

Quarterly Bulletin
1/2014 March

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



Quarterly Bulletin
1/2014 March

Volume 32

Contents

	Page
Monetary policy report	4
1 Monetary policy decision of 20 March 2014	5
Monetary policy strategy at the SNB	6
2 Global economic environment	7
3 Economic developments in Switzerland	13
4 Prices and inflation expectations	19
5 Monetary developments	23
Business cycle trends	30
SNB Policy Paper: Prices of Swiss traded goods during the Great Trade Collapse	34
Chronicle of monetary events	44

Monetary policy report

Report for the attention of the Governing Board of the Swiss National Bank for its quarterly assessment of March 2014

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 20 March 2014') is an excerpt from the press release published following the assessment.

This report is based on the data and information available as at 20 March 2014. 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 20 March 2014

SNB reaffirms minimum exchange rate

The Swiss National Bank (SNB) is maintaining its minimum exchange rate of CHF 1.20 per euro. The Swiss franc is still high. The SNB stands ready to enforce the minimum exchange rate, if necessary, by buying foreign currency in unlimited quantities, and to take further measures as required. With the three-month Libor close to zero, the minimum exchange rate continues to be the right tool to avoid an undesirable tightening of monetary conditions in the event of renewed upward pressure on the Swiss franc. The SNB is leaving the target range for the three-month Libor unchanged at 0.0–0.25%.

In March, the SNB's conditional inflation forecast was adjusted downwards once again. Inflation in Switzerland was close to 0% for January and February. Internationally declining inflation rates and the slightly stronger Swiss franc are delaying the rise of inflation into positive territory. As in the previous quarter, the forecast is based on a three-month Libor of 0.0% over the next three years and assumes that the Swiss franc will weaken over the forecast period. The SNB is now expecting the inflation rate to be 0.2 percentage points lower for both

2014 and 2015, at 0% and 0.4% respectively. In 2016, inflation should increase to 1.0%. Consequently, no inflation risks can be identified for Switzerland in the foreseeable future.

The moderate recovery of the global economy continued in the fourth quarter. In Europe, growth was, geographically, broader-based than in previous quarters. By contrast, euro area inflation was low, in part reflecting the persistent weakness of demand within the euro area.

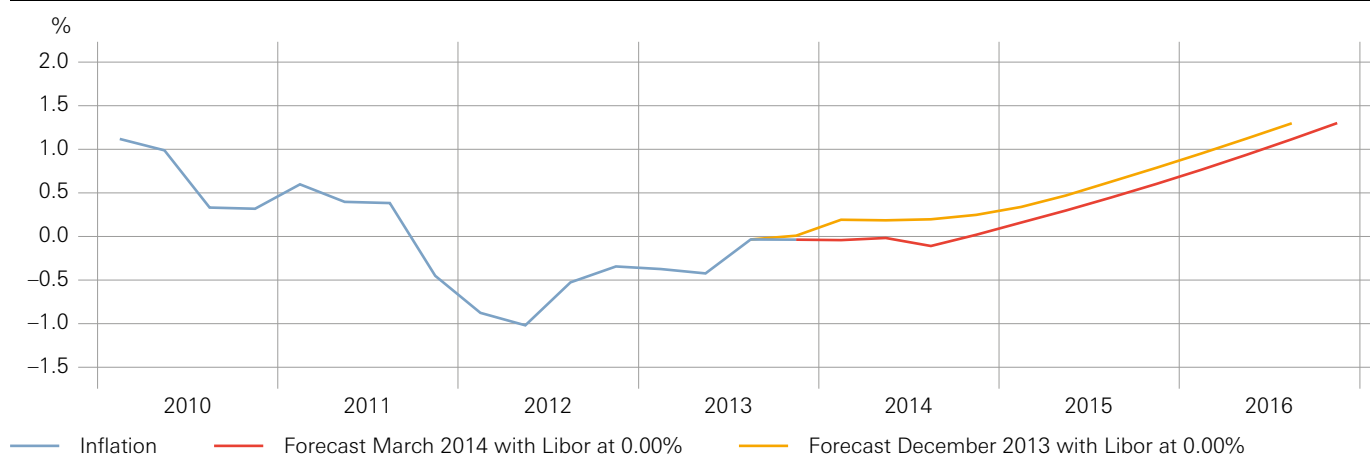
Nevertheless, there are still substantial risks attached to the global economic recovery. Concerns over the state of the euro area financial system are likely to remain high until the assessment of banks' balance sheets has been completed. The decline in inflation in the advanced economies has increased uncertainty regarding the future path of monetary policy in the major currency areas. In addition, bringing about a sustained improvement in public finances poses a considerable challenge for a number of advanced economies. Likewise, structural weaknesses in key emerging markets and political tensions in various regions could weigh on the global economic recovery.

In Switzerland, as expected, the fourth quarter of 2013 saw a weakening of growth momentum, largely as a result of a decline in exports, which led to a corresponding decrease in value added in the manufacturing industry. Economic activity should pick up again from the first quarter of 2014. For 2014 as a whole, the SNB is still anticipating GDP growth of around 2%.

Chart 1.1

CONDITIONAL INFLATION FORECAST OF MARCH 2014

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



Source: SNB

In January, at the proposal of the SNB, the Federal Council increased the sectoral countercyclical capital buffer (CCB), which will result in a temporary rise, as of 30 June 2014, in capital requirements for mortgage loans on residential property in Switzerland. This will increase banks' resilience to a possible correction of imbalances on

the mortgage and real estate markets, and will counteract a further build-up of these imbalances. The SNB continues to monitor the situation on the mortgage and real estate markets closely, and regularly reassesses the need for an adjustment of the CCB.

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. In addition, a minimum exchange rate against the euro is currently in place.

Table 1.1

OBSERVED INFLATION IN MARCH 2014

	2010				2011				2012				2013				2011	2012	2013
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Inflation	1.1	1.0	0.3	0.3	0.6	0.4	0.4	-0.5	-0.9	-1.0	-0.5	-0.3	-0.4	-0.4	0.0	0.0	0.2	-0.7	-0.2

CONDITIONAL INFLATION FORECAST OF MARCH 2014

	2013				2014				2015				2016				2014	2015	2016	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Forecast December 2013, with Libor at 0.00%					0.0	0.2	0.2	0.2	0.2	0.3	0.5	0.6	0.8	1.0	1.1	1.3		0.2	0.6	
Forecast March 2014, with Libor at 0.00%					0.0	0.0	-0.1	0.0	0.2	0.3	0.4	0.6	0.8	0.9	1.1	1.3		0.0	0.4	1.0

Source: SNB

2 Global economic environment

As expected in the baseline scenario of December 2013, the moderate global economic recovery continued in the fourth quarter of 2013. World trade expanded further (cf. chart 2.1), and global GDP registered another increase of just under 4% in the final quarter. Capacity utilisation thus rose worldwide, but remained well below its long-term average, in particular in the advanced economies.

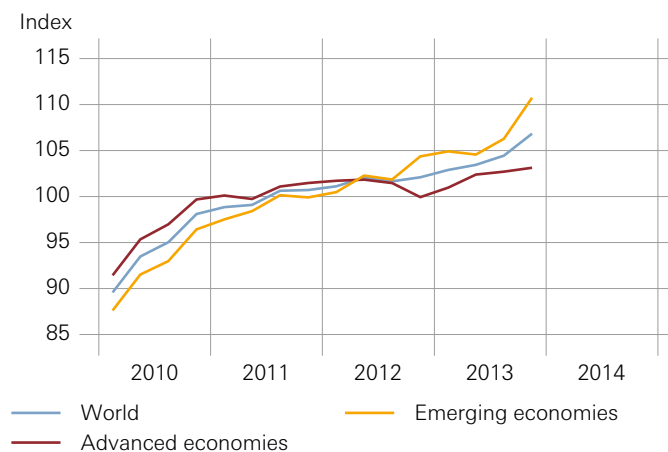
In the US, GDP saw solid growth in the fourth quarter, even though the partial government shutdown had a perceptible negative impact. Economic growth in the euro area remained moderate, with the recovery becoming somewhat more broad-based geographically. By contrast, inflation dynamics in the euro area were surprisingly weak. In Japan, growth was substantially lower than in previous quarters. China registered robust economic growth once again, while activity remained modest in the other emerging economies.

The global economy's pace of expansion is likely to remain more or less unchanged in the short term. The recovery is being driven by the reduction of debt in the US private sector, dwindling effects of restrictive fiscal policy in the US and Europe, as well as sustained expansionary monetary policy in the major advanced economies. As a result of the exceptional cold snap in the US and the planned increase in Japan's VAT in April, the growth pattern is expected to be volatile for the first half of the

Chart 2.1

GLOBAL EXPORTS

Period average = 100

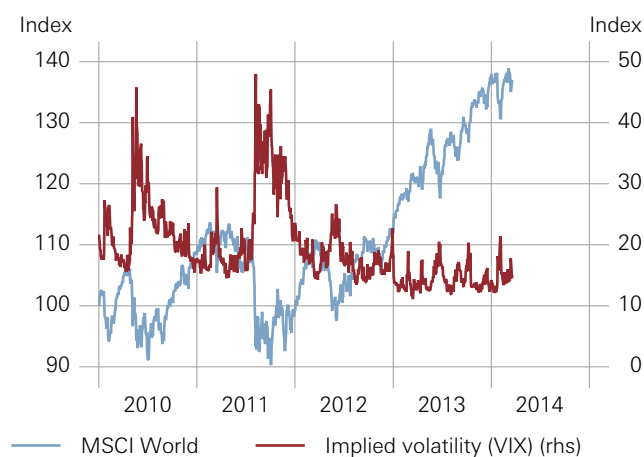


Sources: CPB, Thomson Reuters Datastream

Chart 2.2

STOCK MARKETS

Beginning of period = 100 (lhs)



Source: Thomson Reuters Datastream

Table 2.1

BASELINE SCENARIO FOR GLOBAL ECONOMIC DEVELOPMENTS

	2010	2011	2012	2013	Scenario	
					2014	2015
GDP, year-on-year change in percent						
Global ¹	5.1	3.7	3.0	2.9	3.7	4.1
US	2.5	1.8	2.8	1.9	2.9	3.3
Euro area	1.9	1.6	-0.7	-0.5	1.3	2.0
Japan	4.7	-0.4	1.4	1.5	1.3	0.8
Oil price in USD per barrel ²						
	79.6	111.4	111.7	108.7	108.0	108.0

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

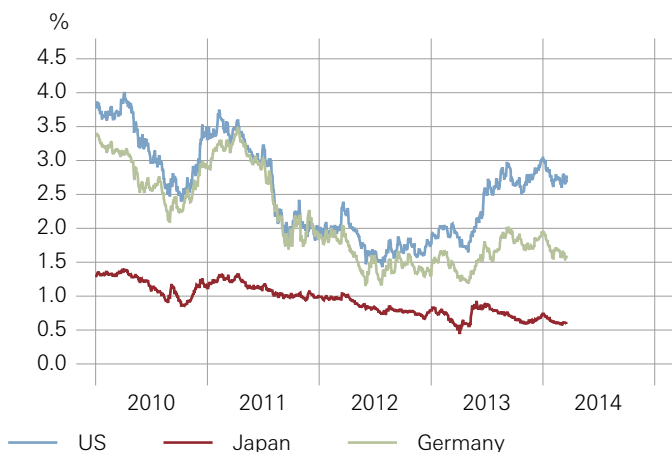
² Level.

Sources: SNB, Thomson Reuters Datastream

Chart 2.3

INTERNATIONAL LONG-TERM INTEREST RATES

10-year government instruments

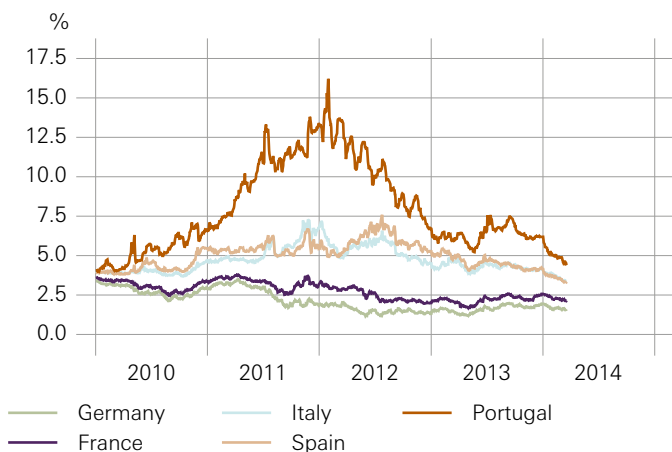


Source: Thomson Reuters Datastream

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

year. Owing to its structural problems, the euro area will see only moderate growth. Growth in the emerging economies is likely to vary from one country to the next.

The global economic outlook continues to be exposed to significant downside risks. Owing to the approval of the budget bill and the agreement on lifting the debt ceiling, uncertainty about fiscal policy in the US has eased considerably. At the same time, however, doubts about the robustness of economic developments in many emerging economies and geopolitical tensions have become the focus of attention. The recovery in the euro area remains fragile despite the progress made so far. Uncertainty about the state of the financial system is likely to persist until the ECB has finished its comprehensive assessment of banks. In addition, there is increased danger that inflation in the euro area will continue to remain well below the ECB's targeted level for quite some time.

The SNB's forecasts are based on assumptions about the oil price and the EUR/USD exchange rate, and have remained practically unchanged compared with the baseline scenario of December 2013. The SNB is assuming an oil price for Brent crude of USD 108 per barrel and an exchange rate of USD 1.36 to the euro.

INTERNATIONAL FINANCIAL AND COMMODITY MARKETS

Since the quarterly assessment in mid-December, confidence on the international financial markets has been shaped by doubts about the robustness of the global economy. A number of emerging economies registered sharp capital outflows and exchange rate movements, which prompted central banks of some of the affected economies to respond by lifting their key interest rates.

Due to the uncertainty, global equity prices lost considerable ground for a time, and the VIX volatility index for US shares fluctuated heavily (cf. chart 2.2). Yields on most long-term government bonds in the advanced economies decreased (cf. chart 2.3), with the risk premia of southern euro area members continuing to decline compared with German government bonds. The major currencies trended upwards slightly (cf. chart 2.5). The euro again gained value against the US dollar.

Commodity prices recovered (cf. chart 2.6). Unfavourable weather conditions and other factors contributed to a strong increase in food prices. Oil prices trended sideways, even though production shortfalls in major oil-producing countries and an exceptional cold snap in the US supported prices at times.

UNITED STATES

Following a sluggish first half-year, economic growth in the US picked up in the second half of 2013 (cf. chart 2.7). A substantial increase in inventories was the main driver behind this development, but final demand also rose somewhat. GDP grew by 1.9% for 2013 as a whole, compared with 2.8% in the previous year. Aggregate capacity utilisation remains low, which is reflected in relatively high unemployment in a long-term comparison (cf. chart 2.10).

Economic activity weakened at the beginning of the year. This was due in part to the exceptionally cold winter weather. The economy is likely to pick up with the beginning of spring. The growth outlook basically remains favourable. The restrictive effect of fiscal consolidation measures will probably recede gradually. In addition, risks emanating from fiscal policies have been mitigated as a result of the approval of the budget bill and the agreement on the debt ceiling. Owing to cost-cutting measures over several years and higher house prices, the financial situation of private households has also improved and is likely to have less of a negative impact on consumer spending. Expansionary monetary policy is expected to be another growth driver. Corporate investment is therefore likely to gradually regain momentum. Overall, the SNB expects GDP growth of 2.9% for 2014 and 3.3% for 2015 (cf. table 2.1).

Inflation in the US is modest. As a result of volatile energy prices, annual consumer price inflation has fluctuated over recent months, and amounted to 1.1% in February (cf. chart 2.11). Core inflation was virtually unchanged at 1.6% (cf. chart 2.12). Inflation should gradually return to the US Federal Reserve's targeted level over the next few years.

