

Swiss National Bank Quarterly Bulletin

September 3/2011 Volume 29

Contents

4	Monetary policy report
32	Business cycle trends
38	Exchange rate survey: Effects of Swiss franc appreciation and company reactions
44	SNB Policy Paper: Swiss franc bond market – smooth sailing through the financial crisis
52	Chronicle of monetary events

Monetary policy report

Report to the attention of the Governing Board of the Swiss National Bank for its quarterly assessment of September 2011.

This report is based primarily on the data and information available as at 15 September 2011.

Monetary policy report

Contents

6	About this report
7	1 Monetary policy decision of 15 September 2011
8	Monetary policy strategy at the SNB
9	2 Global economic environment
9	2.1 International financial and commodity markets
10	2.2 United States
11	2.3 Euro area
12	2.4 Japan
13	2.5 Emerging economies in Asia
14	3 Economic developments in Switzerland
14	3.1 Aggregate demand and output
17	3.2 Labour market
18	3.3 Capacity utilisation
19	3.4 Outlook for the real economy
20	4 Prices and inflation expectations
20	4.1 Consumer prices
22	4.2 Producer and import prices
22	4.3 Real estate prices
23	4.4 Inflation expectations
24	5 Monetary developments
24	5.1 Summary of monetary policy since the last assessment
25	5.2 Money and capital market interest rates
27	5.3 Exchange rates
28	5.4 Stock markets
29	5.5 Monetary and credit aggregates

About this report

The Swiss National Bank (SNB) has a statutory mandate to pursue a monetary policy serving the interests of the country as a whole. It ensures price stability while taking due account of economic developments.

It is a particular concern of the SNB that its monetary policy be understood by a wider public. Moreover, it is obliged by law to inform regularly of its policy and to make its intentions known. This monetary policy report performs both of these tasks. It 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.

Sections 2–5 of the present report were drawn up for the Governing Board's assessment of September 2011. Section 1 ('Monetary policy decision of 15 September 2011') is an excerpt from the press release published following the monetary policy assessment of 15 September 2011.

Unless otherwise stated, all rates of change from the previous period are based on seasonally adjusted data and are annualised.

1 Monetary policy decision of 15 September 2011

The Swiss National Bank (SNB) will enforce the minimum exchange rate of CHF 1.20 per euro set on 6 September with the utmost determination. It is prepared to buy foreign currency in unlimited quantities. It continues to aim for a three-month Libor at zero and will maintain total sight deposits at the SNB at significantly above CHF 200 billion.

With these measures, the SNB is taking a stand against the acute threat to the Swiss economy and the risk of deflationary development that spring from massive overvaluation of the Swiss franc. Even at a rate of CHF 1.20, the Swiss franc is still high and should continue to weaken over time. If the economic outlook and deflation risks so require, the SNB will take further measures.

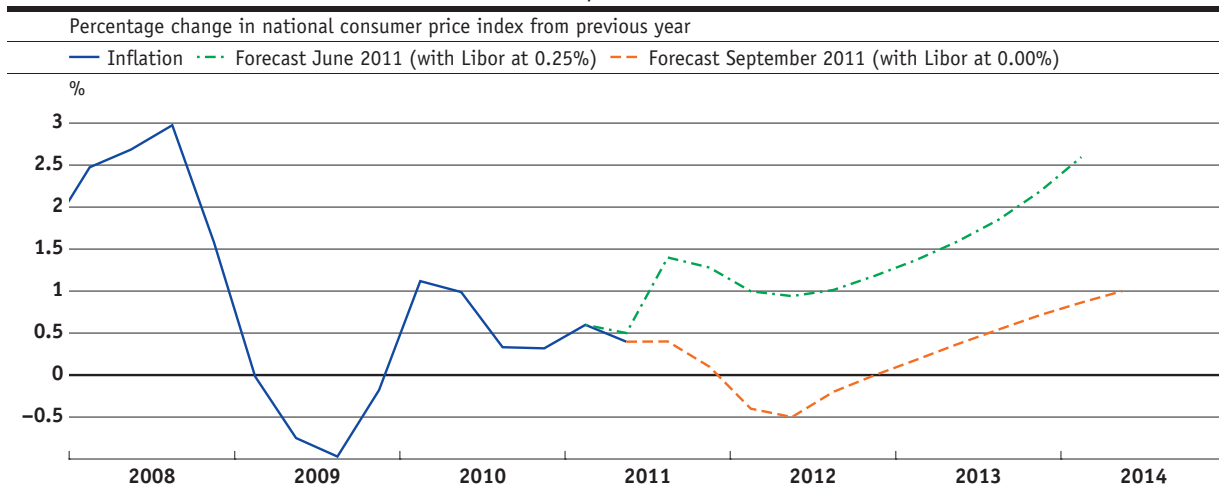
The growth of the global economy has slowed substantially in the course of the second quarter. The outlook for the advanced economies, in particular, has worsened considerably. In Switzerland, economic activity is suffering from both the strong Swiss franc and the softening in international demand. The SNB expects growth to come to a halt

in the second half of the year. For 2011 as a whole, GDP growth can be expected at 1.5–2.0%. This is only because of the favourable economic development in the first half of the year. Without the stabilising effect of the minimum exchange rate, there would be a substantial threat of recession.

Uncertainty about the future outlook for the global economy remains exceptionally high and the risks for the global financial system have increased substantially. The deterioration in the outlook for growth and fiscal problems in the advanced economies are both adversely impacting confidence in financial markets worldwide.

The SNB's conditional inflation forecast has shifted substantially downwards as a result of the massive appreciation in the Swiss franc and the deterioration in the outlook for the global economy. For 2011, the forecast shows an inflation rate of 0.4%, for 2012 a rate of –0.3% and for 2013 a rate of 0.5%. This forecast is based on the assumption of a three-month Libor of 0.0% and a further weakening in the Swiss franc. In the foreseeable future, there is no risk of inflation in Switzerland. There are, however, downside risks for price stability should the Swiss franc not weaken further.

Chart 1.1
Conditional inflation forecast of June 2011 and of September 2011



Source: SNB

Observed inflation in September 2011

Table 1.1

	2008				2009				2010				2011				2008	2009	2010	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Inflation	2.5	2.7	3.0	1.6	0.0	-0.7	-1.0	-0.2	1.1	1.0	0.3	0.3	0.6	0.4				2.4	-0.5	0.7

Conditional inflation forecast of June 2011 with Libor at 0.25% and of September 2011 with Libor at 0.00%

	2011				2012				2013				2014				2011	2012	2013	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Forecast June 2011, Libor at 0.25%		0.5	1.4	1.3	1.0	0.9	1.0	1.2	1.4	1.6	1.8	2.2	2.6					0.9	1.0	1.7
Forecast September 2011, Libor at 0.00%			0.4	0.1	-0.4	-0.5	-0.2	0.0	0.2	0.4	0.5	0.7	0.9	1.0				0.4	-0.3	0.5

Source: SNB

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 national 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 pol-

icy 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.

2 Global economic environment

The global economic recovery has lost more strength than expected. The delayed impact of the strong increase in energy prices in the first quarter held back demand worldwide. In addition, the major catastrophe in Japan led to interruptions in production. In the US and in the euro area, GDP growth in the second quarter was disappointingly weak, and in Japan, GDP again declined.

Over the past few months, energy prices have stabilised, and the delivery chain problems that arose because of the earthquake in Japan have abated. This should provide some support to the growth of the world economy in the second half of the year. Overall, however, recovery in the advanced economies is likely to remain weak. Rising risk premia for European government bonds and the decline in the international stock markets are dampening the confidence of companies and consumers. Moreover, government budget consolidation measures in the advanced economies are holding back economic recovery. By contrast, the pace of expansion is likely to remain robust in the emerging economies.

The SNB has made a substantial downward adjustment to its global growth forecasts. The uncertainty about the future outlook for the global economy remains exceptionally high and the downside risks continue to dominate.

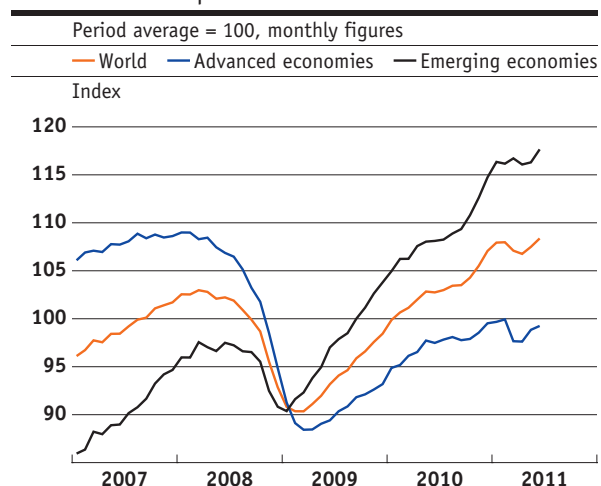
2.1 International financial and commodity markets

Movements on the international financial markets were dominated by investors' concern about fiscal sustainability in Europe and the US as well as disappointing economic indicators. The compromise in the US budget dispute, the prospect of a further aid package for Greece and additional fiscal savings measures in Italy, Spain and France were unable to curb the uncertainty.

Risk premia for bonds with low credit ratings increased. The global equity markets continued to lose ground significantly and the volatility indices showed a distinct increase in market uncertainty (cf. chart 2.3). There was once again considerable tension on the European interbank market. On the currency markets, the yen in particular continued to appreciate while the euro and US dollar remained stable on a trade-weighted basis (cf. chart 2.4). Commodity prices receded slightly owing to anxiety over the economic developments (cf. chart 2.5).

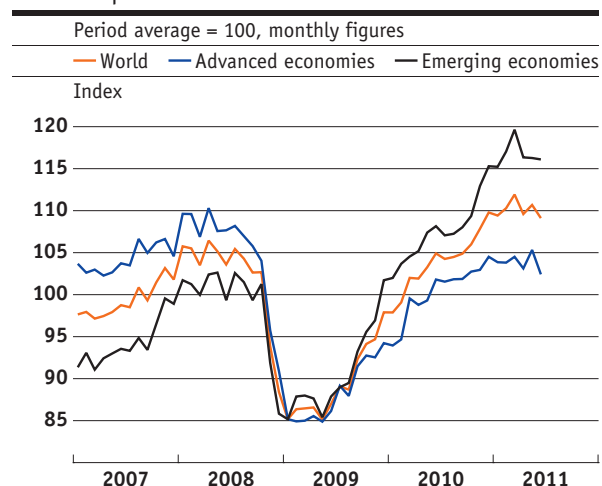
For its forecasts, the SNB assumes an oil price of USD 115 per barrel of Brent crude and an exchange rate of USD 1.42 per euro.

Chart 2.1
Global industrial production



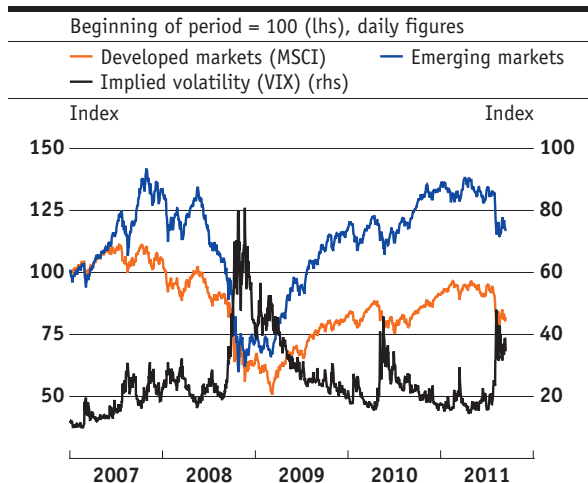
Sources: Netherlands Bureau for Economic Policy Analysis (CPB), Thomson Financial Datastream

Chart 2.2
Global exports



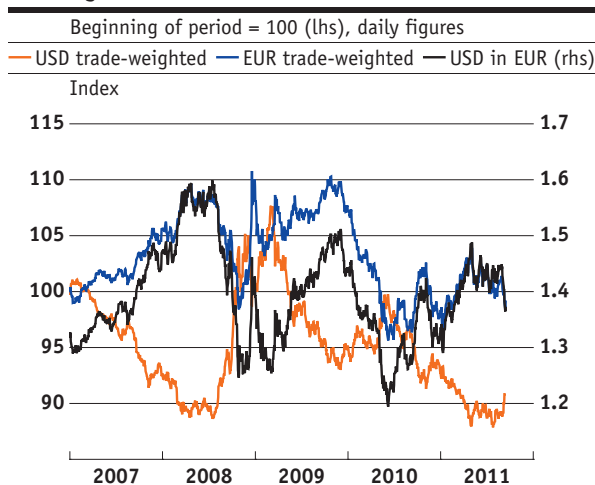
Sources: CPB, Thomson Financial Datastream

Chart 2.3
Stock markets



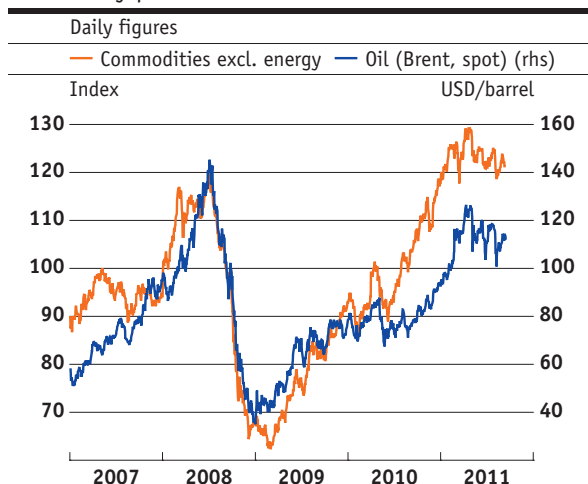
Sources: Reuters, Thomson Financial Datastream

Chart 2.4
Exchange rates



Sources: Reuters, Thomson Financial Datastream

Chart 2.5
Commodity prices



Sources: Reuters, Thomson Financial Datastream

2.2 United States

The economic recovery in the US lost momentum unexpectedly sharply in the first half of the year. GDP virtually stagnated in the first quarter and grew by only 1.0% in the second, thus remaining significantly below its potential growth level. Weak growth in incomes, supply problems resulting from the disaster in Japan, higher commodity prices and government savings measures held back domestic demand. Moreover, revised GDP data show that the economic recovery since 2009 has been considerably weaker than had previously been assumed. GDP is still below the pre-crisis level.

Although commodity prices have stabilised in recent months and supply problems have been resolved, the economic outlook for the US has deteriorated. Downtrends in share prices and delays in achieving a compromise in the budget dispute resulted in a loss of confidence in the economy. The situation on the real estate market remains very difficult. Furthermore, low growth in employment is dampening household consumption. The upcoming fiscal consolidation measures are also hampering the growth outlook. Against this background, the SNB has made a considerable downward adjustment to its growth forecast for the US. It now anticipates GDP growth of 1.6% in 2011 and 1.9% in 2012.

Consumer price inflation is still considerable. The annual inflation rate rose to 3.8% in August. Energy prices declined. The core inflation rate continued to rise, reaching 2.0%. Persistently high unemployment should, however, keep wage rises and core inflation low in the medium term.

The US Federal Reserve is continuing to support the economy through an expansionary monetary policy. It has left the target range for the federal funds rate unchanged at 0.0–0.25% and reinvested securities that fall due. The second major securities programme (QE2), which provided for the purchase of US Treasury bonds to a total value of USD 600 billion, ended in June as scheduled. Furthermore, the Federal Reserve announced that, given the present economic outlook, it would be holding the fed funds rate unchanged at the present exceptionally low level until at least mid-2013.

2.3 Euro area

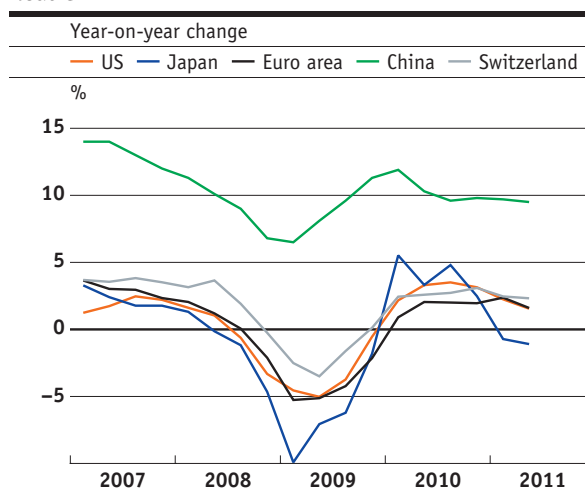
Following robust growth in the first quarter, economic activity in the euro area weakened perceptibly. GDP grew by 0.6% in the second quarter, but the core euro area countries in particular lost considerable momentum. Germany only registered a marginal increase in economic output, while in France it stagnated. There was a broadly-based decline in GDP growth on the demand side. Domestic demand was held back by increasing uncertainty triggered by the lingering sovereign debt crisis and, in France, the temporary impact of the expiry of premiums for scrapping old cars.

The economic outlook for the euro area has deteriorated markedly. Surveys on order intake and export expectations indicate a slowdown in industrial activity. At the same time, demand is being dampened by the fiscal savings measures announced by some member states. Household and business sentiment became distinctly gloomier in August (cf. charts 2.7 and 2.8). The SNB has reduced its growth forecast for the euro area. It now expects GDP growth of 1.6% in 2011 and 1.1% in 2012.

Inflation in the euro area is gradually declining. Consumer price inflation dropped to 2.5% in August, while the core inflation rate fell to 1.2%. Price cuts for clothing and shoes curbed inflation, and surveys of households and businesses also indicate lower inflation expectations.

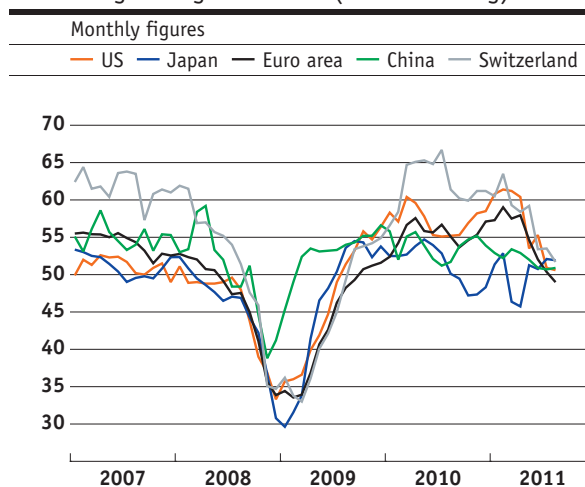
The European Central Bank (ECB) increased its main refinancing rate by 25 basis points in July, having increased it in April for the first time since the end of the recession. However, tension on the government bond markets increased significantly in August, prompting the ECB to reactivate its securities purchase programme. Since then, markets have been expecting a reduction in interest rates in the coming few months.

