Swiss National Bank
Quarterly Bulletin

June 2/2008 Volume 26

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Monetary policy report (p. 6)

Global economic growth at the beginning of 2008 was robust, despite the continuing turbulence on financial markets, although exceptional factors contributed to the positive results in Europe and Japan. In the US, negative GDP growth was averted by a positive external contribution. Growth momentum remained high in the emerging eastern Asian markets. The short-term growth prospects for industrialised countries, on the other hand, remain subdued. Consensus forecasts for GDP growth in 2008 and 2009 have therefore been downgraded further since February.

In Switzerland, as expected, economic growth slowed markedly in the first few months of 2008. The slowdown was primarily due to the fallout from the international financial market crisis, which led to a decline in value added at Swiss banks. In contrast, developments in other sectors were satisfactory. The situation on the labour market also remained favourable. A number of indicators suggest that there will also be moderate economic growth over the next few quarters. The SNB is continuing to project real GDP growth of 1.5–2% for the year 2008.

At its quarterly monetary policy assessment in June, the SNB decided to leave the target range for the three-month Libor unchanged at 2.25–3.25%.

The economic situation from the vantage point of the delegates for regional economic relations (p. 40)

Most of the 190 or so representatives of various economic sectors and industries interviewed by the SNB delegates for regional economic relations between March and May 2008 expected the good business trend to continue. This was especially true for the retail trade and other consumer-oriented sectors. The export sector's assessment of the business situation and outlook was more mixed than in the last round of talks, while banks were feeling the effects of the stock market decline.

General Meeting of Shareholders (p. 44)

At the SNB's 100th General Meeting on 25 April, the President of the Bank Council, Hansueli Raggenbass, looked back over the SNB's eventful history. Interestingly, not only in the year of its foundation, but also when it celebrated its 25th, 50th and 75th anniversaries, the SNB found itself facing major problems. The year of its foundation saw the 1907 Panic in New York, whose effects were also felt in Switzerland. A quarter of a century later, monetary policy was dominated by the Great Depression, the banking crisis and the devaluation question, while in 1957 the economic situation and tensions in the international monetary system were the main cause for concern. Finally, in 1982 the international debt crisis presented the SNB with a new challenge.

The speech by Jean-Pierre Roth, Chairman of the Governing Board, reviewed the year 2007. The year was a successful one from an economic perspective. However, the final few months were dominated by high uncertainty, triggered by the turbulence on international financial markets that had begun in summer 2007. Switzerland was particularly hard hit, owing to its relatively open financial sector. In the second part of his speech, Jean-Pierre Roth outlined the lessons that can be learned from the turmoil. He emphasised that these problems should not distract the SNB from its objective of maintaining price stability in the medium term.

SNB Working Papers (p. 56)

Abstracts of five papers: Martin Brown and Christian Zehnder, 'The emergence of information sharing in credit markets', *SNB Working Paper* 2008-1; Yvan Lengwiler and Carlos Lenz, 'Intelligible factors for the yield curve', *SNB Working Paper* 2008-2; Katrin Assenmacher-Wesche and M. Hashem Pesaran, 'Forecasting the Swiss economy using VECX* models: an exercise in forecast combination across models and observation windows', *SNB Working Paper* 2008-3; Maria Clara Rueda Maurer, 'Foreign bank entry, institutional development and credit access: firm-level evidence from 22 transition countries', *SNB Working Paper* 2008-4; Marlene Amstad and Andreas M. Fischer, 'Are weekly inflation forecasts informative?', *SNB Working Paper* 2008-5.

Monetary policy report

Report for the attention of the Governing Board of the Swiss National Bank for its quarterly assessment of June 2008

This report is based primarily on the data and information available as at mid-June 2008.

Contents of the 'Monetary policy report'

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 2008. The sections headed 'Monetary policy decision' and '4 The SNB inflation forecast' take due account of the Governing Board's monetary policy decision of mid-June 2008.

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

Monetary policy decision

Since the last quarterly assessment by the SNB in March 2008, developments in the international economic environment have been mixed. On the one hand, global economic growth was robust despite the continuing turbulence on financial markets. On the other hand, oil prices rose further, prompting a generalised increase in inflation rates and clouding the outlook for growth in industrialised countries.

Within this context, the SNB has made a downward revision to the international economic scenario upon which its medium-term inflation forecast is based. It now anticipates considerably slower economic growth for the US in 2008 than it did in March, and has also adjusted its forecasts for Europe downwards, although to a lesser extent. At the same time, the SNB expects inflation to move even higher in the industrial countries as a result of the rising oil prices.

In Switzerland, as expected, economic growth slowed in the first quarter of 2008. The slowdown mainly reflected the fallout from the international financial market crisis, which led to a decline in the number of financial market transactions and thus to a drop in added value in the Swiss banking industry. In contrast, developments in other industries were satisfactory. On the demand side, exports lost considerable momentum, whereas domestic demand remained strong.

These developments were reflected in the discussions conducted by the SNB delegates for economic relations between March and May with the representatives of different industries and economic sectors. The retail and other consumer-oriented industries, in particular, continued to be confident about business prospects. However, the export industry's assessment of the business situation and outlook was more mixed than in the last round of talks, while banks were feeling the effects of the stock market decline. Sentiment has been hit by worries about the impact of the financial market turbulence as well as the massive hike in the price of agricultural products, energy and industrial raw materials and the heavy depreciation of the US dollar.

The SNB is continuing to project real GDP growth of 1.5–2.0% for the year 2008, and has therefore decided to leave its March growth forecast unchanged. At the same time, it has raised its inflation forecast for this year to 2.7%, from the 2% projected in March.

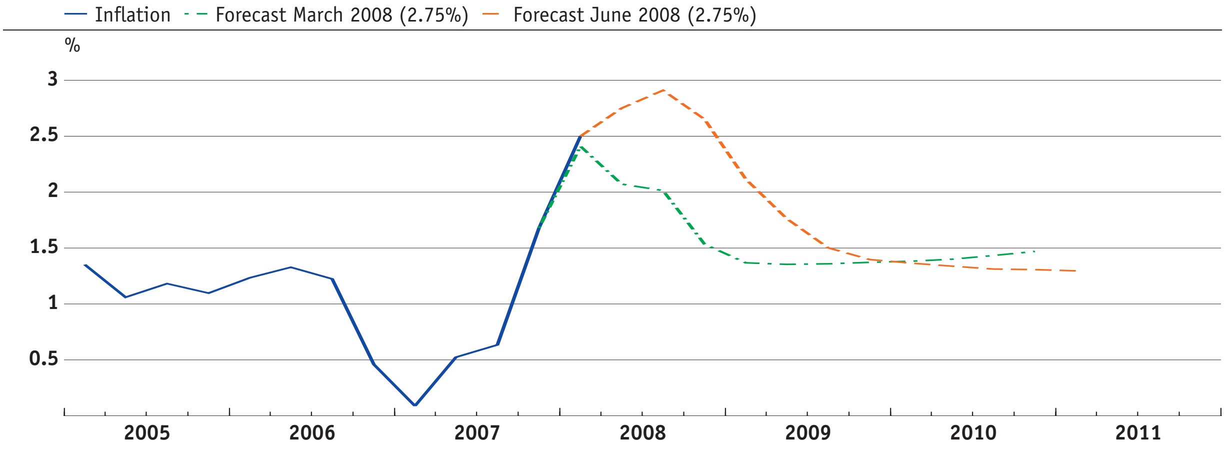
Following its quarterly monetary policy assessment in June, the SNB decided to leave the target range for the three-month Libor unchanged at 2.25–3.25% and to keep the rate in the middle of the target range for the time being.

The main factor in this decision was the high degree of uncertainty attached to the inflation forecast this time. A further price surge would be a concern if energy prices were to rise again or if the Swiss franc were to weaken. Conversely, inflationary pressure could ease in the event of a more pronounced slowdown in the international economy.

Against such a background, the SNB remained cautious and kept its monetary policy course unchanged. Given the medium-term inflation outlook, this is still a viable option. All the signs indicate that the currently high inflation is temporary. It is true that – assuming a constant three-month Libor – inflation is likely to remain above 2% until the beginning of 2009, thereby exceeding the range that the SNB equates with price stability. Yet, the expected flattening-out of economic growth will improve the inflation outlook for 2009 and 2010. The SNB is forecasting average inflation of 1.7% for 2009 and 1.3% for 2010. Compared to the March forecast, therefore, the current inflation forecast curve is lower as regards the long-term outlook.

Inflation forecast of March 2008 with Libor at 2.75% and of June 2008 with Libor at 2.75%

Percentage change in national consumer price index from previous year



Inflation forecast of June 2008 with Libor at 2.75%	2008	2009	2010
Average annual inflation in percent	2.7	1.7	1.3

1 Developments in the global economy

Global economic growth was robust at the start of this year, despite continuing turbulence on the financial markets. This was partly due to exceptional factors in Europe and Japan. In Europe, mild weather boosted construction activity and growth was also supported by a substantial increase in inventories. In Japan, consumer spending picked up perceptibly, although this was largely attributable to calendar effects. In the US, negative GDP growth was averted by a positive external contribution, accompanied by declining demand for imports. Growth momentum remained high in the emerging eastern Asian markets.

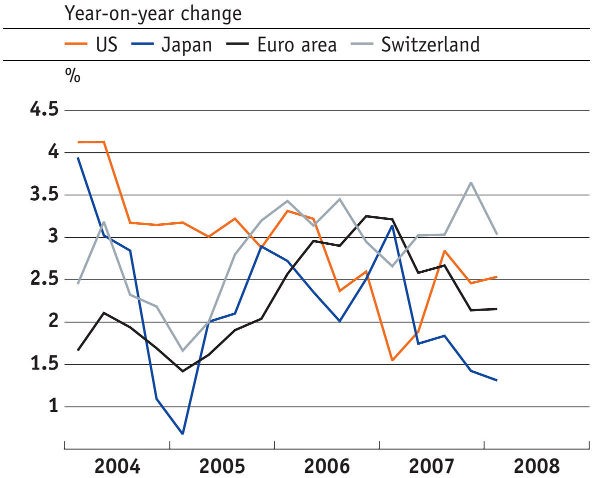
The situation on the financial markets has calmed somewhat since mid-March, but the short-term growth prospects for the industrialised countries remain clouded. Consumer and corporate spending will be dampened by the renewed hike in the oil price. American consumers are likely to be particularly hard hit by higher petrol and food prices because households are facing falling house prices and a credit squeeze. In the euro area, the external contribution will probably be checked by the appreciation of the euro. Consensus forecasts for GDP growth in 2008 and 2009 have therefore been downgraded further since February.

Continued dip in growth in the US

In the US, economic growth remained low at 0.9% in the first quarter compared with 0.6% in the fourth quarter of last year, but was still positive despite the rising fears of a recession. Positive contributions came from increases in inventories and, above all, private consumption, which continued to rise although the pace of growth slackened considerably. By contrast, investment spending decreased across a wide range of industries. Export momentum also fell considerably. Nevertheless, the export surplus remained high as a result of falling imports. The dip in growth was reflected on the labour market as well, with job losses amounting to 240,000 in the first quarter.

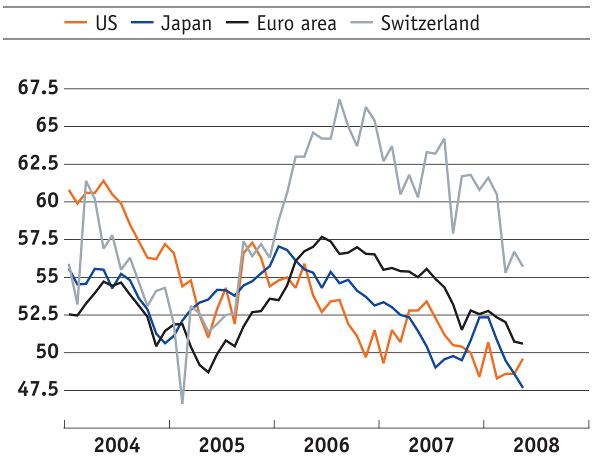
Economic growth looks set to remain weak for the rest of the year. Although tax refunds to private households should support consumer spending, the enormous hike in petrol prices, negative asset effects and the worsened labour market situation will continue to impact on spending. The deterioration in consumer confidence continued into May and is well below the long-term average. Further tightening of lending conditions and the increasingly uncertain economic outlook are likely to hold back investment by the corporate sector, while the downtrend in house prices is expected to bring a further downturn in spending on residential property. The export sector should provide positive

Chart 1.1
Real GDP



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

Chart 1.2
Purchasing managers' indices (manufacturing)



Source: Thomson Datastream

impetus thanks to the persistent weakness of the dollar and well-filled order books. The GDP consensus forecast for 2008 dropped from 1.6% to 1.3% between February and May, while the forecast for 2009 slipped from 2.6% to 1.9%.

Surprisingly sound growth in the euro area

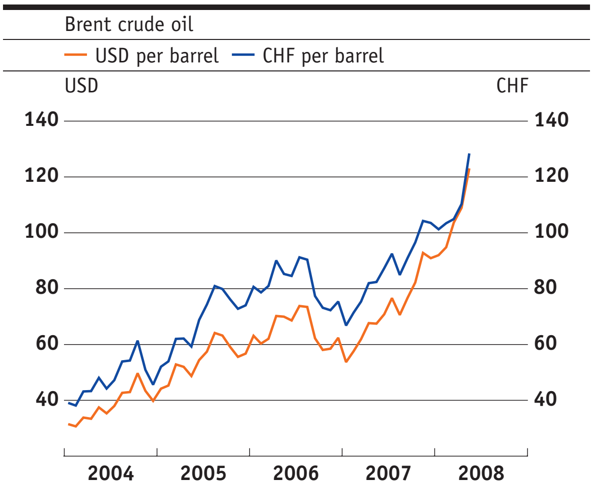
The economy in the euro area posted surprisingly robust growth of 3.2% in the first quarter, indicating that so far the downside impact of the financial market turbulence has been lower than had been feared. Nevertheless, growth was not evenly distributed. In Germany, real GDP grew by 6.3%, the strongest rise for nearly twelve years, whereas Spain reported a marked cooling of growth to just 1.1%. The strong demand in the euro area was driven by exports and investment. However, the rise in investment was partly due to one-off factors, as construction work was brought forward as a result of the mild winter. Moreover, growth was underpinned by an increase in inventories. Consumer spending, which had recorded below-average growth during the current upswing, increased only slightly in the first quarter following a drop in the fourth quarter. Utilisation of the factors of production remained high even though capacity utilisation in the manufacturing sector slipped slightly again in the first quarter. There was no further tightening of the labour market situation.

Despite the sound growth at the start of the year, the economic outlook for the euro area has deteriorated. Growth is likely to falter in the second quarter as the one-off effects registered in the first quarter will not be repeated. The strength of the euro is reducing export demand and the high price of oil is holding back domestic demand. Despite pay rises, consumer sentiment surveys indicate that people are increasingly concerned about purchasing power. They are also more pessimistic about job prospects. Investment by the corporate sector is likely to slow gradually as a result of more restrictive lending by the banks in the first quarter. The slowdown will probably differ from one euro country to another. Germany appears to be relatively resilient at present, whereas a marked downturn on the real estate market is clouding prospects in Spain and Ireland. The GDP consensus forecast for 2008 remained virtually unchanged at 1.5% but the forecast for 2009 slipped by 0.3 percentage points to 1.6%.

Strong growth in Asia

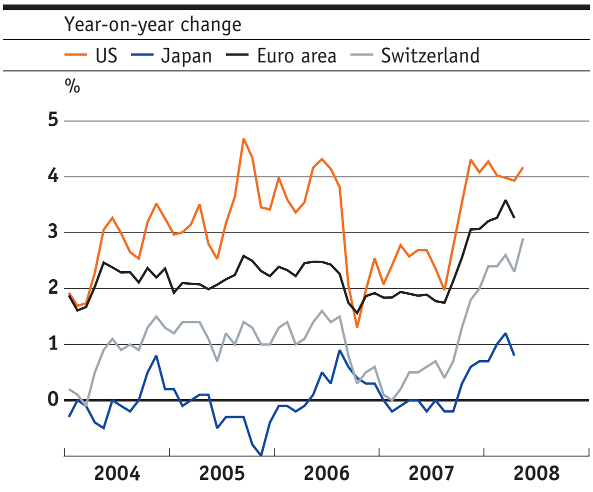
The Asian economies continued to expand strongly in the early part of this year. In Japan, real GDP growth increased to 4.0% in the first quarter, up from 2.9% in the fourth quarter of 2007. This was again driven by exports, which posted double-digit growth despite the dip in demand in the US. Investment in housing construction recovered from the downturn triggered by the introduction of more stringent building regulations in summer 2007, but equipment investment lost momentum. Overall,

Chart 1.3
Oil prices



Sources: Reuters, SNB

Chart 1.4
Consumer prices



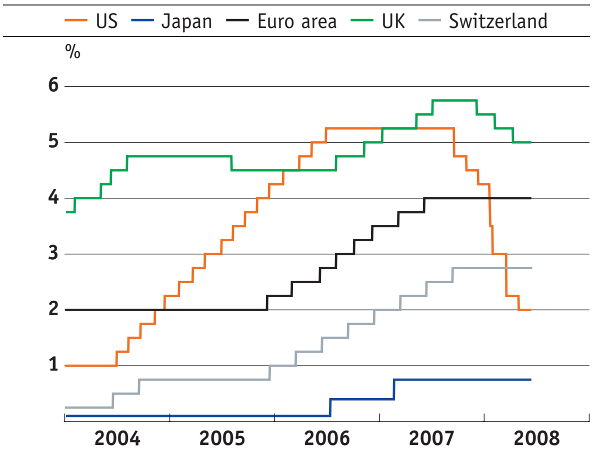
Sources: Swiss Federal Statistical Office (SFSO), Thomson Datastream growth in the first quarter was probably overstated due to the leap-year effect because – unlike the figures in the US and the euro area – Japanese GDP is not adjusted for this effect. Consequently, it may be expected that this will be compensated by far lower growth in the second quarter. The outlook is subdued. Faced with the heightened uncertainty and higher material costs, which are squeezing margins, Japanese companies could take a more cautious line on investment even though they are still benefiting from good export conditions. The yen's present strength versus the US dollar may be making Japanese exports less competitive, but it is also checking the rise in the price of imported raw materials and thus buoying up weaker segments of the economy, especially private households and enterprises that are reliant on the domestic market. Overall, we assume that growth will be lower this year than last. In May the GDP forecast for 2008 was virtually unchanged at 1.3%, whereas the growth rate for 2009 had been downgraded by 0.6 percentage points to 1.6%.

