MARKET INTEREST RATES

Money market interest rates continue in negative territory

Since the monetary policy assessment of mid-March, both secured and unsecured money market interest rates have hardly moved. They remain in negative territory, close to the interest on sight deposits at the SNB of -0.75% (cf. chart 5.1).

The three-month Libor stood at around -0.8% . Interest rates on the secured money market (Swiss Average Rates) were slightly higher than those on the unsecured money market.

Volatile long-term interest rates

Yields on long-term Confederation bonds mainly followed the international trend. They showed increased volatility and at times receded back into negative territory. Thus since the monetary policy assessment in March, yields on ten-year Confederation bonds fluctuated between -0.2% and 0.3% . Mid-June saw yields at approximately 0.1% , which was slightly higher than in mid-March.

Steeper yield curve

The yield curve for Confederation bonds was steeper in mid-June than in mid-March (cf. chart 5.2). This reflects movements in long-term interest rates, which, in line with the international market trend, were slightly higher in June than three months earlier.

Slight rise in mortgage rates

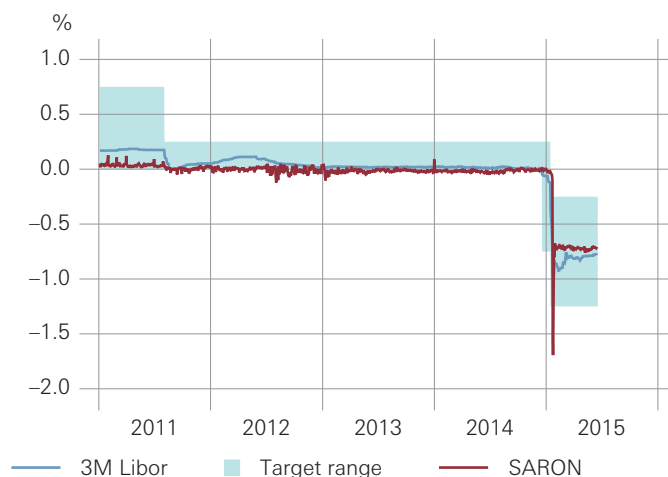
Since the introduction of negative interest on sight deposits held at the SNB, banks have increased the customer premium on new mortgage loans. One reason is that a significant share of banks' refinancing costs consists of interest paid on savings deposits, which, unlike the money market interest rates, has not fallen below zero. To counter pressure on the interest rate margins, the banks raised mortgage rates slightly.

Increase in long-term real interest rates

The estimated long-term real interest rate rose from -0.1% at the time of the monetary policy assessment in March to just over 1% (cf. chart 5.3). This estimate is based on the development of the ten-year yield on Confederation bonds and the estimated inflation expectations for the same time horizon, determined using a vector autoregressive (VAR) model. These inflation expectations declined, due to the marked fall in consumer prices in the first two quarters of 2015, which, accompanied by a slight increase in nominal interest rates, was reflected in a considerable rise in real interest rates.

Chart 5.1

MONEY MARKET RATES

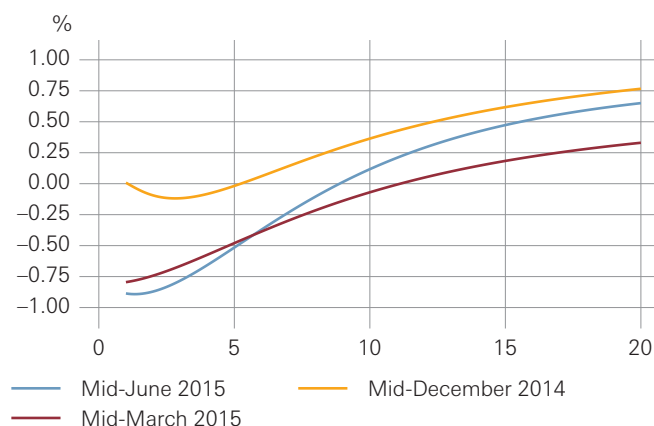


Sources: Bloomberg, SIX Swiss Exchange Ltd, SNB

Chart 5.2

TERM STRUCTURE OF SWISS CONFEDERATION BONDS

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



Source: SNB

Chart 5.3

ESTIMATED REAL INTEREST RATE

10-year Confederation bonds
Inflation expectations estimated with VAR model



Source: SNB

Chart 5.4

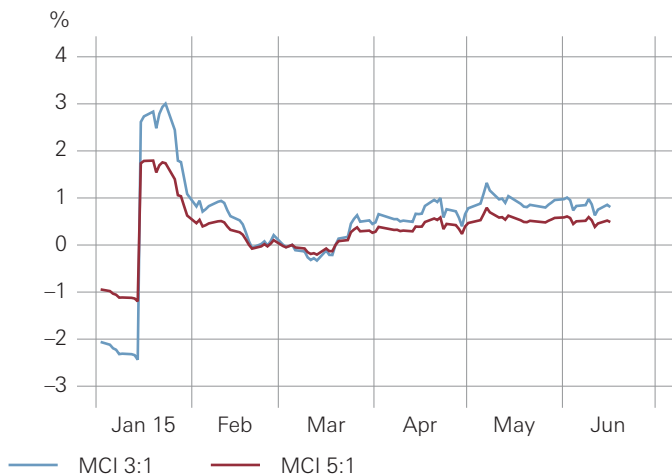
EXCHANGE RATES



Source: SNB

Chart 5.5

MCI NOMINAL



Source: SNB

Chart 5.6

REAL EXTERNAL VALUE OF SWISS FRANC

Export-weighted, January 1999 = 100



Source: SNB

EXCHANGE RATES

Stronger Swiss franc since mid-March

The Swiss franc has gained in value since the monetary policy assessment of mid-March (cf. chart 5.4). The appreciation against the US dollar was mainly due to weaker US economic data, which led market participants to revise their expectations on when US interest rates would begin to rise. The strength against the euro resulted from uncertainty surrounding Greece and ECB bond purchases.

Tighter monetary conditions

Since mid-March, the higher valuation of the Swiss franc at unchanged short-term interest rates has led to slightly more restrictive monetary conditions. 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 exchange rates, two versions of the index are used, 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 a tightening of monetary conditions.

Real external value of Swiss franc at very high level

The nominal appreciation of the Swiss franc has resulted in a further slight increase in the real export-weighted external value of the Swiss franc since March (cf. chart 5.6). It therefore remains at a very high level.

STOCK MARKETS

Stock market setback overcome

The Swiss Market Index (SMI), which comprises the 20 largest and most liquid companies in the Swiss stock market, dipped sharply following the discontinuation of the minimum exchange rate in mid-January. It recovered rapidly, however, and already in March occasionally reached its pre-discontinuation level. It held this level in the period between March and June, despite substantial fluctuations (cf. chart 5.7).

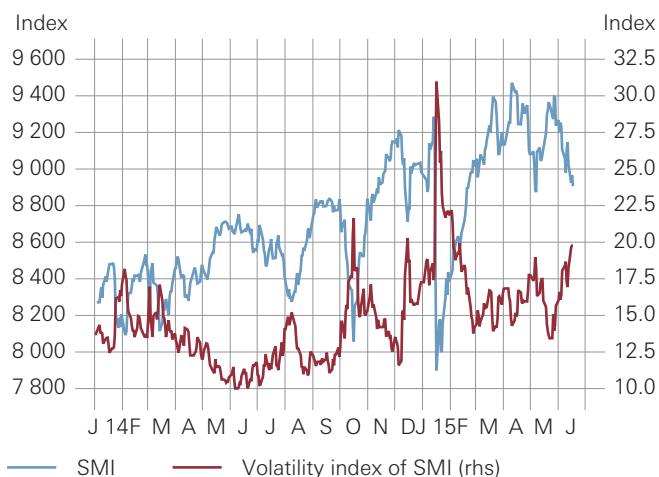
The expected volatility of the SMI, which is calculated using option prices, almost doubled following the discontinuation of the minimum exchange rate, but quickly normalised in line with the SMI's recovery. The volatility index is a measure of market uncertainty. In June, market uncertainty was slightly above its average for 2014.

Growing differences between sectoral indices

The slump in mid-January 2015 affected all the major sectoral indices of the Swiss Performance Index (SPI) almost equally strongly. Since then, the financials and industrials sub-indices have fared better than health care and consumer goods stocks. The movements of these four sub-indices are shown in chart 5.8, which was indexed at 100 on 14 January 2015 (the day before the discontinuation of the minimum exchange rate).

Chart 5.7

SHARE PRICES AND VOLATILITY

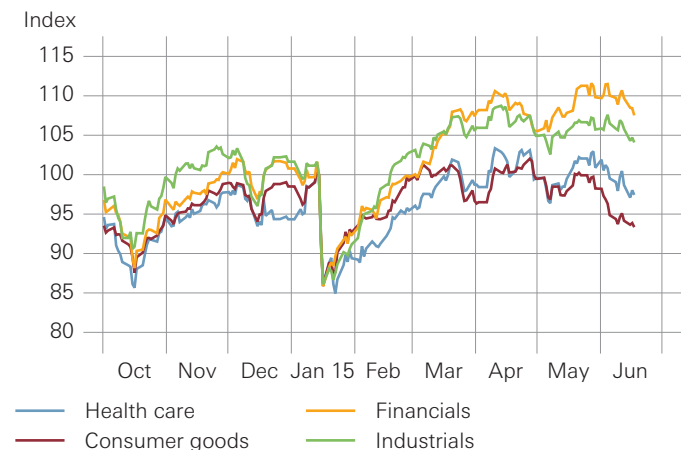


Sources: Bloomberg, Thomson Reuters Datastream

Chart 5.8

SELECTED SPI SECTORS

14 January 2015 = 100



Source: Thomson Reuters Datastream

MONETARY AND CREDIT AGGREGATES

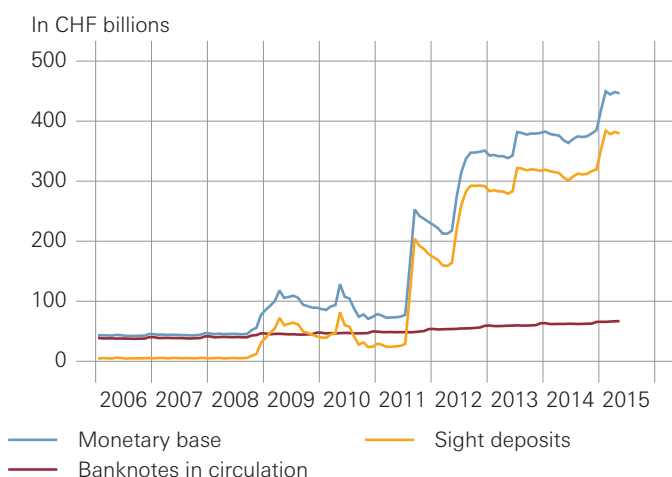
Monetary aggregates largely unchanged

The monetary base has remained largely stable since February (cf. chart 5.9). From February to May, the sight deposit account balances held by domestic banks at the SNB decreased slightly, while banknotes in circulation increased somewhat.

The broader monetary aggregates, which measure money stocks held by private households and companies, also saw little change (cf. chart 5.10). In May, the M1 monetary aggregate (notes and coins in circulation, sight deposits and transaction accounts) was down by 0.1% year-on-year. In the same period, M2 (M1 plus savings deposits) increased by 0.8% and M3 (M2 plus time deposits) by 1.5% (cf. table 5.1).

Chart 5.9

MONETARY BASE

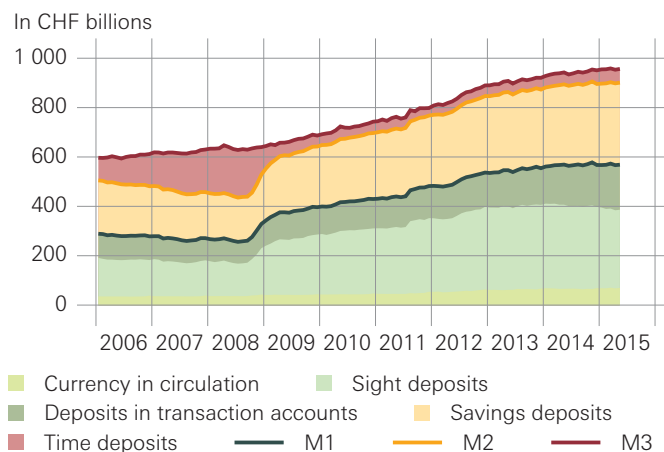


Source: SNB

Chart 5.10

MONETARY AGGREGATES

Including PostFinance



Source: SNB

Table 5.1

MONETARY AGGREGATES AND BANK LOANS

Year-on-year change in percent

	2014	2014	2014	2014	2015	2015	2015	2015
		Q2	Q3	Q4	Q1	March	April	May
M1 ¹	3.8	4.2	3.1	2.8	1.0	1.2	-0.1	-0.1
M2 ¹	3.5	3.7	3.1	2.9	1.6	1.6	0.8	0.8
M3 ¹	3.8	3.9	3.4	3.4	2.5	2.3	1.5	1.5
Bank loans, total ^{2, 4}	4.1	4.5	4.4	3.5	2.5	2.2	1.7	
Mortgage claims ^{2, 4}	3.9	3.8	3.8	3.6	3.6	3.5	3.5	
Households ^{3, 4}	3.5	3.6	3.4	3.3	3.5	3.6	3.5	
Private companies ^{3, 4}	4.8	4.5	4.5	4.4	3.9	3.7	3.9	
Other loans ^{2, 4}	5.3	7.7	8.0	2.6	-2.9	-4.5	-7.5	
Secured ^{2, 4}	4.3	4.3	8.8	8.0	4.2	2.9	-1.4	
Unsecured ^{2, 4}	6.0	10.0	7.5	-1.0	-7.2	-9.1	-11.3	

¹ On 26 June 2013, PostFinance was granted a banking licence. The growth rates are based on monetary aggregate figures adjusted retroactively for the period January 2005 to May 2013 (cf. *Monthly Statistical Bulletin*, table B2a online, and 'Information on SNB statistics', August 2013, p. III).

