Swiss National Bank
Quarterly Bulletin

June 2/2010 Volume 28

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Sectional breakdown of bulletin Q2/2010

Monetary policy report (p. 6)

After the powerful recovery in the second half of 2009, the Swiss economy grew at a slower rate in the first quarter of 2010, albeit, once again, more strongly than the euro area. This slowdown in the growth rate is largely due to a sharp decline in added value in the banking sector. By contrast, the manufacturing sector continued to recover. On the demand side, robust growth in both exports and consumer spending continued. The situation in the labour market has improved against the backdrop of economic recovery. Like the output gap, however, the unemployment rate points to continued capacity under-utilisation in the economy. Accordingly, inflationary pressure has remained low.

The recovery is likely to continue in the second quarter of 2010, since all the leading indicators still point to growth in economic activity. The inflation outlook remains favourable, although the forecast based on an unchanged three-month Libor suggests that the current expansionary monetary policy cannot be maintained throughout the entire forecast horizon without compromising medium and long-term price stability.

At its quarterly monetary policy assessment on 17 June, the SNB decided to leave the target range for the three-month Libor unchanged at 0.00–0.75% and to adhere to its objective of holding the Libor within the lower part of the target range, at around 0.25%. It also stated that in the event of a renewed threat of deflation, it would take all the measures necessary to ensure price stability.

The economic situation from the vantage point of the delegates for regional economic relations (p. 44)

The talks conducted by the SNB delegates for regional economic relations in April and May with some 230 representatives of all parts of the economy showed that the favourable economic trend had continued in the second quarter. The recovery was most evident in manufacturing. However, broad-based growth was also apparent in the construction industry and the services sector.

Respondents are confident about the months ahead because of the upturn in demand. Positive growth in turnover is expected in both the manufacturing and the services sector. The under-utilisation of production capacity is therefore likely to decrease further.

SNB Working Papers (p. 60)

Summaries of eight *SNB Working Papers*: Charlotte Christiansen, Angelo Ranaldo and Paul Söderlind, 'The time-varying systematic risk of carry trade strategies', *SNB Working Paper* 2010-1; Daniel Kaufmann, 'The timing of price changes and the role of heterogeneity', *SNB Working Paper* 2010-2; Loriano Mancini, Angelo Ranaldo and Jan Wrampelmeyer, 'Liquidity in the foreign exchange market: measurement, commonality, and risk premiums', *SNB Working Paper* 2010-3; Samuel Reynard and Andreas Schabert, 'Modeling monetary policy', *SNB Working Paper* 2010-4; Pierre Monnin and Terhi Jokipii, 'The impact of banking sector stability on the real economy', *SNB Working Paper* 2010-5; Sébastien Kraenzlin and Thomas Nellen, 'Daytime is money', *SNB Working Paper* 2010-6; Philip Sauré, 'Overreporting oil reserves', *SNB Working Paper* 2010-7; Elizabeth Steiner, 'Estimating a stock-flow model for the Swiss housing market', *SNB Working Paper* 2010-8.

Monetary policy report

Report for the attention of the Governing Board of the Swiss National Bank for its quarterly assessment of June 2010

This report is based primarily on the data and information available as at 17 June 2010.

Monetary policy report
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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 1–3 of the present report were drawn up for the Governing Board's assessment of June 2010. The sections entitled 'Monetary policy decision' and 'SNB inflation forecast' (section 4) take due account of the Governing Board's monetary policy decision of 17 June 2010.

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

Monetary policy decision

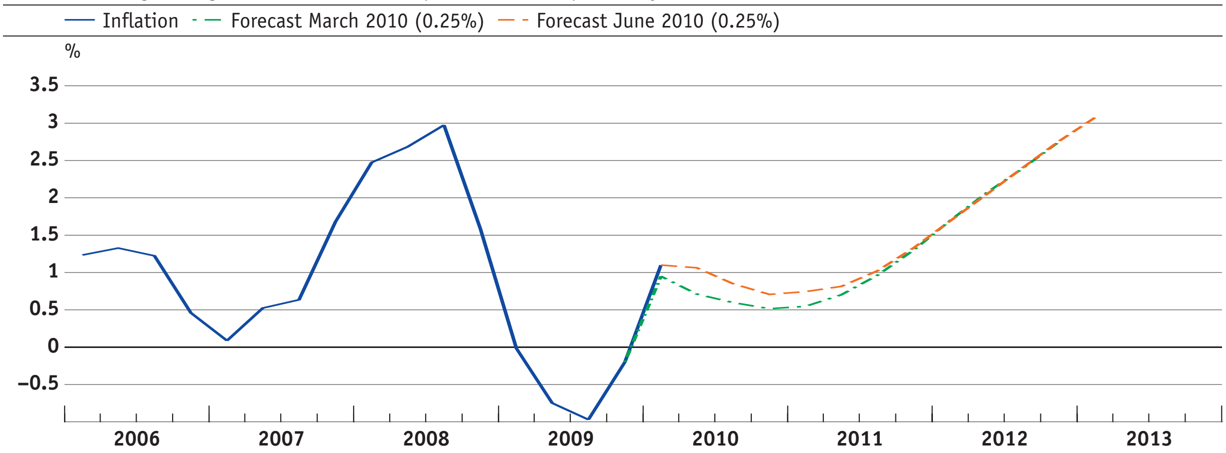
At its monetary policy assessment of 17 June 2010, the Swiss National Bank (SNB) decided to maintain its expansionary monetary policy. Consequently, it left the target range for the three-month Libor unchanged at 0.00–0.75% and announced that it intended to hold the Libor in the lower part of the target range, at around 0.25%.

In the light of the continuing global economic recovery, the SNB is now expecting real GDP growth of about 2% in Switzerland for 2010. As a result of the positive developments, the risk of deflation in Switzerland has largely disappeared. At the same time, uncertainty has increased, however. The latest tensions on the financial markets, particularly with regard to the public finances of some individual countries, have increased the downside risks. Should these downside risks materialise and, via an appreciation of the Swiss franc, lead to a renewed threat of deflation, the SNB would take all the measures necessary to ensure price stability.

The inflation outlook remains unchanged. However, the three-year inflation forecast based on an unchanged three-month Libor suggests that the current expansionary monetary policy cannot be maintained over the entire forecast horizon without compromising medium and long-term price stability.

Conditional inflation forecast of March 2010 with Libor at 0.25% and of June 2010 with Libor at 0.25%

Percentage change in national consumer price index from previous year



Source: SNB

Inflation forecast of March 2010 and June 2010
Average annual inflation in percent

	2010	2011	2012
Inflation forecast of March 2010, Libor 0.25%	0.7	0.9	2.2
Inflation forecast of June 2010, Libor 0.25%	0.9	1.0	2.2

Source: SNB

1 Developments in the global economy

The global economy has been recovering from the recession for about one year now, under the influence of expansionary monetary and fiscal policy. Overall, the developments have been a positive surprise. However, there have been regional differences in the recovery. In the emerging markets of Asia, growth continued to be very strong in the first quarter of 2010. Consumer spending firmed in the US, but further catching up is still needed. In Europe the recovery has remained modest and dependent on foreign demand.

Signs of a strengthening of final consumer demand in the major industrialised nations have been encouraging. Nevertheless, the recovery in production in these countries is likely to continue to be slow in the second half of the year too. First, unemployment and the hard-pressed financial situation of private households are likely to keep any growth in consumer spending in check. Second, private investment activity continues to be impacted by restrictive lending conditions. Third, the current inventory cycle will come to an end, and finally, the effects of economic stimulus measures are subsiding.

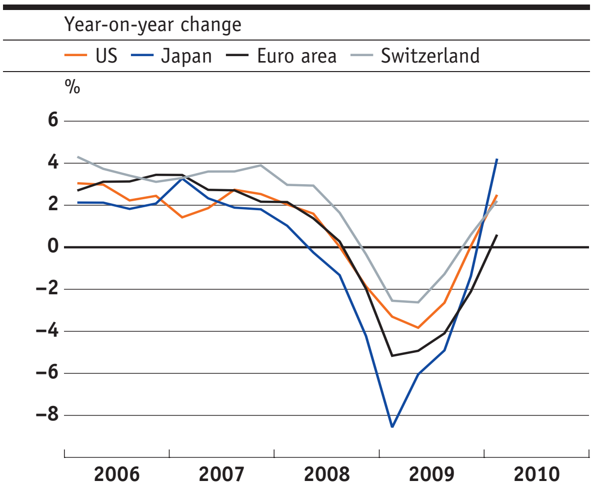
As developments overall have exceeded expectations, the SNB has adjusted its global growth forecasts for 2010 slightly upwards since the March assessment. However, the level of uncertainty associated with the forecast remains high. On the one hand, the intrinsic momentum of consumer demand could prove considerably stronger. On the other hand, the debt crisis currently gripping Europe poses serious downside risks.

Strengthening of demand in the US

The recovery in the US economy has become more broad-based in recent months. GDP grew by 3.0% in the first quarter of the year, while remaining below the level achieved before the beginning of the recession. After undergoing a significant correction, inventories began to be restocked, which explains around a half of the GDP growth posted in the first quarter. Consumer spending on the part of private households also made a significant contribution to growth. Equipment investment revealed a double-digit growth rate for the second quarter in a row, whereas declining investment in commercial and residential construction weighed on GDP growth. Where foreign trade is concerned, imports rose more strongly than exports, causing the trade deficit to expand once again after shrinking during the crisis. The labour market situation has improved somewhat, with private sector employment rising in May for the fifth time in succession. Due to a rise in the participation rate, however, the unemployment rate remained virtually unchanged at 9.7%.

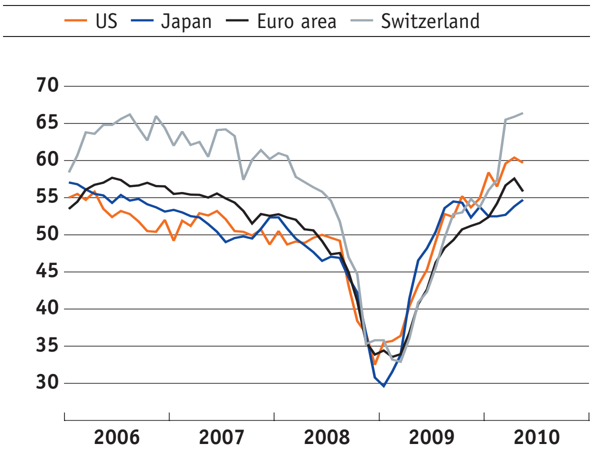
The economic outlook for the US remains favourable. According to business surveys and new order figures, demand in the manufacturing and services sectors has gained further momentum. Consequently, corporate confidence in the recovery

Chart 1.1
Real GDP



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

Chart 1.2
Purchasing managers' indices (manufacturing)



Source: Thomson Financial Datastream; copyright and database rights: Markit Economics Ltd 2009; all rights reserved has also risen and is likely to feed through into a greater willingness to invest. Moreover, the recovery in global demand is likely to support exports. However, it is likely that there will be some weakening in economic growth in the second half of the year, given the declining stimuli from the inventory cycle and the fiscal package. In addition, the labour market situation remains difficult. Against this backdrop, there is likely to be a slowing in consumer spending growth, as this has so far been boosted by fiscal income support. The extension of tax credits for homebuyers will temporarily support investment in residential construction, but there is still too great a supply overhang for any sustainable recovery to set in.

The SNB now expects US GDP to grow by 3.2% in 2010, compared with its forecast of 2.9% in March. This represents only a modest upswing, however, given the sharp contraction experienced during the recession.

Weak growth in the euro area

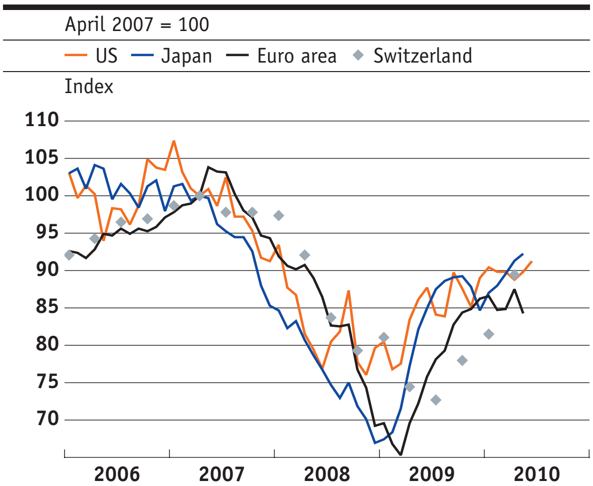
The economic recovery in the euro area continued at the beginning of the year but remains unevenly distributed. GDP rose by 0.8% in the first quarter of 2010, having virtually stagnated in the fourth quarter of 2009. Exports continued to recover, and activity in manufacturing also picked up. Final domestic demand remained weak, however. Consumer spending stagnated, and investment activity slowed further on the back of lower capacity utilisation in industry. A cold snap in the northerly countries of the euro area proved a further drag on construction activity.

Company surveys on production and employment suggest a further recovery of the economy in the second quarter of the year. Exports are benefiting from the significant fall in the value of the euro. In addition, a recovery effect is likely to manifest itself in construction. The economy nonetheless remains fragile. Restrictive lending conditions are weighing on growth. According to an investment survey by the European Commission, the manufacturing industry is planning to further reduce its level of investment this year. Furthermore, the stimuli from fiscal programmes are gradually wearing off.

In May, financial market fears about the sustainability of a number of European countries' fiscal policies increased. After Greece was spared a potential default thanks to a bailout, the EU arranged a rescue package of up to EUR 750 billion with the assistance of the IMF to prevent the debt crisis from spreading to other member states through contagion. In the short term at least, this has succeeded in restoring calm to the financial markets and prevented a further rise in government refinancing costs.

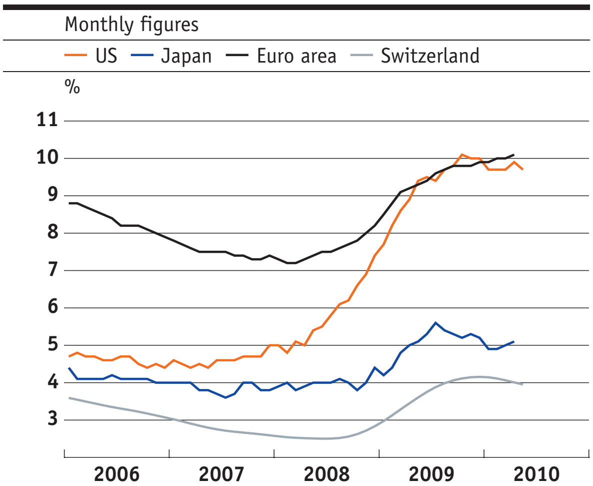
Overall, the SNB views the economic prospects for the euro area as rather more promising than in March. It is now expecting GDP growth of 1.2% for 2010 compared to 1.0% three months ago.

Chart 1.3
Consumer confidence index



Sources: SECO, Thomson Financial Datastream

Chart 1.4
Unemployment rates



Sources: SECO, Thomson Financial Datastream

Further recovery in Japan

Economic activity has firmed in Japan too, driven in particular by monetary and fiscal measures as well as by stimuli from abroad. GDP has risen by some 4% year-on-year since the start of the recovery a year ago. This means that just under half the GDP loss suffered during the recession has now been made good again.

In the first quarter GDP grew by 5.0%. The upswing in exports continued and contributed to the strong growth of industrial production. Equipment investment, which was badly hit by the crisis, expanded further after returning to positive growth in the previous quarter.

Surveys reveal that the global upturn has triggered a tangible improvement in confidence among Japanese companies. The powerful growth momentum of Asia's emerging economies suggests a further recovery on the part of Japanese exports. The low level of equipment investment and the prospects of continuing robust corporate earnings are likely to spark the next stage of the investment cycle. However, it is also possible that the latest financial market turbulence will motivate companies to return to a wait-and-see approach. The recovery in domestic demand remains fragile and is dependent on both foreign demand and economic support measures.

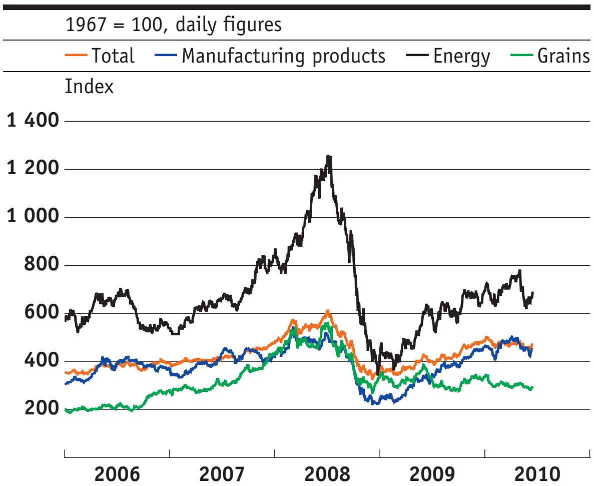
The SNB has revised its expectations for the Japanese economy significantly upwards, due in part to revised data. It now expects growth of 3.1%, compared to 1.9% in March.

Recovery of Asia's emerging markets at an advanced stage

The emerging economies of Asia have continued their powerful expansion over the last few months. Under the influence of massive economy-boosting measures, China's economic performance in the first quarter of 2010 rose by 11.9% year-on-year. The driving force here was again domestic demand, but growth was also given a boost by the strong recovery in exports. Rising employment levels and an increase in government transfer payments supported household incomes and private consumer spending. By contrast, after enjoying a rise of more than 40% over the course of the last year, public sector investment demand weakened. The transfer of growth from investment demand to consumer demand therefore continued. Nonetheless, investment as a proportion of GDP remains exceptionally high by international standards.

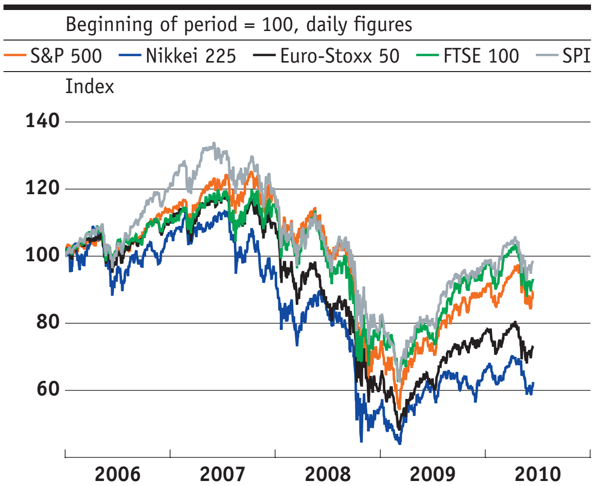
The outlook for China remains very favourable, particularly as the government economic package will continue to provide significant stimuli for the domestic economy. The economic policy of the Chinese government is aimed at preserving stable and strong growth. The continuing vitality of the domestic and industrial economy is generating strong demand for commodities, particularly energy sources and industrial metals. Imports have risen to a new peak, while exports have continued their recovery against a backdrop of favourable competitive parameters. The composition of GDP growth will alter significantly compared to the previous year,

Chart 1.5
Commodity indices



Sources: Reuters, Thomson Financial Datastream

Chart 1.6
Share prices



Sources: Bloomberg, Thomson Financial Datastream however. Greater growth contributions from private consumption and investment in residential construction are likely to offset a lower contribution from state investment. The government's attention is currently focused above all on the property market, where rapidly increasing prices are giving rise to fears of an asset bubble, particularly in large cities. The economic repercussions of a price correction in the Chinese property market would be serious, given the high proportion accounted for by real estate holdings in the portfolios of many companies. The government has therefore taken an increasingly number of specific sectoral measures designed to limit the risk of a price bubble.

In the export-oriented economies of South Korea, Taiwan, Hong Kong and Singapore, activity expanded strongly across many sectors of the economy in the first quarter. In all four economies, GDP surged beyond pre-crisis levels and is now likely to have reached a level that matches production potential. The dramatic growth of these economies is in stark contrast to the relatively slow recovery in the major industrialised countries. The drivers of this success include the rapid implementation of an expansionary monetary and fiscal policy, strong demand from China, the upturn in the global technology sector, and comparatively healthy fundamentals. The indicators for developments going forward are encouraging. The upward trend in industrial production and exports shows no sign of ending, and corporate confidence remains healthy.

