Swiss National Bank Quarterly Bulletin

June 2/2009 Volume 27

Contents

5 **Sectional breakdown of bulletin Q2/2009**

6 **Monetary policy report**

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

48 **Opening speech by the President of the Bank Council at the SNB General Meeting of Shareholders**
Hansueli Raggenbass

52 **Speech by the Chairman of the Governing Board at the SNB General Meeting of Shareholders**
Jean-Piere Roth

58 **SNB Working Papers: Summaries**

62 **Chronicle of monetary events**

Sectional breakdown of bulletin Q2/2009

Monetary policy report (p. 6)

The global economic downturn deepened in the first quarter. Economic performance in the industrialised nations (as measured by GDP) fell sharply, a fall which was broadly based. Investment continued to decline and inventories were reduced, following the involuntary increase in the previous quarter. A number of signs point to a gradual recovery in the second half of the year. The situation on the financial and money markets has improved significantly. However, the overall economic situation remains challenging.

The recession in Switzerland also intensified during the first few months of the year. The deterioration in the economy is chiefly evident from the rapid decrease in capacity utilisation in manufacturing, a continuing decline in added value in the finance and insurance industries, and some important labour market indicators.

In the second half of the year, the SNB expects to see output in the euro area stabilising, and the US and Japan posting positive growth rates. Against this background, goods exports from Switzerland can be expected to stabilise gradually. Construction investment should even experience a modest revival. However, the other components of domestic final demand are expected to continue to weaken. For 2009 as a whole, the SNB still expects GDP to decline by 2.5–3.0%.

At its quarterly assessment in June, the SNB decided to continue the policy introduced in March whereby it implemented a firm relaxation of monetary conditions. It therefore left the three-month Libor target range unchanged at 0–0.75% and will still aim to gradually bring the Libor down to the lower part of the range, in other words, to around 0.25%. It will continue to provide the economy with a generous supply of liquidity and to purchase Swiss franc bonds with the aim of reducing risk premia on long-term bonds issued by private sector borrowers. It will take firm action to prevent an appreciation of the Swiss franc against the euro.

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

The talks held by the SNB delegates for regional economic relations with around 180 representatives from various economic sectors and industries from April to May 2009 yielded a picture of a further deterioration in the economic situation. Initially, the crisis mainly affected exports and the financial industry, but in recent months it also had a noticeable impact on the domestic economy. However, there were still striking differences. Businesses in the export industry continued to fare markedly worse than firms that cater to domestic demand. In terms of individual industries, the capital goods industry suffered the worst decline. By contrast, the majority of companies in construction and retailing performed comparatively well, although these industries also experienced a definite slowdown. Most respondents regard the outlook as gloomy. Only a few are expecting the situation to improve in the second half of the year.

General Meeting of Shareholders (p. 48)

At the General Meeting of Shareholders on 17 April 2009, the President of the SNB Bank Council, Hansueli Raggenbass, discussed the measures to strengthen the UBS balance sheet announced in October 2008. In addition, he explained the role of the Bank Council in connection with the newly created special purpose vehicle (SPV), as well as management and accounting procedures for the illiquid assets. The responsibilities of the Bank Council in connection with the SPV are derived from its supervisory and monitoring function. This includes responsibility for supervising and checking accounting procedures and for overseeing and assessing risk management and the investment process.

In his speech, the Chairman of the Governing Board, Jean-Pierre Roth, talked about the difficulties involved in implementing the SNB's monetary policy last year, the measures aimed at consolidating UBS, the spilling over of the crisis into the real economy and the economic outlook for 2009. The SNB reacted to the spreading crisis by relaxing monetary policy rapidly and firmly. The objective was to improve lending conditions and make investments in Swiss francs unattractive. Since the Swiss franc appreciated considerably between October 2008 and March 2009, the SNB was forced to intervene in the foreign exchange market for the first time in fifteen years.

SNB Working Papers (p. 58)

Abstracts of three papers: Thomas Bolli and Mathias Zurlinden, 'Measurement of labour quality growth caused by unobservable characteristics', *SNB Working Paper* 2009-1; Martin Brown, Steven Ongena and Pinar Yeşin, 'Foreign currency borrowing by small firms', *SNB Working Paper* 2009-2; Matteo Bonato, Massimiliano Caporin and Angelo Ranaldo, 'Forecasting realised (co)variances with a block structure Wishart autoregressive model', *SNB Working Paper* 2009-3.

Monetary policy report

Report for the attention of the Governing Board of the Swiss National Bank for its quarterly assessment of June 2009

This report is based primarily on the data and information available as at mid-June 2009.

Monetary policy report

Contents

8 About this report

9 Monetary policy decision

10 1 Developments in the global economy

15 2 Developments in the Swiss economy
16 2.1 GDP growth
17 2.2 Foreign trade, consumption and investment
20 2.3 Employment and labour market
21 2.4 Capacity utilisation
23 2.5 Prices
25 2.6 Real economic outlook

26 3 Monetary developments
26 3.1 Interest rates and inflation expectations
28 3.2 Exchange rates
30 3.3 Equity, commodity and real estate prices
32 3.4 Monetary aggregates
35 3.5 Credit

37 4 SNB inflation forecast
37 4.1 Assumptions for global economic developments
39 4.2 Inflation forecast and monetary policy decision

37 Inflation forecasting as part of the monetary policy strategy

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. However, it is also obliged by law to inform the public 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 what conclusions it draws from this assessment.

Sections 1–3 of the present report were drawn up for the Governing Board's assessment of June 2009. The sections headed 'Monetary policy decision' and 'SNB inflation forecast' take due account of the Governing Board's monetary policy decision of mid-June 2009.

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

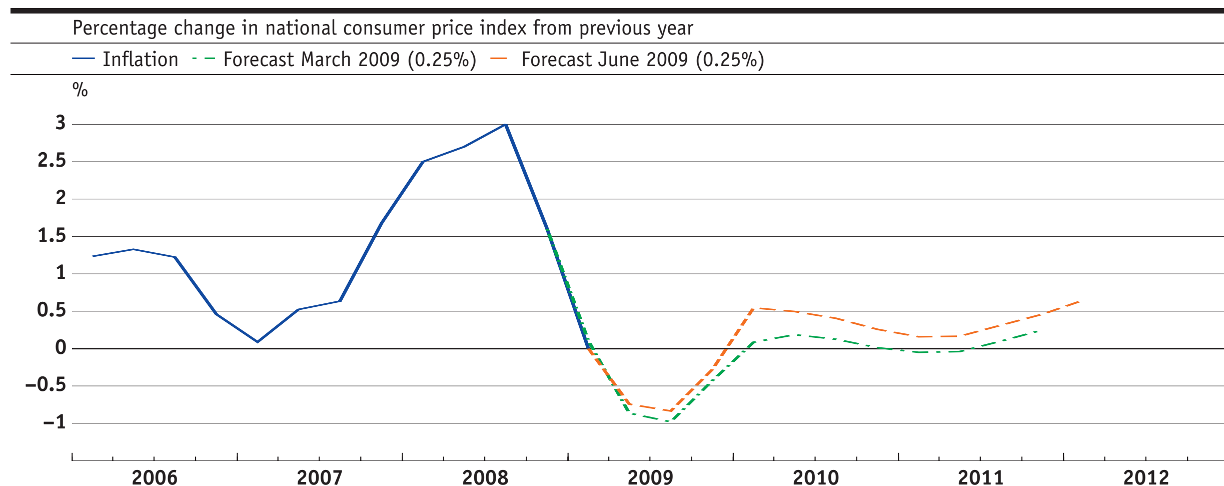
Monetary policy decision

At its quarterly assessment on 18 June 2009, the Swiss National Bank (SNB) announced that it would continue the policy introduced in March whereby it implemented a relaxation of monetary conditions. The outlook for inflation necessitates a firmly expansionary monetary policy. Despite the emergence of some encouraging signs, the global economic situation remains unfavourable and further economic deterioration cannot be ruled out. In Switzerland, the economic situation is difficult; the risk of deflation has abated, but still remains a concern.

Consequently, the SNB left the Libor target range unchanged at 0–0.75%. It will still aim to bring the Libor down to the lower part of the range, in other words, to around 0.25%. It will continue to provide the economy with a generous supply of liquidity and to purchase Swiss franc bonds with the aim of reducing risk premia on long-term bonds issued by private sector borrowers. It will take firm action to prevent an appreciation of the Swiss franc against the euro.

In doing so, the SNB aims not only to check the risk of deflation, but also to limit the risk of additional deterioration of the economic situation. It will continue to use an inflation forecast as its guide. In this way, it can ensure that the unconventional measures currently in force do not compromise medium and long-term price stability.

Inflation forecast of March 2009 with Libor at 0.25% and of June 2009 with Libor at 0.25%



Source: SNB

Inflation forecast of March and June 2009
Average annual inflation in percent

	2009	2010	2011
Inflation forecast of March 2009, Libor 0.25%	−0.5	0.1	0.1
Inflation forecast of June 2009, Libor 0.25%	−0.5	0.4	0.3

Source: SNB

1 Developments in the global economy

The global economic downturn deepened in the first quarter. Economic performance in the industrialised nations (as measured by GDP) fell sharply, a fall which was broadly-based. Export-geared countries such as Germany and Japan registered double-digit shrinkage in GDP. Investment continued to decline and inventories were reduced, following the involuntary increase in the previous quarter. Since the start of the recession, GDP has shrunk by 2.3% in the US, 4.8% in the euro area and 8% in Japan. Inflation in the G7 countries fell below zero, mainly because of decreasing energy prices.

A number of signs point to a gradual recovery in the second half of the year. The situation on the financial and money markets has improved significantly. In particular, spreads have narrowed considerably on the interbank market, indicating that market participants regard the systemic risk in the banking sector – particularly in the US – as having lessened. In addition, monetary and fiscal stimulus packages are beginning to kick in. Consumer confidence and business sentiment have improved noticeably, at least in the US and Asia. Furthermore, lacklustre foreign trade and industrial production in Asia are starting to revive. The growing confidence is reflected in rising commodity prices. Global equity prices have also gained around 40% since their lows at the start of March, while less risky securities have lost some of their appeal. Government bond yields have accordingly risen in recent months.

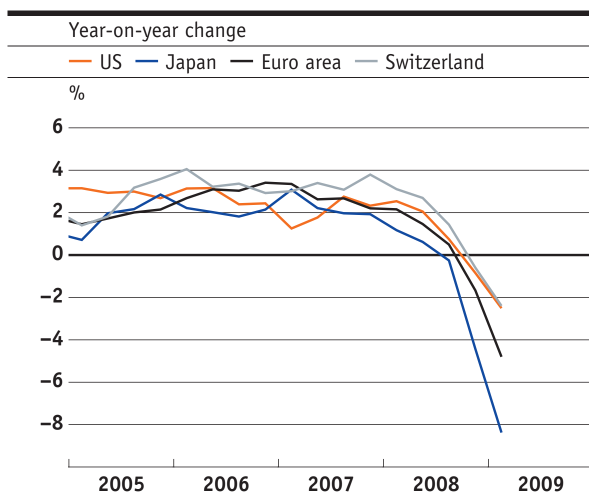
However, the overall economic situation remains challenging. Consumption and investment are still being hit by falling house prices while households and companies continue to find lending conditions restrictive. Some countries are likely to see the real estate market correct further. Unemployment is also expected to keep on rising, and this will affect consumer spending. Government finances, which have deteriorated significantly, will take several years to stabilise.

The SNB's assessment of the international economic situation has not altered significantly in the past three months. Although the global growth predictions for 2009 have been revised downwards because production fell faster than expected in the first quarter, the forecasts for 2010 remain almost unchanged. Japan is the only country for which growth forecasts for 2010 are now more favourable. This largely reflects additional fiscal measures. However, the forecasts are still subject to a substantial degree of uncertainty.

Sharp fall in growth in the US

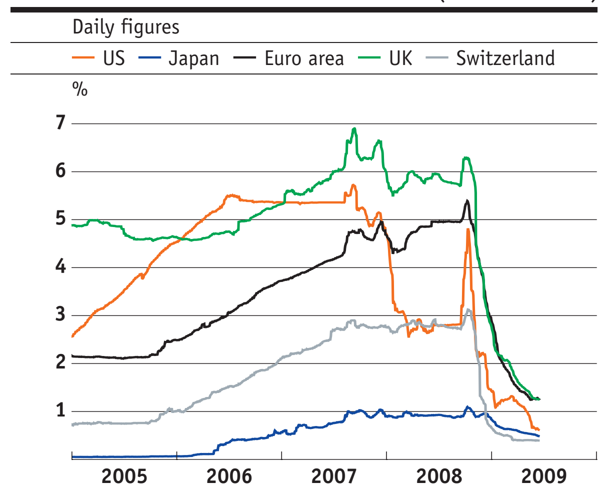
In the US, GDP declined by 5.7% in the first quarter, following a similar big decrease in the previous quarter (–6.3%). Together, these two quarters registered the worst drop in growth since 1958. The contraction in the first quarter primarily reflected falling investment and exports, as well as a pronounced reduction in inventories. Private consumption stabilised, having shrunk significantly for two

Chart 1.1
Real GDP



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

Chart 1.2
International short-term interest rates (three months)



Source: Thomson Datastream

consecutive quarters. The labour market situation continued to worsen. Between February and May, the number of people in employment fell by 1.5 million, while the unemployment rate rose by another 1.3 percentage points to 9.4%.

Results of consumer and producer surveys improved and new orders stabilised, indicating that the downturn slowed in the second quarter. The economy should recover slightly in the second half, but growth is still likely to be below production potential. The under-utilisation of production capacity will therefore increase again. The slump in real estate prices and rising unemployment will push up the savings rate further and hit consumption. Business investment is not expected to stimulate growth in the short term, either. The real estate market remains under strain. The number of house sales seems to be stabilising very gradually, while house prices and residential construction are still declining.

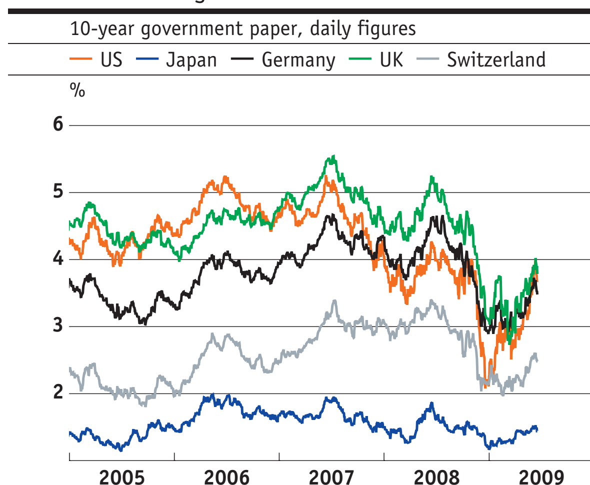
For now, any stimulus to growth is likely to come mainly from government spending and inventories. A stimulus package amounting to 4.1% of GDP in fiscal 2009 and 2010 will give households and businesses some relief, but will also lead to a significant rise in the budget deficit. The SNB predicts a decline in GDP of –2.8% for the US in 2009, rather than the –1.8% it forecast in March.

Deeper recession in the euro area

In the euro area countries, the contraction in GDP came to 9.7% in the first quarter of 2009, which was the fourth successive quarter in recession. This was a considerably larger fall than in the previous period and is probably the worst loss in output in any one quarter since the Second World War. The economic downturn was particularly pronounced in Germany, where GDP declined by 14.4%. The Netherlands and Italy also recorded big falls in GDP. Exports to the emerging markets declined substantially. The decrease in investment accelerated as industrial capacity utilisation reached record lows and the outlook for demand remained uncertain. Companies reduced their inventories quickly, and private consumption also fell markedly. Government incentives for the purchase of consumer durables (especially cars) had a positive impact, as did low inflation, but consumers were worried by the rapid rise in unemployment. During the expansionary phase that lasted from 2005 to 2008, the number of people out of work fell by over 2.5 million, but the current recession has already more than cancelled out the decrease.

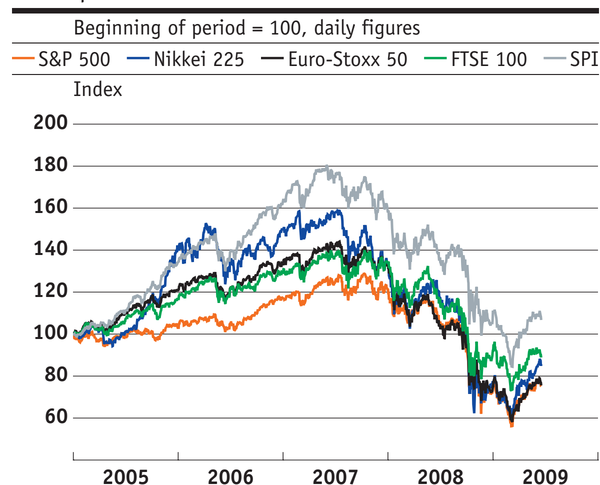
In recent months, business confidence surveys have been indicating a trend reversal. Estimates for new orders in manufacturing have been less pessimistic, and expectations regarding output have been revised upwards. Furthermore, there has been a reduction in the proportion of commercial banks tightening their credit standards for consumer and business loans. In view of the increase in fiscal stimulus packages from mid-year onwards, the most pronounced phase of the recession should now be over. Exports rose once more in February and March and should be able to recover fairly quickly from the abrupt decline they experienced in the winter half

Chart 1.3
International long-term interest rates



Source: Thomson Datastream

Chart 1.4
Share prices



Sources: Bloomberg, Thomson Datastream

if the situation in the financial sector continues to ease globally and the euro's external value remains stable. However, stock clearing by companies, reluctance to invest and a further rise in unemployment are all likely to act as brakes. The SNB now forecasts a decline in GDP of –4.6% for the euro area in 2009, compared to the March forecast of –2.7%.

Trough reached in Japan …

Japanese GDP, which has been in decline since the second quarter of 2008, fell by an unexpectedly large 14.2% in the first quarter of 2009, or 8.8% year on year. GDP decreased across the board, led by exports and equipment investment, which dropped to the same level as in early 2003. Net exports accounted for around half the fall in GDP.

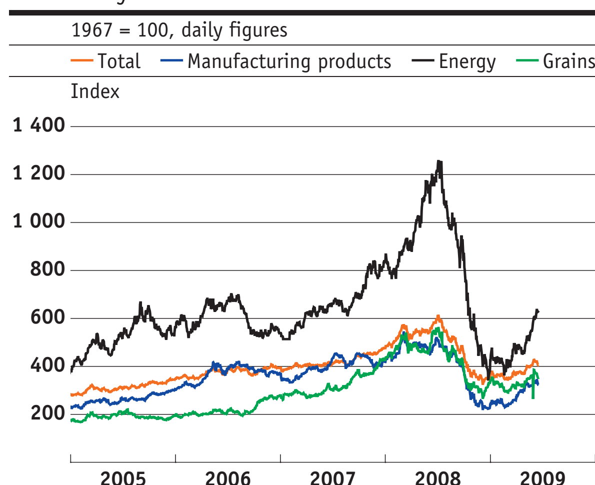
GDP appears to have touched bottom in the first quarter. There are growing signs of stabilisation in the manufacturing sector. Industrial production, which had fallen to the level of the early 1980s, rose again sharply in March and April. According to surveys, companies are planning to increase output further in the next few months. In addition, a slow but steady return of confidence has set in across various sectors and sizes of company since the beginning of the year, albeit starting from all-time lows. Even the badly affected export industry, which is still feeling the effects of the marked appreciation of the yen between mid-2008 and early 2009, is showing signs of recovery. Exports remained stable in March and rose significantly in April. The export sector made a positive contribution to GDP growth in the second quarter. Fiscal stimulus packages should have a greater impact as the year progresses. The JPY 15.4 trillion stimulus package passed in April this year (around 3% of GDP) is the fourth set of economic measures within a short period, and the largest of the entire post-war period. Cost savings and cuts in investment plans as a result of lower earnings in the last few quarters will continue to weigh on the labour market and hold down household spending. Unemployment has also risen more steeply in recent months and reached 5.0% in April.

The SNB has revised its growth forecast for the Japanese economy downwards for 2009. It now expects a –6.8% fall in GDP, as opposed to –3.9% in March. However, the growth forecast for 2010 is more favourable, chiefly because of the impact of the additional economic stimulus package.