Chart 2.6
Real GDP



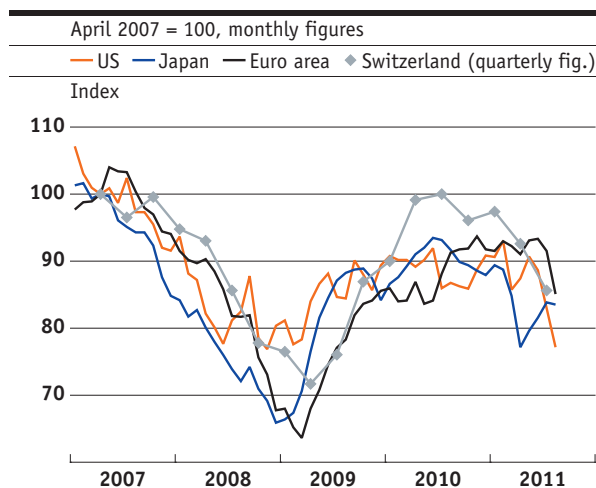
Sources: State Secretariat for Economic Affairs (SECO), Thomson Financial Datastream

Chart 2.7
Purchasing managers' indices (manufacturing)



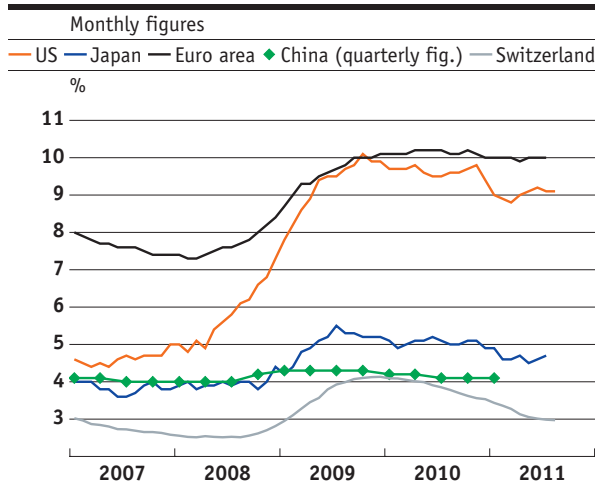
Source: Thomson Financial Datastream; copyright and database rights: Markit Economics Ltd 2009; all rights reserved

Chart 2.8
Consumer confidence index



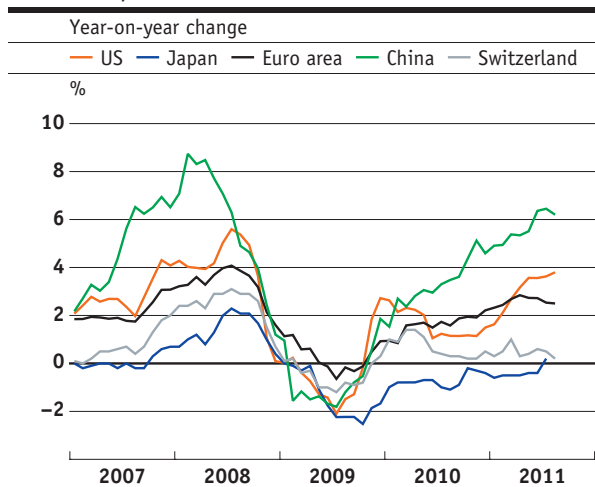
Sources: SECO, Thomson Financial Datastream

Chart 2.9
Unemployment rates



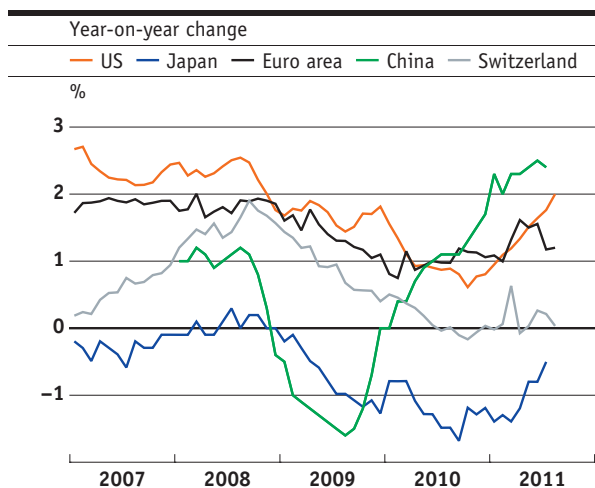
Sources: SECO, Thomson Financial Datastream

Chart 2.10
Consumer prices



Sources: Swiss Federal Statistical Office (SFSO), Thomson Financial Datastream

Chart 2.11
Core inflation rates



Sources: SFSO, Thomson Financial Datastream

2.4 Japan

The Japanese economy went into recession in March following the catastrophic earthquake. This interrupted the gradual recovery that had started in early 2009. The decline in GDP registered in the first half of the year reflects bottlenecks caused by wrecked production facilities and power shortages, as well as a decrease in demand due to widespread uncertainty. Measured by the reduction in GDP, the disaster is one of the most expensive to have hit the world since the Second World War.

The economy should recover in the second half of the year, making up for the previous reduction in GDP. The upturn got under way during the second quarter and is broadly based. Industrial output and exports of goods have almost entirely recovered from the downturn, and there are signs of rising consumer demand for energy-saving domestic appliances. At the end of July, the Japanese government decided on a second supplementary budget totalling JPY 2,000 billion (0.4% of GDP) to support the regions affected by the earthquake. A further supplementary budget to fund reconstruction work is planned. The medium-term growth prospects nevertheless remain subdued as a gradual relocation of production to other countries is holding back potential growth. The SNB now expects Japan's GDP to contract by 0.4% in 2011, followed by strong growth of 2.6% in 2012.

Japanese consumer prices are still declining. Furthermore, the recent adjustment of the basket of consumer goods has resulted in a considerable downward revision of inflation rates for past months. Since utilisation of production capacity is still well below normal as the recovery is only making slow progress, price pressure remains very muted. Moreover, the strength of the yen is reducing imported inflation.

The Ministry of Finance intervened on the currency market in August to check the appreciation of the yen. Moreover, a special credit facility programme equivalent to around CHF 80 billion has been designed to support investment by Japanese companies abroad. In addition, the Bank of Japan increased the budget earmarked for the acquisition of assets by an amount equivalent to around CHF 85 billion. It left the call money rate unchanged at 0.0–0.1%.

2.5 Emerging economies in Asia

In the emerging economies of Asia, the earthquake in Japan and lower demand from the major advanced economies resulted in a reduction in economic momentum. In the newly industrialised economies (NIEs) – South Korea, Taiwan, Hong Kong and Singapore – growth weakened in the second quarter, although this came in the wake of strong growth in the previous quarter. The reduction was mainly due to the export industry. Chinese growth, too, slowed down somewhat. Domestic demand in China, however, proved resilient against the background of tighter economic policy.

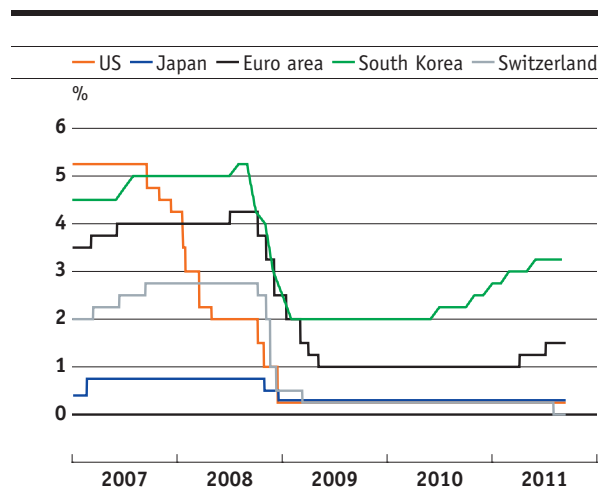
The regional economy should regain strength in the second half of the year. Rising household incomes and state incentives will continue to support private consumption. Although the SNB has reduced its growth forecast for China slightly, it still expects sound GDP growth of around 9% in

both 2011 and 2012. In the NIEs, both production and export activity have picked up again since mid-year. For 2011, the SNB is still forecasting that these four economies will report GDP growth in line with the average for the past ten years (around 4.3%). By contrast, its forecast for 2012 is slightly lower, reflecting the expected weakening of foreign demand.

Inflation remains high in the region. In China, consumer prices rose by 6.2% year-on-year in August. However the rise, which was partly due to food prices, should have peaked. So far there is no sign of increased wage pressure. In South Korea, inflation is above the central bank's target range.

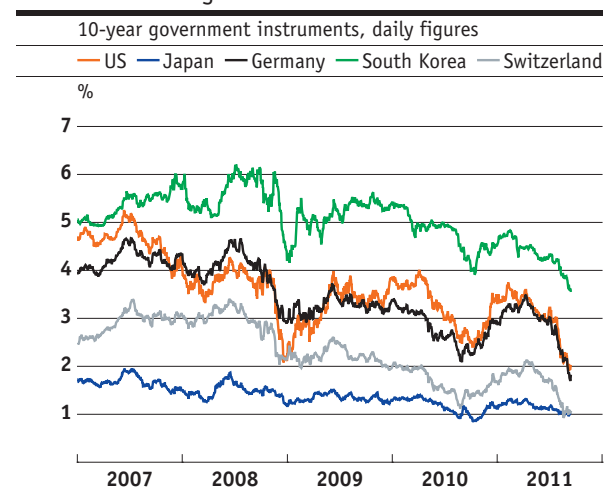
The People's Bank of China tightened minimum reserve requirements for banks again and allowed the renminbi to appreciate slightly in trade-weighted terms. In some Asian economies, the rapid rise in real estate prices remains the main focus of attention in monetary policy.

Chart 2.12
Official interest rates



Sources: SNB, Thomson Financial Datastream

Chart 2.13
International long-term interest rates



Sources: SNB, Thomson Financial Datastream

3 Economic developments in Switzerland

In the course of the global economic slowdown, growth in Switzerland also weakened in the second quarter. According to the initial estimate, real GDP rose by an annualised rate of 1.4%, following growth rates of around 2.5% in the previous four quarters. Goods exports only increased by a small amount, while exports of services declined considerably. Domestic final demand stagnated.

For the time being, technical capacity utilisation remains high. In manufacturing, it remains slightly above the long-term average. In the construction industry, it again attained a new record high. The recovery in the labour market continued in the second quarter. In the course of the third quarter, however, it came to a standstill. Unemployment only receded slightly in August.

The impact of the appreciation of the Swiss franc is not yet reflected in the figures on production and capacity utilisation for the first half of the year. However, the slowdown in the international economy and the exceptionally strong and rapid appreciation of the Swiss franc in the past few months have resulted in a difficult situation for the Swiss economy. Surveys show that many companies that are exposed to international competition are now suffering from a sharp drop in margins. Both demand for labour and investment decisions are being affected by the uncertainty with regard to future developments. The domestic economy is also

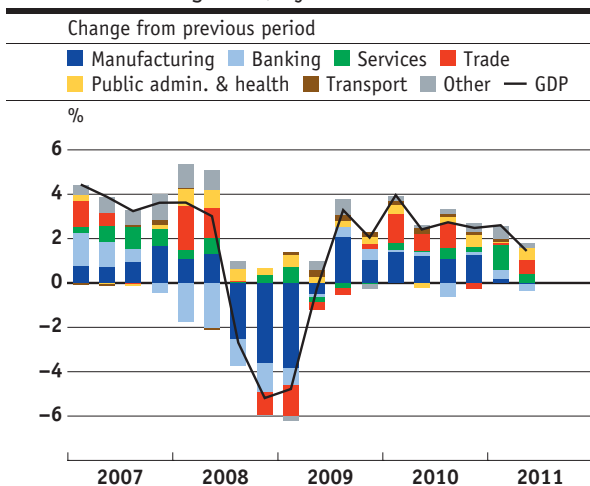
likely to be affected to some extent by a slowdown in labour market development. The SNB expects that growth will come to a halt in the second half of the year. For 2011 as a whole, GDP growth can be expected at 1.5–2.0%. This is only because of the favourable economic development in the first half of the year.

3.1 Aggregate demand and output

Growth in 2010 at 2.7% according to SFSO

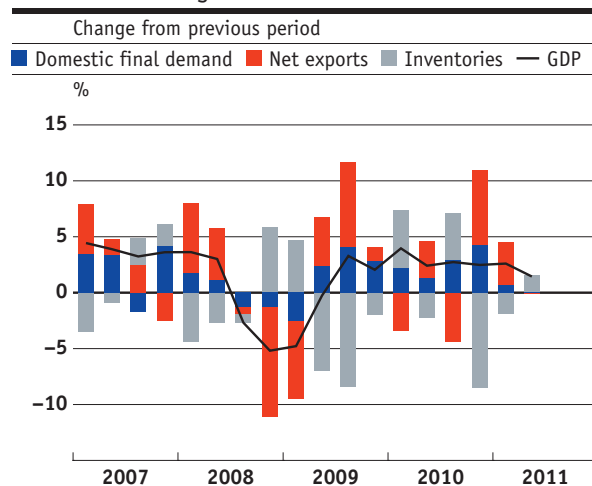
The initial estimate of the national accounts for 2010 published by the Swiss Federal Statistical Office (SFSO) confirms the rapid recovery of the Swiss economy last year which was already apparent in the original quarterly figures published by the State Secretariat for Economic Affairs (SECO). At 2.7%, the GDP growth estimate by the SFSO is only marginally higher than SECO's original figure (2.6%). There are, however, considerable differences from one component to another. For example, value added in manufacturing recovered more quickly from the sharp fall in 2009 than had originally been anticipated. Trade and the construction industry also grew at a more vigorous pace in 2010. By contrast, after the steep decline triggered by the financial crisis, the banking industry grew at a slower pace than originally expected. On the demand side, the rise in equipment investment since 2009 is particularly striking.

Chart 3.1
Contributions to growth, by sector



Source: SECO

Chart 3.2
Contributions to growth in demand



Source: SECO

Signs of a decline in value added

According to provisional estimates by SECO, GDP growth in the second quarter weakened to 1.4%, the lowest quarterly growth rate since the end of the recession. The year-on-year change amounted to 2.3%. The slowdown in value added was particularly noticeable in the financial industry (banks and insurance companies), while value added stagnated in manufacturing. However, public administration and trade again contributed more substantially to growth than they had in the previous quarters (cf. chart 31).

Slower momentum in foreign trade

Foreign trade slackened in the second quarter (cf. chart 3.2). With the global slowdown in economic growth and the renewed appreciation of the Swiss franc, total exports declined (cf. chart 3.3). With imports contracting as well, (cf. chart 3.4), the foreign trade contribution was only slightly negative (-0.1 percentage points).

Growth in goods exports slowed considerably. Exports of machinery and precision instruments, in particular, began to suffer, but those of many other important industries were weaker as well. Exports of watches were the only area that continued to expand vigorously. This was due to demand from Asia. Exports to emerging Asian economies, however, lost momentum overall, as did exports to the US. In fact, exports to Europe contracted.

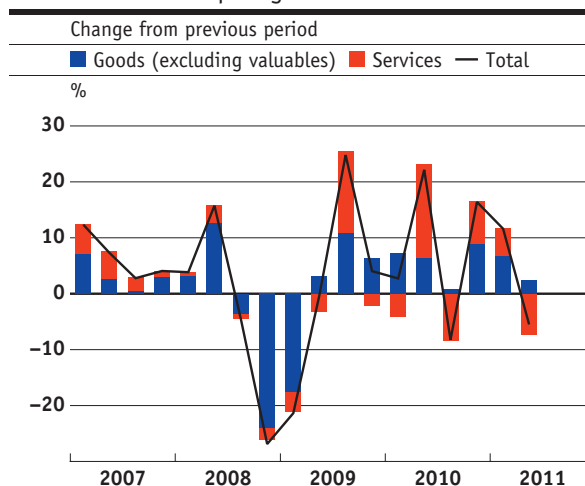
Exports of services fell significantly in the second quarter. In addition to currency-related losses from cross-border banking operations, this decline is particularly attributable to lower net revenues from merchanting. Despite the strong Swiss franc, tourism exports remained at the same level as in the previous quarter. This was because the stronger influx of visitors from Asia compensated for the decline in the numbers of Europeans travelling to Switzerland.

With regard to imports, consumer spending by Swiss residents abroad recorded a slight increase owing to the sharp rise in purchasing power. By contrast, other import fell considerably.

Domestic final demand weak

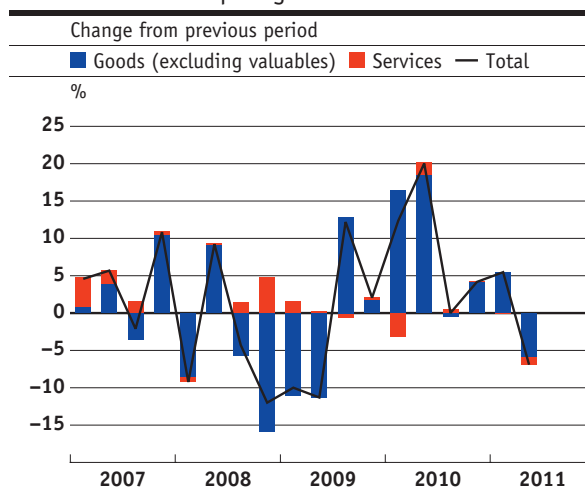
Domestic final demand stagnated in the second quarter (cf. chart 3.5 and table 3.1). At 1.7%, domestic demand expanded reasonably strongly. However, this was mainly attributable to a strong increase in inventories.

Chart 3.3
Contributions to export growth



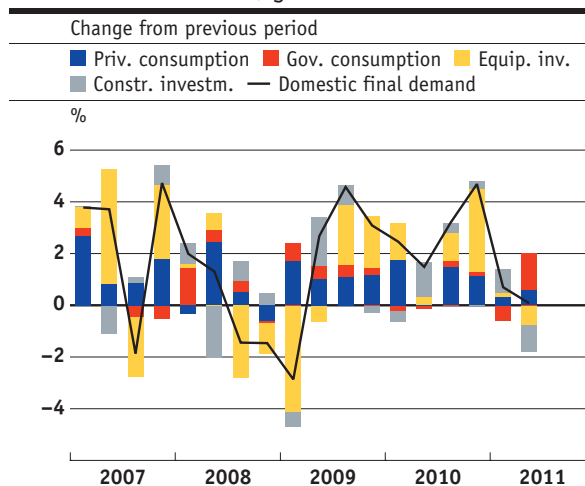
Source: SECO

Chart 3.4
Contributions to import growth



Source: SECO

Chart 3.5
Domestic final demand, growth contributions



Source: SECO

Real GDP and components

Table 3.1

Growth rates on previous period, annualised

	2007	2008	2009	2010	2009		2010				2011	
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Private consumption	2.3	1.4	1.4	1.7	1.7	1.8	2.7	0.0	2.3	1.7	0.5	0.9
Government consumption	0.3	2.7	3.3	0.8	3.6	2.3	-1.5	-1.2	2.0	1.2	-4.7	11.5
Investment in fixed assets	5.1	0.5	-4.9	7.5	13.9	7.3	4.0	7.2	6.4	15.0	4.4	-7.6
Construction	-2.3	0.0	3.0	3.5	7.6	-2.7	-4.2	13.6	3.8	3.2	8.8	-9.7
Equipment	11.1	0.8	-10.8	10.9	19.8	16.6	11.3	2.3	8.5	25.4	1.2	-5.8
Domestic final demand	2.7	1.3	0.1	2.9	4.6	3.1	2.5	1.5	3.2	4.7	0.7	0.1
Domestic demand	1.4	0.5	0.6	1.5	-3.9	0.9	6.6	-2.5	12.2	-5.0	-1.7	1.7
Total exports	9.6	3.1	-8.6	8.4	26.0	1.6	9.4	18.7	-11.3	15.5	14.1	-5.1
Goods ¹	8.3	2.1	-11.1	9.4	16.0	9.5	10.8	9.2	1.3	12.9	10.0	3.5
Services	12.8	4.3	-1.7	5.4	45.3	-6.4	-12.6	54.7	-25.4	24.4	15.3	-22.6
Aggregate demand	4.4	1.5	-3.0	4.0	6.2	1.2	7.6	5.2	2.5	2.3	4.0	-1.0
Total imports	6.1	0.3	-5.5	7.3	13.1	-0.8	17.1	11.9	2.0	2.0	7.5	-6.6
Goods ¹	6.7	-1.0	-8.5	10.8	16.6	2.1	20.9	23.1	-0.6	5.1	6.7	-7.3
Services	11.2	4.1	7.4	-1.9	-2.8	1.8	-14.5	8.6	2.5	0.5	0.6	-5.3
GDP	3.6	2.1	-1.9	2.7	3.3	2.0	4.0	2.4	2.7	2.5	2.6	1.4

¹ Goods: excluding valuables (precious metals, precious stones and gems as well as works of art and antiques)
Source: SECO

Equipment investment declined in the second quarter (-5.8%), although there was substantial variation from one industry to another. Investment in vehicles and telecommunications declined considerably even though import prices were trending weaker, while investment in machine and metal products, by contrast, which account for around one-third of equipment investment, increased. Moreover, the positive trend of the past few quarters continued for investment in software. Overall, companies continue to benefit from favourable financing conditions. However, the willingness to invest remains on the whole subdued because of the increasingly pessimistic sales outlook.