² Monthly balance sheets.

³ Credit volume statistics.

⁴ Growth rates for the bank loans item and for its components include information provided by banks on changes in their classification practices. Consequently, they may deviate from growth rates published in the *Monthly Bulletin of Banking Statistics*.

Source: SNB

Swiss franc deposits predominantly held by Swiss residents in banks in Switzerland

Apart from notes and coins in circulation, the M3 monetary aggregate includes Swiss franc deposits of non-banks resident in Switzerland (private households and non-financial companies) at banks in Switzerland.

Chart 5.11 presents a comprehensive picture of Swiss franc deposits worldwide, including the Swiss franc deposits of foreign non-banks at banks in Switzerland, and the Swiss franc deposits of domestic and foreign banks at banks in Switzerland. Also included are Swiss franc deposits of banks and non-banks at banks abroad (based on data provided by the BIS). The chart thus provides an overview of Swiss franc deposits held at banks worldwide. Other forms of Swiss franc investments, notably investments in Swiss franc securities, are not included. The period under review is 2009 to 2014, and thus covers the years in which the Swiss franc appreciated sharply.

The chart shows that, at the end of 2014, the investments included in the M3 aggregate (blue) made up 72% of Swiss franc deposits at banks worldwide. At the beginning of 2009, this share was just 51%. By contrast, Swiss franc deposits of banks at banks abroad have increased sharply (turquoise). Swiss franc deposits of foreign customers (banks and non-banks) at banks in Switzerland (light green and orange) grew in 2011 and 2012, which, aside from minor methodological differences, corresponds to the results of the SNB policy paper ‘A safe haven: international demand for Swiss francs during the euro area debt crisis’ by Raphael A. Auer (cf. pp. 40–53 in this publication). These deposits were subsequently reduced again, and made up 11% of Swiss franc deposits

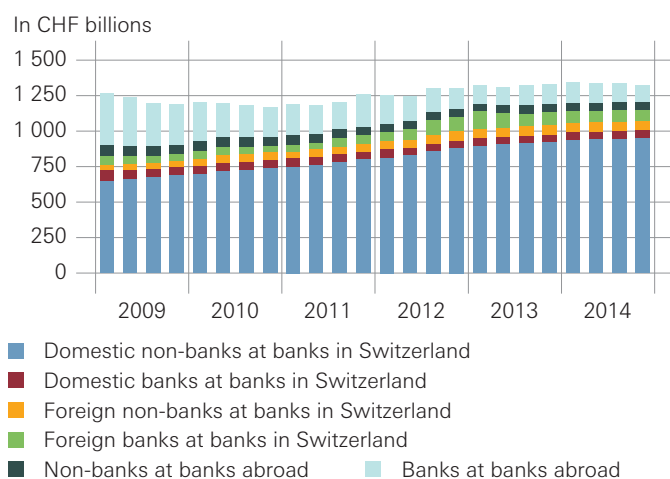
worldwide by the end of 2014. The chart shows that the bulk of Swiss franc deposits are held by domestic non-banks at banks in Switzerland. The significance of other Swiss franc deposits has receded in the period since 2009.

Mortgage growth unchanged

In the first quarter of 2015 – as in the preceding quarter – banks’ mortgage claims, which make up roughly four-fifths of all domestic bank lending, were up 3.6% year-on-year. The breakdown by borrower indicates that growth in mortgage lending to private companies declined, while growth in mortgage lending to private households advanced slightly (cf. table 5.1).

Chart 5.11

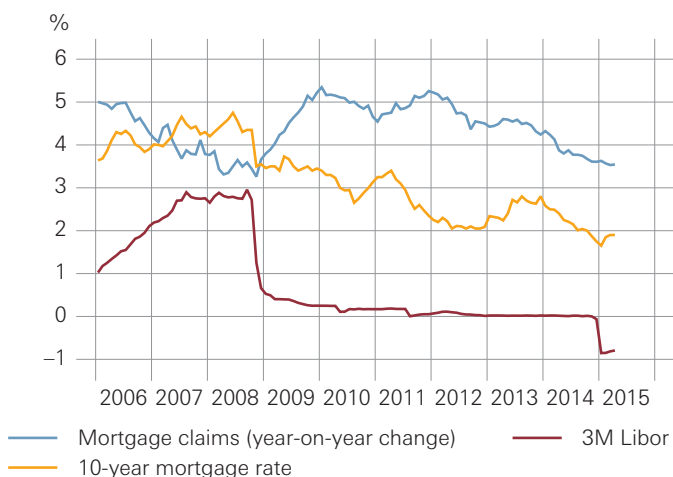
SWISS FRANC DEPOSITS WORLDWIDE



Sources: BIS, SNB

Chart 5.12

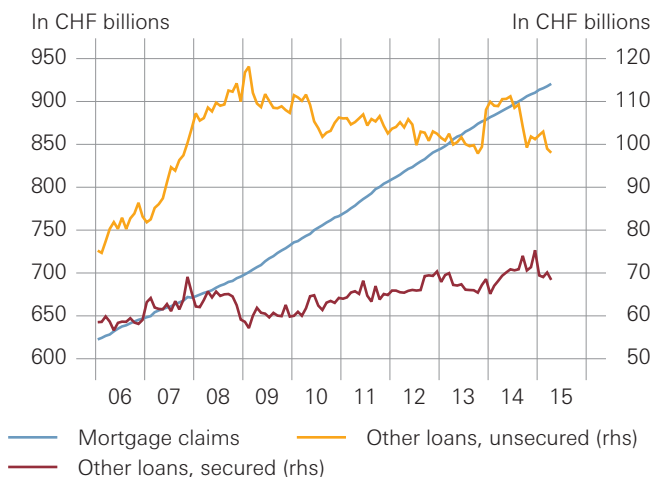
MORTGAGE CLAIMS AND 3M LIBOR



Sources: Bloomberg, SNB

Chart 5.13

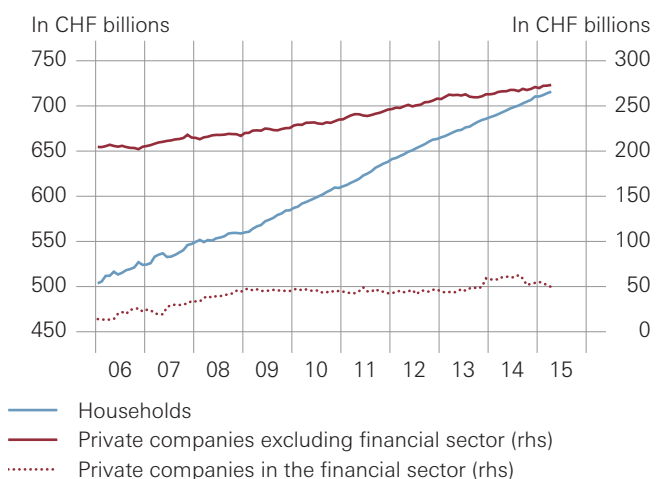
MORTGAGE CLAIMS AND OTHER LOANS



Source: SNB

Chart 5.14

LOANS TO HOUSEHOLDS AND COMPANIES



Source: SNB

Despite the recent increase in mortgage rates, the level of interest rates remains very low in historical terms and thus continues to underpin the demand for mortgage loans (cf. chart 5.12). The weaker growth in mortgage lending observed since 2012 may be attributed to various measures taken in the last three years to restrain the banks' appetite for risk and strengthen their resilience. These include their own self-regulation measures, which subject mortgage lending to stricter minimum requirements. Furthermore, at the proposal of the SNB, the Federal Council activated the countercyclical capital buffer in 2013 and increased it a year later. This requires the banks to back their mortgage loans on residential property with additional capital.

Decline in other loans

In the first quarter, other loans (i.e. loans not secured by mortgages) were down by 2.9% year-on-year, after recording a year-on-year gain in the fourth quarter of 2014 (cf. table 5.1). Compared to mortgage loans, movements in other loans were substantially more volatile. Aside from short-term fluctuations, however, their volume has remained largely unchanged since 2009. The modest increase in secured other loans observed in these last six years was offset by a slight decline in unsecured other loans (cf. chart 5.13).

Growth in lending by sector

Both households and non-financial companies have benefited from the favourable financing conditions of recent years, as reflected in a continuous rise in bank loans (cf. chart 5.14). At the end of April 2015, loans to households increased year-on year by CHF 22.8 billion (3.3%) and to non-financial companies by CHF 7.1 billion (2.7%). By contrast, loans to financial companies, which at a significantly lower volume exhibited more volatility, declined by CHF 10.9 billion (-18.1%).

Business cycle trends

SNB regional network

Report for the attention of the Governing Board of the Swiss National Bank for its quarterly assessment of June 2015

Second quarter of 2015

The Swiss National Bank's delegates for regional economic development are constantly in touch with companies from different areas of the economy. This report is based on discussions conducted from mid-April to early June 2015 with 225 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 breakdown of GDP (excluding agriculture and public services).

Regions

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

Delegates

Walter Näf
Urs Schönholzer
Jean-Marc Falter
Fabio Bossi
Martin Wyss
Daniel Hanimann
Aline Chabloz
Markus Zimmerli

SUMMARY

Discussions conducted with managers and entrepreneurs in the second quarter were still shaped to a large degree by the effects of the discontinuation of the minimum exchange rate against the euro on 15 January. According to this survey, which does not factor in the public sector, economic growth – measured by real turnover – was unchanged in the quarter under review. However, turnover sank further in nominal terms because of movements in sales prices. Margins are therefore very strained for many companies, causing firms to implement a wide range of countermeasures (cf. the exchange rate survey on pp. 34 et seq.).

Following a sharp correction in the previous quarter, the outlook for real turnover growth in the coming months has improved marginally. Despite this, conditions remain very uncertain. Headcounts and the investment volume will remain at the current level.

BUSINESS ACTIVITY

Ongoing stagnation

Overall, real turnover in the manufacturing industry was unchanged against one quarter earlier. This was already the case in the previous period under review. In nominal terms however, turnover was in many instances far lower than in the previous quarter because of major reductions in sales prices.

Moreover, there are marked differences between industry categories: The machinery industry and precision instrument manufacturers reported lower real turnover against the previous quarter. Plastics processing companies reported slightly higher real turnover, as did some companies in the chemical industry.

The US as well as the Asian and Arab regions are still among the export markets enjoying high momentum. Demand in Europe remains stable overall, with sporadic signs of improvement. The automobile industry remains a major contributor. Some sectors are registering a noticeable slowdown in business activity with Russia.

The construction industry reported stable to slightly higher turnover than in the previous quarter in seasonally adjusted terms. In the finishing trade, momentum is high. Activity appears to have slowed further in residential construction, at least locally.

Real turnover is slightly higher than in the previous quarter in the services sector. Consequently, there has been a slight improvement overall since the previous quarter, when services stagnated. However, the picture is very mixed: the catering, car dealing, retail and transport industries reported higher turnover than in the previous quarter, with some segments affected positively by higher import volumes. The hotel industry and recruitment firms reported noticeably lower turnover.

Although retail saw a marginal improvement overall, the topic of cross-border shopping was frequently raised; in particular, shopping centres close to the border report that they are empty at the weekend. In the hotel industry, continued high demand from Asian tour groups and guests from the Middle East has helped to cushion the negative effects of the strong Swiss franc.

CAPACITY UTILISATION

The companies surveyed rated production capacity as marginally underutilised overall.

Around 30% of responding companies in the manufacturing industry reported an underutilisation of capacity. There are marked differences between categories here too. Capacity utilisation was assessed as significantly lower than normal by producers of electrical equipment and precision instruments as well as in the food industry. By contrast, in the machinery and plastics industries, capacity utilisation is higher than usual thanks to the backlog of orders and additional sales efforts.

In the construction industry, utilisation of technical capacity was still reported as slightly higher than normal overall. However, signs of a slowdown were identified by a number of respondents. In this regard, the effects of the vote to curb second-home ownership are often cited.

In the services sector, most sectors reported a slight to significant underutilisation of infrastructure (i.e. primarily office and retail space as well as transport capacity). Car dealers are an exception, reporting slightly higher than usual infrastructure utilisation thanks to orders from the first quarter and increased demand for services.