In China, real GDP rose by 10.6% in the first quarter compared to the corresponding period of last year. The major impetus again came from investment spending. In particular, construction spending rose further against the background of a real estate boom. The shift from exports to private consumption continued, supported by solid growth in employment and state incentives. Bad winter storms held back industrial output but there were signs of recovery in March and April. Korea, Taiwan, Hong Kong and Singapore grew by an average of 6.1% year-on-year in the first quarter thanks to high export momentum, but the economic slowdown in the industrialised countries and sustained high energy and food prices are likely to leave their mark during the remainder of the year. China should prove less sensitive given its high internal momentum. The economic impact of the severe earthquake in the Chinese province of Sichuan in May is considered low at present. In May, the consensus forecast for China was for growth of 10.0% in 2008, dropping only slightly to 9.3% in 2009.

High inflation

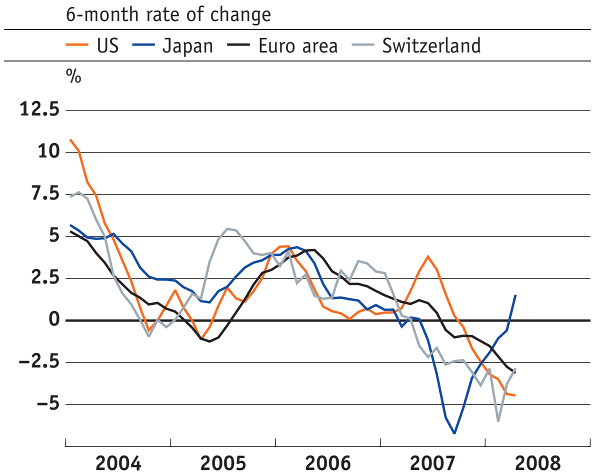
Inflation, measured by the increase in consumer prices, remained high throughout the world between January and April and continued to rise in both Europe and Asia. The driving forces were again energy and food prices. In the US, the annual inflation rate only edged down marginally from 4.3% in January to 3.9% in April. While the massive rise in food prices increased the inflation rate in the previous year, energy made a lower contribution relative to the year-back reference base. The core inflation rate, which excludes energy and food prices, slipped from 2.5% to 2.3% in the same period. Nevertheless, higher inflation expectations made it clear that the inflation risks still remain on the upside. Unlike the US, the euro area's inflation rate increased further to 3.3% between January and

Chart 1.5
Official interest rates



Sources: Thomson Datastream, SNB

Chart 1.6
OECD composite leading indicators



Source: OECD

April and hit a 16-year high of 3.6% in March. By contrast, the core inflation rate slipped back slightly to 1.6%. Producer inflation expectations remained high. In Japan, the annual inflation rate increased by just 0.1 percentage points to 0.8% in the period to April. The core inflation rate remained in negative territory. By contrast, there was a clear rise in the inflation rate in many Asian countries. In China, where inflation was driven principally by a steep rise in the price of pork, the annual inflation rate climbed to 8.5% in April. In Korea, Taiwan, Hong Kong and Singapore, it increased to an average of over 4%.

Differing monetary policies

The situation in many parts of the international financial markets has improved perceptibly since the Fed intervened to prevent the collapse of the investment bank Bear Stearns in mid-March. Volatility has declined significantly in most markets, and the tension on the money markets has recently eased slightly. This was probably attributable to increased efforts by various central banks to raise the liquidity of the interbank market. Moreover, the Fed has eased its monetary policy further.

A massive cut of 125 basis points in the key Fed funds rate in January was followed by further cuts totalling 100 basis points, bringing it to 2.0%. By contrast, the European Central Bank indicated a state of increased alertness in June in view of the increased risk of inflation. Although it left its main refinancing rate unchanged at 4.0%, it indicated that there was a possibility of a rate rise in July. The Bank of Japan stressed the economic risks and left its overnight call money rate at 0.5%, whereas the Chinese central bank tightened its monetary policy further, raising the minimum reserve rate by a total of 1.5 percentage points to 16.5%.

Consensus forecasts Table 1.1

	Economic growth[1]				Inflation[2]			
	February		May		February		May	
	2008	2009	2008	2009	2008	2009	2008	2009
United States	1.6	2.6	1.3	1.9	2.9	2.0	3.8	2.4
Japan	1.4	1.9	1.3	1.6	0.5	0.5	0.8	0.5
Euro area	1.6	1.9	1.5	1.6	2.5	2.0	3.1	2.1
Germany	1.7	1.9	1.7	1.5	2.1	1.7	2.6	1.9
France	1.6	1.9	1.5	1.7	2.2	1.8	2.7	1.9
Italy	1.0	1.4	0.6	1.0	2.5	2.0	3.0	2.3
United Kingdom	1.7	2.0	1.7	1.6	2.4	2.0	2.7	2.2
Switzerland	2.0	1.9	2.2	1.7	1.6	1.3	1.9	1.2

1 Real GDP, year-on-year change in percent
2 Consumer prices, year-on-year change in percent
Source: Consensus Forecasts, February 2008, May 2008. Consensus forecasts are monthly surveys conducted among over 240 companies and economic research institutes in more than 20 countries, covering predictions for the expected development of GDP, prices and other economic data. The results are published by Consensus Economics Inc., London.

2 Developments in the Swiss economy

2.1 GDP growth and outlook

Considerable reduction in growth

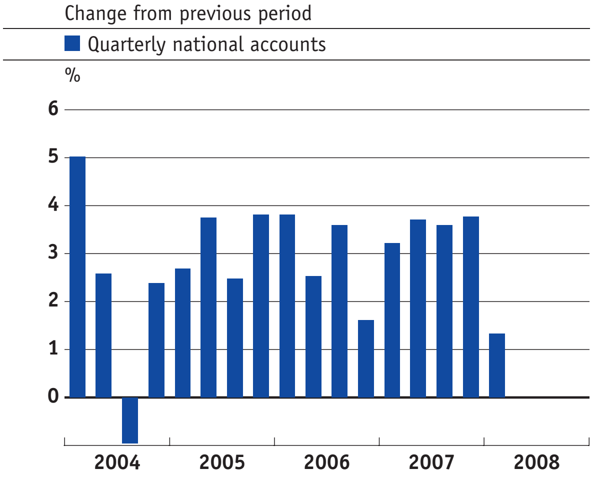
As predicted, the Swiss economy cooled considerably in the first few months of this year. SECO (the State Secretariat for Economic Affairs) estimates that real GDP rose by 1.3% compared with the previous period, following a rise of 3.8% in the fourth quarter of 2007. This slowdown chiefly reflected the impact of the international financial market crisis. The added-value contribution of the banks decreased by 11.5% in the first quarter, having increased sharply in the final quarter of 2007. This downtrend was attributable to a substantial drop in financial market transactions, which resulted in a slump in the banks' commission income. A slight decline in value added by the manufacturing sector also depressed GDP growth. These developments can be traced in the manufacturing statistics published by the SFSO (Swiss Federal Statistical Office), which show a decline in manufacturing output in the first quarter. By contrast, growth remained high in sectors focused on domestic demand – trade, hotel and catering and transport and communication.

Tempering factors on the demand side were a drop in construction investment and a decidedly negative contribution from inventories. By contrast, there was further significant growth in both private and public-sector consumption, and the pace of growth in equipment investment actually increased. Foreign trade also made a positive contribution. Although lower foreign demand and the appreciation of the Swiss franc led to a drop in exports, imports declined even faster.

Further moderate growth expected

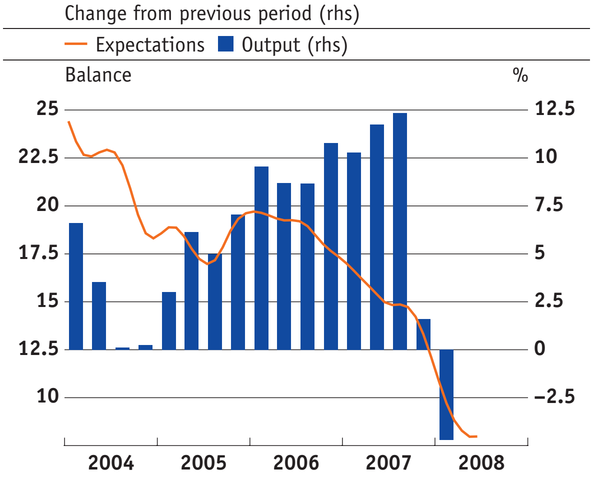
The SNB anticipates that economic growth will continue to slow in the coming quarters. The uncertainty on the financial markets will reduce the contribution made by the heavily weighted banking sector while the more downbeat cyclical trends in Europe and the US hold back foreign demand. At the same time, Swiss exports should benefit from rising incomes in several emerging economies and the oil-exporting countries. As a consequence, the manufacturing sector should not report a further significant downtick. The results of the latest surveys are showing first cautious signs of stabilisation following a negative trend over several months. Unless further unexpected price rises cut purchasing power, the favourable employment and income trends should buoy up domestic demand.

Chart 2.1
Real GDP



Source: SECO

Chart 2.2
Manufacturing output



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

Real GDP and components Table 2.1

Growth rates on previous period, annualised

	2004	2005	2006	2007	2006			2007				2008
					Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Private consumption	1.6	1.8	1.5	2.1	2.6	–0.5	1.4	3.1	2.3	3.1	1.1	1.6
Government consumption	0.8	0.5	–1.4	0.1	–6.3	4.6	1.8	–0.5	0.6	–2.8	–0.2	0.8
Investment in fixed assets	4.5	3.8	4.1	2.7	4.3	2.9	6.0	0.7	12.1	–10.7	1.8	4.8
Construction	3.9	3.5	–1.4	–2.9	–0.0	0.4	2.9	–0.6	–14.4	–5.8	7.2	–2.4
Equipment	5.0	4.0	8.9	7.2	7.9	4.9	8.5	1.8	37.2	–14.0	–2.0	10.5
Domestic final demand	**2.1**	**2.1**	**1.7**	**2.0**	**1.8**	**0.9**	**2.5**	**2.1**	**4.3**	**–1.0**	**1.1**	**2.2**
Domestic demand	**1.9**	**1.8**	**1.4**	**0.3**	**4.9**	**–4.2**	**4.6**	**–4.8**	**3.3**	**–1.1**	**8.4**	**–6.9**
Total exports	7.9	7.3	9.9	9.9	–1.3	11.9	18.6	12.2	4.2	9.6	0.2	3.0
Goods	7.3	5.8	11.1	8.4	–1.0	14.2	18.0	12.4	–1.0	8.3	–4.0	3.9
Excluding valuables[1]	7.3	6.5	11.3	8.4	7.8	6.6	18.5	9.2	4.1	7.5	–2.9	–2.7
Services	9.7	11.2	6.8	13.7	–2.1	6.2	20.4	11.7	19.2	12.8	11.6	0.9
Aggregate demand	**3.8**	**3.6**	**4.3**	**3.7**	**2.6**	**1.3**	**9.6**	**1.3**	**3.6**	**2.9**	**5.2**	**–3.2**
Total imports	7.3	6.7	6.9	5.2	2.9	–3.8	30.0	–3.1	3.5	1.3	8.2	–12.3
Goods	5.8	5.6	7.8	4.6	1.9	–8.7	40.6	–5.5	2.9	–2.2	6.4	–9.9
Excluding valuables[1]	5.9	5.3	7.4	6.4	0.7	–5.6	29.8	6.7	0.9	–0.5	5.3	–9.7
Services	14.7	11.6	2.7	8.0	7.5	22.1	–9.6	9.8	6.3	19.4	17.0	–22.3
GDP	**2.5**	**2.4**	**3.2**	**3.1**	**2.5**	**3.6**	**1.6**	**3.2**	**3.7**	**3.6**	**3.8**	**1.3**

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

This view is reflected in the talks held by the SNB delegates for regional economic relations with around 190 representatives of various sectors and industries between March and May. The majority of representatives reported good overall business trends, especially in retailing and other consumer-oriented sectors such as hospitality. However, the assessment of the business situation and outlook by the export sector was more mixed than in the previous talks. Most representatives suggested that business had slowed. Banks also reported a drop in activity as they are feeling the effects of the stock market slump.

The prevailing opinion is that sales are likely to slow further in the second half of 2008. Sentiment has been hit by worries about the impact of the turbulence on the financial markets as well as the massive hike in the price of agricultural products, energy and industrial raw materials and the heavy depreciation of the dollar. Although the general uncertainty has increased, the majority of companies are sticking to their investment plans and some are planning a further increase in headcount.

For 2008, the SNB expects real GDP growth to be between 1.5% and 2%. This scenario assumes a gradual reduction in the current high utilisation of the factors of production.

2.2 Foreign trade, consumption and investment

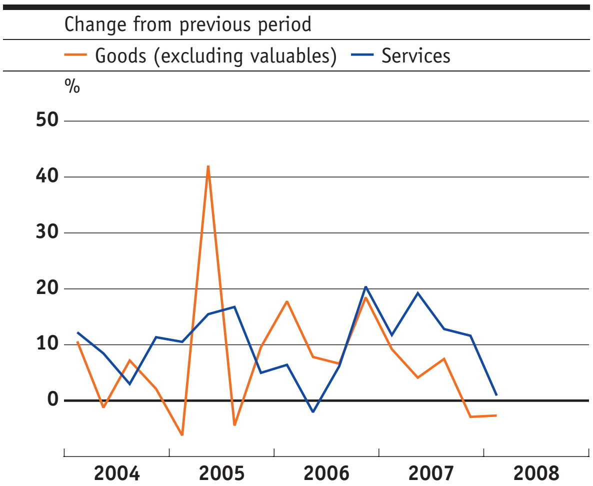
Exports declining for the first time since 2006

The slower growth in the international economy and the appreciation of the Swiss franc put pressure on real exports in the first quarter. As a result, exports contracted for the first time in almost two years. A drop in exports of goods for the second consecutive period was accompanied by far lower growth in the export of services. March had fewer working days than last year. As well as affecting export growth, this cut the year-on-year growth rate from 7.1% to 3.4%.

Looking at exports of goods (excluding valuables), there was a moderate rise in demand for semi-finished goods but this was more than cancelled out by lower exports of investment and consumer goods. Demand again varied by region. Exports to EU member states dropped and exports to south-east Asia were also slightly lower. By contrast, exports to the oil-exporting countries and China rose further. There was a rebound in deliveries to Japan and to the US, although here the increase was mainly confined to capital goods.

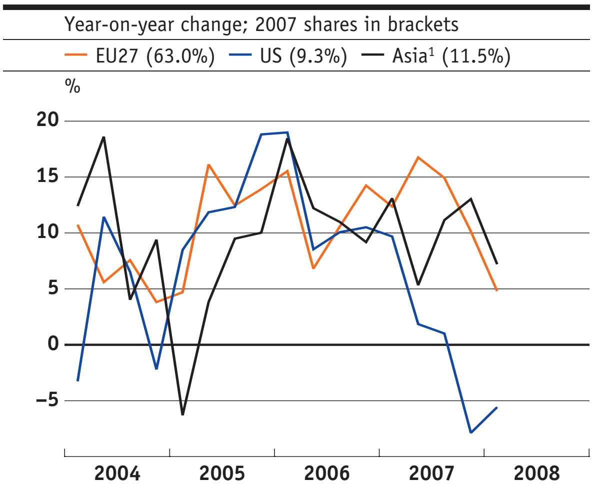
Exports of services lost considerable momentum in the first quarter. As in the previous period, commission income from banking transactions with foreign clients declined. This was compounded by lower income from merchanting, as well as from patents and licences. By contrast, there was a further rise in income from tourism thanks to the good weather conditions.

Chart 2.3
Exports



Source: SECO

Chart 2.4
Exports by trading partners



1 Asia: Japan, China, South Korea, Hong Kong, Singapore, Taiwan, Malaysia, Thailand, Philippines, Indonesia
Source: Federal Customs Administration (FCA)

Pronounced drop in imports

After three years of almost consistent growth, a pronounced drop in real exports in the first quarter brought them to slightly below the year-back level (–0.3%). Far fewer goods and services were sourced from foreign suppliers. Within imports of services, there was an especially marked drop in spending on patents and licences. By contrast, support came from the tourism sector, where spending was around the same level as in the previous quarter.