In the second quarter, construction investment declined by 9.7%, following a sharp rise in the first quarter, when temperatures were mild. The level of construction investment is still high by historic standards. Residential construction, in particular, which is being encouraged by low interest

rates and immigration, remains strong. However, civil engineering also continues to be supported by robust demand for infrastructure projects.

In the most recent period, private consumption has only picked up slightly, increasing 0.9% in the second quarter. Consumer expenditure was supported by a continuation of the strong rate of population growth. Broken down by components, the consumption of services, in particular, increased, while expenditure on food decreased considerably. The latter could be attributable in part to the increase in cross-border shopping. Since goods imported by private individuals are not fully recorded, consumer expenditure, as officially stated, is likely to underestimate actual expenditure. However, in view of the most recent decline in consumer confidence, a fairly subdued advance in consumption may be expected, irrespective of this one-off statistical effect.

3.2 Labour market

Employment still increasing

Employment is likely to have increased further in Switzerland in the second quarter. Full-time employment was up by 1.5% (cf. chart 3.6). Due to an adjustment to the employment statistics, however, no reliable data on movements in part-time employment or full-time equivalents are currently available. According to SNB estimates, the volume of full-time equivalents is likely to have expanded further in the second quarter.

In most services industries, full-time employment rose, exceptions being accommodation, architectural practices, engineering consultants and financial services, all of which recorded a decline. Full-time employment increased further in manufacturing; in construction, however, it decreased slightly.

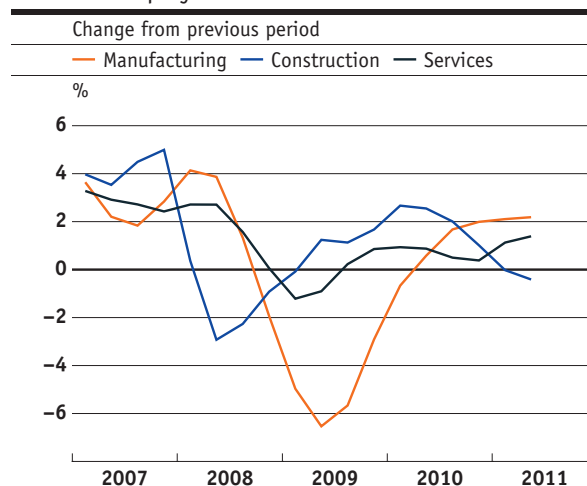
Stagnating unemployment

Seasonally adjusted unemployment decreased only marginally between May and August. However, the rate of unemployment remained unchanged at 3.0% (cf. chart 3.7). During the same period, the proportion of job-seekers fell from 4.5% to 4.4%.

Since data on unemployment are available sooner than employment figures, they are already reflecting a weakening in the demand for labour.

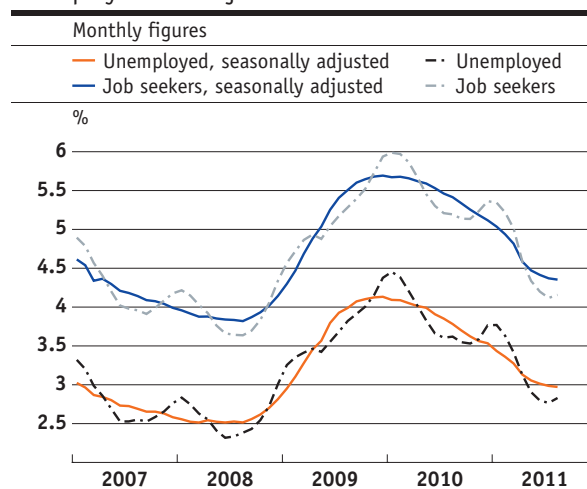
In the first half of the year, short-time work again decreased slightly (cf. chart 3.8), and in June 3,400 individuals were still affected by short-time work, compared with the maximum figure of 92,300 recorded in the recession.

Chart 3.6
Full-time employment



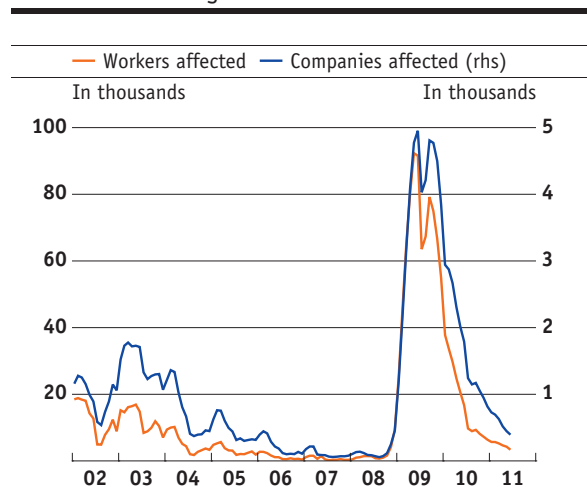
Source: SFSO, seasonal adjustment: SNB

Chart 3.7
Unemployment and job seeker rates



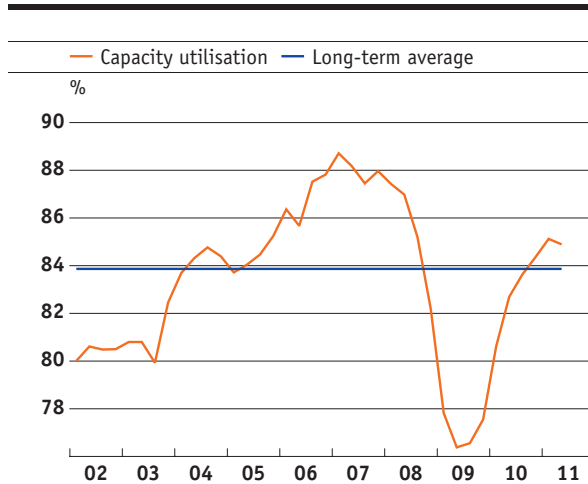
Unemployed and job seekers registered with the regional employment offices, as a percentage of the labour force according to the 2000 census (labour force: 3,946,988 persons).
Source: SECO

Chart 3.8
Short-time working



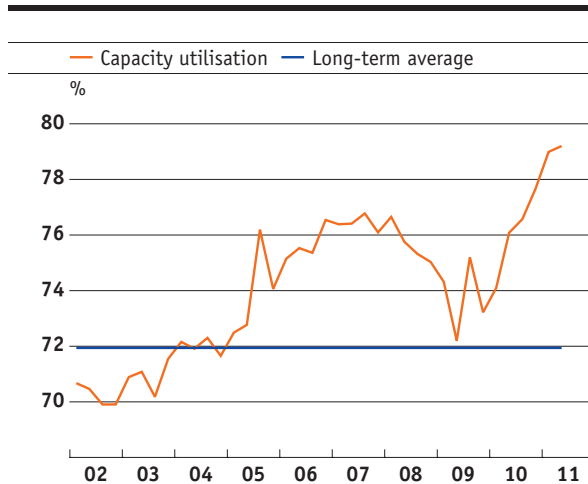
Source: SECO

Chart 3.9
Capacity utilisation in manufacturing



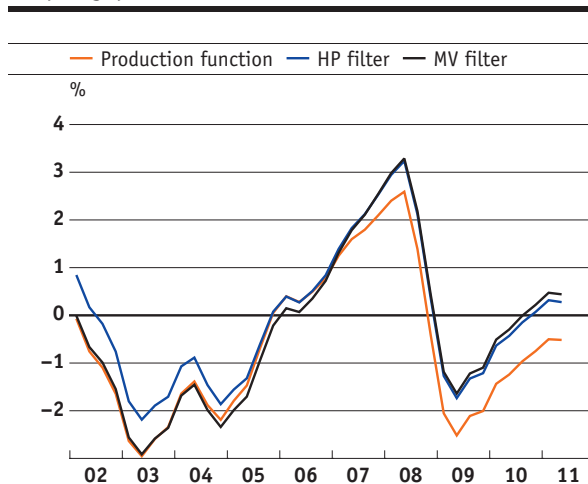
Source: KOF Swiss Economic Institute

Chart 3.10
Capacity utilisation in construction



Source: KOF Swiss Economic Institute

Chart 3.11
Output gap



Source: SNB

3.3 Capacity utilisation

Capacity utilisation stagnating

Technical capacity utilisation in manufacturing stagnated in the second quarter. According to the survey conducted by the Swiss Economic Institute (KOF) (cf. chart 3.9), it remained above the long-term average (cf. chart 3.9). In addition, the number of businesses reporting a shortage of labour and technical capacity is at an average level.

In the construction industry, utilisation remains exceptionally high. In the second quarter, the level of machine utilisation reached a new peak of 79.2% (cf. chart 3.10). Accordingly, many of the companies interviewed by the KOF are complaining of bottlenecks in machine and equipment capacity, as well as labour shortages.

Among services companies, the survey continues to show that capacity utilisation is at an average level. Employment is currently described by the businesses surveyed as predominantly satisfactory.

Output gap almost closed

The output gap, which is defined as the percentage deviation of GDP from estimated aggregate potential output, shows how well the production factors in an economy are being utilised.

Estimates of potential output using different methods indicate that, in the second quarter, GDP was at about its potential level (cf. chart 3.11). Depending on the method used, the output gap was -0.5% (production function), 0.3% (Hodrick-Prescott filter) or 0.4% (multivariate filter).

The deviation between the estimates reflects different ways of calculating production potential. The production function approach considers the labour market situation and the stock of capital in the economy. Since potential labour trends have been particularly robust in recent years – to some extent because of immigration – the estimate of production potential based on this method is higher than production potential estimated on the basis of statistical filters. Accordingly, the output gap estimated using the production function approach is lower.

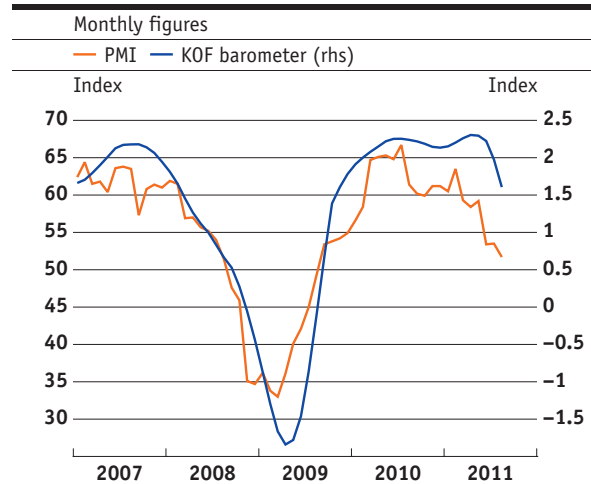
3.4 Outlook for the real economy

The outlook for the Swiss economy has clouded over. With the further strengthening in the Swiss franc during the past few months, surveys indicate that the margins of many Swiss companies have again deteriorated markedly. A few months ago, the negative impact on companies' earnings situation was still mitigated by the high order level; in the next few months, however, the limited momentum in the economies of Switzerland's main trading partners is likely to exacerbate the situation.

In the last few months, the leading indicators have noticeably weakened, and a significant slowdown is evident in goods exports. In addition, the positive momentum on the labour market has slackened over the past few months; in the meantime some indicators suggest a slowing in the demand for labour.

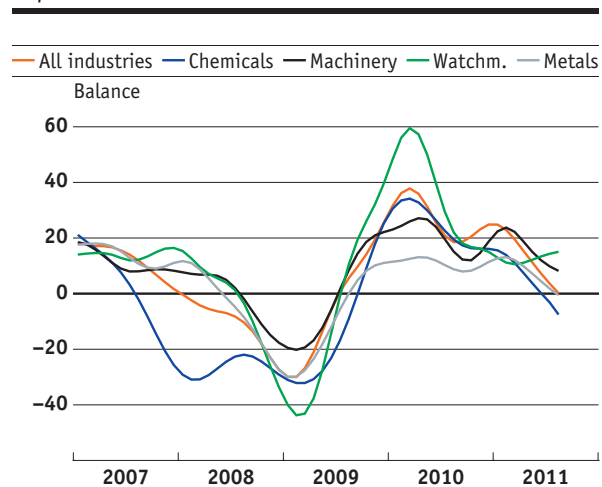
Although domestic factors such as the low interest rate and the healthy development of real incomes are still having a favourable impact, the weakening of foreign demand and the deterioration in the earnings of many companies are likely to have a negative effect on investment, in particular. This, in its turn, is likely to have a negative impact on both employment and private consumer expenditure. The SNB expects growth to come to a halt in the second half of the year. For 2011, GDP growth of 1.5–2.0% can be expected. This is only because of the favourable economic development in the first half of the year.

Chart 3.12
Leading indicators



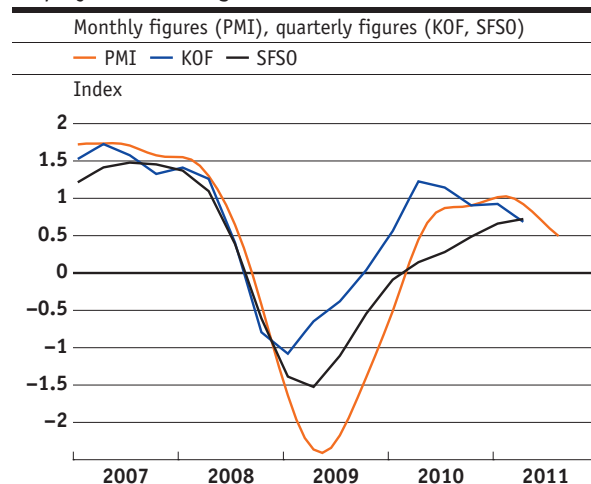
Sources: Credit Suisse, KOF Swiss Economic Institute

Chart 3.13
Expected new orders



Source: KOF Swiss Economic Institute

Chart 3.14
Employment leading indicators



Sources: Credit Suisse, KOF Swiss Economic Institute, SFSO

4 Prices and inflation expectations

Over the past few months, prices in Switzerland have been held back considerably by the appreciation of the Swiss franc. Prices of imports and, to a lesser extent, producer prices receded and were lower than in the previous year. Consumer prices, too, were under pressure and only slightly exceeded the year-back level. Surveys conducted with companies and households suggest a marked decrease in inflation expectations. Real estate prices, however, continued to grow faster than would be justified on the basis of fundamental factors.

4.1 Consumer prices

Lower CPI inflation

The annual inflation rate as measured by the national consumer price index (CPI) has declined since the last quarterly assessment (cf. chart 4.1). It stood at 0.2% in August, compared with 0.4% in May. The decrease was primarily due to lower prices for imported goods and services. The recent strong appreciation of the Swiss franc is likely to have a gradual impact on consumer prices and therefore continue to exert downward pressure on the CPI in the coming months. The trend towards higher prices for domestic services will probably only partially offset this pressure.

National consumer price index and components
Year-on-year change in percent

Table 4.1

	2010			2011		2011		
		Q3	Q4	Q1	Q2	June	July	August
Overall CPI	0.7	0.3	0.3	0.6	0.4	0.6	0.5	0.2
Domestic goods and services	0.6	0.4	0.5	0.6	0.6	0.8	0.7	0.7
Goods	-0.1	-0.4	-0.5	-1.0	-1.0	-0.5	-0.5	-1.2
Services	0.8	0.7	0.8	1.1	1.1	1.1	1.1	1.2
Private services excluding rents	0.6	0.5	0.4	0.6	0.8	0.9	0.8	0.9
Rents	1.1	0.9	1.2	1.5	1.3	1.2	1.2	1.5
Public services	0.9	0.7	1.2	2.0	1.8	1.8	1.8	1.8
Imported goods and services	0.9	-0.1	-0.1	0.5	-0.3	0.0	-0.3	-1.2
Excluding oil products	-1.3	-1.4	-1.5	-1.3	-1.9	-1.4	-1.7	-2.3
Oil products	13.9	8.6	8.5	10.5	8.9	8.2	7.7	5.1

Sources: SFSO, SNB

The relationships between the inflation rates of the various CPI components have remained largely stable over the past few quarters. Whereas prices for domestic goods reported a slightly positive year-on-year development, those for foreign goods were well below the year-back level. With the recent appreciation of the Swiss franc, this discrepancy has become more pronounced, but it had already been noticeable in the previous quarters (cf. chart 4.1). Prices for domestic goods are on a downward trend and thus showed negative year-on-year rates. Prices for services, by contrast, are tending upwards. This pattern, too, changed little over the past few quarters (cf. chart 4.2).

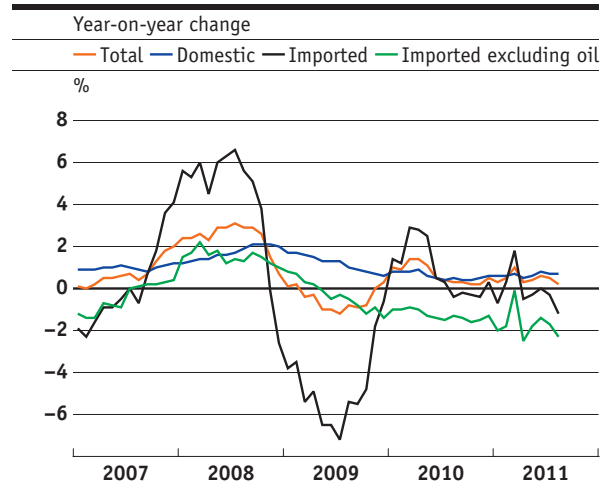
Slight fall in core inflation

For the evaluation of the CPI, the SFSO's core inflation rate (SFS01), the trimmed mean (TM15) and the dynamic factor inflation (DFI) can be used. The latter two are calculated by the SNB. In the case of the SFS01, the same, mostly price-volatile goods are excluded from the CPI every month, whereas in the TM15, the goods prices with the highest and lowest annual inflation rates are excluded each month. The two core inflation rates are thus based on a reduced commodities basket. The broader-based DFI, by contrast, calculates core inflation using an empirically estimated dynamic factor model that includes other real and nominal economic data in addition to price data. Chart 4.3 shows that core inflation has trended downwards over the past few months after previously recording a slight upward trend.