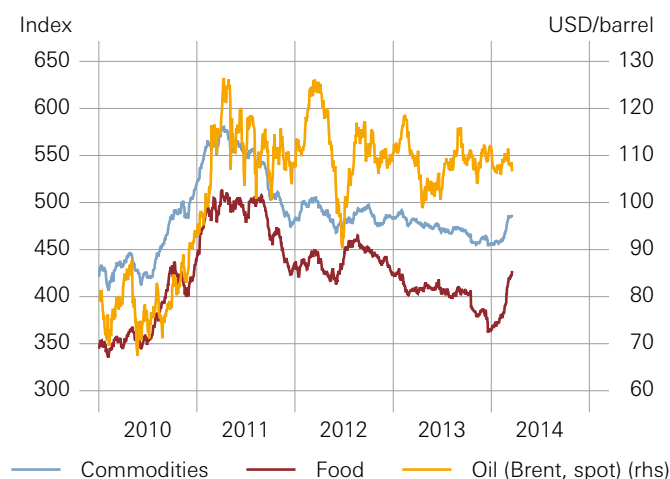
Since December 2013, the Federal Reserve has tapered its bond purchases in three steps, from USD 85 billion to USD 55 billion per month. It left the target range for the federal funds rate at 0.0–0.25% (cf. chart 2.13). In March, it indicated for the first time that it intended to lift the federal funds rate only once its securities programme had come to an end. In this context, it again pointed to its low inflation forecast. There was no further mention of the existing threshold values for unemployment and medium-term inflation.

EURO AREA

The moderate economic recovery in the euro area continued. GDP rose by 1.1% in the fourth quarter (cf. chart 2.7). However, averaged over 2013, it declined again (by 0.5%). Exports and investment continued to rise in the fourth quarter. Manufacturing in particular saw an upturn in activity. Demand also became broader-based geographically. While Germany continued to be the driving force, all major member states now have GDP growth. In Italy, GDP increased for the first time in two and half years, and in France it was back to pre-crisis

Chart 2.6

COMMODITY PRICES

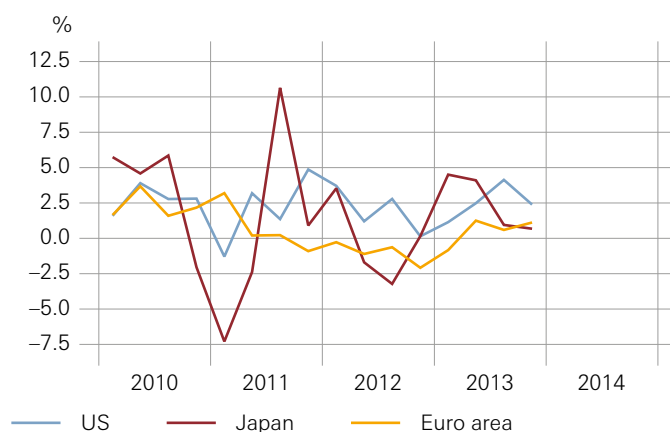


Source: Thomson Reuters Datastream

Chart 2.7

REAL GDP: ADVANCED ECONOMIES

Change from previous period

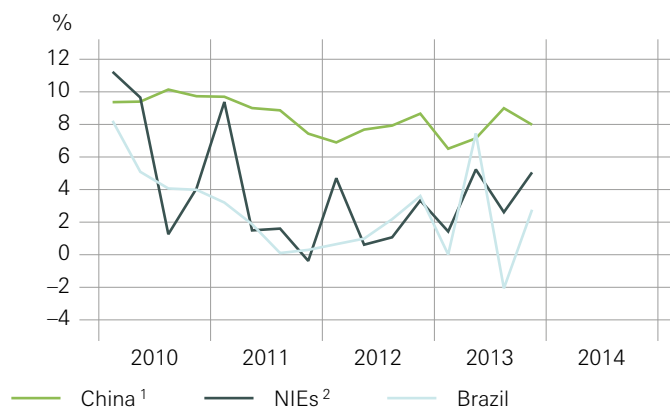


Source: Thomson Reuters Datastream

Chart 2.8

REAL GDP: EMERGING ECONOMIES

Change from previous period



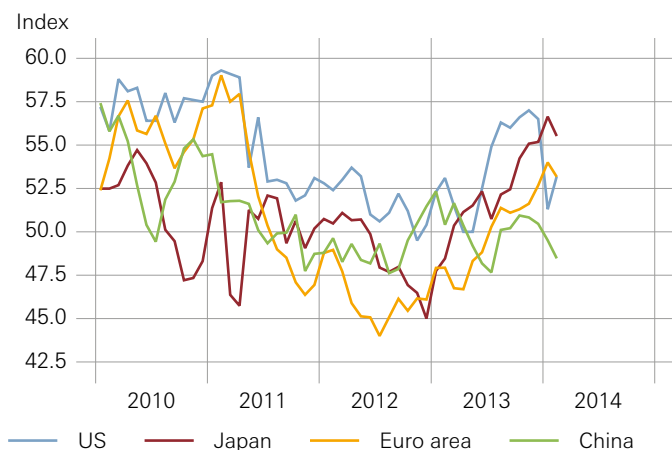
1 Estimate: SNB.

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

Source: Thomson Reuters Datastream

Chart 2.9

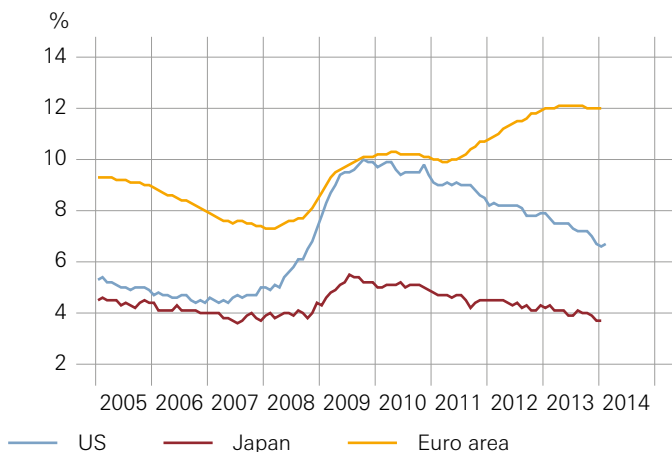
PURCHASING MANAGERS' INDICES (MANUFACTURING)



Source: Markit Economics Ltd 2009; all rights reserved

Chart 2.10

UNEMPLOYMENT RATES

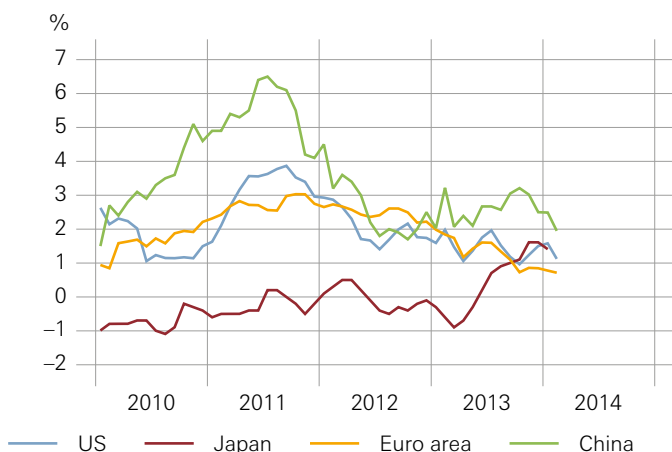


Source: Thomson Reuters Datastream

Chart 2.11

CONSUMER PRICES

Year-on-year change



Source: Thomson Reuters Datastream

levels. GDP also inched up in many smaller member states. Unemployment fell in the fourth quarter for the first time in three years, but the unemployment rate remained very high (cf. chart 2.10).

Consumer and business confidence continued to improve (cf. chart 2.9) and domestic demand is therefore likely to pick up further. The outlook for exports remains cautiously upbeat. Considerable uncertainties with regard to the ECB's assessment of banks' balance sheets, the banking union and the restructuring of public sector finances are nevertheless dampening the recovery. Developments within the euro area are still uneven. In particular, lending conditions are problematic in some countries. Overall, the SNB expects GDP growth of 1.3% for 2014 and 2.0% for 2015.

Consumer price inflation was markedly weak, which is attributable to both falling energy prices and modest domestic demand. In February, it was virtually unchanged at 0.7% (cf. chart 2.11), and in the peripheral states was well below the euro area average. In December, core inflation had reached its lowest level since the beginning of the monetary union (0.7%), but climbed back to 1.0% in February (cf. chart 2.12).

The ECB left its main refinancing rate at the historical low of 0.25% (cf. chart 2.13). It confirmed its assessment that the key interest rates are likely to remain at their current level – or lower – for an extended period.

JAPAN

Under the impact of the expansionary monetary and fiscal policies initiated in spring 2013, the Japanese economic recovery continued in the fourth quarter. However, export momentum slowed perceptibly towards the end of the year, holding back GDP growth. In the final quarter, GDP expanded by only 0.7% (cf. chart 2.7). On average for the year, it nevertheless grew at a pace not seen in three years (1.5%).

Since consumer spending will probably be brought forward due to the VAT increase scheduled for April, a temporary growth surge is to be expected in the first quarter. An economic stimulus package, entailing public sector investment, transfer payments to low-income households and tax incentives for investment, is aimed at mitigating the negative impact of the VAT increase on growth. Business confidence generally remains upbeat. The gradual upturn in the global economy and the weak yen are also contributing to this. Given the positive outlook, private corporate investment should therefore gradually recover. In the medium term, the SNB expects expansion to remain moderate. In view of the public sector budget target, fiscal policies are likely to become more restrictive in 2015. The structural reforms announced as part of the growth strategy could underpin growth potential. Sustained growth is necessary, not least to tackle the fiscal policy challenges.

In Japan, there are signs of an end to years of falling prices. In the face of the weak yen, consumer price inflation continued to rise in recent months. At 0.4%, average annual inflation was positive for the first time since 2008. In January 2014, annual inflation amounted to 1.4% and core inflation to 0.6% (cf. charts 2.11 and 2.12). In the meantime, over half of the goods and services in the basket of goods exceed their year-back level; this was last the case at the beginning of 2009. The VAT increase is likely to result in a one-off rise in inflation of around 2 percentage points. Gradually increasing inflation expectations could drive up prices in the medium term.

The Bank of Japan reaffirmed its intention, announced in April 2013, to double the monetary base to JPY 270 trillion – around half of nominal GDP – by the end of 2014 through purchases of Japanese government bonds with long maturities (cf. chart 2.14). This measure is aimed at pushing up inflation to around 2% in the foreseeable future. At the same time, the Bank of Japan extended two special loan facilities by one year. The two facilities launched in 2010 and 2012 are intended to encourage bank lending.

EMERGING ECONOMIES

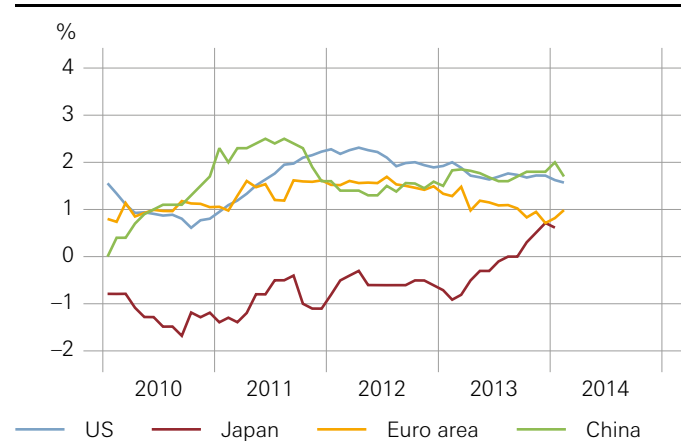
Economic activity in the emerging economies continued to vary from one country to another. In China, momentum continued to pick up across the board in the second half of the year (cf. chart 2.8). GDP expanded by 7.7% for 2013 as a whole, i.e. at the same rate same as the year before. In the newly industrialised Asian economies, including South Korea and Taiwan, the upturn continued thanks to robust private consumption. In Brazil, India and Russia, growth was muted as a result of increasingly tighter monetary policies and a lack of reforms.

The outlook for the emerging economies varies widely depending on the region. In China, GDP is likely to register solid growth in the medium term. The reforms announced to improve welfare systems should have a positive impact on consumer spending since households have to spend less on private retirement savings. It is difficult to determine current economic momentum, however, as indicators reflect distortions related to the Chinese New Year holiday. Furthermore, there are risks associated with the continued strong growth of lending volumes. Excess capacity in the highly indebted heavy industry segment and rising interest rates could increasingly lead to insolvencies and financial market turbulence. In Brazil, India and Russia, the outlook remains muted. These countries are struggling with restrictive lending conditions, a slow pace of reform and low productivity. In Russia, political tensions with Ukraine and the international community are also putting a strain on growth prospects.

Chart 2.12

CORE INFLATION RATES ¹

Year-on-year change

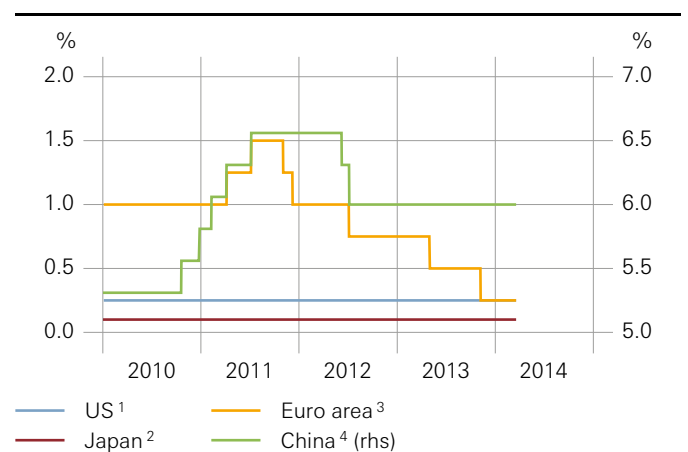


¹ Excluding food and energy.

Source: Thomson Reuters Datastream

Chart 2.13

OFFICIAL INTEREST RATES



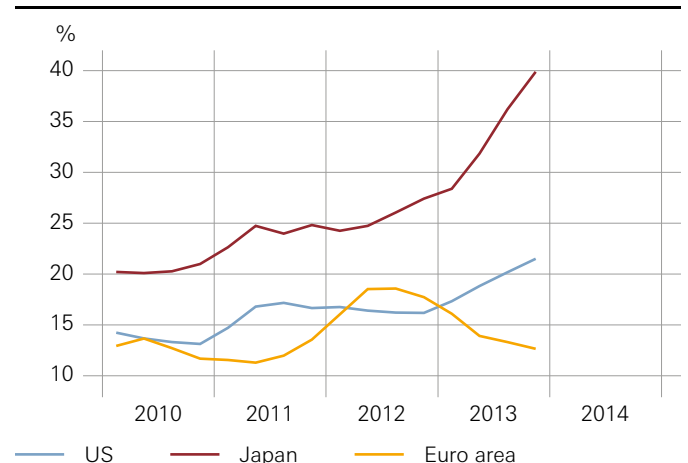
¹ Federal funds rate. ² Call money target rate. ³ Main refinancing rate. ⁴ One-year lending rate.

Source: Thomson Reuters Datastream

Chart 2.14

MONETARY BASE

Relative to GDP



Source: Thomson Reuters Datastream

Inflation in emerging economies eased slightly in the past few months. In Brazil, India and Russia, however, the annual inflation rate still considerably exceeded monetary policy targets. In China, falling food prices pushed annual inflation significantly below the central bank's target of 3.5%. Upstream supply price developments are still skewed to the downside.

Monetary policy was tightened further in some emerging economies. In Brazil, India and Russia, the central banks further raised key rates to counter high inflation and some sharp capital outflows. The People's Bank of China attempted to ease volatility in the interbank market with various monetary policy measures.

3 Economic developments in Switzerland

As expected, Switzerland experienced a noticeable slowdown in growth in the fourth quarter. According to preliminary estimates by the State Secretariat for Economic Affairs (SECO), real GDP increased by 0.6%, following three quarters of growth marginally above 2%. A key factor in this slowdown was the weak development in goods exports in connection with the significantly lower added value in manufacturing. By contrast, domestic demand continued to provide a positive stimulus. The year 2013 as a whole closed with GDP growth of 2.0%.

Owing to the subdued growth in the fourth quarter, the negative output gap widened again somewhat. Utilisation of technical production capacity in manufacturing remained below average. Employment was up, the unemployment rate, however, unchanged.

Growth is expected to pick up again in the first quarter of 2014. The SNB is forecasting growth of roughly 2% for 2014, the same level as in the past year.