Inflation subdued

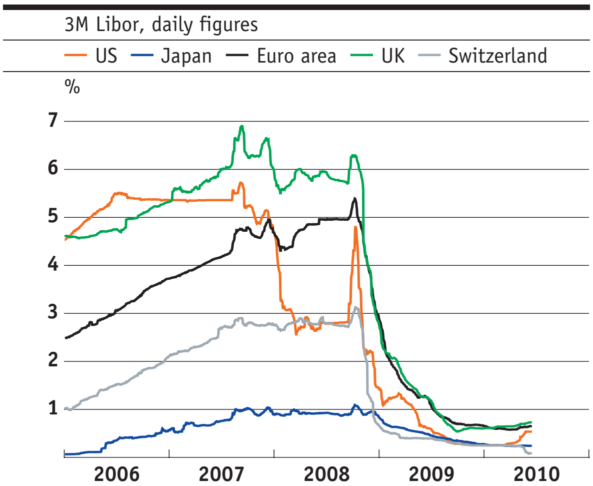
Inflation has remained low around the globe in recent months (cf. chart 1.9). Core inflation, which excludes energy and food prices, even showed signs of declining. Low capacity utilisation and high unemployment should keep inflationary pressures in industrialised countries at a low level in the second half of the year too.

In the US, annual inflation decreased from 2.6% in January to 2.2% in April. Core inflation continued its downward trend and came in at 0.9% in April. The annual rate of inflation in the euro area rose from 1.0% to 1.5% over the same period. Core inflation remained virtually unchanged at 0.8%. Unlike the situation in the US and the euro area, annual inflation in Japan has remained negative. In April it was –1.2% as compared to –1.3% in January. Core inflation declined further to a historical low (–1.6%). By contrast, base effects and rising energy prices led to a rise in rates of inflation in the emerging economies of Asia. In China, the annual rate of inflation rose to 2.8% due to weather-related food price increases, but the core rate of inflation remained modest at 0.7%.

No change in expansionary monetary policy in large industrial countries; exceptional measures taken by the ECB

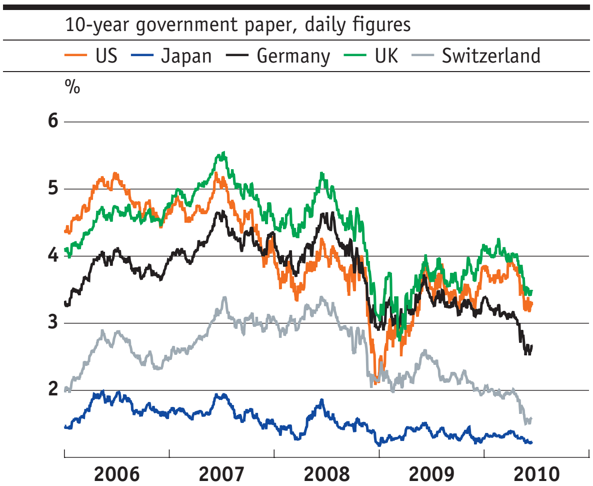
The central banks of the main industrialised countries have maintained their expansionary monetary policy (cf. chart 1.10). The Federal Reserve (Fed) left the target range for the federal funds rate

Chart 1.7
International short-term interest rates



Source: Thomson Financial Datastream

Chart 1.8
International long-term interest rates



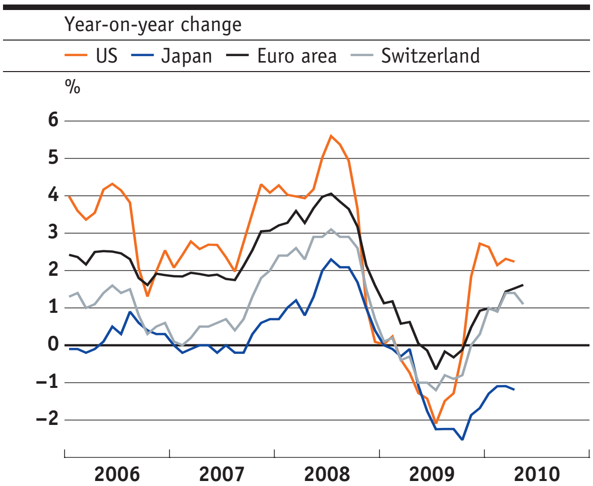
Sources: SNB, Thomson Datastream

at 0.00–0.25%. However, it brought to an end almost all exceptional liquidity programmes, as well as its purchases of mortgage-related securities. At more than USD 2 trillion, the balance sheet total of the Fed is more than twice the size it was before the crisis. As a reaction to the renewed tensions in the money markets, in May the Fed once again began operations to provide US dollar liquidity in coordination with other central banks.

The ECB left its main refinancing rate unchanged at 1.0%. In April, it announced that it would maintain the conditions for securities accepted for refinancing transactions, which had been relaxed during the crisis, throughout 2010 and beyond. At the beginning of May, it also guaranteed the validity of Greek government bonds for refinancing transactions. As an accompanying measure to the EU bailout package, the ECB also conducted sterilised interventions in the sovereign bond markets of member states. It resolved to make unlimited liquidity available to banks until September via three-month refinancing transactions. With these supplementary measures, the ECB is aiming to ensure smooth functioning of the monetary transmission mechanism.

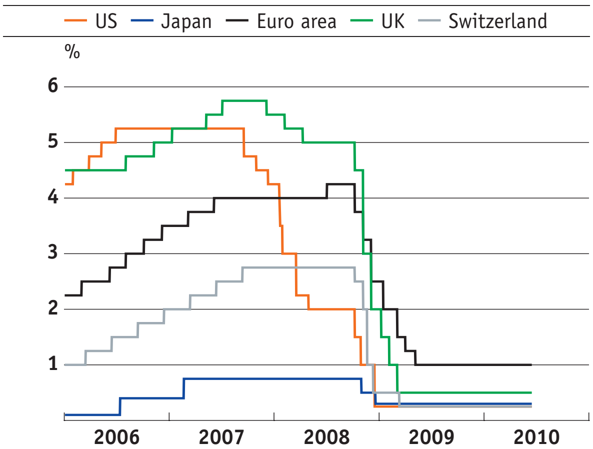
The Bank of Japan left its overnight call money rate unchanged at 0.1%. By expanding the liquidity measures first introduced in December, it endeavoured to reduce long-term interest rates. In addition, it adopted a number of new measures to promote promising investment projects. The Chinese central bank increased its reserve requirement ratio once again as a reaction to the continuously high growth rate in lending. Signs of inflationary pressure in Singapore led the monetary authority of this city state to tighten its monetary policy, which is based on the index of the nominal effective exchange rate.

Chart 1.9
Consumer prices



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

Chart 1.10
Official interest rates



Sources: SNB, Thomson Financial Datastream

2 Developments in the Swiss economy

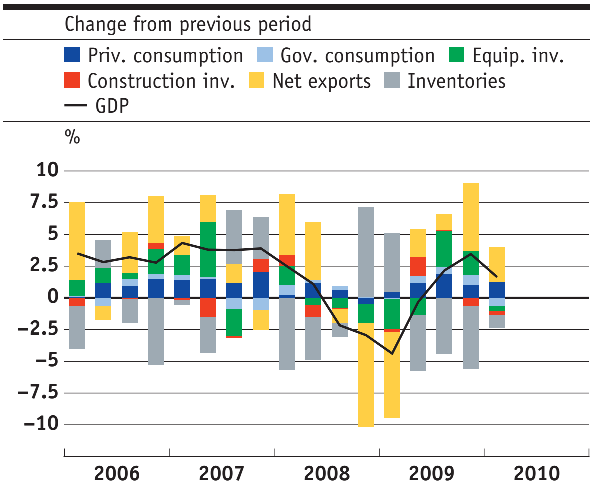
After the powerful recovery in the second half of 2009, the Swiss economy grew at a slower rate in the first quarter of 2010, albeit more strongly than the euro area once again.

This slowdown in the growth rate is largely due to a sharp decline in added value in the banking sector. By contrast, the manufacturing sector continued to recover. On the demand side, robust growth in both exports and consumer spending continued.

The situation in the labour market has improved against the backdrop of economic recovery. Employment continued to rise in the first quarter, while the unemployment rate has fallen slightly over the last few months. Like the output gap, however, the unemployment rate points to continued capacity under-utilisation in the economy. Accordingly, inflationary pressure has remained low. Although the annual inflation rate, as measured by the national consumer price index, increased slightly, achieving its highest level since August 2008 in April, it was once again lower in May, at around 1.1%.

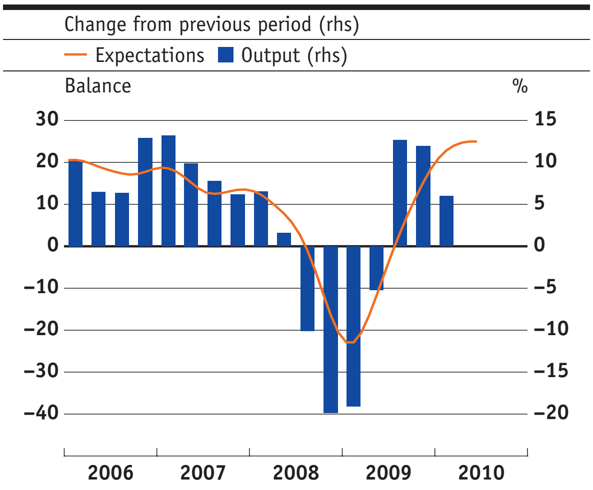
The recovery is likely to continue in the second quarter of 2010, since all the leading indicators point to growth in economic activity. The discussions which the SNB delegates for regional economic relations conducted with some 230 company representatives from all sectors of the economy in April and May confirm this assessment. The interviews showed that the recovery is clearest in manufacturing, both in comparison with the previous quarter and with respect to last year. However, broad-based growth was also observed in construction and in the services sector. Respondents' expectations for the coming months suggest positive growth in turnover. The under-utilisation of production capacity is therefore likely to decrease further.

Chart 2.1
Contributions to output growth



Source: SECO

Chart 2.2
Manufacturing output



Sources: KOF Swiss Economic Institute, SFSO

2.1 Gross domestic product (GDP)

Slowdown in economic growth in the first quarter

Economic growth weakened in the first quarter. According to a provisional estimate by the State Secretariat for Economic Affairs (SECO), GDP rose by 1.6%, compared to 3.5% in the previous quarter. Over a 12-month period, GDP rose by 2.2%.

At the same time as it published the results for the first quarter, SECO also corrected its quarterly estimates from 2008 onward. The estimated decline in GDP in the first quarter of 2009 is now rather greater than previously assumed (–4.4% instead of –4.0%). However, growth for the subsequent three quarters of 2009 was adjusted upwards slightly, most notably for the fourth quarter (3.5% instead of 3.0%).

In the first quarter of 2010, Swiss economic growth was supported by persistently strong growth in exports and consumer spending. By contrast, there was a slight quarter-on-quarter decline in both government spending and investment. The growth contribution from inventory movements was negative, as had also been the case in the previous three quarters.

Broken down by sector, developments in added value in the banking sector constituted the most important factor in the weakening of GDP growth. In the third and fourth quarters of 2009, banks had made the largest contribution to GDP growth. In the first quarter of 2010, more than half of the increased added value achieved by the banks in these previous two quarters disappeared. By contrast, added value in manufacturing remained steady, as it had been in the previous quarter, while added value in business-related services was higher than in the previous quarter, the first such increase following six successive quarters of decline.

Real GDP and components Table 2.1

Growth rates on previous period, annualised

	2006	2007	2008	2009	2008			2009				2010
					Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Private consumption	1.6	2.4	1.7	1.2	2.0	1.1	–0.8	0.8	1.9	3.2	1.8	2.1
Government consumption	0.3	0.5	–0.1	2.5	2.8	2.9	0.4	–0.7	5.3	5.2	7.0	–5.6
Investment in fixed assets	4.7	5.2	0.4	–3.7	–6.8	–4.0	–7.6	–12.6	0.1	14.0	5.6	–3.2
Construction	–1.4	–2.3	0.9	1.3	–9.8	–0.6	0.3	–2.2	16.5	0.7	–6.4	–3.0
Equipment	10.1	11.1	0.1	–7.5	–4.5	–6.3	–13.1	–20.2	–11.9	26.7	16.4	–3.3
Domestic final demand	**2.1**	**2.8**	**1.1**	**0.2**	**–0.1**	**0.1**	**–2.3**	**–2.6**	**1.9**	**5.8**	**3.3**	**–0.1**
Domestic demand	**1.4**	**1.3**	**0.4**	**1.6**	**–0.6**	**–3.8**	**7.2**	**6.5**	**–3.5**	**–0.2**	**–0.6**	**–4.7**
Total exports	10.3	9.5	2.9	–9.9	17.8	–2.9	–27.2	–22.5	–6.0	16.6	9.2	20.6
Goods	11.1	8.4	2.6	–11.8	18.0	–2.5	–34.3	–25.3	–4.7	19.4	11.0	24.2
Excluding valuables[1]	11.2	8.3	2.1	–11.0	25.2	–8.3	–32.8	–23.8	–2.5	15.9	15.3	10.3
Services	8.4	12.5	3.4	–5.3	17.3	–3.8	–7.6	–15.6	–9.0	10.3	5.2	12.3
Aggregate demand	**4.5**	**4.3**	**1.4**	**–2.8**	**6.3**	**–3.4**	**–7.8**	**–5.1**	**–4.4**	**5.5**	**2.9**	**4.1**
Total imports	6.5	6.0	0.4	–5.9	18.5	–6.2	–17.6	–6.7	–13.3	13.7	1.5	10.3
Goods	7.8	5.1	–0.5	–8.4	24.3	–9.0	–25.7	–5.6	–18.9	17.0	0.8	12.8
Excluding valuables[1]	7.4	6.7	–1.0	–8.2	23.9	–9.4	–22.3	–10.3	–16.7	18.7	0.5	8.6
Services	0.6	10.3	4.8	5.8	–5.2	8.4	29.3	–10.1	13.8	1.1	4.3	0.6
GDP	**3.6**	**3.6**	**1.8**	**–1.5**	**1.1**	**–2.2**	**–2.9**	**–4.4**	**–0.3**	**2.2**	**3.5**	**1.6**

1 Valuables: precious metals, precious stones and gems as well as objets d'art and antiques.
Source: SECO

2.2 Foreign trade, consumption and investment

Persistent upward trend in exports

The recovery in exports continued in the first quarter on the back of the global economic recovery. Overall, exports of goods and services rose by 11.0% (excluding valuables).

Exports of goods once again expanded strongly in the first quarter thanks to a strong rebound in watch exports. In addition, exports of machinery enjoyed a noticeable increase for the first time since the beginning of the crisis, while exports of pharmaceuticals continued their steady upward trend. When broken down by sales market, the growth of goods exports was driven by a rise in demand from Europe and the Asian economies. Despite strong growth over the last three quarters, goods exports have so far only regained half of the ground lost during the recent recession.

Exports of services recovered noticeably in the first quarter. Tourism exports declined slightly owing to the strong Swiss franc, while the commission business of banks with foreign clients only benefited from the recovery in stock markets to a limited degree. However, net revenues from merchanting enjoyed a sharp increase. Consequently, in overall terms, exports of services have clearly recovered from the crisis.

According to KOF Swiss Economic Institute surveys, manufacturing companies remain optimistic about economic prospects. This confidence appeared justified by the continued upward trend of goods exports in April. However, the recovery could lose some momentum as the year progresses, not least due to the appreciation of the Swiss franc against the euro.

Chart 2.3
Contributions to export growth

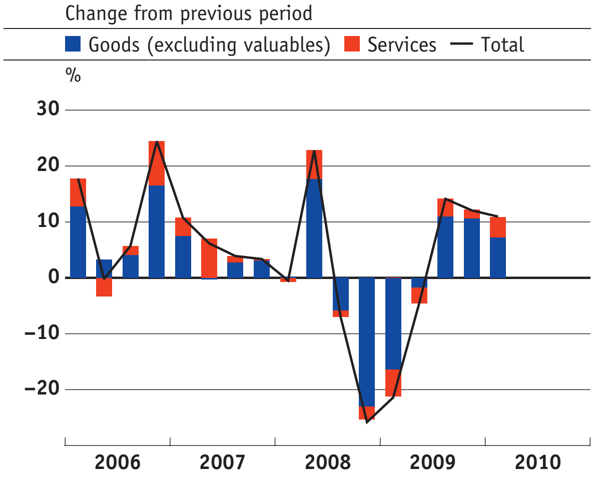


Chart 2.4
Expected new orders

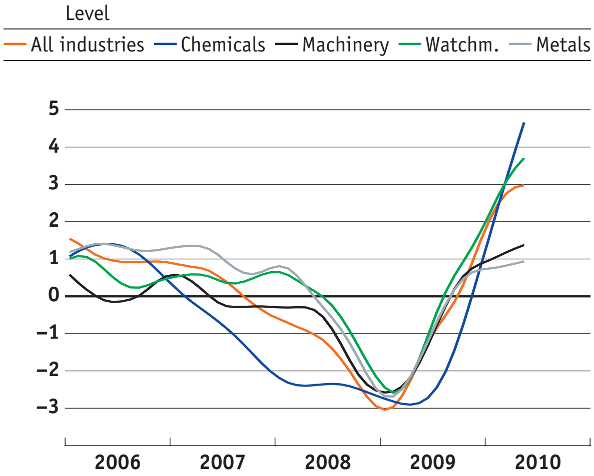


Chart 2.5
Goods exports, regional growth contributions

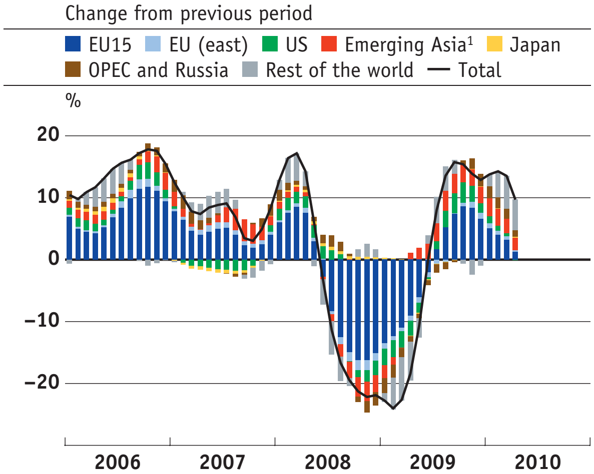


Chart 2.3:
Source: SECO

Chart 2.4:
Source: KOF Swiss Economic Institute

Chart 2.5:
1 Emerging Asia: China, Hong Kong, India, Indonesia, Malaysia, Philippines, Singapore, South Korea, Taiwan, Vietnam.
Source: Federal Customs Administration (FCA)

Construction investment slightly down

Construction investment in the first quarter of 2010 was down on the previous quarter. At 3.0%, however, the decline was less pronounced than in the fourth quarter of 2009. A slight year-on-year rise was again evident.

According to a survey by the *Schweizerischer Baumeisterverband/Société Suisse des Entrepreneurs* (Swiss Federation of Master Builders), all three main segments of the construction industry were affected by the quarter-on-quarter decline in construction activity. The most strongly affected segment was commercial construction, which was already weak. However, both residential construction and civil engineering suffered falls after having proved surprisingly robust during the recession. The slowdown in construction activity can partly be explained by the weather, as relatively strong snowfall and low temperatures weighed on production. However, the trend for new orders and orders in hand also points to weaker construction activity over the next few quarters.

Slowdown in recovery of equipment investment

The recovery in equipment investment halted briefly in the first quarter of 2010. Following two quarters in which strong double-digit growth rates were posted, equipment investment actually declined slightly over the previous period. Nonetheless, it was still well above the year-back level.

The growth in equipment investment registered in the second half of 2009 was in part driven by exceptionally high imports of telecommunications equipment. Demand in this area has now returned to rather more normal levels. The demand for capital goods was therefore more broadly based in the first quarter of 2010 than in previous months. The outlook for the next few quarters remains positive. This is confirmed by KOF Swiss Economic Institute survey indicators, which show a significant rise in capacity utilisation in most industrial sectors.