… and in the emerging economies of Asia

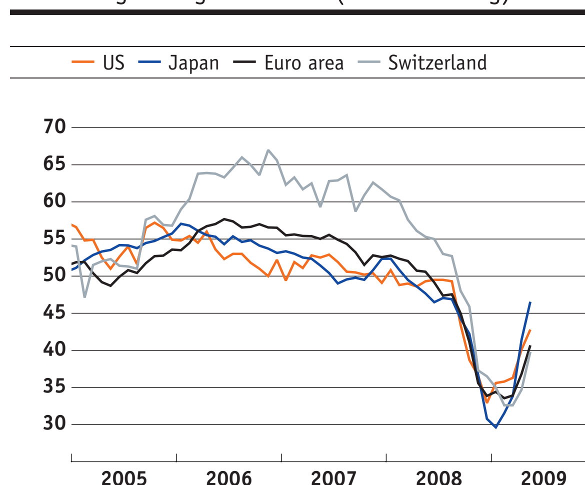
In China, growth fell again in the first quarter, to 6.1% lower than in the previous year. This decline is attributable to a negative base effect. In fact, the Chinese economy should have bottomed out. It is deriving increasing benefit from the government consumer incentives and additional expenditure on infrastructure already being implemented as part of the massive economic packages for 2009 and 2010. Industrial production is growing, and leading indicators for manufacturing industry suggest that it will improve further. The acceleration in investment is reflected in a big rise in credit growth since the beginning of the year, with new

Chart 1.5
Commodity indices



Sources: Reuters, Thomson Datastream

Chart 1.6
Purchasing managers' indices (manufacturing)



Source: Thomson Datastream

loans increasingly flowing into infrastructure projects. At the end of May, the government passed further stimulus measures in the form of subsidies, mainly intended to revive consumption, especially for consumer durables.

GDP in the east Asian tiger economies – Korea, Taiwan, Hong Kong and Singapore – fell by an average of 7% year on year in the first quarter, compared with –3.9% in the depths of the Asian crisis of 1998. This means that the lowest point of the cycle should now have been reached. Industrial production has recovered since the beginning of the year, and by April had made up around half the losses registered in the second half of 2008. Ongoing inventory reductions and rising orders in the export sector should allow economic activity to normalise further in the coming months. In these countries, too, the economy will continue to be supported by the rapid loosening of monetary policy last year, as well as by generous fiscal packages.

Clear decline in consumer price inflation

In the G7 countries, the annual rate of consumer price inflation fell to the lowest level for at least three decades (–0.1%) in April. This drop was largely attributable to the high baseline for energy prices and falling inflation rates for food prices. However, core inflation, which excludes energy and food prices, hardly declined at all, and stands just below the average for the last ten years. A further drop in inflation can be expected by the summer, thanks to low industrial capacity utilisation and the continuing effect of a high baseline for energy prices.

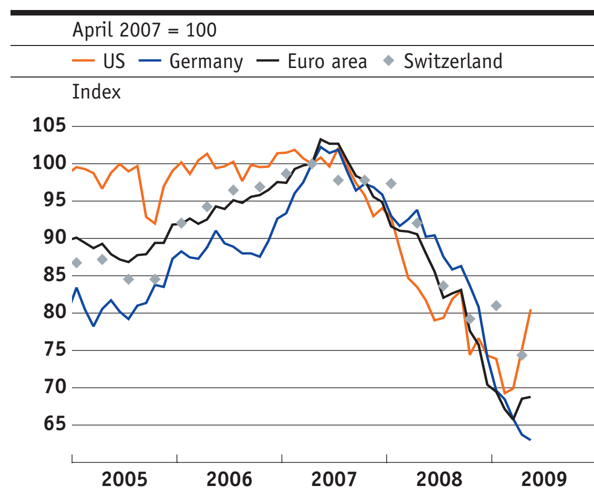
In the US, annual inflation fell from 0.0% in January to –0.7% in April: it is negative for the first time since 1955. At the same time, core inflation went up slightly from 1.7% to 1.9%. In the euro area, annual inflation decreased from 1.1% in January to 0.6% in April, while core inflation remained at 1.6% on average. In Japan, annual inflation nudged down by 0.1 percentage points to –0.1%. Core inflation also declined further, to –0.4%. In the Asian tiger economies, annual inflation fell by more than one percentage point to an average of 1.6%. In China, it entered negative territory (–1.5%) for the first time in seven years.

Monetary policy remains expansionary

In view of the significant under-utilisation of production capacity together with a weak inflation outlook, the central banks continued to pursue an expansionary monetary policy. They also extended their measures aimed at supporting the money and capital markets.

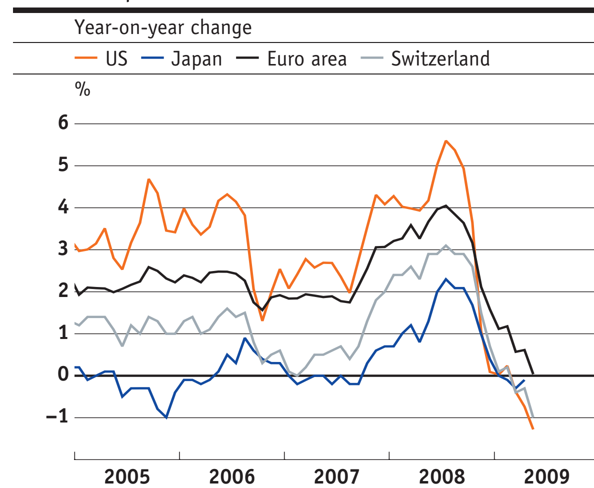
The Federal Reserve left the target range for the federal funds rate at 0.0–0.25%. It made further purchases of asset-backed securities, which contributed to a reduction in risk premia. Furthermore, in March, the US central bank announced the purchase of longer-term government bonds worth up to USD 300 billion. The Department of the Treasury also plans to purchase toxic assets in early summer as part of its Public-Private Investment Program. This is intended to help banks clean up their balance sheets and thus encourage them to lend more to households and businesses.

Chart 1.7
Consumer confidence index



Sources: SECO, Thomson Datastream

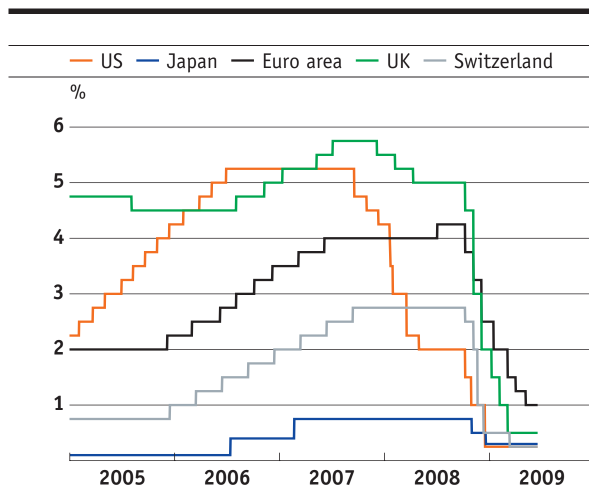
Chart 1.8
Consumer prices



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

The European Central Bank (ECB) cut the main refinancing rate by 25 basis points in both April and May to the current level of 1.0%. In addition to maintaining its expanded list of securities eligible as collateral until the end of 2010, the ECB decided to extend the maturity of its refinancing operations to a maximum of 12 months. These operations have previously been up to six months only. Furthermore, it added another instrument to its monetary policy by undertaking to purchase euro-denominated covered bonds to the amount of EUR 60 billion (around 0.6% of GDP) from July 2009 onwards. The ECB is thus supporting a segment of the financial market that has been badly affected by the crisis. The Japanese central bank left the call money rate at 0.1% and approved further steps aimed at making short-term liquidity easier to obtain and stabilising the financial system. These measures included expanding the range of securities eligible as collateral by adding government bonds from selected countries. After rapidly loosening the monetary reins in recent months, the central banks of many Asian countries are adopting a wait-and-see stance, since initial signs that economic activity is stabilising are now emerging.

Chart 1.9
Official interest rates



Sources: SNB, Thomson Datastream

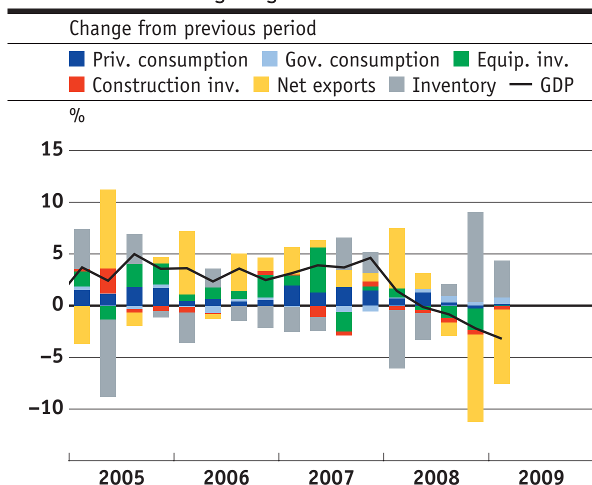
2 Developments in the Swiss economy

The recession in Switzerland deepened significantly during the first few months of the year. However, the drop in GDP calculated for the first quarter reflects this to only a limited extent, since the sharp fall in final demand – particularly from abroad – was once again largely offset by a build-up in inventories. Switzerland is clearly an exception in this respect: most of its trading partners saw this component of demand make a negative contribution to growth in the first quarter.

The deterioration in the economy was chiefly evident from the rapid decrease in capacity utilisation in manufacturing, a continuing decline in added value in the finance and insurance industries, and some important labour market indicators. For instance, unemployment and short-time working have risen markedly since the beginning of the year.

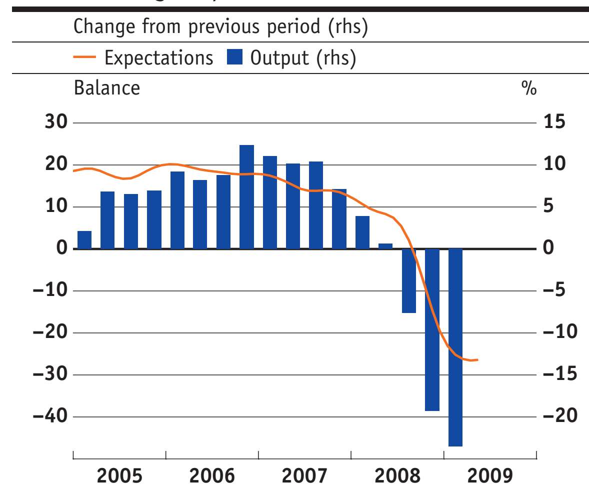
The talks held by the SNB delegates for regional economic relations with around 180 representatives from various economic sectors and industries from April to May 2009 also yielded a picture of a further deterioration in the economic situation. Initially, the crisis mainly affected exports and the financial industry, but in recent months it also had a noticeable impact on the domestic economy. However, there were still striking differences. Businesses in the export industry continued to fare markedly worse than firms that cater to domestic demand. In terms of individual industry segments, the capital goods industry suffered the worst decline. The majority of companies in construction and retailing performed comparatively well, although these industries also experienced a definite slowdown. Most respondents regard the outlook as gloomy. Only a few are expecting the situation to improve in the second half of the year, and the prospects for 2010 are described as very uncertain.

Chart 2.1
Factors contributing to growth



Source: SECO

Chart 2.2
Manufacturing output



Sources: Institute for Business Cycle Research at ETH Zurich (KOF/ETH), SFSO

2.1 GDP growth

According to provisional SECO estimates, in the first quarter of 2009 real GDP declined by 3.2% compared with the previous quarter, following a 2.2% drop in the fourth quarter of 2008. It was thus down 2.4% year on year.

As in the previous quarter, the fall in demand was considerably more pronounced than the decline in GDP: while domestic final demand remained more or less static, demand from abroad decreased by 16.5%. As chart 2.1 illustrates, GDP was again boosted by a strongly positive contribution to growth from inventory investment.

On the production side, the continuing decline in value creation in the financial industry (–18.5%), insurance (–17.2%) and hospitality (–9.3%) had a negative effect on GDP. In the manufacturing industry, the drop in added value came to a more modest –5.2% owing to declining goods exports, which, according to various surveys, led to inventories being run down further. The wholesale and retail trades and public services were the main contributors to growth.

Real GDP and components Table 2.1
Growth rates on previous period, annualised

	2005	2006	2007	2008	2007			2008				2009
					Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Private consumption	1.8	1.6	2.1	1.7	2.2	3.1	2.5	1.2	2.2	0.5	–0.5	0.2
Government consumption	1.0	–0.9	–1.1	0.0	–0.3	–5.7	–5.3	1.0	3.1	6.2	3.3	5.8
Investment in fixed assets	3.8	4.7	5.4	–1.7	13.5	–10.2	4.0	2.1	–3.2	–7.6	–12.3	–1.6
Construction	3.5	–1.4	–1.5	–2.9	–11.0	–4.1	5.4	–4.4	–3.3	–4.9	–4.7	–4.1
Equipment	4.0	10.0	10.9	–0.8	35.3	–14.2	3.0	7.0	–3.2	–9.4	–17.5	0.3
Domestic final demand	**2.2**	**2.0**	**2.5**	**0.7**	**4.5**	**–1.3**	**1.9**	**1.3**	**1.0**	**–0.8**	**–2.9**	**0.5**
Domestic demand	**1.9**	**1.4**	**1.1**	**0.2**	**3.2**	**0.7**	**7.8**	**–5.8**	**–1.2**	**–2.7**	**10.1**	**9.3**
Total exports	7.3	9.9	9.4	2.3	1.1	5.7	7.2	3.3	10.6	–1.8	–30.7	–20.0
Goods	5.8	11.1	8.4	2.3	–5.2	4.3	4.2	5.8	14.6	–1.4	–34.0	–24.0
Excluding valuables[1]	6.5	11.2	8.3	2.0	–6.7	3.6	7.7	4.9	15.6	–8.0	–31.1	–19.4
Services	11.3	6.8	12.1	2.5	19.9	9.5	14.9	–2.7	0.8	–2.7	–21.2	–8.9
Aggregate demand	**3.7**	**4.3**	**4.1**	**1.0**	**2.4**	**2.6**	**7.6**	**–2.4**	**3.2**	**–2.3**	**–7.7**	**–2.2**
Total imports	6.6	6.5	5.9	–0.2	–0.8	0.3	14.4	–10.2	10.8	–5.4	–18.7	–0.0
Goods	5.6	7.8	5.1	–0.4	–3.2	–2.1	12.8	–7.3	13.5	–6.5	–26.4	1.7
Excluding valuables[1]	5.3	7.4	6.7	–0.8	–4.1	0.7	7.4	–6.7	12.9	–6.4	–24.2	–1.8
Services	11.3	0.5	10.0	0.8	12.0	12.0	21.6	–22.2	–1.2	0.0	27.9	–6.2
GDP	**2.5**	**3.4**	**3.3**	**1.6**	**3.9**	**3.7**	**4.6**	**1.4**	**–0.1**	**–0.8**	**–2.2**	**–3.2**

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

Exports continue to decline

After the slump in exports in the fourth quarter of last year, the decline continued in the first quarter of 2009, with exports of goods and services posting a 16.5% drop (excluding valuables) in comparison with the previous period. Goods exports (excluding valuables) decreased across a broad front, both geographically and by category of goods. Only the chemical industry reported an increase, thanks to flourishing pharmaceuticals exports to Japan. By contrast, increasing global reluctance to invest hit exports of capital goods; exports of industrial and electrical machinery, in particular, fell further in the first quarter. The downturn in intermediate goods – especially in the metals and textiles industries – continued unabated. Finally, watch exports registered a record fall for the second quarter in succession, declining by around 25% within six months and finishing up at their 2003 level.

Exports of services were unable to escape the effects of the persistently sluggish demand: they fell by 8.9% compared with the previous period. With the exception of merchanting, which benefited from the recovery in commodity prices, all industry segments were affected by the downturn. Once again, falling equity prices in the first quarter had a particularly large impact on banks' commission business with foreign customers. For the first time since the start of the crisis, tourism exports posted a significant loss; however, this may have been overstated, due to the fact that the Easter holidays did not fall in the first quarter of the year, unlike in 2008.

In April, there were growing signs that the downturn was slowing, thanks in particular to a noticeable upturn in consumer goods exports (mostly pharmaceutical products). Conversely, intermediate and capital goods continued their decline. At regional level, there was a significant improvement in exports to the emerging economies of Asia in particular, and the negative momentum has also weakened perceptibly in respect of exports to other regions. According to KOF/ETH surveys, export-oriented companies were expecting new orders to fall less rapidly in March/April, which suggests that exports may gradually stabilise at a low level in the next few months.

Chart 2.3
Factors contributing to export growth

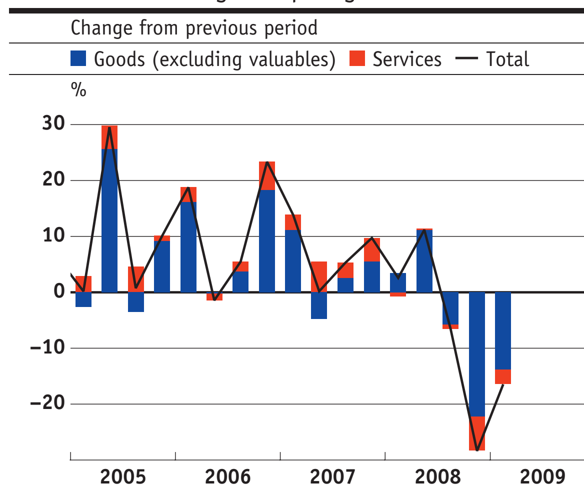


Chart 2.4
Goods exports: Regional growth contributions

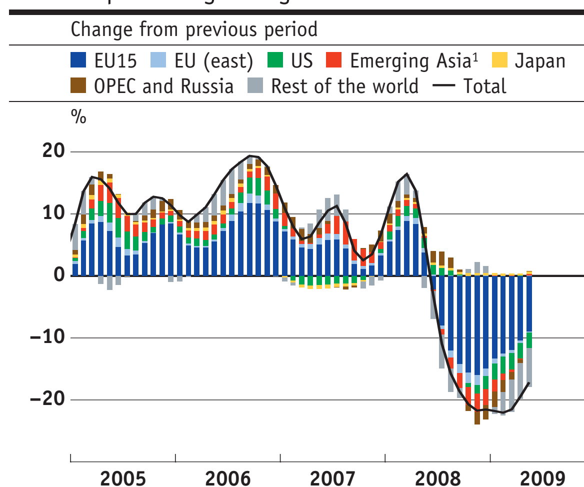


Chart 2.5
Expected new orders

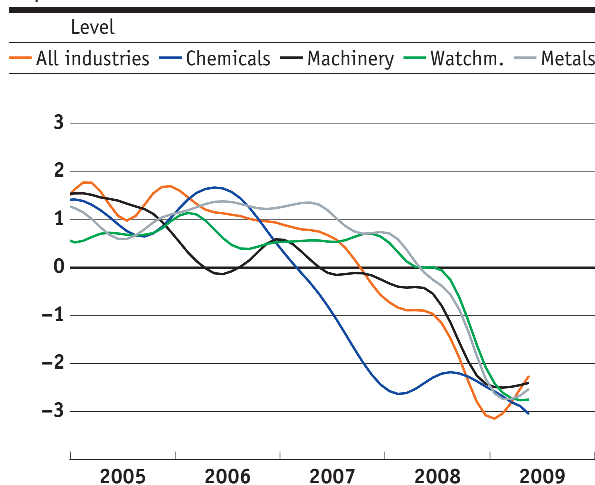


Chart 2.3:
Source: SECO

Chart 2.4:
1 Emerging Asia: China, Hong Kong, India, Indonesia, Malaysia, Philippines, Singapore, South Korea, Taiwan, Vietnam
Source: Federal Customs Administration (FCA)

Chart 2.5:
Source: KOF/ETH

Consumer spending static

Falling energy prices mean that households are currently benefiting from a favourable trend in real income. However, uncertainty about the economy is weighing on consumer spending. Demand for consumer durables and services, in particular, has weakened markedly.

All in all, consumer spending stagnated in the first quarter. In February and March, retailers posted weak results, and spending was also slightly lower for the first quarter as a whole compared to the previous one. While spending on food and beverages rose slightly, other components declined – some of them substantially. Certain other consumption indicators also paint a somewhat negative picture: new car registrations fell sharply, as did domestic demand for hotel accommodation.