The drop in real imports of goods (excluding valuables) provided a sharp contrast to the robust domestic demand in the first quarter. One explanation may be the erratic development of imports of aircraft, which were down significantly. Other factors were a dip in the highly weighted imports of non-durable consumer goods in the pharmaceuticals sector.

There were signs of a rebound in trade in goods at the start of the second quarter. Total exports of goods picked up in April, with the strongest impetus coming from semi-finished products and consumer goods. Thanks to solid domestic demand, there was also a broadly based upturn in imports.

Consumer spending subdued but still a source of growth

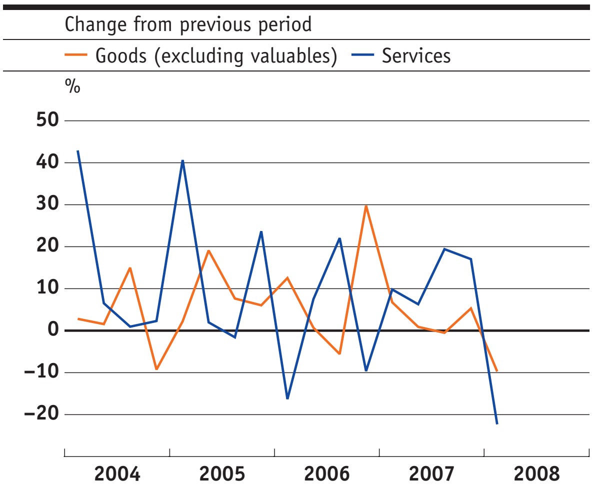
Private consumption remained a mainstay of growth in the first quarter. Projected over the year, consumer spending rose by 1.6%. However, the upward momentum was well below the average for the previous year (2.4%).

The uptrend in retail sales came to a standstill in the first quarter as growth in the consumption of goods faltered. Although spending on food continued to rise, this was partly because Easter fell in March this year. At the same time, demand for consumer durables fell. Examples include the lower rise in new car registrations and declining imports of durable goods. By contrast, domestic tourism remained in very good shape, with a further strong rise in the number of overnight stays by domestic guests in the first quarter.

The sluggish consumer spending at the start of the year was a reflection of lower consumer confidence. The aggregate consumer confidence index calculated by SECO increased by 2 points in April, well below the improvement in the previous survey in January (+14 points). Consumer sentiment was dampened by two factors. Firstly, the turbulence on the international financial markets led to a downward revision of the assessment of the country's general economic situation. And secondly, unexpectedly high inflation in recent months has adversely affected assessments of consumers' real purchasing power.

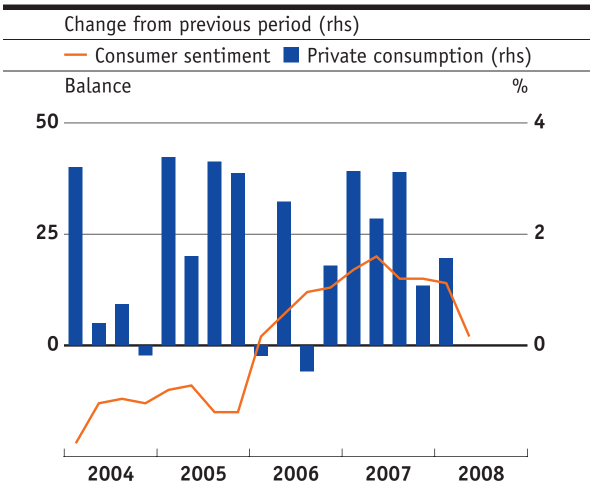
By contrast, households are still optimistic about future real income trends. That tallies with the SNB's assessment, which is based on a 2.9% increase in real wages this year (2007: +4.4%). Growth in real wages (including variable wage components) and employment will probably remain well inside positive territory.

Chart 2.5
Imports



Source: SECO

Chart 2.6
Private consumption



Source: SECO

Construction investment is still declining

Construction investment contracted by 2.9% in 2007 and dropped further in the first quarter of this year. The growth rate was –4.2% compared with the first quarter of 2007 and –2.9% compared with the fourth quarter. The renewed decline is again due to a drop in residential construction, reflected in the reduction in the number of housing units under construction. By contrast, the quarterly survey by the Swiss Association of Building Contractors indicated a further rise in commercial construction. Civil engineering also expanded significantly.

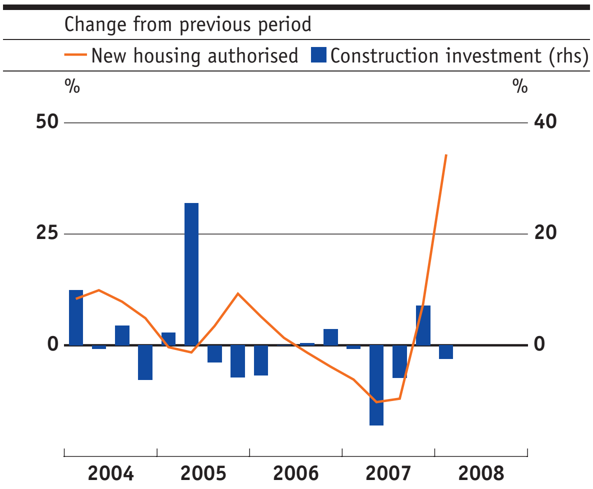
The present decline in housing construction has been on the cards for some time as there has been a clear and continual reduction in construction permits since spring 2006. In 2007, construction permits were down by almost 10%. This trend was broken in the first quarter when there was a sharp hike in permits for residential construction. This should gradually slow the downward trend in this sector in the coming quarters.

Temporary recovery in equipment investment

Equipment investment rose strongly in the first quarter, but the 10.5% increase was not broadly based. The sharp rise was principally due to high investment in precision instruments. By contrast, investment in machinery was more or less flat and spending on IT products and services decreased.

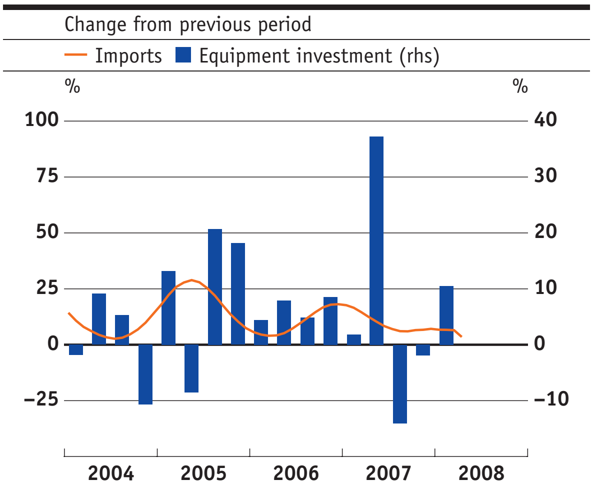
Capacity utilisation in the Swiss economy has been falling slightly since winter 2007/2008 but nevertheless remains at a high level. Slower economic growth is likely to result in a further reduction in capacity utilisation in the coming quarters. Accordingly, the rise in equipment investment looks set to slow.

Chart 2.7
Construction



Sources: SECO, SFSO

Chart 2.8
Equipment



Sources: FCA, SECO

2.3 Employment and labour market

Further steep rise in employment

The strong rise in employment continued in the first months of this year. The number of people in employment was 2.7% higher than in the previous period and 2.8% higher than twelve months previously. Converted into full-time equivalents, the number of jobs rose by 2.8% compared with 2.9% in the previous period. The biggest increase was in employment in the manufacturing sector (4.3%), especially in the watchmaking and precision instruments industries. In the service sector, employment rose by 2.4%. The main drivers here were insurance (5%), IT (4.7%), the public sector (3.8%) and the wholesale sector (2%). Despite lower added value, the banking sector also created new jobs (1.5%).

Chart 2.9 shows that the strong rise in employment has been maintained for three years now. Average employment growth was 1.9% between the first quarter of 2005 and the first quarter of 2008, having stagnated between 1991 and 2004. This impressive performance is partly due to jobs created following implementation of bilateral agreements, which make it easier for companies to recruit new staff. In the first quarter, the number of foreign workers again rose faster than the number of domestic workers.

The strong employment trend is expected to drop back in the coming months. At present, all indicators of demand for personnel are high, pointing to continued sound growth in employment in the short term. However, there are first signs that the trend could be reversing. The SFSO index of job vacancies has declined slightly for both manufacturing and the service sector. The index of job prospects has also fallen back slightly.

Chart 2.9
Employment

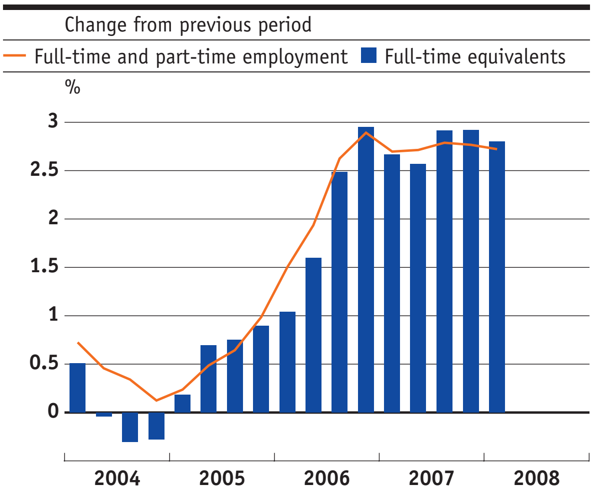


Chart 2.10
Vacancy index

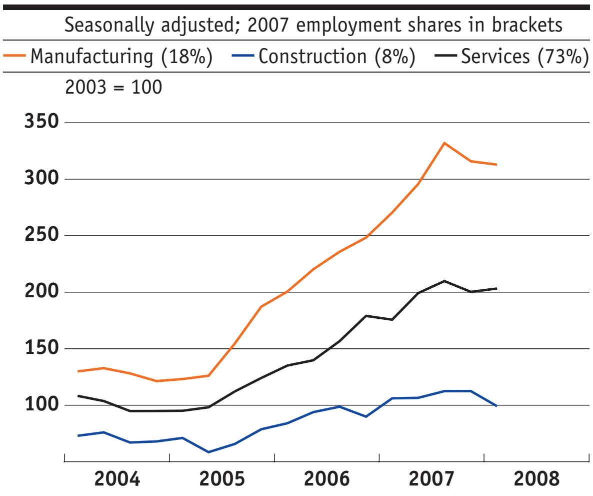
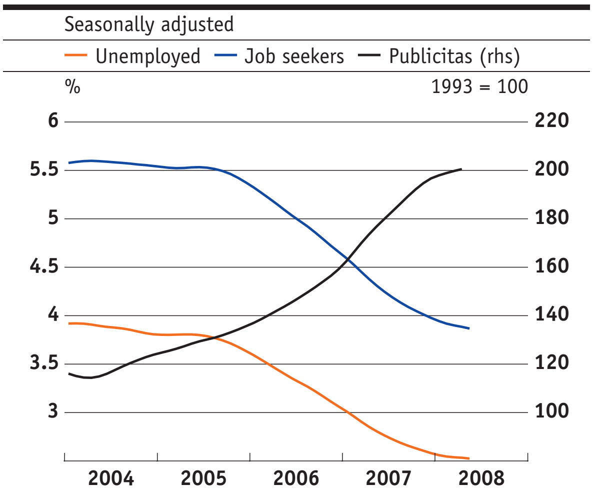


Chart 2.11
Unemployment rates and vacancies



Charts 2.9 and 2.10:
Source: SFSO

Chart 2.11:
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).
Sources: Publicitas, SECO

Unemployment stabilising at a low level

After adjustment for seasonal factors, the number of people registered as unemployed has declined steadily over the past four years but remained unchanged at 100,000 between February and May. The unemployment rate therefore stabilised at 2.5% in May. The number of people seeking employment – which includes people on training and employment programmes or who have accepted an interim placement, as well as those registered as unemployed – dropped slightly to 3.9% by the end of May.

In view of the rapid rise in employment in recent quarters, stabilisation of the unemployment trend can be interpreted as a sign that the structural unemployment level has been reached. Most vacancies are for highly skilled jobs and tend to be filled mainly by new market participants (immigrants or young people who have just completed their training).

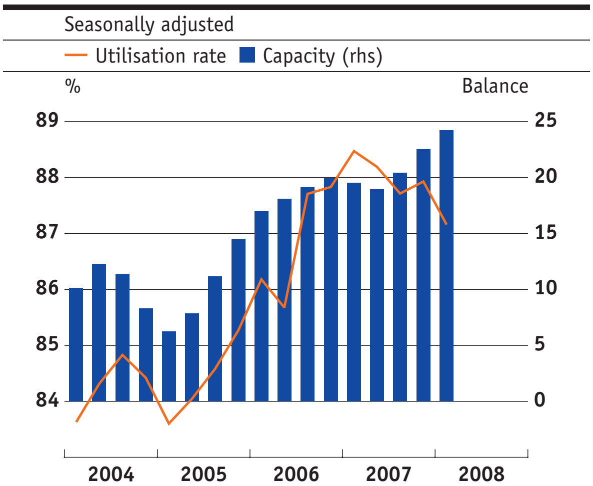
2.4 Capacity utilisation

If aggregate demand does not move synchronously with aggregate supply in the medium term, inflationary or deflationary trends may arise. As a rule, aggregate supply – which is determined by the availability of capital and labour as well as technological progress – grows at a relatively even pace in the short term. Changes in demand are therefore reflected in fluctuations in utilisation of technical and labour capacity. If their utilisation rate exceeds its normal level, this points to excess demand and, consequently, to increasing inflationary pressure. Conversely, under-utilisation of capacity indicates excess supply and consequently lower inflationary pressure.

Further reduction in technical capacity utilisation

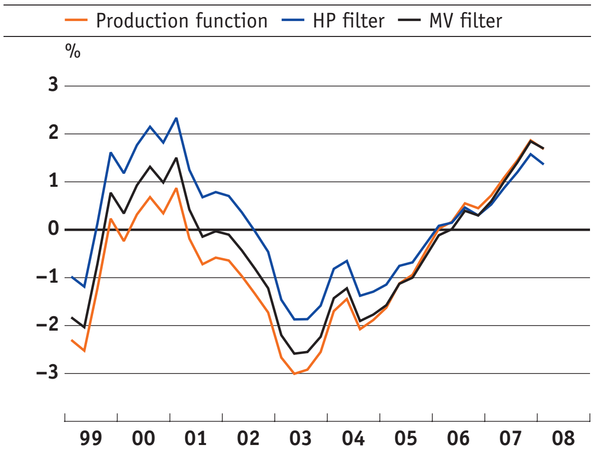
According to the KOF/ETH surveys, capacity utilisation in manufacturing declined from the previous quarter (chart 2.12) to 87.2%, but was still above the long-term average of 84%. This sustained high level of capacity utilisation is contributing to a substantial increase in capacity in the manufacturing sector (chart 2.12). Capacity utilisation in the construction sector hardly changed compared with the previous quarter and is still well above the long-term average. The proportion of construction companies reporting insufficient technical capacity remained at the level of the previous quarter, hav-

Chart 2.12
Technical capacity in manufacturing



Source: KOF/ETH

Chart 2.13
Output gap



Source: SNB

ing declined continuously over the previous year. Slightly fewer manufacturing and construction companies than in the previous period registered a shortage of workers. The picture is similar in the service industries. There was also a further sharp drop in delivery periods in the wholesale sector to around the long-term average. By contrast, the hospitality industry reported a shortage of technical facilities. The room occupancy rate was 66.5%, the highest level since 1990.

Reduction in the output gap

A more comprehensive measure of capacity utilisation in the economy is the output gap, which is calculated as the difference between real GDP and estimated production potential in Switzerland, expressed in percentage terms. Chart 2.13 shows three estimates of the output gap based on different methods of estimating production potential: the production function (PF), the Hodrick-Prescott filter (HP), and the multivariate filter (MV). As real GDP rose by 1.3% in the first quarter, which was below growth in production potential, the output gap measured by all three estimates declined considerably. According to the PF and the MV it was 1.7%, while according to the HP filter it was 1.4%.

The output gap is mainly a reflection of above-average utilisation of technical capacity. By contrast, utilisation of the labour supply is now normal. The SNB predicts that aggregate demand will grow more slowly than potential in the next few quarters, so the output gap should continue to narrow. Growth in production potential is currently around 2% and thus remains above the long-term GDP growth trend, which was around 1.6% in the past 25 years. This is mainly because the supply of labour is growing relatively strongly at present as a result of immigrant workers and a rise in the participation rate. Due to the vigorous investment activity, capital stock is also increasing relatively strongly.