Chart 2.6
Construction

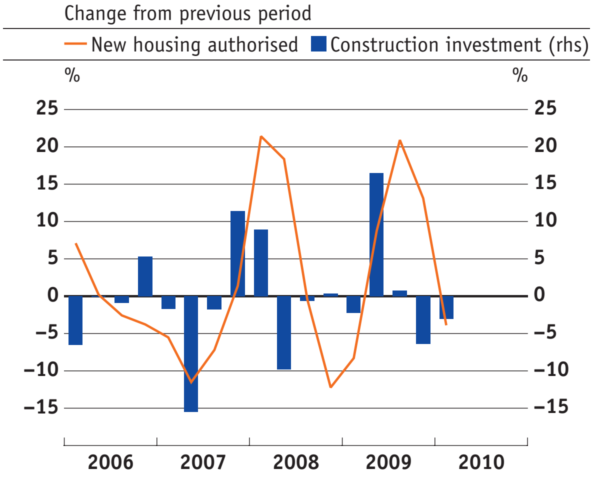


Chart 2.7
Mortgage rates and 3M Libor

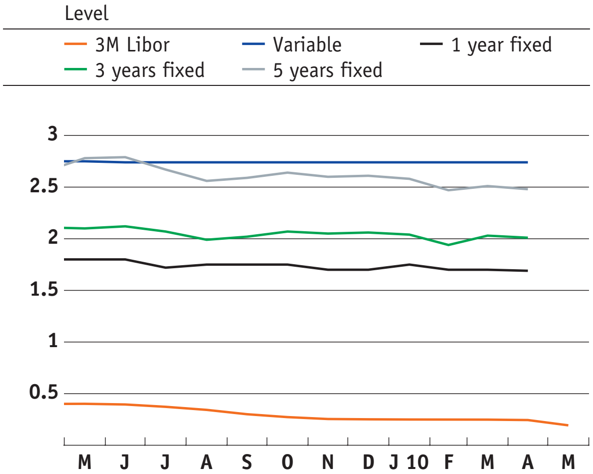


Chart 2.8
Equipment

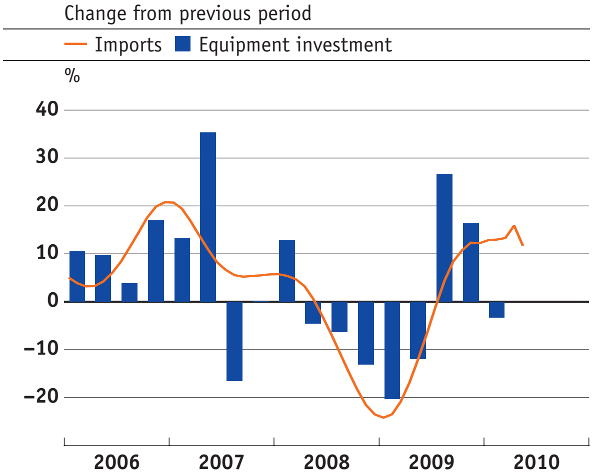


Chart 2.6:
Sources: SECO, SFSO

Chart 2.7:
Source: SNB

Chart 2.8:
Sources: FCA, SECO

Robust growth in consumer spending

Private consumption grew by 2.1% in the first quarter as compared to the previous quarter. Growth was broad-based, with increases registered not only in the consumption of soft goods but also in consumer durables. For example, car registrations rose by 7.5% in the first quarter on a seasonally adjusted basis. Demand for domestic tourism, an indicator of demand for services, may not quite have matched the previous quarter's high growth rate in the first quarter of 2010, but nonetheless rose by 0.5% in seasonally adjusted terms.

Positive consumer confidence

Consumer confidence improved further in spring. In April, the SECO index, which has been published since 2007 and is comparable with similar indices in other countries, finally returned to its pre-crisis level. The expectations of consumers regarding labour market developments, in particular, have improved, but there is also a greater degree of optimism with respect to the future economic situation. Only in the third quarter of 2000 were expectations at a slightly higher level.

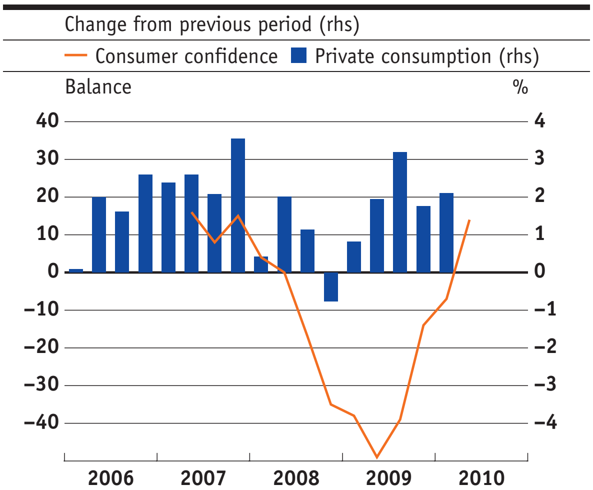
Continued recovery of imports

Supported by robust overall demand, imports of goods and services (excluding valuables) rose by 6.9% in the first quarter. The rise was almost entirely accounted for by imports of goods, which were driven by a sharp rise in imports of commodities and semi-finished goods. In particular, demand for chemicals rose substantially, but imports of consumer and capital goods also continued their upward trend.

Imports of services were largely unchanged over the previous quarter. Lower spending on licences and patents contrasted with an increase in private insurance revenues. Foreign travel – which is entered under tourism imports – again rose.

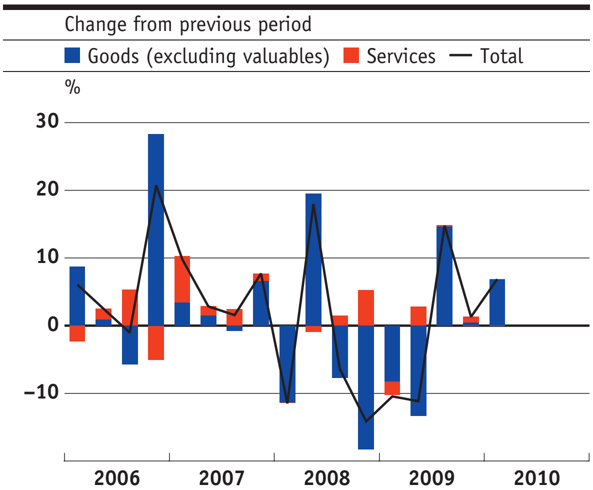
The survey data compiled by the KOF Swiss Economic Institute indicates that expectations regarding purchases of preliminary products have risen once again. This is also borne out by the fact that imports of commodities and semi-finished products rose further in April, as did overall goods imports.

Chart 2.9
Private consumption



Source: SECO

Chart 2.10
Contributions to import growth



Source: SECO

2.3 Employment and labour market

Further rise in employment ...

The slight rise in employment registered in the fourth quarter of 2009 continued into the first quarter of 2010. The volume of work as measured by full-time equivalents rose by a seasonally adjusted 0.8%, following on from 0.5% in the previous quarter.

Broken down by industry, the employment trend has become more varied. The industries registering a rise in the numbers of employed persons included construction, wholesaling, healthcare, hotels and catering, and business-related services. While the manufacturing industry reported a significantly smaller decline in the number of employed people than in previous quarters, employment in the banking sector and insurance was sharply down.

... and a mixed picture for the employment outlook

In the first quarter, movements in the leading employment indicators were positive overall. However, a number of significant differences began to emerge between the different sectors. While employment prospects in industry and construction improved, a downward trend became apparent in parts of the services sector, including public administration, education and healthcare. Leading indicators suggest that the next few quarters will see positive, but modest growth in overall employment.

Chart 2.11
Employment

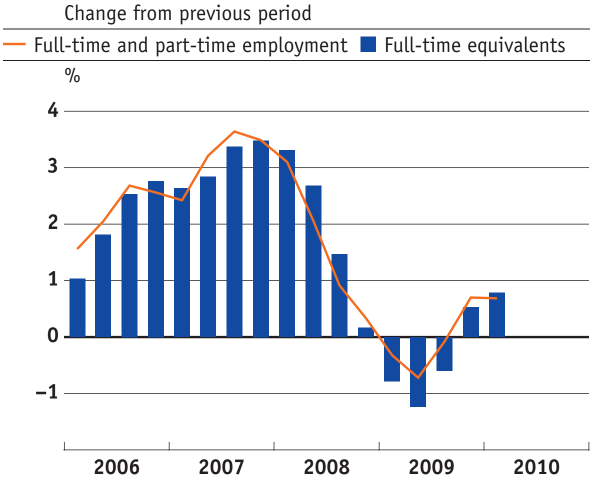


Chart 2.12
Employment outlook indicator

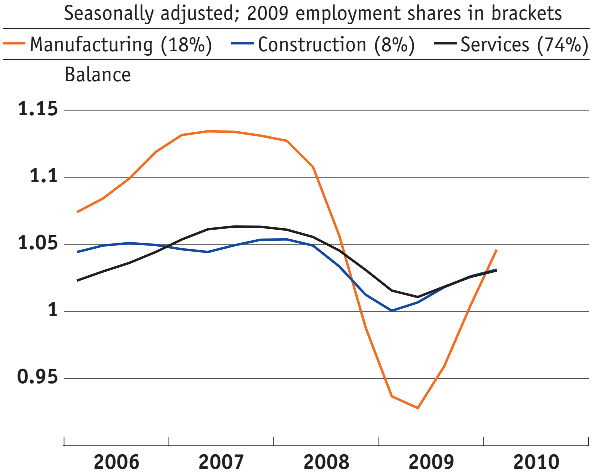


Chart 2.13
Unemployment and job seeker rates

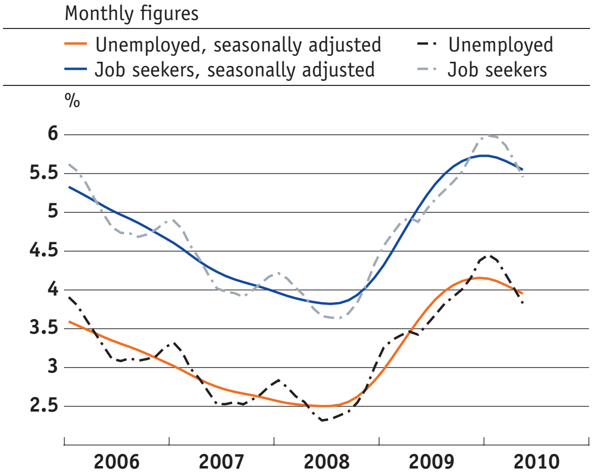


Chart 2.14
Short-time working

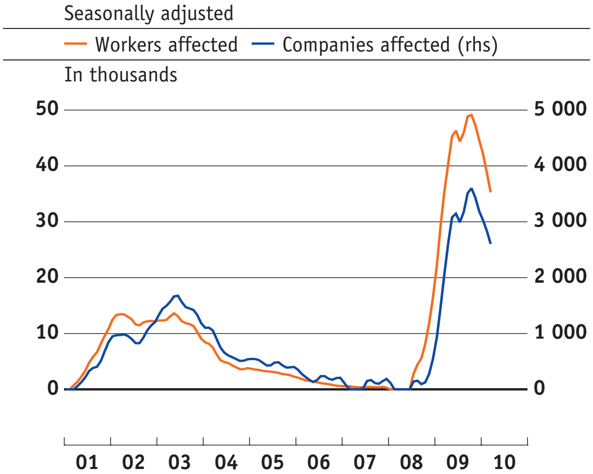


Chart 2.11:
Source: SFSO; seasonal adjustment: SNB

Chart 2.12:
Source: SFSO; seasonal adjustment: SNB

Chart 2.13:
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 2.14:
Source: SFSO; seasonal adjustment: SNB

Slight fall in unemployment

The seasonally adjusted unemployment rate fell slightly between February and May, after reaching its cyclical peak in December 2009. The number of unemployed people registered with the regional employment offices fell by 6,300, resulting in a 0.1% fall in the unemployment rate to 4.0%. The number of job seekers, which also includes those participating in training and employment programmes, likewise declined slightly, from 5.7% to 5.5%.

The official unemployment figures measure only one aspect of under-employment. Short-time working, which had already peaked back in October 2009, declined steadily to March 2010. As there is a downward trend in the path of both unemployment and short-time working, it can be assumed that the replacement of short-term working by unemployment, which was a concern in the recent recession, has turned out to be a relatively limited phenomenon.

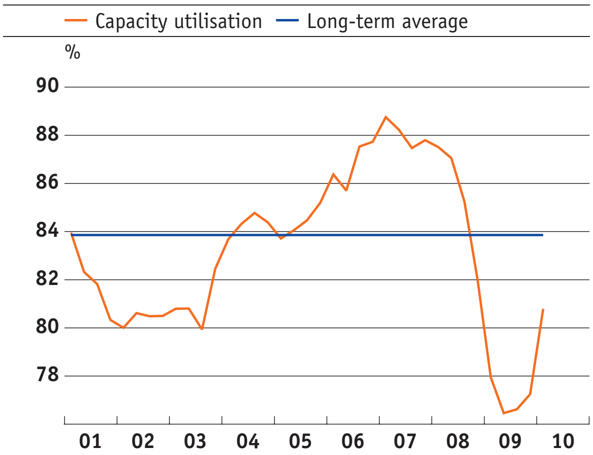
2.4 Capacity utilisation

If aggregate demand does not move in step with aggregate supply over the medium term, inflationary or deflationary trends may arise. Aggregate supply – which is determined by the availability of capital and labour as well as technological progress – is usually relatively static in the short term. Fluctuations in demand are therefore reflected in a change in technical capacity utilisation and staffing levels. If the utilisation rate exceeds (falls below) the normal level for an extended period of time, this points to excess demand (excess supply) and, consequently, to greater (less) inflationary pressure.

Marked rise in capacity utilisation in manufacturing

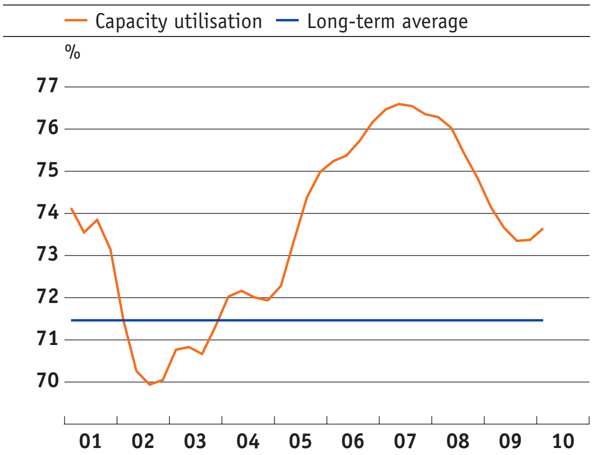
Capacity utilisation in manufacturing improved significantly in the first quarter according to survey data from the KOF Swiss Economic Institute. The rise from 77.2% in the fourth quarter of 2009 to 80.8% in the first quarter of 2010 is unusually strong compared to the other recovery phases experienced over the last three decades. However, there is still a high level of capacity under-utilisation in manufacturing. The situation is completely different in construction. Here, the degree of capacity utilisation of machinery, particularly in building construction, continues to be very high.

Chart 2.15
Capacity utilisation in manufacturing



Source: KOF Swiss Economic Institute

Chart 2.16
Capacity utilisation in construction

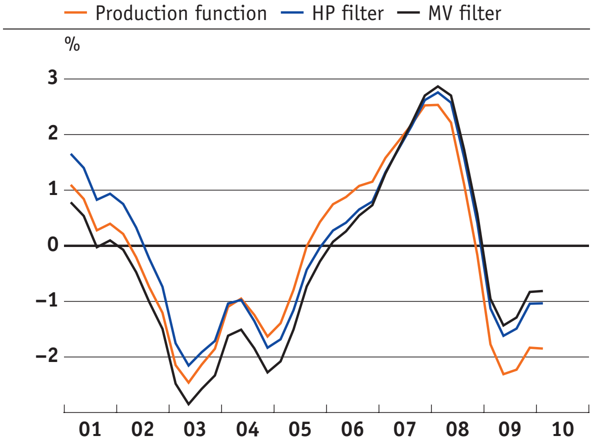


Source: KOF Swiss Economic Institute

Output gap closing slowly

The aggregate output gap – currently clearly in negative territory – closed further in the first quarter. The estimate of the production function indicates that GDP was still around 1.8% below production potential in the first quarter. Estimates of the output gap based on the Hodrick-Prescott filter and the multivariate filter were somewhat less negative, at around –1.0%. Even if there is a certain degree of uncertainty over the size of the output gap and the various estimates provide differing results, all methods indicate that the output gap is still negative at present. This reflects below-average utilisation of both technical capacity and labour supply. Due to lower immigration, potential growth has been lower than a year ago and is now somewhat below the long-term average. The SNB assumes that growth in production potential will slowly stabilise and that the output gap will narrow further as the economy recovers. As growth in production potential has not suffered too badly in the recent crisis, however, the closing of the output gap is likely to be a very slow process.

Chart 2.17
Output gap



Source: SNB

2.5 Prices and inflation expectations

Rising prices for energy sources and intermediate goods

In the past few months, aggregate supply prices (producer and import prices) have increased substantially. As a result, the annual inflation rate rose from –1.0% in February to 1.4% in May. This was mainly attributable to higher prices for energy sources and intermediate goods. Excluding commodities and energy, aggregate supply prices in May remained slightly below the previous year's level. Consequently, it is still the case that no inflation pressure is being exerted by aggregate supply prices on downstream consumer prices.

Annual CPI inflation in May amounts to 1.1%

Annual inflation, as measured by the national consumer price index (CPI), reached 1.4% in April, its highest level since February 2008. A rise was expected by most observers due to base effects for oil products, but other components also contributed to the rise in the annual rate of inflation.

In May, the annual rate of inflation fell back to 1.1%. This decline was primarily due to lower prices for medicines. In the early part of the year, the Swiss Federal Office of Public Health carried out an extraordinary price review of some 2,000 medicines. This resulted in a 6.5% decline in the price of registered medicines in May as compared to the previous month. In addition, there was a slight decline in the rate of increase in rents, which fell by 0.2 percentage points to 1.0%. Overall there is still a clear divergence between the prices of domestic goods, with a fairly robust underlying inflation rate, and the prices of imported goods (excluding oil products), which are tending to curb the overall rate of inflation.