Outlook still gloomy

Consumer confidence weakened further this spring: in April, the SECO Consumer Climate index declined from –23 to –38 points. This fall reflects a further deterioration in how consumers view the general economic trend. At the same time, concerns about job security became even more pressing, with people considerably more worried about losing their jobs than they were at the start of the year. Negative wealth effects still exist, too. Against this background, consumer spending is likely to weaken further over the next few quarters.

Adverse weather conditions dampen construction investment

According to SECO, construction investment fell again in the first quarter (–4.1%). However, this decline was mainly due to the exceptionally cold, snowy winter, which hampered construction activity. Nevertheless, there is still a satisfactory level of building activity underway. According to the Swiss Federal Statistical Office (SFSO), the number of homes under construction rose further in the first quarter, to reach the highest level since records began in 1994. Furthermore, surveys indicate comparatively well-filled order books and an encouraging business situation in the construction industry. As chart 2.8 illustrates, measures to ease monetary policy are increasingly filtering through to the mortgage market. There was a clear drop in interest rates on fixed rate mortgages, in particular. Owing to favourable lending conditions and an only moderate rise in building costs, the SNB expects residential construction to pick up. In addition, fis-

Chart 2.6
Private consumption

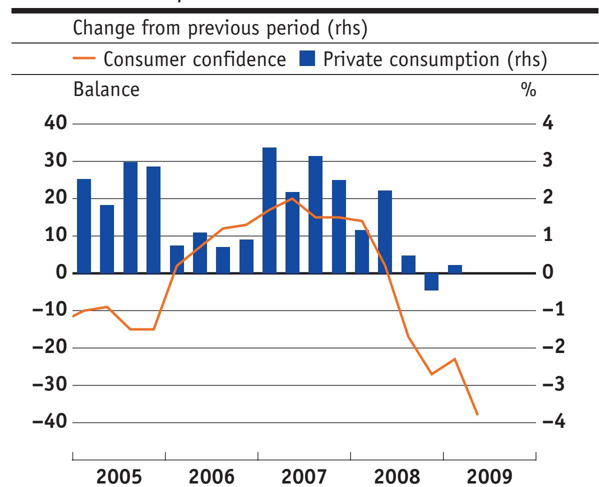


Chart 2.7
Construction

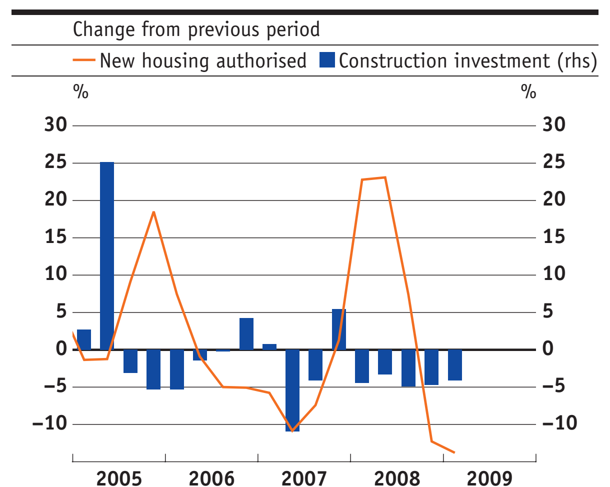


Chart 2.8
Mortgage rates and 3M Libor

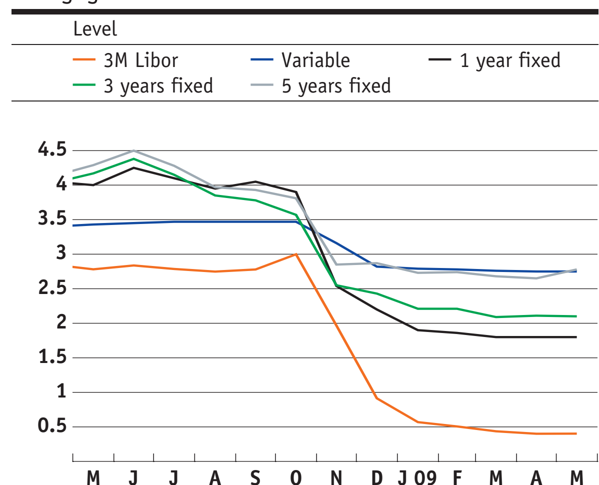


Chart 2.6:
Source: SECO

Chart 2.7:
Sources: SECO, SFSO

Chart 2.8:
Source: SNB

cal measures should provide a boost, especially to civil engineering. The SNB takes the view that these positive effects will support overall construction investment during 2009 and more than offset the fall in the commercial construction sector, which is heavily dependent on the state of the economy.

Weaker demand for equipment investment

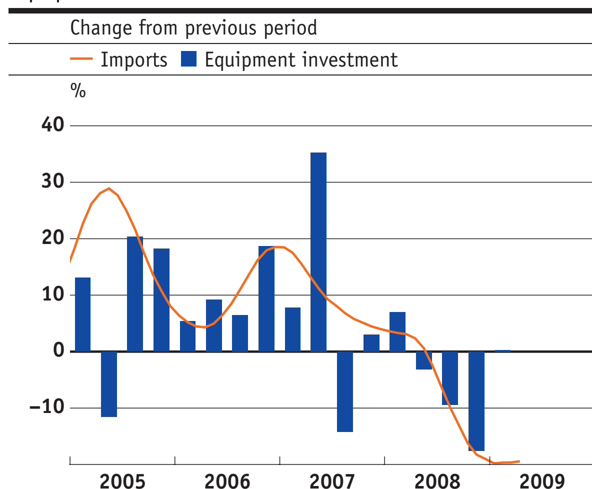
According to SECO estimates, equipment investment stopped falling in the first quarter. However, the underlying trend of the indicators points to a further substantial weakening in investment demand. Apart from an increase in imported aircraft, net imports of most capital goods declined. In addition, domestic production of capital goods fell significantly in the first quarter. This indicates that companies are cutting back heavily on capital spending at present. Another sign was that capacity utilisation in the manufacturing industry stood at only 78% – well below the long-term average – in the first quarter, according to a KOF survey. Moreover, companies are still pessimistic about their future production plans.

Import figures artificially high

Owing to one-off effects in the goods trade (exceptionally high imports of gold jewellery from Vietnam, as well as sizeable imports of aircraft), the 2.9% drop in imports (excluding valuables) during the first quarter appeared moderate. However, imports were low for most categories of goods, apart from the one-off effects just mentioned. As a result of the ongoing crisis in manufacturing, imports of industry-related intermediate goods declined markedly once again; imports of industrial and electrical machinery actually fell faster than before. Imports of capital goods for the construction and services industries also contracted. In the consumer goods segment, imports of cars, consumer electronics, household goods and clothing plummeted. There was also a noticeable decrease in imports of pharmaceutical products and watches. With regard to imports of services, higher nominal expenditure on financial services was countered by lower spending on tourism and transport services.

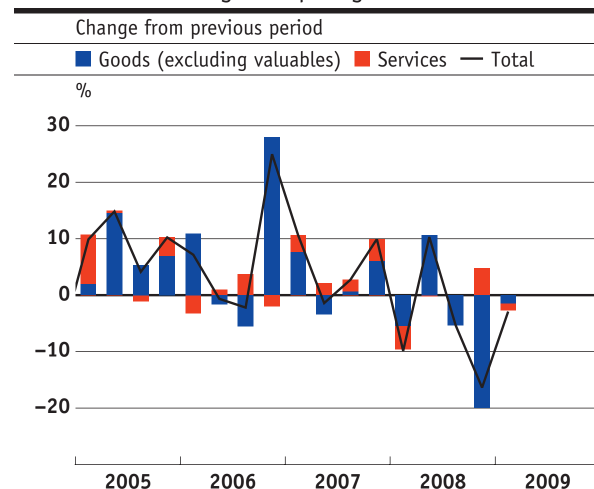
In April, the second quarter started on a weak note for the goods trade with the removal of the one-off effect from gold jewellery imports. The decline in imports of industrial and electrical machinery continued unabated. However, capital goods imports seemed to be stabilising, as did imports of semi-finished goods. This trend was also evident in imports of typical consumer goods (such as cars and consumer electronics), while imports of watches and watch components continued on a downward track.

Chart 2.9
Equipment



Sources: FCA, SECO

Chart 2.10
Factors contributing to import growth



Source: SECO

2.3 Employment and labour market

Mixed picture for employment

Rather surprisingly, employment statistics did not record a decline in the number of jobs during the first quarter of 2009. Full-time equivalent employment rose by 0.2%, following a rise of 0.6% in the fourth quarter of 2008. However, there were marked differences between the various industry segments. Employment in the manufacturing and construction industries declined further. In the services industry, the trend was also downward for retailing and hospitality. By contrast, new jobs were created in the areas of wholesale trade, property management, IT and healthcare.

As in the previous quarter, most firms reported less difficulty in recruiting qualified personnel. The healthcare industry and public administrations were the sole exceptions here; they continued to face recruitment difficulties.

Discouraging outlook

The index of positions vacant compiled by the SFSO declined markedly in the first quarter. Demand for labour will continue to weaken over the coming months: companies view the employment outlook as significantly worse, with manufacturing still the hardest-hit category. The outlook for the services industry has also deteriorated considerably.

Chart 2.11
Employment

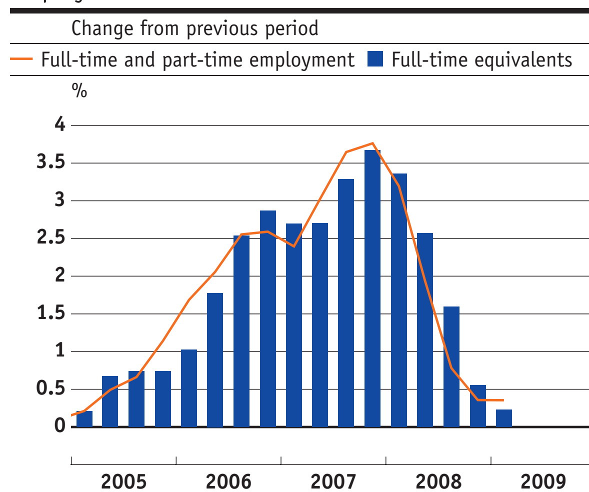


Chart 2.12
Employment outlook indicator

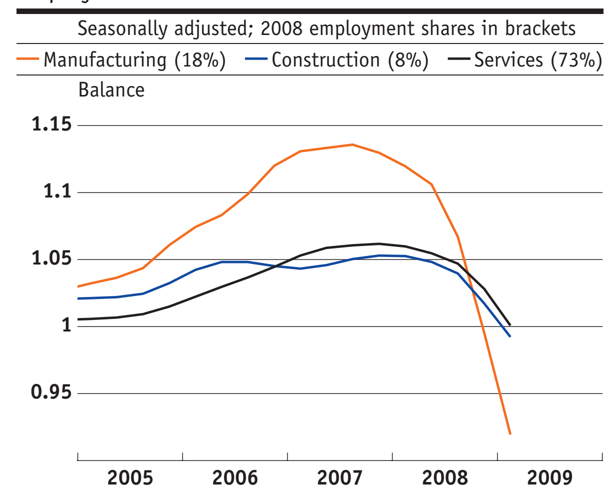


Chart 2.13
Unemployment rates and vacancies

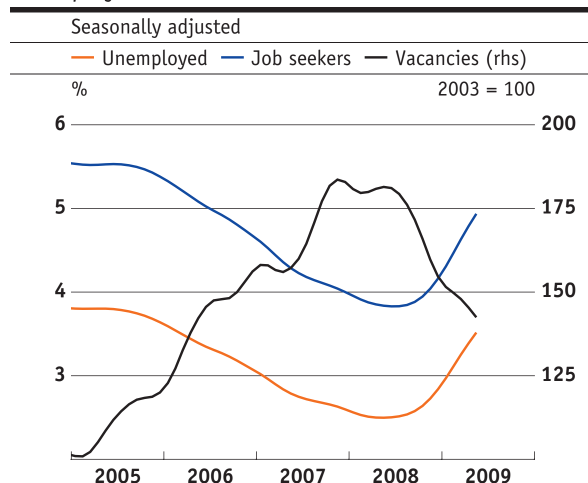


Chart 2.14
Short-time working

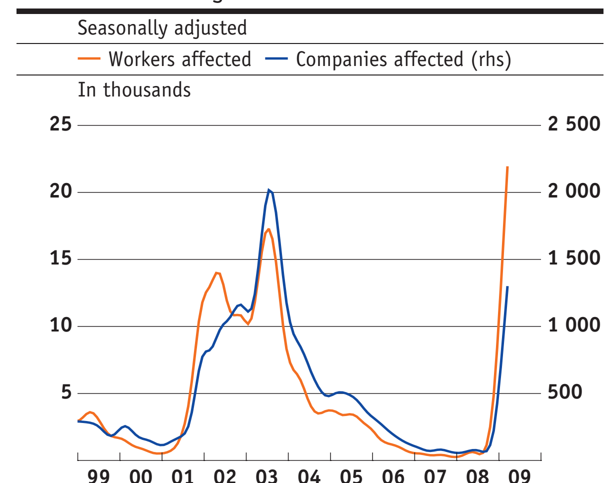


Chart 2.11:
Source: SFSO

Chart 2.12:
Source: SFSO

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: SECO

Rapid rise in joblessness

The sharp deterioration in the labour market situation can be seen most clearly from the increase in unemployment and short-time working. Seasonally adjusted unemployment went up from 3.1% in February to 3.5% in May. The number of job seekers, which, in addition to the registered unemployed, also includes people who are on training or employment programmes or have accepted an interim placement, rose from 4.5% to 4.9%.

Alongside the substantial increase in unemployment in the first quarter, there was also a sudden rise in short-time working. Between December and March, the number of firms introducing short-time working more than trebled. This pushed up the number of employees affected from 8,400 to 22,000, or some 0.5% of the labour force.

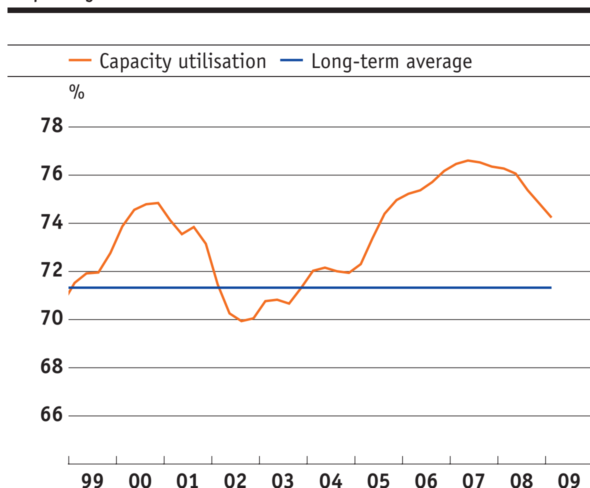
2.4 Capacity utilisation

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 their utilisation rate exceeds the normal level for an extended period of time, this points to excess demand and, consequently, to greater inflationary pressure. Conversely, an excess supply suggests deflationary pressure.

Reduction in capacity utilisation

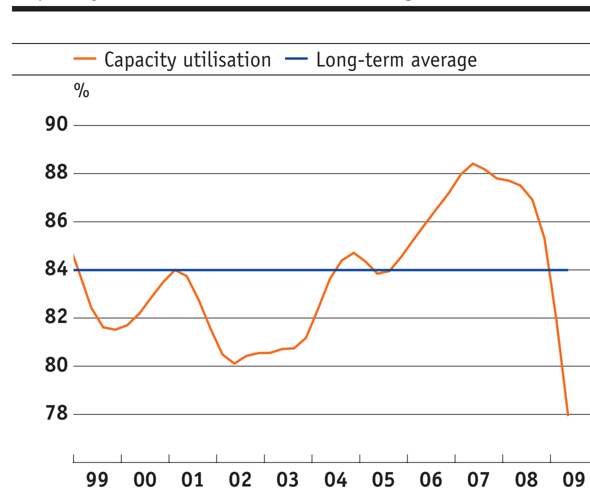
Technical capacity utilisation fell further in the first quarter of 2009. The indicators available, which are calculated by the ETH Institute for Business Cycle Research (KOF/ETH) on the basis of survey results, show that capacity utilisation lies well below its historical average, particularly in the manufacturing industry (cf. chart 2.16). By comparison, capacity is still being better utilised in the construction industry. Here, capacity utilisation is actually slightly above the historical average. However, the proportion of companies reporting that activity is being hampered by a shortage of technical capacity and labour has already slipped below the average.

Chart 2.15
Capacity utilisation in construction



Source: KOF/ETH

Chart 2.16
Capacity utilisation in manufacturing



Source: KOF/ETH

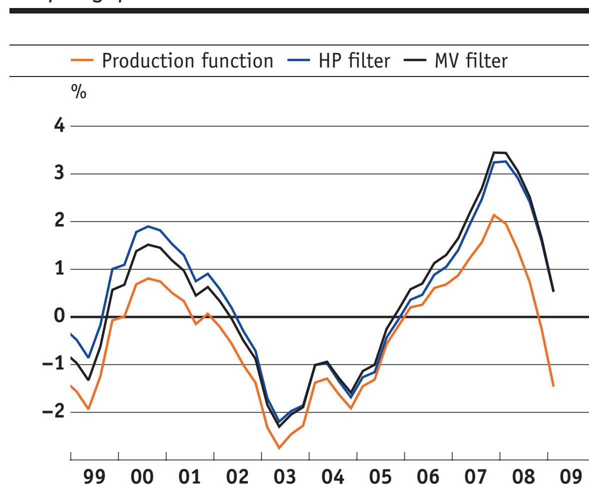
Negative output gap

The output gap, which is calculated as the difference between real GDP and estimated potential output, serves as a measure of capacity utilisation in the economy and the associated inflationary pressure. Calculating the output gap in the economy also takes the labour market situation and productivity into account, unlike the evaluation of technical capacity utilisation.

In the first quarter of 2009, the output gap dropped further into negative territory, meaning that actual output has fallen below potential output. According to the estimated production function (PF), the output gap was –1.5% of potential output in the first quarter (cf. chart 2.17). Alternative statistical filter methods such as the Hodrick-Prescott filter (HP) and the multivariate filter (MV) are still indicating a slightly positive output gap (0.5% of potential output).

Since capacity utilisation and the number of hours worked will probably fall in the next few quarters, the output gap is expected to turn increasingly negative. Potential output should grow more weakly in the coming years. This reflects the expected downturn in equipment investment and weaker growth in the labour supply.

Chart 2.17
Output gap



Source: SNB

2.5 Prices

Price index of aggregate supply still falling

The negative pressure on consumer prices exerted by the price of aggregate supply remained strong in recent months. Since summer 2008, both producer and import prices have been declining month on month. In the last few months, however, the decline has slowed somewhat in both indices. In May 2009, producer and import prices were 2.9% and 8.9% lower respectively, compared with a year earlier. In the case of import prices, all components contributed to this decline in the index, with energy and intermediate goods falling most; this was partly due to the temporary appreciation of the Swiss franc. In the case of producer prices, agricultural goods were the only components apart from energy and intermediate goods to experience price drops during the year, while the prices of consumer and capital goods remained just above their year-back levels.

Inflation expectations clearly negative

Consumer prices will remain under negative price pressure in the next few months. As charts 2.19 and 2.20 illustrate, both the wholesale and manufacturing industries are expecting purchase and sale prices to fall. The corresponding indicators are currently at their lowest levels since the 1970s.

Consumer price index down

Annual inflation, as measured by the national consumer price index (CPI), decreased from 0.2% to −1.0% between February and May. This decline was to a large extent the result of statistical base effects connected with oil products. Excluding these, inflation still came to 0.9% (February: 1.5%).

Further decline in domestic inflation

Inflation for domestic goods and services decreased from 1.7% in February to 1.3% in May. The drop was primarily due to lower inflation rates for residential rents, restaurant meals, package holidays and air travel. In May, residential rents were still 2.8% higher year on year, having risen 3.5% in the twelve months to February. Inflation for private services excluding rents fell from 1.4% in February to 0.8% in May. On the other hand, in May annual inflation for domestic goods was 0.1 percentage points higher than in February (1.2%), partly because of a rise in the price of electricity.