Revision of dynamic factor inflation

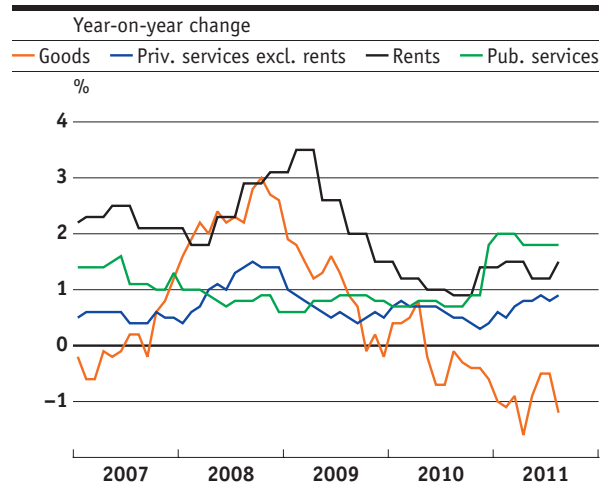
The SNB recently revised the data basis of the DFI. In July 2011, the resulting DFI series was published for the first time in the *Monthly Statistical Bulletin*. Compared to the earlier series, the revised DFI shows a bigger lead on inflation as measured by the CPI and improved statistical features (cf. *Monthly Statistical Bulletin*, July 2011, p. III).

Chart 4.1
CPI: domestic and imported goods and services



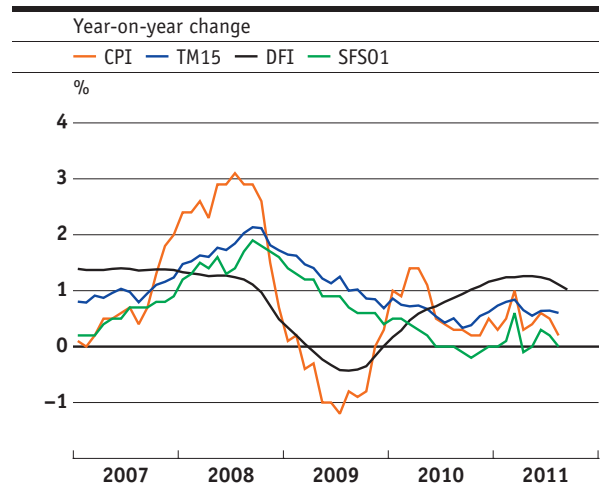
Sources: SFSO, SNB

Chart 4.2
CPI: domestic goods and services



Sources: SFSO, SNB

Chart 4.3
Core inflation rates



Sources: SFSO, SNB

4.2 Producer and import prices

Considerable decline in import prices

The total supply price index (producer and import prices) fell substantially between May and August. Driven by the appreciation of the Swiss franc, price reductions were observed in a large number of industries. The strongest price decreases were registered for imported goods, in particular for energy.

In a year-on-year comparison, the import price index turned negative in July and stood at -2.2% in August (cf. chart 4.4). Prior to that, inflation for imported goods had been above zero primarily due to distinctly higher energy prices year-on-year, whereas prices for consumer and capital goods were already tending downwards at the time.

Year-on-year, the producer price index has been negative since March. In August, it came to -1.8%. In this index, too, it is primarily energy prices that exceed the previous year's level despite the recent decline. Producer prices for other goods mostly fell over the same period. This reflects the appreciation of the Swiss franc, which has put pressure not only on the prices for goods earmarked for export, but also on the prices of goods produced for the domestic market.

4.3 Real estate prices

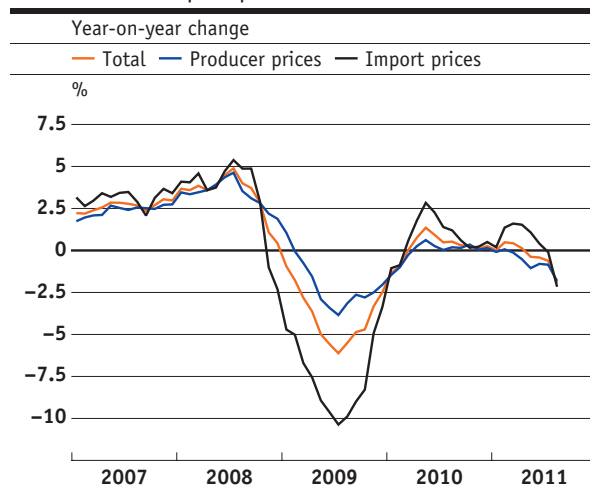
Sharp rise in residential property prices and modest rent increases

Prices for residential property have continued to rise sharply. The prices of single-family homes and owner-occupied apartments advertised in newspapers and the internet in the second quarter were around 5% up year-on-year. In addition to asking prices, there are further indices, some of them using different methods, that measure the development of actual transaction prices. These indices all suggest that transaction prices in the second quarter were also considerably higher than one year back (cf. chart 4.5).

The increase in residential property prices is only partially explained by the changes in population, per capita income and interest rates. The risk of adverse developments will increase if the sharp price rise continues.

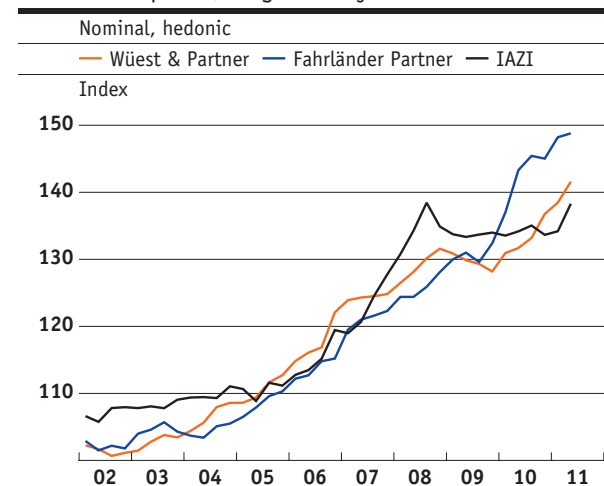
The interest rate decline remained an important reason why rents did not rise to the same extent as prices for residential property. Rents for apartments available on the market and the rental component of the CPI in the second quarter were up by 2.3% and 1.3% respectively, year-on-year (cf. chart 4.6).

Chart 4.4
Producer and import prices



Source: SFSO

Chart 4.5
Transaction prices, single-family homes



Sources: Fahrländer Partner, IAZI, Wüest & Partner

4.4 Inflation expectations

Lower inflation expectations

Against the background of the appreciation of the Swiss franc and a dampened global economic outlook, the survey on the development of consumer prices suggests a distinct lowering of inflation expectations.

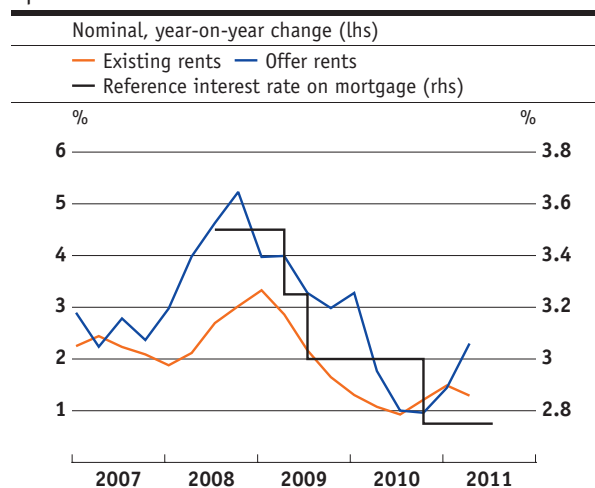
The quarterly survey conducted by SECO in July shows that inflation expectations of households have receded in comparison with April's figures (cf. chart 4.7). The proportion of respondents expecting prices to rise moderately or sharply in the coming twelve months dropped below 50%, whereas there was an increase in the number of respondents who expected unchanged or falling prices.

The monthly *Credit Suisse ZEW Financial Market Report*, which is based on responses from around 40 financial market experts, reveals an ongoing downward trend in inflation expectations since April 2011. In August, only 14% of all respondents believed that CPI inflation rates would rise in the coming six months, as against 77% in April and 41% in June. By contrast, 49% expected no change and 37% anticipated decreasing inflation rates.

Producer sale prices expected to sink

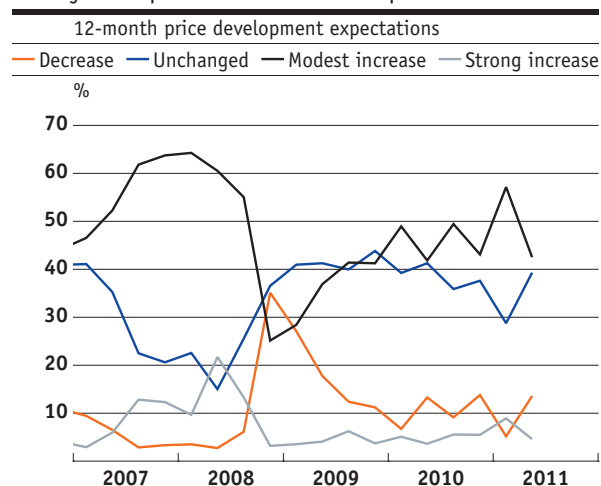
The quarterly KOF survey asks industrial and wholesale companies how they expect purchase and sale prices to perform in the next three months. Compared to the April figures, the results of the July survey indicate that the scope for price increases has narrowed. Whereas in April, most respondents expected rising purchase and sale prices, the majority in July believed that purchase prices would remain unchanged and sale prices sink.

Chart 4.6
Apartment rents and reference interest rate



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

Chart 4.7
Survey on expected movements in prices



Sources: SECO, SNB

5 Monetary developments

Through the introduction of a minimum exchange rate for the euro, the SNB has taken a stand against the significant tightening in monetary and financial conditions that has come about as a result of the extreme appreciation in the Swiss franc. The minimum exchange rate was announced on 6 September, after the SNB had increased liquidity in three stages, from CHF 30 billion to a total of around CHF 200 billion. To this end, reverse repo transactions and SNB Bills that fell due were no longer renewed. In addition, outstanding SNB Bills were repurchased, and foreign exchange swaps and repo transactions with negative interest rates were concluded. As a result of these measures, short-term interest rates fell temporarily into negative territory.

In mid-August, long-term interest rates declined to new record lows. The yield curve flattened, reflecting the deterioration in the economic outlook. However, falling inflation expectations resulted in a slight rise in real interest rates. Nevertheless, they remain low, thereby helping to support consumption and investment.

Even though the value of the Swiss franc had fallen around 15% from its peak levels against the euro and the US dollar by the end of August, it appreciated significantly again in the early days of September. Even at the minimum exchange rate of CHF 1.20 per euro, the Swiss franc is still high, and should continue to weaken.

In the survey on lending, a number of banks reported that they had slightly tightened their lending standards for household mortgages due to the risks in the real estate market. Despite this, mortgage lending rose relatively strongly in relation to economic activity last quarter, owing to the low level of interest rates. The risk of adverse developments in the Swiss mortgage and real estate market remains unchanged.

5.1 Summary of monetary policy since the last assessment

Action to counter the strength of the Swiss franc

At its assessment of June 2011, the SNB decided to maintain its expansionary monetary policy. It left the target range for the three-month Libor unchanged at 0.0–0.75% and announced that it intended to continue aiming for the lower part of the target range, at around 0.25%.

In August and September, the SNB adopted a range of measures to counter the strength of the Swiss franc. On 3 August, it reduced the target range for the three-month Libor to 0.0–0.25% and expressed its intention of keeping it as close to zero as possible. Further, it announced that it would increase banks' sight deposits at the SNB from CHF 30 billion to CHF 80 billion and would therefore stop issuing SNB Bills and repurchasing outstanding SNB Bills, and would no longer renew liquidity-absorbing repo transactions that fell due. A few days later, the SNB raised the target for sight deposits to CHF 120 billion (on 10 August 2011) and CHF 200 billion (on 17 August 2011). At the same time, it announced that it would be using currency swaps as a further instrument. After these measures had proved insufficient, on 6 September the SNB announced a minimum exchange rate of CHF 1.20 per euro and stated that it would enforce this rate with the utmost determination. To this end, it was prepared to buy foreign currency in unlimited quantities.

Sight deposits at the SNB at record level

At the start of the period under review, bank sight deposits averaged some CHF 27 billion. They rose steadily as a result of the SNB's action in August to increase liquidity, reaching new historic highs from 15 August. The weekly average on September 16 was CHF 206 billion. Total sight deposits in Swiss francs amounted to CHF 247 in the same period.

Following the halting of liquidity-absorbing open market operations, repo transactions expired and SNB Bills became due for redemption. To speed up the increase in sight deposits, the SNB also repurchased outstanding SNB Bills.

From 8 August, the SNB undertook currency swaps. A currency swap is a monetary policy instrument to create temporary Swiss franc liquidity. The SNB purchases foreign currencies on the spot market and simultaneously sells them at forward rates. Further, from 24 August the SNB made liquidity-providing repo transactions with one-week maturities available on the market. These measures resulted in negative market interest rates.

Rise in banks' surplus reserves

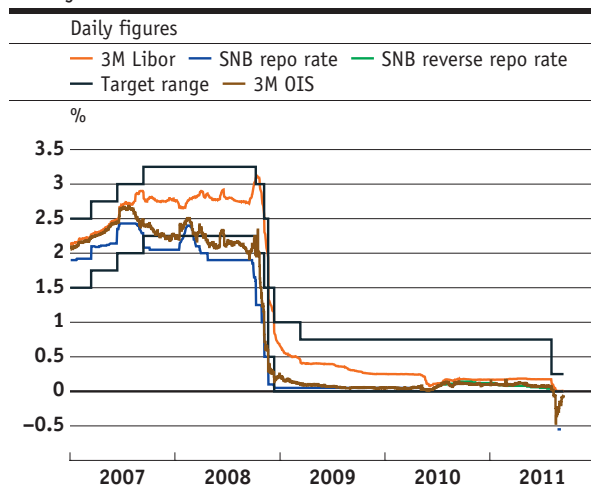
Statutory minimum reserves averaged CHF 10 billion between 20 May and 19 August 2011. They were thus practically unchanged from the preceding period (20 February to 19 May 2011). On average, banks exceeded the requirement by around CHF 32.1 billion (previous period: CHF 20.2 billion). The average compliance level increased from 306% to 419%.

5.2 Money and capital market interest rates

The three-month Libor stood at 0.18% in the first six weeks following the June assessment. It dropped significantly in August following the SNB's announcement of measures to counter the strength of the Swiss franc. On 5 September it dropped to a new historic low of 0.0% (cf. chart 5.1).

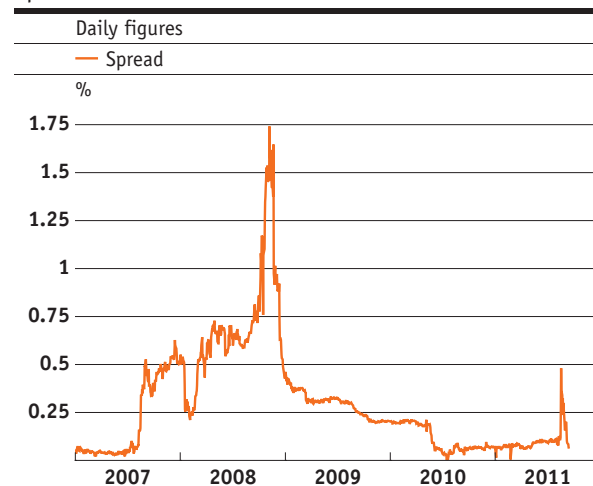
In the second half of August, the difference between the three-month Libor and the three-month OIS – which is an indicator of the tension and risk on the money market – temporarily increased to levels last seen during the financial crisis of 2007/2008 (cf. chart 5.2). While at that time expansion of the three-month Libor/OIS interest rate spread reflected the rise in the three-month Libor caused by rising credit and liquidity risks, the rise in August 2011 was driven principally by the exceptionally high liquidity, which was reflected in the negative OIS.

Chart 5.1
Money market rates



Sources: Bloomberg, Reuters, SNB

Chart 5.2
Spread between 3M Libor and 3M OIS



Sources: Bloomberg, Reuters

Long-term interest rates at a new low

Medium and long-term interest rates, which had risen considerably since their temporary low of summer 2010, have been falling again since April and have reached new historic lows. The yield on ten-year Swiss Confederation bonds, for example, fell from 1.7% in mid-June to 1.0% in mid-September. Yields on corporate bonds with high credit ratings moved largely in parallel with those of Confederation bonds, while yield premia on lower-rated corporate bonds have risen since the deterioration of the economic outlook at the end of July. The decline in long-term interest rates is attributable to two factors: high demand for Swiss franc investments from investors seeking a safe haven, and market expectations that short-term rates will remain low for a prolonged period.

Yield curve shifts downwards

As a result of the decline in both short and long-term interest rates, the yield curve shifted downwards between June and September (cf. chart 5.3). In addition, in September it was flatter than in June. The difference between the yield on ten-year Confederation bonds and the three-month Libor was 1.0 percentage points in mid-September, as against 1.5 percentage points in mid-June and an average of 1.3 percentage points since the mid-1990s.

Real interest rates remain low

Estimated real interest rates rose slightly between June and September because estimated inflation expectations fell faster than nominal interest rates. The estimated three-year real interest rate was -0.1% in September 2011, compared with -0.2% in June (cf. chart 5.4). The inflation expectations used to calculate real interest rates are based on inflation forecasts generated by various SNB models.

Chart 5.3
Term structure of Swiss Confederation bonds

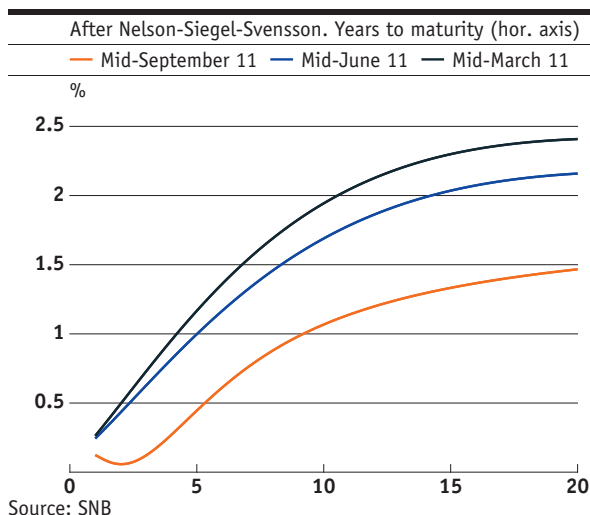
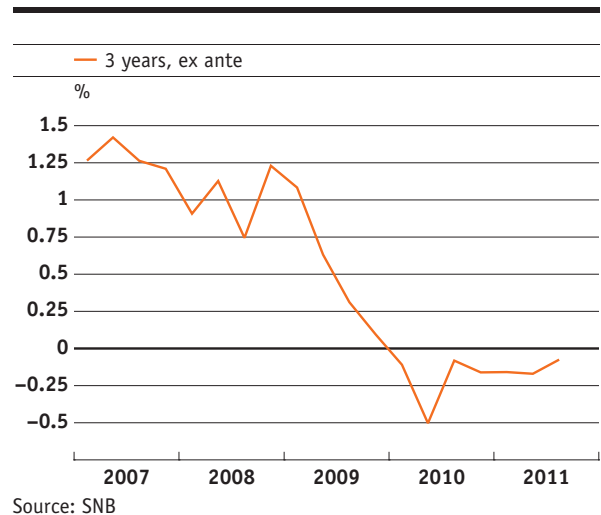


Chart 5.4
Estimated real interest rate



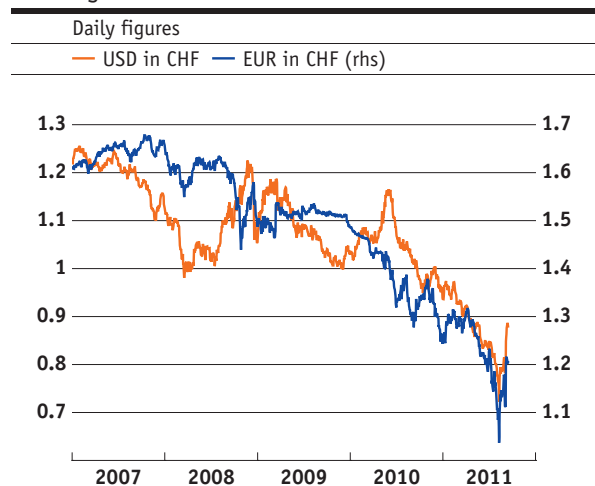
5.3 Exchange rates

Further appreciation of the Swiss franc until August

Following the monetary policy assessment in June, the euro and US dollar dropped to new lows against the Swiss franc (cf. chart 5.5). On 10 August 2011, the exchange rates for the euro and US dollar were just above CHF 1.00 and CHF 0.70 respectively. The factors adversely affecting the US dollar included the dispute between the political parties about US Federal budget cuts and the deterioration in the economic outlook. As in previous periods, the euro was weakened by investors' concern about the debt problems in various euro area countries.