AGGREGATE DEMAND AND OUTPUT

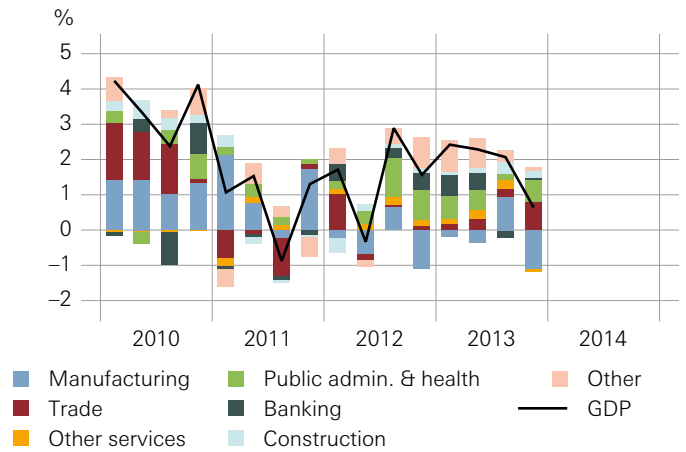
Temporary downturn in manufacturing

The weak GDP growth in the fourth quarter was primarily due to lower value added in manufacturing (cf. chart 3.1). Weak developments were also recorded in financial services and company-related services. Trade, public administration and the health sector, by contrast, showed positive momentum.

Chart 3.1

CONTRIBUTIONS TO GROWTH, BY SECTOR

Change from previous period

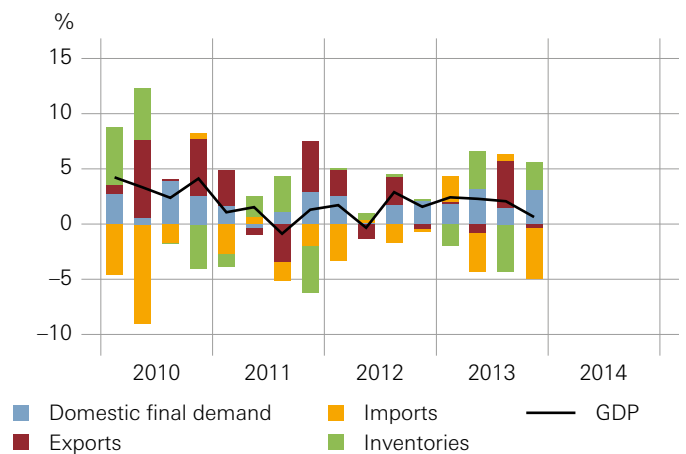


Source: State Secretariat for Economic Affairs (SECO)

Chart 3.2

CONTRIBUTIONS TO GROWTH IN DEMAND

Change from previous period

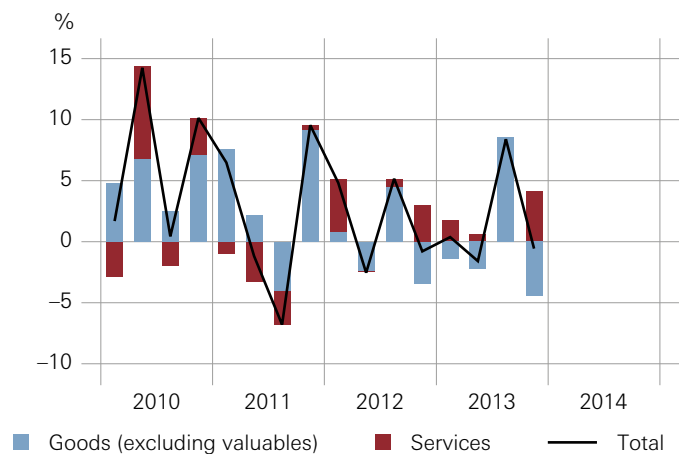


Source: SECO

Chart 3.3

CONTRIBUTIONS TO EXPORT GROWTH

Change from previous period



Source: SECO

Markedly negative foreign trade contribution

Exports declined slightly after registering robust growth in the previous quarter (cf. chart 3.3). The noticeable rise in exports of services, particularly in the area of patent and licence fees, only partly offset the negative development in goods exports. Imports rose steeply after posting a slight decline in the previous quarter (cf. chart 3.4). Overall, this resulted in a markedly negative foreign trade contribution to GDP growth in the fourth quarter. Averaged over the year, net exports barely added to the annual growth (cf. chart 3.2 and table 3.1).

Table 3.1

REAL GDP AND COMPONENTS

Growth rates on previous period in percent, annualised

	2010	2011	2012	2013	2012				2013			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Private consumption	1.7	1.1	2.4	2.3	3.9	0.6	2.7	3.3	2.3	2.2	0.9	2.7
Government consumption	0.2	1.2	3.2	3.0	2.9	3.3	3.7	2.8	3.3	1.3	4.8	2.6
Investment in fixed assets	4.8	4.5	-0.4	1.8	-0.3	-3.1	-1.4	-0.6	0.3	8.7	2.1	6.2
Construction	3.5	2.5	-2.9	3.8	-8.6	1.1	0.1	2.7	6.6	2.0	6.3	6.2
Equipment	5.8	6.1	1.7	0.2	7.0	-6.2	-2.7	-3.2	-4.8	14.6	-1.2	6.2
Domestic final demand	2.2	1.8	1.8	2.3	2.8	0.1	1.9	2.4	2.0	3.5	1.6	3.4
Change in inventories ¹	0.8	-0.2	-0.1	-0.2	0.1	0.5	0.2	0.2	-2.0	3.4	-4.3	2.6
Total exports ²	7.4	3.8	2.0	1.1	4.8	-2.5	5.2	-0.8	0.4	-1.6	8.4	-0.6
Goods ²	9.3	6.3	1.9	-0.5	1.1	-3.5	6.6	-5.1	-2.1	-3.3	12.9	-6.6
Services	3.5	-1.6	2.4	4.4	14.0	-0.4	2.1	9.1	5.4	1.9	0.0	12.6
Total imports ²	9.1	3.8	3.9	1.1	8.5	-0.8	4.1	0.7	-6.0	8.8	-1.7	11.6
Goods ²	10.6	3.1	2.5	-0.1	7.6	-3.2	4.3	-3.0	-6.6	9.7	-2.1	5.9
Services	3.0	6.8	9.4	5.7	12.4	9.5	3.2	16.4	-4.2	5.7	-0.5	33.8
Net exports ³	0.2	0.4	-0.5	0.1	-1.0	-1.0	0.9	-0.7	2.6	-4.3	4.9	-5.0
GDP	3.0	1.8	1.0	2.0	1.7	-0.3	2.9	1.6	2.4	2.3	2.1	0.6

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

2 Excluding valuables (precious metals, precious stones and gems as well as works of art and antiques).

3 Contribution to growth in percentage points.

Source: SECO

Domestic demand recovers

After temporarily losing momentum in the previous quarter, domestic final demand was up again in the fourth quarter, proving to be the major growth driver for 2013 as a whole (cf. chart 3.5 and table 3.1). Household expenditure advanced vigorously in the health and financial service sectors, contributing to an above-average increase in consumption both in the fourth quarter and over the whole year. Private consumer spending benefited from the high level of immigration and the solid development in incomes.

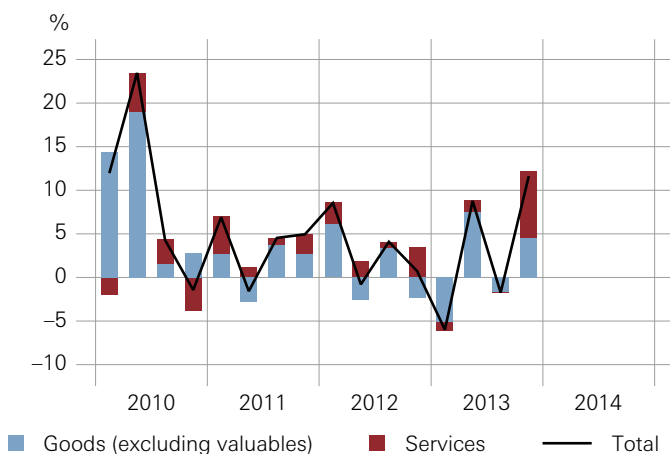
Equipment investment was up again in the fourth quarter. Overall, however, companies' willingness to invest remained limited due to the uncertain global economic outlook. Over the past two years, equipment investment has risen only very slightly and has remained well below the level of 2007, the year the global financial crisis set in.

Investment in construction continued to advance vigorously in the fourth quarter. Benefiting from the booming real estate market, residential construction recorded a further increase. Business construction, too, was up again after the weak developments of the past few quarters. However, this upward trend is likely to be temporary in view of the looming oversupply of office space and the ongoing economic uncertainty.

Chart 3.4

CONTRIBUTIONS TO IMPORT GROWTH

Change from previous period

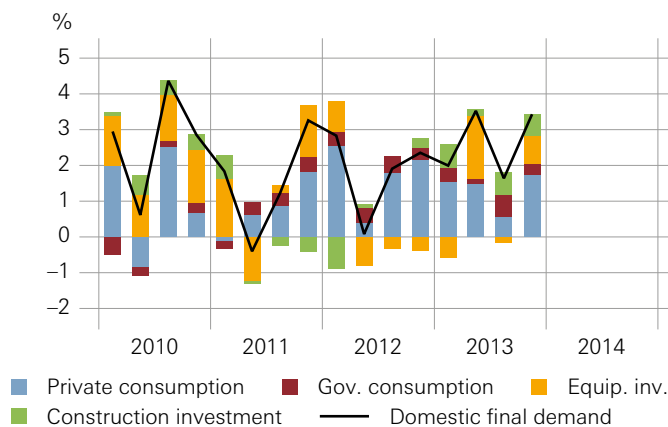


Source: SECO

Chart 3.5

DOMESTIC FINAL DEMAND, GROWTH CONTRIBUTIONS

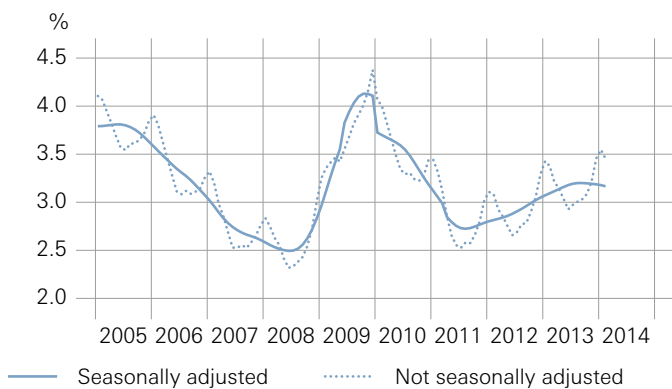
Change from previous period



Source: SECO

Chart 3.6

UNEMPLOYMENT RATE

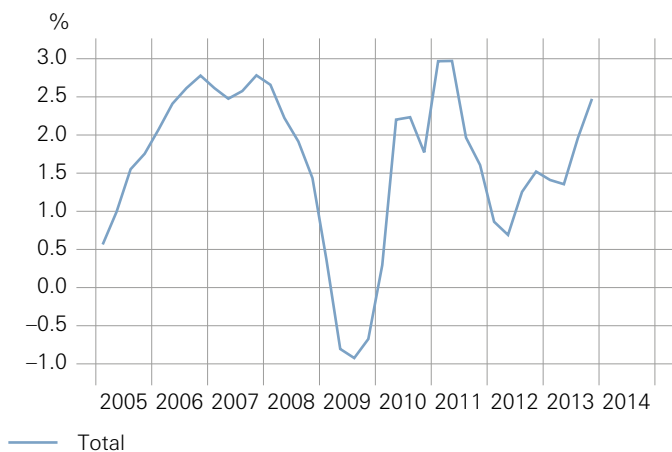


Unemployed registered with the regional employment offices, as a percentage of the labour force according to the 2000 census (labour force: 3,946,988 persons) to 2009, and according to the 2010 census (labour force: 4,322,899 persons) from 2010.
Source: SECO

Chart 3.7

EMPLOYED PERSONS

Change from previous period

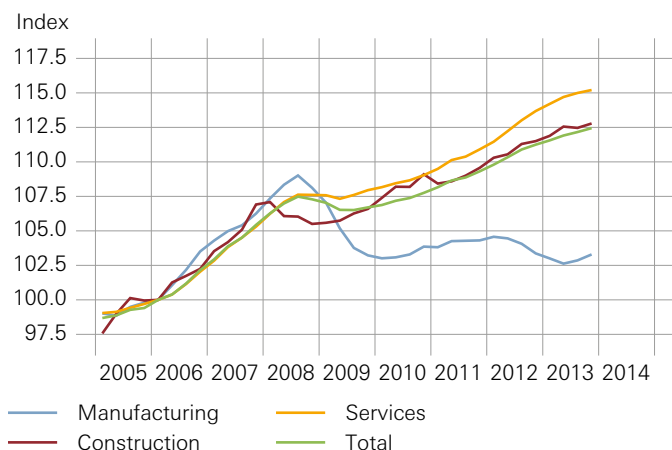


Source: Swiss Federal Statistical Office (SFSO); seasonal adjustment: SNB

Chart 3.8

FULL-TIME EQUIVALENT JOBS

Q1 2006 = 100



Source: SFSO; seasonal adjustment: SNB

LABOUR MARKET

Employment momentum picked up gradually in the quarter under review. By international standards, the situation on the Swiss labour market remains favourable.

Stagnating unemployment

The seasonally adjusted rate of unemployment has stayed unchanged at 3.2% since May 2013 (cf. chart 3.6). It also averaged 3.2% for the year 2013 as a whole, which is 0.3 percentage points higher than in 2012. However, the number of people registered as unemployed with regional employment offices has decreased slightly on a seasonally adjusted basis since October 2013, indicating further labour market recovery.

Robust rise in employment

According to the Employment Statistics (ES) of the Federal Statistical Office, the number of gainfully employed persons rose significantly in the fourth quarter, the quarter-on-quarter increase amounting to 2.5% (cf. chart 3.7). The number of gainfully employed persons advanced by 1.3% in 2013 as a whole, compared with 1.5% in the previous year.

The national job statistics (JOBSTAT) show that the increase in manufacturing jobs gained momentum in the fourth quarter (cf. chart 3.8). Jobs were also added in the services industries, albeit fewer than in the previous quarter. In financial services, however, the number of jobs has been receding for over two and a half years.

CAPACITY UTILISATION

Manufacturing capacity utilisation sees slow recovery

According to the survey conducted by KOF Swiss Economic Institute, utilisation of technical capacity in manufacturing rose to 81.8% in the fourth quarter. At this level, however, manufacturing capacity utilisation was still well below its long-term average (cf. chart 3.9). Machine utilisation in the construction sector continued to decline, yet in contrast to manufacturing, capacity utilisation remained at a fairly high level (cf. chart 3.10). Many of the construction companies surveyed were still reporting bottlenecks in machine and equipment capacity as well as labour shortages. In the services sector, surveys continued to suggest average utilisation.

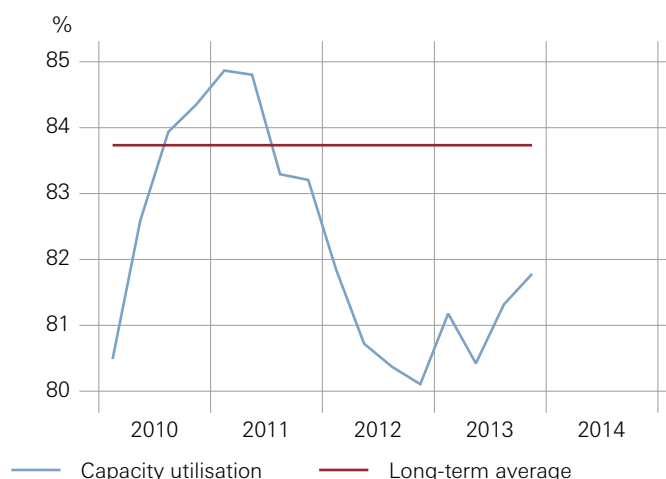
Temporary widening of output gap

The output gap, which is defined as the percentage deviation of observed GDP from estimated aggregate potential output, shows how well the production factors in an economy are being utilised. The gap widened again due to the below-average GDP growth in the fourth quarter, but this widening is likely to prove temporary. Estimated potential output calculated by means of a production function showed an output gap of -1.0% for the fourth quarter (cf. chart 3.11). Estimates using other methods (Hodrick-Prescott filter and multivariate filter) suggest a somewhat narrower gap (-0.6% in both cases).

The different estimates reflect the various ways of calculating production potential. The production function approach takes the supply of labour and the stock of capital in the economy into account. Since the supply of labour has risen significantly 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.