Chart 2.18
Prices of total supply

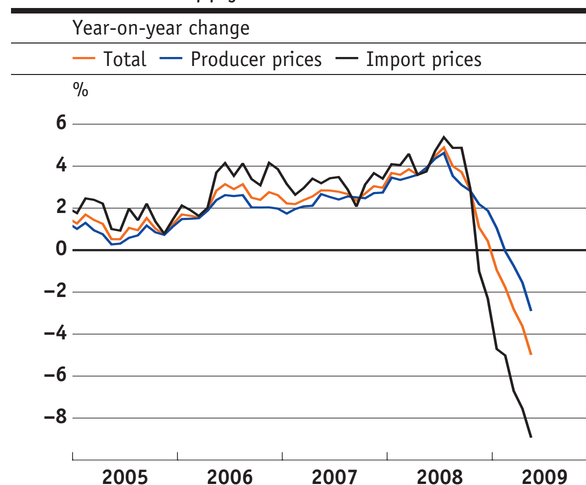


Chart 2.19
Expected purchase prices

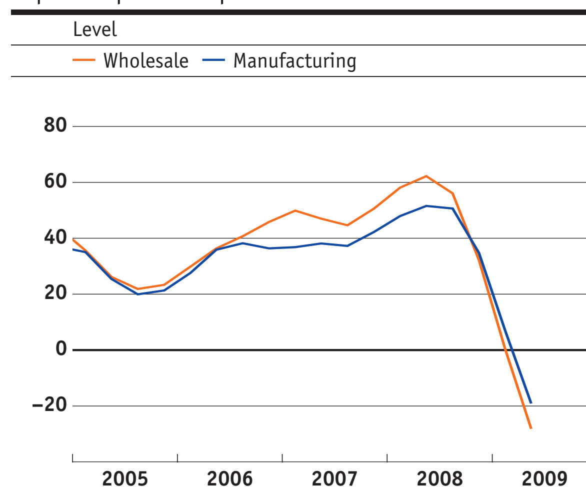


Chart 2.20
Expected sale prices

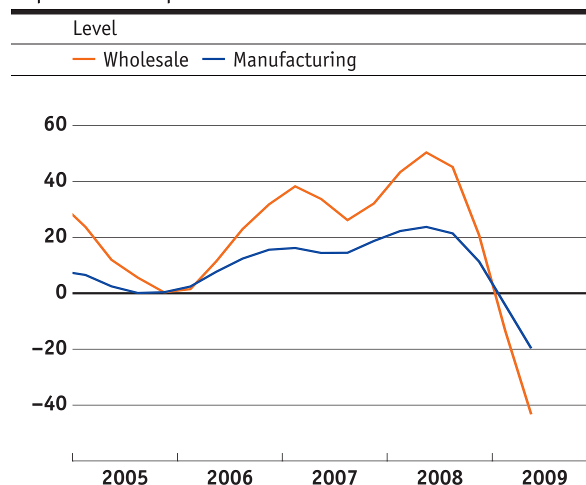


Chart 2.18:
Source: SFSO

Charts 2.19 and 2.20:
Source: KOF/ETH

Negative imported inflation

In February 2009, the price of oil reached its lowest level since December 2004, at USD 43 per barrel on average, before rising to USD 57 per barrel in May. Weak demand meant that oil prices were not fully passed through to consumer prices. Annual inflation rates in this category are therefore still dominated by base effects which will not start to disappear until mid-year. Annual inflation for oil products fell from –23.9% in February to –34.2% in May, despite the latest price rise. Inflation for other imported goods and services also went down from 1.4% to 0.5% in the same period.

Core inflation still declining slightly

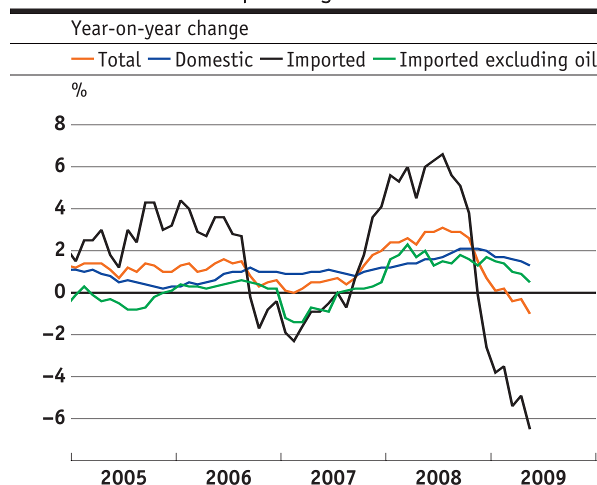
Inflation, as measured by the CPI, is subject to short-term fluctuations that may distort perceptions of the general price trend. For that reason, core inflation rates are calculated with the aim of capturing the underlying inflation trend. The SNB computes two measures of core inflation (cf. chart 2.23). The trimmed means method (TM15)

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

	2008	2008 Q3	Q4	2009 Q1	2009 February	March	April	May
Overall CPI	**2,4**	**3,0**	**1,6**	**–0,0**	**0,2**	**–0,4**	**–0,3**	**–1,0**
Domestic goods and services	1,7	1,9	2,1	1,7	1,7	1,6	1,5	1,3
Goods	1,7	1,6	1,9	1,2	1,2	1,2	0,9	1,3
Services	1,7	2,0	2,1	1,8	1,8	1,7	1,7	1,3
Private services excluding rents	1,4	1,8	1,9	1,3	1,4	1,1	1,0	0,8
Rents	2,4	2,7	3,0	3,3	3,5	3,5	3,5	2,6
Public services	0,9	0,8	0,8	0,6	0,6	0,6	0,8	0,8
Imported goods and services	4,3	5,8	0,3	–4,2	–3,5	–5,4	–4,9	–6,5
Excluding oil products	1,7	1,6	1,6	1,3	1,4	1,0	0,9	0,5
Oil products	17,8	27,8	–5,0	–27,2	–23,9	–31,5	–29,1	–34,2

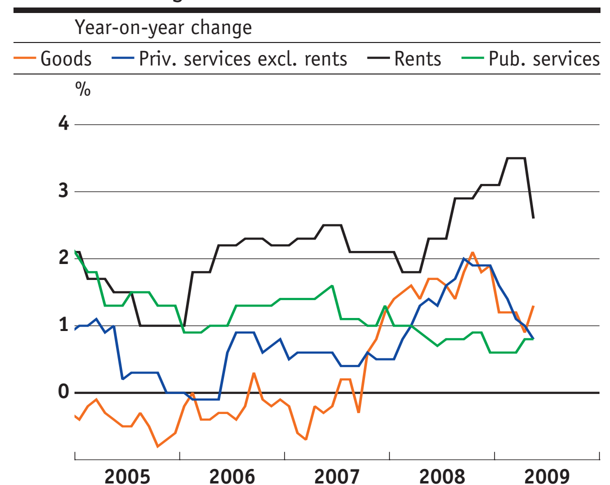
Sources: SFSO, SNB

Chart 2.21
CPI: Domestic and imported goods and services



Sources: SFSO, SNB

Chart 2.22
CPI: Domestic goods and services



Sources: SFSO, SNB

excludes from the consumer price index, for any given month, the 15% of goods prices with the highest annual rates of change and the 15% with the lowest annual rates of change. Dynamic factor inflation (DFI), by contrast, extracts underlying inflation using a large amount of data on the real economy, financial market indicators and monetary variables. The two core inflation rates calculated by the SFSO exclude the same price-volatile items from the basket of goods in each period (cf. chart 2.24). In the case of core inflation 1 (SFSO1), these are food, beverages, tobacco, seasonal products, energy and fuel. Core inflation 2 (SFSO2) also factors out products with administered prices.

The core inflation rate calculated by the SNB using the trimmed means method fell from 1.6% to 1.2% between February and May. The SFSO core inflation rates fell by 0.5 and 0.6 percentage points to 0.8% and 1.0% over the same period. Although these measures of core inflation are still clearly positive, the underlying inflation trend is likely to have fallen faster because of negative inflationary pressure in the upstream stages of the value chain, along with weak final demand. This is also implied by the DFI rate, which declined from 0.7% to 0.4% between February and May.

2.6 Real economic outlook

International downturn slows

The SNB expects the situation abroad to continue improving. The United States and Japan should post positive growth rates, while output should stabilise in the euro area over the same period. Since the expected growth rates are well below potential growth, the negative output gaps in the above-mentioned economies will increase further.

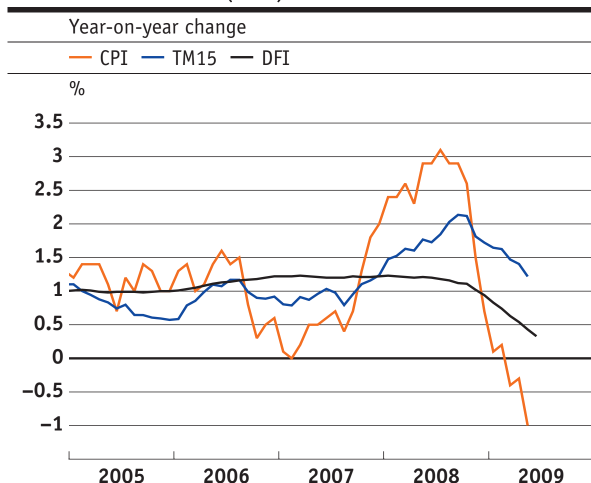
Domestic demand falling

Against this background, goods exports from Switzerland can be expected to stabilise gradually. Construction investment should even experience a modest revival. However, the other components of domestic final demand are expected to continue to weaken. The decline in capacity utilisation will probably lead to a drop in equipment investment. Furthermore, the difficult labour market situation, together with higher compulsory levies, could hit consumer spending.

The inventory trend may have a decisive impact on GDP growth in the short term. For example, inventory reduction is likely to have pushed down growth in the second quarter. However, in Switzerland too, the situation is expected to improve gradually over the medium term.

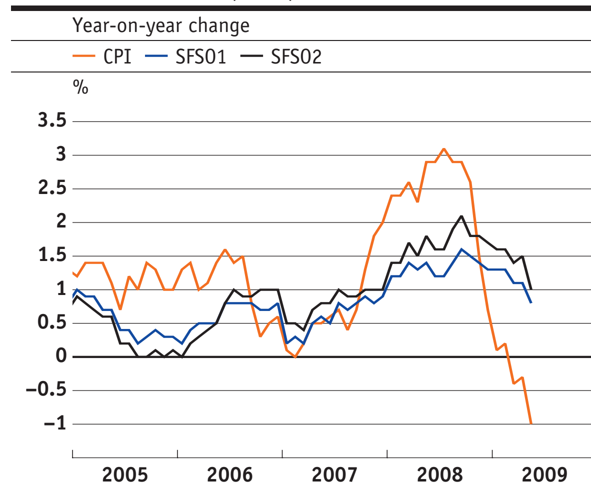
For 2009 as a whole, the SNB still expects Switzerland's GDP to decline by 2.5–3.0%.

Chart 2.23
Core inflation rates (SNB)



Sources: SFSO, SNB

Chart 2.24
Core inflation rates (SFSO)



Source: SFSO

3 Monetary developments

3.1 Interest rates and inflation expectations

The massive deterioration in the economic situation that set in during the 2008/2009 winter half-year, the significantly increased risk of deflation, tighter corporate financing conditions on the capital market and the risk that the Swiss franc would continue to appreciate prompted the SNB to significantly further increase the supply of liquidity to the Swiss economy. At its quarterly assessment in March, it decided to lower the target range for the three-month Libor by 25 basis points to 0–0.75%. It also announced that it would conclude additional longer-term repo transactions with the banks, purchase Swiss franc bonds issued by Swiss private sector borrowers and make currency purchases in order to prevent the Swiss franc appreciating further against the euro.

This bundle of measures led to a significant drop in interest rates and risk premia on the interbank market. While the three-month Libor in Swiss francs settled at 40 basis points, the risk premium as measured by the spread between the three-month Libor and the corresponding overnight index swap (OIS) fell to 0.34 percentage points in the second quarter, having stood at around 0.46 percentage points in the previous one. At the same time, the Swiss franc's upward trend against the euro was curbed effectively and EUR/CHF volatility significantly reduced.

In other countries, the measures implemented by central banks also helped ease the situation on the financial markets. Money market risk premia therefore declined nearly everywhere.

Central banks continued to cooperate closely to give the global financial markets more stability. On 6 April 2009, in conjunction with the Bank of England, the European Central Bank (ECB), the US Federal Reserve (Fed) and the Bank of Japan, the SNB announced a swap agreement to enable the provision of foreign currency liquidity by the Fed to US financial institutions. This new temporary currency swap agreement allows the Fed to draw Swiss franc liquidity of up to CHF 40 billion against US dollars when needed.

Chart 3.1
Money market rates

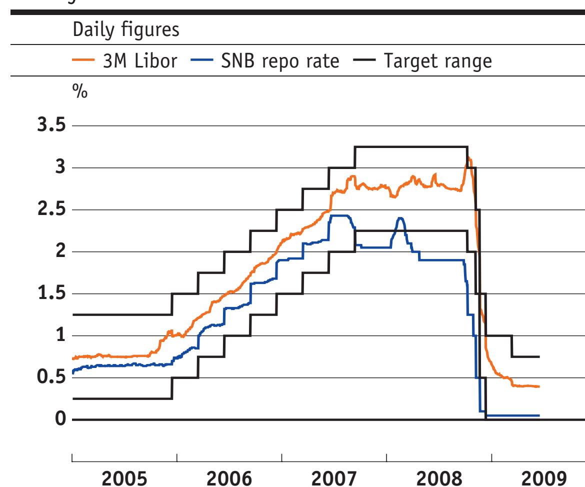


Chart 3.2
Spread between 3M Libor and OIS

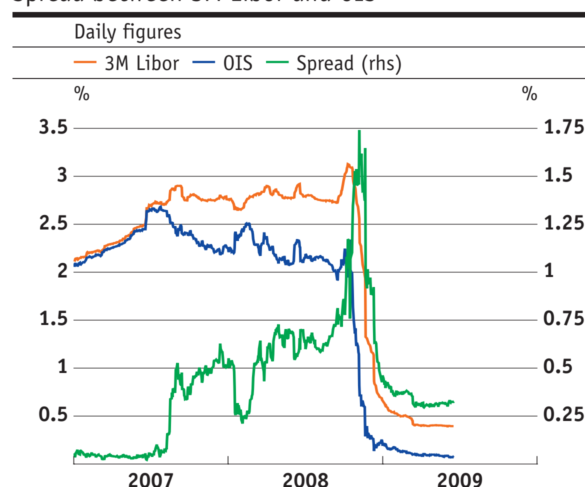
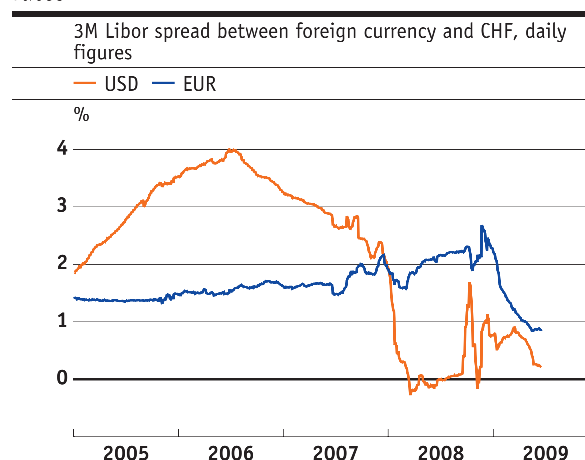


Chart 3.3
Spreads between international short-term interest rates



Charts 3.1 and 3.3:
Sources: Reuters, SNB

Chart 3.2:
Sources: Bloomberg, Reuters

The SNB issued SNB Bills in Swiss francs on a weekly basis to absorb Swiss franc liquidity in a targeted manner. Since the quarterly assessment of 12 March 2009, only SNB Bills with terms of seven days have been placed. The volume of SNB Bills auctioned in April and May 2009 averaged CHF 16 billion and CHF 25 billion respectively. The volume-weighted average yield per auction fluctuated between 0.007% and 0.016%.

As part of the financial arrangements for the loan to the SNB StabFund, the SNB continued issuing debt certificates in US dollars every other Monday. The SNB USD Bills were being offered with terms of 28, 84 and 168 days. Interest in these issues grew steadily, particularly for those with longer terms. Since March 2009, the spread between the yields for SNB USD Bills and the corresponding US dollar Treasury Bills has been between 25 and 40 basis points depending on the term. The outstanding volume of SNB USD Bills hit a record high on 10 June 2009, reaching roughly USD 15 billion.

Rise in long-term rates

Short-term interest rates declined in Switzerland as well as globally. Long-term rates for government bonds, by contrast, trended upwards. Since the last assessment, the yield on ten-year Swiss Confederation bonds has risen from 2.26% to 2.49% in mid-June. This rise can be interpreted as an early sign of economic recovery and higher inflation expectations. The opposing interest rate trend for short and long-term bonds led to a steepening of the yield curve.

Improvement in corporate financing terms

Corporate financing terms improved. Yields had risen after the collapse of Lehman Brothers, particularly on riskier corporate bonds. Since the last assessment, yields on Swiss corporate bonds have declined again. However, they are still higher than they have been in recent years. The drop in yield is particularly evident in the case of lower-rated corporate bonds. Purchases of Swiss franc bonds by the SNB have contributed to a reduction on risk premia on long-term bonds issued by private sector borrowers.

Chart 3.4
Term structure of Swiss Confederation bonds

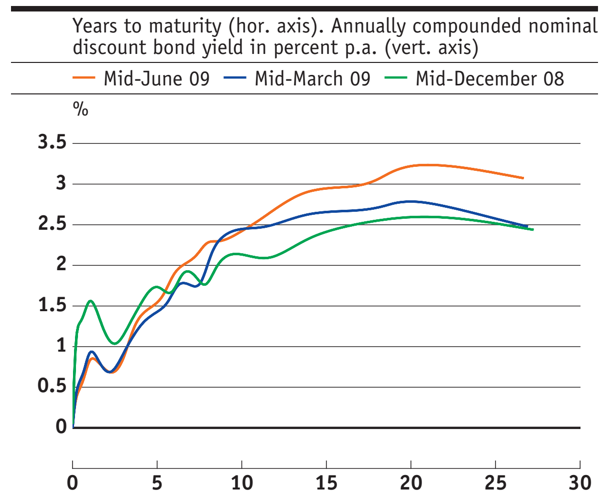


Chart 3.5
International interest rates

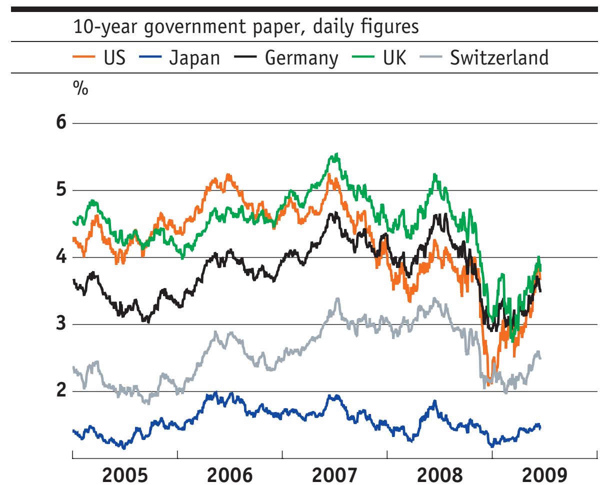
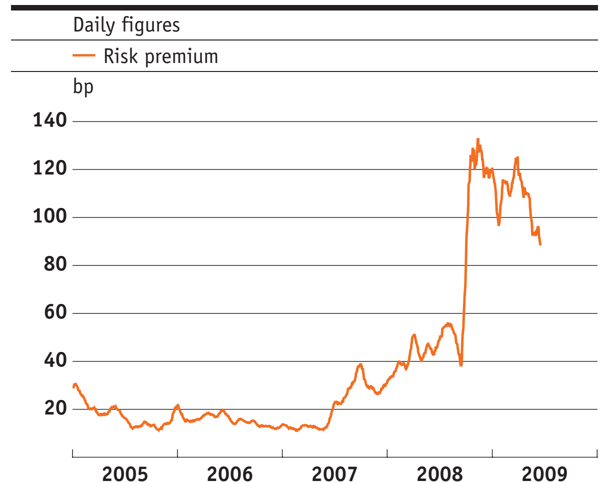


Chart 3.6
Five-year aggregate credit risk premium



Charts 3.4 and 3.6:
Source: SNB

Chart 3.5:
Sources: SNB, Thomson Datastream

Slight rise in short-term real interest rates

The real interest rate is a key determinant in the savings and investment behaviour of companies and households and is thus extremely important for future business cycle developments. Chart 3.7 shows movements in the three-month real interest rate. This rate is defined as the difference between the three-month Libor and the expected rise in consumer prices during the same period. These inflation expectations are an average of the forecasts obtained from various models. In the first quarter of 2009, the real interest rate measured in this way was 0.15%, which was slightly higher than in the previous quarter. This stabilisation at a low level reflects the lower three-month Libor, which was compensated by lower inflation expectations.