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

	2007	2007		2008	2008			
		Q3	Q4	Q1	February	March	April	May
Overall CPI	**0.7**	**0.6**	**1.7**	**2.5**	**2.4**	**2.6**	**2.3**	**2.9**
Domestic goods and services	1.0	0.9	1.1	1.3	1.3	1.4	1.4	1.6
Goods	0.0	0.0	0.9	1.5	1.5	1.6	1.4	1.7
Services	1.2	1.1	1.2	1.2	1.2	1.3	1.4	1.6
Private services excluding rents	0.5	0.4	0.5	0.8	0.8	1.0	1.3	1.4
Rents	2.3	2.2	2.1	1.9	1.8	1.8	1.8	2.3
Public services	1.3	1.1	1.1	1.0	1.0	1.0	0.9	0.8
Imported goods and services	0.1	–0.0	3.2	5.6	5.3	6.0	4.5	6.0
Excluding oil products	–0.4	0.1	0.3	1.9	1.8	2.3	1.7	2.0
Oil products	2.4	–0.8	17.1	25.0	23.3	25.0	18.6	26.9

Sources: SFSO, SNB

2.5 Goods prices

Upward pressure on producer and import prices

On balance, the price pressure exerted by producer and import prices on the downstream consumer level remained high between January and April. Annual domestic producer price inflation rose from 3.5% to 3.6%, while imported goods inflation declined from 4.1% to 3.6%. Lower price rises for imported goods mainly reflected the appreciation of the Swiss franc on the currency markets. A breakdown by type of good shows higher upward price pressure from intermediates, household and consumer products. By contrast, price pressure from capital goods, agricultural products and energy sources declined. Nevertheless, until very recently inflation has been highest for agricultural products, at 6.4%, and energy, at 13.6%.

Much higher consumer price inflation

Annual inflation, as measured by the national consumer price index (CPI), climbed from 2.4% in February to 2.9% in May. The sharpest rise in annual inflation was registered for oil products (from 23.3% to 26.9%) but other goods and services also contributed to the increase in the annual inflation rate. The index that excludes oil products showed an increase in inflation, from 1.4% to 1.7%.

Growing price pressure from both goods and services

The categories of goods where annual inflation rose particularly strongly between February and May included food and non-alcoholic beverages, housing and energy, household goods and products required for running a household, leisure and culture, and restaurants and hotels. By contrast, the annual inflation rate declined on alcoholic drinks and tobacco, clothing and shoes, and transport. Overall, the annual inflation rate for services therefore edged up from 1.2% in February to 1.6% in May, while the annual inflation rate for goods increased from 3.9% to 4.5% over the same period.

Further increase in core inflation rates

Inflation, as measured by the CPI, is subject to short-term fluctuations that may distort perceptions of the general price trend. For this reason, core inflation rates are calculated with a view to capturing the underlying inflation trend. The SNB computes two measures of core inflation, as shown

Chart 2.14
Prices of total supply

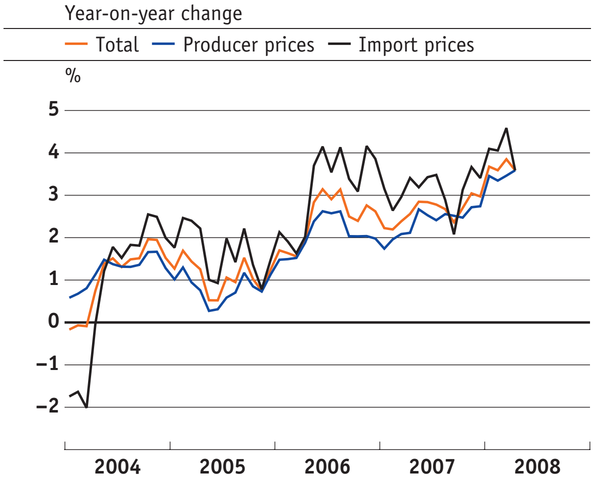


Chart 2.15
CPI: Domestic and imported goods and services

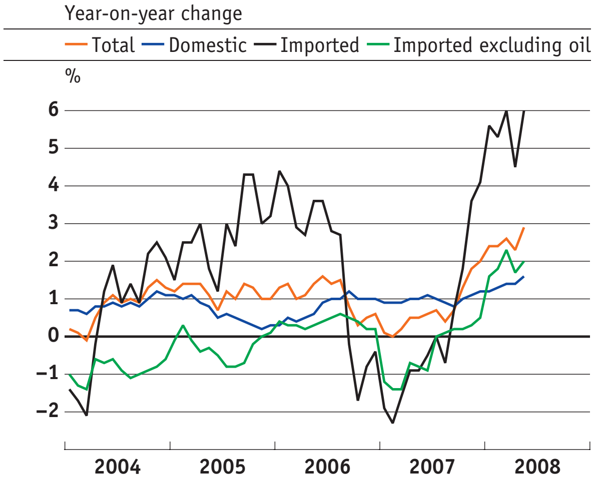


Chart 2.16
CPI: Domestic goods and services

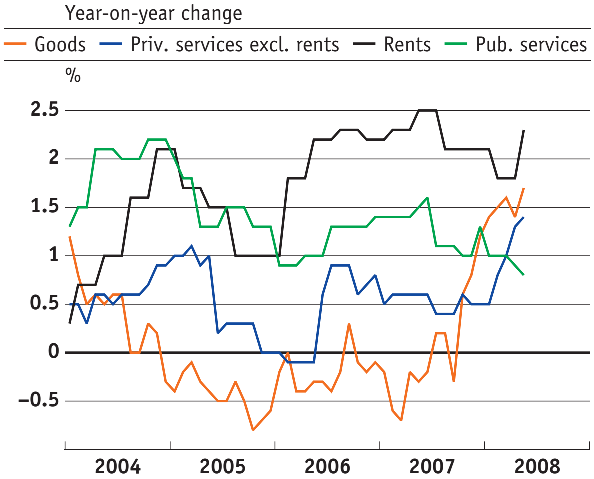


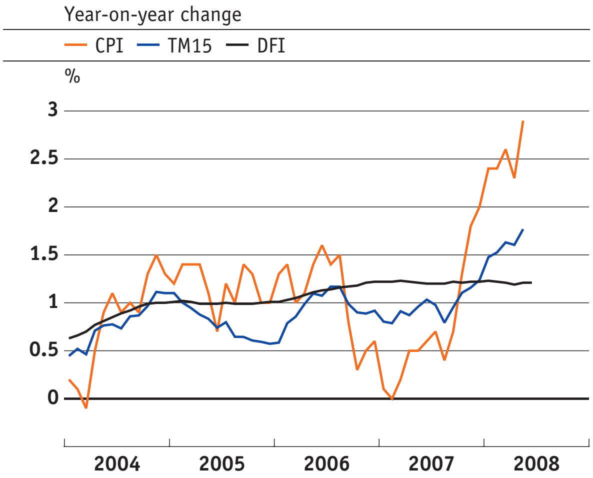
Chart 2.14:
Source: SFSO

Charts 2.15 and 2.16:
Sources: SFSO, SNB

in chart 2.17. The trimmed means method (TM15) 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, takes into account not only prices but also data on the real economy, financial market indicators and monetary variables. The two core inflation rates calculated by the SFSO always exclude the same goods from the commodities basket in each period (cf. chart 2.18). 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.

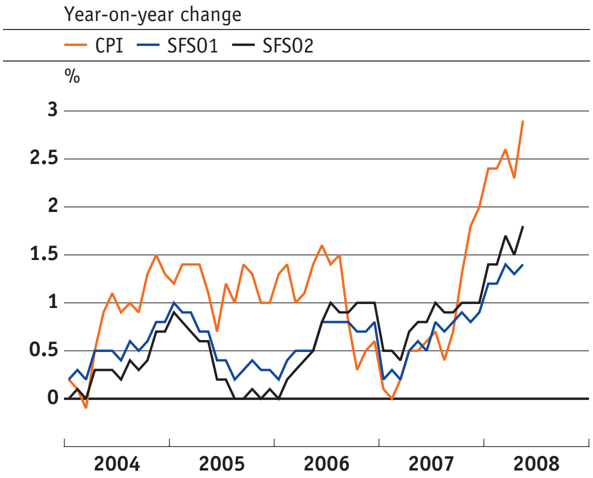
The core inflation rate calculated using the trimmed means method increased from 1.5% to 1.8% between February and May, indicating that the general inflation trend is rising. The two core inflation rates calculated by the SFSO also present the same picture, showing that core inflation 1 rose from 1.2% to 1.5% while core inflation 2 increased from 1.4% to 1.8%. By contrast, dynamic factor inflation remained unchanged at 1.2%, suggesting that the inflation trend remained stable. The strong influence exerted by energy, fuel and food on the inflation rate measured by the CPI is shown by the fact that core inflation has risen more slowly than the headline inflation rate in recent months.

Chart 2.17
Core inflation rates (SNB)



Sources: SFSO, SNB

Chart 2.18
Core inflation rates (SFSO)



Source: SFSO

3 Monetary developments

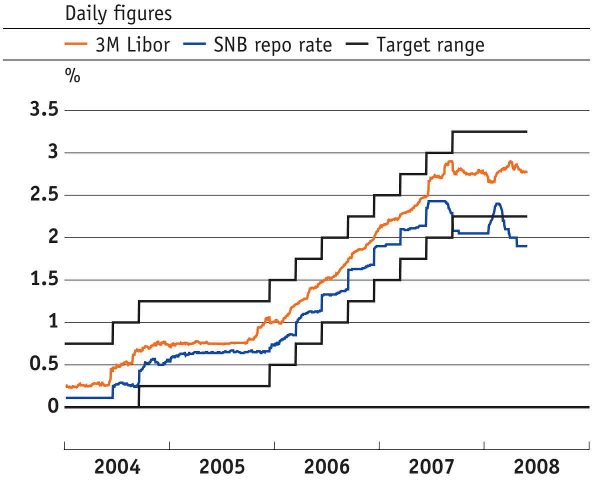
3.1 Interest rates and inflation expectations

At its monetary policy assessment on 13 March 2008, the SNB decided to leave the target range for the three-month Libor unchanged at 2.25–3.25% and to aim for the middle of the target range as in the past. This decision was taken against the background of the expectation that growth would slow, with inflationary pressure expected to be high in the short term but flatter in the medium term. However, the SNB did point out that its assessment contained greater uncertainties than usual.

Immediately after the assessment, the one-week repo rate was 2.1%. Since the three-month Libor was drifting upwards, the SNB gradually reduced its one-week repo rate to 1.9% between the end of March 2008 and mid-June in order to hold the Libor roughly in the middle of the target band. At the end of May, the three-month Libor stood at 2.78%. Subsequently, it edged up again and by mid-June, had reached 2.92% (chart 3.1).

Shortly before the monetary policy assessment on 13 March, the Bank of Canada, the Bank of England, the ECB, the US Federal Reserve System (Fed) and the SNB announced their intention of continuing the action taken last December and January to ease the tension on the international money market caused by the sub-prime crisis in the US. Acting in concert with the Fed, the SNB organised US dollar repo auctions against collateral eligible for SNB repos. The auctions were conducted on 25 March and 22 April, each for a sum of USD 6 billion, with a maturity of 28 days. The aim was to give its counterparties easier access to US dollar liquidity. On 2 May, the Fed, the ECB and the SNB announced that they would be increasing the size of their liquidity measures in US dollars. Since then, the SNB has held repo auctions in US dollars fortnightly instead of monthly, as before. Each auction was limited to USD 6 billion, as in the past, and the repo maturity remained 28 days. The following auctions were held on 6 May, 20 May, 3 June and 17 June. All of the repo auctions were oversubscribed.

Chart 3.1
Money market rates



Sources: Reuters, SNB

Higher three-month Libor expected

In mid-March, the regular Consensus Forecast survey showed that the financial market was anticipating an unchanged three-month Libor for end-March 2009. The mean of the forecasts was 2.7%. The interest rates on futures expiring in September and December 2008 and March 2009 were well below the three-month Libor spot rate. During March and April they first rose to well above the spot rate, dropped back to the spot rate at times and ended the period well above it. At the end of May they were 2.88%, 3.05% and 3.12% respectively (chart 3.2). This indicates that the markets expected the target range to be raised by 25 basis points as of year-end.

Increase across the entire yield curve

While the equity markets have recovered slightly since March, the attractiveness of fixed-income bonds has slipped slightly further. The entire yield curve has shifted upwards and flattened somewhat overall. At the end of May, yields on Swiss Confederation bonds with maturities of two years or more were a good deal higher than in March (chart 3.3). The average yield on five-year Swiss Confederation bonds in May was 2.90%; the corresponding yields on ten-year bonds were 3.19% and those on twenty-year bonds were 3.51%. The increase in the yield curve for Confederation bonds was also reflected in higher mortgage and savings rates.

Assuming efficient capital markets, the creditworthiness of a company that can raise funds on the capital market by issuing bonds can be measured by the yield on its bonds. The lower its credit standing, the higher the yield on its bonds, in general. The higher yield compensates investors for the risk that the company could become insolvent or bankrupt before the bond matures. This risk premium is normally measured as the difference between the yield on a corporate bond versus Swiss Confederation bonds. Chart 3.5 shows the yield spread for five-year corporate bonds, based on prime, medium and low-grade borrowers. As a result of the turbulence on the financial markets, the credit risk premium has risen significantly since June 2007. However, it has not changed since the March monetary policy assessment. The risk that a company might no longer be able to service its bonds tends to be higher in an economic downturn than in an upswing. The relatively high credit risk premiums therefore point to slowing economic growth.

Chart 3.2
Three-month interest rate futures

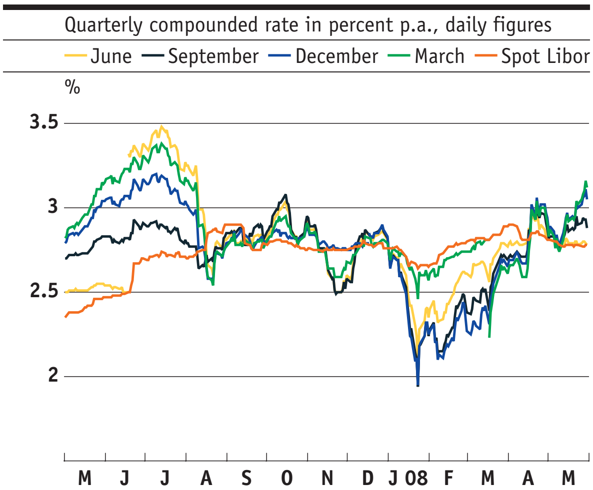


Chart 3.3
Term structure of Swiss Confederation bonds

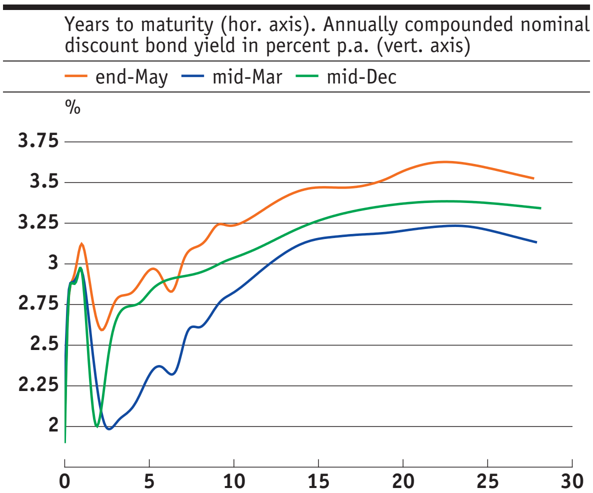


Chart 3.4
Swiss Confederation bond yields

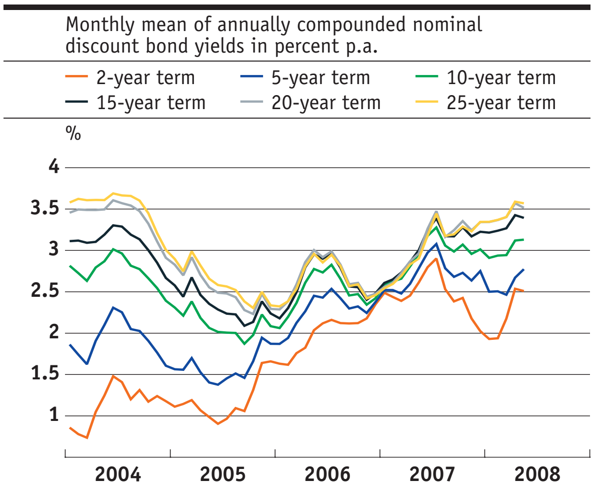


Chart 3.2:
Sources: Bloomberg, SNB

Charts 3.3 and 3.4:
Source: SNB

Expansion of interest rate differentials compared with the euro area on the money markets …

Short-term Swiss interest rates have essentially moved sideways since the start of the subprime crisis in summer 2007. By contrast, US money market rates slipped by 2.6 percentage points between mid-July 2007 and mid-March 2008, while European money market rates rose by 0.4 percentage points (chart 3.6). Although the Fed cut its key interest rate by another 100 basis points to 2% on 19 March and 30 April as a result of the ongoing crisis on the mortgage market, the dollar Libor rate only shifted slightly. Thus, the spread between Swiss franc and US dollar investments has hardly changed and was 11 basis points in mid-June. The ECB has not altered its key interest rate since mid-2007. Nevertheless, the three-month interest rate on euro investments has risen, increasing the differential between rates on euro and Swiss franc bonds from 181 basis points in mid-March to 204 basis points in mid-June.

… and the capital markets

As in Switzerland, the attractiveness of risk-free government bonds has declined on foreign markets (chart 3.7). The yield on a ten-year US treasury bond increased from 3.51% to an average of 3.88% in May. The yield spread between US and Swiss government bonds increased slightly between March and May and was 0.69 percentage points in May. Between March and May the yield on German government bonds increased slightly faster to an average of 4.21% in May. The yield spread between German bonds and Swiss Confederation bonds therefore widened more significantly from 0.73 percentage points in March to 1.02 percentage points in May.