DEMAND FOR LABOUR

Demand for staff hardly changed

The discontinuation of the minimum exchange rate against the euro triggered numerous staffing policy measures, including hiring freezes, longer working hours for the same pay, and pay freezes – in some cases even after increases had already been decided on (cf. information in exchange rate survey below). Some companies are planning to reduce headcounts, with the focus remaining primarily on temporary staff.

Overall, staff numbers are currently rated as appropriate. In manufacturing, producers of electrical appliances reported that staff numbers are too high. In construction, staff numbers are slightly too low. Within the services sector, respondents in the hotel industry and some engineering firms and architectural practices reported that headcounts are slightly too high. By comparison, IT companies are still looking for more staff.

In all three categories, the lack of specialists has become somewhat less acute. Many companies continued to report that the level of spontaneous job applications was still high to very high, particularly in Ticino and French-speaking Switzerland.

PRICES, MARGINS AND EARNINGS SITUATION

Margins still under serious pressure

In all three main industry categories, margins overall were reported as being under serious pressure, as in the previous quarter. The discontinuation of the minimum exchange rate has triggered strong pressure on prices. Many companies have rapidly lowered prices to counter the risk of losing customers. Pressure on prices is also being passed on to domestic suppliers in order to reduce costs.

A total of 55% of the respondent companies assessed their margins as being lower than usual, half of them as significantly lower. A further 30% of companies reported that margins were within the normal range. Several measures are currently being implemented to counter the tougher competitive situation (cf. results of the exchange rate survey below).

In all branches of the manufacturing industry, profit margins were judged to be lower or even significantly lower than usual. In the construction industry, the companies surveyed reported margins to be narrower than usual.

Companies in the services sector also rated margins as lower than usual overall. Trade, the transport industry, the finance industry and recruitment firms had to contend with particularly low margins. In the banking sector, a high volume of foreign exchange and securities trading dampened this effect.

OUTLOOK

Marginally more favourable outlook

Uncertainty about the future development of the economy remains high because of the exchange rate situation. Nevertheless, real turnover is expected to increase marginally over the coming months, whereas in the previous quarter stagnation was still expected.

There are, however, considerable differences from one industry or segment to another; the construction industry is quite sceptical. Respondents in the services sector are the most confident. Many respondents continue to assess the situation in the light of the more volatile exchange rate situation.

In all industry categories, significant reductions in purchase and sales prices are still expected. Where feasible, however, companies are not reducing their sales prices by as much as the drop in purchase prices, in order to improve their margins again, at least to a certain extent.

While the survey participants in the manufacturing industry anticipate further slight staff reductions, respondents from the services sector and construction expect headcounts to remain unchanged. The sectors reporting the highest demand for staff are the pharmaceutical industry, wholesalers and telecommunications.

Many companies imposed an immediate freeze on investment following the discontinuation of the minimum exchange rate and are now thoroughly reviewing their capital expenditure. Overall, investment plans are still cautious, although slightly less so than in the previous quarter. The primary aim of investment planned within Switzerland is to increase efficiency or to meet replacement needs.

Respondents' inflation expectations – measured by the consumer price index – are still within negative territory, at –0.6% over the short term (6–12 months), compared to around –1.3% in the last survey. Expectations over the longer-term horizon of 3–5 years remain unchanged at 0.5%.

Respondents' main concern is still the tight margin situation and, linked to this, future movements in the exchange rate. Some of the discussions revealed fears that further effects from the strength of the Swiss franc may only be felt in the economy over the coming months. One of the reasons for this is that order books are rather less well filled. The uncertainty is also a result of the Greek debt situation and other existing geopolitical risks. With regard to the domestic market, criticism was levelled at both unfavourable economic conditions – which could, for example, arise as a result of the implementation of the mass immigration initiative – and increasing regulation.

Exchange rate survey: Effects of Swiss franc appreciation and company reactions

SNB regional network

Report for the attention of the Governing Board of the Swiss National Bank for its quarterly assessment of June 2015

In the economic survey for the second quarter, which was carried out from mid-April to the beginning of June 2015, delegates from the SNB's regional network also systematically raised the exchange rate issue with companies, with the aim of quantifying the effects of the Swiss franc appreciation. A total of 225 companies took part in the survey. 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).

The discontinuation of the minimum exchange rate on 15 January 2015 presents a great challenge for many companies. The new exchange rate situation has increased uncertainty about future business performance and triggered a number of measures.

OVERALL RESULTS OF THE SURVEY

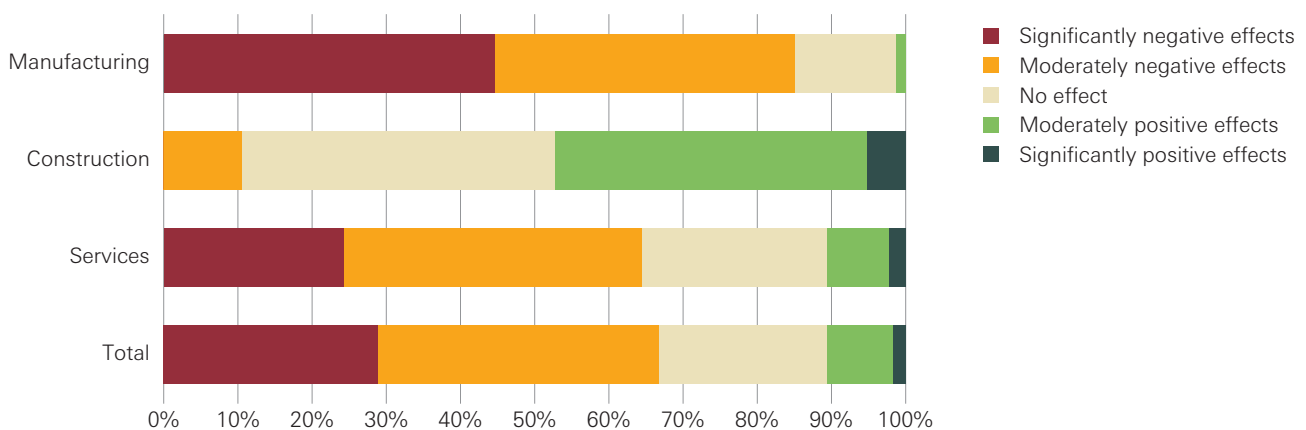
As is evident from chart 1, two-thirds of respondents report experiencing negative effects from the appreciation of the Swiss franc (29% significantly and 37% moderately negative). A total of 23% of companies say they have not felt any appreciable effect on their business activities from the Swiss franc appreciation. Positive effects have been experienced by the remaining 11% of companies included in the survey. However, the different sectors of the economy are very differently affected by the appreciation.

Manufacturing has most commonly experienced negative effects from the strength of the Swiss franc (85%). In the services sector, this figure is 65%. In construction, only 10% of the respondent companies report experiencing negative effects, with just under 50% benefiting from the Swiss franc strength through increased purchasing power. It should be noted that industrial companies with construction-related activities are included under manufacturing in this survey.

Chart 1

EFFECTS OF CHF APPRECIATION

225 companies



Source: SNB

NEGATIVE EFFECTS – WHERE AND HOW?

In all, 150 companies report moderate or significantly negative effects from the appreciation of the Swiss franc. Chart 2 shows the markets where these negative stimuli are observed and the form they take. On both the foreign and domestic markets, the negative effects are primarily felt in the form of decreased margins as a result of lower sales prices (in Swiss francs and Swiss franc-equivalent prices). On the domestic market, roughly 60% of the negatively affected companies cite this as the reason; on the export markets, around 45%.

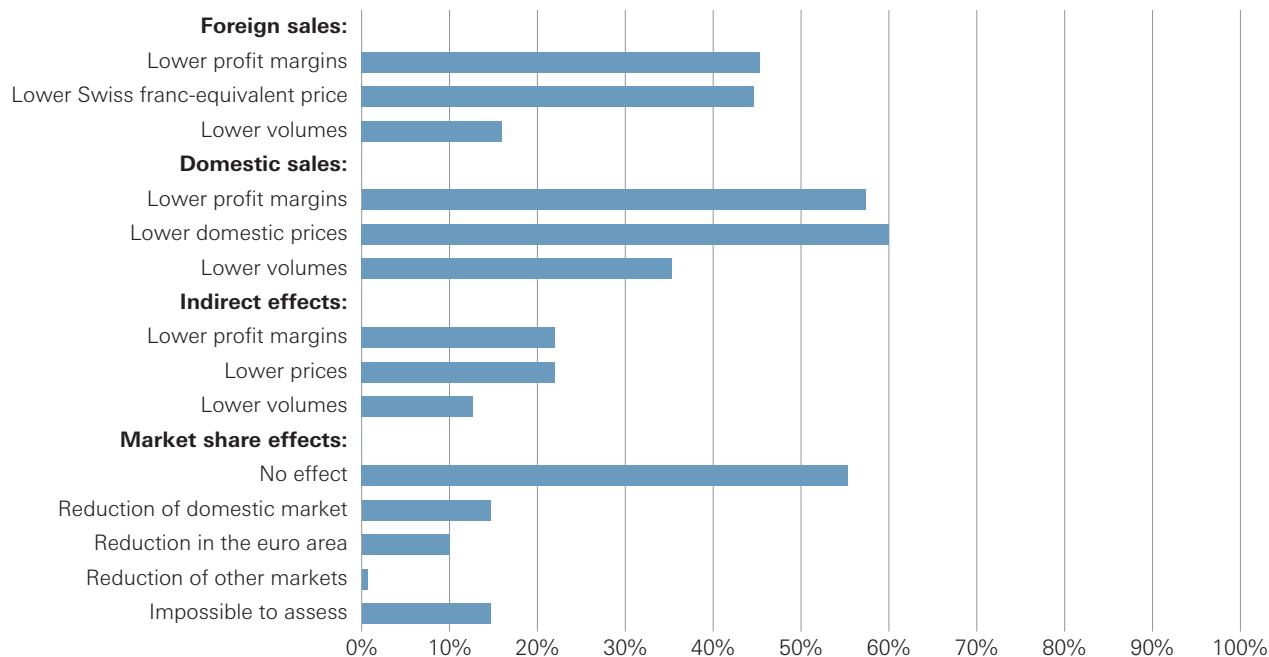
A decline in sales volumes is given as the second most important factor. It is also becoming evident that in 10–15% of the cases market share is being lost because of the unfavourable competitive situation, both in Switzerland and abroad.

In addition to the direct repercussions on the export industry, indirect effects were also reported (cf. lower half of chart 2), mainly by suppliers to export-oriented companies.

Chart 2

NEGATIVELY AFFECTED COMPANIES: EFFECTS OF CHF APPRECIATION

150 companies, multiple answers possible



Source: SNB

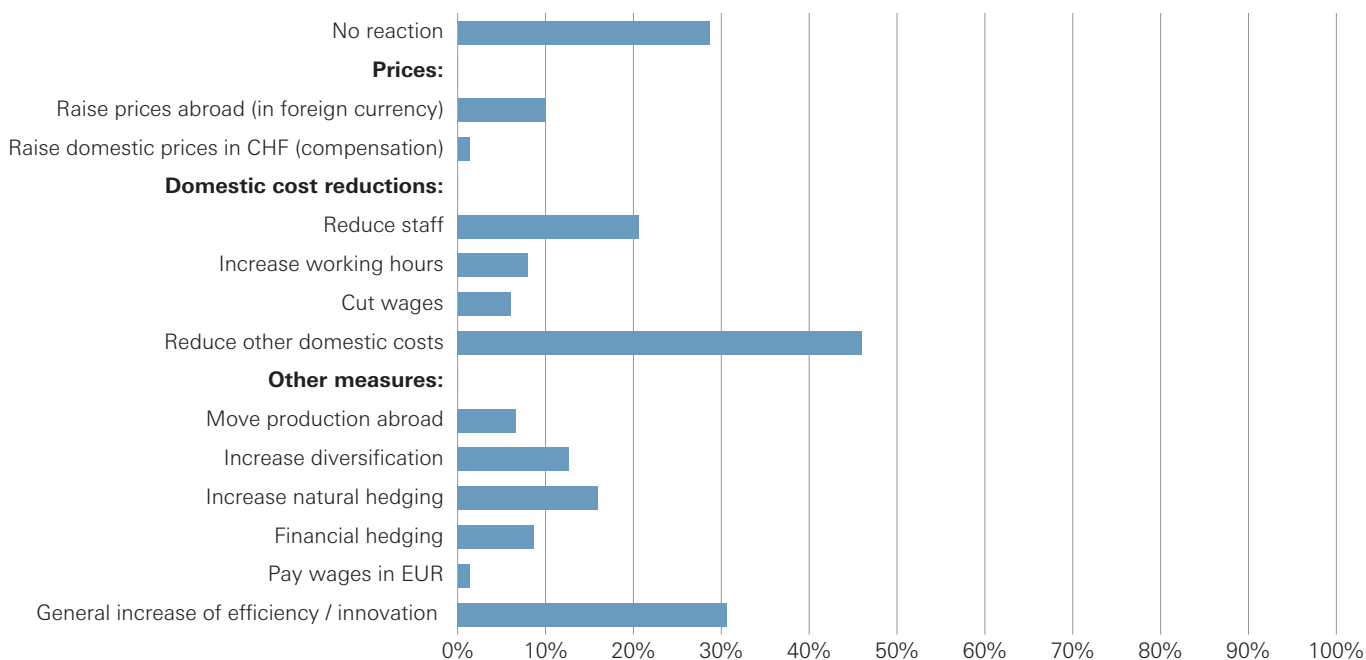
NEGATIVE EFFECTS – HOW ARE COMPANIES REACTING?