Chart 3.9

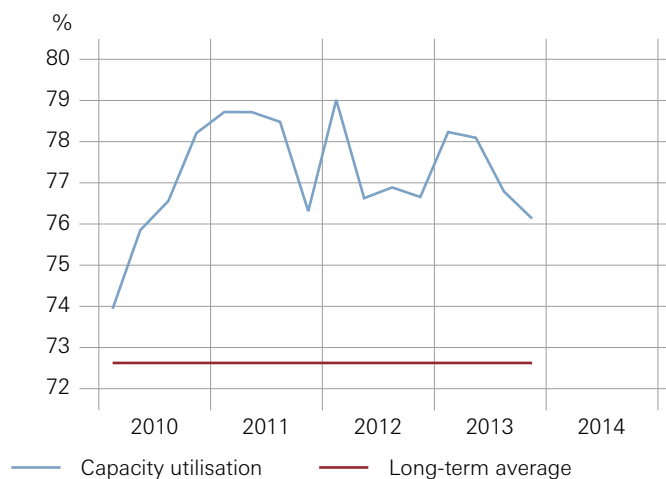
CAPACITY UTILISATION IN MANUFACTURING



Source: KOF Swiss Economic Institute

Chart 3.10

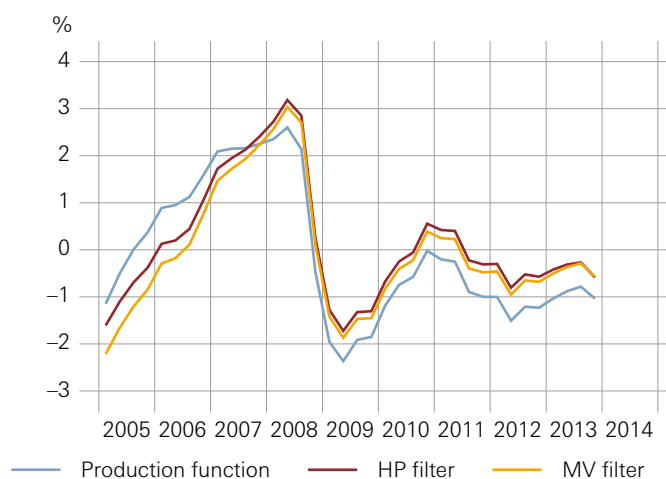
CAPACITY UTILISATION IN CONSTRUCTION



Source: KOF Swiss Economic Institute

Chart 3.11

OUTPUT GAP



Source: SNB

Chart 3.12

PURCHASING MANAGERS' INDEX (MANUFACTURING)

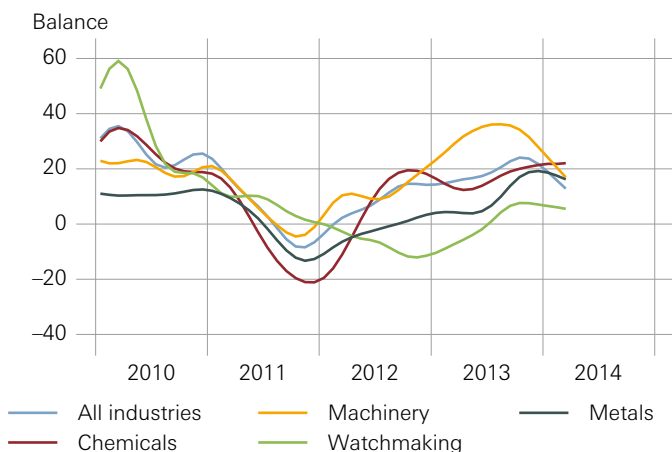


Source: Credit Suisse

Chart 3.13

EXPECTED NEW ORDERS

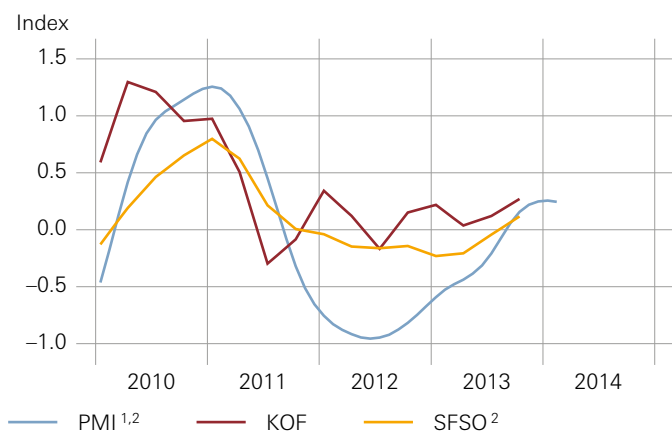
Trend component



Source: KOF Swiss Economic Institute

Chart 3.14

EMPLOYMENT LEADING INDICATORS



1 Monthly figures

2 Trend component: SNB

Sources: Credit Suisse, KOF Swiss Economic Institute, SFSO

OUTLOOK FOR THE REAL ECONOMY

The solid economic momentum of the previous year is likely to continue in 2014. Most available indicators suggest that growth will pick up again in the first quarter, with a noticeable recovery in goods exports as the main driver.

In the further course of the year, growth stimulus is also likely to come from the global economy, and the situation of export-oriented industries should gradually improve. Accordingly, production capacity utilisation is expected to be higher and companies should see further improvement in their financial situation. Against this background, investments look set to regain momentum. Industries with a domestic focus will continue to benefit from the favourable domestic environment in the coming quarters.

The SNB is forecasting GDP growth of roughly 2% for the current year, too. The unemployment rate is likely to recede slightly in the course of the year.

Major uncertainties remain attached to this forecast, mostly in connection with developments abroad (cf. chapter 2). The Swiss electorate's vote in favour of curbing immigration has added to the uncertainty concerning future economic developments. Its impact cannot yet be precisely assessed.

4

Prices and inflation expectations

CONSUMER PRICES

Swiss CPI virtually unchanged year-on-year

Consumer prices continue to be stable, with annual inflation as measured by the Swiss consumer price index (CPI) hovering around the 0% mark. In February 2014, the annual inflation rate was –0.1%, following 0.1% between November 2013 and January 2014 (cf. table 4.1).

Annual consumer price inflation has hovered around 0% over the last few months. Core inflation rates, too, have been close to zero, giving no indication of either inflation or deflation.

According to surveys, expectations on price developments have remained largely unchanged, with inflation expectations still in the low positive range, consistent with the SNB's definition of price stability.

In contrast to prices for goods and services, prices for owner-occupied apartments and single-family homes have risen sharply in recent years. The fourth quarter saw a further price rise, and in turn a further increase in risk on the residential real estate market.

Table 4.1

SWISS CONSUMER PRICE INDEX AND COMPONENTS

Year-on-year change in percent

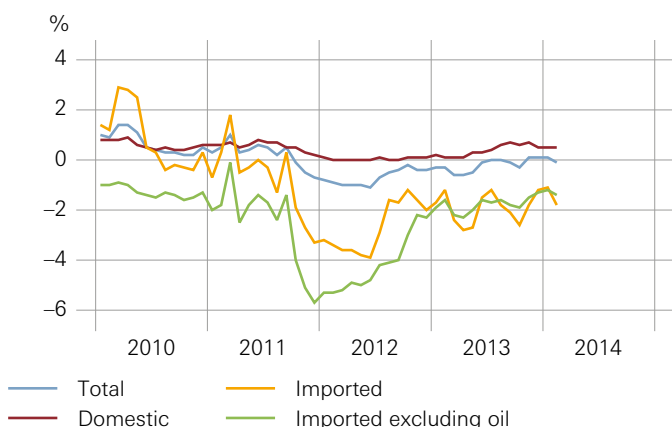
	2013	2013				2013	2014	
		Q1	Q2	Q3	Q4	December	January	February
Overall CPI	-0.2	-0.4	-0.4	0.0	0.0	0.1	0.1	-0.1
Domestic goods and services	0.4	0.1	0.3	0.5	0.6	0.5	0.5	0.5
Goods	-0.3	-0.8	-0.6	0.2	0.1	0.2	0.3	0.3
Services	0.6	0.4	0.5	0.6	0.7	0.6	0.5	0.5
Private services excluding rents	0.5	0.5	0.6	0.5	0.5	0.5	0.3	0.3
Rents	0.4	-0.2	0.1	0.7	1.2	1.4	1.4	1.4
Public services	1.0	1.1	1.1	1.1	0.5	-0.5	-0.5	-0.5
Imported goods and services	-1.9	-1.8	-2.3	-1.7	-1.8	-1.2	-1.1	-1.8
Excluding oil products	-1.8	-1.9	-1.9	-1.7	-1.6	-1.3	-1.2	-1.4
Oil products	-2.5	-1.0	-4.3	-1.6	-3.1	-0.4	-0.1	-3.9

Sources: SFSO, SNB

Chart 4.1

CPI: DOMESTIC AND IMPORTED GOODS AND SERVICES

Year-on-year change

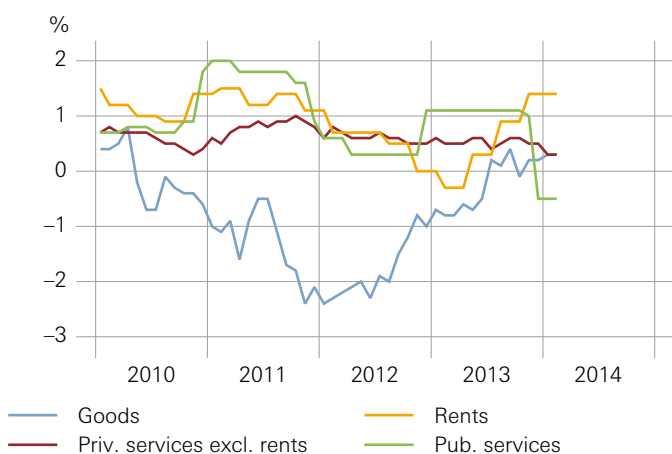


Sources: SFSO, SNB

Chart 4.2

CPI: DOMESTIC GOODS AND SERVICES

Year-on-year change

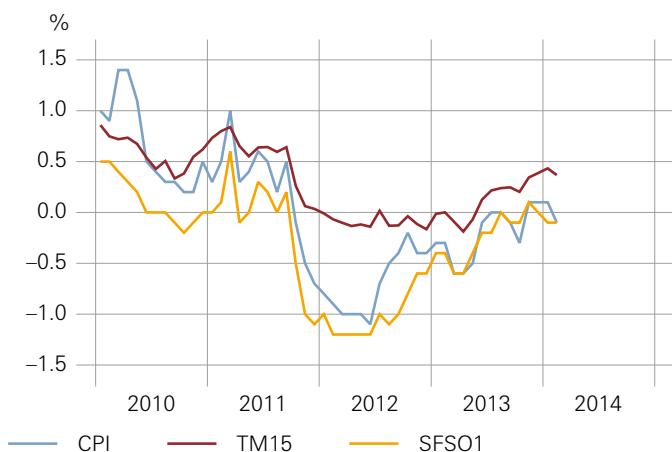


Sources: SFSO, SNB

Chart 4.3

CORE INFLATION RATES

Year-on-year change



Sources: SFSO, SNB

Price declines for imported goods

In February, prices of imported CPI goods continued to be below the corresponding year-earlier level, at -1.8%. This reflects the lacklustre price developments abroad and the slight appreciation of the Swiss franc. Both the oil price and the prices of other imported goods contributed to the negative annual rate (cf. chart 4.1).

Weak price rises for domestic goods

The domestic component of the CPI registered an annual inflation rate of 0.5% in February. Prices of both goods and services were slightly higher, on average, than one year previously. The exception was the public services category (cf. chart 4.2), where, as a result of reduced rates for hospital services, prices declined month-on-month in December; since then, they have consistently been lower than the same month one year earlier.

Low core inflation

Core inflation rates – calculated on a reduced basket of goods – continue to be low (cf. chart 4.3). The trimmed mean (TM15) calculated by the SNB has risen slightly over the last few months, reaching 0.4% in February. The SFSO’s core inflation 1 (SFSO1) fluctuated around 0%.

PRODUCER AND IMPORT PRICES

Producer and import prices slightly down year-on-year

In February, producer and import prices, which together make up the supply price index, fell month-on-month. This resulted in a corresponding decline in annual inflation rates, which are slightly more negative for import prices than for producer prices (cf. chart 4.4).

REAL ESTATE PRICES

Further rise in residential real estate prices in fourth quarter

Prices for residential real estate continued to increase in the fourth quarter of 2013. Chart 4.5 shows that Fahländer Partner's price index for owner-occupied apartments has recouped the declines of the preceding quarter, while the indices from Wüest & Partner and IAZI rose by roughly the same as in the previous quarter. The three indices were thus between 4.7% and 8.0% above their level of one year earlier. The corresponding price indices for single-family homes rose by between 2.6% and 7.4% for the same period. Most of these rates of increase were lower year-on-year.

Slight rise in existing rents

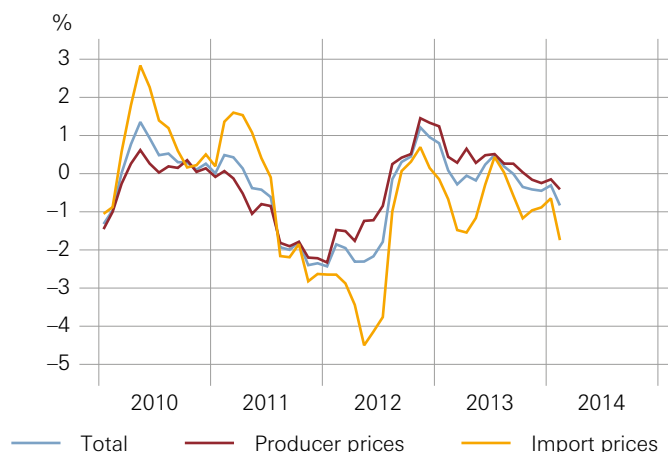
The last three years have seen a cumulative increase of around 10% in rents recorded by Wüest & Partner for apartments offered on the market (asking rents), while existing rents approximated from the rental component of the CPI have risen by less than 3% over the same period. One reason for this difference is that rents for existing contracts are tied by law to the reference interest rate. Over the last few years, this rate has gradually been going down and has stood at 2% since September 2013 (cf. chart 4.6).

In the fourth quarter of 2013, annual inflation for asking rents was once again significantly above that for existing rents. However, the long-standing rise in asking rents is gradually starting to be reflected in higher existing rents, which were 1.2% above the year-back level.

Chart 4.4

PRODUCER AND IMPORT PRICES

Year-on-year change

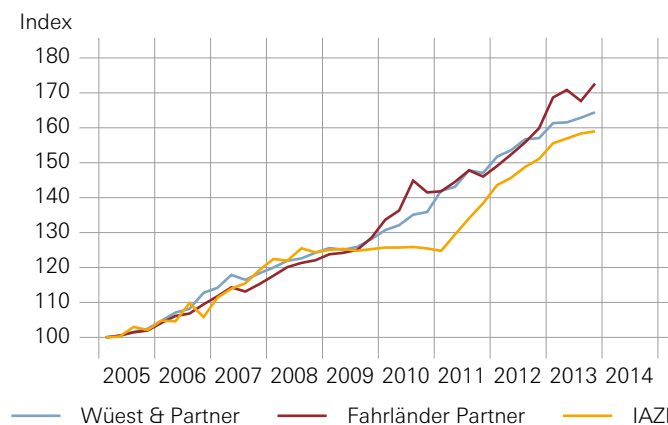


Source: SFSO

Chart 4.5

TRANSACTION PRICES, OWNER-OCCUPIED APARTMENTS

Nominal (hedonic), beginning of period = 100

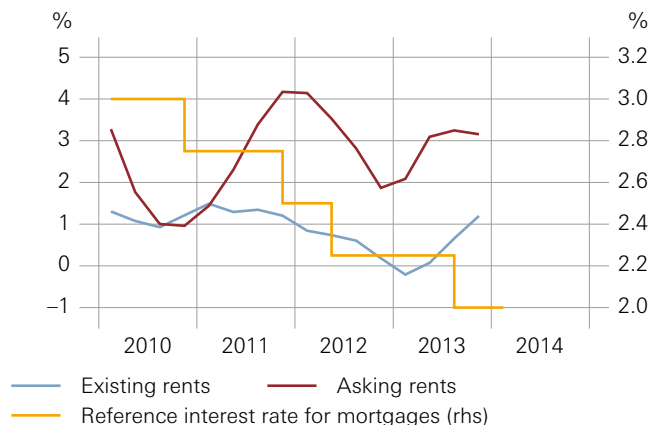


Sources: Fahländer Partner, IAZI, Wüest & Partner

Chart 4.6

APARTMENT RENTS AND REFERENCE INTEREST RATE

Nominal, year-on-year change (lhs)



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

INFLATION EXPECTATIONS

Inflation expectations remain low

A number of surveys have revealed that expectations on price developments have hardly changed over the last few months. Survey respondents are not expecting major changes in either the price level or the inflation rate. Medium-term inflation expectations are still slightly higher than short-term expectations.