Strong reduction in short-term real interest rates

Chart 3.8 shows movements in the three-year real interest rate. This interest rate is defined as the difference between the nominal three-month interest rate and the expected rise in consumer prices during the period in question. Inflation expectations are taken as the average of the forecasts published by a number of different institutions (Consensus Forecast, May 2008).[1] The real interest rate measured in this way was far lower in the first quarter of 2008, at 0.5%, than in the preceding quarter. This decline was due to the increase in inflation expectations, which was mainly the result of the rise in the oil price.

1 Cf. table 1.1.

Chart 3.5
Spread of 5-year manufacturing bonds

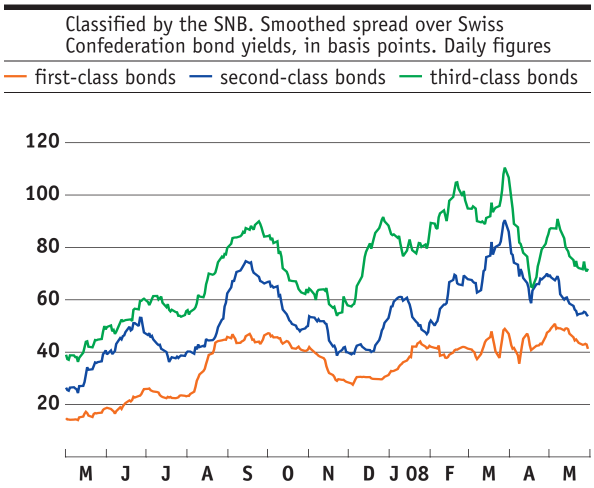


Chart 3.6
International short-term interest rates (three months)

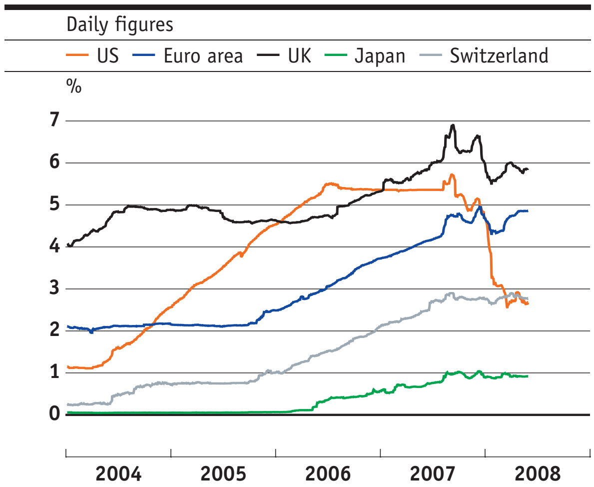


Chart 3.7
International interest rates

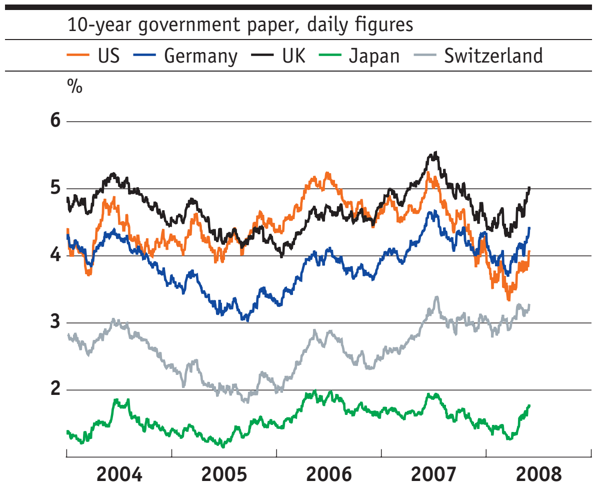


Chart 3.5:
Source: SNB

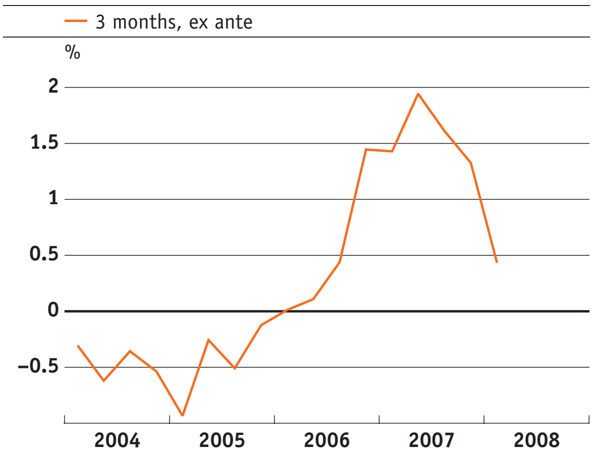
Chart 3.6:
Sources: Reuters, SNB

Chart 3.7:
Sources: SNB, Thomson Datastream

Short-term real interest rates are a key determinant of the savings and investment behaviour of companies and households and thus of central importance for future economic development. The recent pattern of low short-term real interest rates is currently stimulating the economy.

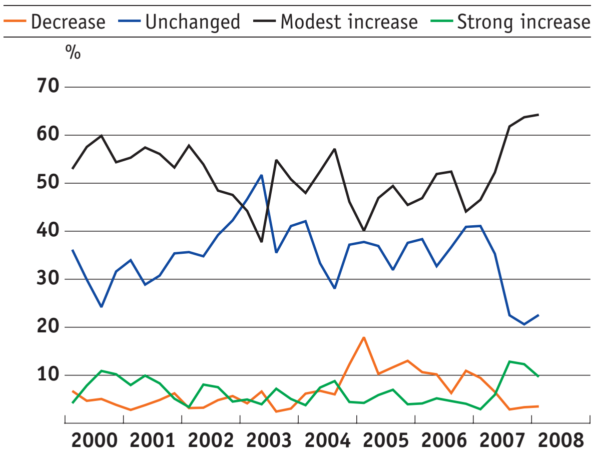
The impression of high inflation expectations was confirmed by the SECO survey of households in April (chart 3.9). This was the fifth consecutive survey showing a rise in the proportion of the households surveyed that anticipated higher prices. While at the start of 2007 only one in two households expected prices to rise, two-thirds of the households surveyed now believe that prices will rise in the next twelve months.

Chart 3.8
Estimated real interest rate



Source: SNB

Chart 3.9
Survey on expected movements in prices



Sources: SECO, SNB

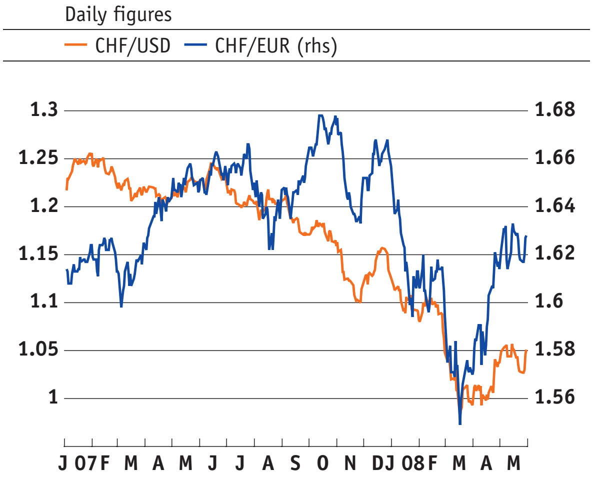
3.2 Exchange rates

Overall weakening of the Swiss franc

The trend on the currency market was characterised by considerable fluctuations in the Swiss franc exchange rate. Four days after the March monetary policy assessment the Swiss franc hit an all-time high against the US dollar. On 17 March, one US dollar was fetching just CHF 0.98. The franc also rose against the euro. It temporarily traded at 1.55 CHF/EUR, bringing it back to the level seen at the start of 2006 for the first time since then. The strengthening of the Swiss franc was accompanied by a drop on the equity markets. Since most equity markets rallied after the Fed cut interest rates, the Swiss franc lost ground against the euro and the US dollar. Overall, it slipped 2.5% against the euro and 3.0% against the US dollar between mid-March and mid-June. In mid-June, the exchange rates were 1.61 CHF /EUR and 1.04 CHF/USD. The dollar/euro exchange rate was less volatile during this period. The euro initially rose against the US dollar but then fell back and was practically unchanged at 1.55 USD/EUR in mid-June.

By mid-June, the exchange rate for the Swiss franc versus the euro had therefore dropped back to the level seen at the start of 2008 and was well below the long-term average since 1999 (1.55 CHF/EUR). If the franc were to settle at the present level or drop further, inflationary pressure through imported goods would remain high. However, the Swiss franc is still strong against the US dollar. While the CHF/USD exchange rate was relatively stable between 2004 and 2007, the Swiss franc rose increasingly rapidly up to March 2008. The weakness of the dollar reflected the marked drop in growth prospects in the US, the narrowing of the interest rate differential and a very negative net foreign asset position in the US.

Chart 3.10
Exchange rates



Source: SNB

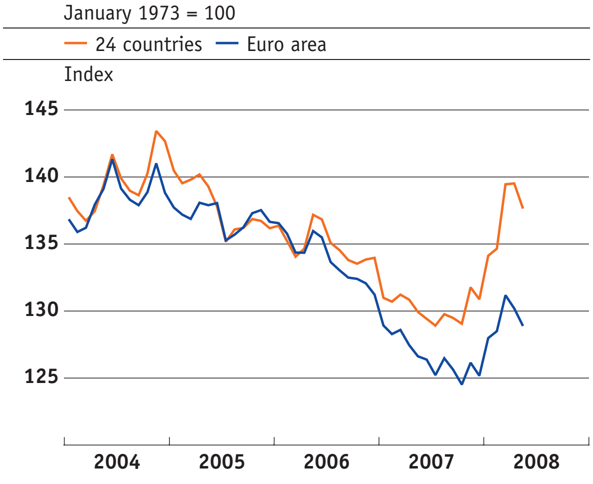
Real depreciation of the Swiss franc as well

The recent movements in nominal exchange rates are also reflected in the trade-weighted effective exchange rate for the Swiss franc, which factors in differences in price movements between currency areas. The share of the euro area in the total index (covering the 24 most important trading partners) amounts to around 65% of Swiss exports, while the US share is estimated at 15%. About 10% of Swiss exports are taken by Asia, i.e. a region where many currencies are linked to the US dollar. Between March and May 2008, the Swiss franc declined in real terms by 2.0% against the euro area and by 1.7% against Switzerland's 24 most important trading partners, having initially gained ground from the end of 2007 (chart 3.11).

Relaxation of monetary conditions

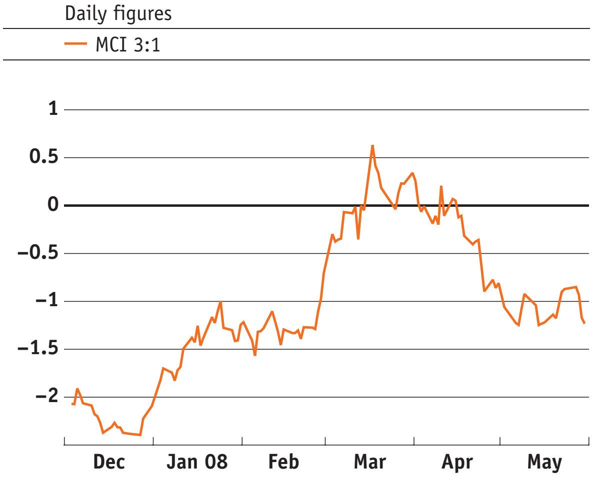
The substantial depreciation of the Swiss franc since the last monetary policy assessment, accompanied by virtually unchanged short-term interest rates, has led to a relaxation of monetary conditions. This is shown by the monetary conditions index (MCI) in chart 3.12. The MCI combines the three-month Libor and the trade-weighted nominal external value of the Swiss franc, providing 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* 1/2004, p. 27). At the end of May, the MCI stood at –123 basis points.

Chart 3.11
Export-weighted real exchange rate of Swiss franc



Source: SNB

Chart 3.12
MCI nominal



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, price fluctuations on these markets trigger changes in corporate and household wealth, which in turn has repercussions for their credit standing and their consumption 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. 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 with continued volatility

On 17 March 2008, the turbulence on the financial markets reached a new peak with the investment bank Bear Stearns facing serious liquidity problems that brought it to the brink of bankruptcy. Thereafter, the major equity markets rallied. Between mid-March and the end of May, the US S&P 500 index rose by 8% and the European Euro-Stoxx 50 by 5%. In tandem with the main equity markets, the Swiss Performance Index (SPI) rose 7% in the same period.

A breakdown of the different components of the SPI by size of company shows that large companies gained 7% between mid-March and end-May, while mid-cap companies were up 9% in this period. These companies had previously been affected worst by the downturn. Shares in smaller companies rose by 6% in the same timeframe. In particular, technology and industrial stocks rallied (21%). The extensive write-downs by major Swiss banks continued to exert downside pressure on share prices in the banking sector.

Chart 3.15 shows expected volatility for the following thirty days based on the Chicago Board Options Exchange Volatility Index (VIX) and the actual volatility measured as the annualised standard deviation of monthly yields on the SPI and S&P 500. Although, in general, share prices rose in the second quarter, volatility – which is a sign of uncertainty – is still relatively high. This is probably due to uncertain growth and profit prospects.

Chart 3.13
Stock prices

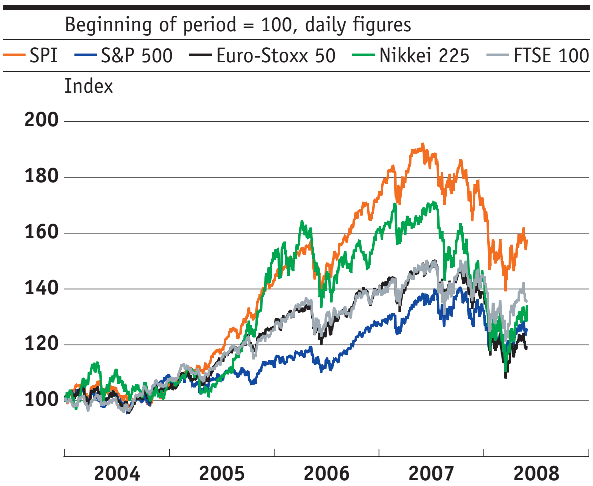


Chart 3.14
Selected SPI sectors

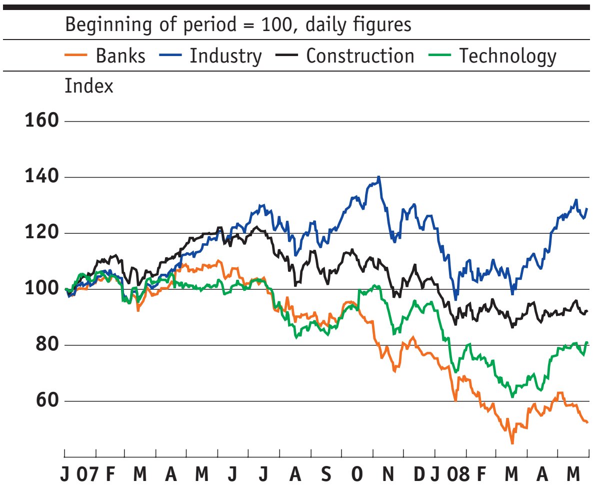


Chart 3.15
Volatility of equity returns

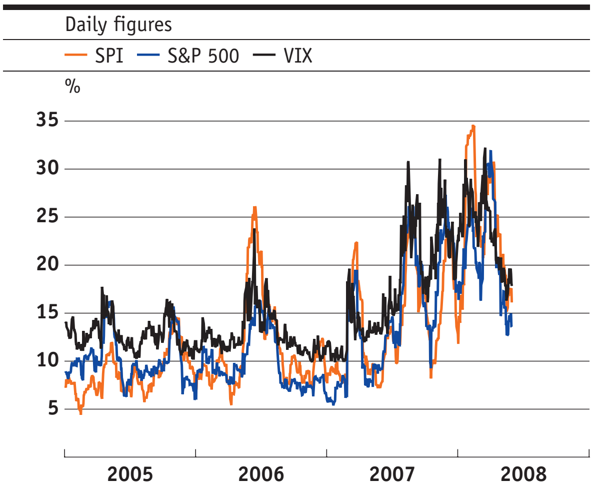


Chart 3.13:
Sources: Bloomberg, Thomson Datastream

Chart 3.14:
Source: Thomson Datastream

Chart 3.15:
Sources: SNB, Thomson Datastream

Inflationary worries and the weakness of the dollar also put pressure on the market.

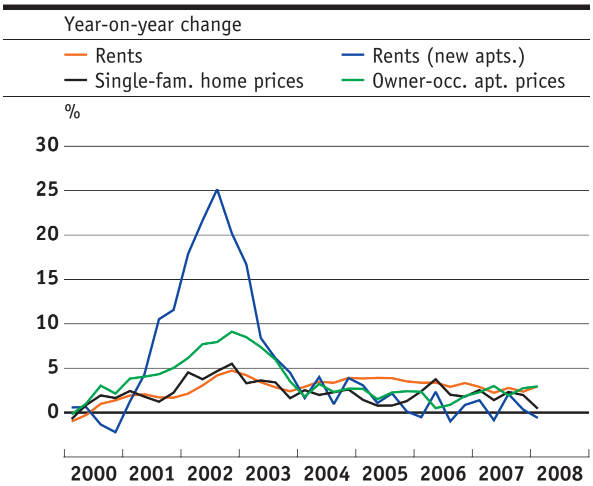
Higher commodity prices

Commodity prices continued to rise. Between mid-March and mid-June, the Goldman Sachs Commodity Index increased by 17%, driven principally by rising energy prices (23%). The oil price reached a new all-time high of over USD 130 per barrel of Brent crude towards the end of June, which was equivalent to a rise of 19% between mid-March and mid-June. The rise in the oil price in Swiss francs was 22% in the same period. On the other hand, the price of wheat, cereals and agricultural produce slipped compared with the peaks of the first quarter of 2008. Precious metals also trended downwards. One reason was probably the slight increase in investors' risk appetite and lower demand for investments in 'safe havens' such as gold.