Companies were also asked about the measures they had already taken to counter the effects of the Swiss franc appreciation. Chart 3 shows the range of measures already taken. Roughly 70% of the negatively affected companies have opted to take measures. Reducing production costs or boosting efficiency, for example by making more purchases in the euro area, were the measures reported most frequently (50% and 30% of the companies respectively). Labour costs are mainly being cut by reducing staff numbers (20%) or increasing working hours (8%). Other strategies include expansion of hedging and greater diversification by product, market and currency. Of the companies negatively affected by the strong Swiss franc, 7% are moving parts of their production abroad.

Chart 3

NEGATIVELY AFFECTED COMPANIES: MEASURES TAKEN IN REACTION TO CHF APPRECIATION

150 companies, multiple answers possible



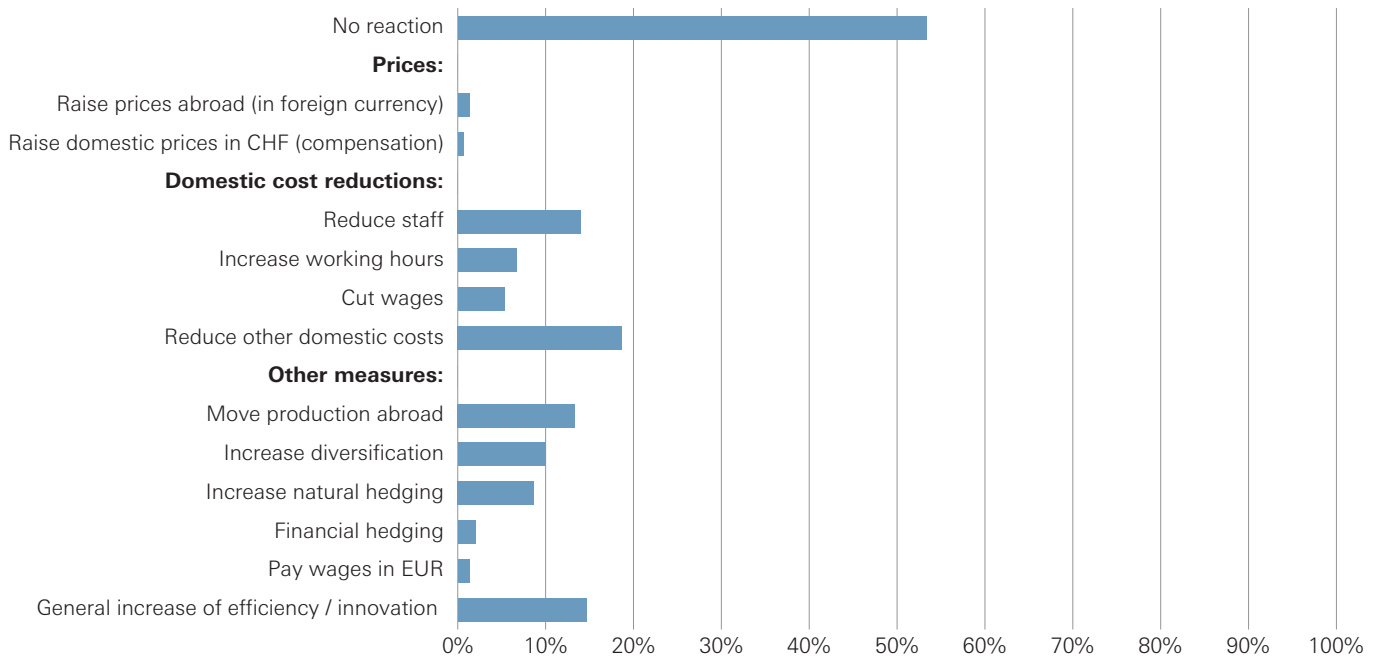
Source: SNB

Chart 4 shows the reactions which are still being considered by negatively affected companies. Here too, roughly the same priorities with respect to potential measures are evident: The main measures under discussion are reducing costs, increasing efficiency and innovation, while reducing staff and moving a part of production abroad are also being considered. However, the number of companies contemplating such measures is smaller, in most cases, than those who have already implemented measures.

Chart 4

NEGATIVELY AFFECTED COMPANIES: MEASURES BEING CONSIDERED DUE TO CHF APPRECIATION

150 companies, multiple answers possible



Source: SNB

POSITIVE EFFECTS – WHERE AND HOW?

Moderately or even significantly positive effects from the appreciation of the Swiss franc were experienced by 24 respondent companies (11% of total). As can be seen from chart 5, the greater part of the positive effects came in the form of lower input costs (83% of cases) and/or improved profit margins (53% of cases). More favourable conditions for investment and for research and development were mentioned by 38% of the companies.

The improved business conditions are likely to result primarily in lower sales prices in Switzerland. Around a quarter of the positively affected companies indicated that they were addressing the situation this way. To a lesser extent, the more favourable business conditions also lead to more investment in equipment, research and development, as well as higher salaries or increased profit-sharing.

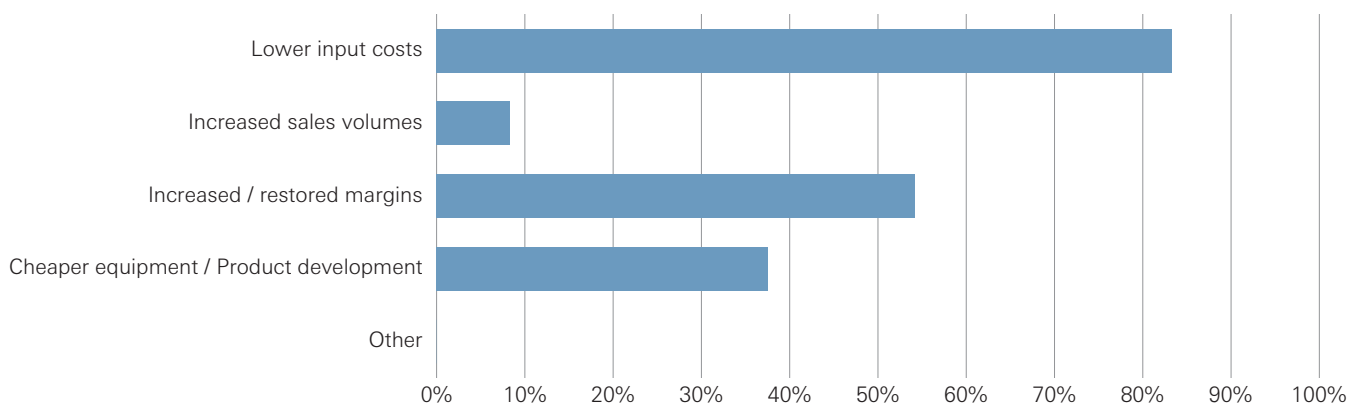
NO EFFECTS – WHAT ARE THE REASONS?

The 23% of companies that report experiencing no significant effects from the Swiss franc appreciation on their business activity mainly consist of companies not exposed to exchange rate movements. However, exchange rate effects can also be neutralised, through positive and negative factors offsetting each other, or through hedging transactions conducted before the discontinuation of the minimum exchange rate (cf. chart 6).

Chart 5

POSITIVELY AFFECTED COMPANIES: EFFECTS OF CHF APPRECIATION

24 companies, multiple answers possible

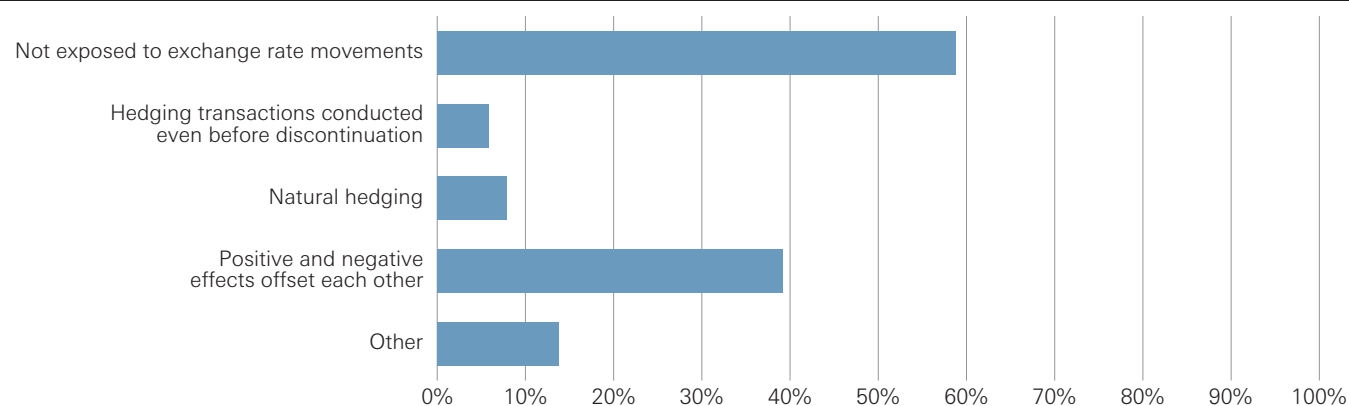


Source: SNB

Chart 6

COMPANIES NOT AFFECTED: EXPLANATIONS

51 companies, multiple answers possible



Source: SNB



A safe haven: international demand for Swiss francs during the euro area debt crisis

By Raphael A. Auer ¹

How large was the international demand for CHF during the peak of the European debt crisis, through what channels was this demand realised, and what are the financial risks created by the rapid inflow of funds? Whereas the demand for CHF during earlier periods can be attributed to both domestic residents and non-residents, this paper focuses on the demand from non-residents and documents that from August 2011 to February 2013, parties from outside Switzerland accumulated CHF 132 billion via Swiss bank accounts and increased their exposure by a further CHF 42 billion through ownership of CHF-denominated bonds and shares of Swiss companies. Most of these positions were acquired through banks that are physically located in Switzerland, but foreign-owned. In particular, CHF 78 billion were accumulated through the Swiss branch offices of foreign-domiciled international banks, which caused the balance sheets of those branches to increase almost fivefold. Despite the large amounts involved, the financial stability of these branch offices would not be threatened should the safe-haven flows reverse sharply at some point in the future. The reason is that the inflows are almost entirely invested in sight deposit accounts at the Swiss National Bank (SNB) and can thus be withdrawn at short notice without creating financial turmoil.

¹ This paper draws on studies by Lukas Altermatt, Romain Baeriswyl, Marco Huwiler, and Pinar Yesin. I would like to thank them along with Adrien Alvero for excellent research assistance. The views presented in this paper are those of the author and not necessarily those of the Swiss National Bank.

1 Introduction

Political stability, sound fiscal and monetary policy, and the resulting steady macroeconomy make the CHF the quintessential safe-haven currency to which Swiss investors return and international investors flock in times of crisis.

The safe-haven nature of the CHF poses a challenge for the Swiss economy as the CHF tends to appreciate whenever a global crisis looms. This pattern has been especially pronounced in recent years. Against a backdrop of substantial appreciation during the 2008–2009 global financial crisis and the subsequent emergence of concerns about government solvency in some European countries, the Swiss currency skyrocketed in late 2010 and throughout the first three quarters of 2011 as the euro area debt crisis became increasingly severe.

The resulting overvaluation and the associated deflationary pressure led the SNB – in the face of interest rates close to zero and no other policy options – to impose a minimum exchange rate of CHF 1.20 against the euro on 6 September 2011, a policy that remained in place until 15 January 2015.

While the minimum exchange rate was being upheld, the SNB had to intervene whenever demand for the CHF exceeded supply at the minimum rate. In late 2011 and in 2012, the SNB intervened on foreign exchange markets to the extent of CHF 17.8 billion and CHF 188 billion respectively.²

How much did international investors' search for a safe haven drive the SNB's interventions after the introduction of the minimum exchange rate, through what channels was this international safe-haven demand realised, and what are the financial risks created by the rapid inflow of funds?

To answer these three questions, this paper quantifies the flight of international capital into the CHF for the period around the introduction of the minimum exchange rate up to the subsequent peak of the European debt crisis.

Overall, the analysis finds that from August 2011 to February 2013, parties not resident in Switzerland ('non-residents') increased their net CHF positions by CHF 132 billion via commercial banks. This increase was most intense around the Greek election in mid-2012, with non-residents' CHF positions increasing by around CHF 69 billion in the three months following April 2012.

In addition to engaging in business transactions with banks, non-residents can also obtain a CHF position by buying Swiss shares, bonds or other assets in Switzerland. Information collected by the SNB on the ownership of such assets by non-residents reveals that non-residents increased their CHF exposure in the period under review by a further CHF 42 billion through fiduciaries, raising their holdings of CHF-denominated bonds and ownership of Swiss companies.