According to the quarterly survey carried out by SECO in January, 52% of households are expecting moderate price rises, and 4% are expecting sharp price rises. Another 37% are expecting prices to stay the same, while the remaining 7% are expecting prices to fall. These shares are largely unchanged from the previous quarter (cf. chart 4.7).

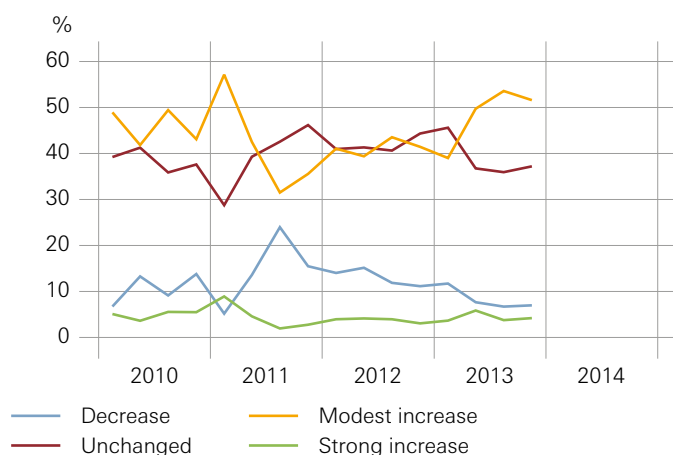
The majority of the financial analysts surveyed in February for the *Credit Suisse ZEW Financial Market Report* are not expecting any change in inflation. Over a six-month horizon, 73% were expecting unchanged annual inflation rates, 24% higher rates, and almost no one lower rates.

Information on quantitative inflation expectations is provided by the talks held by the SNB delegates for regional economic relations with companies from all sectors of the economy. In the first quarter of 2014, inflation expectations for the next six to twelve months were unchanged from the previous quarter, at 0.4%. The CFO survey conducted by Deloitte showed that, in the fourth quarter, the rate of inflation expected in two years was 1.2% (third quarter: 1.3%).

Chart 4.7

PRICE EXPECTATIONS

Survey on expected movements in prices for coming 12 months



Sources: SECO, SNB

5

Monetary developments

Long-term interest rates rose slightly towards the end of the year, but by February had again fallen below the level recorded last summer. This development corresponds to the trends on the international financial markets which were shaped by increasing demand for secure investments at the beginning of the year. Money market interest rates remained at a very low level, with little activity.

In the past quarter, the Swiss franc saw moderate fluctuations but remained above the minimum exchange rate against the euro. After weakening briefly, the export-weighted value of the Swiss franc was slightly higher in March than at the monetary policy assessment of mid-December. Thus, the Swiss franc is still high.

The monetary base has remained stable since the assessment in December. By contrast, growth in the broad-based monetary aggregates increased again at the beginning of the year. Liquidity held by households and companies remains high.

In January, at the proposal of the SNB, the Federal Council increased the sectoral countercyclical capital buffer (CCB), leading to a temporary rise in capital requirements for mortgage loans financing residential property in Switzerland as of 30 June 2014. With this measure, the Federal Council reacted to the increasing imbalances in the mortgage and real estate markets, caused by the continued strong growth of mortgage lending.

SUMMARY OF MONETARY POLICY SINCE THE LAST ASSESSMENT

Continuation of the monetary policy announced in September 2011

In the past quarter, the SNB maintained unchanged the monetary policy which it announced in September 2011 and has reiterated at subsequent assessments. On 6 September 2011, the SNB set a minimum exchange rate of CHF 1.20 to the euro. One month before, in August, it had already narrowed the target range for the three-month Libor to 0.0–0.25%.

Sight deposits at the SNB virtually unchanged

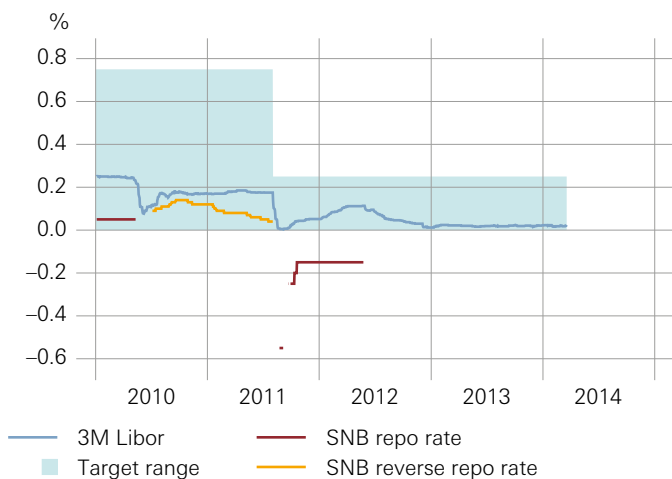
Since the December monetary policy assessment, total sight deposits held with the SNB have remained almost unchanged. In the week ending 14 March 2014 (last calendar week before the mid-March assessment), sight deposits totalled CHF 367.1 billion, compared to CHF 366.7 billion in the last calendar week before the mid-December 2013 assessment. Between the assessments in mid-December 2013 and mid-March 2014, sight deposits at the SNB averaged CHF 365.7 billion. Of this amount, CHF 317.4 billion was accounted for by the sight deposits of domestic banks and the remaining CHF 48.3 billion by other sight deposits.

High level of banks' surplus reserves

Statutory minimum reserves averaged CHF 14.7 billion between 20 November 2013 and 19 February 2014. They were thus unchanged from the preceding period (20 August 2013 to 19 November 2013). On average, banks exceeded the minimum requirement by some CHF 310.5 billion (previous period: CHF 311.1 billion). Thus, banks' surplus reserves have remained exceptionally high.

Chart 5.1

MONEY MARKET RATES

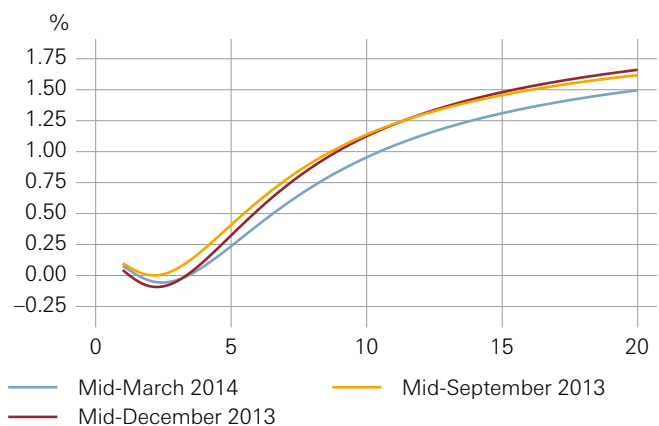


Sources: Bloomberg, SNB

Chart 5.2

TERM STRUCTURE OF SWISS CONFEDERATION BONDS

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

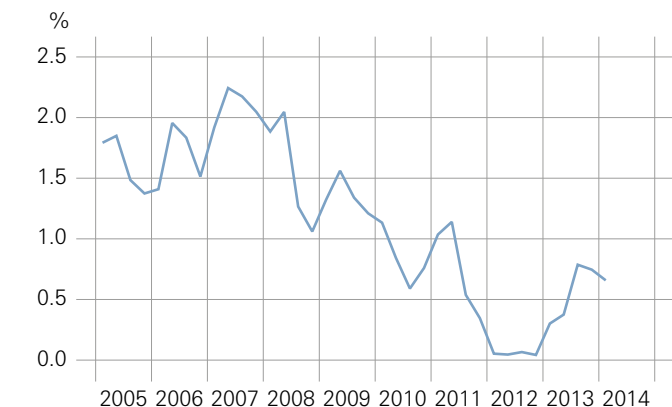


Source: SNB

Chart 5.3

ESTIMATED REAL INTEREST RATE

10-year Confederation bonds
Inflation expectations estimated with VAR model



Source: SNB

MONEY AND CAPITAL MARKET INTEREST RATES

Money market interest rates remain low

In the past quarter, the high level of liquidity contributed to trading volumes on the money market staying low. Money market interest rates remained virtually unchanged at a low level (cf. chart 5.1).

In mid-March, the three-month Libor remained at 2 basis points, as in the previous quarters. Interest rates in the secured money market (Swiss Average Rates), as well as the issuing yields for money market debt register claims of the Swiss Confederation, remained in the negative range.

Long-term interest rates down slightly

Disappointing economic data from some emerging economies and political tensions in many regions of the world pushed up demand for secure investments; this is reflected by a drop in yields on long-term government bonds of major economies. The yields of Swiss Confederation bonds were also affected. In mid-March, the yield on 10-year Confederation bonds reached 1.0%, compared to approximately 1.1% at the time of the quarterly assessment of December.

Slight flattening of yield curve

With short-term interest rates almost unchanged, the somewhat lower long-term interest rates led to a slight flattening of the yield curve (cf. chart 5.2). The spread between the yield on ten-year Confederation bonds and the three-month Libor was just under 1.0% in mid-March, compared with 1.1% in mid-December.

Real interest rates practically unchanged

The modest decline in long-term nominal yields, combined with largely unchanged inflation expectations, led to almost unchanged real interest rates. The estimated ten-year real interest rate was just under 0.7% in the first quarter, which is very low in a long-term comparison (cf. chart 5.3). Calculation of this real interest rate is based on the ten-year yield on Confederation bonds and the estimated inflation expectations for the same time horizon, determined using a vector autoregressive (VAR) model.

EXCHANGE RATES

Slight appreciation of the Swiss franc

The trade-weighted nominal external value of the Swiss franc in mid-March was slightly above the level at the monetary policy assessment of mid-December (cf. chart 5.4). After a temporary weakening at the beginning of the year, the appreciation of the Swiss franc to mid-March gave impetus to safe-haven effects.

US dollar exchange rate fluctuates

Chart 5.5 shows the Swiss franc exchange rate movements against the euro and US dollar. The turning points are largely identical, though the USD/CHF exchange rate fluctuates more than the EUR/CHF rate. The movements of the Swiss franc against the US dollar thus partially reflect the movements of the US dollar against the euro.

High real external value of the Swiss franc

The export-weighted real external value of the Swiss franc is still high and lies considerably above its long-term average. Following the introduction of the minimum exchange rate of CHF 1.20 per euro in September 2011, the real external value of the Swiss franc initially declined until May 2013, then rose again by 2.5% until February (cf. chart 5.6). The real appreciation of the Swiss franc is slightly less than the nominal appreciation as, during the same period, consumer prices in Switzerland grew at a slower rate than those abroad.

Chart 5.4

NOMINAL EXTERNAL VALUE OF SWISS FRANC

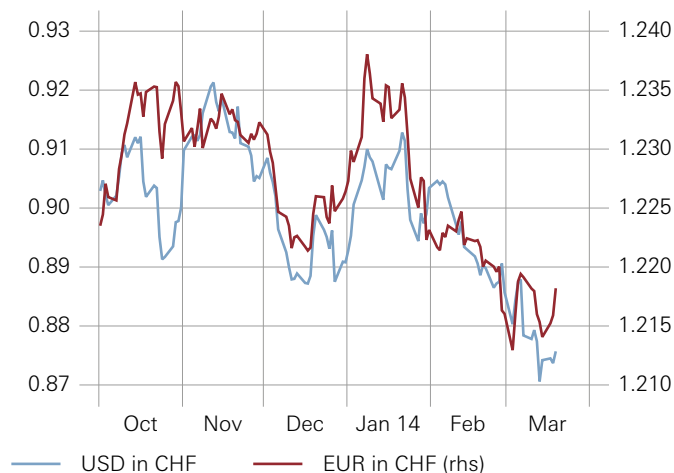
Export-weighted, January 1999 = 100



Source: SNB

Chart 5.5

EXCHANGE RATES



Source: SNB

Chart 5.6

REAL EXTERNAL VALUE OF SWISS FRANC

Export-weighted, January 1999 = 100



— In real terms (24 countries)

Source: SNB

STOCK MARKETS

SMI in mid-March at the same level as end-2013

The major equity indices in the US and Europe fluctuated substantially in the first quarter. After seeing a continued upward trend at the beginning of 2014, disappointing economic data from some emerging economies set equity prices back in the second half of January. They mostly rose again in February. Remarks by Janet Yellen, the new chair of the Federal Reserve, stating that she would continue to pursue the monetary policy of her predecessor, contributed to this development. The conflict between Russia and Ukraine led to further price losses at the beginning of March.

In mid-March, the Swiss Market Index (SMI) was at practically the same level as at end-2013.

Increase in market uncertainty

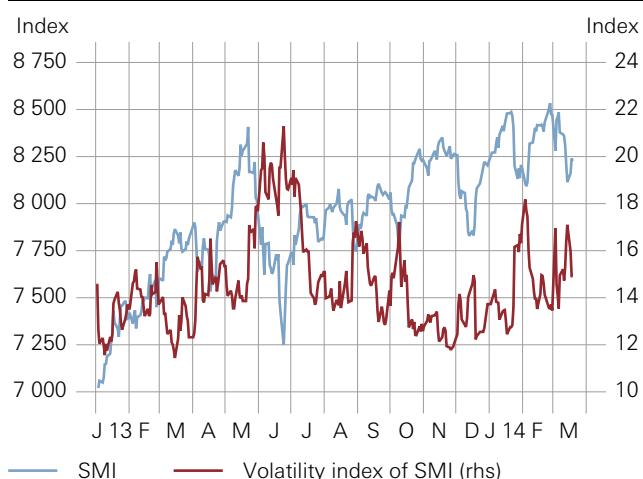
Alongside the price losses on the stock markets, the indices of expected volatility of share prices rose, reflecting the high level of uncertainty that shaped the stock markets in the first quarter. The 30-day expected volatility of the SMI exhibits two distinct upward spikes at the end of January/beginning of February and in March (cf. chart 5.7).

Volatile bank share prices

Chart 5.8 shows movements in four important sub-indices of the Swiss Performance Index (SPI): banks, health care, industrials and consumer goods. The latter three sub-indices have risen significantly since mid-2013, mainly reflecting the more significant trends in the market. The bank index, which lost almost 10% at the end of October and beginning of November, has since recouped part of these losses.

Chart 5.7

SHARE PRICES AND VOLATILITY

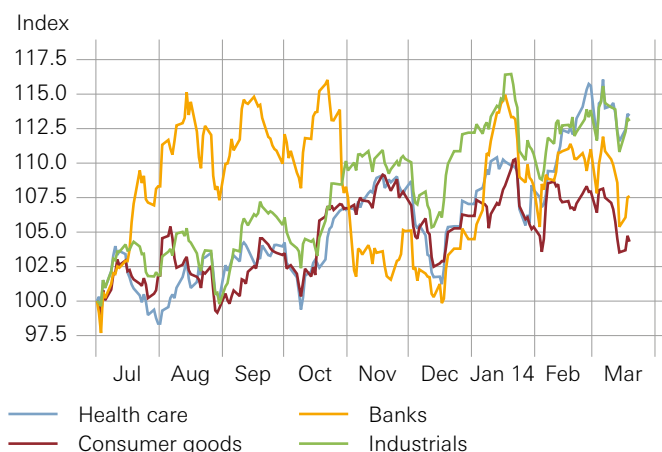


Sources: Bloomberg, Thomson Reuters Datastream

Chart 5.8

SELECTED SPI SECTORS

Beginning of period = 100



Source: Thomson Reuters Datastream

MONETARY AND CREDIT AGGREGATES

Monetary base remains stable at high level

The monetary base, which is made up of banknotes in circulation plus domestic banks' sight deposits with the SNB, has seen almost no change in the last few months (cf. chart 5.9). The rise recorded in June and July 2013 was attributable to PostFinance Ltd being granted a banking licence. This meant that PostFinance's sight deposits held at the SNB became a part of the monetary base. Had there been no change to the status of PostFinance, the monetary base would have remained largely unchanged since September 2012. By long-term standards, the monetary base remains at a very high level.