Real estate prices rise slightly

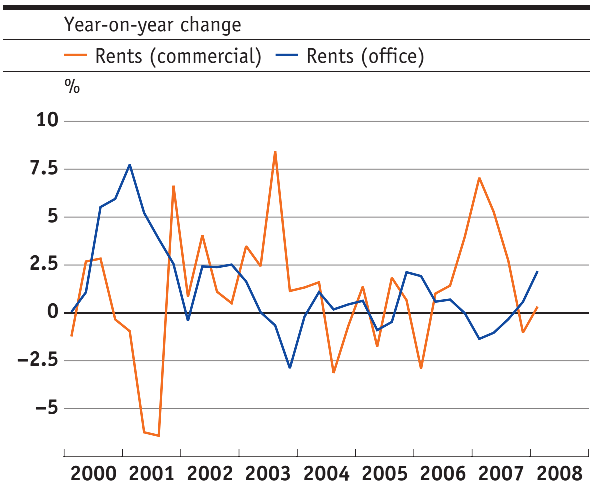
Nominal price movements on the housing market were moderate in the first quarter of 2008 compared with the corresponding period of the previous year. Prices of owner-occupied apartments increased by 2.9% while owner-occupied houses only rose 0.4% compared with 2.0% in the previous quarter. In the same period, apartment rents, which make up the biggest segment of the Swiss housing market and also the largest component of the CPI (20%), rose by 2.9% in nominal terms. This was slightly faster than in the previous quarter. However, this figure applies mainly to the existing housing stock. Rents for new apartments, which are a better reflection of market forces, decreased by 0.6%. Rents for business property increased (chart 3.17): office rents rose 2.2% while rents for commercial properties were up 0.3%.

Chart 3.16
Nominal real estate prices and rents



Source: Wüest & Partner

Chart 3.17
Nominal industry and office rents



Source: Wüest & Partner

3.4 Monetary aggregates

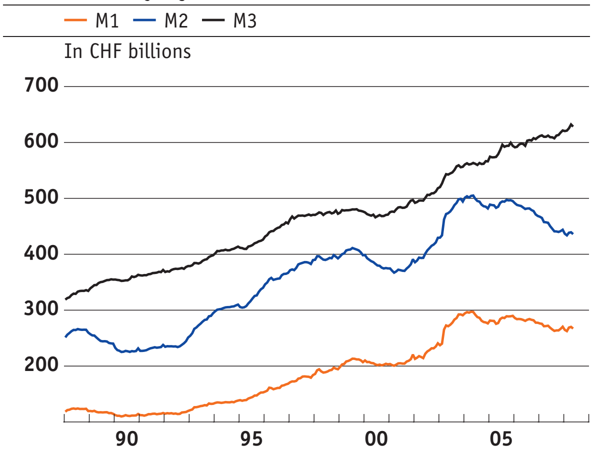
Stabilisation of M1 and M2

As shown in chart 3.18, both M1 (notes and coin in circulation, sight deposits and transaction accounts) and M2 (M1 plus savings deposits) have been declining since early 2006 but have recently stabilised. In May 2008, M1 was 2.0% below the previous year's level and M2 was 4.5% lower. By contrast, M3 (M2 plus time deposits) increased by 2.6%. As in the late 1980s/early 1990s and in 1999/2000, lower or negative growth in the monetary aggregates was preceded by a tightening of monetary policy. The latest stabilisation of M1 and M2 reflects the fact that the SNB has left its target interest rate corridor unchanged since September 2007.

One way of assessing potential inflationary risks emanating from an excessive supply of liquidity to the economy is to calculate a 'money gap'. This may in fact be a positive deviation (monetary overhang) or negative deviation (money gap) of the actual 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* 1/2005, p. 33). In order to take account of statistical uncertainty, the money gap is presented in chart 3.19 as a range that spans one standard deviation. If the range is below the zero line – as was the case in the first quarter – this indicator points towards lower inflationary pressure in the medium term. For some months there has been a monetary shortfall similar to the situation seen at the start of 2000. At that time, the shortfall led to lower inflation following an increase in inflationary pressure in the late 1990s and at the start of 2000.

Chart 3.18
Monetary aggregates

Seasonally adjusted



Source: SNB

Monetary aggregates[1]

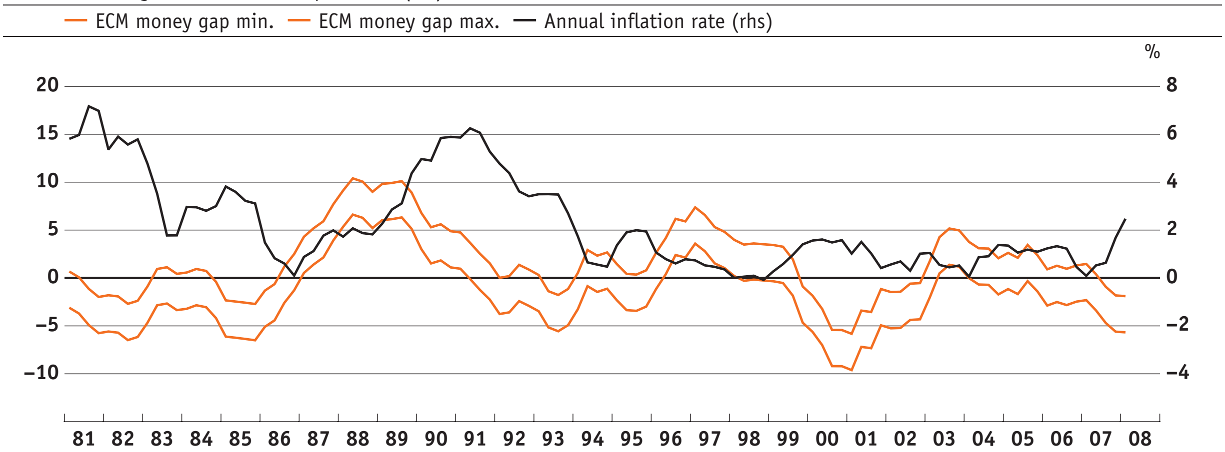
Table 3.1

	2006	2007	2007 Q1	Q2	Q3	Q4	2008 Q1	2008 March	April	May
Monetary base[2]	**43.1**	**44.2**	**44.6**	**44.0**	**43.4**	**44.8**	**45.8**	**46.0**	**45.3**	**45.4**
Change[3]	*3.0*	*2.5*	*3.1*	*1.5*	*2.7*	*2.7*	*2.6*	*3.4*	*3.5*	*2.8*
M1[2]	**282.4**	**269.1**	**276.0**	**270.0**	**261.5**	**269.0**	**266.8**	**267.3**	**270.9**	**265.0**
Change[3]	*–0.6*	*–4.7*	*–3.6*	*–4.2*	*–6.7*	*–4.3*	*–3.3*	*–0.9*	*–0.5*	*–2.0*
M2[2]	**481.6**	**450.6**	**465.9**	**453.9**	**439.0**	**443.5**	**438.8**	**437.8**	**440.3**	**434.5**
Change[3]	*–2.0*	*–6.4*	*–5.3*	*–6.1*	*–8.0*	*–6.4*	*–5.8*	*–4.2*	*–3.9*	*–4.5*
M3[2]	**600.3**	**612.4**	**613.4**	**611.6**	**606.4**	**618.0**	**624.1**	**624.9**	**635.8**	**627.6**
Change[3]	*2.5*	*2.0*	*3.0*	*2.4*	*1.0*	*1.7*	*1.7*	*2.5*	*3.6*	*2.6*

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

Chart 3.19
Money gap and annual inflation rate

Percentage deviation from equilibrium (lhs)



Source: SNB

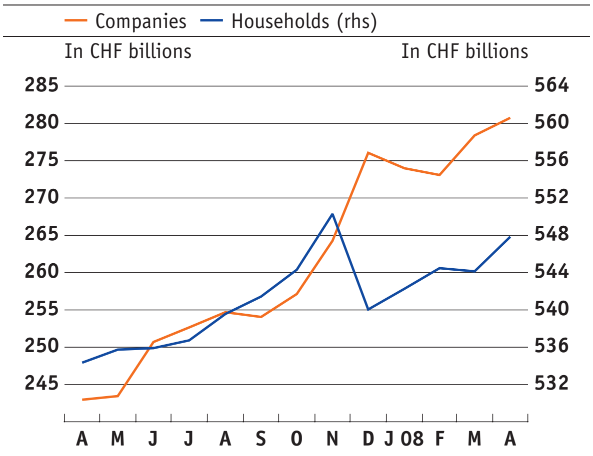
3.5 Credit

Slightly flatter growth in lending volume

Credit growth slowed to 6.6% in the first quarter of 2008, compared with 6.9% in the previous quarter (table 3.2). This was principally because growth in lending to private households declined from 4.0% to 3.0%, while annual growth in lending to the corporate sector accelerated from 11.6% to 13.9%. Chart 3.20 shows that growth in lending volume has been far flatter since the start of the year and that the high growth rate for corporate loans is attributable to a basis effect in the fourth quarter of 2007.

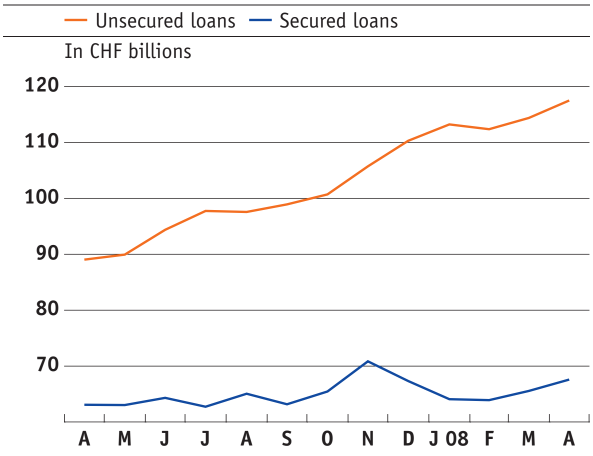
The breakdown into mortgage and other loans shows that the rise in mortgage loans, most of which are taken out by private households, slipped from 3.9% in the fourth quarter of 2007 to 3.7% in the first quarter of this year. Other loans, which mainly comprise borrowing by companies, also grew more slowly than in the previous quarter, advancing by 19.3%. Chart 3.21 subdivides other loans into secured and unsecured loans. It shows a rapid rise in unsecured loans in the fourth quarter, followed by slower growth. Owing to the basis effect at year-end 2007, the annual growth rate for unsecured loans rose to 34.1% in the first quarter of 2008. Secured loans amounted to CHF 70.8 billion in November, the highest level since mid-1993, but then dropped back to CHF 65.6 billion in March 2008. A year-on-year comparison therefore shows zero growth in secured loans in the first quarter of 2008.

Chart 3.20
Volume of loans



Source: SNB

Chart 3.21
Other loans



Source: SNB

Bank loans Table 3.2

Year-on-year change in percent

	2006	2007	2007 Q1	Q2	Q3	Q4	2008 Q1	2008 February	March	April
Total[1]	**4.8**	**5.8**	**5.2**	**5.3**	**5.5**	**6.9**	**6.6**	**6.6**	**6.3**	**6.8**
Households[2]	6.1	4.6	5.1	5.0	4.4	4.0	3.0	3.5	2.2	2.5
Companies[2]	1.6	6.7	3.9	4.5	6.6	11.6	13.9	12.9	14.9	15.6
Mortgage claims[1]	4.8	4.0	4.2	4.2	3.8	3.9	3.7	3.9	3.5	3.3
of which households[2]	5.5	4.3	4.9	4.8	4.0	3.7	3.6	3.9	3.3	3.2
of which companies[2]	1.2	2.3	0.8	1.2	3.0	4.3	3.7	3.5	3.6	3.4
Other loans[1]	4.6	13.4	9.6	10.3	13.1	20.2	19.3	18.4	18.6	21.7
of which secured[1]	2.5	8.2	7.1	7.2	5.6	13.2	0.0	–2.5	3.4	7.1
of which unsecured[1]	6.3	17.2	11.5	12.6	18.6	25.3	34.1	34.9	29.5	32.0

1 Monthly balance sheets
2 Credit volume statistics
Source: SNB

4 The SNB inflation forecast

Monetary policy impacts 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 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.

4.1 Assumptions for global economic developments

Alongside domestic factors, exogenous effects have a major influence on Swiss inflation rates. The SNB's inflation forecasts are therefore largely embedded in an international economic scenario. This represents what the SNB considers to be the most likely development over the next three years. Table 4.1 contains the main exogenous assumptions and the corresponding assumptions underlying the March forecast.

Continued weaker growth in the global economy

The oil price has been revised strongly upwards compared with the last forecast. The latest scenario assumes an oil price of around USD 128 per barrel for the next few quarters and USD 116 in the long term.

In view of the rise in the oil price and the continued turbulence on the US real estate market and the international financial markets, lower growth momentum is now assumed for the US over the entire period. The risks of a medium-term slowdown in growth have also increased in Europe. For that reason, the forecast has been revised downwards for both regions, especially for 2009. Growth is still expected to approach the potential figure of approximately 3% (US) and 2% (EU) towards the end of the forecast period.

For 2008 and 2009, higher international inflation rates are forecast due to rising energy and commodity prices. The dollar/euro exchange rate has been increased to 1.55 USD/EUR, as compared to 1.47 USD/EUR in March.

Assumptions for inflation forecasts Table 4.1

June 2008	2008	2009	2010
GDP US[1]	1.4	1.6	2.8
GDP EU15[1]	1.8	1.5	2.4
		Short term	Long term
Exchange rate USD/EUR[2]		1.55	1.55
Oil price in USD/barrel[2]		128	116

March 2008	2008	2009	2010
GDP US[1]	1.5	2.4	3.1
GDP EU15[1]	1.7	2.0	2.4
		Short term	Long term
Exchange rate USD/EUR[2]		1.47	1.47
Oil price in USD/barrel[2]		98	92

1 Change in percent
2 Level
Source: SNB

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.

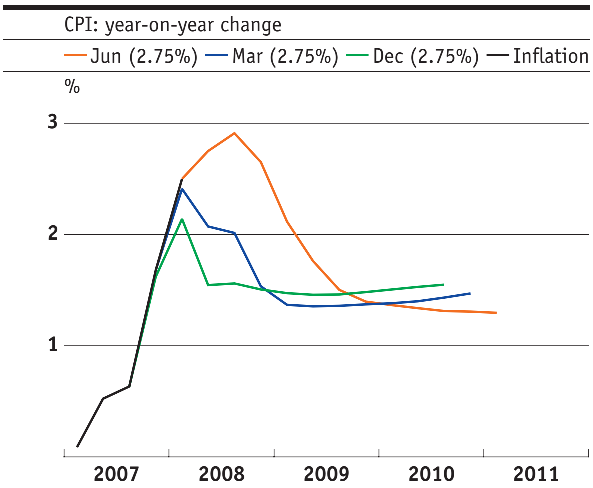
4.2 Inflation forecast for Q2 2008 to Q2 2011

The quarterly 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 will remain constant over the forecasting period. Chart 4.1 depicts the inflation forecast of June 2008 alongside those of March 2008 and December 2007. The new forecast, which covers the period from the second quarter of 2008 to the first quarter of 2011, is based on a steady three-month Libor of 2.75%. This rate corresponds to the mid-point of the 2.25–3.25% target range for the three-month Libor, which the SNB confirmed on 19 June. The March and December inflation forecasts were also based on a fixed three-month Libor of 2.75%.

Swiss economic growth slowed in the first quarter of 2008, although the economy remained strong. For the coming quarters, growth is expected to continue at a moderate pace. In the short term, forecast inflationary pressure has risen markedly, as compared to the inflation forecast of March. This is due, first, to robust demand in the markets for goods, services and labour and to the fact that prices are rising across a broad front for oil, raw materials and agricultural products. Second, it is relatively easy to pass on costs in view of continuing strong demand and the high utilisation of production capacity. Finally, higher inflationary pressure also reflects the delayed effects of the weakness of the Swiss franc last year. Inflation is projected to rise to 2.9% by the third quarter of 2008, before falling back due to basis effects, although it will remain above 2% until the second quarter of 2009. However, the medium-term inflation outlook has improved, based inter alia on the expected economic slowdown and declining capacity utilisation. Assuming an unchanged three-month Libor of 2.75%, the SNB forecasts average inflation of 2.7% in 2008, falling to 1.7% and 1.3% respectively for the two following years.

This assessment of the inflation outlook involves considerable uncertainty. For instance, a renewed increase in energy and food prices could cause the short-term inflation forecast to deteriorate. A further price surge would also have to be expected if the Swiss franc were to weaken. Conversely, a marked slowdown in the international economy could result in inflationary pressure easing to a greater degree than expected.

Chart 4.1
SNB inflation forecasts: a comparison



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 SNB for its quarterly assessment of June 2008

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 March to May 2008 on the current and future economic situation are summarised.