Thus, the paper's first finding is that during the narrow period from August 2011 to February 2013, international investors were substantial counterparties of the SNB's interventions.

The revealed importance of non-residents during the period under review contrasts sharply with the patterns of capital flows prevailing in the time after 2007 and leading up to late 2011. During that period, both private capital inflows and outflows displayed a pronounced home bias (cf. Yesin (2015)). The associated repatriation of foreign assets by Swiss residents resulted in net capital inflows to Switzerland.

The paper's second finding is that foreign-owned banks played a prominent role in the build-up of non-residents' CHF positions. Most of these positions were accumulated through banks physically located in Switzerland, but owned by foreign parties.

² Cf. Swiss National Bank (2012 and 2013b). Without the minimum exchange rate, a net capital inflow to Switzerland from non-residents is by no means a necessary condition for a safe-haven appreciation. Since the exchange rate is a flexible price that can be volatile even if portfolio flows change only a little, the safe-haven status of a currency with a flexible exchange rate causes an appreciation but only small net capital flows. However, once the monetary authority introduces a binding minimum rate, further safe-haven effects are generated via quantities and thus lead to capital flows into the currency. Reynard (2008), Ranaldo and Söderlind (2010), and Grisse and Nitschka (2013) quantify the safe-haven factors that move the Swiss exchange rate.

In particular, CHF 78 billion of non-residents' positions were accumulated through the Swiss branch offices of internationally active foreign-domiciled banks. This amount is extremely large considering that, in early 2010, the combined balance sheet size of these branch offices was a mere CHF 21 billion, which subsequently increased to CHF 103 billion by the end of February 2013. Safe-haven flows thus caused the balance sheets of these branch offices to rise almost fivefold.³

The paper's third finding is that despite the large amounts involved, the stability of the Swiss banking system would not be threatened should these safe-haven flows reverse sharply at some point in the future.

The key finding regarding financial stability is that the size of positions that materialised through branches of foreign banks is not directly a cause for concern because the funds involved were not used to expand the domestic credit activity of branches, which would have transformed maturities or created other exposures. Rather, the funds are almost entirely invested in sight deposit accounts at the SNB. Since these funds are accessible on a short-term basis, the financial linkages can be resolved quickly, and a reversal of these safe-haven flows would not substantially threaten financial stability. The direct effect of reversing safe-haven flows is therefore likely to be small.⁴

This paper is structured as follows: Section 2 shows the channels through which international investors can obtain an exposure in CHF and examines how such exposures are reflected in Swiss or international statistics. Section 3 quantifies the importance of each of the potential channels, and section 4 contrasts the total uncovered amounts with the evolution of the SNB's foreign exchange rate reserves. Section 5 concludes.

3 Foreign-domiciled banks operate in Switzerland and Swiss corporations also engage in banking transactions with banks domiciled outside Switzerland. Because Swiss firms tended to accumulate CHF positions on their bank accounts abroad during the European debt crisis, this channel reduced the total CHF net position of non-residents in Switzerland.

4 However, the possible interest rate normalisation associated with a reversal of safe-haven flows might have indirect effects on financial stability.

2

How to trace non-residents' CHF positions in the data

Although anecdotal evidence for the flight into the CHF is abundant (cf., for example, Bollen (2011) or Mattich (2011)), quantifying the involved amounts and the channels through which the money flows is complicated by the fact that foreign investors do not report their overall position in CHF, or the way they have acquired it, to any public authority.

This section therefore discusses how Swiss datasets that include information on the CHF position of non-residents can be combined to quantify the overall exposure.

2.1. DEFINING NON-RESIDENTS' CHF POSITIONS, RESIDENCY VERSUS OWNERSHIP, AND THE TIME PERIOD OF INTEREST

This paper quantifies the amount by which international investors – i.e. those investors residing outside Switzerland – increased their exposure in CHF during the European debt crisis. ‘Domestic’ and ‘foreign’ is based on the principle of economic residency as defined in the System of National Accounts (cf. United Nations (2008)): a Swiss citizen residing in London is counted as a non-resident in the analysis, while a British citizen living in Zurich is counted as a Swiss domestic resident.⁵

This paper analyses monthly data from the beginning of August 2011 up to the end of February 2013. It thus includes a full month before the introduction of the minimum exchange rate on 6 September 2011.

The reason for choosing this start date is that the SNB had already put in place other measures to absorb the spiking demand for CHF before introducing the minimum exchange rate.⁶ Only when these alternative measures on their own proved insufficient to counter the safe-haven

⁵ With this definition of ‘non-residents’ CHF position’, any CHF purchase by a non-resident corresponds to an inflow of CHF funds from abroad, i.e. an international capital flow. This definition makes this paper comparable to international capital flow data. It also corresponds to the definition of cross-country exposures in the locational banking statistics of the Bank for International Settlements (BIS).

⁶ On 3 August 2011, the SNB aimed to bring the official target interest rate “as close to zero as possible” (cf. Swiss National Bank (2011a)) and expanded sight deposits from CHF 30 billion to CHF 80 billion. On 10 August, the SNB again expanded sight deposits to CHF 120 billion and also announced that it would conduct foreign exchange swap transactions to accelerate the increase in CHF liquidity (cf. Swiss National Bank (2011b)). On 17 August, the SNB yet again expanded sight deposits, this time to CHF 200 billion, noting that it would continue to employ foreign currency swaps (cf. Swiss National Bank (2011c)). Because the currency swaps substantially affected the balance sheets of both the SNB and its counterparties, the analysis of this paper starts on 1 August 2011.

pressure that led the Swiss franc to appreciate did the SNB’s Governing Board decide to introduce the minimum rate on 6 September.

The period analysed in this paper closes at the end of February 2013 since concerns about the stability of the euro area and, in consequence, international demand for CHF had levelled off substantially by that date. After the statement by Mario Draghi on 26 July 2012 (cf. Draghi (2012)) that the European Central Bank would do “whatever it takes to preserve the euro,” the yields of government debt in the euro area’s troubled economies decreased markedly. However, this did not happen at once, but only gradually. Yields continued to decrease until early January 2013 in Greece, Portugal and Spain, and until February 2013 in Ireland and Italy. The fear of a breakup of the euro area during this period of decreasing, yet still elevated, government yields could well have been a factor in the international safe haven flows into the CHF. The analysis of this paper thus ends in February 2013.⁷

2.2. POTENTIAL CHANNELS AND HOW TO IDENTIFY THEM IN OFFICIAL DATA

Identifying non-residents’ CHF positions is difficult because foreign authorities do not publish information on the CHF positions of their residents. Furthermore, while data on international capital flows are readily available, the currency denomination of such flows is not.

To overcome this problem, the analysis infers CHF positions by non-residents from statistics that their Swiss counterparties collect. For example, if a Spain-based private customer opens a CHF account at a Swiss bank, the Swiss bank will include the balance of this account as a CHF-denominated liability to a non-resident party in its balance sheet. The CHF position of foreign investors can thus be inferred from the balance sheet information of Swiss banks.⁸

How can non-residents increase their CHF positions against domestic counterparties? Chart 1 shows that if non-residents wish to raise their CHF holdings on bank accounts, they either go directly through a bank registered in Switzerland or they rely on a bank registered abroad. If the latter bank does not have a sight deposit account at the SNB, it passes on the CHF exposure to another bank that does. Through this process, nearly all non-residents’ CHF positions ultimately end up as either sight deposits held by a foreign-domiciled bank at the SNB or as CHF

⁷ Subsequent events in late 2014 and early 2015 have proved that the perception of the CHF as a safe haven persists. However, in as much as the nature of the euro area debt crisis has evolved since the start of 2013, and since geopolitical concerns might also have affected the international demand for CHF during late 2014 and early 2015, this period requires separate analysis that is left for future research.

⁸ These insights are obvious to any observer with knowledge of the concept of double-entry accounting. Any account balance that is an asset to one party is a liability to another, and the magnitude of the balance can be inferred from either of the two balance sheets.

liabilities of a bank registered in Switzerland against a counterparty based abroad.

Since non-residents mostly conduct such transactions through banks, increases in non-residents' CHF positions are thus reflected by increases in CHF liabilities against foreign counterparties in either the Swiss banking statistics or in the SNB's balance sheet. Building on Altermatt and Baeriswyl (2015), sections 3.1 and 3.2 of this paper examine Swiss banking statistics and the SNB's balance sheet in order to quantify non-residents' CHF positions.

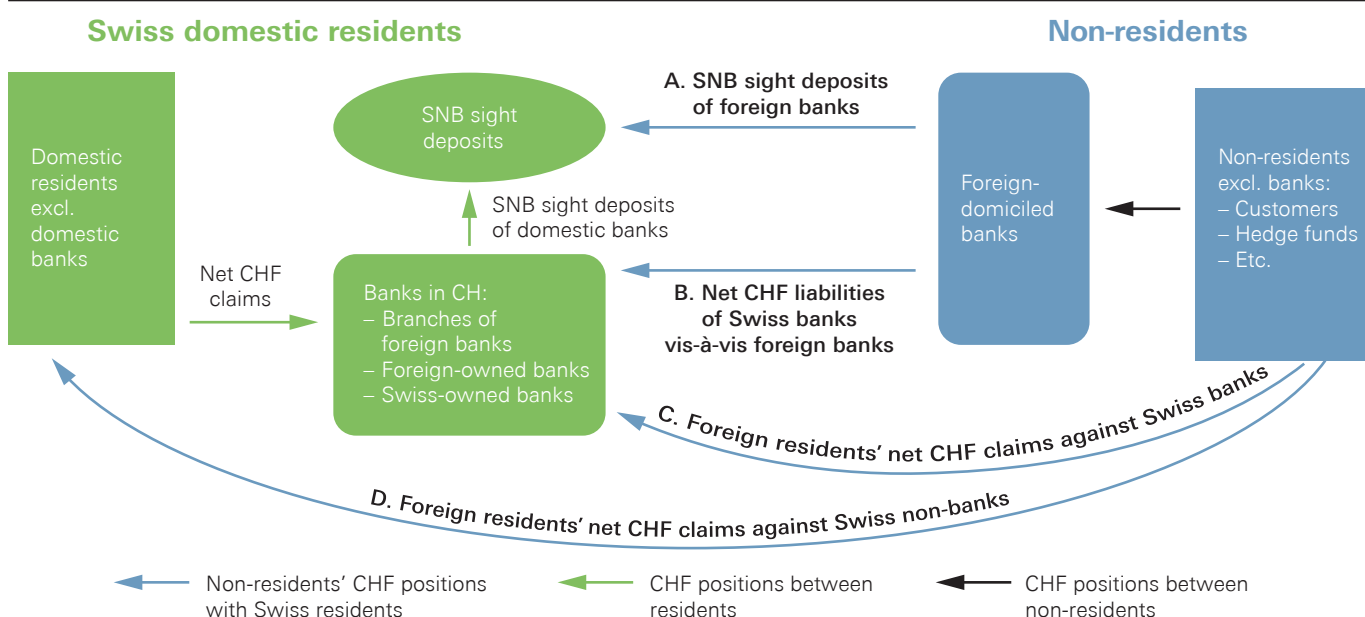
The data coverage of the banking statistics and the SNB balance sheet statistics is not complete (cf. chart 1, channel D). In addition to the problem that only on-balance-sheet positions are reported – thus omitting positions in derivatives – an important data limitation is that Switzerland is home to many multinational corporations engaging in banking transactions with non-Swiss banks (banks domiciled outside Switzerland). Such transactions are not recorded in the Swiss banking statistics because only foreign banks are involved. They are, however, recorded in the statistics of the banks' country of domicile. The latter are collected by the BIS's International Banking Statistics, which also

include information on whether funds are denominated in CHF. These data are analysed in section 3.2.2.

Data on CHF positions built up against Swiss non-banks are not included in the banking statistics either (cf. also chart 1, channel D). For example, if a non-resident customer opens a CHF account at a Swiss fiduciary, this transaction is not reflected in the banking statistics (a separate set of statistics for such transactions does exist, however). Furthermore, if non-residents acquire securities denominated in CHF (such as Swiss government or corporate debt), the increase in non-residents' CHF positions is not visible in the banking statistics. Section 3.3 quantifies the importance of such alternative channels.

Chart 1

DIFFERENT WAYS FOR NON-RESIDENTS TO INCREASE THEIR CHF EXPOSURE



Source: SNB

3

Tracing CHF demand by non-residents

This section quantifies the various ways in which non-residents obtain CHF exposures, using a variety of statistical data sources. Exposures arising from transactions that are conducted through banks domiciled in Switzerland are included in the Swiss banking statistics, while exposures from transactions that go through banks domiciled outside Switzerland are visible in the BIS's international banking statistics and the SNB's balance sheet. Finally, information on exposures that do not involve banks is included in data on the ownership of Swiss shares and bonds.

3.1. POSITIONS OF NON-RESIDENTS VIA BANKS LOCATED IN SWITZERLAND

All banks with a physical presence in Switzerland are overseen by the Swiss authorities and deliver information on their balance sheet exposures to the SNB. Quantifying

the business they undertake with non-residents is thus possible using the Swiss banking statistics.⁹

Non-residents increased their CHF positions in the period under review by engaging in transactions with three distinct categories of banks: branches of foreign banks, foreign-owned banks and Swiss-owned banks.