As a result of the measures taken in August to counter the strength of the Swiss franc, a reversal of the trend started on 10 August, but rapidly lost momentum. Only the announcement of a minimum exchange rate against the euro on 6 September brought about a substantial weakening of the Swiss franc. In the morning, before the announcement, the exchange rate against the euro stood at CHF 1.10. Afterwards it rose rapidly above the minimum exchange rate. The Swiss franc also weakened against the other currencies. In mid-September, the rate of the Swiss franc against the euro was CHF 1.20 and against the US dollar, CHF 0.88, compared to CHF 1.20 and CHF 0.85 at the time of the June assessment.

Chart 5.5
Exchange rates



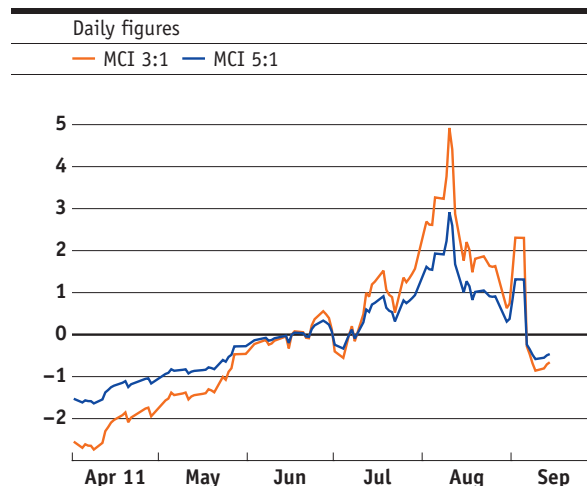
Source: SNB

Monetary conditions dominated by exchange rate movements

In recent months, monetary conditions have been dominated by the sharp movements of the Swiss franc exchange rate. The monetary conditions index (MCI) shown in chart 5.6 combines changes in the three-month Libor and the nominal trade-weighted external value of the Swiss franc. To take account of uncertainty regarding the relative impact of changes in interest rates and exchange rates, two different weightings are used for the MCI (3:1 and 5:1). The index is reset to zero immediately after each monetary policy assessment.

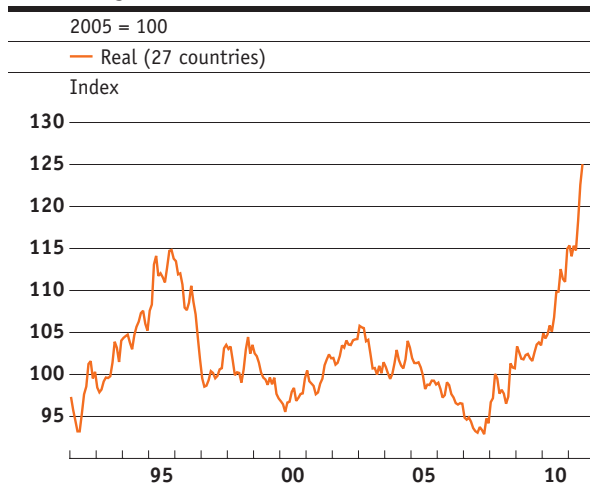
Owing to the appreciation of the Swiss franc, the MCI rose until the first half of August. This indicated a tightening of monetary conditions, despite the fact that the three-month Libor fell in August. The measures to combat the strength of the Swiss franc, and especially the announcement of a minimum exchange rate against the euro, resulted in a considerable correction. By mid-September the MCI was slightly negative. Monetary conditions were therefore more expansionary in mid-September than they had been at the time of the June assessment.

Chart 5.6
MCI nominal



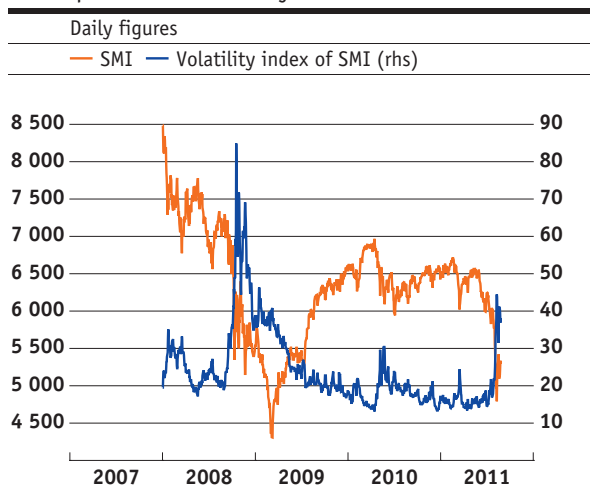
Source: SNB

Chart 5.7
Trade-weighted external value of Swiss franc



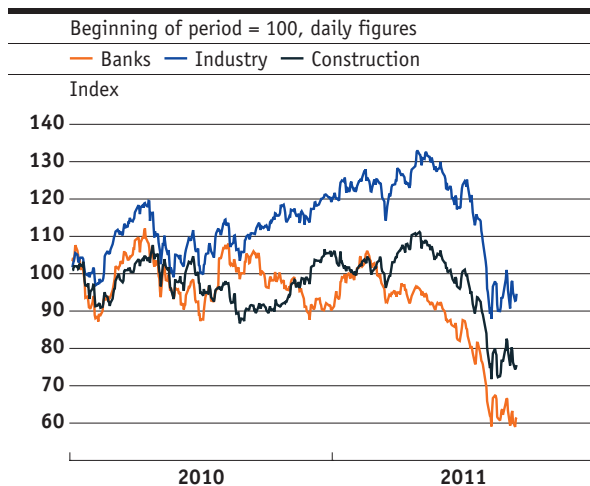
Source: Bank for International Settlements

Chart 5.8
Share prices and volatility



Source: Thomson Financial Datastream

Chart 5.9
Selected SPI sectors



Source: Thomson Financial Datastream

Real external value of the Swiss franc at very high level

In August, the real trade-weighted external value of the Swiss franc climbed to a new high, which was considerably higher than the 1995 level (cf. chart 5.7). At the new level, the Swiss franc was massively overvalued in real terms. The rise shows that the nominal appreciation of the Swiss franc is only offset to a very small extent by lower inflation than in other countries. As a result of the correction in September, the real external value of the Swiss franc should be back around the June level. Thus the Swiss franc is still high. The exchange rate situation continues to present serious problems for the competitiveness of Swiss exporters.

5.4 Stock markets

Share price downside in August

Prices of shares in the Swiss Market Index (SMI) have declined considerably since the June assessment. In the first half of August, they fell to their lowest level since March 2009. By mid-September, the SMI had lost around 16% since the start of the year (cf. chart 5.8).

As usual, the decline in share prices went hand-in-hand with an increase in market uncertainty. The volatility index of the SMI shows that expected 30-day volatility rose rapidly between mid-June and mid-September, reaching levels not seen since the financial crisis intensified in autumn 2008.

Against the background of the deterioration in the economic outlook, Swiss share prices have moved analogously to those in most other industrialised countries. However, the extreme volatility of the Swiss franc exchange rate has played a special role. Prices of Swiss shares reflect the impact of the strong currency on valuations and concern about the impact of the franc's strength on the competitiveness of Swiss companies and on Swiss economic growth. Shares in companies in the financial, industrial and construction industries have all sustained heavy losses (cf. chart 5.9).

5.5 Monetary and credit aggregates

Sharp rise in monetary base

The monetary base, which is composed of banknotes in circulation, plus the domestic banks' sight deposits with the SNB, increased very substantially in August, reflecting the increased liquidity on the Swiss franc money market. The monetary base had already risen significantly in autumn 2008 in response to the monetary policy reaction to the intensification of the financial crisis and had remained at a high level since then, with some large fluctuations (cf. chart 5.10).

Strong growth in the broadly based monetary aggregates

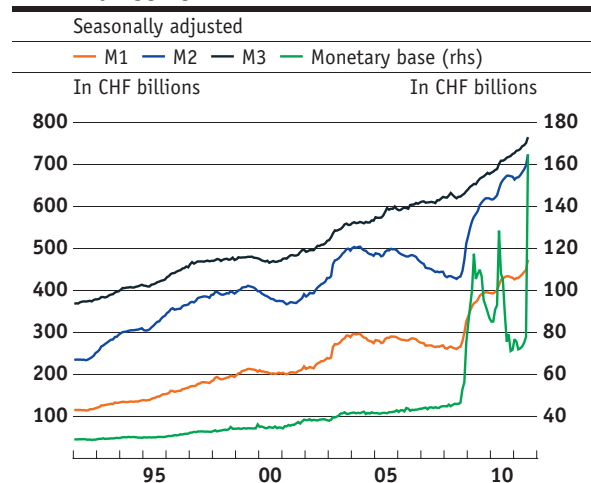
The M1, M2 and M3 aggregates provide a better insight than the monetary base into the impact of monetary policy on the economy and prices. They have also grown strongly since autumn 2008 (cf. chart 5.11). In August, M1 (cash in circulation, sight deposits and transaction accounts) was 9.7% above its level a year earlier, while M2 (M1 plus savings deposits) was 8.4% higher and M3 (M2 plus time deposits) rose by 7.6% in the same period (table 5.1). At present, the increase in M3 is being driven mainly by the growth in lending.

Higher growth in lending

The rise in bank lending has picked up slightly even though the results of the SNB's quarterly survey of lending suggest that the banks slightly tightened lending standards and conditions for mortgage lending to private households in the second quarter.

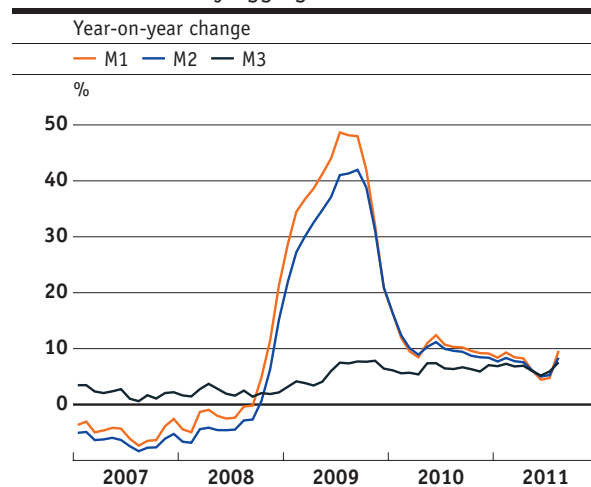
Mortgage claims, which account for around four-fifths of total bank loans, increased by a year-on-year rate of 4.8% in the second quarter and July, compared with 4.6% in the first quarter. The growth in mortgage claims rose considerably in autumn 2008 following the reduction in the three-month Libor and had been slowing slightly since the start of 2010 (cf. chart 5.12).

Chart 5.10
Monetary aggregates



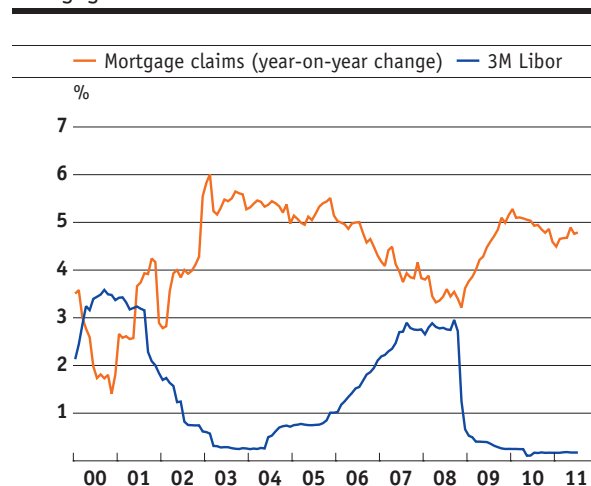
Source: SNB

Chart 5.11
Growth of monetary aggregates



Source: SNB

Chart 5.12
Mortgage claims and 3M Libor



Sources: Reuters, SNB

Monetary aggregates and bank loans
Year-on-year change in percent

Table 5.1

	2010			2011		2011		
		Q3	Q4	Q1	Q2	June	July	August
M1	10.7	10.4	9.2	8.7	6.3	4.4	4.8	9.7
M2	10.2	9.7	8.4	7.9	6.2	5.0	5.3	8.4
M3	6.4	6.5	6.4	7.0	6.0	5.2	6.0	7.6
Bank loans total^{1,3}	3.8	3.5	3.8	3.6	3.8	4.4	4.2	-
Mortgage claims ^{1,3}	5.0	4.9	4.7	4.6	4.8	4.8	4.8	-
Households ^{2,3}	4.9	4.7	4.7	4.4	4.4	4.5	4.5	-
Private companies ^{2,3}	5.2	5.1	4.7	5.2	5.5	5.4	5.4	-
Other loans ^{1,3}	-1.1	-2.8	-0.6	-0.8	-0.3	2.8	1.7	-
Secured ^{1,3}	3.8	3.5	4.3	6.6	3.6	5.0	3.7	-
Unsecured ^{1,3}	-3.9	-6.4	-3.5	-5.1	-2.8	1.3	0.4	-

1 Monthly balance sheets

2 Credit volume statistics

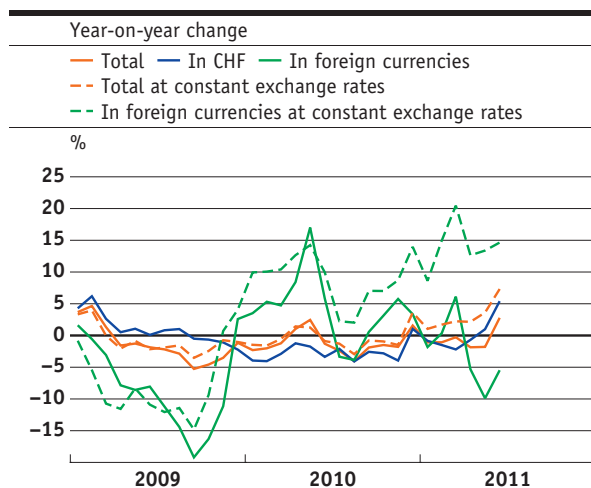
3 Growth rates for the bank loans item and for its components include information provided by banks on changes in their classification practices. Consequently, they may deviate from growth rates published in the *Monthly Bulletin of Banking Statistics*

Source: SNB

The year-on-year rate of change in other loans moved into positive territory in June (cf. chart 5.13). Other loans denominated in Swiss francs have been above the previous year's levels since May. By contrast, the Swiss franc value of the loans denominated in foreign currencies is lower than in

the previous year. This decline mainly reflects the appreciation of the Swiss franc. Calculated at constant exchange rates, there was a considerable increase in loans denominated in foreign currencies.

Chart 5.13
Other loans



Source: SNB

Business cycle trends

SNB regional network

Summary report for the attention of the Governing Board of the Swiss National Bank for its quarterly assessment of September 2011

Third quarter of 2011

The Swiss National Bank's delegates for regional economic relations are constantly in touch with a large number of enterprises from the different economic sectors and industries. Their reports, which contain subjective evaluations by these companies, are a valuable source of information for assessing the economic situation. The following pages contain a summary of the most important results of the talks held in July and August 2011 with 164 representatives of various industries on the current and future situation of their companies and the economy in general. The selection of companies is made according to a model that reflects Switzerland's production structure; the companies selected differ from one quarter to the next. The reference parameter is GDP excluding agriculture and public services.

Region	Delegate
Geneva	Marco Föllmi
Italian-speaking Switzerland	Mauro Picchi
Mittelland	Martin Wyss
	Hans-Ueli Hunziker (acting delegate)
Northwestern Switzerland	Markus Zimmerli (acting delegate)
Eastern Switzerland	Jean-Pierre Jetzer
Vaud-Valais	Aline Chabloz
Central Switzerland	Walter Näf
Zurich	Markus Zimmerli

Summary

Confidence in the third quarter of 2011 was strongly influenced by the exchange rate situation. Accordingly, companies' assessment of the situation became generally gloomier during the survey period. The economy lost momentum in all three sectors – manufacturing, construction and services. This was most apparent in the services sector. Overall, the demand for labour increased only marginally. Uncertainty about future developments has mounted perceptibly of late.

In terms of real growth in sales, prospects in the manufacturing industry and the services sector are still positive – but much less so than in the preceding quarters. Only in the construction industry is capital expenditure likely to continue growing. Technical capacity utilisation in the Swiss economy is normal to very high in all three sectors, and looks set to stabilise at the current level in the months ahead.

According to the talks held in July and August, concern over future developments has increased tangibly. Further exchange rate movements are the main focus of attention. The export industry is suffering from extremely heavy pressure on margins. Measures such as a hiring or investment freeze, or an extension of working hours without a corresponding pay rise, have become widespread. The prospect of a slowdown in the world economy and of further negative repercussions of the debt crisis in Europe has given rise to further uncertainty.

As in the previous quarters, reactions to the appreciation of the Swiss franc vary considerably from one sector to the next; overall, however, the pressure on the economy has risen substantially (cf. 'Exchange rate survey: Effects of Swiss franc appreciation and company reactions', pp. 38–43).

1 Business activity

Manufacturing

Despite the difficult exchange rate situation, the manufacturing industry benefited from its existing backlog of orders. Turnover in real terms rose both year-on-year and quarter-on-quarter. However, momentum weakened considerably from the previous quarter in all industries except watchmaking, which proved very resilient.

As in the preceding quarters, business showed a particularly sharp year-on-year improvement in the watchmaking, metal processing and machinery industries, as well as in parts of the machine tools industry. The electrical and electronic components production industry also performed very well.

The export industry continued to benefit from strong demand emanating from the emerging economies of Asia, and from northern and eastern Europe. Further contributions to growth came from the US and South America. Within the euro area, demand from Germany remained brisk.

Construction

For the construction industry, business activity continued to be very positive, although the momentum slowed slightly. Turnover was up substantially on a year-on-year basis. Although the quarter-on-quarter comparison was also positive, the increase was less pronounced than in the second quarter of 2011. Turnover remains strong in residential construction and also in the finishing trade. Given the ample backlog of orders, there is no end in sight to the fundamentally positive trend. In many places, capacity in allied building trades, too, is being pushed to the limit; some respondents reported that order books 'have never been so full'.

In the light of recent interest rate developments, a number of respondents expressed their concern about real estate market risks.

Services

Sales trends in the services sector have stabilised both year-on-year and quarter-on-quarter. As a result, the pace of growth has tailed off appreciably.