Chart 2.18
Prices of total supply

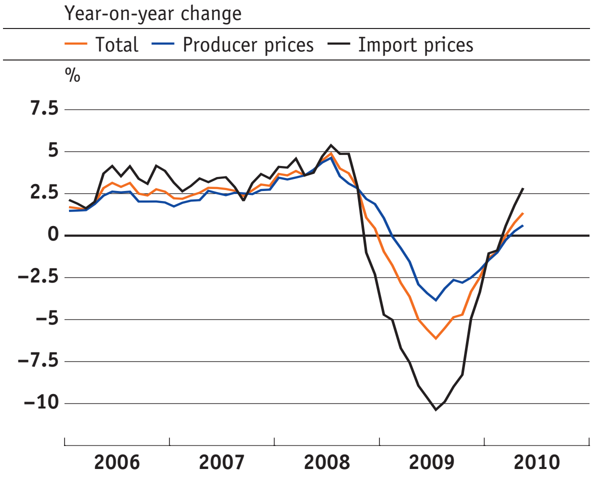


Chart 2.19
CPI: domestic and imported goods and services

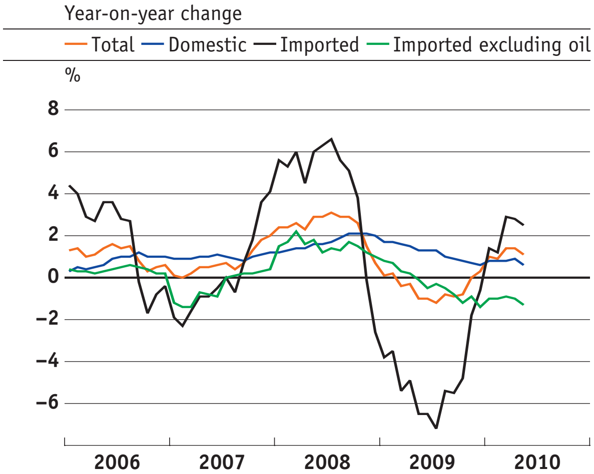


Chart 2.20
CPI: domestic goods and services

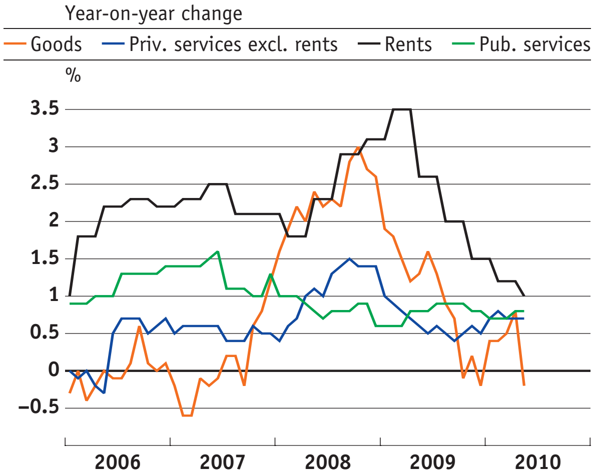


Chart 2.18:
Source: SFSO

Charts 2.19 and 2.20:
Sources: SFSO, SNB

Core inflation displays mixed trends

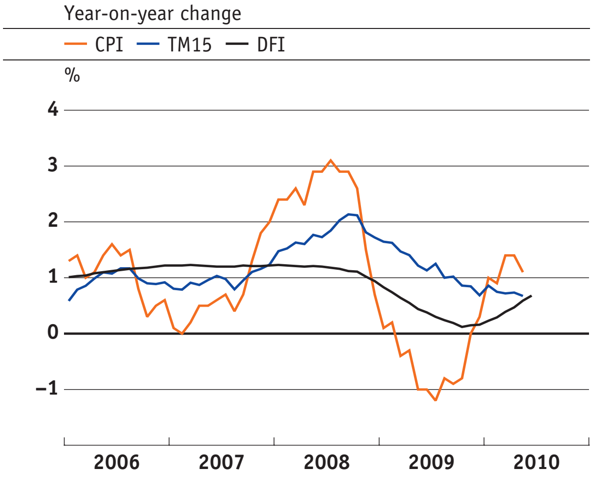
Inflation, as measured by the CPI, is subject to numerous short-term fluctuations that may distort perceptions of the general price trend. To counter this, core inflation rates are calculated with the aim of capturing the underlying trend in price movements. The SNB computes two measures of core inflation (cf. chart 2.21): The trimmed means method (TM15) excludes from the consumer price index, for any given month, those 15% of goods prices with the highest annual rates of change and those 15% with the lowest annual rates of change. The broader-based dynamic factor inflation (DFI), by contrast, extracts underlying inflation using a wide range of prices, data on the real economy, financial market indicators and monetary variables. For their part, the two core inflation rates calculated by the SFSO always exclude the same price-volatile goods from the basket of goods in each period (cf. chart 2.22). In the case of core inflation 1 (SFSO1), these are food, beverages, tobacco, seasonal products, energy and fuel. Core inflation 2 (SFSO2) additionally factors out products with administered prices.

National consumer price index and components Table 2.2
Year-on-year change in percent

	2009	2009		2010	2010			
		Q3	Q4	Q1	February	March	April	May
Overall CPI	**–0.5**	**–1.0**	**–0.2**	**1.1**	**0.9**	**1.4**	**1.4**	**1.1**
Domestic goods and services	1.2	1.1	0.7	0.8	0.8	0.8	0.9	0.6
Goods	1.0	1.0	–0.0	0.4	0.4	0.5	0.8	–0.2
Services	1.3	1.0	0.9	0.9	0.9	0.9	0.7	0.7
Private services excluding rents	0.6	0.5	0.5	0.8	0.8	0.7	0.7	0.7
Rents	2.5	2.2	1.6	1.3	1.2	1.2	1.2	1.0
Public services	0.8	0.9	0.8	0.7	0.7	0.7	0.8	0.8
Imported goods and services	–4.7	–6.0	–2.4	1.8	1.2	2.9	2.8	2.5
Excluding oil products	–0.3	–0.6	–1.2	–0.9	–1.0	–0.9	–1.0	–1.3
Oil products	–25.9	–30.5	–10.9	18.3	13.4	26.4	26.1	25.9

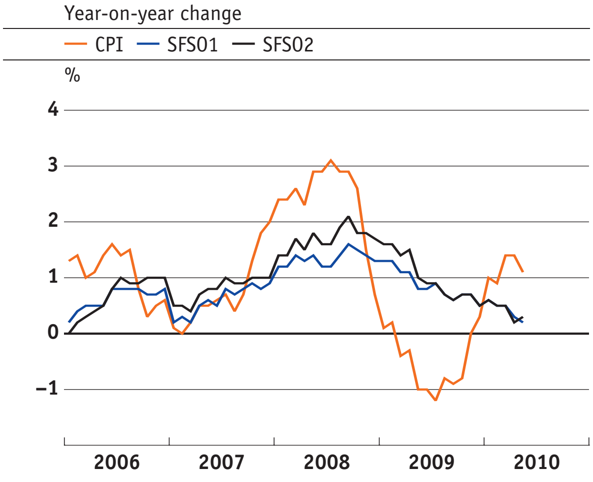
Sources: SFSO, SNB

Chart 2.21
Core inflation rates (SNB)



Sources: SFSO, SNB

Chart 2.22
Core inflation rates (SFSO)



Source: SFSO

The inflation rate calculated by the SNB according to the trimmed means method amounted to 0.7% in May, the same level as in February. The DFI rose by 0.3% to 0.6% over the same period, thereby indicating a further decrease in deflation risks. By contrast, the two SFSO core inflation rates have fallen slightly since February, and in May stood at 0.2% (SFSO1) and 0.3 (SFSO2).

Modest rise in inflation expectations

Inflation expectations are appraised on the basis of various surveys of companies and households. In the quarterly survey carried out by the KOF Swiss Economic Institute and the monthly PMI survey, interviews are conducted with senior employees of companies in Switzerland. The results show how companies expect purchase and sale prices to move over the following three months. The rise in price expectations, which was already observed in the previous quarter, continued in the second quarter. In both wholesaling and manufacturing, the majority of companies are expecting purchase prices to rise (cf. chart 2.23). The 'expected purchase prices' component of the monthly PMI also rose further, and in April reached a level that more or less matched that of July 2008. At that time, the rate of increase in producer prices had reached 4.6%, its highest level since the end of the 1980s. The KOF survey indicates that expectations with respect to future sale prices are somewhat more restrained than those for purchase prices, but here, too, companies are increasingly planning price rises (cf. chart 2.24).

The quarterly SECO survey of Swiss households measures the expected price trend over the coming 12 months from the viewpoint of consumers. The figures published in April suggest a moderate rise in inflation expectations. Although the majority of consumers continued to expect either unchanged or slightly rising prices, there was a slight shift in favour of consumers expecting modest price rises. At the same time, the proportion of consumers with falling price expectations declined. Overall, this suggests that although inflation expectations remain well anchored, they are slightly higher.

Chart 2.23
Expected purchase prices

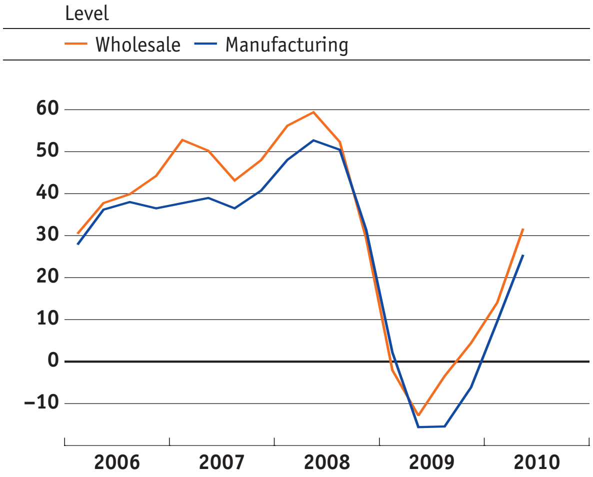


Chart 2.24
Expected sale prices

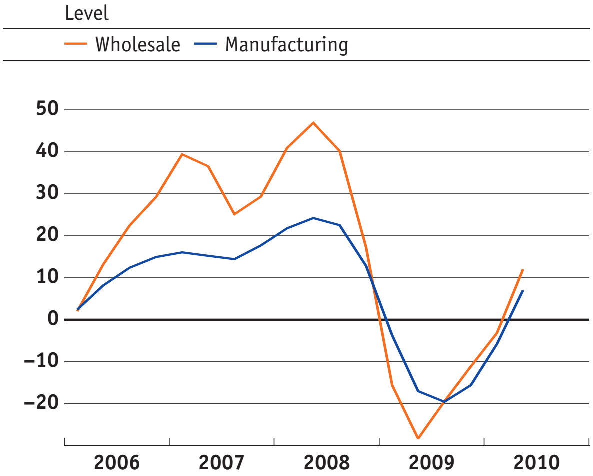
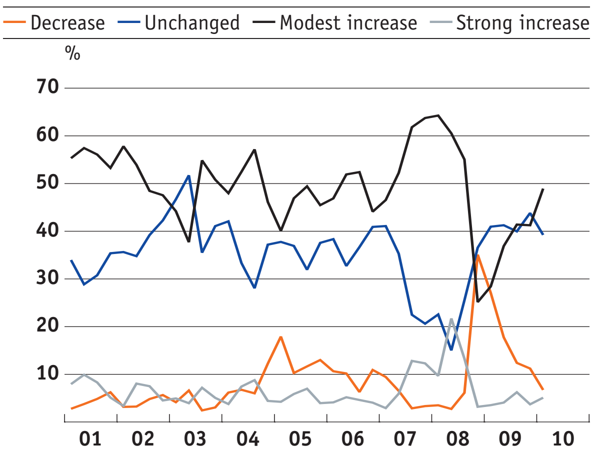


Chart 2.25
Survey on expected movements in prices



Charts 2.23 and 2.24:
Source: KOF Swiss Economic Institute

Chart 2.25:
Sources: SECO, SNB

2.6 Outlook for the real economy

Moderate economic upswing

The SNB anticipates that Swiss GDP will grow by about 2% in 2010, following a decline of 1.5% in 2009. Despite slightly weaker potential growth, the expected increase in GDP will not be sufficient to close the overall output gap by the end of 2010.

GDP growth in 2010 is likely to be supported by a combination of foreign and domestic demand. Despite the lethargic recovery in many major European countries and the appreciation of the Swiss franc in the currency markets, net exports will probably make a positive contribution to growth.

However, the uncertainties are considerable. The renewed turbulence in the financial markets associated with the fiscal problems in the euro area shows that the after-effects of the financial and economic crisis are still being felt. It cannot be ruled out that economic growth in the economies of Switzerland's major trading partners could be more severely unsettled than expected. An unexpectedly strong rise in commodity prices or an excessive appreciation in the Swiss franc could also have a negative impact on the expected recovery. By contrast, global trade could recover at a faster pace and give a corresponding boost to Swiss exports.

3 Monetary developments

3.1 Interest rates

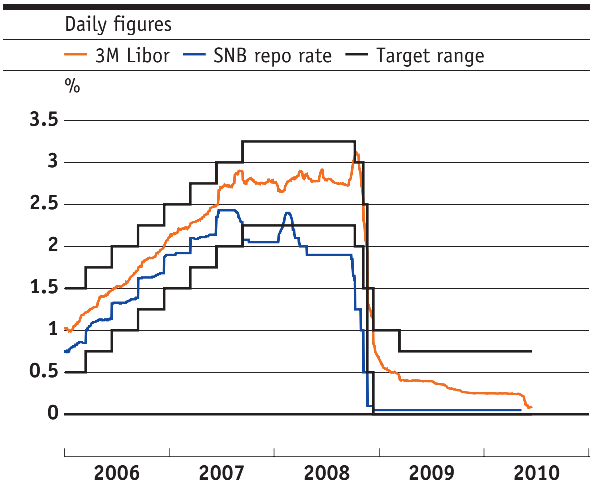
Summary of monetary policy since the March assessment

At its monetary policy assessment of March 2010, the SNB decided to continue its expansionary monetary policy. It left the target range for the three-month Libor unchanged at 0.00–0.75% and announced that it intended to keep the Libor within the lower part of the target range, at around 0.25%. The SNB also reiterated its intention of countering an excessive rise of the Swiss franc against the euro.

In the first quarter of 2010, the SNB purchased around CHF 31 billion worth of foreign currencies against Swiss francs. Since April 2010, additional purchases to the value of approximately CHF 113 billion have been carried out. Since the March assessment, the high level of sight deposits has resulted in a steady decline in demand at the liquidity-providing repo auctions. On 7 May 2010, zero demand for one-week liquidity was registered for the first time, and the SNB has not held any further liquidity-related repo auctions since 14 May 2010. As in previous quarters, the SNB continued to issue SNB Bills in Swiss francs on a weekly basis to absorb Swiss franc liquidity in a targeted manner. In March and April 2010, as in the months before, only SNB Bills with terms of seven days were placed. In this manner, the SNB absorbed CHF 16.3 billion on average in March and April, with bids amounting to CHF 17.3 billion. The average marginal yield per auction was 0.029%. A number of 28-day SNB Bills have also been placed since the end of May, and 84-day terms were added at the beginning of June.

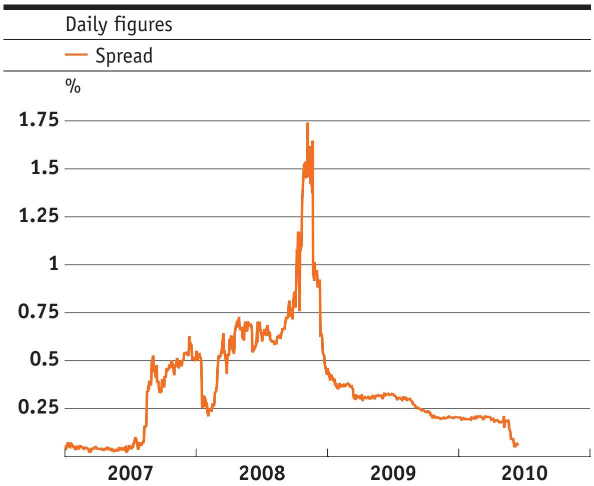
In response to the recent re-emergence of strains in the US dollar funding markets in Europe, the SNB, together with the Bank of Canada, the Bank of England, the European Central Bank and the Federal Reserve, announced in May 2010 that the temporary swap facilities for US dollar liquidity would be reactivated. These facilities are aimed at improving liquidity conditions in the US dollar funding markets in Europe and preventing the spread of strains to other markets and other financial centres. In coordination with other central banks, the SNB decided to recommence operations to provide US dollar liquidity with a term of seven days. These operations take the form of repo transactions against SNB-eligible collateral, and are carried out as fixed rate tenders with full allotment. In the period under review, there was no demand for US dollar auctions by the SNB. In addition, the SNB continued to issue its own debt certificates in US dollars (SNB USD Bills). These issues took place every two weeks. The outstanding volume of SNB USD Bills has fallen since the March monetary policy assessment, and amounted to USD 11.5 billion at the beginning of June. Of this amount, roughly 80% was accounted for by 168-day SNB USD Bills. The yield spread of SNB USD Bills over the corres-

Chart 3.1
Money market rates



Sources: Reuters, SNB

Chart 3.2
Spread between 3M Libor and OIS



Sources: Bloomberg, Reuters

ponding US Treasury bonds remained virtually unchanged in the first quarter of 2010 for the 84 and 168 day terms. Since the March assessment, the yield spread for the shorter terms has narrowed, however. Since the loan to the SNB StabFund has been reduced substantially since February 2009, and since the SNB's funding possibilities have changed, the SNB discontinued its issuance of SNB USD Bills with effect from end-June 2010.

Slight downward trend in money market interest rates

Between mid-March and the beginning of May, the three-month Swiss franc Libor remained close to the targeted level of 0.25%, just as it has done since November 2009 (cf. chart 3.1). In May and June it fell, however, and in mid-June was 0.09%. The fall in the rate is a sign that the banking system is currently holding a very large amount of liquidity. The risk premium of the three-month Libor over the corresponding overnight index swap (OIS) fell to 0.06 percentage points. Since November last year, this spread had remained virtually unchanged at 0.2 percentage points. Chart 3.2 shows that the interest rate spread is now once again very close to the level it reached before the financial crisis.

Chart 3.3 shows the development in interest rates for different maturities in the secured Swiss franc interbank money market (Swiss Reference Rates). The Swiss Reference Rates were more volatile than usual in the reporting period. The overnight money market rate of this reference group, known as the Swiss Average Overnight Rate (SARON), had hovered slightly above 0.02% since November 2009, but fell to 0.01% in May 2010 before rising again slightly.

Further flattening of the yield curve

The yields on Swiss Confederation bonds declined for all maturities. This is first and foremost explained by the renewed turbulence in the financial markets in April and May, which triggered a flight to secure investments. The yield on ten-year Swiss Confederation bonds fell from 1.8% in mid-March to 1.5% in mid-June. This decline was thus rather more pronounced than in the money markets, which led to a further flattening of the yield curve (cf. chart 3.4). Yields have trended downwards since mid-2008, after previously rising to 3.3%.

The term spread, as measured by the difference between the three-month Libor and the yield on ten-year Swiss Confederation bonds, also narrowed slightly for the same reasons. This spread provides a summary measure of the steepness of the yield curve. Chart 3.6 shows that the term spread collapsed following the bankruptcy of Lehman Brothers in September 2008, before climbing rapidly to historically high levels as a result of a substantial relaxation of monetary policy at the end of

Chart 3.3
Swiss Reference Rates

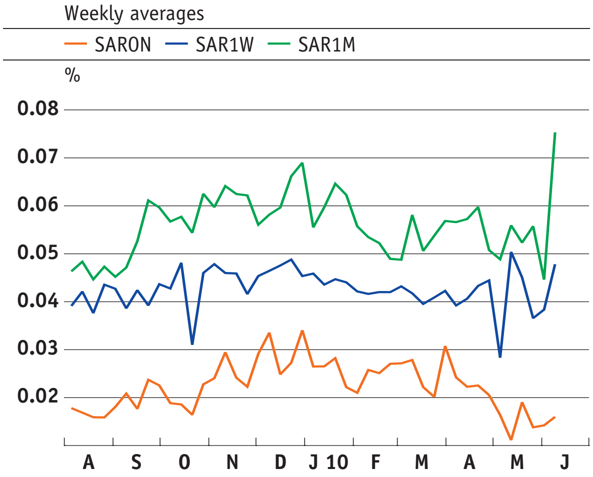


Chart 3.4
Term structure of Swiss Confederation bonds

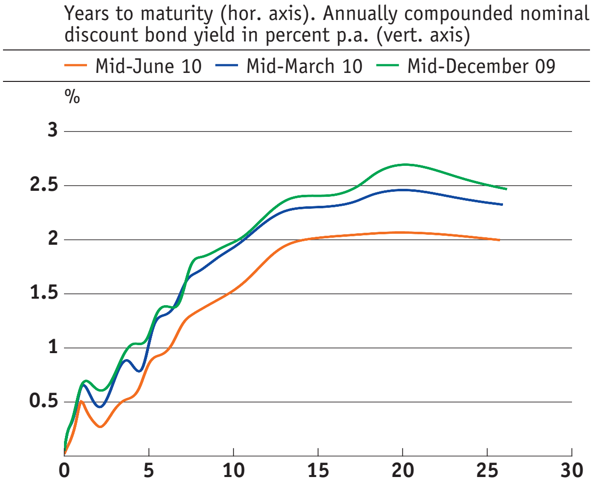


Chart 3.5
Spreads between international short-term interest rates

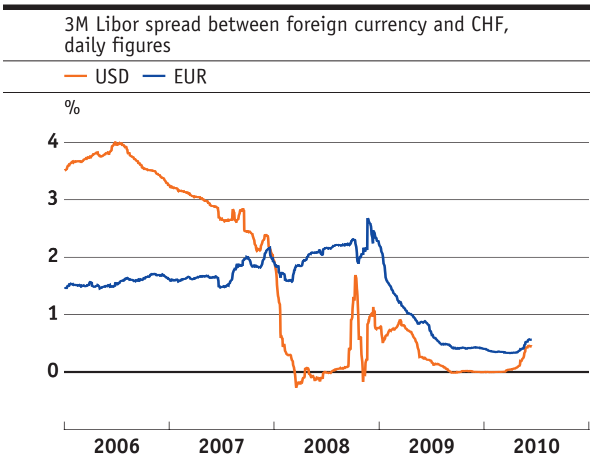


Chart 3.3:
Source: SIX Swiss Exchange Ltd

Chart 3.4:
Source: SNB

Chart 3.5:
Sources: Reuters, SNB

2008 and the beginning of 2009. Since May last year, however, the term spread for Switzerland has been narrowing. Fears over government debt abroad have triggered a flight to quality and forced long-term yields downwards. The term spread is now once again close to its long-term average.