All three bank categories are Swiss residents as they are physically located in Switzerland. However, both branches of foreign banks and foreign-owned banks are owned by parties located abroad.

Chart 2 provides the definitions of these three bank categories and also explains the importance of each category for the accumulation of non-residents' CHF positions. Non-residents' on-balance-sheet CHF positions with respect to commercial Swiss banks located in Switzerland grew by a total of CHF 128 billion between August 2011 and February 2013.

⁹ The analysis of this section draws on Altermatt and Baeriswyl (2015), who document the counterparties of the various liquidity operations the SNB has implemented since the onset of the financial crisis in 2007. This paper builds on their basic insight, focusing however only on the impact of the minimum exchange rate, and explores the role of various bank types and their foreign customers as counterparties of the SNB after the adoption of the minimum exchange rate.

Chart 2

OVERVIEW OF INCREASE IN FOREIGN RESIDENTS' CHF POSITIONS FROM 08/2011 TO 02/2013

Bank location	Bank/account category	Description/hypothetical example	Increase In CHF billions	See section
Banks located in Switzerland	Branches of foreign banks	Branch offices of foreign-domiciled banking corporations such as 'J.P. Morgan Securities plc., London, Zurich office'	78	3.1.1
	Foreign-owned banks	Swiss-domiciled banks that are more than 50% foreign-owned. For example, 'Deutsche Bank (Switzerland) Ltd', which is not a branch office of a foreign bank	11	3.1.2
	Swiss-owned banks	'True' Swiss banks such as UBS or ZKB. Only bank offices located in CH are included (i.e., excludes 'UBS Frankfurt')	39	3.1.3
Foreign-domiciled banks (does not include branches of foreign banks in Switzerland)	SNB sight deposits by foreign-domiciled banks	Foreign-domiciled banks such as 'Barclays UK' that have a sight deposit account at SNB	9	3.2.1
	International accounts of Swiss residents with foreign-domiciled banks	Nestlé's CHF-denominated account at a UK-based bank	-5	3.2.2
All CHF positions taken on via the banking system			132	

Source: SNB

The most important bank category for meeting non-residents' CHF demand was that comprising Swiss branch offices of foreign-domiciled banks ('branches of foreign banks'). In total, non-residents' CHF positions increased by CHF 78 billion through these branches. The second category comprises banks registered in Switzerland that are not branches of foreign banks, yet are still majority-owned by foreign companies ('foreign-owned banks'). Non-residents' on-balance-sheet CHF positions built through foreign-owned banks rose by CHF 11 billion in the period under review. The third category is made up of 'true' Swiss banks, that is, banks that are both Swiss owned and located in Switzerland ('Swiss-owned banks'). Non-residents' on-balance-sheet CHF positions increased by CHF 39 billion through this category in the period under review.

Banking statistics do not include off-balance-sheet CHF positions that non-residents might have acquired through the use of derivatives. The analysis thus takes a detailed look at the balance sheets of the various bank types in order to gauge the likely off-balance-sheet CHF positions. It is vital to understand the incentives for building up off-balance-sheet CHF exposures since no official statistics on such exposures exist.

This analysis reveals that it is unlikely for branches of foreign banks or Swiss-owned banks to have engaged in sizeable off-balance-sheet CHF positions through derivatives, as their on-balance-sheet CHF exposures were almost perfectly hedged. Banks try to minimise the overall currency risk they carry. Because the examined banks are hedged through the offsetting of foreign and domestic CHF positions on their balance sheets, it does not make sense for them to engage in large off-balance-sheet CHF positions.

3.1.1. Swiss branches of foreign banks

Branches of foreign banks typically are the Swiss branches of foreign-domiciled banks, such as 'J.P. Morgan Securities plc., London, Zurich branch'. Such branches of foreign banks are registered in Switzerland and thus included in the Swiss banking statistics. The SNB's banking statistics guidelines note that branches of foreign banks are mostly branch offices of foreign-domiciled international banking corporations.¹⁰

These foreign-domiciled international banking corporations can deposit funds at the SNB if they have branch offices in Switzerland. To do this, the foreign-domiciled bank transfers funds to its Swiss branch office and the branch office then deposits the funds in its SNB sight deposit account. The branch's balance sheet subsequently records a CHF claim against a domestic counterparty (the SNB) and an offsetting CHF liability

against a foreign counterparty (the parent bank of the branch office).

Branches of foreign banks play an important role in channelling the build-up of CHF positions by non-residents. Plot I of chart 3 documents the movements in the CHF position that branches of foreign banks have taken against non-residents, while plot II documents the movements in the CHF position that branches of foreign banks have taken against domestic residents (domestic counterparties include the SNB).

Plot I shows movements in CHF-denominated assets (claims) and liabilities of branches of foreign banks with respect to non-residents. An example of a foreign CHF asset is a CHF loan to a firm located in Poland. Such carry trade loans were quite common before the financial crisis (cf. Auer et al. (2009)). Since these contracts are long term, the associated positions still exist (cf. Auer et al. (2012)). An example of a foreign CHF liability is a CHF deposit by the foreign-domiciled parent bank.

The net foreign CHF position of these banks, which is equal to 'foreign CHF assets minus foreign CHF liabilities' (solid blue line), decreased by CHF 78 billion after August 2011. This was because foreign CHF assets (dotted blue line) remained more or less unchanged, while foreign CHF liabilities (dashed blue line) surged. Since the net CHF liabilities of branches of foreign banks towards non-residents increased by CHF 78 billion, non-residents' CHF positions thus rose by the same amount.

Although branches of foreign banks built up CHF liabilities against foreign counterparties, they themselves did not take on any risk as there was a mirroring increase in net CHF claims against domestic residents. Plot II of chart 3 shows movements in CHF assets (dotted green line) against and CHF liabilities (dashed green line) towards domestic residents for branches of foreign banks. While domestic CHF liabilities remained more or less unchanged, domestic CHF assets surged, and so did the domestic CHF position (solid green line showing 'domestic CHF assets – domestic CHF liabilities').

In the aggregate, the total CHF exposure of branches of foreign banks remained close to zero. Plot III of chart 3 shows movements in the net foreign CHF position (blue line, taken from plot I), the net domestic CHF position (green line, from plot II), and the net overall CHF position (red line, equal to the sum of the net domestic position and the net foreign position) of branches of foreign banks.

Branches of foreign banks did not take on any net CHF exposure on their own as is shown in plot III, chart 3. Rather, they served as 'channel vessels' that took on total domestic CHF exposure worth CHF 78 billion and fully unloaded it onto their foreign counterparties (they may also have served directly as clearing banks).

¹⁰ It is worth noting that, because they are located in Switzerland, branches of foreign banks are categorised as domestic residents in Switzerland.

It is unlikely that branches of foreign banks took on sizeable off-balance-sheet net CHF positions through derivatives, as their on-balance-sheet CHF exposure was almost perfectly hedged. Branches of foreign banks precisely offset their decreasing net foreign CHF position with an increasing net domestic CHF position. Banks try to minimise the overall currency risk they carry; since branches of foreign banks are hedged already with their offsetting foreign and domestic CHF positions on their balance sheets, it does not make sense for them to engage in large off-balance-sheet CHF positions.

At the end of the period under review, almost the entire business activity of the branches of foreign banks consisted of channelling CHF liquidity to foreign counterparties (plot IV, chart 3). On the one hand, almost the only domestic CHF assets that these banks owned were sight deposits at the SNB. Plot IV of chart 3 shows movements in domestic CHF assets (green line taken

from chart 3) and compares it to the movements in these banks' SNB sight deposits (purple line). From August 2011 onwards, the overlap was almost perfect.

On the other hand, almost the only foreign CHF liabilities these banks had were those towards foreign-domiciled banks. Plot IV of chart 3 shows movements in foreign CHF liabilities (turquoise line) and compares these to the movements in foreign CHF liabilities towards foreign-domiciled banks (blue line, taken from plot I). Again, after August 2011, the overlap was almost perfect. The foreign CHF liabilities towards banks may actually be towards their parent companies. The ultimate counterparties might be private customers abroad, but information on this cannot be gained from Swiss banking statistics.

Chart 3 Plot I

FOREIGN CHF ASSETS AND LIABILITIES OF BRANCHES OF FOREIGN BANKS

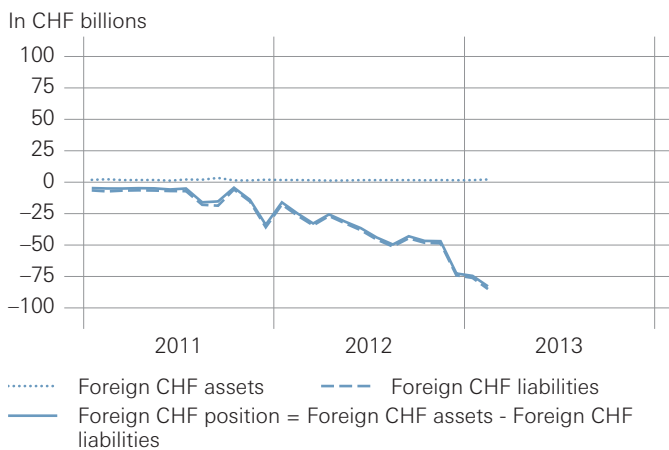


Chart 3 Plot II

DOMESTIC CHF ASSETS AND LIABILITIES OF BRANCHES OF FOREIGN BANKS

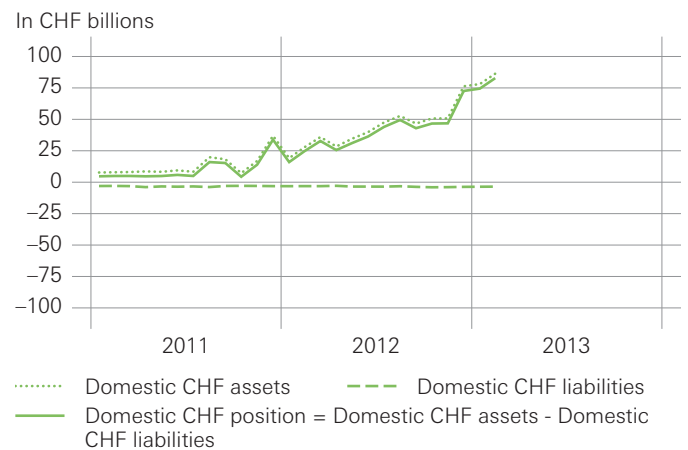


Chart 3 Plot III

OVERALL CHF POSITION OF BRANCHES OF FOREIGN BANKS

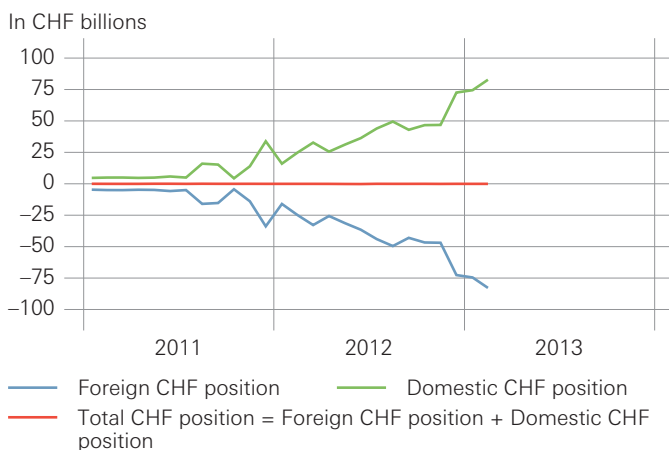
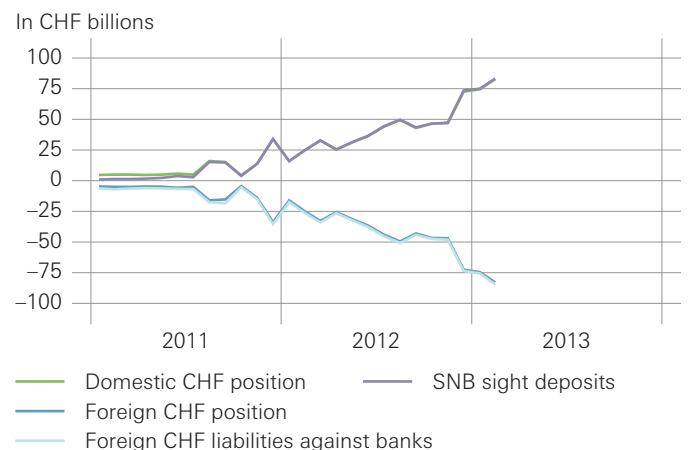


Chart 3 Plot IV

MAIN CHF ASSETS AND CHF LIABILITIES OF BRANCHES OF FOREIGN BANKS



3.1.2. Foreign-owned banks in Switzerland

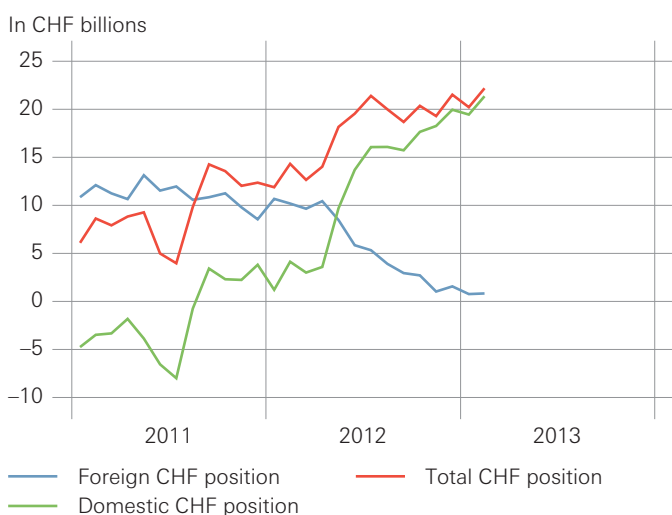
A second category is that of banks controlled by foreigners, yet physically located and registered in Switzerland. In the banking statistics, this category is referred to as ‘foreign-owned banks’. These are not branches of foreign banks since they are legally separate entities for their mother companies, but they are more than 50% owned by foreign parties. This category includes mainly subsidiaries of foreign-domiciled banks such as ‘Deutsche Bank (Switzerland) Ltd’.