The results of SECO's household survey of consumer confidence published in May also suggest a decline in short-term inflation expectations. The proportion of respondents expecting prices to drop in the next twelve months remained steady compared with the previous month, at approximately 30%. Furthermore, the number of respondents expecting prices to remain stable went up from 35% to 40%.

Medium-term inflation expectations rose slightly, leading to a fall in real interest rates on medium-term paper. The real three-year interest rate stood at 0.7% in the first quarter of 2009. By historical standards, the level of real interest rates is also low for medium-term maturities and is having a stimulating effect on the economy.

3.2 Exchange rates

Dollar weakens as volatility persists

The currency markets continued to be volatile. The US dollar has weakened by 9% against the euro since the last quarterly assessment, following the improvement on the financial markets. However, it is still about 6% above the average price for 2008 (cf. chart 3.9).

Intervention drives down the Swiss franc

On the day of the quarterly assessment of 12 March, the Swiss franc weakened abruptly against the euro before firming up to some extent (cf. chart 3.9). The CHF/EUR exchange rate trend was influenced by the SNB's interventions aimed at preventing the Swiss franc appreciating further. The Swiss franc has lost 2% against the euro since the

Chart 3.7
Estimated real interest rate

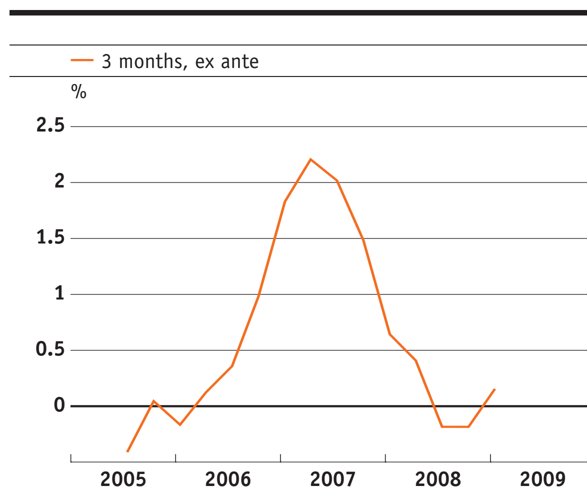


Chart 3.8
Survey on expected movements in prices

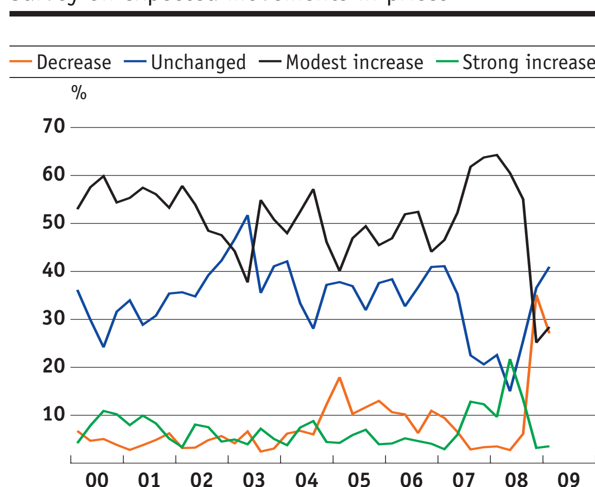
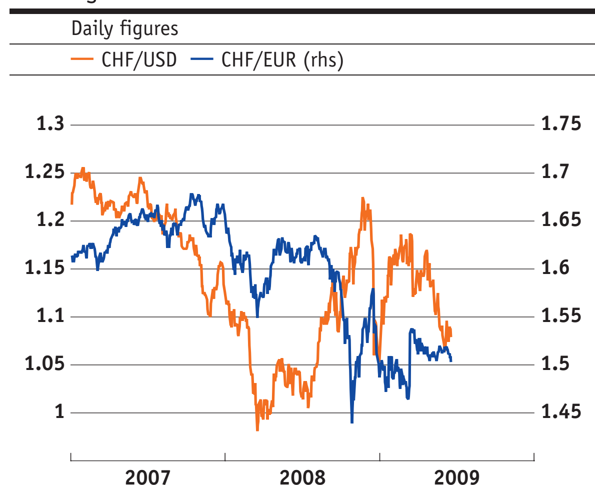


Chart 3.9
Exchange rates



Charts 3.7 and 3.9:
Source: SNB

Chart 3.8:
Sources: SECO, SNB

last quarterly assessment. However, in mid-June it was still 5% higher than a year earlier.

This depreciation against the euro since March was partly compensated by the sustained appreciation of the Swiss franc against the US dollar. In May, the nominal trade-weighted Swiss franc exchange rate was practically unchanged from the last quarterly assessment (cf. chart 3.10). The Swiss franc has nevertheless still gained about 10% since the start of the crisis in August 2007.

Real external value stable over the long term

The relatively stable path of the trade-weighted external value of the Swiss franc shown in chart 3.10 suggests that, over a long-term period, movements in the nominal exchange rate have tended to balance out inflation differentials (relative purchasing power parity).

More expansionary monetary conditions

The Monetary Conditions Index (MCI) combines the three-month Libor and the nominal trade-weighted value of the Swiss franc to provide a measure of the monetary conditions with which businesses in Switzerland have to contend. 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)', *Quarterly Bulletin* Q1 2004, p. 27).

Since the last quarterly assessment, the depreciation of the Swiss franc together with only minor changes in the three-month Libor has led to a slight fall in the MCI, corresponding to a loosening of monetary conditions.

Chart 3.10
Trade-weighted external value of Swiss franc

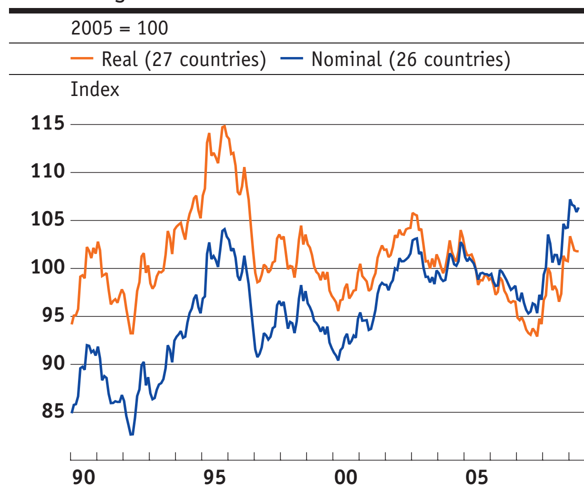


Chart 3.11
MCI nominal

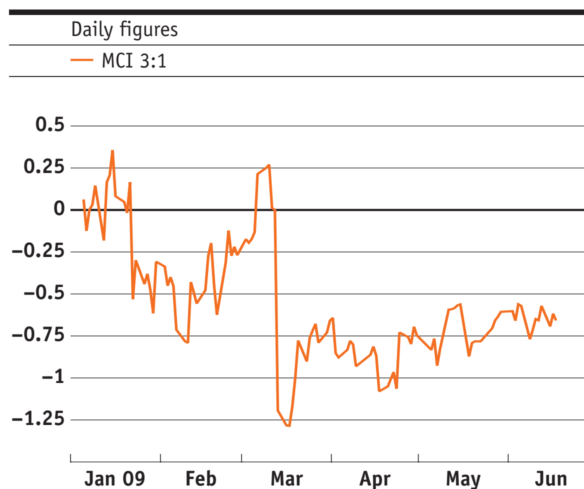


Chart 3.10:
Source: Bank for International Settlements

Chart 3.11:
Source: SNB

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 volume 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, real estate and commodities being revalued. Price movements in these investments therefore allow conclusions to be drawn about inflation expectations and the outlook for the economy. 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.

Equity market rally

The equity markets made clear gains in the second quarter of 2009. Following the March quarterly assessment, the Swiss Performance Index (SPI) rose by 18% to mid-June. The Standard & Poor's 500 (S&P) and the Dow Jones EURO STOXX (DJ Euro) gained around 20%. These price movements made up for the losses registered since the beginning of the year.

The uncertainty on the equity markets as measured by the VIX index declined. The index has fallen from about 41% to 31% since the last quarterly assessment. This can be taken to mean that risk aversion has fallen and that there is a swing towards more risk-tolerant behaviour. However, the VIX index is still very high by historical standards, even after the latest drop.

Swiss companies of all sizes have benefited from the upward trend on the stock market. Large cap companies saw their share prices rise by 15%, while the increases were 24% and 21% for mid and small cap firms respectively. Nevertheless, the recovery on the Swiss equity market was not broad-based in terms of sector. Bank and technology stocks, in particular, have soared since mid-March 2009.

Chart 3.12
Share prices

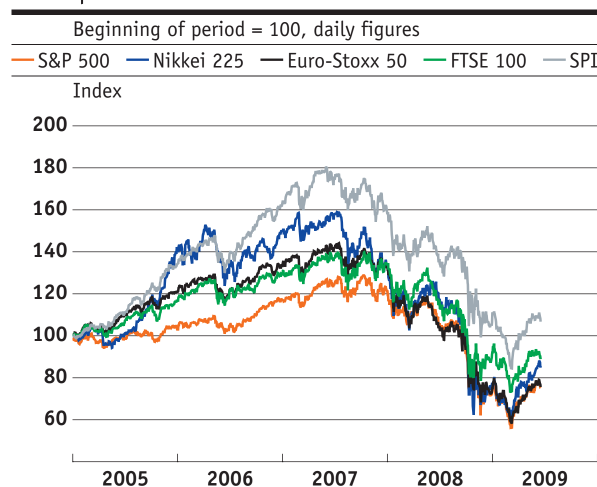


Chart 3.13
Selected SPI sectors

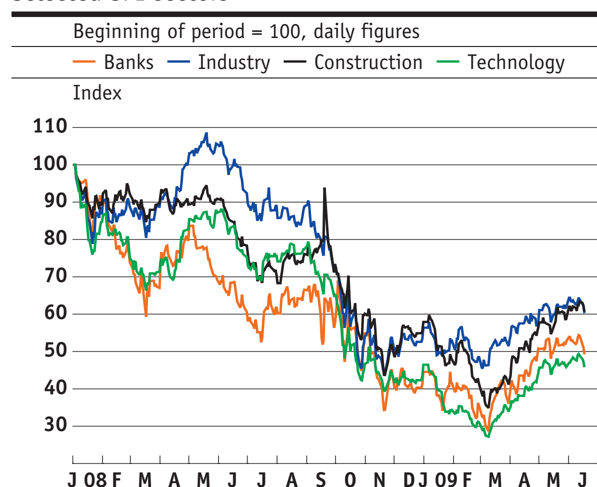


Chart 3.14
Volatility of equity returns

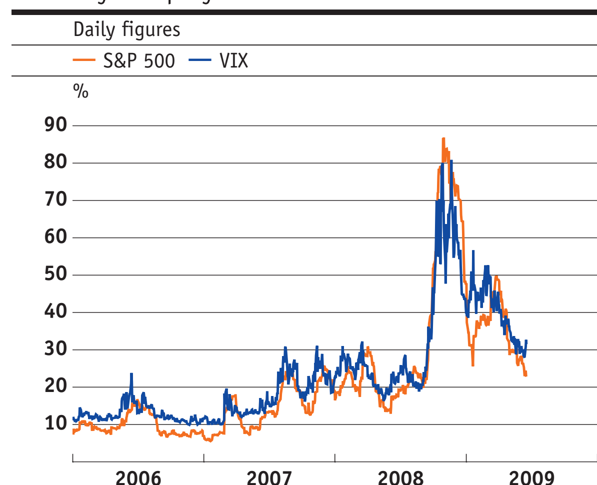


Chart 3.12:
Sources: Bloomberg, Thomson Datastream

Chart 3.13:
Source: Thomson Datastream

Chart 3.14:
Sources: SNB, Thomson Datastream

Big price rises on commodity markets

Commodity prices performed similarly to equity valuations. A number of commodities have recently reached new highs for the year. Since the quarterly assessment in March, price rises have focused on energy sources in particular. The oil price rose by 52% in dollars. The appreciation against the dollar meant that oil went up less in Swiss francs, but the increase was still 46%.

Mixed trends on the real estate market

Real estate prices showed mixed trends in the first quarter. Year on year, real estate prices increased significantly overall. Prices for owner-occupied apartments climbed by 5.4%, while those for single-family homes went up 5.1% and apartment rents rose by 3.9%. On the other hand, rental costs for new apartments, which are a better reflection of market forces, fell by 3.6%, while commercial rents declined by as much as 8.7%. Office rents remained virtually unchanged.

Chart 3.15
Nominal real estate prices and rents

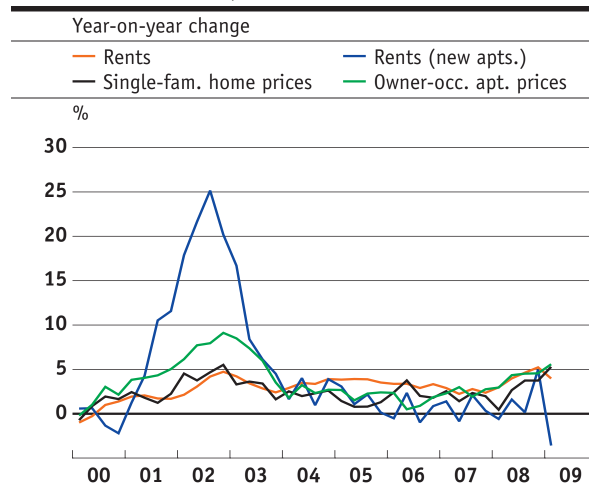
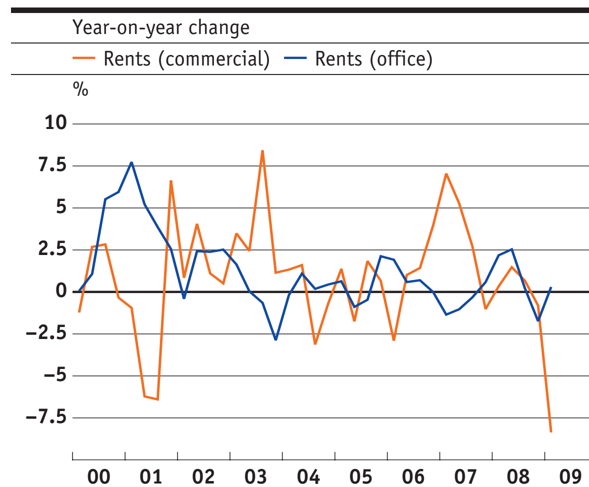


Chart 3.16
Nominal commercial and office rents



Charts 3.15 and 3.16:
Source: Wüest & Partner

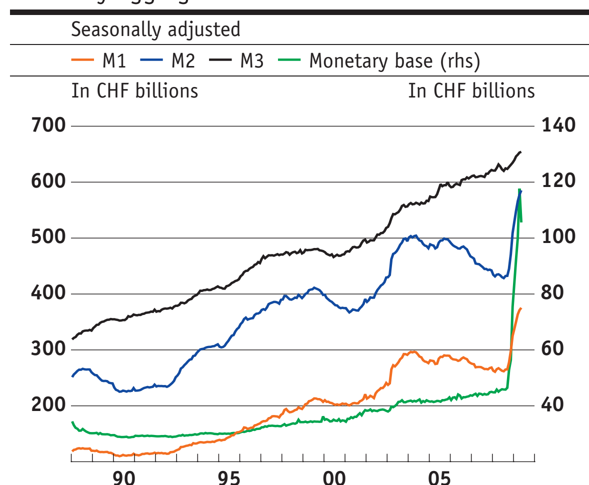
3.4 Monetary aggregates

Growth in monetary aggregates

The SNB continued to provide the market with generous liquidity in order to satisfy unusually high demand on the part of commercial banks. The general level of uncertainty led to an increase in demand for high-denomination banknotes. Consequently, the fact that the monetary base shot up by 132% in May compared with the year-back figure does not mean that the economy is over-supplied with money, and does not entail any inflationary risk.

This is also confirmed by the fact that the broader monetary aggregates are still only slightly above their trend level (cf. chart 3.17). After strong growth in 2003–2005, both M1 (notes and coins in circulation, sight deposits and transaction accounts) and M2 (M1 plus savings deposits) declined from the beginning of 2006 as a result of rising interest rates. From autumn 2007, both of these monetary aggregates stabilised again, in line with the flatter path of short-term interest rates. Following the latest interest rate reductions, M1 and M2 began to grow strongly again. In May, M1 was 41.7% above the year-back level, while M2 was 35.1% up. However, M3 (M2 plus time deposits), which generally fluctuates less than the other aggregates, expanded by only 4.2% (cf. table 3.1).

Chart 3.17
Monetary aggregates



Source: SNB

Higher inflation rates in the medium term

One way of assessing potential inflationary or deflationary risks emanating from an excessive or insufficient supply of liquidity to the economy is to calculate a money gap or monetary overhang. This corresponds to the positive deviation (monetary overhang) or negative deviation (money gap) 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', *Quarterly Bulletin* Q1 2005, p. 33). Chart 3.18 shows the percentage deviations of the M3 money stock from the calculated equilibrium value. In order to take account of statistical uncertainty, the money gap or monetary overhang is presented as a range that spans one standard deviation. The chart shows that the target range still lay below the zero line in the first quarter. However, an examination of movements in the monetary aggregates in April and May suggests the existence of a positive monetary overhang which indicates that higher inflation rates may be expected in the medium term.