The slowdown was especially noticeable in the wholesale and retail segments, in the hospitality industry, and in banking. Numerous hotel owners experienced a sharp fall-off in overnight stays during the summer. As in the previous quarter, however, a clear distinction must be made between city tourism – where business continues to be buoyant – and the mountain regions, where the situation is difficult. Retailing has been hit by the tendency among Swiss residents to go shopping in areas just across the border – and, recently, further afield. The automobile industry and the furniture trade have also been seriously affected by this phenomenon. On the other hand, business has remained brisk in the engineering and planning consultancy segments, as well as among real estate agents and transport firms. Here, sales were considerably higher than in the previous quarter.

2 Capacity utilisation

After rising sharply in the previous quarter, utilisation of production capacity has fallen back slightly. Capacity utilisation in the construction industry remains high. In manufacturing, utilisation was rated as fairly high, while in the services sector it was rated as normal. However, the problem of low or inadequate profitability despite high capacity utilisation has worsened across a broad front.

The watchmaking industry and its suppliers reported a very high level of capacity utilisation. Manufacturers of computer equipment, electronic and optical devices as well as electrical equipment reported relatively high utilisation. Reports from the machinery industry were very mixed, ranging from high to low capacity utilisation.

The construction industry saw technical capacity utilisation persisting at the previous quarter's high level. All the respondent firms were still very satisfied with capacity utilisation, although some of them would have liked their business to be proceeding at a somewhat slower pace. Company representatives expect the level of capacity utilisation to stabilise in the months ahead, and do not see any signs of a downturn.

In the services sector, capacity utilisation was rated as normal overall – as in the preceding quarters. The companies with the highest level of utilisation were engineering, architectural and consulting offices along with transport firms. Capacity utilisation in the IT industry has risen again. Travel operators, too, reported a rather high level of capacity utilisation. In the financial sector, utilisation was rated as normal. By contrast, capacity utilisation in trading (car trade, wholesaling and retailing) and in the hospitality industry has fallen markedly.

3 Demand for labour

In the manufacturing industry, demand for labour has fallen off slightly compared to the previous quarter. Overall, representatives of manufacturing companies now only rated their staffing levels as being slightly on the low side. Owing to the high level of uncertainty, companies are pursuing cautious HR policies. Their recruitment needs have waned accordingly. Companies in the metals processing and electrical equipment manufacturing segments reported a shortage of labour.

In the construction industry, the demand for labour continued to rise. The majority of respondent companies rated the size of their current workforce as somewhat low, and the difficulties that a number of them are experiencing in recruiting suitable employees have intensified. In many cases, therefore, insufficient availability of staff was a limiting factor.

In the services sector, staff levels were generally considered appropriate. Architectural offices, engineering firms, planning offices, IT firms, transport companies and – to some extent – travel operators all reported a significant need to recruit staff. The hospitality industry is still overstaffed, and this now also applies to trading.

Whereas recruitment problems in the construction industry have worsened, the situation in the services sector, and to some extent also in manufacturing, has eased. Generally speaking, however, specialists and highly qualified staff still tended to be hard to find.

Per capita labour costs remained on an upward trend in most business sectors, although the trend was slightly less marked than in the previous quarter. In the construction industry in particular, higher demand for personnel and the tight labour market were pushing up costs. Companies in the electrical industry in particular were faced with higher per capita costs. In the services sector, it was mainly IT firms, real estate companies, consultancies, transport companies and recruitment agencies that reported higher labour costs.

4 Prices, margins and earnings situation

Margins, which were already judged to be tight in the preceding quarters, narrowed considerably in the third quarter. In the manufacturing and services sectors in particular, margins are increasingly falling short of the levels considered to be normal. This can be ascribed mainly to the strength of the Swiss franc and to the rises in some commodity prices. Measures such as a hiring or investment freeze, or an extension of working hours without a corresponding pay rise, have become widespread. A growing number of firms are also considering outsourcing abroad in the medium term.

It was once again manufacturing which suffered most from squeezed profit margins. Margins look set to remain under heavy pressure: although most companies now expect purchase prices to fall rather than continue rising, they will also have to make major concessions on sale prices in Swiss francs.

In construction, profit margins were judged to be normal – as in the previous quarters. Company representatives were now no longer expecting raw materials purchase prices to rise. At the same time, businesses no longer saw any possibility of being able to achieve higher sale prices. Their margins might therefore stabilise in the coming months.

Overall, respondents in the services sector regarded their profit margins as below average. The overall result continued to be adversely affected by banks' margins, which were clearly unsatisfactory. Low interest rates coupled with exchange rate and stock market developments had a significant impact on bank revenues. Representatives of wholesale and retail firms, hotels and certain fiduciary and consulting companies also rated their profit margins as unsatisfactory. By contrast, transport companies and travel agencies reported a relatively normal margins situation. Companies in the real estate management industry reported high margins.

As in the previous quarters, companies taking part in the July/August 2011 survey were again asked about the impact of the Swiss franc's appreciation on their business. This revealed a considerable deterioration compared to their assessment in the second quarter of 2011: 58% of firms now stated (compared to 48% in the previous survey) that they

were experiencing negative effects overall, 31% (37%) of businesses were unaffected by the appreciation, and 10% (15%) reported positive effects. Once again it was manufacturing that was easily the worst affected by the Swiss franc strength; compared to the previous quarter, pressure on this sector has increased sharply (cf. 'Exchange rate survey: Effects of Swiss franc appreciation and company reactions', pp. 38–43).

5 Outlook

Uncertainty about future developments mounted perceptibly of late, especially towards the end of the survey period. The cautious stance among companies is reflected above all in their muted recruitment and investment plans. Their turnover expectations for the next few months have been reduced substantially compared to the previous quarter.

The majority of manufacturing companies expect turnover to continue rising gradually in the next six months. In some segments, however, the volume of new orders points to a marked slowdown. Capacity utilisation will probably stabilise and any further increases in employment will be only sporadic.

In the construction industry, confidence remains high. The positive trend in both turnover growth and recruitment plans is continuing. In many cases, order books are full well into next year. The finishing trade is especially optimistic.

Companies in the services sector are also generally upbeat about the business trend in the next six months. Turnover growth is projected to be considerably lower than in the previous quarter, however. Capacity utilisation and headcounts are likely to stabilise at their present levels. Representatives of IT and travel operators rate their turnover prospects very optimistically indeed. In contrast to the mountain regions, city-based tourism is still performing well, though some respondents expressed doubts about the reliability of what appears to be a good level of bookings. Recruitment firms are also positive, as are some insurers. Bank representatives, however, are expecting mainly negative trends. Retailers are hoping that consumer spending will bounce back in the coming months.

With regard to international risks, attention is focused on a slowing of the world economy and on further repercussions from the European debt crisis. Quite a few industries are facing raw material shortages. Fears expressed in the previous quarter about delivery bottlenecks and price rises for certain product categories in the wake of the Fukushima accident have not, on the whole, been borne out. Nor have worries about future energy prices become any more concrete.

On the other hand, erosion of margins – largely the result of the Swiss franc's appreciation – is causing a great deal of concern for the companies affected. As they expect purchase prices to soften over the next few months but will also have to make considerable price concessions when selling their products, the margins situation could at least stabilise. Many respondents hinted at serious consequences for their business if the Swiss franc were to stay at its current high level. A number of them expressed their unease about the persistently low interest rates.

The generally high level of uncertainty about future economic developments is reflected in capital spending plans: whereas in the previous quarter companies in all three sectors had still been planning to invest more, the latest survey shows that this now only applies to the construction industry. In manufacturing and the services sector, investment looks set to remain at current levels. At some manufacturing companies, there is talk of gradually cutting back investment in Switzerland in favour of new investment abroad.

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

SNB regional network

Report for the attention of the Governing Board of the Swiss National Bank for its quarterly assessment of September 2011

Third quarter of 2011

In the economic survey for the third quarter, which was carried out in July and August 2011, delegates from the SNB's regional network once again systematically raised the exchange rate situation with companies, posing questions with the aim of quantifying the effects of the appreciation of the Swiss franc. A total of 164 companies took part in the survey. The selection of companies is made according to a model that reflects Switzerland's production structure. The companies selected differ from one quarter to the next. The reference parameter is GDP excluding agriculture and public services.

1 Overall results of the survey

With the exchange rate situation deteriorating further, the results for the economy as a whole showed a significant worsening compared to those for the previous quarter. Of the respondent companies, 58% (previous quarter: 48%) claimed to be experiencing negative effects from the appreciation of the Swiss franc (35% significantly and 23% moderately negative). A total of 31% of companies (37%) said they had not felt any significant effect on their business activities from the appreciation of the Swiss franc. As can be seen from chart 2, these are mainly companies that have no exchange rate exposure. In addition, hedging strategies or mutually offsetting factors help to neutralise exchange rate effects. Accordingly, most of these companies are not anticipating any impact in the near future either (cf. chart 3). However, the percentage of such companies has fallen sharply from the previous survey. If exchange rates were to remain at their present level, a further worsening of the survey results in the next quarter would be likely.

Positive effects from the appreciation of the Swiss franc were experienced by the remaining 10% of companies included in the survey (15%).

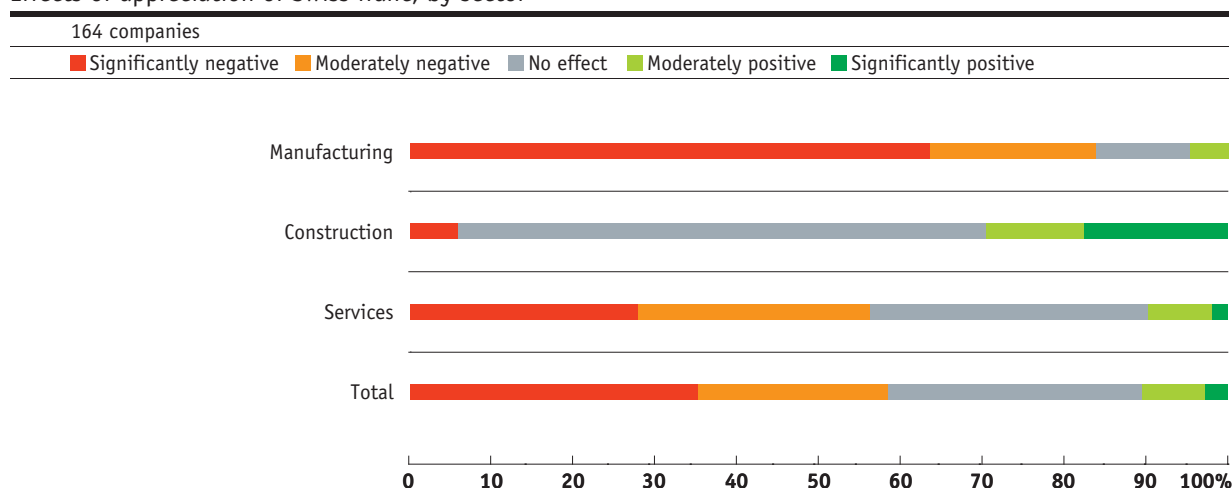
The proportion of companies in the manufacturing sector that felt significantly negative effects continued to increase (up from 58% to 64%). The percentage that rated the effects as 'moderately negative' also rose – from 15% to 20%. In the services sector, the majority of companies (56%) are now reporting negative effects from the strength of the Swiss franc. While the proportion experiencing

moderately negative effects remained virtually constant (approximately 30%), the proportion of companies reporting significantly negative effects doubled to almost 30%. In the construction industry, the situation remained stable: as before, about two-thirds of companies are unaffected by the Swiss franc's strength. A total of 29% of companies reported positive effects. It should be noted that industrial companies with construction-related activities are included under manufacturing. Thus any negative effects detected by such companies as a result of fiercer foreign competition do not influence the construction industry results in this survey.

2 Negative effects – where and how?

In all, 96 companies reported moderately or significantly negative effects from the appreciation of the Swiss franc. Chart 4 shows the markets where these negative effects were observed and the form they took. As expected, export activities were again hardest hit. In most cases the companies that were adversely affected found themselves faced with lower profit margins in their foreign sales markets (almost two-thirds of companies), lower sales volumes (43% of companies) and lower Swiss franc-equivalent sale prices (49% of companies). The phenomenon of unsatisfactory sales prices was thus more marked than in the previous quarter, which suggests that only a limited number of Swiss exporters were able to achieve higher sales prices in foreign currencies and thereby (to some extent)

Chart 1
Effects of appreciation of Swiss franc, by sector



Source: SNB

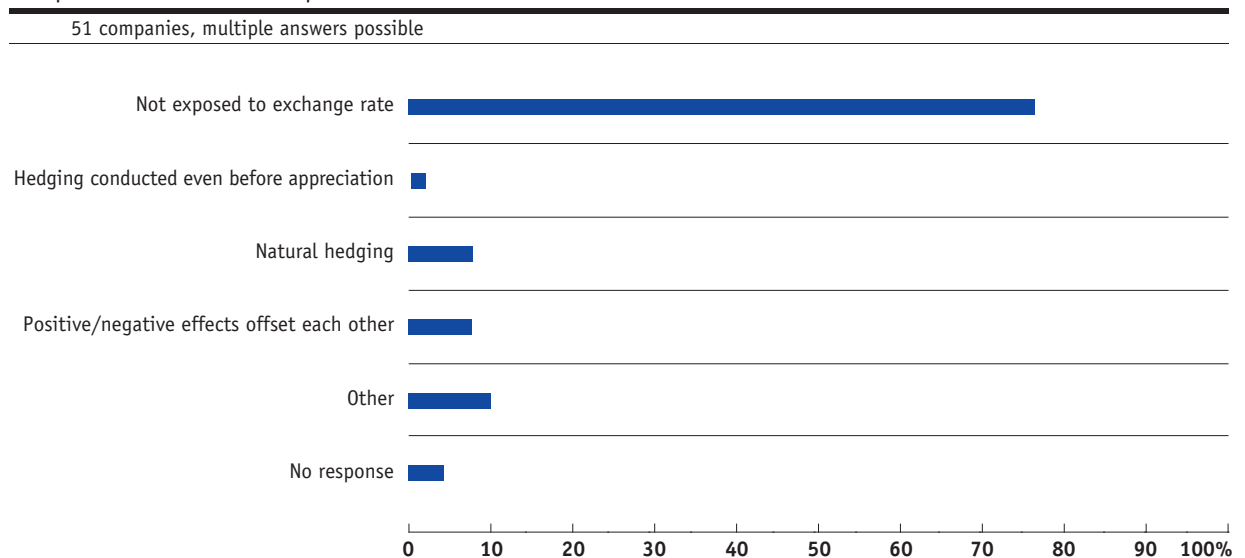
offset the appreciation. It was also clear that companies are losing orders because of the unfavourable competitive environment. In the domestic market, too, a higher proportion of firms reported tighter margins, lower sales prices and reduced sales.

In addition to the direct effects on the export industry, indirect effects were reported by suppliers to export-oriented companies (cf. lower third of chart 4). These indirect negative effects also seem to have increased somewhat.

The industries hit hardest by the negative effects of the appreciation were chemicals and pharmaceuticals, metals, manufacturers of electronic products and precision instruments, and the machinery, textiles and clothing industries. The

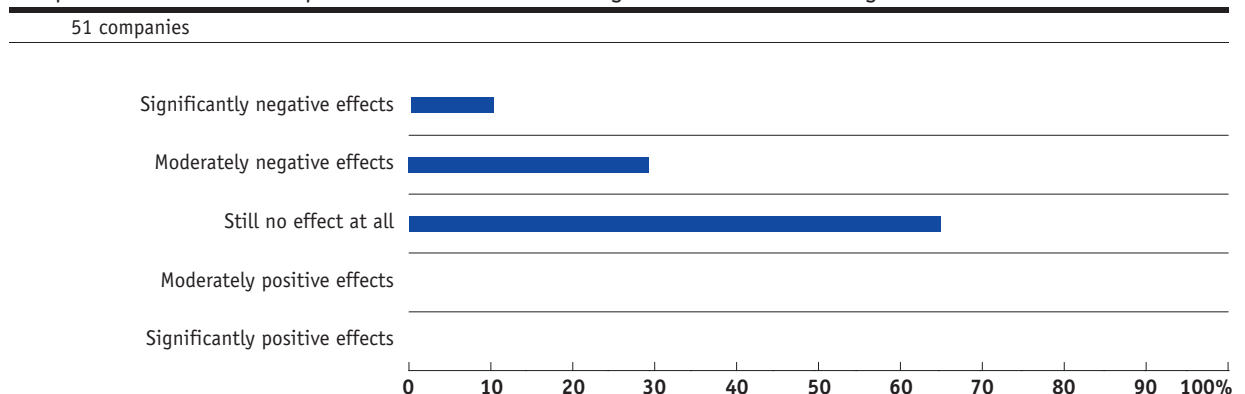
results for the hospitality industry deteriorated compared to those from the previous quarter's survey. Of the total of 15 hotel representatives interviewed, five reported moderately negative and five reported significantly negative effects from the appreciation, while the remaining five representatives said the strength of the Swiss franc had had no significant impact. City-based tourism has continued to perform much better than tourism in the mountain regions. The picture for retailing has deteriorated considerably since the previous quarter. Whereas the result three months ago was mixed, now practically all retailers surveyed are reporting negative effects from the Swiss franc's appreciation. The tendency of Swiss residents to go shopping abroad has increased – and the impact is

Chart 2
Companies not affected: explanations



Source: SNB

Chart 3
Companies not affected: expectations while the exchange rate remains unchanged



Source: SNB

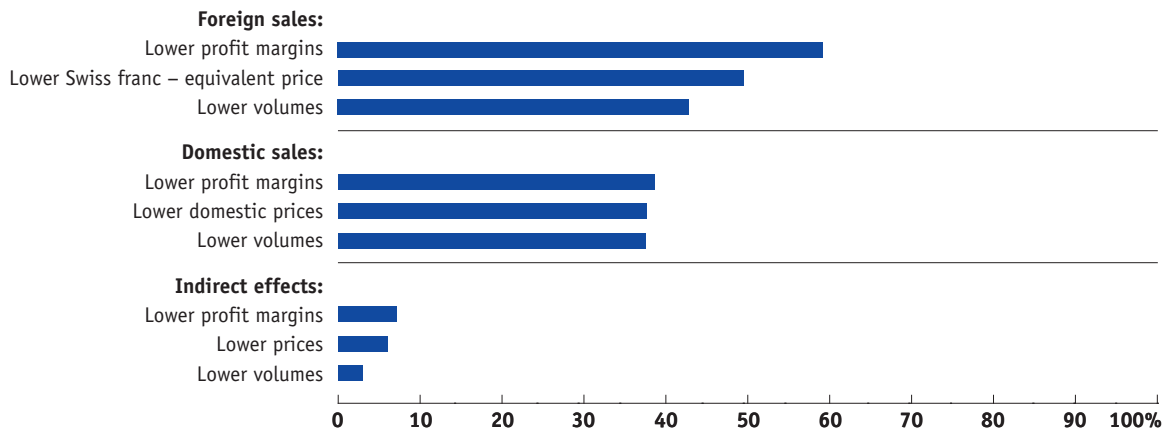
no longer confined to border areas. The situation in wholesaling has also worsened substantially: the majority of respondents reported moderately or even significantly negative effects. Most banks reported adverse effects. By contrast, representatives of the real estate management and brokerage industry, fiduciary firms and catering companies generally reported either no effects or positive effects.