Non-residents increased their CHF position with respect to foreign-owned banks by CHF 11 billion. Chart 4 shows movements in the net CHF position of foreign-owned banks with respect to non-residents (blue line), the net CHF position with respect to domestic residents (green line), and the net overall CHF position (red line, equal to the sum of the blue and green lines).

Foreign-owned banks accumulated an additional on-balance sheet exposure worth CHF 18 billion (cf. green line). After August 2011, they increased their net domestic CHF assets by CHF 28 billion (mostly on SNB sight deposit accounts), thus raising their net overall on-balance-sheet CHF exposure by CHF 18 (without rounding, this figure corresponds to the difference between CHF 28 billion and CHF 11 billion). Since these banks are owned by non-residents, these CHF 18 billion thus also increase the CHF exposure of non-residents (an exposure taken into account in section 3.3).

Chart 4

CHF POSITION OF FOREIGN-OWNED BANKS



3.1.3. Swiss-owned banks in Switzerland

‘True’ Swiss banks such as UBS are neither branches of foreign banks nor more than 50% foreign-owned.¹¹ These bank decreased their net foreign CHF position by CHF 39 billion between August 2011 and February 2013 (cf. chart 5, in particular the kink in the blue line in early 2012). This corresponds to a direct increase in non-residents’ CHF positions by CHF 39 billion.

These banks did not take on any CHF exposure on their own. The increase in the domestic CHF position (green line) offset the decrease in the foreign CHF position (blue line), so that the total CHF position of Swiss-owned banks in Switzerland at the end of the period under investigation was more or less equal to what it was before the minimum exchange rate was introduced. Because their on-balance-sheet total CHF exposure did not change substantially after August 2013, it is unlikely that Swiss-owned banks built up any large off-balance-sheet CHF exposure.

3.2. CHF POSITIONS WITH BANKS DOMICILED OUTSIDE SWITZERLAND

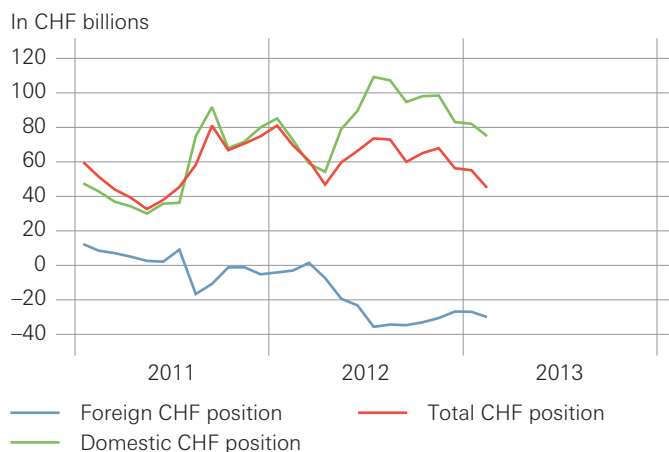
Banks domiciled in other countries and without a physical presence in Switzerland may also hold or owe CHF. These banks are not included in the Swiss banking statistics. However, if they hold CHF on a sight deposit account at the SNB, this exposure is included in the balance sheet of the SNB. By contrast, if the banks have a CHF exposure to a non-bank Swiss counterparty, they report it to their national authority, which in turn delivers these data to the BIS to be included in the BIS banking statistics. The lower

¹¹ Note that only branches located in Switzerland are included in this paper, in order for these statistics to correspond to statistics on international capital flows (i.e. this paper examines only banks which form part of the ‘domestic offices’ reporting entity in the SNB’s banking statistics. This corresponds to the definition of exposures as recorded in the BIS locational banking statistics).

Chart 5

CHF POSITION OF SWISS-OWNED BANKS

Includes only branch offices located in Switzerland



Source: SNB

rows of chart 2 list the two types of transactions that involve relevant CHF exposures.

3.2.1. SNB sight deposits of foreign-domiciled banks

The SNB is unique among central banks in that it allows banks domiciled abroad to participate in its repo system.¹² Consequently, banks that do not reside in Switzerland can also have a sight deposit account at the SNB even if they do not maintain a branch in Switzerland. Chart 6 displays the movements in sight deposits at the SNB for banks that are domiciled abroad and thus not registered in Switzerland. These banks are not included in the Swiss banking statistics. Information on their SNB sight deposits is, however, included in the SNB's balance sheet.

While the increase in such deposits was pronounced in relative terms, the overall increase was small. From August 2011 to February 2013, sight deposits of foreign-domiciled banks at the SNB increased by CHF 9 billion. Non-residents' CHF positions thus grew by CHF 9 billion through the use of SNB sight deposit accounts by banks domiciled abroad. An offsetting factor was that Swiss households and firms could hold CHF-denominated accounts with these foreign-domiciled banks.

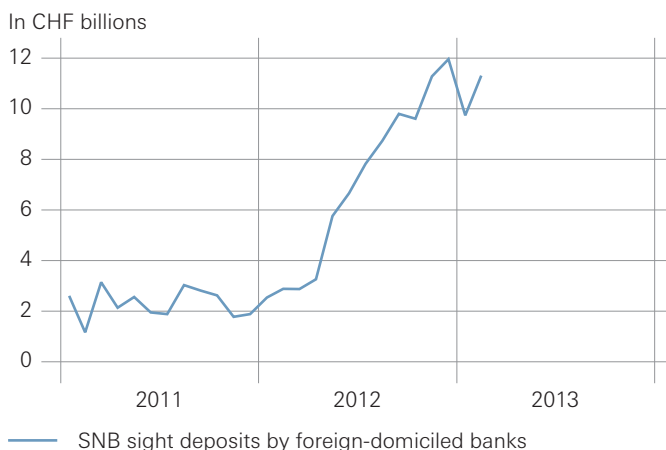
3.2.2. CHF-denominated accounts of Swiss non-bank private sector residents with foreign-domiciled banks

There is a further way in which residents of Switzerland and non-residents can interact through banks. Swiss companies operating internationally usually have accounts with non-Swiss banks, too, and some of these accounts are denominated in CHF.

¹² For a description, cf., for example, Auer and Kraenzlin (2011) and Auer et al. (2012).

Chart 6

SNB SIGHT DEPOSITS BY FOREIGN-DOMICILED BANKS



Source: SNB

From August 2011 to February 2013, banks domiciled outside Switzerland reduced their net claims against Swiss non-banks by CHF 5 billion, which means that the net position of non-residents has been overstated by this amount in the above analysis. Such CHF positions of banks domiciled outside Switzerland with respect to Swiss firms and private customers are visible in the BIS locational banking statistics (in the 'External positions of reporting banks vis-à-vis individual countries – vis-à-vis the nonbank private sector'). Chart 7 depicts the path of this exposure.

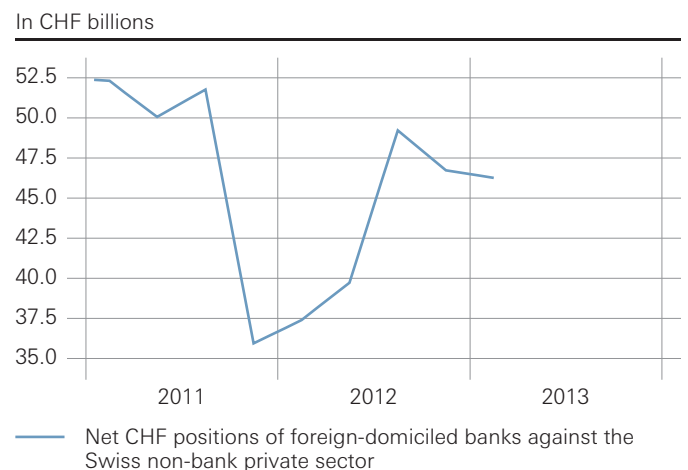
As shown in sections 3.1.1, 3.1.2., and 3.2.1, non-residents' CHF positions increased by CHF 78 billion via foreign branches, CHF 11 billion via foreign-owned banks (likely to be acting on the behalf of their owners domiciled abroad) and a further CHF 9 billion via the use of sight deposit accounts by foreign-domiciled banks. However, the resulting total build-up of non-residents' CHF positions via foreign-owned banks has to be adjusted downwards by CHF 5 billion because these foreign-owned banks were sometimes acting on behalf of their Swiss counterparties. This calculation indicates the complexities involved when defining what positions are ultimately to be deemed foreign in a world with both international banks and internationally active non-bank corporations.

3.3. FURTHER NON-RESIDENTS' CHF POSITIONS THAT ARE NOT VISIBLE ON BANKS' BALANCE SHEETS

Not all increases of non-residents' CHF positions are visible in the balance sheets of banks. For example, if a non-resident first exchanges euros for Swiss francs with the SNB, but subsequently uses these Swiss francs to acquire a holiday home previously owned by a Swiss resident, this increase in the CHF position of non-residents is not visible in the balance sheet of any bank.

Chart 7

CHF POSITIONS OF FOREIGN-DOMICILED BANKS AGAINST THE SWISS NON-BANK PRIVATE SECTOR



Source: SNB

If non-residents purchase Swiss assets, this forces domestic residents to hold more CHF on bank accounts. In an analysis restricted to the banking statistics, such transactions would thus lead to the erroneous conclusion that the counterparties of the SNB intervention are domestic residents.

Statistics on non-resident ownership of Swiss shares and bonds are included in the SNB's detailed yearly report on Swiss banks (cf., for example, Swiss National Bank (2013a)). This dataset includes information on the holdings of securities in bank custody accounts broken down by domicile of custody account holder, also detailing the type of security that is owned by non-residents.

Analysis of data on the ownership of Swiss assets by non-residents shows that the total CHF exposure accumulated by non-residents via these means is equivalent to CHF 42 billion. From August 2011 to February 2013, non-residents increased their holdings of CHF debt issued by non-banks by CHF 4 billion and invested around CHF 20 billion in the Swiss stock market. They also raised their effective CHF exposure by a further CHF 18 billion through the banks they owned.

Non-residents increased their holdings of CHF-denominated debt issued by Swiss non-banks by CHF 4 billion. Of this total, non-residents bought Swiss public debt worth around CHF 2 billion and raised their ownership of other debt products that are issued by Swiss residents and are CHF-denominated by CHF 2 billion. In contrast, the CHF position of non-residents via Swiss fiduciaries did not move substantially.

Non-residents bought approximately CHF 20 billion worth of Swiss shares. The SNB's detailed yearly report on Swiss banks (cf. Swiss National Bank (2013a)) includes information on the holdings of securities in bank custody accounts broken down by domicile of custody account holder. The total value of non-residents' portfolios of Swiss shares advanced from CHF 485 billion in August 2011 to CHF 650 billion in February 2013. However, most of this increase reflects valuation gains and not new purchases, as the broad Swiss stock market index (the Expanded SMI) rose by 40% in this period. Taking into account such valuation effects, it is possible to estimate the net purchase of shares by non-residents. From August 2011 to February 2013, the ownership share of non-residents in the Swiss stock market rose gradually from 58.5% to 60.8%. In view of both the precise way this percentage point increase in foreign ownership was accumulated and the stock market prices prevailing at each relevant moment, it can be concluded that CHF 20 billion of new funds were invested by non-residents in the Swiss stock market.

In addition, a further CHF 18 billion were accumulated domestically by foreign-owned banks in Switzerland. As demonstrated in section 3.1.2, banks located in Switzerland but owned by foreigners accumulated a CHF exposure of CHF 18 billion. Because these CHF 18 billion are owned by non-residents, they increase the latter's CHF exposure and are thus counted as assets owned by non-residents.

Two additional sources of non-residents' CHF positions which might be plausible are increases in CHF cash holdings by non-residents (for which no data exist) and investments in Swiss real estate.