Summary

Most of the 190 or so representatives of various economic sectors and industries interviewed by the SNB delegates for regional economic relations between March and May expected the good business trend to continue. This was especially true for the retail trade and other consumer-oriented sectors such as hospitality. The assessment of the business situation and outlook by the export sector was more mixed than in the last round, while banks were feeling the effects of the stock market decline particularly strongly.

Sentiment has been hit by worries about the impact of the financial market turbulence as well as the massive hike in the price of agricultural products, energy and industrial raw materials and the heavy depreciation of the dollar. Although the general uncertainty has increased, the majority of companies are sticking to their investment plans and some are planning a further increase in headcount. They continued to report recruitment problems and a pronounced shortage of skilled staff.

1 Production

Manufacturing

The majority of export-oriented companies reported that incoming orders remained high, although momentum was somewhat reduced. However, the signs of a slowdown were not seen as a cause for concern in view of the high level of capacity utilisation. Nevertheless, a few companies reported a significant deterioration in business. In most of these cases, the dampening effect came from the US market, while demand from Europe, especially Germany and eastern Europe, and from Asia and Latin America was judged satisfactory.

Representatives of the agrochemicals, energy technology and supply, and watchmaking sectors continued to achieve excellent business results. The watchmaking sector and its suppliers continued to complain about supply problems and signs of overheating. In stark contrast, the textile machinery industry experienced a sudden drop in sales. The main explanation given for this was a slowdown in the Asian textile industry. The majority of firms in other areas of the capital goods and machinery industry reported good order intake. This group included the casting industry, which is regarded as a leading indicator for the mechanical engineering and electrical/electronics industry.

Services

The retail trade was still satisfied with business trends, and described consumer sentiment as good to very good. Sales were roughly in line with expectations and actually exceeded expectations in some cases. This was true for wholesalers as well as for smaller retailers. Suppliers in border regions benefited from the improved competitiveness of prices compared with neighbouring countries. This reflected both the weakening of the euro/Swiss franc exchange rate and price cuts on the Swiss market. Despite good overall sentiment, some respondents were expecting weakening consumer spending against the background of the problems in the banking sector and unfavourable stock market conditions. This was particularly evident in the high-price segment, which tends to benefit when customers receive high bonus payments.

Representatives of the hospitality sector also reported a positive picture. The majority reported an increase in the number of guests compared with the previous year accompanied by a greater willingness to spend. Following an excellent winter season, the tourism industry was registering good bookings for the summer season. Swiss cities continued to benefit from booming tourism and robust demand in connection with business travel and conferences. That said, there were some indications that companies were cutting back on spending and a few instances of cancellations.

The company-related services segment was less optimistic than it had been three months previously. The sharp rise in transport costs and slower export business reduced the demand for transport services. This trend affected air freight, inland waterways and road transport. Representatives of the management consulting sector noted a certain reticence on the part of some clients; in particular, there was a drop in demand from the banking sector. A similar picture was painted by respondents from the advertising and IT sectors: in the latter sector, project decisions were being delayed and in some cases (notably at banks) projects were even cancelled.

The banking sector reported a substantial deterioration in asset management business. Trading volume dropped as a result of uncertainty and stock market volatility, leading to a year-on-year decline in commission income for the majority of respondents. By contrast, the lending business remained satisfactory. Demand for mortgages and corporate loans increased further, although growth was slower than in the preceding months. However, there was also greater competition between banks, so margins came under renewed pressure in both areas. The banks were still upbeat about their clients' financial circumstances. Like the corporate sector, they refuted the suggestion that lending conditions had tightened. However, there was some talk about subjecting loan applications to a more thorough examination.

Construction and real estate

Construction industry representatives were satisfied with the business environment. Both construction activity and the order backlog are still high. Although some representatives indicated lower demand, others detected a renewed rise in residential building, including conversion and renovation work, which is one of the mainstays of the industry. Positive impetus also came from the commercial construction sector and to some extent from major infrastructure projects. Price growth on the real estate market seems to be subsiding in some regions, mainly because of a sharp increase in the supply of residential property. However, prices continued to rise in other areas – especially in the high-price segment – although sector representatives had not detected any signs of overheating.

2 Labour market

Many representatives continue to envisage an increase in staff numbers. However, in isolated instances there was talk of shedding staff for the first time in a long while. Fluctuation rates remained high in general, with many companies reporting recruitment problems and high recruitment costs. The pronounced shortage of skilled workers was regularly cited. More companies reported a rise in wage pressure, which appeared to be causing greater concern at some companies in the light of the sharp general rise in cost pressure.

3 Prices, margins and earnings situation

Issues raised by many representatives were the availability of raw materials, the sharp hike in production costs and the depreciation of the US dollar. Most respondents pointed to considerable pressure on margins and a deterioration in their earnings position. Although it had often been possible to pass on the massive rise in the price of agricultural and industrial raw materials to customers, recouping the rise in energy and transport costs was proving more difficult. A number of representatives also pointed to a sharp rise in the price of preliminary products sourced from Asia, especially China, which was putting additional pressure on margins. Moreover, many exporters had to contend with a reduction in earnings as a result of the marked depreciation of the US dollar. Only in rare cases had it been possible to raise prices in Swiss francs or invoice in euros.

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

Hansueli Raggenbass
Berne, 25 April 2008

Dear Shareholders
Ladies and Gentlemen
Dear Guests

I would like to start by welcoming you to the hundredth General Meeting of the Swiss National Bank. Not until today's meeting does the series of events marking the SNB centenary finally come to a close. That is why I would like to take this opportunity of reviewing, once again, the eventful history of our central bank. By focusing on 1907, the year when the SNB was founded, as well as 1932, 1957 and 1982, the years of its 25th, 50th and 75th anniversaries, I will outline the kinds of issues and problems faced by the National Bank over the course of the century. To those of you who would like to read up on these matters in more detail, I can wholeheartedly recommend the SNB's commemorative publication.

It is interesting to note that the SNB was faced with particular difficulties not only in the year of its foundation but also in each of its anniversary years. Might this be an unknown correlation that has yet to be discovered by academics? One might almost think so, since the rule that major anniversary years are always years of particular challenge has again – unfortunately – been substantiated this year with the turmoil on the financial markets. The following brief review of the first hundred years should therefore help to place the current difficulties in their historical perspective.

1907: Panic in New York

When the SNB opened its doors for the first time on 22 June 1907, it was immediately confronted with the onset of a downturn in the world economy. In the US, share prices had already fallen in March and the decline continued in summer. In autumn, while the newly-founded SNB was still heavily involved in organisational matters such as drawing up regulations, the problems in the US escalated. Eventually a situation of downright panic broke out on 22 October 1907, triggered by a run on the Knickerbocker Trust Company, which was suspected of having been involved in a huge and unsuccessful copper speculation affair.

Trusts were financial intermediaries that took on similar functions to modern investment banks. Although their field of business was broader than that of banks, they were not obliged to hold as many reserves as banks. Moreover, they were not properly linked into the banks' clearing system, which meant they were unable to obtain liquidity from the system. At that time, there was no central bank in the US which could provide financial institutions with liquidity outside the clearing system. (The Federal Reserve System (Fed) was not founded until 1913–1914. It was established as a reaction to the panic events described here.)

After the trusts, the banks were also affected by the crisis of confidence. A run on the banks could only be averted because they stopped paying out customer deposits. Not until an aid committee headed by banker John Pierpont Morgan mobilised liquidity for the most badly affected banks did public calm again prevail. In early 1908, the situation began to ease.

The events in New York were observed with anxiety by many, including the SNB. At the beginning of November 1907, the Chairman of the Governing Board told the Bank Committee that the international money market was suffering under the "pressure of nervous anxiousness." In New York, he said, the crisis was turning into a panic, Holland had just "gone through a crisis which had considerably weakened the country's stock exchanges and Italy was in the midst of a crisis."

The financial crisis caused interest rates to rise internationally, and Switzerland was unable to escape this trend, although the SNB did not have to increase the discount rate as much as other central banks did. Consequently, the panic in Switzerland was more or less limited to the stock exchange. Although the fall in the value of US securities caused a few small banks in French-speaking Switzerland to close their doors, the impact was less widespread than in other countries, where the real economy was strongly affected. Thus the SNB achieved relatively good results in its first year of business.

1932: Great depression and banking crisis

When the SNB celebrated its 25th anniversary, it found itself confronted with difficulties that made the 1907 panic look like a minor operational incident. The Wall Street crash at the end of October 1929 was the spark that ignited a worldwide economic slump that has gone down in history as the Great Depression.

A series of bank failures (which in Europe had begun in Austria and Germany, in the spring of

1931) accelerated a process that finally led to the collapse of the international monetary and credit system. This was a system that had been established with a great deal of effort after the First World War, but had been set up – to some extent – on faulty foundations. Faced with balance of payments difficulties, important Swiss trading partners were forced to depreciate their currencies and abandon the link to gold. The end of fixed exchange rates based on the gold standard saw the destruction of one of the key foundations upon which the initial phase of economic globalisation in the first half of the 19th century had been based. Most countries imposed additional measures, such as higher customs duties and import restrictions, which further constrained international trade.

For a long time, the SNB hoped that the gold standard would be restored and believed that the export industry would derive only short-term benefits from a devaluation of the Swiss franc. Nowadays, economic historians contend that this assessment was wrong and that earlier devaluation would have accelerated the recovery.

As if the question of an appropriate exchange rate were not difficult enough, the SNB was also faced with a banking crisis at the beginning of the 1930s. However, unlike the panic of 1907, this crisis also affected big banks and cantonal banks rather than just a few small banks. The banks' difficulties were mainly attributable to their foreign business. From 1931, Germany and other countries were no longer able to meet their foreign payment obligations and had to issue foreign debt moratoriums. In addition, they introduced measures for the management of foreign exchange, through which capital transactions were heavily restricted. Since Swiss banks engaged in foreign business had strong commitments in these countries, they encountered major difficulties. Rather like the banks affected by the current sub-prime crisis, they found that, all at once, a substantial part of their assets had become illiquid. Particularly affected by the crisis were the banks that had allowed themselves to be carried away by the boom in the second half of the 1920s and make excessive commitments, those who had too little experience in these transactions, and those with inadequate reserves.

The largest banks to be affected were the Swiss Volksbank and the Swiss Discount Bank. The SNB feared for the stability of the financial system if these banks went bankrupt, and it promoted efforts to salvage them. In autumn 1931, an Alternate Member of the Governing Board was delegated to the Volksbank's executive management as a restructuring specialist, and the SNB also placed itself at the disposal of the Federal Council, in an advisory capacity. An additional representative of the Governing Board transferred to the Department of Finance and played a major role in drawing up the first Swiss Banking Law of 1934.

In the case of the Swiss Discount Bank, the SNB headed the salvage operation and arranged both private and public bridging loans. In 1932, it promoted the establishment of the *caisse de prêts de la Conféderation* (in German: *Eidgenössische Darlehenskasse,* roughly equivalent to Federal loans office) in order to supply illiquid banks with liquidity. The idea was to provide these banks with funds that had not been available before, since the *caisse de prêts* would be able to lend on the basis of assets that could not be accepted by the SNB for legal reasons. Unlike the Volksbank, which was refloated thanks to a massive injection of capital by the Confederation, the Swiss Discount Bank could not ultimately be salvaged, despite the National Bank's considerable efforts. At the end of April 1934, it had to close down. At least the measures that had been taken helped to ensure that the liquidation was orderly and general panic avoided.

1957: Concern about the economy and tension on the capital market

As opposed to the 1930s, the 1950s were times of general prosperity in the US and in most countries of western Europe. This was particularly the case in Switzerland. With its unscathed economy, our country was able to benefit from reconstruction in Europe. However, it was in the SNB's 50th anniversary year, as it happened, that the acutest economic decline of the decade occurred in the US. From January 1957 to April 1958, US industrial production fell by about 14%. In western Europe, the overall balance of payments of countries that were in surplus and those that were in deficit drifted strongly apart, leading to tensions on foreign exchange markets. France suffered from high rates of inflation, balance of payments deficits and declining foreign currency reserves. Consequently, it was forced to depreciate its currency, thereby – as the SNB noted in its *Annual Report* – "triggering a wave of unrest and nervousness that caught up a number of additional European currencies in a web of rumours and speculation about upcoming exchange rate adjustments."

In Switzerland, signs of economic overheating were becoming evident at the beginning of 1957. Saving lagged behind investment, forcing banks to turn down numerous loan applications. The shortage of capital was also manifested in a persistent increase in interest rates for new loans. Despite the improvement in conditions, numerous issues proved to be an outright failure due to the fact that institutional investors' funds were too firmly tied up in mortgages. Consequently, the head of SNB Department III felt himself called upon to point out, in a meeting of the Bank Committee, that "a reasonable relationship between lending and borrowing business must be maintained."

In May, the SNB came to the conclusion that it would have to deploy "its last weapon in the battle against the impending overheating of the economy" and increased the discount rate for the first time in 21 years. The fact that it raised the rate by an entire percentage point shows how serious it judged the situation to be.

In autumn 1957, the future looked grim. In the US, the stock exchange index had dropped 20% below its record level, while in Switzerland it was 26% down. In view of this tumble, the head of Department III asked himself "whether this development on the stock exchange, as in 1929, did not presage a more serious economic crisis." Luckily this conjecture did not come to fruition, and the US economy, stimulated by monetary and fiscal policy, was already on the road to recovery by the following year. In Europe, there was a sustained improvement in the exchange rate situation, so that the western European countries were able to move forward to currency convertibility at the end of 1958. In Switzerland, inflation began to decline.

1982: Reduction in inflation and debt crisis

By 1982, when the SNB celebrated its 75th anniversary, the foundations upon which monetary policy was based were entirely different to those of the former major anniversaries. In 1973, the Bretton Woods system of fixed exchange rates had collapsed and the SNB had become one of the pathbreaking central banks running a monetarist policy committed to managing the supply of money. Liberated from the fetters of fixed exchange rates, it was – for the first time – free to manage the supply of money as well as inflation. Now, however, it was faced with the problem of strong short-term exchange rate fluctuations. In 1978, the Swiss franc appreciated so much against the German mark that the SNB temporarily replaced its money supply objective by an exchange rate objective. However, the necessary interventions on the foreign exchange markets resulted in a substantial expansion of the money supply and subsequently to high rates of inflation.

Bringing down inflation was not easy in view of the difficult international environment, and hardly had the consumer price index in Switzerland begun to drop when the SNB found itself confronted with new problems, as the international debt crisis broke out. In August 1982, the Mexican Minister of Finance stated that his country's foreign currency reserves were exhausted and the country was no longer able to service its debts. The background to this crisis, which enveloped first Mexico, then Brazil, and subsequently further South American as well as Asian countries, was a combination of excessive indebtedness, a massive increase in US interest rates in connection with the fight against inflation, and falling commodity prices. The crisis was dangerous, not just for the overindebted developing and emerging countries but also for the industrialised economies, since, at the end of the 1970s, their banks had engaged in large-scale lending to the emerging countries. In view of their high equity levels and "relatively conservative business policies," the SNB Governing Board did not believe that there would be any serious consequences for the Swiss banks. Nevertheless, it took the precaution of presenting the Bank Committee with a plan to be followed in the event of an acute liquidity crisis. It took years before the debt crisis was resolved, and a solution was only found by means of close cooperation between the central banks, the International Monetary Fund (IMF), the Bank for International Settlements (BIS) and the commercial banks. The main contribution of the SNB to these measures aimed at protecting the international financial system was to provide guarantees for BIS bridging loans. The idea of these loans was to allow these countries to service their loans until such time as an agreement with the IMF could be concluded.

Ladies and Gentlemen, we cannot assume that there is any specific mechanism ensuring that the National Bank will always be confronted with particularly difficult situations in its major anniversary years. We should also realise that these years were not the only difficult ones for the SNB. However, I think that by examining the challenges faced by our central bank on these special occasions we derive a good sample of the range of SNB activities. We see that, in addition to securing the internal and external stability of the currency, the National Bank has also had to cope with the consequences of international turmoil emanating from financial and economic crises. As the central bank of a small open economy, it needed to pay attention to the stability of the financial system from very early on – long before it was explicitly entrusted with this task in the 2004 revision of the National Bank Act.

Even if the SNB has occasionally been guilty of mistakes or misjudgements in the course of its history, it is with a certain sense of pride that we can state today that, all in all, it has mastered its tasks well and preserved our country from serious economic damage. I have no doubt that this is also the case now, and will continue to be so in the future.

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

Jean-Pierre Roth
Berne, 25 April 2008

Mr President of the Bank Council
Dear Shareholders
Dear Guests

As history has shown, and the President of the Bank Council has reminded us just now, celebrations to mark our various anniversaries have often taken place amid difficult circumstances.

Such was the case in 2007, when confidence in the quality of numerous financial products began to fade from August onwards in the wake of the US real estate crisis – subsequently placing a substantial provisioning burden on international banks and leading to a crisis of confidence on the markets. A worsening of the economic outlook and major stock market corrections then ensued.

Nevertheless, 2007 as a whole can still be regarded as a successful year in economic terms, with global economic growth settling in at around 5%. This excellent performance is mainly attributable to the continued momentum of the emerging economies, notably in Asia, although favourable financial conditions also played a positive role until the middle of the year.

Global economic performance was less homogeneous than in 2006, however. Although growth remained high in the emerging economies and exceeded the long-term trend in Europe, economic activity in the US slowed considerably in autumn on the back of the credit crunch on the property market.