Trend reversal for international term spreads after 18 months of widening

In contrast to the three-month Swiss franc Libor, the three-month US dollar Libor and the three-month euro Libor have been rising since the beginning of April 2010, reflecting renewed tensions in European money markets. Accordingly, the spreads between Swiss franc interest rates and the corresponding euro and US dollar rates have widened slightly (cf. chart 3.5). At the longer end of the maturity spectrum, May also witnessed the start of a decline in yields on ten-year international government bonds, which typically act as benchmarks. This also resulted in a narrowing of foreign term spreads (cf. chart 3.6). Yields between the first quarter of 2009 and the first quarter of 2010 had been largely stable or even rising, which was also reflected in stable or widening term spreads. In the US, the term spread fell to 2.7 percentage points in mid-June, after reaching a high of 3.7 percentage points at the beginning of April. Furthermore, chart 3.6 shows that term spreads in the US, the UK and Germany – unlike in Switzerland – are still relatively high in a historical comparison, despite the recent decline.

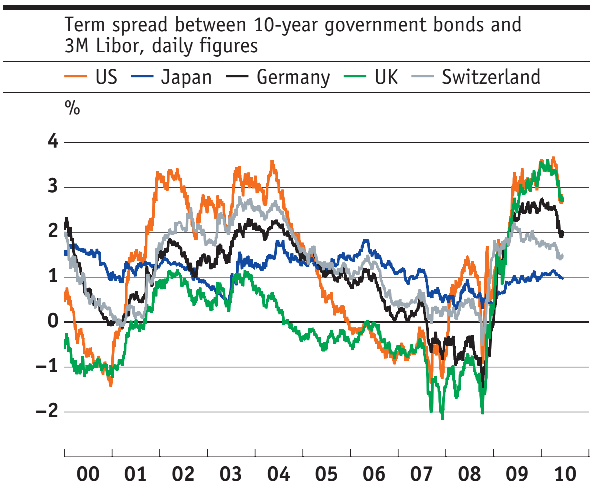
Further decline in corporate bond yields and renewed increase in yield spreads

Against a backdrop of continuing improvements in both credit conditions and corporate results, yields on Swiss corporate bonds declined further in the reporting period. At the same time, however, this decline was less pronounced than it was for government bonds. The yield spreads of corporate bonds over government bonds therefore increased slightly, a trend that was also evident internationally. Following the Lehman Brothers bankruptcy in 2008, these yield spreads had widened dramatically. Until recently, however, they had been steadily narrowing again.

Real interest rates still low

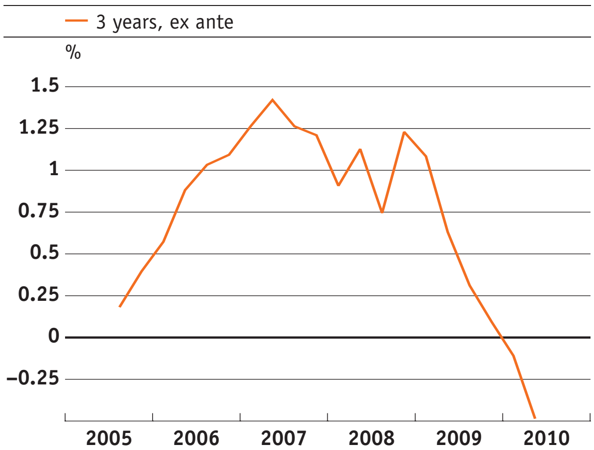
The real interest rate is a key determinant in the saving and investment behaviour of companies and households, and is thus extremely important for the future development of the economy. Chart 3.7 plots the three-year real interest rate. Inflation expectations for this period have been derived from the forecasts of various SNB models. Since the nominal interest rate for three-year maturities continued to fall over the past three months while inflation forecasts increased slightly, the three-year real interest rate declined further in the second quarter of 2010, to –0.5%. With the level of real interest rates at a historical low, monetary policy is likely to have a stimulating effect on the economy.

Graph 3.6
Term spreads



Sources: SNB, Thomson Financial Datastream

Chart 3.7
Estimated real interest rate



Source: SNB

3.2 Exchange rates

Euro weakness continues

Since the monetary policy assessment in March 2010, the overriding theme in the foreign exchange markets has been the weakness of the euro. Between mid-March and mid-June 2010, fears that the debt crisis in the euro area might spread to other European countries caused the euro to depreciate by 11% against the US dollar. The downward trajectory of the euro against the dollar, which began in December 2009, has therefore continued.

The Swiss franc appreciated against the euro during the period under review (5%). This comparatively modest rise is the consequence of the SNB's policy to counter an excessive appreciation of the Swiss franc. In relation to the US dollar, the Swiss franc lost 6% over the same period.

Rise in external value of the Swiss franc

In nominal trade-weighted terms, in April 2010 the Swiss franc was 3.4% above its 2009 average, and 13.8% above its pre-crisis level of August 2007 (cf. chart 3.9). The same situation more or less applies to the real trade-weighted external value. Viewed over a longer horizon, i.e. since the mid-1990s, the average value for the latter has been relatively stable, albeit with some episodes of major and long-lasting volatility (cf. chart 3.9). Real exchange rate relations tend to be stable in the long run, as movements in nominal exchange rates are largely offset by inflation differentials between different economic areas.

Slightly more restrictive monetary conditions

The Monetary Conditions Index (MCI) combines the three-month Libor and the trade-weighted nominal external value of the Swiss franc to provide a measure of the monetary conditions affecting the Swiss economy. The MCI is reset to zero immediately after each monetary policy assessment. An increase to positive values (decline to negative values) thus signifies a tightening (loosening) of monetary conditions (cf. box 'The Monetary Conditions Index (MCI)', Monetary policy report, *Quarterly Bulletin* 1/2004, p. 27).

Given a 3:1 weighting of changes in three-month Libor versus changes in the trade-weighted nominal external value of the Swiss franc, in mid-June 2010 the MCI indicated slightly more restrictive monetary conditions in Switzerland (cf. chart 3.10). This is mainly attributable to an appreciation of the Swiss franc against the euro.

Chart 3.8
Exchange rates

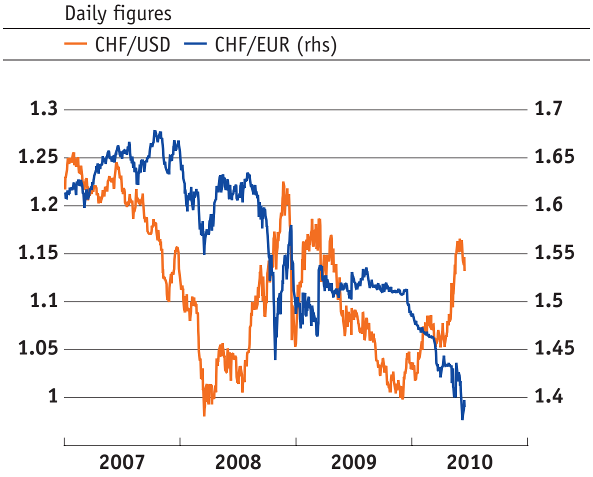


Chart 3.9
Trade-weighted external value of Swiss franc

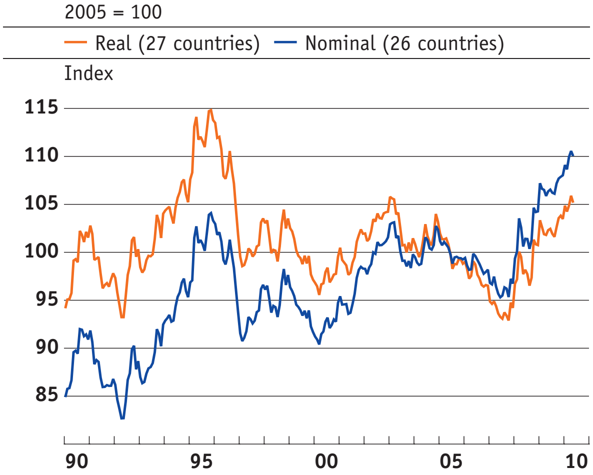
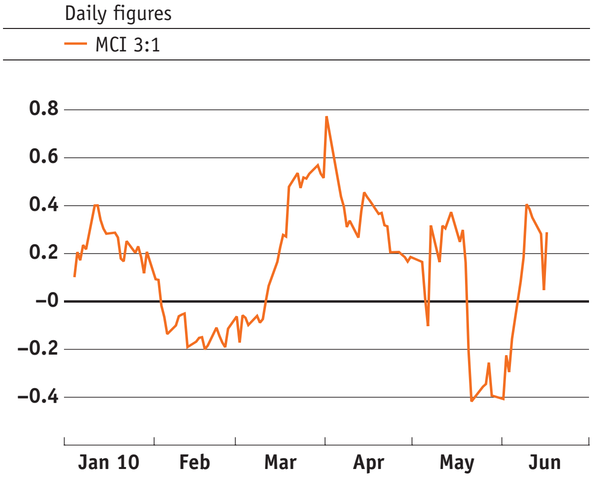


Chart 3.10
MCI nominal



Charts 3.8 and 3.10:
Source: SNB

Chart 3.9:
Source: Bank for International Settlements

3.3 Equity, commodity and real estate prices

Equities, commodities and real estate are investment assets. Their prices are relevant for an analysis of the economic situation for two main reasons. First, fluctuations in these prices alter the level of assets held by households and companies. This in turn affects their creditworthiness as well as influencing consumer and investment behaviour. Second, changes in inflation expectations lead to equities, commodities and real estate being revalued. Commodities are also of interest for a third reason: they are inputs in the production process of many goods. Consequently, their prices affect costs and may thus exert pressure on the general price level.

Volatile equity markets

The euro area debt crisis dominated the second quarter of 2010 and overshadowed stock market developments. The S&P 500 in the US, the Euro-Stoxx 50 in Europe and the Swiss Performance Index (SPI) all fell by about 5%. There were considerable price fluctuations in the period under review. For example, the SPI declined by more than 6% in the first week of May, only to bounce back by more than 4% in a single session (10 May 2010).

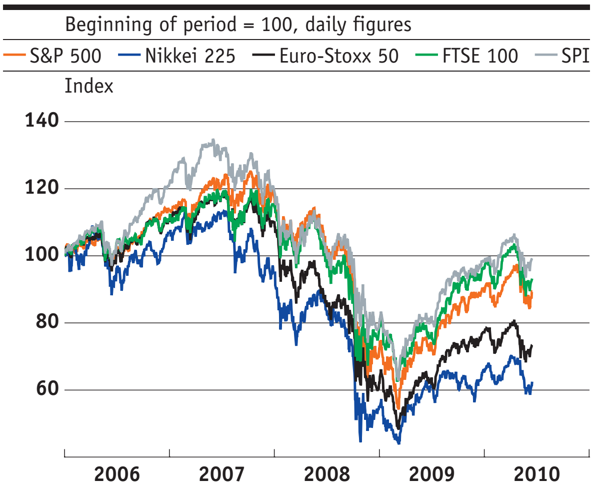
Not all companies and industry sectors were affected to the same degree. Clear differences emerge from an analysis of the individual components of the SPI. It was the large companies that came under pressure first, while small companies fared rather better. This is typical for the initial phase of a global market correction, and explains why large Swiss companies have lost 6% of their value over the last three months, while the smaller caps have declined by just 1% over the same period. Share prices of companies active in the construction sector declined the least, as this industry is currently benefiting from the healthy situation in the real estate market.

Volatility in the equity markets is a measure of market uncertainty. Chart 3.13 shows the expected volatility for the next 30 days based on the Chicago Board Options Exchange Volatility Index (VIX) and the actual volatility measured by the annualised standard deviation in monthly returns on the S&P 500. After displaying a relatively steady downward trend since the middle of last year, the VIX rose sharply at the beginning of May 2010, reaching levels not seen since the end of March 2009. This is a reflection of the uncertainty that has gripped investors recently.

Lower commodity prices

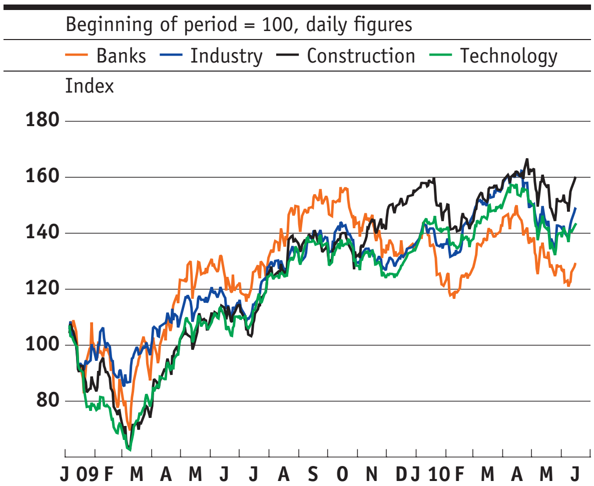
Like equity prices, commodity prices have fallen since the monetary policy assessment of March. Energy prices declined by 7%. In mid-June, the oil price stood at around USD 75 per barrel as opposed to USD 80 in mid-March. The prices of industrial goods declined over the same period by around 5%. By contrast, gold has constantly posted slight price gains this year. In mid-May the gold price reached a record high of USD 1,238 per ounce. One of the reasons for the attractiveness of gold is that it

Chart 3.11
Share prices



Sources: Bloomberg, Thomson Financial Datastream

Chart 3.12
Selected SPI sectors



Source: Thomson Financial Datastream

offers risk-averse investors a safe haven as well as acting as a hedge, including against inflation risks. The latter aspect might suggest that market participants are anticipating greater inflation risks following the large-scale fiscal and monetary measures taken by a number of governments and central banks.

Increase in real estate prices

The prolonged phase of low interest rates has stimulated the Swiss real estate market and helped to dampen the negative effects of the financial crisis. Nominal rents and prices showed a year-on-year increase in the first quarter of 2010. The prices of owner-occupied apartments and single-family homes grew by 6% and 4.8% respectively. Residential rents rose by 3.2%. The rents for new apartments, which are a better reflection of market forces, picked up again slightly (0.8%) after the downward trend of last year. Rents for commercial property also recovered, by 1.1%, having previously fallen for five successive quarters. Rents for office premises likewise rose (3.9%).

Chart 3.13
Volatility of equity returns

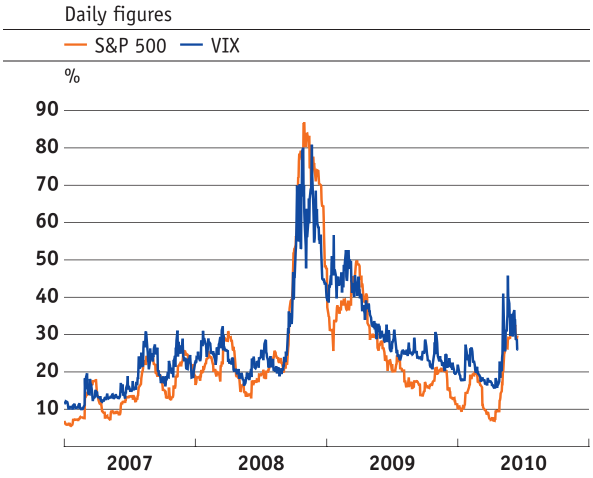


Chart 3.14
Nominal real estate prices and rents

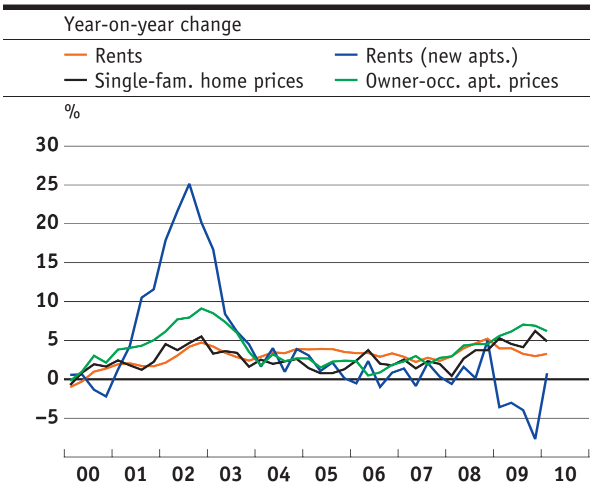


Chart 3.15
Nominal commercial and office rents

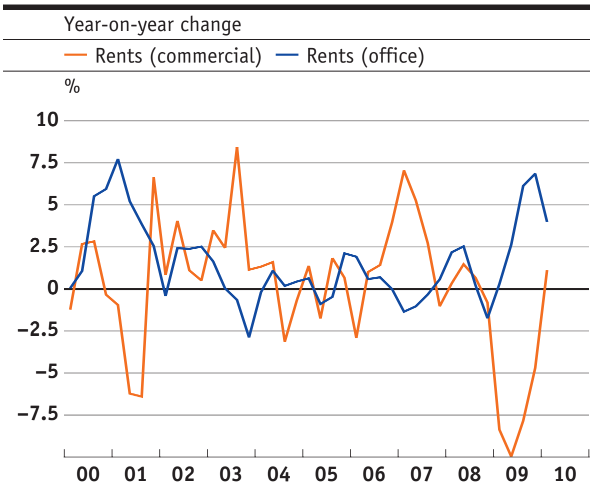


Chart 3.13:
Sources: SNB, Thomson Financial Datastream

Charts 3.14 and 3.15:
Source: Wüest & Partner

3.4 Monetary aggregates

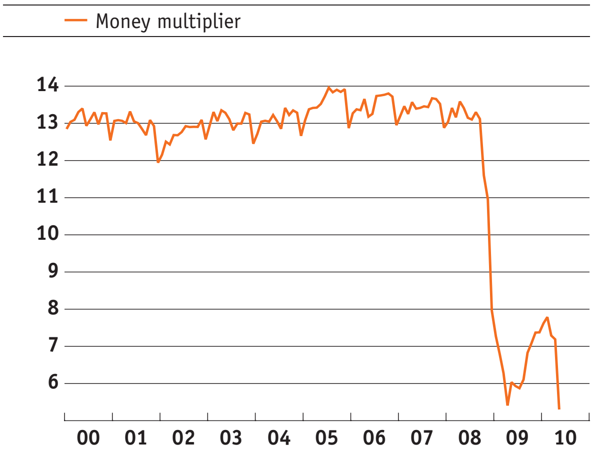
Persistently high level of monetary base

The monetary base, consisting of banks' sight deposits at the SNB plus banknotes in circulation, has increased substantially since the financial crisis, on the one hand due to the unconventional measures taken by the SNB, and on the other due to the ongoing uncertainty. Before the crisis, the ratio of the monetary base to the more broadly defined monetary aggregates was very stable, as is clear from the development of the M3 money multiplier (cf. chart 3.16). The M3 money multiplier is a quotient of the M3 aggregate and the monetary base. It expresses the extent to which, on the basis of the liquid funds available to them, banks are able to multiply the amount of money available to the general public through lending. Since the outbreak of the financial crisis, banks have scaled down their interbank lending activity and are holding greater supplies of liquidity for precautionary reasons. This is reflected in a sharp decline in the money multiplier. As a result of the renewed expansion of the monetary base, the M3 money multiplier has once again headed downwards in recent months. However, a proportion of the banks' sight deposits with the SNB has been directly transferred into money held by the public in recent months, which has in turn increased the broader monetary aggregates.