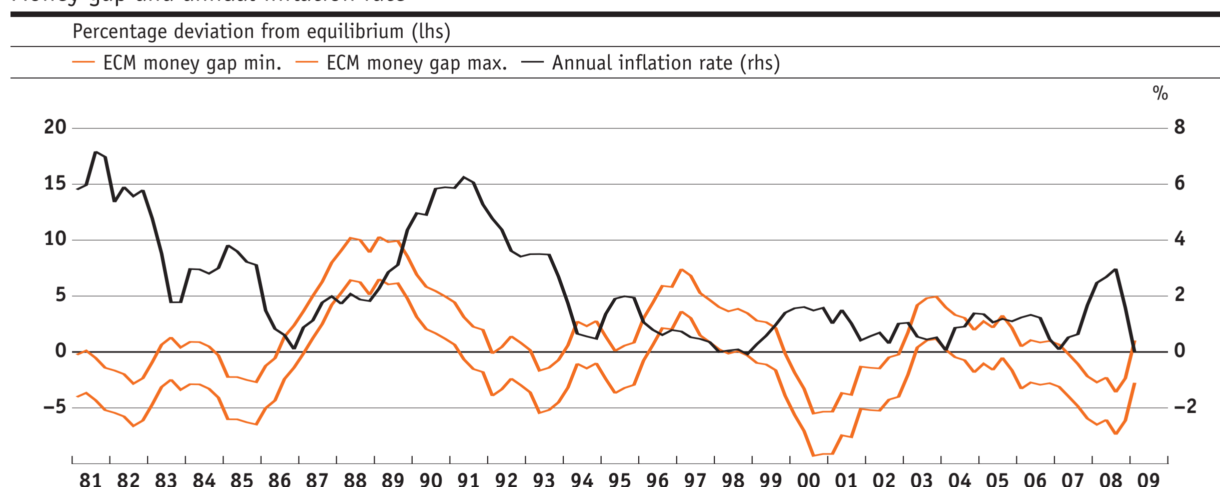
Monetary aggregates[1]

Table 3.1

	2007	2008	2008 Q1	Q2	Q3	Q4	2009 Q1	2009 March	April	May
Monetary base[2]	**44.2**	**49.6**	**45.8**	**45.4**	**45.3**	**61.7**	**92.9**	**100.3**	**118.0**	**105.4**
Change[3]	*2.5*	*12.1*	*2.6*	*3.3*	*4.4*	*37.8*	*102.9*	*117.9*	*160.5*	*132.0*
M1[2]	**268.9**	**273.1**	**266.4**	**265.3**	**258.5**	**302.3**	**355.4**	**365.8**	**375.9**	**375.9**
Change[3]	*–4.8*	*1.6*	*–3.4*	*–1.7*	*–1.1*	*12.5*	*33.4*	*37.0*	*39.0*	*41.7*
M2[2]	**450.5**	**443.1**	**438.7**	**434.3**	**423.7**	**475.7**	**554.8**	**570.1**	**584.5**	**587.9**
Change[3]	*–6.4*	*–1.7*	*–5.8*	*–4.3*	*–3.5*	*7.3*	*26.5*	*30.2*	*32.8*	*35.1*
M3[2]	**612.8**	**625.9**	**625.2**	**629.3**	**617.9**	**631.1**	**648.1**	**650.7**	**658.4**	**656.7**
Change[3]	*2.1*	*2.1*	*1.9*	*2.8*	*1.8*	*2.0*	*3.7*	*3.8*	*3.4*	*4.2*

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

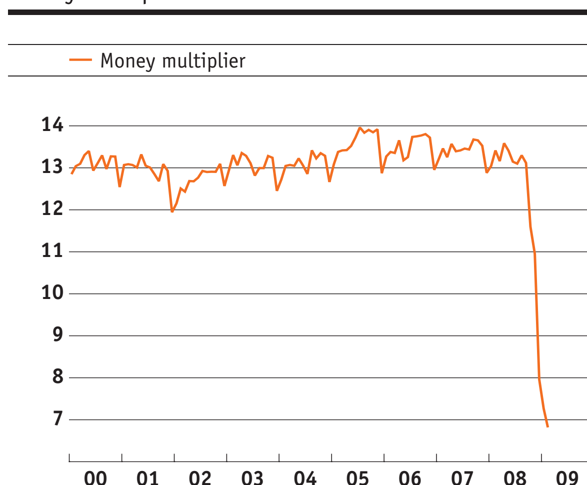
Huge increase in demand for central bank money

The monetary base, consisting of banks' sight deposits at the SNB plus banknotes in circulation, is a measure of the liquidity in the interbank market. Demand for central bank money has more than doubled since September 2008, because since the start of the financial crisis the banks have not been extending as much credit to each other as they previously did. The central banks – including the SNB – have taken over this function, which would normally be exercised by the commercial banks. The increase in demand from banks for central bank money is evident from the ratio of banks' sight deposits to public deposits (sight, time and savings deposits) included in M3.

There is generally a stable relationship between the liquidity in the interbank market, sight deposits and the M3 aggregate, and this is expressed as the money multiplier (cf. chart 3.19). The latter expresses the fact that, on the basis of the liquid funds available to them, the banks are able to multiply the amount of money available to the general public through lending. The M3 money multiplier is a quotient of the M3 aggregate and the monetary base. Banks' sight deposits have increased significantly since autumn 2008, and this is reflected in a big fall in the multiplier. The decline of the multiplier shows that the liquidity created by the SNB in the wake of the financial crisis is still in the banking system today. That is why there has so far been only moderate growth in the M3 aggregate.

Sooner or later, the multiplier will return to its normal value. Basically, this can happen in one of two ways. The first, which is to be avoided for monetary policy reasons, would see the multiplier rise while the monetary basis remains unchanged. The banks' high liquidity would thus be made available to the rest of the economy via the granting of loans. The associated rise in M3 could have an inflationary effect eventually. On the other hand, if the multiplier rises because the SNB absorbs the liquidity from the interbank market, thus reducing the banks' sight deposits, M3 growth and inflation would remain under control.

Chart 3.19
Money multiplier M3



Source: SNB

3.5 Credit

Stronger growth in mortgage claims

Mortgages are growing strongly because of low interest rates. Other loans are gradually declining, with household loans falling rapidly. As in previous recessions, the cantonal banks recorded higher mortgage volumes than the two largest banks. Large firms are having their credit limits cut, and the SNB's bank lending survey is showing a slight tightening of credit conditions.

Annual credit growth fell slightly, from 4.2% in the last quarter of 2008 to 4.1% in the first quarter of 2009. Breaking the figures down into mortgages and other loans shows that mortgages grew faster (3.9% in the first quarter of 2009, compared with 3.4% in the fourth quarter of 2008), whereas other loans increased more slowly (4.7% compared with 7.1%). The slower growth in other loans is attributable to a 6.0% drop in secured loans (–5.6% in the previous quarter). Unsecured loans increased by 10.9% (15.3%).

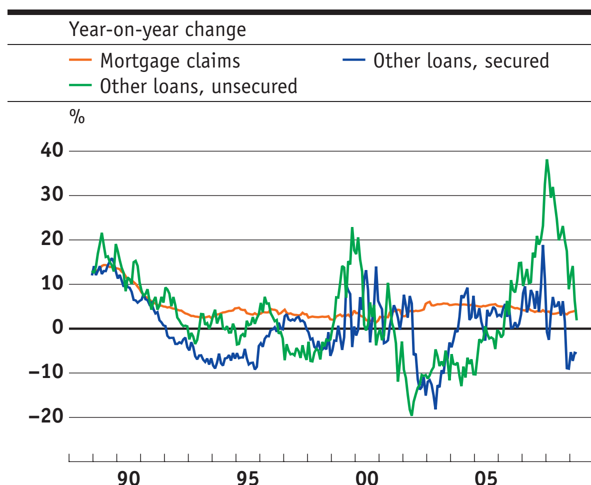
In April 2009, this trend observed in the first quarter persisted. Overall credit growth thus declined further, to 3.1%. Mortgages grew faster at 4.2%, while other loans declined by 0.8%. The low interest rate led to mortgages growing at their fastest since April 2007. Whereas secured loans fell by another 5.6%, unsecured loans again increased slightly, by 1.9%. The trend in other loans reflects the current economic situation. The growth rate for secured loans since 1988 shows a correlation of 0.58 with real GDP growth, while that for unsecured loans shows a correlation of 0.30.

Since March 2009, the credit volume statistics have been based on a new questionnaire. A breakdown of borrowing into private companies and households shows that corporate mortgages increased by 6.6% in the first quarter of 2009, which was faster than in the previous quarter, while other corporate borrowing grew by 15.0%. Household mortgages increased slightly faster at 3.5%, while other household loans plunged by 17.9%. Other household loans generally move in line with growth in consumer spending (correlation of 0.51).

Chart 3.21 illustrates mortgages and other loans granted by the big banks and the cantonal banks. The cantonal banks have reported higher mortgage volumes than the big banks since the end of 2008. A similar phenomenon was also observable during the recession at the beginning of the decade. The chart also shows that growth in other loans has fallen, especially those granted by the big banks.

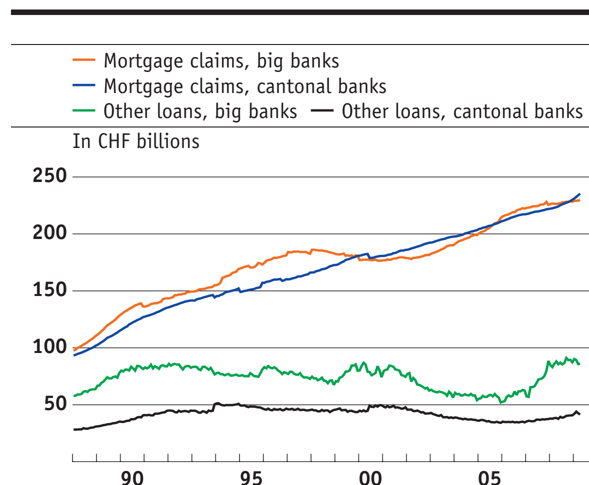
Chart 3.22 shows utilisation of credit limits by private small and medium-sized companies, as well as by large companies. In March, utilisation by large companies came to 82%, compared to 79% in

Chart 3.20
Growth in bank loans



Source: SNB

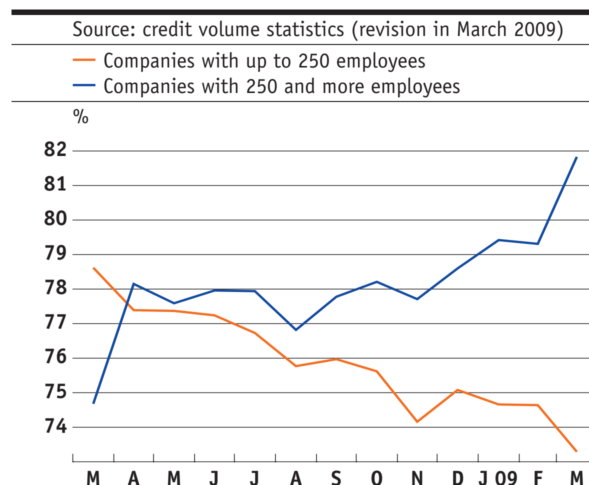
Chart 3.21
Bank loans



Source: SNB

February, an increase which is attributable to lower credit limits. In the case of small and medium-sized companies, utilisation over the same period fell from 75% to 73%. The fact that large companies are confronted with lower credit limits tallies with the SNB's bank lending survey, which reveals that lending conditions have tightened a little further for large companies, and now for small and medium-sized companies, too. If this relatively new survey proves to be a leading indicator of credit volumes, as it is in other countries, the current issue of the survey would indicate that a decline in lending to small and medium-sized companies is possible in the next few months.

Chart 3.22
Utilisation of lines of credit



Source: SNB

Bank loans
Year-on-year change in percent

Table 3.2

	2007	2008	2008 Q1	Q2	Q3	Q4	2009 Q1	2009 February	March	April
Total[1]	**5.8**	**5.7**	**6.6**	**6.4**	**5.8**	**4.2**	**4.1**	**4.4**	**3.6**	**3.1**
Mortgage claims[1]	4.0	3.5	3.7	3.4	3.5	3.4	3.9	3.9	4.0	4.2
of which households[2]	4.3	3.3	3.6	3.0	3.5	3.3	3.5	3.3	3.7	–
of which private companies[2]	2.8	3.9	3.4	4.5	3.8	4.1	6.6	6.0	7.7	–
Other loans[1]	13.4	14.8	19.3	19.0	15.0	7.1	4.7	6.4	2.1	–0.8
of which secured[1]	8.2	1.2	0.0	5.7	5.1	–5.6	–6.0	–7.3	–5.4	–5.6
of which unsecured[1]	17.2	24.2	34.1	28.2	21.4	15.3	10.9	14.1	6.4	1.9
of which in CHF[1]	5.7	20.3	22.4	23.6	19.3	16.3	6.2	8.2	3.4	1.2
of which in other currencies[1]	44.3	–1.8	8.8	5.2	2.3	–18.5	–3.2	–3.7	–4.9	–9.6

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 forecast.

Short-term downturn in growth more pronounced than expected

An unexpectedly sharp downturn in growth during the winter half of the year led to growth assumptions for 2009 being revised downwards again. For the current year, GDP is expected to decline by 2.8% in the United States and 4.6% in Europe. In 2010, the US and Europe are expected to stage a recovery, although this is now forecast to be slightly weaker than predicted in March.

The price of oil is estimated at USD 60 per barrel for the next few quarters, falling to USD 54 per barrel thereafter. Global inflation forecasts for 2009 and 2010 are significantly lower than three months ago. The USD/EUR exchange rate for the forecast period is USD/EUR 1.34.

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 2009	2009	2010	2011
GDP US[1]	–2.8	1.7	2.9
GDP EU15[1]	–4.6	0.2	2.1

	Short term	Long term
Exchange rate USD/EUR[2]	1.34	1.34
Oil price in USD/barrel[2]	60	54
Oil price in CHF/barrel[3]	65	58

March 2009	2009	2010	2011
GDP US[1]	–1.8	1.9	2.9
GDP EU15[1]	–2.8	0.5	2.2

	Short term	Long term
Exchange rate USD/EUR[2]	1.30	1.30
Oil price in USD/barrel[2]	42	45
Oil price in CHF/barrel[4]	49	52

1 Change in percent
2 Level
3 Level, exchange rate on 18 June 2009
4 Level, exchange rate on 12 March 2009
Source: SNB

4.2 Inflation forecast and monetary policy decision

Since the beginning of the financial crisis in August 2007, the SNB's monetary policy has passed through three distinct stages. In the first stage, as the interbank market gradually dried up, the National Bank sought to protect the Swiss economy from a deterioration in conditions on the credit market. From the start of the crisis, it countered the forces pushing the level of the three-month Libor up by undertaking appropriate reductions in the repo rate. Between September 2007 and September 2008, it was able to stabilise the Libor at 2.75%. Thus it protected the economy from a rise in interest rates resulting from the increase in risk premia on the money market. Since the SNB was confident that the economic downturn would have a moderating effect on prices, it refrained from adopting a more restrictive monetary policy, despite the fact that soaring oil prices caused inflation to rise and risked destabilising inflation expectations.

The second stage began in autumn 2008 with the emergence of the first indications of a swift downturn in the economy and the sharp deterioration in the financial crisis after the collapse of Lehman Brothers investment bank. The SNB rapidly relaxed its monetary policy by bringing down the Libor target by 225 basis points to a level of about 0.5% within three months. At the same time, it had been charged with stabilising the financial sector, committing itself to take over a large portfolio of illiquid UBS assets. In addition, it concluded euro versus Swiss franc swap arrangements with the European Central Bank and the central banks of Poland and Hungary, to ease refinancing of banks that had granted mortgage loans in Swiss francs in these two countries. These swaps made it possible to counteract the rise in the Libor generated by an additional demand for Swiss francs outside its normal field of operation.

The third stage began in March 2009. By then, price stability was threatened, not by the temporary inflationary escalation of 2008, but quite the opposite – the risk of a fall in prices over the coming three years. Since, by that time, the National Bank's room for manoeuvre in the area of interest rates was limited, it decided to turn to unconventional instruments in order to bring about a further relaxation in monetary conditions.

How has the economic and financial situation developed since the assessment in March?

Global economic outlook

Global economic activity declined more sharply than expected in the first quarter of 2009, especially in Europe and Japan. However, recent financial and macroeconomic indicators have shown a few encouraging signs. Stock exchange indices have started to edge up. Oil prices, which had been falling since July 2008, have been rising again since March. Risk premia in the money and capital markets have declined. In addition, the indices of business activity and household confidence has clearly turned upward again, even if they remain at historically low levels. The combined effect of all these developments leads the SNB to modify its risk assessment, but does not substantially affect its scenario for the global economy. The SNB still believes that positive growth could set in within the US in the second half of the year and in Europe at the beginning of next year. It continues to expect a modest global recovery, so that the considerable under-utilisation of production capacities will not be eliminated in the next few quarters. Consequently, unemployment is likely to increase further in the developed countries as a whole.

Swiss economic outlook

As expected, the Swiss economic situation continued to deteriorate in the first months of the year. In the first quarter, GDP contracted by 3.2% in annualised terms. However, this figure obscures a much sharper drop in final demand. As in the preceding quarter, part of production was, in effect, absorbed by an increase in stocks. External demand again plummeted and the level of capacity utilisation fell substantially in the manufacturing sector. Final domestic demand by private entities stagnated, and is most likely to weaken in the months ahead, since companies will reduce their equipment investment and household expenditure will be checked by growing uncertainty in the labour market. The number of individuals affected by short-time working was rising fast at the beginning of the year, and unemployment is increasing at a regular pace. This trend is likely to persist in the next few months since the leading indicators of labour demand are falling sharply.

Nevertheless, it is to be hoped that the signs of improvement observed abroad will be gradually

transmitted to the Swiss economy. From the second quarter, the decline in exports is likely to slow down. However, growth figures will probably remain negative over the next few quarters due to the weakening in domestic demand as well as the reduction of inventory levels. For 2009 as a whole, the National Bank continues to forecast a reduction in GDP of between 2.5% and 3%. These figures are still relatively moderate by comparison with other countries since Switzerland benefits from the broad diversification and relative flexibility of its economy. Even so, it must be stressed that the risks attached to the SNB's forecast are clearly skewed to the downside.

Changes in monetary and financial conditions

How have monetary and financial conditions developed since the last quarterly assessment in March? This section will first take a look at movements in interest rates on the money and capital markets as well as currency movements on the foreign exchange markets.

On the money market, the three-month Libor moved down, but not as far as the SNB would have liked. Its decline was checked by the level of risk premia, and it currently stands at around 40 basis points. As announced in March, the objective is still "to gradually bring the Libor down to the lower end of the new target range, i.e. to approximately 0.25%". Progress will be slow, since monetary policy can only influence risk premia indirectly, for instance, by promoting a climate of greater confidence in the banking sector.

The capital market was affected by forces working in opposite directions. On the one hand, long-term rates of interest, which were affected by global developments, rose slightly. This increase reflects renewed optimism about an upturn in the economy, inflationary fears and increased capital requirements on the part of the public sector. On the other hand, risk premia have fallen somewhat. Nonetheless, they remain elevated, and – moreover – the reductions that have occurred have been varied, depending on the quality of borrowers, the maturity of the bond in question and the industry.

The months from November 2007 to March 2009 saw a significant appreciation in the Swiss franc, by 10% in trade-weighted terms and by 11% against the euro. Although interest rates had been reduced between October and December last year, the strengthening of the Swiss franc had the unwelcome effect of tightening monetary conditions. In view of this development, the National Bank decided at its March assessment to prevent further appreciation of the Swiss franc against the euro by purchasing foreign currencies on the foreign exchange market. It achieved its objective. Since then the appreciation of the Swiss franc against the euro has ceased and its volatility with respect to the European currency has diminished considerably.

The following will deal with an examination of monetary conditions in terms of volume – in other words, in terms of credit and monetary aggregates. Overall, credit is still growing at an annual rate of more than 3%. However, this general figure is composed of a number of different movements in opposite directions. Mortgage lending has been increasing more and more rapidly since November. The growth rate rose from 3.6% in December to 4.2% in April, an advance related to the fall in the Libor. Other credits for all currencies, by contrast, began falling in April (–0.8%), as might be expected in this phase of the economic cycle. Other credits granted in Swiss francs, however, continued growing at a rate of 1.2%, despite the fact that they were already at a relatively high level. Loans granted to private companies grew at a rate of 10.2% in the first quarter of 2009 as compared to the first quarter of 2008. Thus, the SNB does not perceive the slightest indication of any credit crunch in Switzerland. Clearly, with the decline in the quality of certain borrowers during a recession, it is inevitable that a cyclical tightening of loan conditions will occur, but this cannot be termed a credit crunch.

This statistical information is confirmed by the quarterly survey on lending conditions which the SNB has been conducting with the 20 most important Swiss banks since the beginning of 2008. The survey shows that a third of the banks questioned tightened their lending conditions slightly. This proportion is a little higher for loans granted to large companies than those granted to small and medium-sized companies.

To summarise, the situation on the bank lending market remains relatively relaxed and clearly better than that in the US or in the euro area. Nonetheless, deterioration cannot be ruled out for the future.

The monetary analysis reveals the following: For more than eighteen months now, the demand for liquidity on the interbank market has increased

substantially and – as previously mentioned – the loss of trust among banks has brought the market to a standstill. The SNB has been forced to take the place of the lending banks and provide the market with generous amounts of liquidity through a major expansion of its repo lending. Moreover, additional liquidity has been created by purchasing foreign currency on exchange rate markets and bonds issued by private sector borrowers, and by making Swiss franc funding available through swap arrangements with the European Central Bank and with the central banks of Poland and Hungary. Consequently, in May, the monetary base was up by 132% within the space of one year and now amounts to CHF 105 billion. The medium and long-term inflationary threat of this large amount of liquidity is limited because the National Bank will be able to absorb it rapidly, by slowing its lending or by issuing SNB Bills, as soon as confidence returns to the markets.

However, liquidity accumulated by the banks could give rise to excessive creation of money through a massive expansion of bank credit. In May, growth in the narrow monetary aggregates, which are very sensitive to changes in the rate of interest, exceeded 40% for M1 and 30% for M2. In essence, this strong rate of growth reflects a preference on the part of the general public for the most liquid monetary assets over time deposits, due to financial uncertainty and the fall in interest rates. The M3 aggregate, which is not affected by these substitution effects, continued growing at a more moderate rate of 4.2% in May, which shows that, at present, created central bank money is confined at the interbank level and has not been transmitted to the rest of the economy. Monetary policy needs to ensure that the level of the monetary aggregates does not become excessive over a longer period. The indicators which the SNB is monitoring show that this is not currently the case.