Although data are sparse regarding the purchase of real estate by non-residents, anecdotal evidence suggests that a moderate part of the increased demand for CHF was met via this channel. When non-residents hold Swiss real estate for investment purposes, they mostly do so by investing in stock-market-listed real estate companies. Information on this is thus contained in the data on the holdings of securities in bank custody accounts, broken down by domicile of custody account holder (and already thus contained in the above figure of CHF 20 billion attributed to the purchase of Swiss shares).

Regarding direct real estate purchases, Credit Suisse (2014) concludes that sales and purchases of holiday homes by non-residents actually balanced out in 2011 and 2012. The same study, based on Wüest and Partner (2014), acknowledges that around 10% of commercial property sales may be accounted for by non-residents.

4 Total non-residents' CHF positions and comparison to the SNB's foreign currency reserves

How do non-residents' CHF positions relate to movements in the SNB's foreign currency reserves? Overall, the exposure of non-residents increased by a total of CHF 174 billion, of which CHF 132 billion are recorded on banks' balance sheets, while the remaining CHF 42 billion were accumulated via the purchase of Swiss securities or the ownership of Swiss companies.

Chart 8 shows cumulative changes in the CHF positions of residents and non-residents since 1 August 2011 and compares these changes to cumulative changes in the SNB's foreign currency reserves as of the same date. The blue line in chart 8 reflects the total net on-balance-sheet CHF position of non-residents with respect to the private Swiss banking system, which increased by CHF 128 billion (CHF 78 billion via branches of foreign banks, CHF 11 billion via foreign-owned banks, CHF 39 billion via Swiss-owned banks). The total on-balance-sheet increase in non-residents' CHF positions since August 2011 amounts to CHF 137 billion, since a further CHF 9 billion were directly deposited on sight deposit accounts at the SNB by foreign-domiciled banks. From these CHF 137 billion, one needs to subtract the CHF 5 billion identified in section 3.2.2, which leads to an overall

cumulative exposure of CHF 132 billion over the analysed time horizon (cf. also chart 2 for an overview).

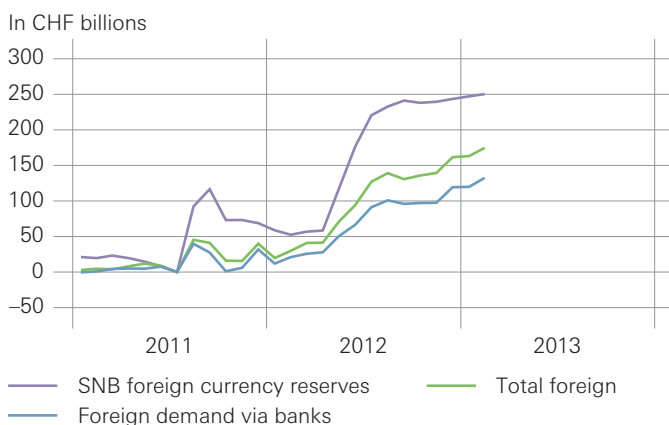
The green line also shows the further net investments of non-residents, amounting to CHF 42 billion via the purchase of Swiss assets or via the accumulation of CHF positions by foreign owned banks (cf. section 3.3).

In total, during the period under observation, non-residents thus absorbed a large part of the SNB's foreign exchange interventions. The SNB's foreign currency reserves increased by CHF 250 billion between August 2011 and the end of February 2013. Note that this figure of CHF 250 billion does not mirror the SNB's foreign exchange interventions precisely due to valuation effects and the foreign currency swap agreements the SNB engaged in during 2011. The SNB intervened on foreign exchange markets by buying CHF 17.8 billion worth of foreign currency reserves in 2011 and CHF 188 billion worth of foreign currency reserves in 2012. Since the SNB does not publish the precise timing of these interventions, chart 8 displays the movements in the SNB's foreign currency holdings as a proxy for the underlying interventions.¹³

It must also be remembered that the results of this paper highlight only a specific period and by no means imply that the upward pressure on the CHF witnessed in the last few years can be entirely attributed to the international search for a safe haven. If one adopts a longer time perspective, the decreasing risk appetite of Swiss residents, that led them to stop investing abroad and in some cases even repatriate their funds to Switzerland, was just as important, if not more.¹⁴

Chart 8

CUMULATIVE CHANGES IN CHF POSITIONS AND SNB FOREIGN CURRENCY RESERVES SINCE JULY 2011



Source: SNB

¹³ Note that the movements in the SNB's foreign currency reserves mirror the path of Target2 imbalances in the euro area, which were driven by a similar search for a safe haven (cf. Auer (2014)).

¹⁴ Cf. Yesin (2015) and also Auer and Tille (2015), who document how the Swiss financial account has coevolved with capital flows into the Swiss banking system since the early 2000s.

5

Conclusions

This paper traces the demand for CHF from outside Switzerland during the peak of the euro area debt crisis. Its three main results show that (i), in the period under review, non-residents were an important counterparty of the SNB's interventions, (ii) while deposits at Swiss-owned banks also increased strongly, substantial non-residents' CHF positions were accumulated through banks physically located in Switzerland, but owned by foreign parties, and (iii) the inflows that foreign branch offices received were directly deposited in sight deposit accounts at the SNB.

An important implication of these findings concerns the nature of how international safe-haven capital flows interact with financial stability in Switzerland, or more precisely the question of whether a sudden reversal of safe-haven flows would cause financial instability in Switzerland and therefore require policy action.

Specifically, the inflow of CHF 78 billion from abroad to foreign branch offices warrants attention. After all, this inflow caused the balance sheets of these branches to increase almost fivefold: in early 2010, the combined balance sheet size of such branch offices was a mere CHF 21 billion, which subsequently increased to CHF 103 billion by the end of February 2013.

Although the amounts involved are staggering, the paper's results imply that the associated risk to financial stability is likely to be limited. This is so because foreign branches directly deposited any inflow of funds in their SNB sight deposit accounts. They did not expand their domestic credit activity, and thus did not transform maturities or create other exposure. Because these funds are deposited on SNB sight deposit accounts, they are accessible instantly should safe-haven capital flows reverse.¹⁵

¹⁵ This discussion concerns only the direct effects of a reversal of safe-haven capital flows. A further, indirect, effect is that with receding safe-haven flows, the CHF would depreciate substantially, thus potentially requiring higher interest rates to guarantee price stability. The SNB's 2014 *Financial Stability Report* (cf. Swiss National Bank (2014)) discusses the implications of such an interest rate hike for financial stability, finding that this could cause considerable losses for domestically operating banks.

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Chronicle of monetary events

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

<p>At its quarterly assessment of 18 June 2015, 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%. Negative interest rates in Switzerland help to make holding investments in Swiss francs less attractive. In the view of the SNB, the Swiss franc is significantly overvalued. The SNB reaffirms that it is taking account of the exchange rate situation and its impact on inflation and economic developments. It therefore remains active in the foreign exchange market, as necessary, to influence monetary conditions.</p>	<p>June 2015</p>
<p>On 22 April 2015, the SNB reduces the group of sight deposit account holders that are exempt from negative interest; the only exemptions now are those of the central Federal Administration and the compensation funds for old age and survivors' insurance, disability insurance and the fund for loss of earned income (AHV/AVS; IV/AI; EO/APG).</p>	<p>April 2015</p>
<p>At its quarterly assessment of 19 March 2015, the SNB leaves its target range for the three-month Libor unchanged at between -1.25% and -0.25%. The interest rate on sight deposits with the SNB remains at -0.75% and the exemption thresholds remain unchanged. Negative interest helps to make it less attractive to hold investments in Swiss francs. In the view of the SNB, the Swiss franc is significantly overvalued overall and should continue to weaken over time. The SNB affirms that it will continue to take account of the exchange rate situation and its impact on inflation and economic developments. It will therefore remain active in the foreign exchange market, as necessary, in order to influence monetary conditions.</p>	<p>March 2015</p>
<p>On 15 January 2015, the SNB discontinues the minimum exchange rate of CHF 1.20 per euro. At the same time, it lowers the interest rate on sight deposit account balances at the SNB that exceed a given exemption threshold by 0.5 percentage points, to -0.75%, with effect from 22 January 2015. The target range for the three-month Libor now amounts to between -1.25% and -0.25% (previously between -0.75% and 0.25%). The reduction in interest rates is aimed at ensuring that the discontinuation of the minimum exchange rate does not lead to an inappropriate tightening of monetary conditions. The SNB stresses that it will continue to take account of the exchange rate situation in future. If necessary it will therefore remain active in the foreign exchange market.</p>	<p>January 2015</p>
<p>On 18 December 2014, the SNB announces that it will impose an interest rate of -0.25% on sight deposit account balances at the SNB from 22 January 2015. Negative interest will be levied on balances exceeding a given exemption threshold. The SNB's aim is to take the three-month Libor into negative territory. The target range for the three-month Libor now amounts to between -0.75% and 0.25% (previously $0-0.25\%$). The introduction of negative interest rates makes it less attractive to hold Swiss franc investments, and thereby supports the minimum exchange rate.</p>	<p>December 2014</p>
<p>At its quarterly assessment of 11 December 2014, the SNB reaffirms that it will maintain the minimum exchange rate of CHF 1.20 per euro. The SNB will continue to enforce the minimum exchange rate with the utmost determination. If necessary, it is prepared to purchase foreign currency in unlimited quantities, and to take further measures as required. The target range for the three-month Libor remains unchanged at $0.0-0.25\%$. In the view of the SNB, deflation risks have increased once again and the Swiss franc is still high. With the three-month Libor at zero, the minimum exchange rate continues to be the key instrument to avoid an undesirable tightening of monetary conditions.</p>	<p>December 2014</p>

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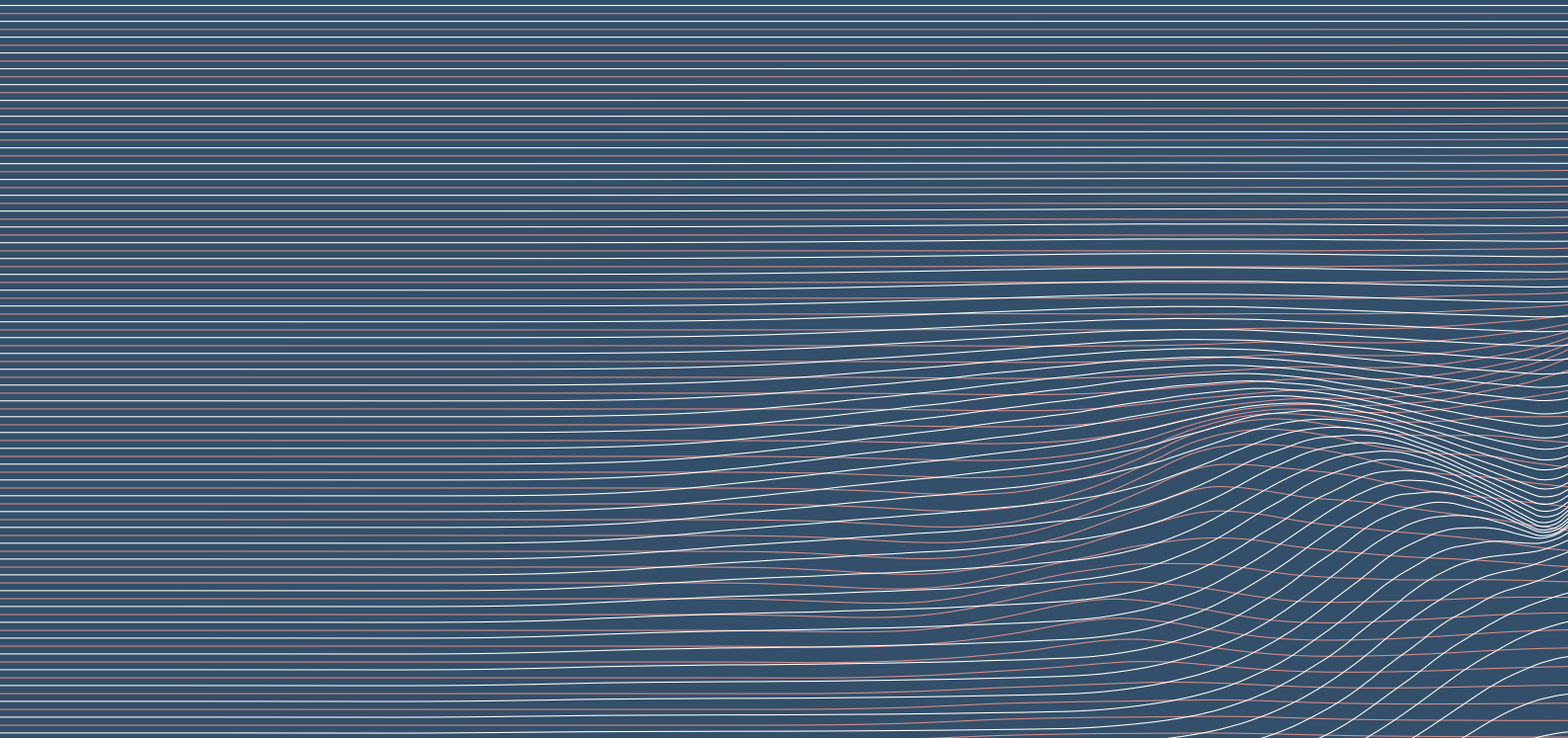
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