Expansion of broader monetary aggregates

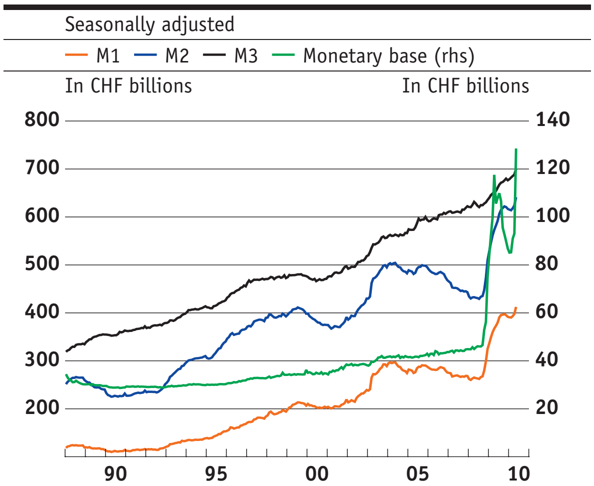
The broad monetary aggregates (M1, M2 and M3) recently exceeded their trend levels (cf. chart 3.17); they are now well above trend and continue to rise steadily. After strong growth in 2003–2005, both M1 (notes and coins in circulation, sight deposits and transaction accounts) and M2 (M1 plus savings deposits) had declined until summer 2007 as a result of rising interest rates. From autumn 2007 onwards, both of these monetary aggregates then stabilised in line with the flatter path of short-term interest rates. Following the recent interest rate reductions, however, M1 and M2 began to grow strongly. In May 2010, M1 was 10.7% above the previous year's level while M2 was 10.2% higher. M3 (M2 plus time deposits), which is typically less volatile than the other aggregates, expanded by 7.1% (cf. table 3.1).

Chart 3.16
Money multiplier M3



Source: SNB

Chart 3.17
Monetary aggregates



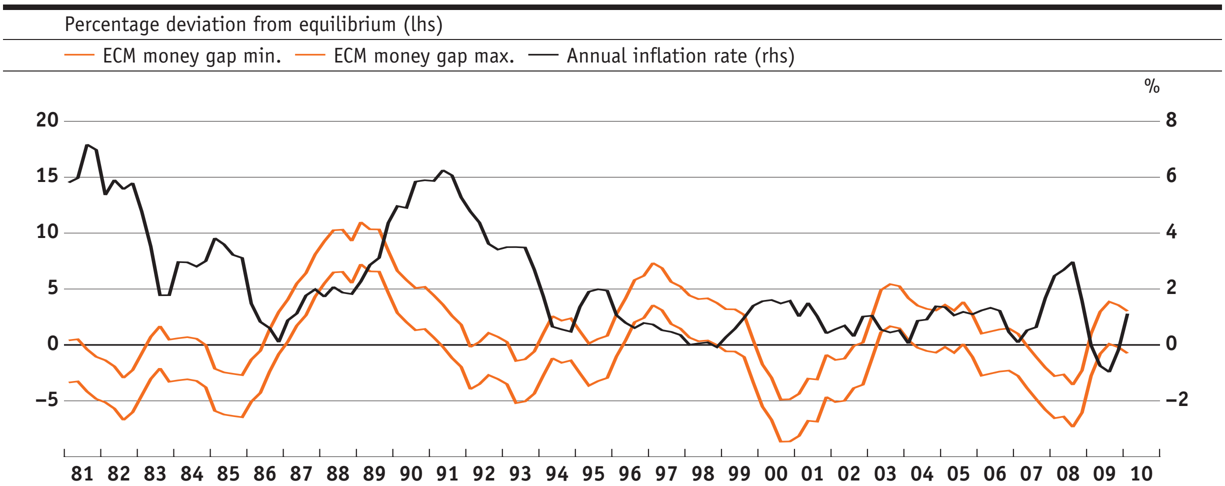
Source: SNB

Monetary aggregates[1] Table 3.1

	2008	2009	2009 Q1	Q2	Q3	Q4	2010 Q1	2010 March	April	May
Monetary base[2]	**49.6**	**99.1**	**92.9**	**110.2**	**103.0**	**90.1**	**87.9**	**91.4**	**93.5**	**128.4**
Change[3]	*12.1*	*99.9*	*102.9*	*142.6*	*127.4*	*46.1*	*–5.4*	*–8.9*	*–20.8*	*21.8*
M1[2]	**273.1**	**377.2**	**355.2**	**375.4**	**383.0**	**395.3**	**399.7**	**400.8**	**407.9**	**416.0**
Change[3]	*1.5*	*38.1*	*33.3*	*41.5*	*48.2*	*30.8*	*12.5*	*9.6*	*8.5*	*10.7*
M2[2]	**443.1**	**589.7**	**554.9**	**586.4**	**599.5**	**617.8**	**627.1**	**628.7**	**637.6**	**648.0**
Change[3]	*–1.6*	*33.1*	*26.5*	*35.0*	*41.5*	*29.8*	*13.0*	*10.3*	*9.1*	*10.2*
M3[2]	**626.0**	**662.1**	**648.3**	**657.9**	**664.7**	**677.4**	**686.0**	**688.0**	**694.3**	**704.0**
Change[3]	*2.2*	*5.8*	*3.7*	*4.5*	*7.5*	*7.3*	*5.8*	*5.7*	*5.4*	*7.1*

1 1995 definition
2 Level in CHF billions
3 Year-on-year change in percent
Source: SNB

Chart 3.18
Money gap and annual inflation rate



Source: SNB

Higher inflation rates in the medium term

One way of assessing potential inflation or deflation risks resulting from an excessive or insufficient supply of liquidity to the economy is to calculate the money gap. This corresponds to the positive (monetary overhang) or negative (money gap) percentage deviation of the M3 aggregate from an equilibrium value, which is calculated on the basis of the transaction volume in the economy and the opportunity cost of holding money (cf. box 'Money supply growth and inflation', Monetary policy report, *Quarterly Bulletin* 1/2005, p. 33). Chart 3.18 shows the calculated money gap in the form of a range that spans one standard deviation, thereby taking account of statistical uncertainty. According to this measure, the money gap closed in the second quarter of 2009. The zero line may still have been within the range in the first quarter of 2010, but the general picture is one of monetary overhang, which could lead to greater inflationary pressure in the medium term.

3.5 Credit

Higher growth in lending

The pace of credit growth increased once again in the first quarter of 2010, at 3.6% year-on-year. Chart 3.19 shows that this development is attributable in particular to other secured loans, which at 2.7% grew for the first time since 2008. Other loans granted in foreign currencies increased for the first time since the end of 2008. This can be explained by the upturn in imports, which are strongly correlated with lending in foreign currencies.

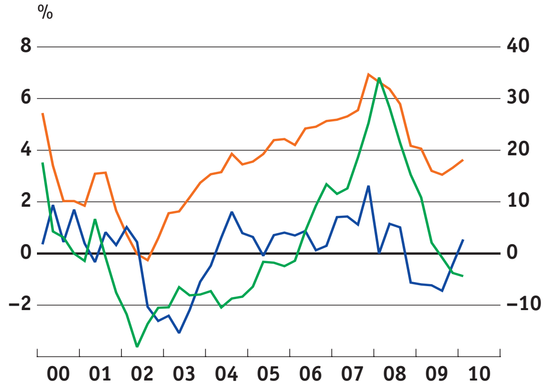
The low interest rate environment has provided a massive stimulus to mortgage lending. Since the substantial decrease in the three-month Libor in October 2008, the growth rate of mortgage claims – which account for four-fifths of all bank lending – has accelerated continuously and strongly. It has recently stabilised at a high level of around 5% (cf. chart 3.20).

Loans to households expanded somewhat more strongly in the first quarter of 2010 than in the previous quarter. Other household loans, in particular, declined much more slowly. The growth rate of mortgages to households was virtually unchanged compared to the previous quarter. By contrast, the growth rate of corporate lending continued to slow, as growth in mortgage lending and in other loans to companies were both lower. Despite the economic downturn, the volume of lending to companies has grown steadily since 2006.

Chart 3.19
Growth in bank loans

Year-on-year change

— Total bank loans — Other loans, secured (rhs)
— Other loans, unsecured (rhs)

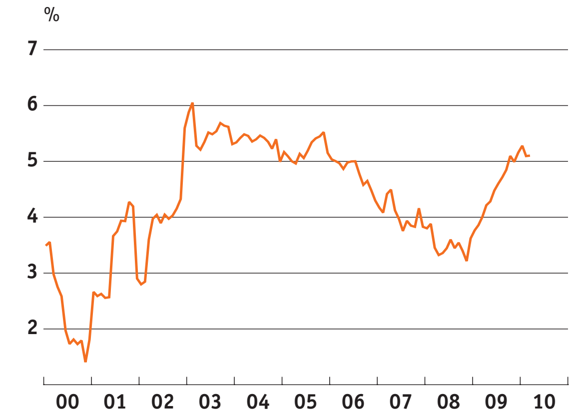


Source: SNB

Chart 3.20
Mortgage claims

Year-on-year change

— Mortgage claims



Source: SNB

Bank loans Table 3.2

Year-on-year change in percent

	2008	2009	2009 Q1	Q2	Q3	Q4	2010 Q1	2010 February	March	April
Total[1]	**5.7**	**3.4**	**4.1**	**3.2**	**3.0**	**3.3**	**3.6**	**3.6**	**3.7**	**4.1**
Mortgage claims[1]	3.5	4.5	3.9	4.3	4.7	5.1	5.2	5.1	5.1	5.1
of which households[2]	3.3	4.7	3.7	4.6	5.0	5.4	5.3	5.5	4.9	4.9
of which private companies[2]	3.8	5.8	5.2	5.8	6.2	6.1	5.7	5.6	5.5	5.3
Other loans[1]	14.8	–0.7	4.7	–0.9	–3.1	–3.2	–2.1	–2.2	–1.4	0.5
of which secured[1]	1.2	–5.4	–6.0	–6.2	–7.2	–2.1	2.7	6.2	–0.0	–0.1
of which unsecured[1]	24.2	2.0	10.9	2.1	–0.8	–3.8	–4.4	–6.0	–2.2	0.9
of which in CHF[1]	20.3	1.5	6.2	1.2	0.4	–1.7	–3.7	–4.0	–3.0	–1.6
of which in other currencies[1]	–1.8	–10.0	–3.2	–9.7	–16.5	–9.8	6.5	8.5	6.7	10.1

1 Monthly balance sheets
2 Credit volume statistics
Source: SNB

4 SNB inflation forecast

Monetary policy affects output and prices with a considerable time lag. In Switzerland, monetary policy stimuli have their maximum effect on inflation after a period of approximately three years. For this reason, the SNB's monetary policy is guided not by current inflation, but by the inflation rate to be expected in two to three years if monetary policy were to remain unchanged. The inflation forecast published four times a year is one of the three key elements of the SNB's monetary strategy, together with its definition of price stability and the target range for the three-month Libor. The inflation forecast is derived from the analysis of different indicators, model estimates and the assessment of any special factors. It maps the future development of prices on the assumption that the three-month Libor remains constant over the forecasting period.

4.1 Assumptions for global economic developments

In addition to domestic factors, exogenous effects also have a major influence on Swiss inflation rates. Various models used in drawing up the SNB's inflation forecast take this into account by embedding the expected outlook for Switzerland in an international economic setting. The assumptions with regard to the international economic scenario reflect what the SNB considers to be the most likely development in the global economy over the next three years. Table 4.1 shows the major assumptions for this scenario, as compared to those for the March 2010 forecast.

Economic recovery continues

While the longer-term assumptions for the global economy are unchanged on the previous quarter, a number of minor adjustments were made for 2010. An annual growth rate of 3.2% is now expected for the US in 2010, whereas the growth forecast for Europe remains essentially unchanged at 1.1%. Although the rate of inflation for 2010 is now forecast to be somewhat higher than was assumed in the previous quarter, at rates below 2%, inflation in the industrialised countries remains modest over the next few years. Following the recent turbulence in the bond markets, it is assumed that the normalisation of monetary policy by the Fed and the ECB will now be delayed a while longer.

For oil, a price of USD 72 per barrel is assumed for the next few quarters, and thereafter USD 83 per barrel. Given the current weakness of the euro, the dollar/euro exchange rate for the forecast period is set at almost 10% lower than in the previous quarter at 1.25 USD/EUR.

Inflation forecasting as part of the monetary policy strategy

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 policy action in a quarterly inflation forecast. This forecast, which is based on the assumption of a constant short-term interest rate, shows how the SNB expects the CPI to move over the next three years. Third, the SNB sets its operational goal in the form of a target range for the three-month Swiss franc Libor. The target range provides the SNB with a certain amount of leeway, enabling it to react to unexpected developments in the money and foreign exchange markets without having to change its basic monetary policy course.

Assumptions for inflation forecasts

Table 4.1

June 2010

	2010	2011	2012
GDP US[1]	3.2	2.8	3.5
GDP EU15[1]	1.1	2.2	2.9

	Short term	Long term
Exchange rate USD/EUR[2]	1.25	1.25
Oil price in USD/barrel[2]	72	83
Oil price in CHF/barrel[3]	82	94

March 2010

	2010	2011	2012
GDP US[1]	2.9	2.6	3.4
GDP EU15[1]	1.0	2.2	2.9

	Short term	Long term
Exchange rate USD/EUR[2]	1.38	1.38
Oil price in USD/barrel[2]	76	75
Oil price in CHF/barrel[4]	81	80

1 Change in percent
2 Level
3 Level, exchange rate on 17 June 2010
4 Level, exchange rate on 11 March 2010
Source: SNB

4.2 Inflation forecast and monetary policy decision

The SNB is maintaining its expansionary monetary policy. Consequently, it is leaving the target range for the three-month Libor unchanged at 0.00–0.75% and intends to hold the Libor in the lower part of the target range, at around 0.25%.

The recovery of the global economy continues and the Swiss economy is benefiting from it. Although the weakening of the euro with respect to the Swiss franc is dampening export activity, this activity is being supported by growth in foreign demand. The domestic sector is still performing favourably. For 2010, the SNB is now expecting real GDP growth of about 2.0%. In view of these pleasing developments, the deflation risk in Switzerland has largely disappeared.

At the same time, uncertainty has increased since the last monetary policy assessment. The latest tensions on the financial markets, particularly with regard to the public finances of some individual countries, have increased the downside risks. Should these downside risks materialise and, via an appreciation of the Swiss franc, lead to a renewed threat of deflation, the SNB would take all the measures necessary to ensure price stability.

The SNB's conditional inflation forecast for 2010 and 2011 has increased slightly since March. It remains unchanged for 2012. Assuming an unchanged three-month Libor of 0.25%, average inflation for 2010 is expected to amount to 0.9%, for 2011 to 1.0% and for 2012 to 2.2%. This forecast shows that short-term price stability is guaranteed. It also shows that the current expansionary monetary policy cannot be maintained over the entire forecast horizon without compromising medium and long-term price stability. The forecast is still associated with very considerable uncertainties.

Global economic outlook

The upturn in the global economy continues, supported by economic policies which remain very accommodating. The emerging economies, in particular, are recording high GDP growth rates. The US has seen a further recovery of domestic demand and the labour market. In Europe, restrained expenditure on the part of households and companies means that economic activity remains subdued. However, positive movements in new orders and the indices for European manufacturing suggest stronger economic growth.

Global growth forecasts for 2010 and 2011 have been revised upwards. The smallest revision was that for the European economy. On the one hand, more restrictive fiscal policies are likely to hold back growth in Europe. On the other hand, however, growth is supported by the depreciation of the euro and low capital market interest rates in the major EU economies.

However, further developments are associated with considerable uncertainties. The biggest risk for the global economy is the continued increase in tension on financial markets, particularly due to the public finances of some individual countries. This could affect the real economy via a loss of confidence on the part of households and companies as well as through an additional burden on banks. At the same time, there are upside risks for the global economy. Domestic demand in the emerging economies and the US could, once again, prove surprisingly robust. In Europe, export activity could increase more strongly than expected.

Swiss economic outlook

In Switzerland, the economic recovery has continued. In the first quarter of 2010, real GDP rose by 1.6% on an annualised basis, and was 2.2% above the year-back quarter. Economic activity was mainly driven by household demand and exports of goods and services.

The firming of the economic recovery led to a renewed rise in the demand for labour, and short-time work fell significantly. Since the beginning of the year, seasonally adjusted unemployment has also fallen slightly. Leading indicators for labour demand are pointing upwards. The SNB anticipates a gradual improvement in the labour market. Despite the uncertainties in connection with public finances in many countries, global economic activity is still having a supportive effect. Consequently, capacity in the export sector is likely to be increasingly better utilised. Consumption and construction investment will be supported by the improved labour market outlook and the expansionary monetary policy.

The SNB expects real GDP to increase by approximately 2% for 2010 as a whole.

Monetary and financial conditions

The expansionary monetary policy is reflected in monetary conditions. Since last November, the three-month Libor had been held at the desired level of 0.25%. However, from mid-May it began sinking rapidly and is currently well below that level. The fall in the rate is a sign that the banking system is currently holding a very large amount of liquidity.

Interest rates on the capital market have also fallen. In June, yields on 10-year Swiss Confederation bonds fell to a record level. The low capital market interest rates reflect a higher demand for Swiss government bonds. In addition, long-term inflation expectations continue to be firmly anchored.

Private companies are also benefiting from low interest rates on capital markets. Credit risk premia have fallen further and rates of interest on bank loans are also at a very low level.

Since the last monetary policy assessment, the Swiss franc has appreciated against the euro. It has simultaneously depreciated against the US dollar. As a result, the trade-weighted external value of the Swiss franc has only slightly increased.

The expansionary monetary policy is also reflected in the monetary aggregates. Thus, the monetary base rose to a record CHF 128.6 billion in May, and growth of the monetary aggregates is continuing at a high level. For example, M2 was growing at 10.2% in May and M3 at 7.1%. Credit growth also increased further. After slowing to 2.7% in September 2009, the rate of growth increased to 4.1% in April. This acceleration is attributable to loans not secured by mortgages, which have been growing since April. Mortgage loans grew at a rate of over 5% in April.

There are still no signs of any credit crunch in the survey on bank lending conditions conducted regularly by the SNB. The survey even provides initial indications of a possible trend reversal. During the financial crisis, a number of banks had reported a slight tightening in their loan conditions. However, in the first quarter of 2010, a few banks (for the first time) reported an easing.

We continue to observe a considerable increase in loan volumes for residential mortgages. This increase, along with movements in real estate prices, represents a risk that demands the full attention of the SNB.

Development of the SNB's balance sheet as a consequence of monetary policy

As is the case at other central banks, the balance sheet has undergone a considerable expansion and change in its composition since the beginning of the financial crisis. By May 2010, it had nearly tripled in size to over CHF 300 billion.

This extraordinary development in the balance sheet is a direct consequence of monetary policy. The SNB had lowered interest rates sharply during the financial crisis, but by the spring of 2009, the traditional interest rate instrument was practically exhausted. Consequently – with an incipient threat of deflation – the SNB adopted unconventional measures to loosen the monetary conditions further. By carrying out long-term repo transactions and foreign exchange swaps, acquiring Swiss franc bonds issued by private sector borrowers and purchasing foreign currency, the banking system was supplied with large amounts of liquidity. In the past few months, foreign exchange purchases, in particular, have been an effective instrument for averting deflation risks. While the liquidity created by purchasing foreign exchange and Swiss franc bonds is of a permanent nature, liquidity resulting from repos and currency swaps is temporary. It flows back automatically when transactions are not renewed. This has occurred to a large extent in the meantime.

The considerable expansion in the SNB's balance sheet is therefore primarily attributable to the increase in foreign exchange reserves. These have more than quadrupled to just over CHF 230 billion as a result of the interventions since the beginning of the financial crisis. From now on, the SNB will also be publishing information on current foreign exchange reserves on its website (www.snb.ch) at the beginning of each month.

The high level of foreign exchange reserves will inevitably increase currency risk and mean that debtors are concentrated in a few major countries. These risks ultimately represent the burden the SNB has assumed in order to protect the Swiss economy from the threat of deflation, in line with its mandate. Balance sheet risks have risen overall. The SNB is now reaping the benefits of having continuously increased its allocation to provisions in previous years. This gave it the room for manoeuvre it needed for measures in times of crisis. The higher allocation to provisions decided on recently has further strengthened the SNB's capital base. The SNB has sufficient equity capital to withstand even large losses.

In the long term, a large part of the liquidity that has been created is excess liquidity. The SNB has the necessary instruments at its disposal to withdraw this liquidity.