Inflation and inflation risks

Inflation developed in line with expectations. In the first quarter it was zero, while the SNB was anticipating 0.1%. Overall, its forecasts are unchanged for the current year, with inflation remaining negative for the rest of 2009. This, in essence, is attributable to the prices of imported goods, which are down by comparison to their high levels in 2008. However, inflation for domestic goods and services, despite weakening during the year, will remain above 1%. The outlook for the following years has been very slightly adjusted upwards.

Monetary policy decision

At its monetary policy assessment in March, the SNB identified a number of elements that led it to foresee negative inflation for 2009 and a risk of deflation for 2010 and 2011. In view of this threat, it relaxed monetary conditions and took supplementary measures. It reduced the three-month Libor target range by 25 basis points to 0–0.75%, aiming for a rate of 0.25%. In order to achieve this, it granted longer-term repo credits and concluded foreign exchange swaps. To prevent the Swiss franc from further appreciating against the euro, it purchased foreign currency on the foreign exchange market; it also purchased bonds issued by private sector issuers to foster a decline in capital market risk premia. All in all, these operations achieved their objective. The situation is gradually normalising, although it remains very vulnerable. The risks are still clearly skewed to the downside and are major. Given these conditions, and in view of the inflation forecast, the SNB considers that the time for a correction has not yet come, but that an additional relaxation of monetary conditions is not necessary either. In addition, it decided on 18 June to continue its expansionary monetary policy, maintaining all of the measures it implemented on 12 March.

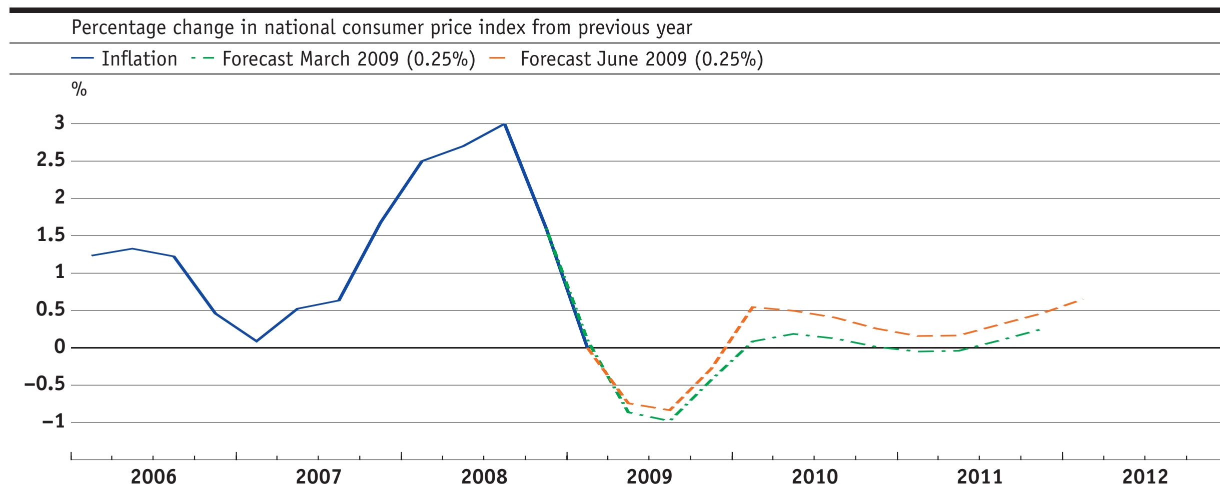
Inflation forecast chart

How has the inflation forecast been revised? The dashed red curve in chart 4.1 represents the new forecast. It covers the period from the second quarter of 2009 to the first quarter of 2012, and maps the future development of inflation on the assumption that the three-month Libor remains unchanged at 0.25% over the forecasting period. For purposes of comparison, the dash-dotted green curve shows the inflation forecast of the March monetary assessment, which was also based on a three-month Libor of 0.25%. The new forecast still shows negative inflation for 2009, but with a very slight adjustment upwards. This is explained by the recent upturn in prices of fossil fuels and of commodities in general. However, as an average for the year, inflation will remain negative, at an unchanged rate of –0.5%. In 2010, inflation is likely to return to slightly positive rates and could

be a little above the figure forecast in March. This is due to the fact that although domestic inflation is falling it will still amount to around 1% around the end of the year while imported deflation recedes more rapidly. Finally, for 2011, the new forecast shows that inflation will accelerate a little at the end of the forecast horizon if the Libor remains at a level as low as that being aimed for at present. Thus, it is clear that the Libor cannot remain at 0.25% indefinitely. However, as the forecast also shows, it would not be advisable to increase the Libor now since the very weak inflation rates expected in 2010 (0.4%) and 2011 (0.3%) indicate that the deflation risk has not completely disappeared.

The SNB continues to use an inflation forecast to guide its decisions. In this way, it ensures that the unconventional measures currently in force do not compromise medium and long-term price stability.

Chart 4.1
Inflation forecast of March 2009 with Libor at 0.25% and of June 2009 with Libor at 0.25%



Source: SNB

Observed inflation in June 2009 Table 4.2

	2006				2007				2008				2009				2006	2007	2008
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Inflation	1.23	1.33	1.22	0.46	0.09	0.52	0.63	1.68	2.50	2.70	3.00	1.60	0.00				1.1	0.7	2.5

Inflation forecast of March 2009 with Libor at 0.25% and of June 2009 with Libor at 0.25%

	2009				2010				2011				2012				2009	2010	2011
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Forecast March 2009, Libor at 0.25%	0.10	–0.86	–0.98	–0.43	0.09	0.19	0.13	0.01	–0.05	–0.04	0.10	0.25					–0.5	0.1	0.1
Forecast June 2009, Libor at 0.25%		–0.74	–0.83	–0.28	0.55	0.50	0.40	0.26	0.16	0.17	0.31	0.46	0.65				–0.5	0.4	0.3

Source: SNB

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

Summary report for the attention of the Governing Board of the Swiss National Bank for its quarterly assessment of June 2009

The SNB's delegates for regional economic relations are constantly in touch with a large number of enterprises from the different industries and economic sectors. Their reports, which contain the subjective evaluations of these companies, are an important additional source of information for assessing the economic situation. On the following pages, the most important results of the talks held from April to May 2009 on the current and future economic situation are summarised.

Summary

The talks held by the SNB delegates for regional economic relations with around 180 representatives from various economic sectors and industries from April to May 2009 yielded a picture of a further deterioration in the economic situation. Although there were a number of indications that the downward trend has slowed, especially in the export industry, very few companies said that business was stabilising, let alone improving.

Initially, the crisis mainly affected exports and the financial industry, but in recent months it also had a noticeable impact on the domestic economy. However, there were still striking differences. Businesses in the export industry continued to fare markedly worse than firms that cater to domestic demand. In terms of individual industry segments, the capital goods industry suffered the worst decline. By contrast, the majority of companies in construction and retailing performed comparatively well, although these industries also experienced a definite slowdown.

Most firms implemented comprehensive cost-cutting measures in response to the crisis. Investment projects were increasingly put on hold and many businesses – particularly in the manufacturing industry – introduced short-time working. This reflects the general outlook, which most respondents regard as gloomy. Only a few are expecting the situation to improve in the second half of the year, and the prospects for 2010 are described as very uncertain. Against the backdrop of global recession, many respondents were worried about the exchange rate trend over the past few quarters. Representatives of the export industry, in particular, therefore welcomed the SNB's announcement that it would take steps to prevent a further appreciation of the Swiss franc against the euro.

1 Production

Manufacturing

A year ago it was still the norm for manufacturing businesses to be working at full capacity. This has since become the exception. New orders and orders in hand fell sharply and production was cut back. Furthermore, the weakening in demand has spread further in recent months: the crisis has now affected companies whose market position and production structure had meant that they had previously been left unscathed.

So far, the export industry has been hardest hit by the recession, with many firms confronting a massive drop in orders year on year. The decline has been especially marked for the capital goods industry. Unsurprisingly, the food and pharmaceuticals industries have proved the most stable. The situation improved for a few niche areas only, including companies active in the renewable energies segment.

The recession has had a particularly severe impact on a large number of supplier firms. In the boom times they benefited from the decision by many big companies to outsource parts of their value chain. This trend has reversed to some extent because of the crisis, with companies taking back these tasks in order to keep their own employees occupied. Many suppliers have continued to see their order intake suffer in recent months, as numerous major customers abroad slashed their inventories.

A number of respondents from the manufacturing industry reported that the pace of decline in new orders has slowed recently. However, most of them do not believe any economic turnaround is in sight yet.

Services

Respondents from the consumer-related services sector gave differing reports regarding the business environment. In the retail trade, sales of food and other everyday items were still higher than a year ago in the majority of cases. Clothing, consumer electronics and consumer durables did not perform so well. Luxury goods registered significant declines; in general, consumers seem to be trading down to cheaper items. Since Easter there have also been signs of a noticeable slowdown in demand generally. For some time now, retailers have been expecting rising unemployment to hit consumer confidence.

The hospitality industry has seen overnight stays fall in recent months, with the number of guests from abroad declining significantly more than domestic visitors. There was a marked drop in business customers, in particular, and in guests from new markets such as Russia. Expenditure per guest also seems to have fallen. Most respondents are expecting guest numbers to decline further in the summer season, although they do not predict a real slump. Numbers are difficult to forecast, however, since in times of recession people tend to book less far in advance than in normal years.

Respondents from firms offering company-related services have mostly been harder hit than the retail trade or large parts of the hospitality industry. Demand has fallen markedly in the transport and logistics industry, and remains slack. The advertising and consultancy segments have also been significantly affected. By contrast, orders have held up relatively robustly in the IT industry. Although this sector has also been hit by the crisis, a number of respondents reported that they had not experienced any drop in sales.

Most representatives from the banking industry were satisfied with volumes in the interest income business, but unhappy with margins. Commission income was again significantly down year on year. Although the sustained rally on the stock markets since mid-March had led to a certain renewal of optimism, a number of asset managers said that investor confidence was still low.

Construction and real estate

The construction industry again appeared surprisingly robust. In the first quarter, construction activity was below expectations because of the weather, while demand declined noticeably in the commercial segment. However, the majority of respondents said that business remained healthy in the civil engineering industry and that demand for residential construction continued to be strong, helped by orders for the renovation of single-family homes as well as new builds.

Respondents from the construction industry are expecting demand to weaken, but not slump, in the next few quarters. In the residential segment, demand is being supported by population growth as well as low mortgage rates. Furthermore, the high

uncertainty on equity markets means that property is now being viewed as a more attractive investment for pension funds and private investors. Construction has also been given a boost by the economic stimulus packages announced by the federal government and various cantons. Even cantons that have not passed such packages are planning to spend more on construction than they did last year, encouraged by healthy balance sheets in recent years.

2 Labour market

Many firms – especially in the manufacturing industry – reacted to weakening demand by introducing short-time working. For most respondents, the chief advantage of short-time working is that it allows them to cut costs without losing human capital. Moreover, short-time working does not demoralise employees as much as redundancies.

Most respondents are expecting unemployment figures to rise in the coming months. For one thing, it is thought that many companies will continue trying to reduce their headcounts through natural wastage. For another, short-time working is increasingly likely to lead to job losses if the prospects for an economic recovery do not improve.

3 Lending conditions

The decline in lending volumes is largely because of falling demand, according to the majority of respondents. They reported that companies have cut their investment and in many cases are using their own resources to finance any projects still in hand.

Almost all respondents said that financing conditions were basically unchanged. However, many expect them to become more difficult soon because of the clear deterioration in key data. Furthermore, some mentioned that large loans have become harder to obtain.

Many company representatives explained that they were paying close attention to liquidity management and striving to maintain sufficient liquidity. Banks and business consultants referred to a growing number of struggling firms, and are expecting higher credit default rates.

4 Prices, margins and earnings situation

Most respondents reported that competitive pressure has increased in tandem with growing under-utilisation of capacity. Many firms are coming under strong price pressure. Businesses are tackling costs in response to pressure on margins. A large number have brought in cost-cutting measures and are preparing to take further steps. Lower raw material and transport costs, as well as low interest rates, are providing some relief, depending on the company’s particular cost structure.

More attention is being paid to exchange rate movements, against the backdrop of a deteriorating earnings situation. Respondents from the export industry, who had been anxiously watching the rise of the Swiss franc, therefore welcomed the SNB’s announcement that it would act to prevent the Swiss franc appreciating further against the euro.

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

Hansueli Raggenbass
Berne, 17 April 2009

Dear Shareholders
Ladies and Gentlemen
Dear Guests

Last year, the SNB centenary was the focus of the meeting. At the time, I drew attention to the fact that the SNB had been faced with particular challenges, not only in the year it was founded, but also in its major anniversary years. As the particular challenge faced in the centenary year, I mentioned the financial market turmoil that began in August 2007. This turmoil has now mushroomed into the deepest and most complex financial crisis the world has seen since the Great Depression. Furthermore, the financial crisis has widened into a global economic crisis, which has taken full hold of the Swiss economy, too.

Financial crisis deepens and measures taken to reinforce Swiss financial system

In 2008, the financial crisis was a major concern for the SNB. At an early stage, it became clear that Switzerland, with its important financial sector and especially with its two international big banks, is particularly vulnerable. Hardly any other country has a banking system in which individual banks are of such tremendous importance to the economy as the two big banks are for Switzerland. Their sheer size alone assures UBS and CS a key role in the stability of the entire financial system. Consequently, if one of the big banks is at risk, the Swiss financial system as a whole is put at risk.

Article 5 of the National Bank Act stipulates that the SNB shall contribute to the stability of the financial system. Conscious of its shared responsibility for the stability of the financial system, the SNB began drawing up measures for a possible emergency at an early stage – always hoping that such an emergency would not eventuate. In doing so, it was in permanent contact with the Federal Department of Finance and the Swiss Federal Banking Commission (now FINMA). When the financial market crisis deepened further following the collapse of the Lehman Brothers investment bank last September, it became increasingly likely that such an emergency could occur in the Swiss financial system. Consequently, on 16 October, the Federal Council, the SNB and the SFBC announced a package of measures aimed at strengthening the Swiss financial system. This package combined a reinforcement of depositor protection, thorough revision of the deposit guarantee scheme and targeted measures to strengthen the balance sheet of Switzerland's largest bank, UBS. UBS would transfer illiquid assets amounting to a maximum of USD 60 billion from its balance sheet to a special purpose vehicle (SPV) established by the SNB, and would contribute capital equivalent to 10% of the amount to be transferred to the SPV. At the same time, the Swiss Confederation would strengthen the UBS equity base by underwriting mandatory convertible notes (MCN) for CHF 6 billion. The SNB, for its part, would grant the SPV a long-term loan amounting to a maximum USD 54 billion. The SNB loan would be secured by the assets held by the stabilisation fund.

When the package of measures was announced last October, it was assumed that the assets to be transferred would amount to no more than USD 60 billion. Following a detailed examination of the portfolio and the resulting negotiations between UBS and the SNB, a portfolio now amounting to USD 38.7 billion was taken over by the stabilisation fund. Accordingly, the SNB loan to the stabilisation fund was reduced from a maximum of USD 54 billion to USD 34.8 billion. The size of the UBS participation in the SPV fell from USD 6 billion to USD 3.9 billion.

Statutory mandate and powers of the SNB

The SNB's powers to establish and finance the SPV arise out of its constitutional mandate to pursue a monetary policy that is in the interests of the country as a whole. Within this framework, it also has a mandate to contribute to the stability of the financial system. Under article 46 of the NBA, the Governing Board has sole responsibility for the conduct of monetary policy. Thus the decision to establish and finance the SPV fell within the Governing Board's exclusive powers and responsibilities. The NBA specifies that the Governing Board shall render account to the Federal Assembly on the fulfilment of its tasks. These requirements also apply with regard to the SPV. Thus, in its accountability report to the Federal Assembly which constitutes the first part of the *Annual Report,* the SNB provided detailed accounts of the establishment of the SPV, the transfer of the illiquid assets and the granting of the loan. The Chairman of the Governing Board has also informed the relevant Federal Assembly commissions about the SPV at a number of discussion meetings.

The SNB Bank Council has no monetary policy powers, serving rather as the National Bank's supreme supervisory and monitoring body. However, these supervisory and monitoring powers relate not to monetary policy but to the business management of the SNB. This organisation of powers is based on the SNB's special corporate governance model which differentiates clearly between the conduct of monetary policy, on the one hand, and business management matters, on the other. The Governing Board has sole and exclusive responsibility for the conduct of monetary policy. In business management matters, however, the NBA (like the Banking Act), works on the principle that supervisory and executive functions should be separated. Thus, the Governing Board is the supreme management and executive body, while the Bank Council supervises and monitors the management. The individual powers of the Bank Council are listed in the Organisation Regulations. In particular, the Bank Council sets out the basic principles according to which the SNB should be organised, regulates the basic structure of its accounting, financial monitoring and financial planning systems, monitors and assesses risk management and the investment process, and reviews its resource strategies. In addition, the Bank Council approves the business and financial report for submission to the Federal Council and the General Meeting of Shareholders, and prepares the General Meeting.

Bank Council tasks in connection with special purpose vehicle

What are the consequences of the division of powers between the Governing Board and the Bank Council with regard to the SPV? First, the actual decision to establish and finance the SPV was taken by the Governing Board alone. The Bank Council had no say in the matter. Second, the Bank Council was not obliged to retrospectively review the decision – which was, after all, a decision of a monetary policy nature. Nevertheless, important tasks fall to the Bank Council in connection with the SPV – as part of its supervisory and monitoring functions. These tasks are derived from the Bank Council's responsibility first, for supervising and monitoring the accounts and, second, for monitoring and assessing risk management and the investment process.

In order to fulfil its supervisory and monitoring responsibilities optimally, the Bank Council established an Audit Committee and a Risk Committee back in 2004. Each of the committees consists of three Bank Council members with special knowledge and experience in the specific field. The Audit Committee oversees accounting and financial reporting, while the Risk Committee assesses the suitability and effectiveness of the investment process and oversees risk management. The committees fulfil a preparation and support function with respect to Bank Council decisions. However, the actual supervisory powers lie with the Bank Council itself.

The two committees face particular challenges in connection with the establishment of the SPV and the transfer of the illiquid assets. The Audit Committee is dealing with complex accounting issues, in particular relating to reporting, valuation, entry and presentation in the *Annual Report*. It is working closely with the heads of internal and external audit. The Risk Committee is dealing with questions relating to financial risks and management of the acquired assets. It is monitoring the risk control process and ensuring that it obtains regular risk evaluations. The Risk Committee therefore stays in close contact with the head of SNB risk management. Both committees also ensure that the SNB's resources, expertise and organisation are appropriate for mastering these new tasks. The Audit Committee and the Risk Committee both receive comprehensive quarterly reports on developments in the stabilisation fund.

Illiquid assets – accounting and management

As you will gather from reading the *Annual Report,* the transfer of the illiquid assets and the long-term investment strategy being pursued in this connection have had a fundamental impact on the current financial report. For the first time, we are presenting you with consolidated financial statements in which both the financial accounts of the SNB, as the parent company, and the interim results of the SPV, as the subsidiary company, are presented in consolidated form. All of these financial statements are audited by PricewaterhouseCoopers (PwC), our external auditors.

Financial statements for the stabilisation fund are drawn up in accordance with the International Financial Reporting Standards (IFRS). In view of the long time horizon, the illiquid assets are valued not at market price, but rather (where this is per-

missible under the accounting standard), at amortised cost. Due to the illiquidity of the assets, market prices are almost non-existent at present and, where they do exist, have little meaning. In other words, fair value has lost a great deal of its significance and is not useful for valuations of the assets in question. Impairment tests are being conducted periodically, however, to determine the recoverable value of the assets. This ensures that, in the medium term, the assets are not stated in the balance sheet at a value higher than the amount they will reach, while, at the same time, due consideration is given to unrecoverable losses in value. An initial impairment test was conducted as per end-2008 and, where necessary, value adjustments were made. Losses on assets in the stabilisation fund will initially be absorbed by the capital contributed by UBS, which corresponds to 10% of the assets that have been transferred. Should there be further losses, secondary loss protection is foreseen. The SNB has a warrant for 100 million UBS shares in the event of a loss on its loan when the assets are liquidated.