3 Negative effects – how are companies reacting?

In addition, companies were asked about the measures they had already taken to counter the effects of the Swiss franc's appreciation. Chart 5 shows the range of these reactions. Overall, these results were largely unchanged compared to the previous quarter. A large majority of companies have taken action. The most frequent measures being taken are aimed at reducing production costs. Labour costs have mainly been cut by lowering the headcount or halting recruitment – or, more recently, by increasing working hours while keeping pay

Chart 4
Negatively affected companies: effects of appreciation of Swiss franc

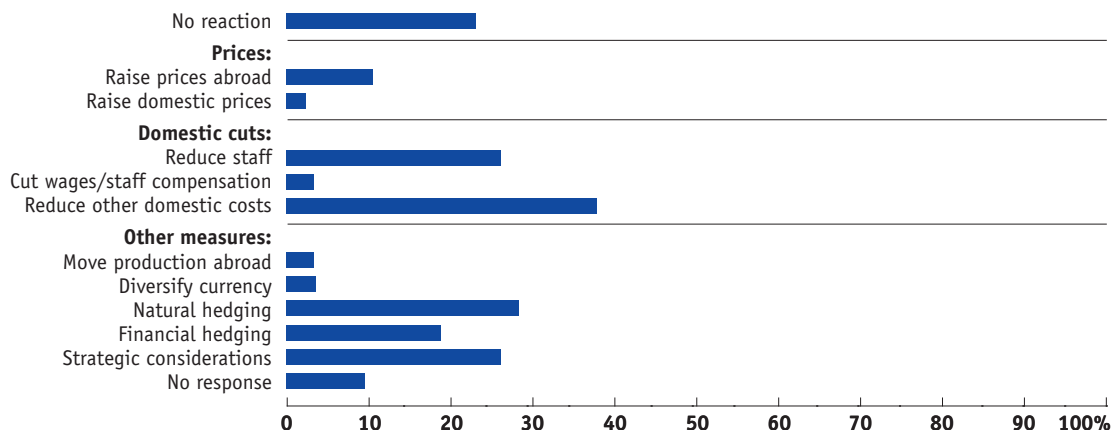
96 companies, multiple answers possible



Source: SNB

Chart 5
Negatively affected companies: reactions to appreciation of Swiss franc

96 companies, multiple answers possible



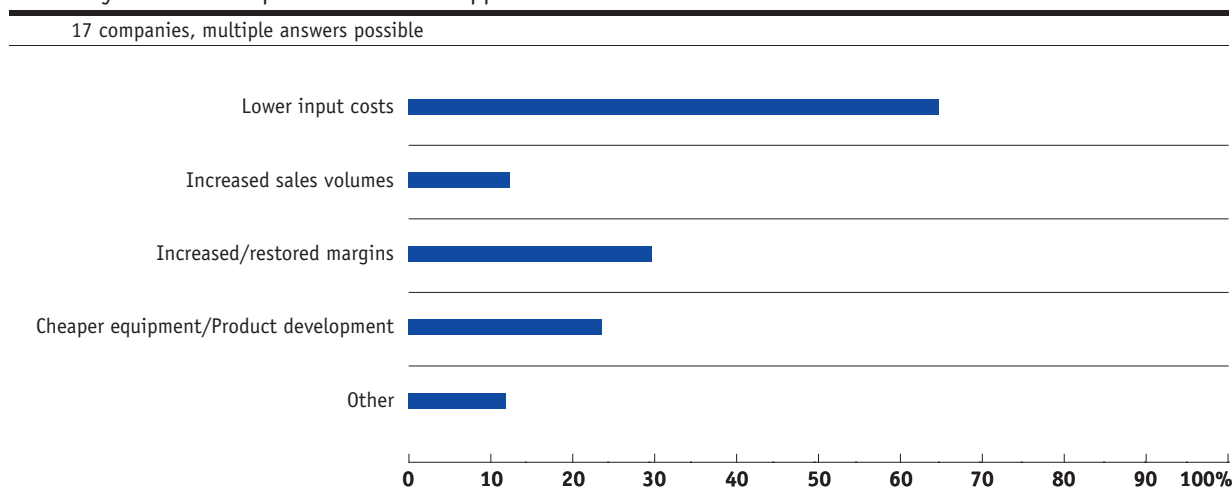
Source: SNB

levels unchanged. The percentage of companies considering cuts in headcount has risen to about 26%; in the previous quarter, this figure was still well below 20%. In most cases, however, cost-cutting measures have continued to focus on other production costs. The use of hedging strategies (mainly in the form of natural hedging) is widespread. Some companies are trying to enhance their range of products and services in terms of value added. About a quarter of the adversely affected companies said they were also engaging in fundamental strategic thinking about the future of the company.

4 Positive effects – where and how?

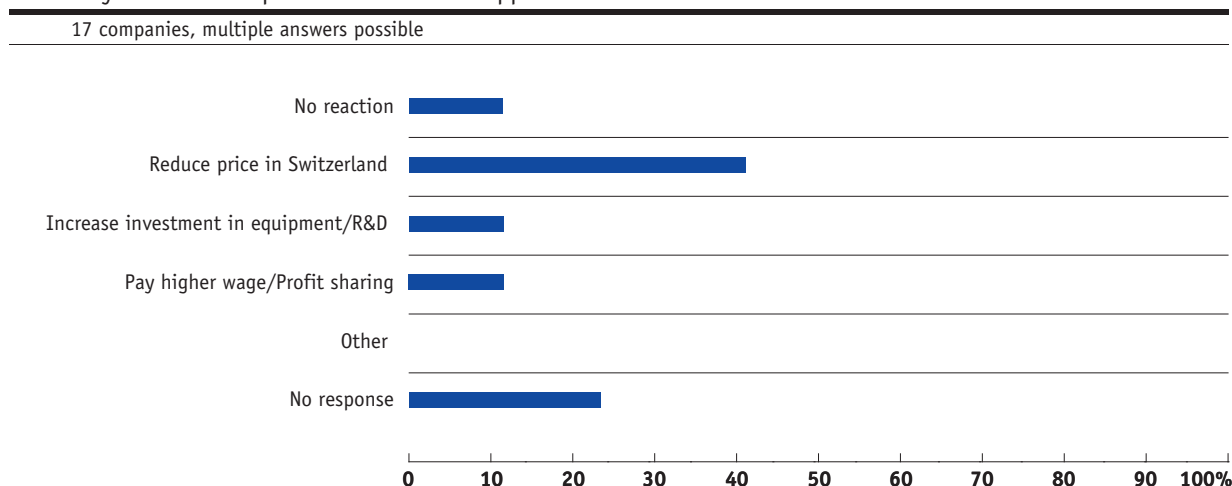
A total of 17 respondent companies (10% of the total, as against 15% in the previous quarter) were experiencing moderately or even significantly positive effects from the appreciation of the Swiss franc. As can be seen from chart 6, the greater part of the positive effects came in the form of lower input costs (approximately 65% of cases) and/or improved profit margins (30% of cases). However, the percentage of firms that were able to improve their margins was much lower than in the previous quarter (78%). Moreover, a quarter of the companies mentioned more favourable conditions for

Chart 6
Positively affected companies: effects of appreciation of Swiss franc



Source: SNB

Chart 7
Positively affected companies: reactions to appreciation of Swiss franc



Source: SNB

investment and for research and development; this proportion has also decreased by comparison with the preceding quarter (34%). Chart 7 suggests that an improvement in business conditions will primarily result in lower sales prices in Switzerland. Of the companies reporting positive effects, 41% stated that they were addressing the situation this way – double the percentage in the last survey. To a lesser extent, the more favourable business conditions will also lead to higher investment in equipment, research and development, or to higher salaries or increased profit-sharing.

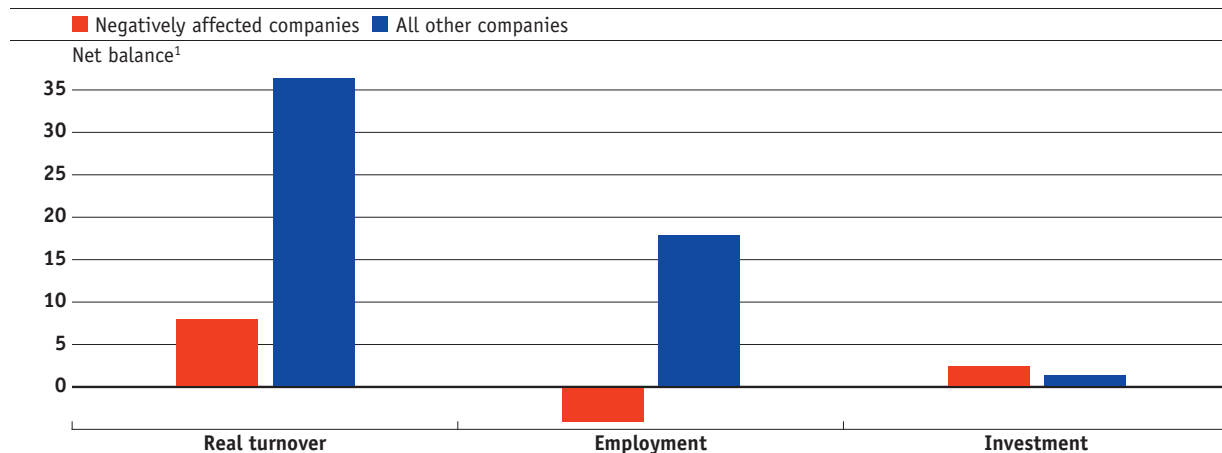
5 Expectations for the near future remain positive

In the survey, companies were asked about their expectations with regard to real turnover, staff numbers and investment in the coming six/twelve months. Their answers are recorded on a scale ranging from 'significantly higher' to 'significantly lower'. Based on this information, an index is created by subtracting the negative assessments from the positive ones (net assessments). Significantly positive and significantly negative assessments are assigned higher weights than

slightly positive or slightly negative assessments. The index is constructed in such a manner that its value can range between +100 and –100. A positive index value reflects positive assessments overall, while a negative value shows negative assessments overall.

The evaluation was conducted for two sub-groups – first, companies affected negatively by the appreciation of the Swiss franc, and second, all other companies. The situation has changed decisively from that in the previous quarter. On balance, companies' assessments show that they are still expecting turnover to increase in real terms, as can be seen in chart 8. However, there are major differences between the third-quarter assessments of the two sub-groups: while the adversely affected companies were on balance expecting only a slight increase in sales, the figure for all other companies remained as high as in the previous quarter. In terms of employment trends, the negatively affected companies – unlike those not experiencing any adverse impact – were actually expecting cuts in headcount. In both sub-groups, planned investment appears to be standing still. Overall, therefore, companies' assessments of these issues show a significant deterioration compared to the previous quarter's survey.

Chart 8
Expectations: turnover, employment and investment



1 Weighted positive estimates of companies minus weighted negative estimates regarding the future development of real turnover, employment and investment. The time horizon is 6 months (for real turnover and employment) or 12 months (for investment).
Source: SNB

SNB Policy Paper: Swiss franc bond market – smooth sailing through the financial crisis

Gero Jung, Investment Strategy and Financial Market Analysis
Swiss National Bank, Zurich

Developments in bond markets are of considerable interest to central banks. The reasons why central banks monitor bond markets in domestic currency are manifold. First, certain central banks, such as the Swiss National Bank (SNB), conduct monetary policy by steering the level of the interest rate in the money market.¹ The interest rate in question, the three-month Libor, is a reference rate in the interbank market and acts as a benchmark rate for the broader capital market. It is equally important for both the bond and swap markets. Developments in the bond market are thus important in the transmission mechanism for monetary policy, and provide valuable information for economic and monetary policy analysis. A second reason is that, in Switzerland, as in many other countries, the central bank acts as the government's banker.² As such, it processes payments on behalf of the Confederation, issues money market debt register claims and bonds, handles the safekeeping of securities and carries out money market and foreign exchange transactions. Third, as it holds a significant amount of Swiss franc bonds, the SNB has a direct interest in movements in the Swiss franc bond market. Fourth, bonds denominated in Swiss francs are important for the SNB's eligible collateral for repo transactions. Finally, domestic bond markets can play an important role in measures taken to deal with financial crises. As part of the extraordinary measures taken during the recent cri-

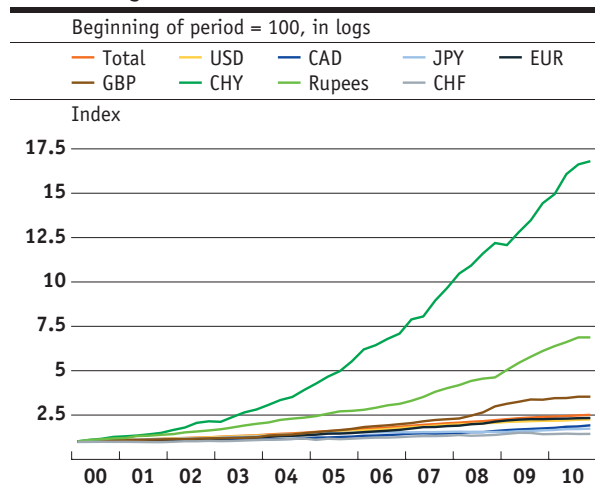
sis, the SNB purchased Swiss franc bonds issued by private sector borrowers, with the goal of preventing a credit crunch in Switzerland. Thus, overall, the domestic bond market constitutes a vital component of the Swiss financial system. More generally, it is a key element of the Swiss economy, as in all industrialised countries.

In its examination of the Swiss franc bond market, this report is structured in two parts. The first provides an overview of the main characteristics of the Swiss franc bond market, while the second reviews market developments, particularly those which occurred before and after the financial crisis. The findings show that this market did not experience a bond market closure in the late 2000s, and foreigners did not alter their demand by significantly increasing their issuance activity in Swiss francs. Similarly, central banks around the world have not appreciably changed their holdings of Swiss franc assets.

1 Characteristics of the Swiss franc bond market

The Swiss franc bond market has three main features. First, in an international context, the growth of the Swiss franc bond market is relatively slow. A second feature is that the private, non-public debt market overwhelmingly dominates the pub-

Chart 1
Outstanding bonds in local currencies

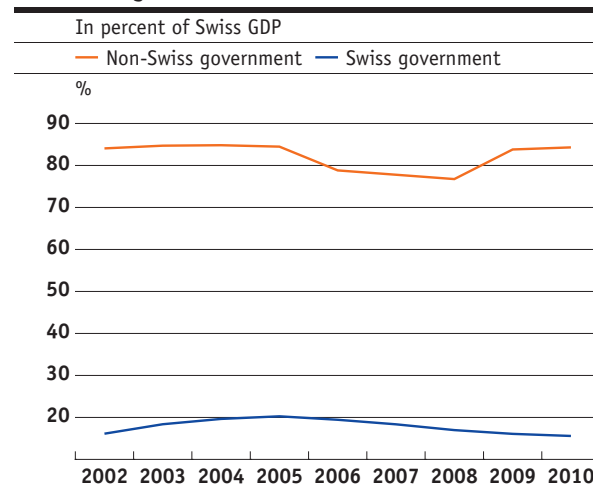


Source: Bank for International Settlements (BIS)

1 Owing to the massive overvaluation of the Swiss franc, on 6 September 2011 the SNB set a minimum exchange rate of CHF 1.20 per euro.

2 According to art. 5 para. 4 and art. 11 of the National Bank Act (NBA), the SNB is required to provide banking services to the Swiss Confederation.

Chart 2
Outstanding CHF bonds



Sources: SIX Swiss Exchange Ltd, SNB

lic debt market. This stands out when comparing the Swiss market with those of other industrialised nations. Third, the specific structure of the Swiss franc bond market shows that the market for foreign issuers is larger than that for domestic, Swiss-based borrowers.

a) Slow growth compared to international bond markets

The growth of the Swiss franc bond market has been comparatively sluggish, one of the slowest internationally, attaining only subdued levels over the past decade.³ With the worldwide volume of bonds outstanding continuously experiencing robust growth, bond market growth is particularly strong in certain emerging economies, such as China or India. In contrast, the Swiss franc bond market has experienced one of the slowest growth rates internationally (cf. chart 1).⁴

b) Dominance of private debt capital market

Total market capitalisation of the Swiss franc bond market reached a level of more than CHF 570 billion by end-2010. This currently constitutes about 115% of Swiss GDP, corresponding to the average size of an advanced economy's bond market.⁵ In contrast to other advanced countries, however, the Swiss private debt market is significantly larger than its public counterpart. Over the past

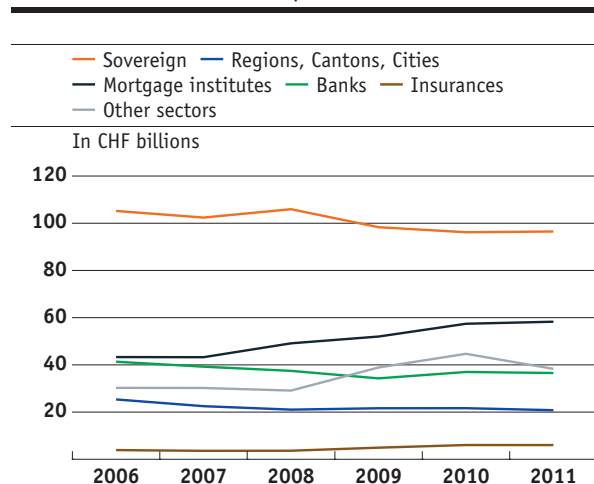
five years, the volume of outstanding Swiss government bonds has been steadily decreasing relative to the size of the economy. This reflects the sound fiscal policy pursued by Swiss federal and local government authorities over an extended period of time.

c) Specific structure of Swiss franc bond market: market for foreign issuers is larger

Foreign issuers hold a larger share of the Swiss franc bond market than domestic ones. While, to a large extent, most countries' bond markets consist of domestic debt securities, on the Swiss franc market, the situation is different.⁶ Here, a greater share of bonds is issued by foreign – as opposed to domestic – issuers.⁷ In terms of overall volume, the market capitalisation of foreign issuers is also larger than that of domestic issuers, and this has been the case for several years.⁸ For domestic borrowers, the market capitalisation of public issuers (Confederation, cantons and cities) has steadily declined.

In Switzerland, *Pfandbriefe*, which are similar to covered bonds in other countries, represent a key segment of the Swiss franc domestic bond market, serving as a cost-efficient instrument with which banks can raise long-term funding. *Pfandbriefe* are standardised fixed-rate debt securities, and collateralised by domestic mortgages. Currently, they represent around one fifth of outstanding debt securities in Switzerland.⁹

Chart 3
Domestic issuer market capitalisation

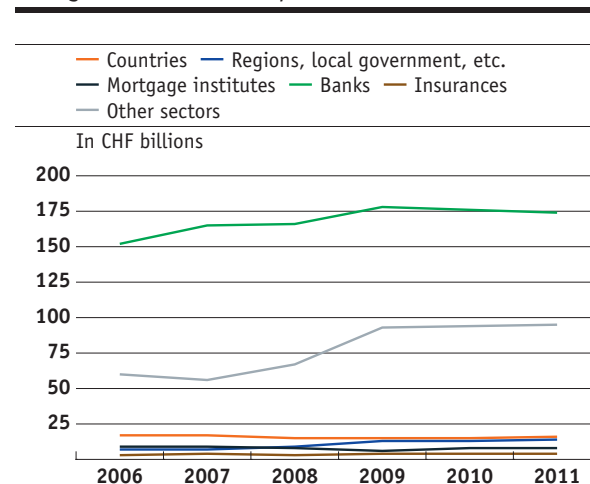


Source: SIX Swiss Exchange Ltd

3 Note that, from a historical point of view, there is no Eurobond market in Swiss francs of a significant size. One main reason for this, as suggested by Christensen (1986), is that the SNB discouraged the emergence of a Eurobond market in Swiss francs. Cf. B. V. Christensen (1986), *Switzerland's Role as an International Financial Center*, IMF Occasional Paper No. 45 (International Monetary Fund, Washington, DC, 1986), p. 40.