Inflation forecast chart

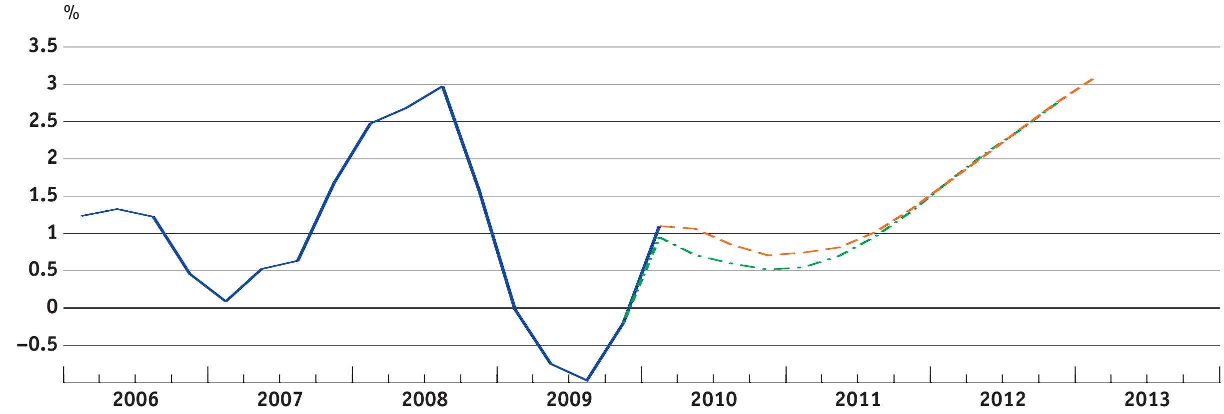
The (dashed) red curve on the chart represents the new, conditional inflation forecast. It covers the period from the second quarter of 2010 to the first quarter of 2013 and shows the future inflation development on the assumption of the three-month Libor remaining constant at 0.25% over the entire forecasting horizon. For purposes of comparison, the (dash-dotted) green curve shows the inflation outlook published in March, which was also based on the assumption of a three-month Libor of 0.25%.

The new forecast shows unchanged inflation prospects. However, new data have led to a slight upward revision in the inflation forecast in the short term, so that inflation arrives at nearly 1% in the second quarter of 2010. Since the oil price in the first half of 2009 was lower than in 2010, this level is due to a base effect attributable to oil prices. Thereafter, inflation is projected to remain below 1% until the second quarter of 2011. On the one hand, the base effect attributable to oil prices weakens. On the other hand, production remains below its potential. The forecast shows that – should the Libor remain at the level targeted today – inflation accelerates from the third quarter of 2011 onwards. At 2.2%, the inflation forecast for 2012 is the same as in the March forecast. The forecast shows that the current expansionary monetary policy cannot be maintained over the entire forecast horizon without compromising medium and long-term price stability. The forecast is still associated with very considerable uncertainties.

Chart 4.1
Conditional inflation forecast of March 2010 with Libor at 0.25% and of June 2010 with Libor at 0.25%

Percentage change in national consumer price index from previous year

Inflation — Forecast March 2010 (0.25%) — Forecast June 2010 (0.25%)



Source: SNB

Observed inflation in June 2010

Table 4.2

	2007				2008				2009				2010				2007	2008	2009
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Inflation	0.09	0.52	0.63	1.68	2.47	2.68	2.97	1.58	−0.02	−0.75	−0.97	−0.20	1.10				0.7	1.3	1.9

Conditional inflation forecast of March 2010 with Libor at 0.25% and of June 2010 with Libor at 0.25%

	2010				2011				2012				2013				2010	2011	2012
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Forecast March 2010, Libor at 0.25%	0.95	0.71	0.60	0.52	0.55	0.70	0.96	1.30	1.70	2.07	2.39	2.75					0.7	0.9	2.2
Forecast June 2010, Libor at 0.25%		1.06	0.85	0.71	0.74	0.81	1.02	1.33	1.69	2.04	2.40	2.76	3.07				0.9	1.0	2.2

Source: SNB

The economic situation from the vantage point of the delegates for regional economic relations

Second quarter of 2010
Summary report for the attention of the Governing Board of the Swiss National Bank for its quarterly assessment of June 2010

The SNB's delegates for regional economic relations are constantly in touch with a large number of enterprises from different industries and economic sectors. Their reports, which contain subjective evaluations of these companies, are an important additional source of information for assessing the economic situation. The following pages contain a summary of the most important results of the talks held in April and May 2010 with some 230 company representatives on the current and future economic situation.

Summary

The favourable economic trend continued in the second quarter. Compared to the previous year, it was the recovery in manufacturing that was most evident. But in a quarter-on-quarter comparison too, manufacturing generated the strongest sales momentum. However, broad-based growth was also apparent in the construction industry and in the services sector, and the demand for labour gradually picked up. Companies are nonetheless still very reluctant to expand their workforces.

As a result of the stronger demand, industry representatives are looking to the immediate future with confidence. Expectations for the next few months point to positive turnover growth in all three economic sectors. The under-utilisation of production capacity in the Swiss economy is therefore likely to decrease further.

Apart from the favourable development of business activity, however, increasing concerns were also expressed about the complex economic situation. The state of public finances around the world and the impact this situation could have on financial and foreign exchange markets, as well as on aggregate demand in the affected countries, are creating considerable uncertainty. In the view of a number of representatives, the extremely expansionary monetary policy being pursued around the world carries inflation risks and is sparking fears of sudden interest hikes. In the manufacturing industry, in particular, volatile commodity prices and indeed the availability of commodities generally is a source of concern. There are considerable discrepancies in the reactions of the industry representatives with regard to the weakening of the euro. This phenomenon is a problem for the hotel industry and for companies which generate the majority of their sales in the euro area, or which are exposed to strong competitive pressure from imports. In many cases, the negative effects of the depreciation of the euro can be cushioned by natural hedging strategies and a diversified client structure. The improved competitive strength of the euro area may also feed through into greater order volumes in Switzerland. In some industries the weakening of the euro is seen as beneficial, as it will lead to lower purchase prices.

1 Business activity

Manufacturing

The economic situation in the manufacturing industry saw further improvement in the second quarter. Turnover increased strongly and reached a significantly higher level overall than in the previous year. The positive turnover development was broad-based, with only a few companies posting turnover figures below last year's level. Although starting from very different levels, the textile and clothing industry, chemical industry, pharmaceutical industry, watchmaking industry and metals industry have all recovered with an unusual degree of strength within the course of the year.

Domestic demand was in important growth support. Demand from emerging markets in Asia, but also in South America, remained exceptionally vigorous. The euro area also made a significant contribution to demand.

Technical capacity utilisation increased further as a result, and demand for labour picked up. This in turn led to a further reduction in short-time work.

Stocks of finished products have been sharply scaled down over the last few months. In the second quarter, stock levels were regarded as adequate in all sectors. Future demand stimuli are therefore likely to result in a rise in production.

Construction

Starting from a very good level, upward momentum in construction continued, albeit at a slower pace. In a year-on-year comparison, industry representatives recorded a clear increase in turnover, although the turnover rise was limited when compared to the previous quarter. Growth stimuli have primarily been emanating from the residential and finishing areas, as well as civil engineering. A number of industry representatives expressed their concern over the real estate market risks that result from the low interest rate policy.

Services

Turnover in the services sector rose significantly between the first and second quarter of 2010. As a result, they clearly surpassed the previous year's level. The positive development was more broadly based than in the first quarter. Posting a very strong quarter-on-quarter increase in turnover, wholesale generated the strongest momentum. Robust turnover growth was also observed in the retail trade, the hospitality industry and in IT. The financial industry saw the weakest growth, with a number of banks and insurers experiencing slight declines in business volumes.

2 Capacity utilisation

As in previous quarters, the degree of technical capacity utilisation in manufacturing differed greatly from industry to industry, as well as from company to company. On average, it remained below the level viewed by companies as normal, despite further clear recovery. Particularly striking was the under-utilisation of capacity in the mechanical engineering industry. However, the phenomenon also remained pronounced in the chemical, watchmaking, clothing, textiles and precision instruments industries, despite the favourable development of business activity in these sectors in recent months. The metals sector showed a very mixed picture. Capacity utilisation was at a normal level in the food industry, while it was assessed as normal to high in the pharmaceutical industry.

The construction sector saw a slowing of growth from the high level it had already attained. On average, technical capacity utilisation in this sector was considerably above the normal full employment level in the second quarter, too. Companies currently experiencing an unsatisfactory level of capacity utilisation were very much the exception.

In the services sector a certain degree of under-utilisation of capacity persisted, although this was less marked than at the beginning of the year. Despite strong sales growth, capacity utilisation in wholesale and in certain areas of the hotel industry was clearly unsatisfactory. This phenomenon was also evident in the corporate consulting and recruitment areas, in banks, and in clothing and shoe retail.

3 Demand for labour

Some redundancies are still occurring in certain parts of the manufacturing industry. In general, however, the recovery in business activity has gone hand in hand with an increase in demand for labour. This has not led to an increase in employment, however. Instead, existing short-time work measures have been withdrawn and previous labour productivity losses made good. Overall, workforce levels appeared to be in line with company requirements. The pharmaceutical industry is the only one in which a certain shortage of labour supply was evident.

In the construction sector too, the great majority of companies expressed themselves happy with the current level of employment, although in the finishing area there were occasional reports of a labour supply shortage, and people were often being recruited on a temporary basis to fill gaps.

In the services sector, the employment level was considered generally adequate to slightly inadequate. A need to hire additional staff was mainly expressed in the wholesale and transport areas.

In general, the difficulty of recruiting new staff was assessed as lower than usual. Exceptions in this respect were the construction sector and the chemical and pharmaceutical industry, with highly qualified staff in the laboratory, development, and management areas being particularly difficult to source.

Per capita labour costs in most sectors were comparatively stable, with the exception of the food, chemical, and the pharmaceutical industries. In these areas there was a noticeable year-on-year increase in real wages. Wages were also trending slightly upwards in the construction sector and the services sector, particularly in the IT industry, transport, and trade.

4 Prices, margins and earnings situation

The higher production and turnover volumes improved profit margins, as fixed costs were more fully absorbed. However, margins in the manufacturing industry were viewed as significantly weaker than was customary, as had already been the case at the beginning of the year. Margins are expected to remain under pressure in the short term. On the one hand, companies are expecting an increase in purchase prices as stronger global demand leads to higher commodity prices (including cotton, oil and oil-related products, chemicals and metals), although the appreciation of the Swiss franc is likely to dampen this phenomenon to a certain extent. On the other hand, sale prices are expected to remain stable, on the whole. A number of companies from various sectors will try to push through price increases, but this will be dependent on specific company-related and market factors.

Anticipated increases in cement and steel prices are likely to lead to a deterioration of profit margins in the construction sector, as an increase in sale prices is only envisaged in a few cases. The depreciation of the euro is leading to stronger competition with foreign providers.

On average, representatives from the services sector considered the level of their profit margins as normal to slightly unsatisfactory. The overall result was negatively influenced by the clearly unsatisfactory interest rate margins of banks – with competition in the mortgage lending business being particularly fierce – and by the wholesale sector.

5 Outlook

The improvement in sentiment in the manufacturing industry, which has been evident since the fourth quarter of 2009, has continued. The majority of companies are anticipating a rise in turnover and higher capacity utilisation. The employment outlook for the next six months has also improved, and a slight rise in employment is now anticipated. In the January/February interviews, industry representatives were anticipating no change in employment levels. A return to increased labour productivity remained a widespread goal.

Companies remain optimistic in the construction industry, and are anticipating a further slight increase in turnover. In the residential and finishing areas, companies are anticipating a stabilisation of capacity utilisation at the current high level. A number of companies in the civil engineering sector are expecting a rise in capacity utilisation. No industry representatives are anticipating a decline in capacity utilisation. Employment is likely to remain stable.

In the services sector, expectations of business activity over the next six months have improved. Particularly optimistic appraisals of sales prospects were evident in wholesale and retail, in automotive sales, and in the IT sector. Consequently, representatives from the services sector anticipated a further increase in capacity utilisation and a slight rise in employment.

However, considerable uncertainties persist regarding the prospects for the European economy, potential exchange rate movements, and the future interest rate situation. Investment plans were therefore still rather on the cautious side, just as in the first quarter of 2010. Both equipment and construction investment are likely to rise only very slightly over the next 12 months.

Opening speech by the President of the Bank Council at the SNB General Meeting of Shareholders

Adjusting the policy on provisions
Hansueli Raggenbass
Berne, 30 April 2010

Dear Shareholders
Ladies and Gentlemen
Dear Guests

In December 2009, the SNB announced that over the next few years it would be increasing the allocation to its provisions. By adjusting its policy on provisions, the National Bank aims to strengthen its equity capital. I would like to use today's occasion to explain to you the background and the significance of this decision.

Swiss National Bank equity capital

The provisions constitute the most important part of the SNB's equity capital. They are accrued from retained profits and have essentially two functions. First, they serve to finance the currency reserves. According to the National Bank Act, the SNB is required to accrue provisions that allow it to maintain its currency reserves at a level that is adequate for its monetary policy. Second, the provisions have the traditional function of equity capital: they must be large enough to absorb even exceptional losses.

Equity capital also consists – along with the provisions – of the distribution reserve. While the level of the provisions reflects the *targeted* equity capital, the distribution reserve is of a temporary nature, in that it is used to smooth the annual SNB profit distribution payments to the Confederation and cantons. The SNB tempers the effects of large fluctuations in the annual results by allocating a portion of the distributable profits in good years to the distribution reserve. These funds are available for distribution at a later date. In this way, in leaner years the SNB can resort to the distribution reserve and thereby continue to carry out the agreed profit distribution.

Increase in assets

Why was it necessary to adjust the policy on provisions? As you know, since the onset of the financial and economic crisis the SNB's balance sheet has almost doubled. Higher currency reserves account for a major part of this. In 2009 alone, these reserves increased by more than CHF 50 billion, due largely to the SNB's purchase of foreign exchange to counter the threat of deflation. In the same year, the value of gold climbed by more than CHF 7 billion. Furthermore, the loan to the stabilisation fund set up by the SNB to take over illiquid assets from UBS lengthened the SNB balance sheet by a further CHF 20 billion.

While the stabilisation fund will be gradually phased out, the additional currency reserves are set to remain on the balance sheet for some while to come. In the past, the SNB's currency reserves have tended to be relatively low, owing to the fact that over the years the level of reserves had not kept pace with the extensive and steadily growing integration of the Swiss economy and financial centre into the global economic system.

Although it was not necessary to tap into the currency reserves during the recent crisis, their presence nevertheless contributed to the SNB's credibility and ability to act. The crisis demonstrated the importance of being equipped to deal with the unexpected. Sufficient currency reserves are essential if the National Bank is to be able to act rapidly and autonomously.

Provisions unchanged

The additional foreign exchange reserves, the valuation gains on gold, and the stabilisation fund together constitute a significant increase in risky assets on the balance sheet. Because there has been no corresponding increase in the provisions to offset this, the provisions to risky assets ratio has deteriorated significantly. This applies also more generally to the total equity capital. Taking into account the distribution reserve, the SNB's equity capital at the end of 2009 amounted to approximately CHF 63 billion. Almost a third of this was made up of the distribution reserve. The reserve, as part of the equity capital, also serves to absorb losses. However, once the existing distribution reserve has been depleted, the equity capital will consist almost solely of the provisions. In the absence of other measures, the SNB would then be confronted with a provisions to risky assets ratio which would, again, have deteriorated. Its ability to absorb even substantial losses using its equity capital would therefore be less assured.

Adjusting the rule for allocation to the provisions

To avoid this predictable scenario, the SNB has decided to gradually increase its provisions. In the past, the SNB has increased these provisions year-on-year at a rate equivalent to average nominal GDP growth for the preceding five years. This transparent approach has proved its worth, and we will continue to adhere to the principle of allocating the provisions according to a fixed rule and taking account of nominal GDP growth. What is new, however, is that henceforth, the provisions will increase at double this growth rate. Thus the allocation for 2009, instead of being CHF 1.5 billion as per the original rule, now amounts to CHF 3 billion. The adjustment to the allocation rule – seen from the current perspective – applies to the financial years 2009 to 2013.

Influence on profit distribution

This measure affects future distributions in two opposing ways. In the short term, the additional provisions will not be available for distribution. The measure therefore reduces the potential for distribution. In the long term, however, the increase in assets will contribute to a rise in earnings potential. Moreover, as the higher level of assets will be financed in the future by more equity capital, there will also be less interest on borrowed capital, and this, too, will increase the potential for distribution.

The current agreement on profit distribution between the Swiss National Bank and the Federal Department of Finance still applies. It envisages until 2017 an annual distribution to the Confederation and cantons of CHF 2.5 billion, and from the current perspective, it appears likely that this distribution will be met. I must, however, explicitly stress the qualification 'from the current perspective'. As we have always made clear, the SNB earnings can fluctuate substantially from one year to the next. They are particularly susceptible to movements in exchange rates and the gold price, and major losses can never be completely ruled out. In the event of serious losses, profit distribution could be affected. The agreement caters for this scenario with different measures, which, depending on the level of the distribution reserve, range from a review of the agreement to a reduction or suspension of the distribution. Irrespective of this, the agreement is due to undergo a routine review in 2013.

Concluding remarks

The SNB balance sheet remained largely robust even during the financial and economic crisis.

On the one hand, this is due to the foresight and long-term thinking underpinning the profit distribution agreement. When the agreement was revised in the early nineties, it was determined that each year a portion of the annual profits would be allocated to the provisions. This has ensured a consistent increase in the SNB's equity capital despite the rise over the years in the distributions. The decision taken at that time to couple the accrual of equity capital with the distribution of profit has since proved its worth.

On the other hand, the SNB has also benefited from the exceptional rise in recent years in the price of gold. That we have, at CHF 19 billion, a very solid distribution reserve at our disposal is due almost solely to this surge in the gold price.

Therefore I want to point out that favourable market conditions as well as responsible management have contributed towards the healthy state of our balance sheet. However, as has been amply demonstrated, we cannot afford to rely on favourable market conditions. The SNB balance sheet is in its current state by virtue of events which, in the time leading up to their occurrence, seemed very unlikely indeed. Nobody can predict what surprises the next few years have in store for us. It is our duty, therefore, to equip ourselves against the possibility of serious shocks.

The fact is the current resilience of our balance sheet depends to a large extent on the size of the distribution reserve. Once the existing reserve has been depleted, should major shocks subsequently occur, those shocks would have to be absorbed by the provisions alone.

Against this backdrop, the Bank Council and the Governing Board have decided to adopt a forward-looking approach and begin taking the necessary steps to ensure the long-term strength of the balance sheet. Increasing the allocations to the provisions will help to ensure that the SNB balance sheet continues to meet the high demands on its robustness even after the distribution reserve has been depleted. It means that the SNB will continue to have at its disposal the currency reserves necessary for the fulfilment of its responsibilities, and it will ensure that in future crises, it still has the leeway it needs to carry out its monetary policy.

Thank you for your attention.

Speech by the Chairman of the Governing Board at the SNB General Meeting of Shareholders

Philipp M. Hildebrand
Berne, 30 April 2010

Mr President of the Bank Council
Dear Shareholders
Dear Guests

I. The recession has run its course

A little over a year ago, we were still in the midst of the worst financial crisis in post-war history. True, we were able to discern the first tentative signs that the tide might be turning, but the outcome was still highly uncertain. Today, the worst is behind us. We can look to the future with a measure of optimism. Yet the challenges that the crisis has left in its wake are still substantial.

While 2008 will go down in history as an annus horribilis for the financial markets, 2009 was dominated by the gloomy economic environment. The global economy contracted for the first time since the Second World War. The huge loss of confidence on financial markets in autumn 2008 caused economic activity to nosedive. Indeed, one of the most striking features of this recession was the speed and severity with which economic growth dropped in a number of countries.

Faced with such a dramatic situation, governments and central banks across the world found themselves having to swiftly implement innovative support and rescue measures on an unprecedented scale, in a bid to stabilise the global financial system and limit the economic downturn.

The decisive economic policy intervention was a key contributor in calming the markets, halting the downward spiral and clearing the way for economic recovery.

As a small open economy, Switzerland could not avoid being drawn into the global recession. The sharp fall in economic activity, which had begun in the second half of 2008, continued in the first half of 2009. Around the middle of the year, the trough was reached and the economy began to grow again. Over the year 2009 as a whole, GDP dropped by 1.5%, the largest decline since 1975.