The SNB does not value the assets itself. It has outsourced this task to third parties, whose work it monitors and checks carefully. This approach was already adopted at the time that the purchase price was established. The calculation of the purchase price was based on the book value of the assets as stated in the UBS interim balance sheet as at 30 September 2008. In addition, the SNB asked independent experts to provide a valuation of the assets as at the same date. The valuations were carried out by specialised companies with different valuation approaches. This gave rise to two different figures: the book value calculated by UBS and the valuation provided by the SNB's independent experts. The assets were acquired at the lower of these two figures.

The assets are being managed by third parties on the basis of investment guidelines drawn up by the SNB. The SNB is participating in this outsourced work and monitoring it actively. It intends to hold the transferred assets until maturity – or at least until the markets in question have recovered. Should the assets be sold later, the sales strategy will be crucial, since the stabilisation fund is competing with other market participants to realise assets, all of which are similar in nature.

Concluding remarks

The SNB is conscious of its shared responsibility for the stability of the Swiss financial system and the entire Swiss economy. In establishing and financing the SPV, it has not shied away from resorting to exceptional measures. In doing so, it has taken a considerable risk. However, the alternative was to risk a destabilisation of the financial system. The SNB judged the risk to the financial system to be greater than the risk of the UBS operation. It therefore decided in favour of the latter.

Now that this decision has been taken, the principle of separating supervision and management functions applies to the SPV as it does for all business matters at the SNB. In connection with the SPV, the Bank Council takes its function as supervisory and monitoring body very seriously. It bears responsibility for supervising and checking accounting procedures and for overseeing and assessing risk management and the investment process. In order to fulfil its task, the Bank Council receives regular and comprehensive information on developments in the stabilisation fund, and remains in permanent contact with the relevant SNB managers via its two committees.

Within the limits of its constitutional mandate and practical possibilities, the SNB will continue to make its contribution to fighting the crisis and smoothing the way to recovery. I would like to thank you, as shareholders, for supporting and trusting in 'your' National Bank in these difficult times.

Speech by the Chairman of the Governing Board at the General Meeting of Shareholders of the Swiss National Bank

Jean-Pierre Roth
Berne, 17 April 2009

Mr President of the Bank Council
Dear Shareholders
Dear Guests

The financial crisis, which first emerged in August 2007, continued to spread during 2008. From mid-September on, the situation deteriorated sharply. Growing uncertainty about the stability of the financial system gradually paralysed the money market. Most industrialised countries implemented relief packages for banks with the aim of improving their refinancing conditions, cleaning up their balance sheets or strengthening their capital base. In fact, the crisis led to an unprecedented level of government intervention. Far-reaching guarantees were granted, major corporations were put under state control, and a substantial amount of risk was transferred from the private to the public sector.

The difficulty of implementing our monetary policy

The waning ability of the financial markets to function properly posed problems for the implementation of our monetary policy. The prevalent mood of uncertainty created a strong appetite for liquidity, and yet the seizing-up of the interbank market hampered the supply in Swiss francs. In view of these two factors, the Swiss National Bank (SNB) had to resort to some exceptional measures.

From the start, the uncertainty engendered by the financial crisis led to a surge in demand for liquidity by both banks and the public in Switzerland. The distrust characterising interbank relations encouraged certain institutions to stockpile capital. This trend was reinforced by the fact that numerous banks were unable to make a reliable estimate of their own liquidity requirements, particularly in view of the soaring demand for cash on the part of the public. At the end of last year, the total value of banknotes in circulation had risen by 11% and banks had three times as much money on their SNB sight deposit accounts as at the end of 2007.

To satisfy this extraordinary demand, the SNB was obliged to expand its repo operations in terms of volume and maturity, and to inject liquidity into the market through a new channel – that of swap transactions.

Over the past few years, repos have become the standard tool with which we implement our monetary policy. They involve loans to banks denominated in Swiss francs and backed by securities. As a rule, these loans are granted for a term of one week. However, in response to the special needs of the market in 2008, we had to lengthen the term of our loans on several occasions, extending maturity to as much as twelve months. Unlike other central banks, however, we saw no need to expand the range of eligible securities, since we already apply a very liberal policy, accepting top-rated securities denominated not only in Swiss francs, but also in euros, pounds sterling, US dollars and other currencies. In 2008, the average amount of our repos rose by 53% against the year before.

Despite the intensification of our repo operations, tensions on the money market increased throughout the year owing to the ongoing deterioration of the economic and financial environment, and reached their peak in autumn. A particular source of difficulties was the extremely strong demand for Swiss francs coming from eastern European countries, where banks had granted Swiss franc-denominated loans on a massive scale, refinancing themselves on the money markets. Since these banks have no access to our loans, they found themselves in a delicate position when the Swiss franc money market dried up. The increased demand for Swiss francs contributed to the rise in our interest rates, which we deemed undesirable from a monetary policy perspective.

To satisfy demand from eastern European banks, we sought the support of the European Central Bank (ECB), to which we remitted Swiss francs under a euros against francs swap arrangement. The ECB then transferred these francs to its counterparties. Similar agreements – euros against Swiss francs – were subsequently concluded with the Polish central bank and the Hungarian central bank, enabling them to conduct analogous transactions in their respective countries. Moreover, to ensure a better distribution of francs across the market, the SNB itself engaged in swaps with its counterparties. By the end of 2008, our supply of Swiss francs to three central banks and a certain number of other banking institutions by means of swap transactions had reached a total of CHF 50 billion.

Thus, the demand for liquidity was considerable across the board. The total amount of our loans more than tripled, climbing from CHF 31 billion at the end of 2007 to CHF 101 billion at the end of 2008. In parallel, as a way of enabling banks

to place their liquid means with the SNB in a form other than sight deposits, and of introducing a tool which would allow us to absorb large amounts of liquidity if need be, we issued SNB Bills for the first time on 20 October 2008. By the end of the year, the sum of SNB Bills issued had reached CHF 24.4 billion.

Active Swiss franc liquidity management enabled us to hold the three-month Swiss franc Libor at the level targeted by our monetary policy. I shall return to this point later.

Consolidating UBS

In autumn 2007, the National Bank realised that Switzerland's two big banks would be particularly badly affected by the financial market turbulence. At that point, we intensified our contacts with the Swiss Federal Banking Commission (SFBC) (now the Swiss Financial Market Supervisory Authority FINMA) in order to ensure ongoing monitoring of the situation at these two institutions. From spring 2008 on, in view of UBS's growing vulnerability, we drew up a number of solutions to protect it from the consequences of a large volume of illiquid assets on its balance sheet. In autumn, after the collapse of Lehman Brothers in the US led to liquidity drying up completely on the interbank market, UBS encountered increasing refinancing difficulties and was facing a substantial loss of funds. In the opinion of the SFBC, urgent action was needed to prevent a dramatic worsening of the situation, with potentially very serious consequences for the stability of the entire banking system and for the Swiss economy as a whole.

This was the environment in which we, in close collaboration with the SFBC and the Swiss government, prepared the operation that was announced on 16 October last year.

It is not necessary here to reiterate the details of a transaction that was copiously commented on by the media and is described in our Annual Report. When planning this operation, we were fully aware of the financial risks inherent in the asset portfolio we were taking over. Yet we were convinced that these risks were adequately compensated for by the conditions under which UBS would participate in any losses and, above all, by the collective benefit derived from the stabilisation of Switzerland's biggest bank. Our decision was thus based solely on considerations regarding the stability of the financial system.

Only in a few years will it be possible to pass definitive judgment on our actions. If, upon completion, the operation proves successful, we might come to wonder whether the support measures were actually necessary. If, by contrast, losses are registered, our conclusion will be that the SNB's operation helped prevent the worst. In any case, whatever the financial outcome, it must be borne in mind that the only motive behind our intervention was to keep the uncertainty with regard to the value of UBS's illiquid assets from destabilising the bank and thereby our financial system and economy.

When public funds are employed to restore financial stability, the rules governing the functioning of markets need to be adapted to ensure that such a situation can never arise again. We therefore strongly supported the SFBC's stance in favour of a gradual strengthening of the big banks' capital levels, of capping their leverage ratios and reforming their compensation systems. In addition, the SNB is currently working together with FINMA to impose more stringent liquidity requirements. As I already pointed out last year, a small country like ours is entitled to define specific conditions under which the systemic risks involved with having two large international banks domiciled on its territory must be limited. The Federal Council and the SFBC clearly recognised this situation and took appropriate preventive measures. For the future, it would also be advisable to examine the expediency of putting into place a legal framework and organisational measures that permit an orderly liquidation of systemically important banks.

The crisis spreads to the real economy

Ultimately, it was inevitable that the financial market crisis would spread to the real economy. And yet the year 2008 began well. Our country was in the midst of solid economic growth and was experiencing a strong inflow of foreign workers. In the first three quarters, year-on-year growth amounted to 2.4%, buttressed by all components of global demand except construction.

At the end of summer, however, the situation turned completely. The faltering international credit markets and the mounting uncertainty caused global trade to plummet and prompted a decline in growth in our export markets; indeed, most of our trading partners actually went into recession. In the fourth quarter of 2008, Switzerland's GDP receded to 1.2% and unemployment, which had

reached a low-water mark of 2.5%, started to climb again. In our quarterly assessment of last December, we predicted a 0.5–1% drop in GDP for 2009. In March this year, based on the latest data available, we revised the forecast downwards to a 2.5–3% decline.

The SNB's reaction

In autumn 2008, as I said, we experienced an abrupt downturn of the economic cycle and, owing to plunging commodity prices, a spectacular change in the inflation outlook. Whereas inflation had been at 3.1% in July, price stability was entirely re-established from November onwards.

This reversal forced the SNB to take rapid and decisive measures to ease its monetary policy. In a series of five steps between October 2008 and March 2009, we lowered the target range for the three-month Swiss franc Libor and brought down the market rate from 3% to 0.25%. Thus, by markedly loosening the monetary reins, we aimed to trigger an easing of lending conditions and discourage investment in Swiss francs. The volume of lending in Switzerland continued to rise, albeit at a reduced pace, but credit lines granted to Swiss borrowers were now less used. To date, the state of the bank loan market reflects a drop in demand and a slight tightening of lending conditions in connection with the decline of the economy, rather than an actual credit crunch. On the other hand, we have noted a substantial deterioration in financing conditions for companies on the capital market due to the prevalent mood of uncertainty and the shortage of liquidity. This is why we decided, on 12 March, to intervene in those market segments where the imbalances were most pronounced.

In this delicate phase of worsening credit market conditions, our monetary policy strategy proved to be particularly well chosen. Unlike most other central banks, the SNB has made it its objective to stabilise a market interest rate – the three-month Swiss franc Libor, which serves as a reference for numerous commercial rates – rather than a rate reflecting central banks' short-term refinancing conditions for commercial banks. By keeping the Libor well under control, we have managed to shelter the Swiss market from the kind of degradation of credit conditions experienced by markets abroad. Thus, the three-month euro Libor, which had generally been 1.5% higher than the three-month Swiss franc Libor, saw its spread widen to 2.2% in 2007 and 2.7% in 2008. Our policy of stabilising the three-month Swiss franc Libor therefore enabled us to at least partly shield the Swiss economy from the repercussions of the international financial crisis.

Unfortunately, the effect of relaxing monetary conditions since last autumn in order to lower the Libor was largely offset by the continuing appreciation of the Swiss franc against the euro. Between October 2008 and March 2009, our currency rose by nearly 10% vis-à-vis the euro, which was particularly inopportune in a phase of rapidly declining inflation rates and the contraction of global demand. On 12 March, to prevent the ongoing appreciation of the franc from neutralising the impact of our policy of lowering interest rates, we decided to buy foreign currencies on the foreign exchange market in conjunction with a further reduction of the Libor, with the aim of avoiding any further appreciation of the Swiss franc against the euro and injecting additional liquidity into the economy. In view of the risk of deflation, decisive action was called for, and we will continue to pursue this strategy for as long as the risk remains.

Therefore, after 15 years of absence, we were obliged to intervene once more in the foreign exchange market. This does not, however, represent any reversal of our traditional strategy, which is to pursue an independent monetary policy aimed at maintaining price stability. It is simply a case of adapting the implementation of this strategy to an environment characterised by interest rates close to zero and a Swiss franc once again in the role of a safe haven. Contrary to certain reactions aired in the media, the action to counter the rise of the Swiss franc against the euro is not a form of competitive devaluation, which would inevitably work against the interests of our country in the long run. Rather, it is a key operational tool which, under the given circumstances, helps us perform our mandate with regard to price stability, in other words to preserve our economy from both inflation and deflation.

The outlook for 2009

The year 2009 will see the steepest decline in Switzerland's GDP since 1975. Exports, normally the driving force of our economy, will continue to be weak, and the lack of confidence in the corporate sector will weigh on investment demand. Moreover, all signs point to a further slackening of consump-

tion in view of growing uncertainty about households' purchasing power. All in all, the outlook for the near future is anything but bright.

Switzerland does not constitute a special case – all industrialised countries are faced with a similar downturn, especially those with high exposure to foreign trade.

All the same, we are confident that we are well equipped to deal with the situation, for several reasons:

– our country has a competitive export sector in terms of both price and technology;
– our companies have posted good results over the past few years and are generally in a healthy financial state;
– unlike other countries, Switzerland did not experience a housing market bubble in recent years;
– our economic structure, built on small and medium-sized enterprises, gives us an edge in terms of flexibility;
– our public finances have been put in order and the country's balance of payments is in a good condition.

All these factors lead us to believe that our economy can rebound once the international economic slide has been halted. The International Monetary Fund is forecasting an upturn in Europe from 2010 onwards in the wake of a recovery expected to begin in the US. In Switzerland, initial signs of stabilisation are appearing here and there, and the decline in GDP should gradually become less steep in the near future. But a true reversal of trend is unlikely to occur before next year and recovery will be a slow process, since the current difficulties are more than just cyclical. They are partly the result of a profound crisis of confidence in the soundness of the financial sector and the future growth potential of the global economy.

Faced with collapsing demand, all countries have adopted expansionist monetary and fiscal policies. Interest rates have been slashed and a number of relief packages involving considerable sums launched, exacerbating the public debt burden. Such strategies are appropriate in times of emergency. Nevertheless, we should always bear in mind that the difficulties confronting us today are in all likelihood the consequence of excessive borrowing and of monetary policies that were too accommodating – two factors that helped derail the international economy. Strange as it may seem, the stimuli used in the battle against recession today are the very ones that were abused in the past.

Moreover, once the economy is back on track, the prime political and economic challenge will be to put in place the corrective measures needed to ensure a more balanced course in future. The subsequent path of growth may not be as steep as it was in the past, but for that it will be all the more sustainable. For our part, we are aware that maintaining price stability in our country over the medium term will require us to re-establish healthy monetary conditions by absorbing excess liquidity in good time. We have both the means and the will to do so.

The global economy has entered a painful phase of putting its house in order; a phase marked by weak growth and high unemployment. Profoundly embedded as it is in international trade, the Swiss economy cannot escape these difficulties. The SNB reacted swiftly to the deteriorating economic situation, and many people hoped that the monetary policy adopted could shield our country from the turmoil experienced elsewhere. However, it was not in our power to meet these expectations. We did all we could within the framework of our legal mandate. 2009 will be a difficult year for our economy, and the signs are that 2010 will be so too because, even if the downward trend is halted, the underutilisation of our production resources will still be considerable.

Dear shareholders, dear guests, in such a challenging environment, we shall once again need the support of everyone, in particular our shareholders. We thank you for the unfailing trust you placed in us throughout the year and the interest you have shown in the SNB's activities.

SNB Working Papers: Summaries

Measurement of labour quality growth caused by unobservable characteristics

Thomas Bolli and Mathias Zurlinden
Working Paper 2009-1

The standard economy-wide indices of labour quality (or human capital) largely ignore the role of unobservable worker characteristics such as, for instance, individual ability. This paper develops a methodology for identifying the contributions of both observable and unobservable worker characteristics in the presence of the incidental parameter problem. Based on data from Switzerland over the 1991–2006 period, the paper finds that a large part of growth in labour quality is caused by shifts in the distribution of unobservable characteristics. The contributions to growth attributed to education and age are corrected downwards if unobservable worker characteristics are taken into account. Yet the inclusion of unobservable characteristics appears to have little effect on the overall index. This is reassuring for calculations of productivity growth, which are based on the standard methods of calculating labour quality indices.

Foreign currency borrowing by small firms

Martin Brown, Steven Ongena and Pinar Yeşin
Working Paper 2009-2

This paper examines why many small firms in Eastern Europe and the former Soviet Union choose to borrow in foreign currency rather than local currency. The paper first models a small firm's choice of loan currency, showing how this choice depends on the interest rate differentials, exchange rate volatility, the firm's revenue structure, and its distress costs in the case of default. When foreign currency funds come at a lower interest rate, firms with foreign currency revenue as well as local currency earners with high revenues and low distress costs choose foreign currency loans. When the banks have imperfect information about firms' revenues, even more local earners switch to foreign currency loans, as they do not bear the full cost of the corresponding credit risk.

The predictions of the model are tested in a 2005 survey of 3,105 small firms in 26 transition countries. The data confirm that firms with foreign currency income are more likely to borrow in a foreign currency. In contrast, interest rate differentials, exchange rate volatility, firm-level distress costs and financial transparency hardly affect the currency denomination. All in all, the empirical findings of the study suggest that 'carry-trade behaviour' is not the key driver of foreign currency borrowing by small firms in transition economies.

Forecasting realised (co)variances with a block structure Wishart autoregressive model

Matteo Bonato, Massimiliano Caporin and Angelo Ranaldo
Working Paper 2009-3

In modelling and forecasting volatility, two main trade-offs emerge: mathematical tractability versus economic interpretation and accuracy versus speed. The authors attempt to reconcile, at least partially, both trade-offs. The former trade-off is crucial for many financial applications, including portfolio and risk management. The speed/accuracy trade-off is becoming more and more relevant in an environment of large portfolios, prolonged periods of high volatility (as in the current financial crisis), and the burgeoning phenomenon of algorithmic trading in which computer-based trading rules are automatically implemented. The increased availability of high-frequency data provides new tools for forecasting variances and covariances between assets. However, there is scant literature on forecasting more than one realised volatility.

Following Gourieroux, Jasiak and Sufana (*Journal of Econometrics,* forthcoming), the authors propose a methodology to model and forecast realised covariances without any restriction on the parameters while maintaining economic interpretability. An empirical application based on variance forecasting and risk evaluation of a portfolio of two US treasury bills and two exchange rates is presented. The authors compare their model with several alternative specifications proposed in the literature. Empirical findings suggest that the model can be efficiently used in large portfolios.

Chronicle of monetary events

Current monetary policy maintained

Following its quarterly monetary policy assessment on 18 June 2009, the SNB decided to leave the target range for the three-month Libor unchanged at 0–0.75% and to maintain its objective to gradually bring the Libor down to the lower part of the range, in other words, to around 0.25%. It also announced that it will continue to provide the economy with a generous supply of liquidity and to purchase Swiss franc bonds with the aim of reducing risk premia on long-term bonds issued by private sector borrowers. Furthermore, it will take firm action to prevent an appreciation of the Swiss franc against the euro.

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

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

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

In addition, the SNB provides information and data from its own sources as well as certain processed data from outside sources. Such information and processed data may be used, translated (with reference to the source), transmitted or used in other ways, for non-commercial purposes, compatible with the purpose of such information or data.

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

Similarly, the SNB does not guarantee that the use of the processed data from outside sources made available by the SNB is admissible. To the extent that the data is clearly derived from outside sources, the users of such data are obliged to respect any existing copyrights and to obtain the right of use from the relevant outside source themselves.

© Swiss National Bank, Zurich 2009

Design
Weiersmüller Bosshard Grüninger WBG, Zurich

Typeset and printed by
Neidhart + Schön AG, Zurich

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

The *Quarterly Bulletin* can be downloaded in the following language versions, from the URLs given below:
English:
www.snb.ch, *Publications, Quarterly Bulletin* (ISSN 1662–257X)
German:
www.snb.ch, *Publikationen, Quartalsheft* (ISSN 1662–2588)
French:
www.snb.ch, *Publications, Bulletin trimestriel* (ISSN 1662–2596)

Website
www.snb.ch