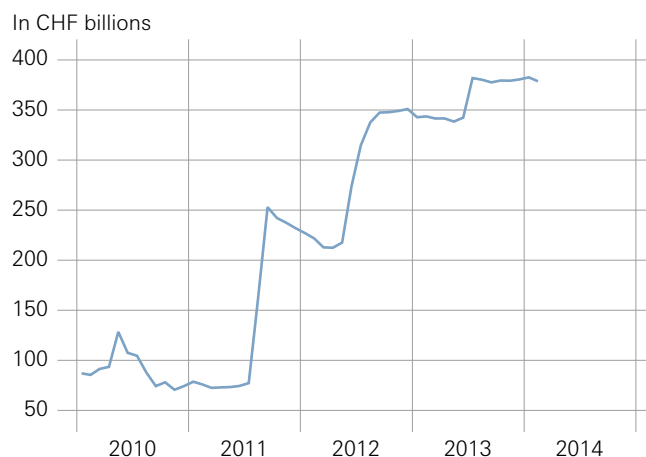
Growth of money supply stabilises

Since the onset of the financial and economic crisis, the M1, M2 and M3 aggregates have grown strongly, both by long-term standards (cf. chart 5.10) and in an international comparison. This indicates that the banking sector was able to transfer monetary policy impulses to the other sectors of the economy by granting loans with very low interest rates. Interventions on the foreign exchange market contributed to the strong growth of the monetary aggregates.

Towards mid-2013, growth in the money supply began to weaken as long-term interest rates rose. Compared with the year-back month, this growth had considerably diminished by the end of 2013, before picking up again as a result of the slight decline in long-term interest rates at the beginning of 2014 (cf. table 5.1). In February 2014, M1 (currency in circulation, sight deposits and transaction accounts) was 4.9% higher than one year earlier. In the same time period, M2 (M1 plus savings deposits) rose by 4.2% and M3 (M2 plus time deposits) was up by 4.5%. These rates of growth are based on the time series for M1, M2 and M3, which were adjusted to include PostFinance in the period before it was granted a banking licence.

Chart 5.9

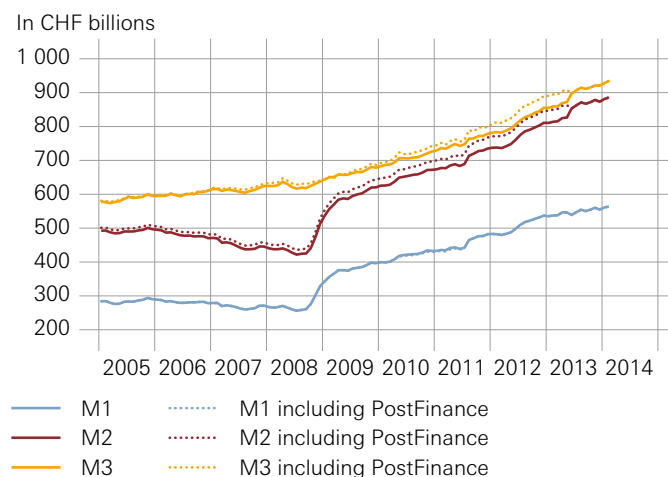
MONETARY BASE



Source: SNB

Chart 5.10

MONETARY AGGREGATES

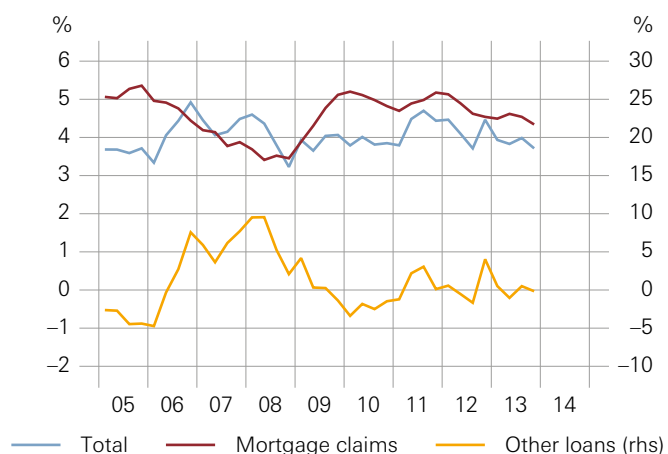


Source: SNB

Chart 5.11

BANK LOANS, IN SWISS FRANCS

Year-on-year change



Source: SNB

Lending growth slows a little in the fourth quarter

In the fourth quarter of 2013, growth of bank loans declined slightly. Bank loans were 3.3% higher than their level a year earlier, compared to 3.5% in the third quarter (cf. table 5.1).

The slowdown is the result of developments in mortgage lending. In the fourth quarter, mortgage lending was 4.3% higher year-on-year, compared to 4.5% in the third quarter. Despite the most recent increase in mortgage rates, the level of interest rates remains very low in historical terms and thus continues to boost the rise in mortgage lending. The breakdown by borrower shows that the rates of growth for mortgage lending to both households and private companies are down.

The volume of other loans has shown a flat path since the beginning of the financial and economic crisis. Since other lending is usually highly cyclical, this development is in line with a subdued level of economic activity. In the fourth quarter, other loans decreased by 1.7% year-on-year, following a decline of 1.8% in the third quarter.

Table 5.1

MONETARY AGGREGATES AND BANK LOANS

Year-on-year change in percent

	2013	2013				2013	2014	
		Q1	Q2	Q3	Q4	December	January	February
M1 (including PostFinance) ¹	8.3	11.5	11.0	6.6	4.6	3.3	4.9	4.9
M2 (including PostFinance) ¹	7.3	10.1	9.4	5.9	4.2	3.1	4.1	4.2
M3 (including PostFinance) ¹	7.3	10.2	9.3	5.9	4.3	3.5	4.3	4.5
Bank loans, total ^{2, 4}	3.5	3.8	3.5	3.5	3.3	3.9	4.2	
Mortgage claims ^{2, 4}	4.5	4.5	4.6	4.5	4.3	4.2	4.3	
Households ^{3, 4}	4.0	4.2	4.1	3.9	3.8	3.8	3.8	
Private companies ^{3, 4}	6.2	5.5	6.4	6.5	6.2	6.0	6.0	
Other loans ^{2, 4}	-1.2	0.4	-1.5	-1.8	-1.7	2.2	3.3	
Secured ^{2, 4}	0.4	5.1	2.2	-1.5	-3.8	-2.6	-4.1	
Unsecured ^{2, 4}	-2.2	-2.6	-3.9	-2.0	-0.3	5.5	8.3	

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

Broad-based growth in lending

All borrower categories recorded an increase in bank loans. Loans to households were CHF 22.3 billion or 3.4% above their year-earlier level in December 2013. In the same period, lending to non-financial companies rose by CHF 4.9 billion or 1.9%, and lending to financial companies, which is often influenced by special factors and exhibits volatile development, was up by CHF 12.2 billion, or 26% (cf. chart 5.12).

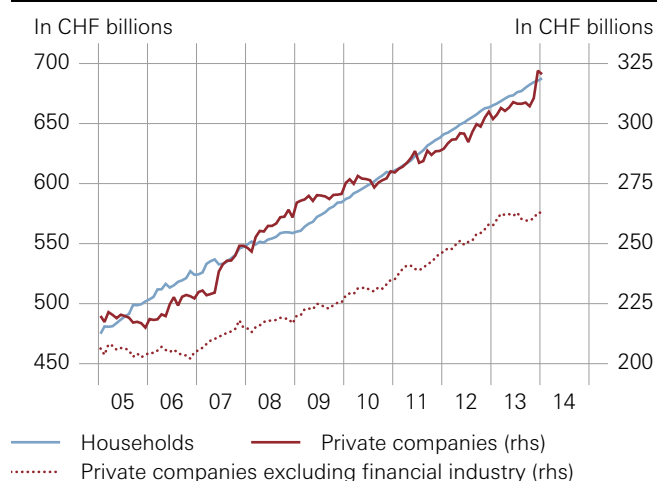
Countercyclical capital buffer increased

On 22 January 2014, the Federal Council increased the CCB from 1% to 2%. As a result, from 30 June 2014, risk-weighted positions secured by residential property in Switzerland must be backed with additional capital. The increase in the CCB serves primarily to improve the banking sector's resilience. Furthermore, it should also help to counter a further build-up of imbalances on the mortgage and real estate markets.

The increase in the CCB is necessary because the imbalances on the Swiss residential mortgage and real estate markets have increased further since the CCB was first activated in February 2013. Certainly, the activation of the CCB was at least one important factor which motivated several banks – including some major banks – to implement capital measures in 2013, which helped to increase resilience. Moreover, in 2013, the growth in both mortgage lending and residential property prices was lower than in the previous year. Neither the activation of the CCB nor other measures taken as part of the revision of the self-regulation rules were sufficient, however, to avoid a further increase in the risk of a sharp correction on the mortgage and real estate markets.

Chart 5.12

LOANS TO HOUSEHOLDS AND COMPANIES



Source: SNB

Business cycle trends

SNB regional network

Report for the attention of the Governing Board of the Swiss National Bank for its quarterly assessment of March 2014

First quarter of 2014

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 in January and February 2014 with 241 managers and entrepreneurs on the current and future situation of their companies and 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
Jean-Pierre Jetzer
Urs Schönholzer
Jean-Marc Falter
Fabio Bossi
Martin Wyss
Daniel Hanimann
Aline Chabloz
Markus Zimmerli

SUMMARY

According to this survey, Switzerland enjoyed solid growth in the first quarter of 2014. Numerous businesses managed to sustain the momentum of the last two quarters of 2013 into the new year and remain confident that operations will continue to develop favourably over the coming months.

Growth was broad-based in terms of sector. Momentum in manufacturing improved slightly. The favourable business outlook in Switzerland acted as a stimulus. Demand from abroad was more geographically diversified than in the previous quarter.

Overall, margins were somewhat lower than respondents regarded as normal. Demand for labour remained stable quarter-on-quarter.

The outlook for real growth in turnover over the next few months remains optimistic in all industries. Companies are signalling that they plan to increase investments somewhat and to marginally raise the number of jobs.

Entrepreneurs believe that various political developments, including the effects of the recently passed referendum on limiting immigration, as well as increased regulation could negatively influence operating conditions in the future. However, uncertainty caused by economic and structural risks in Europe has, in their view, declined.

BUSINESS ACTIVITY

Manufacturing: Ongoing recovery

Compared with the last survey of companies, manufacturing witnessed a certain improvement in business activity. Overall, real turnover was up slightly on the previous quarter. Of the companies surveyed, 45% recorded a quarter-on-quarter rise in turnover; 40% posted no change.

Most industries reported positive developments. The most notable increases in real turnover were registered by pharmaceuticals, chemicals and plastics manufacturers, but the metals industry and food producers also reported turnover gains. By contrast, the machinery and textiles industries experienced a slight decline in turnover compared to the previous quarter.

Domestic demand remains high in Switzerland and momentum has even improved somewhat. In Europe, demand from Germany and the UK remains solid and signs of revived demand from Spain and Italy are beginning to be felt. Demand from the US, Asia and Eastern Europe is acting as a stimulus, and automobile manufacturers are sending strong positive signals.

Construction: Continued momentum

Starting from a very high baseline, real quarter-on-quarter turnover continued to rise in the construction sector. In fact, turnover was substantially higher than in the same quarter a year earlier, due to exceptionally favourable weather conditions. Structural engineering's performance was particularly dynamic.

Services: Moderate growth

The services sector continued to report moderate growth spanning a wide range of industries, albeit at a less pronounced rate than in previous quarters. While nearly one third of the companies surveyed recorded a quarter-on-quarter rise in turnover, 45% reported that turnover had stagnated.

Companies in the following sectors registered relatively dynamic business momentum: IT, consulting, staff recruitment, wholesale, vehicle dealerships and transport. In finance, retail and hospitality, business was relatively flat. Various retailers expressed their belief that cross-border shopping activity had remained stable. In the same survey, a range of retailers highlighted the growing proportion of online purchases, presenting it as both an opportunity and a risk.

Although quarter-on-quarter business remained flat for leisure hotels, it improved significantly compared to the same period a year earlier. Hoteliers noted that demand remained very volatile and that customers were increasingly booking short stays – and at short notice. The number of foreign guests – particularly from Germany – increased slightly. Seminar business was described as muted, not least due to the decline in demand from the finance sector.

CAPACITY UTILISATION

Overall, capacity utilisation remains at a 'normal' level, although substantial differences exist between the construction industry and other branches of the economy.

As in the fourth quarter of 2013, manufacturing companies rated their capacity utilisation as somewhat lower than normal. The pharmaceuticals industry continued to report a slightly higher than normal level, and metals manufacturing and processing companies also reported that utilisation had increased. Machinery manufacturers advised of a noticeable underutilisation of production capacity.

In construction, utilisation of technical capacity was generally a little higher than usual for the time of year. This was due largely to unusually favourable weather conditions.

In the services sector, overall utilisation of infrastructure (i.e. primarily office and retail space as well as transport capacity) was still at a normal level. Architecture and engineering firms, but also tour operators, indicated that capacity utilisation was on the high side. Despite a gratifying start to the winter season, hotel and restaurant operators pointed to a certain underutilisation of their capacity – in the first half of the quarter, at least. One reason named was changes in winter holiday dates.

DEMAND FOR LABOUR

Steady demand for staff

Demand for labour remained virtually unchanged quarter-on-quarter according to this survey. Many companies continue to increase or decrease temporary staff in order to manage unexpected surges or drops in demand. Nonetheless, there are some signs that the number of permanent employment contracts may be increasing slightly. Changes in staffing policy (e.g. short-time working or hiring freezes) were barely mentioned. There are still marked differences between the various industries in their assessment of how appropriate staffing levels are.

The manufacturing companies surveyed indicated that their staff numbers almost exactly matched requirements. Representatives of the chemicals and pharmaceuticals industries, but also some from the timber processing sector, stated that their headcounts were on the low side. Companies in the machinery industry considered themselves marginally overstaffed, while metal-processing firms reported appropriate staff levels.

In construction, only businesses from the finishing trade stated that they were somewhat understaffed. Staffing levels in both civil and structural engineering are considered appropriate.

In the services sector, employee levels were also seen as appropriate overall, whereas IT companies as well as

architectural and engineering firms stated that their staff levels continued to be distinctly too low.

As in the previous quarter, the companies surveyed considered the process of recruiting staff to be roughly as challenging and time-consuming as before. Recruitment has become more problematic in certain sectors and industries, however. Many sectors mentioned that the level of spontaneous job applications was still high.

PRICES, MARGINS AND EARNINGS SITUATION

Margins virtually unchanged

Of the companies surveyed, approximately one third reported that margins were slightly lower than usual overall, while a further 45% considered their margins to be within the normal range.

In manufacturing – mainly in machinery but also in timber processing and the furniture trade – profit margins remained weaker than normal. Food producers and textile processors also noted that margins were lower than usual. By contrast, margins in the chemicals industry were reported as considerably higher than usual, and they were also well above average in pharmaceuticals. Manufacturing companies expect purchase prices to rise slightly and sale prices to remain stable in the coming months.

In construction, the surveyed companies reported margins within the expected range overall, with a slightly more favourable situation in structural engineering being offset by just below-average margins in civil engineering.

In the services sector, margins were once again rated as lower than normal. They have, however, generally improved since the last survey, when significantly more representatives from the services sector reported below-average levels. Banks, retailers, transport firms and vehicle dealers in particular were once again confronted with rather low margins. In addition to the persistently low interest rates, bank representatives frequently cited the cost of implementing regulatory requirements as a cause of margin pressure. Most other services industries reported normal margins. Wholesalers, restaurant operators and banks in particular are expecting higher sales and service prices in the months ahead.

Improvements in margins in recent months were most frequently attributed to cost savings in the production process, but also to leeway for sales price increases. Companies from all three sectors of the economy continue to appreciate the stable exchange rate against the euro as well as against the US dollar, be it in connection with invoicing, budgeting or price negotiations.

OUTLOOK

Increased visibility for the remainder of the year

Companies remain confident about the business outlook for the coming months. This is related to the fact that ‘visibility’, i.e. the term that entrepreneurs use to refer to the predictability of the course of business, has increased. In all industries, respondents expect turnover to rise in the next six months, due in large part to ongoing economic improvements in Europe and good consumer confidence in Switzerland.

A slight increase in headcounts is also envisaged over this time horizon, and quite a few companies said they had raised salaries by a good 1 percentage point or thereabouts from the beginning of the year, or intended to do so in the next few months.

The somewhat higher level of confidence was also reflected – for the first time in several quarters – by slightly more expansive investment plans at companies in all three sectors. Expenditure on capital as well as on building investments is expected to increase slightly in the coming twelve months.

However, numerous political initiatives in Switzerland and the increasingly complex regulatory and bureaucratic environment remain a prime concern among the SNB’s respondents. Several companies, especially in the border regions, have expressed their unease at the recent adoption of the referendum on limiting immigration in Switzerland. However, they do not expect tangible negative effects in the immediate future. The European debt crisis was mentioned sporadically by individual companies as an ongoing issue that has yet to be resolved.