Nevertheless, Switzerland has so far weathered the effects of the financial crisis better than most industrialised economies. This may come as a surprise, given the importance of our financial centre. A deciding factor behind the comparative mildness of the recession in Switzerland was private consumption, which proved to be an important buttress of growth. Moreover, no major distortion was observed in the property market, and banks did not restrict access to lending. Last but not least, the rapid and decisive expansion of monetary policy also played a supporting role.

Despite this positive bill of health compared to other countries, the crisis has clearly left its mark on Switzerland too. For example, unemployment has risen markedly and manufacturing is suffering from the continuing low level of technical capacity utilisation. Finally, the events of the past two and a half years have shown exactly how vulnerable our country is in the event of a banking crisis, particularly one involving large banking institutions.

I would therefore like to begin by outlining a few of the Swiss National Bank's thoughts on the 'too big to fail' issue. I will then briefly review our monetary policy in 2009, and describe the challenges facing the SNB in this area. In the final part of my speech, I will address the recent discussion surrounding the appropriate level of inflation.

II. The 'too big to fail' issue

Without appropriate countermeasures, Switzerland would remain very exposed to any fallout from a banking crisis. True, the big banks have substantially cut their balance sheets, something which the SNB explicitly welcomes. Yet the size of those balance sheets still represents a multiple of our country's GDP. And the big banks continue to hold a dominant position in domestic lending and investment business. They are thus still 'too big to fail'.

In a comparable crisis, the government and the SNB would once again face an impossible choice: either they accept the devastating consequences of a big bank failure for the Swiss economy, or they take on the considerable financial risk of stabilisation measures. In the worst case scenario, it is even conceivable that the funds needed to provide such support would exceed our country's financial resources.

The lion's share of the burden from the measures taken to stabilise the Swiss financial centre was borne by the SNB. For this reason, it has been a staunch advocate of addressing and remedying the 'too big to fail' issue. The SNB has always stressed the need for a political decision in this regard.

In November 2009, the Federal Council appointed a commission of experts, whose mandate is to formulate possible approaches for resolving the 'too big to fail' issue. The SNB is represented by its Vice President, Thomas Jordan. The commission published its interim report last week. The report proposes measures in the areas of capital, liquidity, risk diversification and organisational structure. These measures are designed, first, to be preventative, reducing the likelihood of failure by a systemically important institution. Second, they should minimise the cost to the economy as a whole, in the event that a failure nevertheless occurs. The aim is to remove the need for renewed state intervention in the event of a crisis.

The report by the commission of experts represents an important milestone in the 'too big to fail' debate. The SNB supports the direction proposed by the commission. It shares the commission's view that it is necessary to establish a legal basis which will allow special requirements to be imposed on systemically important banks. In the SNB's opinion, the draft legislation proposed by the commission is a good basis for alleviating the 'too big to fail' issue. In our view it is important to launch the legislative process as soon as possible after the commission's final report has been completed. The key elements of these special requirements, such as minimum and maximum capital provisions or the permissible organisational restrictions, will have to be set out in detail in a Federal Council Ordinance.

It is essential that the capital requirements are designed to be progressive. This progressive nature should incentivise the banks to reduce their systemic importance. The capital requirements must be sufficiently strict to motivate the banks to bear the risks themselves which, up to now, they have been able to pass on to the general public.

Moreover, higher capital requirements can provide an important foundation for a future-oriented business model geared towards sustainability. In the fields of business in which Swiss financial institutions are traditionally strong, well capitalised banks certainly have a competitive advantage.

The SNB also takes the view that the organisation and legal structure of the big banks must be modified so that an orderly wind-down in extreme crisis situations is rendered possible. In particular, it must be possible for systemically important functions to keep running without the company as a whole having to be rescued.

At the international level, proposals are also being drawn up on measures to address the 'too big to fail' issue. We need to take these international regulatory developments into consideration to ensure the global competitiveness of our financial centre. Yet, as the past two and a half years have shown all too clearly, in the event of a crisis each country must take responsibility for its own banks. The formulation and implementation of measures at the national level must take into account the specificities of the country concerned. Here in Switzerland, the 'too big to fail' issue is particularly pronounced, hence the need for a 'Swiss Finish'.

Reform of financial sector regulation and oversight is, without a doubt, a tough challenge. But the SNB is also faced with equally tough challenges in the area of monetary policy.

III. Review of monetary policy in 2009

In 2009, the SNB's monetary policy activities were focused entirely on combating the financial and economic crisis and the associated deflationary trends. Price stability, which is not compatible with either deflation or inflation, remained the core objective.

As early as autumn 2008, the SNB had adopted an expansionary monetary policy stance as a result of the increasingly unfavourable economic outlook and the prospect that inflation would be low for the foreseeable future. Between October and December 2008, the SNB lowered the target range for the three-month Libor by a total of 225 basis points, to only 0.0–1.0%. The SNB also ensured a generous supply of liquidity to the money market.

The economic situation continued to worsen into the spring of 2009. In addition, the uncertainty engendered by the financial crisis had led to a strong appreciation of the Swiss franc against the euro. In view of the economic situation prevailing in Switzerland at that time, there was the risk of a pronounced deflationary trend, in particular if the Swiss franc were to appreciate further. This risk necessitated a further easing of our monetary policy.

The substantial monetary policy easing therefore continued, with a further 25 basis point reduction in the Libor target range in March 2009. This left the new range at 0.0–0.75%, where it has since remained. The SNB aims to keep the Libor in the lower end of the range, i.e. at around 0.25%; the one-week repo rate has been at practically zero since the end of 2008.

The room for manoeuvre using the traditional interest rate instrument was thus effectively exhausted in March 2009. To relax monetary conditions further, the SNB significantly increased liquidity. It did so via a number of unconventional monetary policy instruments. It concluded longer-term repos and purchased bonds issued by private sector borrowers. It also bought foreign exchange on the foreign currency market and acted to prevent the Swiss franc from appreciating further against the euro up to the end of the year.

Against the background of the economic recovery, following its monetary policy assessment in December the SNB is acting only to decisively counter an excessive appreciation of the Swiss franc against the euro. In addition, it has discontinued its purchases of Swiss franc bonds issued by private sector borrowers. Indeed, movements in the Swiss franc against the euro over the past few months have caused monetary conditions to tighten somewhat. Yet, overall, monetary policy is still expansionary. The three-month Libor remains at a low-water mark of 0.25%, and we continue to supply the banks with generous amounts of liquidity.

Let me now turn to the outlook for 2010 and the monetary policy challenges ahead.

IV. Outlook for 2010

The global economy has been in a phase of recovery since mid-2009. The SNB expects that this will continue, although the recovery is still exposed to risks and will vary greatly from region to region.

The greatest expansion will be seen in emerging Asia. The entire region will, in particular, benefit from the strong growth in Chinese domestic demand. In the industrialised economies, the recovery is still being driven by the expansionary monetary and fiscal policy measures adopted at the start of the crisis. At the same time, there are a number of factors weighing on growth prospects. High unemployment, growing sovereign debt and the deterioration in household wealth are likely to dampen private consumer spending in many economies. In addition, given the underutilisation of capacity and the tighter lending conditions, corporate investment seems unlikely to stage a strong recovery. Moreover, in a number of countries the situation in the real estate market, and hence the outlook for the construction industry, will remain difficult.

For 2010, the SNB is currently expecting real GDP growth of about 1.5%. On the one hand, our export industry is exposed to the relatively hesitant growth in European demand. On the other, Switzerland is well equipped for a recovery. Public finances are relatively healthy, the financial positions of both households and corporates are sound, and the labour market is flexible.

The risk of deflation has fallen in the wake of the economic recovery. The most recent SNB inflation forecast from mid-March shows that price stability is not threatened in the short term. The SNB has sufficient leeway to maintain its expansionary monetary policy for the time being. However, the forecast also shows that the current monetary policy cannot be maintained over the entire forecast horizon without compromising medium and long-term price stability.

Moreover, this forecast is still associated with considerable uncertainties. The most recent financial market concerns that have arisen about the public finances of individual euro area countries represent a considerable risk in this regard. Over the past few years, Switzerland has benefited from the advent of the euro and the associated increase in European currency stability. Any threat to this currency stability would, by definition, have a negative impact on Switzerland, above all if the Swiss franc were to appreciate sharply due to its role as a safe haven currency. The SNB will not, however, allow such a development to turn into a new deflation hazard for Switzerland. For this reason, it is acting decisively to prevent an excessive appreciation of the Swiss franc.

As part of its measures to combat the crisis, the SNB supplied large amounts of liquidity to the banks. Liquidity created via repos and currency swaps is temporary: it flows back automatically when the transactions are not renewed. Since the volume of these transactions has declined sharply over the past few months, the amount of liquidity resulting from repos and swaps has already decreased substantially.

The liquidity that we created by purchasing foreign exchange or Swiss franc bonds is, however, of a more permanent nature and must be reabsorbed in good time, to ensure price stability in the medium and long term. The SNB has at its disposal the requisite instruments for rapidly absorbing large amounts of liquidity as and when necessary. Foremost among these are the SNB's own debt certificates, SNB Bills. We can also use reverse repos.

Thus, absorbing excess liquidity is technically not a problem. The challenge lies in selecting the right moment for a normalisation of monetary policy. A major factor in this decision will be the further development of the inflation outlook. The inflation forecast is the main indicator used in monetary policy decision-making by the SNB. The SNB monetary policy strategy does not, however, foresee a mechanical reaction to the forecast on the part of the Governing Board. Aspects such as uncertainty about economic development and the situation on the financial markets are also factored into the monetary policy decision.

V. Maintaining price stability

In concluding my remarks today, I would like to reaffirm that maintaining price stability is the SNB's utmost priority. We equate price stability with having average annual inflation below 2% while avoiding deflation. The reason why I am emphasising this is because the financial crisis has also sparked a debate on the appropriate level for inflation. In particular, it has been suggested that central banks should target a higher inflation level in normal times. The argument goes like this: if central bank reference rates are low, there is also little freedom for reducing interest rates, as the nominal rate cannot fall below zero. In turn – so runs the argument – a central bank's ability to react to a severe crisis is also limited. In contrast, higher inflation would lead to higher nominal interest rates. These could serve as a buffer in the event of a major shock. Monetary policy would then have scope for larger interest rate cuts, and a reduction in deflation risks. In other words: there would be more leeway for a relaxation of monetary policy in a crisis.

This argument is severely flawed. First, it is very doubtful that further interest rate cuts alone would have been enough to deal with the crisis. Second, this line of argument implies that monetary policy is ineffective once the zero lower bound has been reached. However, as I mentioned earlier, our experience shows that there is still room for monetary policy manoeuvre even at the zero lower bound. Using the unconventional measures I have described, the SNB certainly was able to relax monetary policy even further and thereby successfully ward off the risk of deflation.

So in times of crisis, the apparently greater monetary policy freedom with a higher inflation rate would be illusory. Moreover, a higher rate of inflation in normal times would create costs and threaten macroeconomic stability. Costs would arise even if the central bank were successful in keeping inflation constant at the desired level, and thus enabled households and companies to correctly anticipate the inflation rate.

Experience shows, however, that the inflation rate cannot be fine-tuned and a higher level of inflation often goes hand in hand with large fluctuations in inflation rates. It then becomes almost impossible to correctly factor inflation into calculations, leading to the misallocation of resources, as well as random and undesirable income and asset redistributions. In addition, it is generally the most disadvantaged members of society who bear the brunt of inflation, as they have only limited means of protecting themselves against it.

But, above all, higher and fluctuating inflation rates would undermine public confidence in the central bank. Credibility, built up painstakingly over decades, would quickly be eroded. The central bank would lose control of inflation and inflation expectations. Moreover, as inflation rose higher, pecuniary benefits such as salaries would increasingly be indexed, which would amplify the stickiness of inflation. But indexation, combined with a failure to anchor inflation expectations, would lessen the effectiveness of monetary policy and lead to greater fluctuations in interest rates, economic activity and employment.

We are therefore convinced that allowing higher inflation rates would be the wrong lesson to draw from the crisis. Price stability, i.e. neither inflation nor deflation, is a key public good. It is a decisive factor in achieving sustainable economic growth and prosperity, and not least social stability.

Switzerland has had a long and positive experience with low inflation and low nominal interest rates. The SNB is, and will remain, committed to price stability. Its monetary policy strategy gives it the necessary leeway to act decisively against both inflation and deflation.

VI. Conclusion

Ladies and Gentlemen, the worst of the financial and economic crisis that erupted in summer 2007 is now behind us. But we will be dealing with the fallout for some time to come. Hopefully, the Swiss economy will return to a sustainable growth trajectory. Until then, the SNB will continue to face major challenges. The Governing Board will approach them with great respect, but also with confidence and conviction. To achieve this, we will once again need to count on the exceptional efforts of each and every SNB staff member. We thank our shareholders for their continuing support and for their interest in the activities of the SNB.

SNB Working Papers: Summaries

The time-varying systematic risk of carry trade strategies

Charlotte Christiansen, Angelo Ranaldo and Paul Söderlind
Working Paper 2010-1

This paper explains the currency carry trade performance using an asset pricing model in which factor loadings are regime-dependent rather than constant. The regime-dependency allows the systematic risk exposure of the carry trade strategies to change according to market conditions measured by variables such as market risk and liquidity. Empirical results show that a typical carry trade strategy has much greater exposure to the stock market and is mean-reverting in regimes of high FX volatility. The findings are highly robust to various extensions, including more currencies, a longer sample, transaction costs, international stock indices, and other proxies for volatility and liquidity. The regime-dependent asset pricing model provides significantly smaller pricing errors and lower 'alphas', suggesting that carry trade speculation is less attractive than commonly believed. The findings provide a partial explanation for the uncovered interest rate parity puzzle, i.e. that the equality of expected returns on otherwise comparable financial assets denominated in two different currencies does not hold.

The timing of price changes and the role of heterogeneity

Daniel Kaufmann
Working Paper 2010-2

Various models of firms' price-setting behaviour yield predictions for the shape of the hazard function, which describes how the probability of price adjustments varies with the duration of price spells. While most models suggest constant or increasing hazard functions, empirical studies often find decreasing hazards, possibly due to misspecified or neglected heterogeneity in price setting. This paper attempts to disentangle the downward bias into various sources: observed and unobserved heterogeneity, which can be either constant or time-varying. Based on micro data from the Swiss CPI, the paper finds that the downward bias of the hazard function can be eliminated (i) by controlling for time-varying heterogeneity in addition to cross-sectional factors and (ii) by excluding temporary price changes such as sales prices from the data set. Firms' marginal costs appear to be the most important time-varying factor affecting the probability of price changes. The empirical findings presented in this paper are consistent with recent menu cost models, which stress the role of time-varying heterogeneity and temporary price cuts for price setting.

Liquidity in the foreign exchange market: measurement, commonality, and risk premiums

Loriano Mancini, Angelo Ranaldo and Jan Wrampelmeyer
Working Paper 2010-3

This paper develops a liquidity measure tailored to the foreign exchange (FX) market, quantifies the amount of commonality in liquidity across exchange rates, and determines the extent of liquidity risk premiums embedded in FX returns. The new liquidity measure utilises ultra high frequency data and captures cross-sectional and temporal variation in FX liquidity during the financial crisis of 2007–2008. Empirical results show that liquidity co-moves across currency pairs and that systematic FX liquidity decreased dramatically during the crisis. Extending an asset pricing model for FX returns by the novel liquidity risk factor suggests that liquidity risk is heavily priced.

Modeling monetary policy

Samuel Reynard and Andreas Schabert
Working Paper 2010-4

In this paper, the authors incorporate the implementation of monetary policy, i.e. open market operations, into an otherwise standard macroeconomic model. By accepting certain types of eligible assets, like short-term government bonds or recently additional assets, in exchange for money in open market operations, the central bank can lower the yields of these assets. By affecting the liquidity value of the eligible assets as well as money market conditions, a central bank alters the relationship between the policy interest rate, output and inflation. Thus, the link between the policy instrument and targets is influenced by the amount and type of assets that central banks accept in open market operations when providing liquidity to banks, as well as by money market conditions. The model developed in this paper, in contrast to standard macroeconomic models, successfully replicates this link. Moreover, when realistic central bank surplus transfers are accounted for, the model exhibits plausible properties regarding the monetary policy transmission mechanism.

The impact of banking sector stability on the real economy

Pierre Monnin and Terhi Jokipii
Working Paper 2010-5

In this article, the authors study the relationship between the degree of banking sector stability and the subsequent evolution of real output growth and inflation. Adopting a panel VAR methodology for a sample of 18 OECD countries, they find a positive link between banking sector stability and real output growth. This finding is predominantly driven by periods of instability rather than by very stable periods. In addition, the authors show that an unstable banking sector increases uncertainty about future output growth. No clear link between banking sector stability and inflation seems to exist, however. The authors then go on to argue that the link between banking stability and real output growth can be used to improve output growth forecasts. Using Fed forecast errors, they show that banking sector stability (instability) results in significant underestimation (overestimation) of GDP growth in the subsequent quarters. As a result, the study concludes that information contained in the measure of banking sector stability could help forecasters to reduce forecast errors, highlighting the need for policy makers to consider banking sector stability in their forecast models.

Daytime is money

Sébastien Kraenzlin and Thomas Nellen
Working Paper 2010-6

Using real-time trade data from the Swiss franc overnight interbank repo market and SIX Interbank Clearing (SIC), the Swiss real-time gross settlement (RTGS) system, one is able to gain valuable insights into the daytime value of money and its determinants. First, an implicit hourly interbank interest rate can be derived from the intraday term structure of the overnight rate. We thereby provide evidence that an implicit intraday money market exists. Second, we show that since the introduction of Continuous Linked Settlement (CLS), the foreign exchange settlement system, the value of intraday liquidity increases during the hours of the CLS settlement cycle. Third, the turnover as well as the liquidity in SIC has a corresponding influence on the intraday rate. These facts provide evidence for the cost of immediacy. Features like RTGS systems and delivery-versus-payment and payment-versus-payment settlement procedures substitute credit risk with liquidity risk, which in turn increases the value of intraday liquidity. The analysis is relevant to central bank policy insofar as different designs of intraday liquidity facilities and different collateral policies result in different intraday term structures for the overnight money market.

Overreporting oil reserves

Philip Sauré
Working Paper 2010-7

The recent hikes in crude oil prices have reawakened concerns regarding energy security. Part of the market's uncertainty stems from the fact that much of the world's oil production is controlled by highly opaque, state-owned companies. Indeed, a number of oil market experts argue that official levels of oil reserves are substantially overstated. This study analyses the incentives to deliberately and systematically overreport oil reserves. It shows that oil producers may indeed overreport their reserve levels if doing so raises expected future oil supply and thereby undermines the development of oil-substituting technologies. But overreporting oil reserve levels also has a cost. In order to be credible, it must be accompanied by increases of current observable output, which generally induce losses. Surprisingly, these increases in current supply can be offset by delays of supply, through which oil producers undermine the development of oil-substituting technologies in fully informed markets. In this case, overreporting is rational, credible, and cheap.

Estimating a stock-flow model for the Swiss housing market

Elizabeth Steiner
Working Paper 2010-8

This paper analyses the development of housing market imbalances, housing prices and residential investment in Switzerland. A disequilibrium approach is applied, allowing prices and investment to adjust to shocks in several periods. The long-run demand level of housing is estimated using real housing prices, real GDP and real wages. Empirical results indicate that the desired level of residential capital stock can diverge from the existing level for several years. This is due to the slow adjustment of the residential capital stock to shocks. In the short run, the market therefore has to be cleared by price adjustments. And it can indeed be shown that changes in prices are significantly and strongly dependent on the level of stock imbalances. Furthermore, housing prices prove to be an important determinant of residential investment, which in turn drives the adjustment process of the residential capital stock towards its desired level.

Chronicle of monetary events

Maintenance of expansionary monetary policy

Following its quarterly monetary policy assessment of 17 June 2010, the Swiss National Bank decided to maintain its expansionary monetary policy, to leave the target range for the three-month Libor unchanged at 0.00–0.75% and to adhere to its objective of holding the Libor in the lower end of this range at around 0.25%. In addition, it announced that should an appreciation of the Swiss franc lead to a renewed threat of deflation it would take all the measures necessary to ensure price stability.

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