The last few months of 2007 were characterised by the emergence of considerable uncertainties regarding the future path of the global economy, with the latest energy price hikes and, of course, the destabilisation of the financial markets in autumn being the main sources of concern.

Switzerland has not remained unscathed amid all this turmoil. Since the summer, we have seen substantial stock market corrections and a return to lower-risk investments, particularly in Swiss francs. However, we experienced these turbulences during a very dynamic phase in our economic cycle. Despite the volatile climate of recent months, the Swiss economy has continued to enjoy sustained growth.

For the fourth year in succession, real GDP growth was significantly higher than the long-term average, reaching 3.1%. We owe this gratifying result to the extremely broad-based nature of Swiss economic growth. As already in 2006, the global economy and the performance of the Swiss franc facilitated exports, accounting for a jump of some 10% in this sector. What is more, robust domestic demand also played a role this time round. Significant increases in real salaries and the continued labour market upturn had a positive impact on private consumption, while the robust financial health of the corporate sector coupled with a rosy business outlook helped to stimulate investment. Final domestic demand thus rose 2% in 2007, compared to 1.7% in the prior year.

Thanks to burgeoning demand, employment was up sharply, with the unemployment rate edging down to 2.6% in seasonally adjusted terms by December. The Swiss economy is thus experiencing a period of virtually full employment and has been able to benefit from the flow of workers from the European Union and the flexibility this brings.

The economic figures for 2007 are all the more pleasing given that prices have remained stable despite the hike in commodity prices. Over the year as a whole, prices increased by 0.7% on average. However, by December, inflation was up 2% – an acceleration primarily attributable to the sharp jump in the price of oil.

In such a favourable climate, it was important for monetary policy not to stimulate the economy any further. By persisting with excessively low interest rates, we could have aggravated inflationary risks and thereby disturbed the macroeconomic equilibrium. The SNB therefore maintained its monetary normalisation course by lifting the Libor target range by 25 basis points on three occasions. The three-month Libor thus rose from 2.1% at the beginning of the year to 2.75% in September. In view of the considerable financial uncertainty and the effect this was having on growth prospects for 2008, we subsequently left the target range unchanged and stabilised the Libor at the 2.75% mark. We have since maintained this position.

Turmoil on the financial markets

The financial storm of the last nine months has challenged our assessment criteria. Such turmoil poses considerable risks for the future.

Before I deal with these issues, please allow me first to look at the factors which have brought us to this situation.

After several years of rising home prices in the United States, there was a trend reversal to the downside which hit the high-risk sub-prime mortgage segment hard. It was when credit rating agencies began a massive downgrading of sub-prime mortgage-backed securities that the global financial markets realised the full enormity of what was happening. During the summer months of 2007, the prices and liquidity of these securities plummeted. This turn of events alarmed investors. Risk premiums subsequently increased, with uncertainty as to the extent of the losses incurred by banks triggering a general crisis of confidence among financial market participants. Liquidity on the major monetary markets became scarce and there was a return to volatility on the stock markets.

Repercussions for Switzerland

Switzerland quickly felt the storm due to the exposure of its financial sector.

First, our two big banks saw their profitability fall sharply in the second half of 2007. Losses made in connection with their investment activities in the United States were a decisive factor in this respect. One of the big banks even required fresh injections of capital, such was the extent of the losses it suffered. The private banking sector and domestic banking activities continued to flourish, however.

Second, the turbulent environment handicapped the money market and led to a widening of the spread, i.e. by means of an unwelcome interest rate hike. The SNB responded immediately by relaxing its lending conditions for banks. Contrary to certain suggestions, this measure was not intended as a means of increasing the amount of liquidity in circulation on a permanent basis. After all, inflationary pressure would potentially rise given such a scenario. Instead, we acted in a flexible way and adjusted our maturities in accordance with the demands in the lending market so as to provide this market with the buffer it needed. We have consequently introduced three-month loans, whereas the terms we offered previously were never longer than 30 days. We also took joint action with other central banks and provided US dollar liquidity to our counterparties – the first time we have ever taken such a step.

The gradual tightening of lending conditions within our domestic market is a third factor, albeit one which is still to fully materialise. Indeed, the fear that the liquidity requirements of the two big banks may be having a detrimental impact on credit volumes in Switzerland cannot be excluded. However, the rest of the Swiss banking sector – which accounts for almost two-thirds of Switzerland's domestic credit supply – posted excellent results in 2007, thereby helping to limit the burden of risk. Furthermore, our figures show that there has so far been no impact on lending growth. Nevertheless, a gradual revision of banks' credit risk evaluations appears the likely scenario, simply given the economic uncertainty of recent months. Banks may consequently raise their interest rates for commercial loans or ask their customers to provide additional collateral. The sharp increase in premiums seen on the bond market in recent months would seem to back up such a trend, at least as far as the major corporates are concerned. Such a development might then have a knock-on effect on lending conditions for SMEs. At present, the SNB is carrying out a survey among banks in order to gain a better idea of the direction in which lending conditions are heading.

Lessons from the turbulence

We can learn a lot from the period of turbulence we are currently experiencing with regard to banking supervision and the stability of the financial system. The Financial Stability Forum (FSF) submitted a number of measures to the G7 countries aimed at enhancing the resilience of financial markets. The SNB was an active partner in drafting this report.

Allow me to elaborate on this topic.

First, it is astounding that a problem which appears to be confined to one single segment of the mortgage market in one single country could have resulted in crisis of global proportions. We feel that this situation has not only come about because of the globalisation of the financial markets, but also because international banks have become increasingly vulnerable over the last few years – vulnerable because of their thirst for profit and their underestimation of the ensuing risks.

Second, the banks' risk measuring and management instruments could not cope with the crisis. Consequently, the actual losses incurred in the area of mortgage-backed securities (MBS) clearly surpassed the potential level calculated by the sophisticated statistical models, and the liquidity haemorrhage suffered by the banks was greater than the most pessimistic scenarios had suggested. In other words, the risk measuring systems failed despite the fact that they were being monitored by the best-informed experts around. This summary may sound a little harsh, but is not intended to put the blame on the banks. Instead, it illustrates that no model can do complete justice to the complexity of financial instruments and the economic environment in which banks operate these days.

Third, the events of the last few months raise question marks about the efficiency of the banking supervision standards applied so far. The call for more sophisticated risk measurement systems, supervision and regulation of banks is understandable. There is room for improvement in these areas, and it must be exploited. Nevertheless, it should be pointed out that more extensive regulation on its own represents an unsatisfactory response to the growing complexity of banking activities. Through the events of recent months, we are called upon to learn the lessons from the banks' limited ability to measure risk and – as a logical consequence – the limited scope afforded to the relevant supervisory authorities. Despite the welcome improvements provided by Basel II, it is naive to assume that weighted capital requirements can guarantee foolproof bank capitalisation assessments. There is a substantial margin of error which must be taken into consideration. In order to take account of all the variables, a tightening of the traditional requirements in the area of bank capitalisation, liquidity and indebtedness is necessary. For a financial centre like ours – which includes international banks whose private banking arms generate substantial revenue and consequently rely on having a spotless reputation – such action is vital.

Finally, the banks that have been buffeted by the financial storm must take a careful look at the various ways in which they apply corporate governance. In particular, they should examine the role of their respective boards of directors in carrying out the necessary checks and balances to ensure efficient risk management, and they should correct the excesses of their remuneration systems in a manner that does not put short-term results ahead of the long-term performance. The latter aspect has been the subject of debate for some years already, and now it is time for answers.

Impact on monetary policy

The turmoil on the financial markets has also had implications with regard to monetary policy. The SNB has taken care to ensure that the fallout from this crisis does not lead to an undue tightening of credit conditions.

The increase in the risk premiums we saw last autumn has resulted in a de facto tightening of financing conditions for banks and companies. By exerting a moderating influence on interest rates, monetary policy can prevent risk premium hikes from triggering a slowdown in economic activity. The great advantage of the SNB's operational objective – i.e. a target range for the three-month Libor – is that it takes account of the risk premiums banks face in their refinancing transactions. Since the banks pass on these risk premiums to their customers via their lending conditions, the Libor reflects the degree of restrictiveness on the lending market. Fully aware of this fact, the SNB has been aiming for a Libor at around the 2.75% mark in recent months. Given the current circumstances, this is a rate which we deem necessary to ensure price stability in the medium term.

Resurgence of inflationary risks

The financial storm should not make us forget that it is our mandate to ensure price stability in the medium term. In this regard, 2007 saw a worsening in the situation due to the sharp increase in commodity prices. The indicators reflecting these price rises registered a growth rate of between 15% and 40%, while the price for crude oil shot up nearly 50% in one year. Even food prices rose by more than 20% on the international markets. Such price increases are all the more remarkable given that these prices had tended to stagnate in recent years.

This jump in the price of commodities was mainly attributable to the continuous growth in domestic demand in the emerging markets and low extraction and production capacity. In our opinion, this situation is not likely to change in any direction in the short term.

Although partially offset by the weak US dollar, the rise in the oil price during the final quarter of 2007 triggered a sharp increase in inflation – from 0.7% in September to 2% in December. The price rises of other commodities were also significant, but they only had a minor impact on inflation in Switzerland. In fact, commodities are not directly included in the reference basket used to calculate the price index, which means that their price increases only had a minor impact in this respect. However, the indirect effects, i.e. higher prices for goods and services as a result of higher production costs, constitute a much more serious inflationary risk. Having said this, the related impact last year was modest because many companies chose not to pass on their higher costs to consumers, given the considerable competitive pressure in numerous markets. Moreover, the relatively moderate increase in wage costs and gains in productivity over the last few years allowed companies to absorb a good part of the additional costs they had incurred as a result of higher commodity prices.

However, at the end of 2007 and during the first quarter of this current year, companies became less reticent and began to make more frequent and more significant price adjustments. The moderating factors that have been at play until now have gradually lost their impact. Inflation thus reached 2% in December and has even exceeded this level in recent months. We cannot rule out the possibility that costs will increasingly be passed on in 2008.

My fears are based on two particular aspects. First, the rapid rise in the cost of labour at the end of 2007 put pressure on margins. At the same time, productivity gains became less marked as companies reached the limits of their production capacity. Therefore, adjustments in the margins will probably have to be made. Second, the current favourable business climate encourages companies to reinstate the margins they had previously cut in order to maintain their market share amid stiff competition. Some companies may pass on a disproportionate share of the higher costs they have incurred in the past.

The SNB does not underestimate these risks, but is nevertheless confident with regard to the inflation outlook in the medium and long term. In essence, our confidence is based on the fact that monetary policy of the past three years has been successful in gradually normalising the interest rate level. Since 2004, we have lifted the Libor target range in ten steps to bring the interest rate to a level that is in line with price stability in the medium term. Thanks to this preventive approach, the inflation outlook has not deteriorated despite the inflationary bouts of recent months.

Moreover, the performance of our monetary aggregates strengthens our belief that price stability can be maintained. Contrary to what we see in neighbouring countries, growth in Switzerland's monetary aggregates has been compatible with stable medium and long-term inflation for a number of years already. Successive interest rate hikes have created the conditions for transfers from sight and savings deposits to term deposits, which generally earn better returns. Thus, in 2007, M1 and M2 continued declining, while M3 recorded only modest growth. Consequently, the money overhang which existed since 2003 has now dissipated – a development which bodes well for future price stability.

Finally, the foreign exchange market has largely corrected the previous slide in the Swiss franc against the euro, which had made imports more expensive. The Swiss franc's rebound creates a more favourable environment for the preservation of price stability in the medium term. This change in monetary conditions enabled us to leave interest rates unchanged at our monetary policy assessment in March.

Mixed outlook for 2008

Even though Switzerland's economic performance is still excellent, 2008 is fraught with considerable uncertainties. The situation on the financial markets has not yet stabilised, and the global economy is slowing. Our economy, with its important financial sector and strong presence on the international markets, will not remain unscathed. In addition, the increase in commodity prices, in particular the price of oil, is triggering an inflationary effect.

These different factors pose a predicament in terms of monetary policy, and the resultant uncertainty this causes is not exactly beneficial for Swiss companies. I have every confidence, however, that Switzerland will navigate these troubled waters without any major problems. On the one hand, our economy is very competitive. Thanks to the reforms implemented in recent years, Switzerland is well placed to adjust to the needs of the global economy and cope with pressure on the foreign exchange markets. On the other hand, our careful policy in favour of a gradual normalisation of interest rates, which we have been pursuing since 2004, has resulted in a steady tightening of monetary conditions and should ensure price stability in the medium term.

On this positive note, I would like to close my remarks. Thank you for listening and, above all, thank you for supporting the National Bank in its efforts to ensure monetary stability in Switzerland.

SNB Working Papers: Summaries

The emergence of information sharing in credit markets

Martin Brown and Christian Zehnder
Working Paper 2008-1

When assessing loan applications, banks rely not only on information they gather themselves but also – and increasingly – on information provided by other lenders. This sharing of information between lenders often takes place on a voluntary basis through private credit bureaus. Examples of this kind of private credit bureau are the *Zentrale für Kreditinformationen* (ZEK) in Switzerland and *Schufa* in Germany. Banks benefit from information sharing, as it helps them to judge the quality of new loan applicants. Sharing information, however, does expose lenders to increased competition for their existing clients. Banks may therefore be wary of sharing information in very competitive credit markets.

This study examines – in an experimental credit market – the conditions under which lenders will voluntarily share information about their borrowers. The results confirm that, when lenders have weak information about new borrowers, they are more likely to share information with each other. As expected, strong competition between lenders leads to less information sharing. However, the negative impact of competition on information sharing is weaker than the positive impact of banks striving to gain information.

Intelligible factors for the yield curve

Yvan Lengwiler and Carlos Lenz
Working Paper 2008-2

In order to understand complex objects, such as the yield curve, it is useful to reduce the dimensionality of the problem with the help of a few factors that describe the object. The underlying assumption is that there is a simple relationship between these factors and the yield curve, and that the factors in question capture the essential features of the curve. It then suffices to describe the dynamics of the factors since this allows the authors to derive the fundamental attributes of the evolution of the yield curve. The authors construct a factor model of the yield curve and specify time series processes for the factors, so that the innovations are mutually orthogonal. At the same time, the factors are constructed in such a way that they assume clear, intuitive interpretations. The resulting 'intelligible factors' should prove useful for investment professionals when discussing expectations about yield curves and the implied dynamics. The application of the model to the US Treasury yield curve makes it possible to distinguish between changes in the monetary policy stance and monetary policy surprises, which, in fact, are rare. Two such surprise events are identified, namely 11 September 2001, and the Fed reaction to the sub-prime crisis in August 2007.

Forecasting the Swiss economy using VECX* models: an exercise in forecast combination across models and observation windows

Katrin Assenmacher-Wesche
and M. Hashem Pesaran
Working Paper 2008-3

This paper forecasts output, inflation and the short-term interest rate using vector error correction models for Switzerland. It considers three different ways of dealing with forecast uncertainties. First, it investigates the effect of model uncertainty on forecasting performance by averaging the forecasts from different models. Second, economic relations can be subject to structural breaks. This can be taken into account by estimating a model from different observation windows and then pooling the forecasts. Third, the paper examines whether using weighting schemes taken from the machine-learning literature improves the average forecast.

The authors find that averaging forecasts from different models reduces the forecast error considerably. Averaging the forecasts derived from different estimation windows is at least as effective as averaging from different models in improving forecast precision. Moreover, averaging across the two dimensions is mutually complementary, and leads to further reduction in forecast error. By contrast, the effect on forecast accuracy of alternative weighting schemes when combining forecasts is small in the present application.

Foreign bank entry, institutional development and credit access: firm-level evidence from 22 transition countries

Maria Clara Rueda Maurer
Working Paper 2008-4

This paper examines how the protection of creditors' rights influences the way in which foreign bank entry affects firms' ability to access credit. Using a sample of more than 6,000 firms in 22 transition countries, it finds that as bankruptcy proceedings become more inefficient, foreign bank entry becomes more likely to crowd out small and opaque firms. Conversely, as the protection of creditors' rights improves, the positive association between foreign banks and firms' credit constraints diminishes. These results are robust to controls for endogeneity of foreign banks. The interaction between foreign banks and the protection of creditors' rights would thus explain the disparity of results obtained by previous studies on the effects of foreign bank entry. In countries with adequate protection of creditors' rights, foreign bank entry may benefit all firms. However, in countries where protection of these rights is weak, foreign bank entry is likely to result in a credit crunch.

Are weekly inflation forecasts informative?

Marlene Amstad and Andreas M. Fischer
Working Paper 2008-5

Are weekly inflation forecasts informative? Although several central banks review and discuss monetary policy issues on a biweekly basis, there have been few attempts by analysts to construct systematic estimates of core inflation that support such a decision-making schedule. The timeliness of news releases and macroeconomic revisions is recognised to be an important information source in real-time estimation. The authors incorporate real-time information from macroeconomic releases and revisions into weekly updates of monthly Swiss core inflation using a common factor procedure. On the basis of the weekly estimates for Swiss core inflation, updating the forecast at least twice a month is worthwhile.

Chronicle of monetary events

Target range for the three-month Libor left unchanged

On 19 June 2008, following its quarterly monetary policy assessment, the SNB decided to leave the target range for the three-month Libor unchanged at 2.25–3.25%. It intends to hold the three-month Libor in the middle of the target range for the time being.

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