SNB Policy Paper. Prices of Swiss traded goods during the Great Trade Collapse

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This study analyses prices of Swiss exports and imports during the Great Trade Collapse between 2008 and 2009. Prices decreased across the board during this period, on average by around 3.5%. Yet, these price decreases were especially large for goods traded in centralised markets. This suggests that market structure is an important factor influencing the response of goods prices to large contractions in demand, such as those seen during the Great Trade Collapse.

1 Introduction

Imports and exports account for a large part of the Swiss economy, and import and export prices affect Switzerland through a variety of different channels.¹ To carry out its mandate of price stability, the SNB closely follows price developments, including changes in import and export prices.²

As the global financial crisis unfolded, world trade flows collapsed sharply between 2008 and 2009. Chart 1 illustrates that, during this period, Swiss quarterly exports and imports fell by about 21% and 20%, respectively, from peak to trough.³ This sudden drop in Swiss trade was part of the biggest contraction in world trade since the 1930s and is now typically referred to as the Great Trade Collapse.

International shocks of the dimension of the Great Trade Collapse strongly affect Switzerland's small open economy.⁴ A central bank's focus on price developments raises the question of how exactly the prices of traded goods responded. Did they change in 2008 and 2009? Did mounting difficulties in cross-border trade financing push up the prices of internationally traded goods? Or did decreasing import prices add to deflationary pressures – and if so, was this effect equal across goods classes?

A close examination of the dynamics of import and export prices during the Great Trade Collapse helps address these questions. The current study examines import and export data from the Swiss Customs Administration, focusing in particular on the years 2008 and 2009.

Two important empirical findings for Switzerland stand out. First, average Swiss export prices fell by 3.6% and import prices by 3.5% during the Great Trade Collapse. These decreases are relatively small when compared with the fall in aggregate export values (21%) and import values (20%). They show that the drop in prices accounts for only a small portion of the drop in aggregate trade values. By far the largest part is accounted for by a contraction in quantities.

The second, and more important, finding concerns the decomposition of price drops into two different product classes: homogeneous goods and differentiated goods.⁵ Homogeneous goods are traded in centralised markets.⁶ The resulting higher degree of price transparency generally constrains the ability of producers to set prices for these products. The data show that the price drop during the Great Trade Collapse was especially pronounced for homogeneous goods. This suggests that the specific market structure has played an important role in price movements and the transmission of international shocks.

Interestingly, the general direction of all price changes also points to the underlying determinants for the Great Trade Collapse. Specifically, the observed price decreases are consistent with the conventional view that a drop in demand was the key driver of the Great Trade Collapse. Conversely, supply-side factors such as mounting trade frictions would push up prices of traded goods and increase goods prices; they are thus harder to reconcile with the observed price drops.

The next sections document in detail the price changes for Swiss imports and exports during the Great Trade Collapse. Prior to this, however, the main explanations for the sharp decline in world trade are reviewed.

1 There are several phenomena that relate prices of traded goods to CPI dynamics. These phenomena include the impact of imports from low-wage countries (Auer and Fischer (2010)), the exchange rate pass-through (Campa and Goldberg (2005) and Stulz (2007)), and the role of commodity prices (Nakov and Pescatori (2010) and Natal (2012)) or simply the evolution of terms of trade (Kohli (2004)).

2 Hildebrand (2010) stresses the importance of trade linkages for monetary policy in the recent period of the Great Trade Collapse.

3 Chart 1 plots only world imports, since world exports equal world imports – excluding measurement errors.

4 During the period of the financial crisis, disruptions in trade flows as well as strong reversals of capital flows occurred (cf., for example, Milesi-Ferretti and Tille (2011) and Brutti and Sauré (2013)).

5 Typical examples of homogeneous goods are standardised intermediate inputs and commodities such as petroleum oil, unfinished metals or coffee beans. Examples of differentiated goods are specific medicaments or motor vehicles.

6 These are markets where prices are publicly and transparently quoted. An important example is the Chicago Mercantile Exchange.

2 Common explanations for the Great Trade Collapse

International trade is procyclical: trade flows, measured as shares of GDP, tend to increase during economic booms and decline during recessions. This does not imply, of course, that the reasons for the Great Trade Collapse are entirely obvious. Indeed, trade economists have been busy scrutinising the determinants of the sharp decline in world trade.

A number of explanations have been put forward, which can be broadly classified into two camps: those related to a decrease in demand and those associated with supply-side factors and, specifically, with increases in trade frictions.

On the *demand side*, a prominent explanation relates to the specific composition of the trade basket. Thus, demand fell especially heavily for specific goods classes, which happen to be those that constitute a disproportionately large share of the trade basket. Eaton et al. (2011) show that this composition effect of the trade basket can explain up to 80% of the Great Trade Collapse. Following the same line of argument, Behrens et al. (2013) analyse Belgian trade and production data, and find that the collapse of trade values was product-specific rather than specific to cross-border transactions. Other studies examine specific reasons for the drop in demand. Alessandria et al. (2010)

and Alessandria (2013), for example, argue that inventory management magnified the Great Trade Collapse. They show that, when anticipating a drop in future demand, importers run down their inventories, and this leads to a temporary collapse of import demand.⁷

Considering the *supply side*, a number of studies point to increased trade frictions as the reason for the Great Trade Collapse. For example, Ahn et al. (2011) and Chor et al. (2012) stress the role of trade credit. They argue that exporters' banks may have stopped financing export transactions during the crisis, thereby inducing a drop in cross-border trade. An alternative friction is protectionism. Mounting protectionist policies during the acute phase of the crisis could have generated adverse effects on the cross-border supply of goods (cf. Bems et al. (2012)).

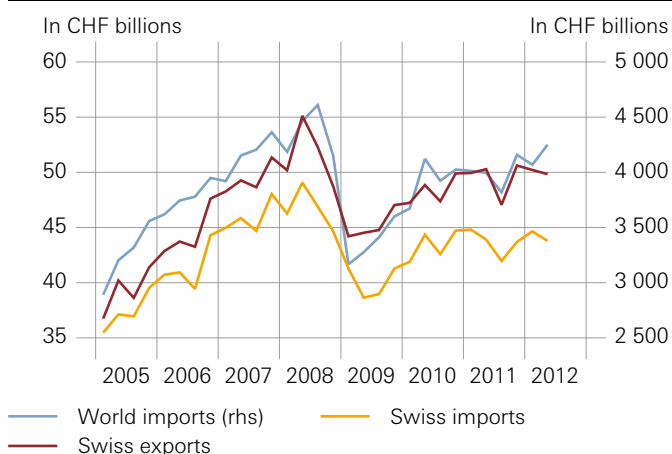
Interestingly, by assessing export and import prices, one can draw a demarcation line through the two broad sets of theories.⁸ Specifically, a drop in export and import prices can be read as evidence against explanations relying on increased export costs such as those of financing trade flows, because such effects are generally associated with increased prices of traded goods. By contrast, explanations stressing demand-side effects, such as those based on the composition of export baskets or inventory management, are consistent with the observed declines in prices of traded goods.⁹

In sum, the general decrease in prices of traded goods between 2008 and 2009 strengthens the common interpretation that the Great Trade Collapse was primarily driven by a fall in demand for traded goods.

Chart 1

WORLD AND SWISS TRADE

Values



Sources: Federal Customs Administration (FCA), International Monetary Fund (IMF)

7 Domit and Shakir (2010), Crowley and Luo (2011), and Bems et al. (2012) survey the literature.

8 Gopinath et al. (2012) emphasise this point in an earlier study on the Great Trade Collapse.

9 Rising trade friction or decreasing demand may both lead to a complete stop in export flows of certain goods, so that price changes remain unobserved. Such effects may indeed blur the overall picture conveyed by trade indices and the statistical estimations. However, the direction of observed price changes can still be considered as strongly indicative for the underlying drivers of the Great Trade Collapse.

3

Price developments in Swiss traded goods

This section presents the key findings of the study in two steps. After discussing general price trends in the first subsection, the subsection thereafter explores the more detailed patterns in the prices of homogeneous and differentiated goods.

GENERAL TRENDS

The analysis of Swiss export and import prices relies on detailed trade data from the Swiss Customs Administration. In the absence of direct information on unit prices, unit values are analysed; these are defined as the value (in CHF) over the mass (in kg).¹⁰ Unit values are known to proxy prices imperfectly, but reasonably well.¹¹

In order to build an aggregate index, unit values for each country-product pair are normalised to 100 in the initial period (January 2005). These are then aggregated through

weighted geometric averages.¹² The data cover the period from January 2005 to June 2012. Charts 2a and 2b plot the evolution of Swiss trade for the years around the Great Trade Collapse. They show the unit value (indexed, red line) with aggregate trade values (blue line) and the real effective exchange rate (yellow line, inverted)¹³ for Swiss exports and imports separately.

The Great Trade Collapse is defined as the four consecutive quarters since the beginning of 2007 during which Swiss exports and imports were lowest. By this definition, it coincides with the calendar year 2009, which is shaded blue in charts 2. Chart 2a illustrates that unit values of exports gradually increased between 2005 and 2008. Between 2008 and 2009, the unit value index dropped somewhat but remained quite stable, especially when compared with the sharp drop in the aggregate value of Swiss exports.¹⁴ The chart suggests that unit values of exports decreased by about 3% to 4% between 2008 and 2009. Indeed, an econometric analysis shows that the unit value of Swiss exports decreased on average by 3.60% during the Great Trade Collapse. This estimated drop is statistically significant and robust to various controls (cf. table in the box).¹⁵

10 The Swiss Customs Administration records 240 different countries and regions as trade partners and, following the 8-digit HS classification system, roughly 9,000 products.

11 The unit value indices analysed here track conventional price indices such as the import and export price indices computed by the Swiss Federal Statistical Office (www.bfs.admin.ch). Recent studies, such as Haddad et al. (2010) and Behrens et al. (2013), have used unit values to proxy and assess price dynamics during the Great Trade Collapse.

12 Weights are constant over time and proportional to total values for the whole period. Unit values are assumed to be constant when monthly observations are missing. Goods classes with an aggregate value of more than 1% are excluded. These classes are mostly residual goods classes, for which within-class substitution effects are likely to be large.

13 The real effective exchange rate is from the BIS.

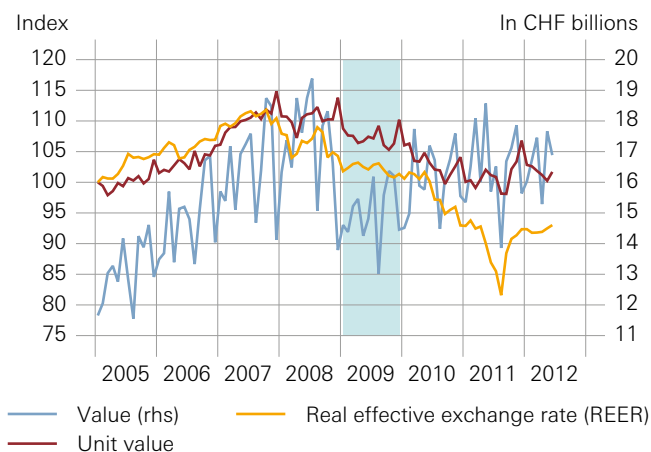
14 The subsequent fall and rise in unit values between 2010 and mid-2012 largely reflect the appreciation of the Swiss franc.

15 In all empirical specifications, changes in the composition of destination and products are controlled for. Thus, increased trade shares of emerging economies do not affect these results.

Chart 2a

SWISS TRADE, EXPORTS

Values and unit values

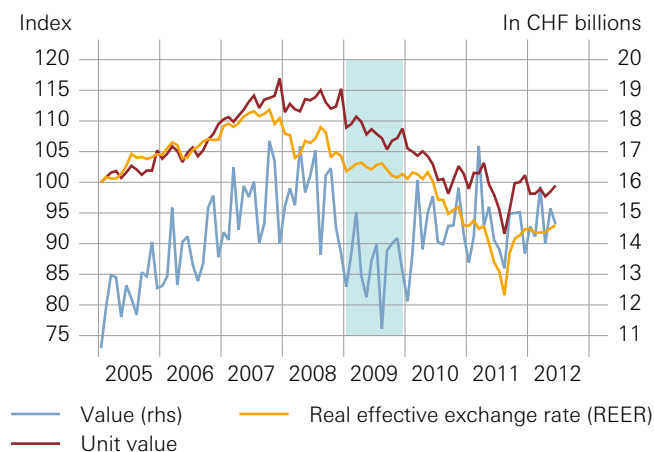


Sources: Bank for International Settlements (BIS), FCA

Chart 2b

SWISS TRADE, IMPORTS

Values and unit values



Sources: BIS, FCA

BOX

Empirical analysis

This box describes the empirical analysis of Swiss unit values during the Great Trade Collapse. Unit values are defined as value over mass. The unit of observation is a single export or import transaction, also called a *shipment*.¹ The period of the Great Trade Collapse is the calendar year 2009 (cf. chart 1). Accordingly, Swiss trade data are used for 2009 and the reference year 2008.

The empirical assessment needs to control for composition effects. Such effects may arise, for example, if Swiss imports from East Asia exhibit relatively low unit values and the share of Swiss imports from East Asia increases, as indeed it has. In that case, the larger weight of cheap Asian import goods may drive part of the dynamics in charts 2 and 3.² The following empirical model controls for such effects:

$$p_i = \alpha_{j(i)k(i)} + \beta_0 GTC_{t(i)} + \beta_1 GTC_{t(i)} * HOM_{k(i)} + \varepsilon_i \quad (1)$$

1 The general term shipment does not refer to transportation via the waterway.
2 Cf., for example, Sauré (2012) and Simonovska (2010) for theory and evidence on destination-specific export prices. Cf. Auer and Sauré (2011 and 2012) for characteristics of trade flows which are Swiss-specific.

Here p_i is the log unit value and the index i identifies the individual shipments. Each shipment i is associated with a unique country of destination, indicated by j , a narrowly defined product, indicated by k , and date of shipment, indicated by t .³ The dummy GTC_t is set to one if time t is in 2009 and zero otherwise. The dummy HOM_k is one if the product k is classified as homogeneous and zero when it is differentiated. The dummies α_{jk} , one for each country-product combination, control for the average level of unit values for each country-product combination, thus absorbing the composition effects discussed above.⁴ The coefficients of interest are β_0 and β_1 , which indicate, respectively, the *average* price change during the Great Trade Collapse and the *additional* price change for homogeneous goods.

Table 1 summarises the estimation results. Column 1 reports those of the specification including only the dummy GTC_t and the country-product dummies α_{jk} . The estimated coefficient β_0 suggests that, during the Great Trade Collapse, the unit value of Swiss exports decreased significantly, by about 3.60%. Column 2

3 All three indices j , k and t depend on shipment i , as indicated in equation (1).
4 Following Gopinath et al. (2012), bilateral exchange rates are not controlled for in the empirical model (1). The average annual CHF/USD exchange rate changed by less than half a percent between 2008 and 2009.

Table 1

UNIT VALUES AND THE GREAT TRADE COLLAPSE

Dependent variable: logged unit value

	1	2	3	Exports 4	5	6	7	Imports 8
GTC	-0.0360*** [0.000504]	-0.0355*** [0.000566]	-0.0273*** [0.000675]	0.00881*** [0.00122]	-0.0352*** [0.000331]	-0.0298*** [0.000362]	-0.0269*** [0.000408]	-0.0307*** [0.000581]
GTC*HOM		-0.0277*** [0.00146]	-0.0149*** [0.00157]	-0.0231*** [0.00158]		-0.0266*** [0.000999]	-0.0234*** [0.00102]	-0.0214*** [0.00104]
GTC*COMM			-0.0254*** [0.00114]	-0.00660*** [0.00126]			-0.0117*** [0.000765]	-0.0158*** [0.000890]
GTC*DUR				-0.0522*** [0.00146]				0.00732*** [0.000814]
Observations	23061154	21048848	21048848	21048848	37873337	35092584	35092584	35092584
R-square adjusted	0.813	0.818	0.818	0.818	0.724	0.723	0.722	0.722
Dummy: goods destination	yes	yes	yes	yes	yes	yes	yes	yes

Transaction-level data for Swiss exports and imports, for 2008 and 2009. GTC = Great Trade Collapse. Stars indicate significance at 10% (*); at 5% (**); and at 1% (***). Standard errors in brackets.