4 Chart 1 shows the nominal growth of outstanding bonds in local currencies. The real growth of these markets shows a similar picture.

Chart 4
Foreign issuer market capitalisation



Source: SIX Swiss Exchange Ltd

5 For an international comparison, cf. G. DeBelle, The Australian bond market in 2011 and beyond, the Kanga News Australian DCM Summit, Sydney, 15 March 2011.

6 In many advanced as well as emerging economies, the size of the domestic bond market far outweighs that of the foreign market. An exception to this is the sterling market, where, much like the Swiss franc market, the foreign market dominates.

7 More precisely, the share of the Swiss franc in the international bond market currently stands at above 1%, while the share in domestic bonds reaches a meagre share of only 0.4% in global outstanding debt obligations.

As for the foreign sector, after an increase in 2008/2009, market capitalisation of foreign banking entities has remained steady. The market capitalisation of other sectors, including non-financial corporations, increased markedly at the height of the financial and economic crisis in 2008 and 2009.

This section has reviewed some of the main characteristics of the Swiss franc bond market. They include slow growth compared to international bond markets, the domination of the public debt market by the private debt market and the larger share of foreign issuers than domestic ones. Furthermore, the majority of Swiss franc bonds are traded on the SIX Swiss Exchange, while in other countries, most trades are conducted as over-the-counter deals. The Swiss franc bond market is also characterised by the above-average underlying credit quality of its issuers.

2 The Swiss franc bond market and the financial crisis

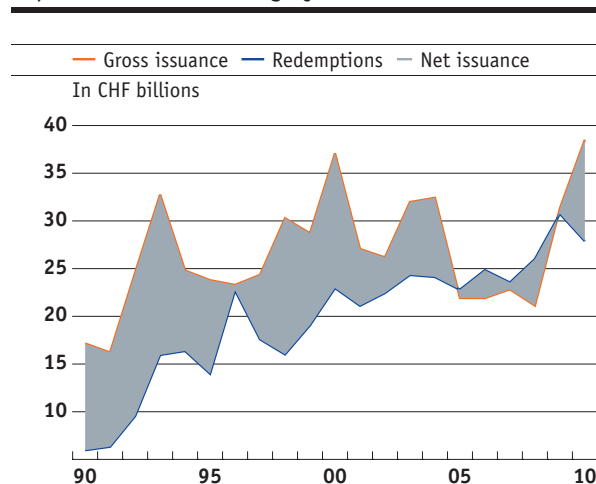
The recent financial crisis has not led to major changes in the Swiss franc primary capital market. In 2010, no major changes were recorded in overall Swiss franc bond issues compared to previous years. However, some striking differences can be observed when capital market borrowing by domestic issuers of Swiss franc bonds is compared to that of foreign

issuers. On the one hand, issuance by domestic borrowers did not collapse during the recent financial crisis, indicating that no bond market closure occurred in Switzerland (cf. section a). On the other hand, there were no portfolio shifts by foreign issuers into this market either, as illustrated by the negative level of net issuances by foreigners in 2010. Thus, foreign financial flows into this market – possibly inducing higher foreign demand for the Swiss franc – did not occur (cf. section b below). Finally, there was no increased demand for Swiss franc bonds by international reserve managers.

a) No bond market closure in Switzerland

Capital market borrowing by domestic issuers in Switzerland was buoyant in 2010. Banking sector issuances increased markedly, causing issuance volumes to more than triple. This occurred after levels had been depressed subsequent to the outbreak of the global financial crisis in 2007. By contrast, industrial firms decreased their issuing activity in 2010. However, this followed a very active year in 2009. Despite the worst economic downturn in decades, industrial firms' issuances were buoyant in 2009, showing that companies were in a position to tap the Swiss domestic bond market on a continuous basis. More generally, however, capital market tapping by domestic industrial firms represents a limited proportion of this market, overall, reflecting the fact that the country's corporate sector

Chart 5
Capital market borrowing by domestic issuers¹⁰



Source: SNB

8 Swiss domestic market capitalisation attained a level of more than CHF 260 billion by end-2010, while foreign issuers' market capitalisation totalled CHF 310 billion.

9 In Switzerland, two institutions are authorised to issue *Pfandbriefe*. Overall, the Swiss *Pfandbrief* market is characterised by comparatively strict legislation.

10 SNB Bills are not included in chart 5.

does not rely heavily on bond financing (cf. table 1). Much higher levels of primary market issuances via covered bonds (the Swiss *Pfandbriefe*) are noticeable since 2007. These represent a relatively inexpensive way of refinancing for the banking sector, whose comparatively high levels of activity in this period correspond to the increasing total mortgage amounts in Switzerland. The Confederation has continued to maintain negative net overall issuance in recent years, thus further reducing the levels of outstanding debt in Switzerland. This is in line with a further decline in the debt ratio for the entire state sector and the lowering of Swiss public debt levels. Overall, issuances by domestic borrowers reached CHF 38 billion in 2010, roughly 50% above the levels during the crisis period of 2007–2009 and about one-third above pre-crisis averages. Note that there is a negative relationship, in empirical terms, between the issuance volumes of domestic borrowers and economic activity in Switzerland. This indicates that, during recent economic downturns, Swiss domestic borrowers have increasingly been tapping the capital market for their financing needs, thereby taking advantage of a favourable interest rate environment.

The Confederation's low rate of issuance activity, which has reached negative net issuance levels in recent years, is due to the healthy state of Swiss public finances. In particular, the fiscal rule at the federal level (the 'debt brake'), which was first applied in the budget of 2003, has helped to modify the budget process in a way that is compatible with the principles of debt stabilisation.¹²

While Switzerland experienced a steep rise in its debt ratio during the 1990s, this expansion of federal debt was halted in the early 2000s and its debt ratios were significantly reduced thereafter. The Swiss Confederation's healthy finances helped ensure that levels of net issuance activity remained close to zero, or negative, which has been the case since the mid-2000s in Switzerland. As a result, the Swiss public debt-to-GDP ratio has been declining and stands at comparably low levels.

Since 2008, SNB Bills, which are interest-bearing debt certificates with maturities of up to one year, have been used to absorb liquidity, as part of the SNB's open market operations (cf. chart 7).¹³ The issuance of the SNB's debt obligations since October 2008 has not led to a crowding out of other debt instruments by the Swiss government, as

Issuance activity by domestic issuers of CHF bonds¹¹
In CHF millions

Table 1

	Averages p.a.		
	2000–2006	2007–2009	2010
Confederation			
Gross issuance	11 518	3 471	4 682
Net issuance	7 532	–3 330	–4 221
Mortgage bond institutions			
Gross issuance	5 076	8 075	11 449
Net issuance	818	2 096	5 417
Industry			
Gross issuance	1 028	3 128	1 831
Net issuance	28	1 398	1 072
Banks			
Gross issuance	4 737	3 993	9 392
Net issuance	–1 708	–2 638	2 929
Others			
Gross issuance	7 137	6 429	11 156
Net issuance	–1 659	809	5 436

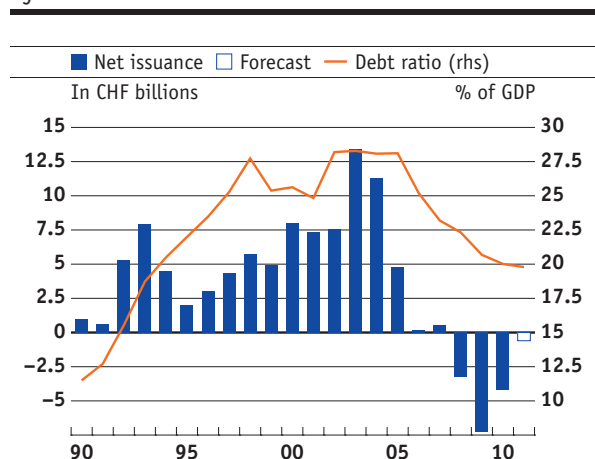
Source: SNB

11 SNB Bills are not included in table 1.

12 The debt brake rule requires budgetary surpluses while the economy is booming, largely removing the need for substantial adjustments during a consecutive downturn and mitigating the problem of pro-cyclical policy. The rule is also sufficiently flexible to handle exceptional situations. It has modified incentives within the budget process towards a better implementation of deficit and debt objectives.

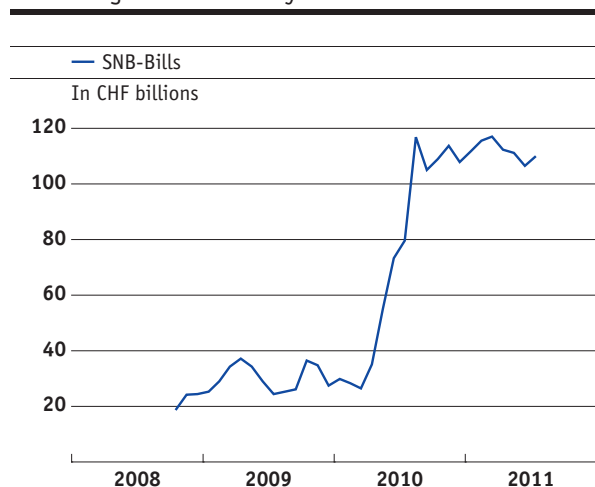
13 SNB Bills may be issued publicly by auction or through private placement. They are included in the list of collateral eligible for SNB repos and may thus be used in SNB repo transactions. The first SNB Bills auction was held in October 2008.

Chart 6
Net issuance activity and debt ratio
by the Confederation



Source: The Federal Finance Administration (FFA), SNB

Chart 7
Debt obligations issued by the SNB



Source: SNB

Capital market borrowing by foreign issuers of CHF bonds
In CHF millions

Table 2

	Averages p.a.		2010
	2000-2006	2007-2009	
European Union			
Gross issuance	28 898	39 624	35 028
Net issuance	10 022	15 981	3 718
US, Canada			
Gross issuance	7 137	10 396	2 743
Net issuance	1 754	2 913	-5 161
Others			
Gross issuance	9 888	10 869	8 405
Net issuance	1 137	1 860	1 406

Source: SNB

14 For a more detailed analysis of Swiss Treasury auctions for Confederation bonds, cf. "Swiss government bonds: Thirty years' experience with uniform-price auctions", by A. Ranaldo and E. Rossi, mimeo.

there has been no significant decrease in demand for Confederation-issued debt obligations or for the Confederation's money market debt registers claims.¹⁴ Starting in August 2011, the SNB – as a measure to expand significantly the supply of liquidity to the Swiss franc money market – repurchased outstanding SNB Bills.

b) No portfolio shifts by foreigners into the Swiss franc bond market

Patterns of capital market borrowing by foreign issuers paint a different picture when compared to domestic borrowers. While, in 2009, international issuances reached record highs, 2010 saw a significant drop in foreign borrowing, with a marked decrease in both gross and net issuances. For international issuers, the Swiss franc bond market is an integral component of their global funding strategy. In part, foreign issuers are attracted to the market because it offers a low interest rate environment. In addition, the Swiss franc bond market provides the opportunity to diversify and strengthen their investor base by opening up a market in a country well known for its political and economic stability. This notwithstanding, many foreign issuers have no direct currency exposure to the Swiss franc and swap their Swiss francs into their domestic currencies. In 2010, foreigners were generally less active on this market because of a sharp decrease in net issuances of borrowers from

the European Union and North America. One possible explanation for this is the relatively high hedging costs of Swiss franc exposure. Overall, total issuance volumes by foreign borrowers amounted to CHF 46 billion in 2010, roughly 20% less than during the crisis period of 2007–2009, corresponding to pre-crisis levels.

c) No increased demand for Swiss franc assets by international reserve managers

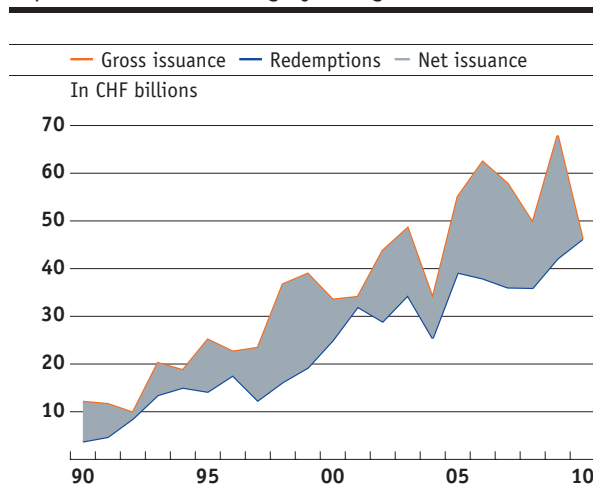
The previous two sections outlined the behaviour of borrowers in the Swiss franc bond market. In this section, the focus is on the demand for Swiss franc assets by international reserve managers. In this examination, the available data has shown that the share of Swiss franc bonds in international reserves has not increased. Most of international reserve managers continue to hold only limited reserve assets in Swiss currency. While the Swiss franc is among the ten most traded currencies in the world,¹⁵ official foreign exchange holdings in Swiss francs continue to be fairly negligible. The currency composition of global reserves shows that claims in Swiss francs represent a mere 0.10% of global reserves, which currently corresponds to a nominal value of around CHF 9 billion. Total reserve holdings continue to be largely dominated by US dollars, whereas the euro has been able to expand its relative position in recent years. Globally, official foreign exchange reserves continue to

grow at a significant rate, surpassing the USD 9 trillion level at the end of 2010. This is a continuation of a recent trend towards the accumulation of foreign exchange reserves by emerging and developing economies, levels of which surpassed the USD 6 trillion mark by end-2010. As a result, the reserves held by these economies collectively amount to twice the level of those held by their counterparts in the advanced economies.

Conclusion

The Swiss franc bond market fared well during the financial crisis. Between 2008 and 2009, this market, which is average in size when compared to those of other industrialised economies, experienced neither a temporary closure, nor a dearth of capital market borrowing by foreign issuers. Foreign central banks also do not seem to have altered their investment strategy with respect to Swiss franc assets, keeping a continued low share of reserves in Swiss francs. In conclusion, taking a general view of recent developments in the bond market, it is clear that the Swiss franc bond market has maintained its reputation of stability, enabling it to sail through the recent crisis with comparative ease.

Chart 8
Capital market borrowing by foreign issuers

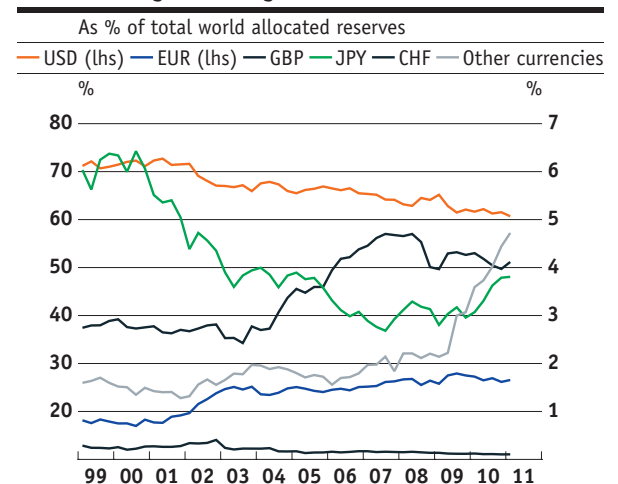


Source: SNB

15 Cf. Bank for International Settlements (BIS), *Triennial Central Bank Survey Foreign exchange and derivatives market activity*, April 2010.

16 Source: IMF Statistics Department COFER database and International Financial Statistics. COFER is an IMF database that keeps end-of-period quarterly data on the currency composition of official foreign exchange reserves. The currencies identified in COFER include the US dollar, euro, pound sterling, Japanese yen, Swiss

Chart 9
Official foreign exchange reserves¹⁶



Sources: International Monetary Fund (IMF), SNB

franc and other currencies. Foreign exchange reserves in COFER consist of the monetary authorities' claims on non-residents in the form of foreign banknotes, bank deposits, treasury bills, short and long-term government securities and other claims usable in the event of balance of payments needs. COFER data are reported on a voluntary basis. At present, there are 139 reporters, consisting of member countries of the IMF, non-member countries/economies and other foreign exchange reserves holding entities.

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.

September 2011

The SNB decides, in coordination with the Bank of England, the Bank of Japan, the European Central Bank and the Federal Reserve, to offer US dollar liquidity with a term of 84 days to cover the end of the year. These tenders will be conducted in addition to the 7-day operations. The first 84-day US-dollar liquidity operation will be carried out on 12 October 2011.

At its quarterly assessment of 15 September, the SNB affirms that it will enforce the minimum exchange rate of CHF 1.20 per euro set on 6 September with the utmost determination. It is prepared to buy foreign currency in unlimited quantities. It continues to aim for a three-month Libor at zero and will maintain total sight deposits at the SNB at significantly above CHF 200 billion.

On 6 September, the SNB announces that it will no longer tolerate a EUR/CHF exchange rate below the minimum rate of CHF 1.20. It will enforce this minimum rate with the utmost determination and is prepared to buy foreign currency in unlimited quantities. In addition, the SNB emphasises that, even at a rate of CHF 1.20 per euro, the Swiss franc is still high and should continue to weaken over time. If the economic outlook and deflation risks make this necessary, the SNB will take further measures.

August 2011

On 17 August, the SNB announces that it will again significantly increase the supply of liquidity to the Swiss franc money market. With immediate effect, it aims to expand banks' sight deposits at the SNB further, from CHF 120 billion to CHF 200 billion. In addition, the SNB will repurchase outstanding SNB Bills and employ foreign exchange swaps.

On 10 August, the SNB announces that it will again significantly increase the supply of liquidity to the Swiss franc money market. It aims to rapidly expand banks' sight deposits at the SNB from CHF 80 billion to CHF 120 billion. To accelerate the increase in Swiss franc liquidity, the SNB will additionally conduct foreign exchange swap transactions.

On 3 August, the SNB announces that, effective immediately, it is aiming for a three-month Libor as close to zero as possible and is narrowing the target range for the three-month Libor from 0.0–0.75% to 0.0–0.25%. Furthermore, it intends to expand banks' sight deposits at the SNB from currently around CHF 30 billion to CHF 80 billion. With immediate effect, the SNB will no longer renew repos and SNB Bills that fall due and will repurchase outstanding SNB Bills. In addition, the SNB points out that the Swiss franc is massively overvalued and is therefore threatening the development of the economy and increasing the downside risks to price stability.

June 2011

At its quarterly assessment of 16 June, the SNB decides to maintain its expansionary monetary policy. The target range for the three-month Libor remains unchanged at 0.0–0.75%, and the SNB intends to keep the Libor within the lower part of the target range at around 0.25%. For 2011, the SNB is maintaining its forecast of real GDP growth of around 2%. The conditional inflation forecast shows that the expansionary monetary policy cannot be maintained over the entire forecast horizon without compromising price stability in the long term.

Published by

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

Copyright ©

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

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

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

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

Limitation of liability

The SNB accepts no responsibility for any information it provides. Under no circumstances will it accept any liability for losses

or damage which may result from the use of such information. This limitation of liability applies, in particular, to the topicality, accuracy, validity and availability of the information.

© Swiss National Bank, Zurich/Berne 2011

Design

Weiersmüller Bosshard Grüniger WBG, Zurich

Typeset and printed by

Neidhart + Schön AG, Zurich

Language versions

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

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

English:

www.snb.ch, *Publications, Quarterly Bulletin* (ISSN 1662-257X)

German:

www.snb.ch, *Publikationen, Quartalsheft* (ISSN 1662-2588)

French:

www.snb.ch, *Publications, Bulletin trimestriel* (ISSN 1662-2596)

Website

www.snb.ch