Source: FCA

corresponds to the estimation with the interaction term $GTC_t * HOM_k$.⁵ It shows that unit values for Swiss exports of differentiated goods decreased by about 3.55% during the Great Trade Collapse. Unit values for homogeneous goods also decreased, by 2.77%, yielding a total decrease of 6.32%.

Columns 3 and 4 report results of the estimations which additionally control for GTC interaction using dummy variables for commodities and durable goods. The estimated coefficients corresponding to both interaction terms are negative and significant. This result shows that prices of both product classes, commodities and durable goods, exhibited a drop that was larger than that of the average product. At the same time, the qualitative difference between prices of homogeneous goods and differentiated goods is preserved: controlling for the effects of other goods classes causes the former to drop by significantly more than the latter.⁶

Columns 5 to 8 of table 1 report results for tests based on Swiss import data. On average, unit values of Swiss imports decreased by about 3.52% during the crisis (cf. column 5). Distinguishing between the effect for differentiated and homogeneous goods, column 6 shows that the unit values of the two classes dropped by 2.98% and 5.64% (2.98% + 2.66%) respectively between 2008 and 2009. Again, the qualitative results remain unchanged when controlling for the specific effects of commodities and durable goods in columns 7 and 8.

⁵ The dummy HOM_k is collinear to the product dummies and thus does not enter the regression separately. Note also that column 1 reports a larger number of observations because not all goods classes are matched.

⁶ The estimated coefficient on GTC indicates that differentiated goods that are neither durable nor commodities exhibited a mild increase in prices of 0.88%.

The picture looks similar for the dynamics of Swiss imports, plotted in chart 2b. Here again, unit values of Swiss imports increased prior to the crisis and dropped sharply during the Great Trade Collapse. Over the same period, unit values of Swiss imports are estimated to have decreased on average by 3.52%.

In sum, charts 2 and the corresponding estimations reported in the box suggest that, during the Great Trade Collapse, firms exporting to and importing from Switzerland cut prices significantly.

DIFFERENT PRODUCT CLASSES: THE ROLE OF MARKET STRUCTURE

Looking at the drop in unit values documented in charts 2, one may wonder whether specific products or product classes were driving the general trends. One of the product classes for which prices reacted strongly is *homogeneous* goods.¹⁶ This class exhibits quite distinctive price characteristics.¹⁷ A distinguishing feature of homogeneous goods is their market structure. Homogeneous goods are sold through centralised market exchanges, so that prices are transparent and comparable across international markets. All other products are called *differentiated* goods and are exchanged through less standardised markets. They are distinguished by quality differences and important brand characteristics. Corresponding international markets are typically segmented, i.e. different prices are charged in different countries. Consequently, prices of differentiated goods tend to be less uniform.

¹⁶ The trade literature frequently distinguishes between homogeneous goods and differentiated goods. Rauch (1999) defines these classes at the 4-digit HS level.

¹⁷ In 2008, the share of homogeneous goods in the Swiss export basket was about 15.4%, and in the import basket 21.8%; the respective shares in 2009 were 15.3% and 19.6%.

Homogeneous goods typically comprise intermediate inputs, building materials, chemical substances, unfinished metals and energy sources. Within Swiss exports, the largest categories of homogeneous goods include electrical energy, specific organic chemicals, roasted coffee and plates of aluminium alloys. Corresponding homogeneous products within Swiss imports are petroleum products and metal products (such as copper wire or unwrought aluminium). As regards differentiated goods, large classes of Swiss exports are medicaments and watches; corresponding import classes are vehicles and telephone sets.

The data analysis reveals distinct price dynamics in the homogeneous and differentiated goods classes during the Great Trade Collapse. To that aim, unit value indices, as defined above, are computed separately for both classes. The unit value index from charts 2 thus decomposes into two sub-indices.

Charts 3a and 3b plot the two resulting sub-indices of unit values (red lines) together with the normalised aggregate values (blue lines) between January 2005 and June 2012.¹⁸ The time series corresponding to homogeneous and differentiated goods are plotted in dashed and solid lines, respectively. Chart 3a illustrates the dynamics of Swiss exports, chart 3b those of Swiss imports.

As charts 3 show, during the Great Trade Collapse the dynamics in *aggregate values* of homogeneous and differentiated goods were not very different: both declined sharply. At the same time, the dynamics in *unit values* of

both classes were quite distinct. The unit values of Swiss exports seem to exhibit greater volatility for homogeneous goods (cf. chart 2a, dashed red line) than for differentiated goods (cf. chart 2a, solid red line). Not only did unit values of homogeneous goods fluctuate more strongly on a monthly basis, they also exhibited larger swings from peak to trough in the period of the Great Trade Collapse. By comparison, unit values of differentiated goods are relatively stable. A similar impression is conveyed by the corresponding plots for Swiss import data in chart 3b.

This general message is corroborated by corresponding empirical estimates. They show that unit values for Swiss exports of differentiated goods decreased by about 3.55% during that period, while those for exports of homogeneous goods decreased by 6.32%. Regarding Swiss imports, unit values of differentiated and homogeneous goods dropped by 2.98% and 5.64% respectively during the crisis (cf. table in the box).

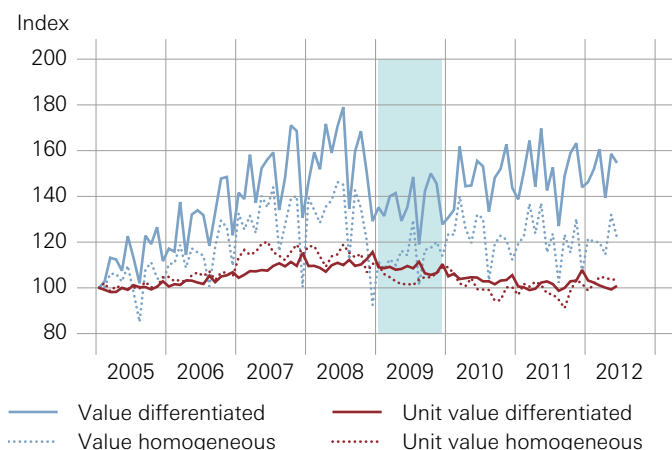
One might suspect that the pronounced differences between the price drops for homogeneous and differentiated goods can be attributed to commodities, a large proportion of which are indeed classified as homogeneous.¹⁹ It turns out, however, that the dynamics of homogeneous goods prices presented in this section are not driven by this overlap. Controlling for effects that are specific to commodities or durable goods leaves the qualitative results unchanged (cf. the econometric estimates in the box, where the effects of commodities are controlled for.)

18 Differentiated goods constitute a large share of total Swiss trade values, with their export value exceeding that of homogeneous goods by more than five times. Thus, the index of differentiated goods has a larger weight in the aggregate index plotted in chart 2.

19 The strong fluctuations of commodity prices are well known and their importance for central bank policy is widely acknowledged. Thus, monetary policy is known to be inefficient if it neglects the components of an oil shock that works like a productivity shock. Cf., for example, Nakov and Pescatori (2010) and Natal (2012).

Chart 3a

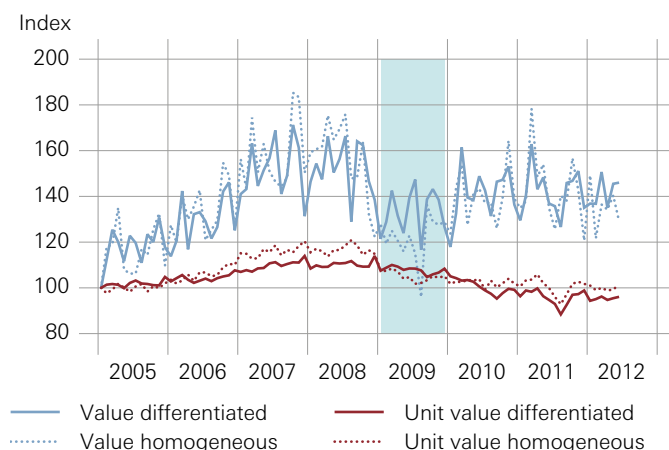
DIFFERENTIATED AND HOMOGENEOUS PRODUCTS, EXPORTS



Source: FCA

Chart 3b

DIFFERENTIATED AND HOMOGENEOUS PRODUCTS, IMPORTS



Source: FCA

The robust difference between the price declines for homogeneous and differentiated goods is interesting for at least two reasons. First, the significantly larger drop in prices of homogeneous goods compared to differentiated goods focuses attention on the impact of market structure on product prices. It suggests that price adjustments during the crisis depended on the specific market structure of goods.²⁰ In particular, competitive pressure and higher price transparency seem to have induced stronger price adjustments for those goods that are traded in centralised markets.

Second, the findings show that, while the change in prices during the Great Trade Collapse differed in magnitude for different goods classes, the direction was universal: prices in all broad goods classes dropped. This second observation underpins and reconfirms the view that the Great Trade Collapse was primarily the result of a contraction in demand as opposed to increased trade frictions, which would have increased the price of traded goods.

²⁰ Of course, the market structure itself is the outcome of underlying product characteristics, such as market size, price elasticity of demand and intrinsic product comparability and substitutability (cf. Broda et al. (2008)). Disentangling the impact of all underlying determinants of market structure, however, is beyond the scope of the current analysis.

This study presents new information on how prices for Swiss exports and imports, proxied by unit values, behaved during the Great Trade Collapse. Between 2008 and 2009, when aggregate trade values contracted sharply, prices of Swiss exports and imports decreased. The universal fall in prices underpins the common view that demand factors were the prime drivers of the Great Trade Collapse.

A closer examination of different goods classes shows that the prices of homogeneous goods fell especially heavily. Their prices dropped by more than average. A characteristic of homogeneous goods is that they are traded through highly centralised exchanges. Together, these observations suggest that market structure played an important role in price changes during the Great Trade Collapse. Specifically, firms operating in homogeneous goods markets were exposed to stronger international competition and may have responded by cutting prices more than firms operating in differentiated markets.

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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 20 March, the SNB reaffirms that it will maintain its minimum exchange rate of CHF 1.20 per euro. The SNB continues to stand ready to enforce the minimum exchange rate, if necessary, by buying 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, the Swiss franc is still high. With the three-month Libor close to zero, the minimum exchange rate continues to be the right tool to avoid an undesirable tightening of monetary conditions in the event of renewed upward pressure on the Swiss franc.</p>	<p>March 2014</p>
<p>On 22 January, at the proposal of the SNB, the Federal Council raises the countercyclical capital buffer (CCB) in reaction to the imbalances on the Swiss residential mortgage and real estate markets, which have increased further since the activation of the CCB in February 2013. The CCB now amounts to 2% (previously 1%) of risk-weighted mortgage loans for the financing of residential property in Switzerland. The banks concerned must comply with the higher buffer requirements from 30 June 2014.</p>	<p>January 2014</p>
<p>At its quarterly assessment of 12 December, the SNB reaffirms that it will maintain the minimum exchange rate of CHF 1.20 per euro. The SNB continues to stand ready to enforce the minimum exchange rate, if necessary, by buying foreign currency in unlimited quantities, and to take further measures as required. The target range for the three-month Libor will stay at 0.0–0.25%. In the view of the SNB, the Swiss franc is still high. With the three-month Libor close to zero, the minimum exchange rate continues to be the right tool to avoid an undesirable tightening of monetary conditions in the event of renewed upward pressure on the Swiss franc.</p>	<p>December 2013</p>
<p>On 31 October, the SNB, together with the Bank of Canada, the Bank of England, the Bank of Japan, the European Central Bank, and the Federal Reserve, convert their temporary swap arrangements to standing arrangements. The arrangements allow the SNB to provide Swiss francs to these central banks when required, as well as enabling the SNB to provide liquidity to Swiss banks, should it be needed, in any of the five foreign currencies. The SNB intends to continue offering US dollar liquidity-providing repo operations at terms of one week and three months until further notice.</p>	<p>October 2013</p>
<p>At its quarterly assessment of 19 September, the SNB reaffirms that it will maintain the minimum exchange rate of CHF 1.20 per euro. The SNB continues to stand ready to enforce the minimum exchange rate, if necessary, by buying foreign currency in unlimited quantities, and to take further measures as required. In the view of the SNB, the Swiss franc is still high. The minimum exchange rate prevents an undesired tightening of monetary conditions were the upward pressure on the Swiss franc to intensify once again. The target range for the three-month Libor will stay at 0.0–0.25%.</p>	<p>September 2013</p>
<p>At its quarterly assessment of 20 June, the SNB reaffirms that it will maintain the minimum exchange rate of CHF 1.20 per euro. In the view of the SNB, the Swiss franc is still high. The minimum exchange rate remains important in order to avoid an undesirable tightening of monetary conditions in the event of sudden upward pressure on the Swiss franc. The SNB continues to stand ready to enforce the minimum exchange rate, if necessary, by buying 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%.</p>	<p>June 2013</p>

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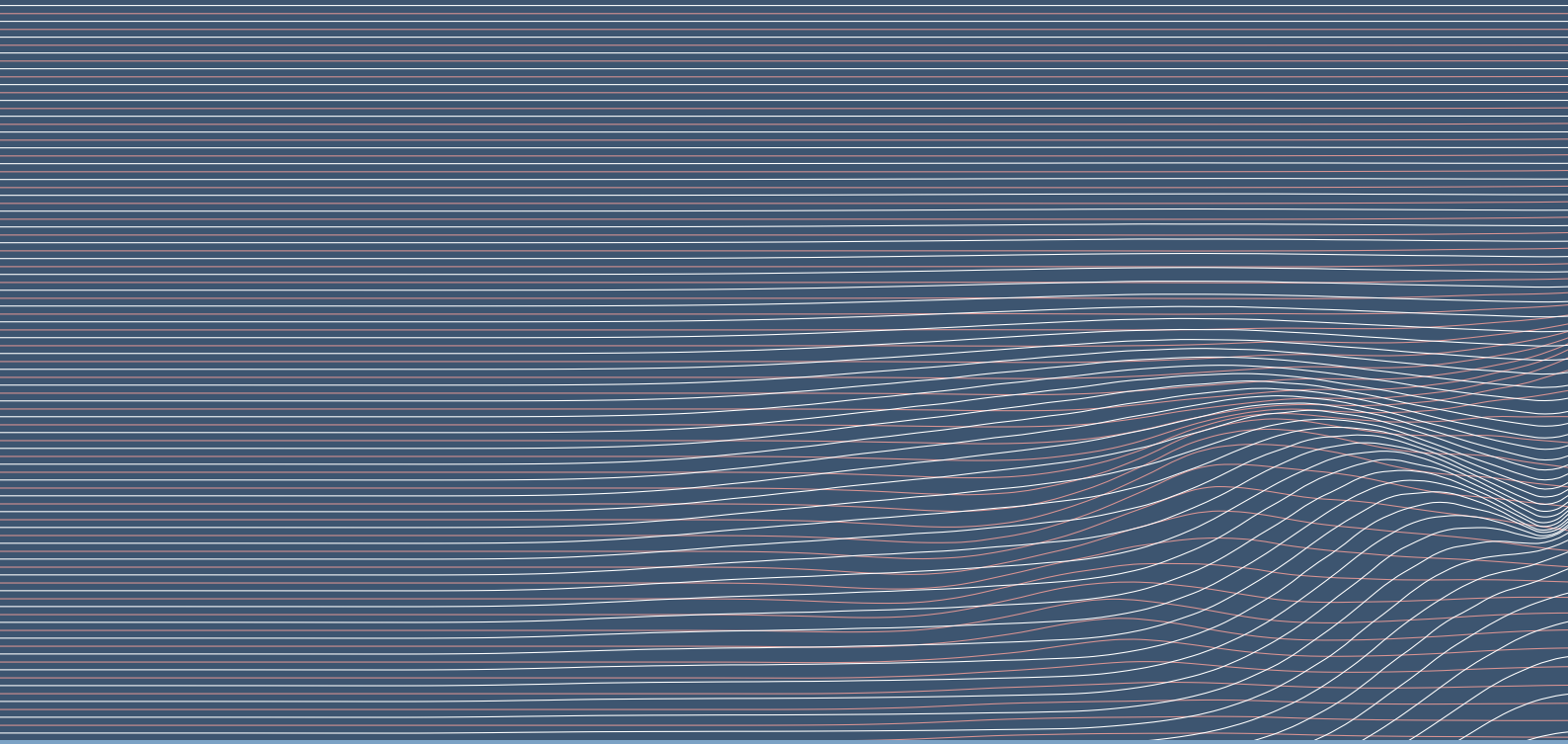
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