

Swiss National Bank Quarterly Bulletin

December 4/2009 Volume 27

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Sectional breakdown of bulletin Q4/2009

Monetary policy report (p. 6)

In the past few months, the international economy has shaken off the recession. Real GDP in the third quarter grew faster than the long-term average for the first time in over two years in many industrialised countries. The main drivers were the relaxation in the finance and credit markets as well as government stimulus programmes. The recovery was strongest in the emerging industrial economies of Asia, while economic activity in the western industrialised countries still remains below the level of 2008. The SNB is anticipating a continuation of the global economic recovery. Its global growth forecasts for 2009 and 2010 are almost unchanged from those for the monetary policy assessment in September.

In Switzerland, too, real GDP in the third quarter increased for the first time since the beginning of the recession. Owing to a more favourable international environment, exports recovered somewhat, while private consumption and investment in the construction sector continued to have a supporting effect. However, GDP growth overall was insufficiently strong to bring about a reduction in the existing under-utilisation of production capacity. As a result, the labour market situation deteriorated further. For 2010, the SNB is forecasting GDP growth of 0.5–1.0%, following an estimated decline of roughly 1.5% in 2009. In addition, the SNB predicts that consumer prices will rise by 0.5% in 2010, following a probable fall of some 0.5% in 2009. However, the global economy remains fragile and major uncertainties remain attached to the forecasts.

At its quarterly monetary policy assessment in December, the SNB decided to maintain its expansionary monetary policy, to leave the target range for the three-month Libor unchanged at 0–0.75% and to adhere to its objective of keeping the Libor within the lower end of this range, at around 0.25%. It will still provide the economy with a generous supply of liquidity, but discontinue its purchases of Swiss franc bonds issued by private sector borrowers. The SNB will act decisively to prevent any appreciation of the Swiss franc against the euro.

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

In the talks held by the SNB delegates for regional economic relations with around 180 representatives of various economic sectors and industries, the picture of a recovery gradually gaining a foothold emerged for October and November. The initial – and for the most part still weak – signals of a turnaround that were evident in the previous round of discussions were confirmed and increased in number. In addition, expectations tended to be exceeded. However, there has been a rise in the number of redundancies and, in many sectors of the economy, capacities are, in some cases, significantly under-utilised. Looking ahead to 2010, most respondents anticipate another difficult year. For the first time in a long while, a majority of respondents expect an increase rather than a decrease in turnover in the next few months. As far as staff numbers are concerned, however, most anticipate further cuts. Selling prices are also expected to trend downwards.

SNB Working Papers and SNB Economic Studies (p. 48)

Summaries of ten SNB Working Papers: Christian Hott, 'Explaining house price fluctuations', *SNB Working Paper 2009-5*; Sarah M. Lein and Eva Köberl, 'Capacity utilisation, constraints and price adjustments under the microscope', *SNB Working Paper 2009-6*; Philipp Haene and Andy Sturm, 'Optimal central counterparty risk management', *SNB Working Paper 2009-7*; Christian Hott, 'Banks and real estate prices', *SNB Working Paper 2009-8*; Terhi Jokipii and Alistair Milne, 'Bank capital buffer and risk adjustment decisions', *SNB Working Paper 2009-9*; Philip Sauré, 'Bounded love of variety and patterns of trade', *SNB Working Paper 2009-10*; Nicole Allenspach, 'Banking and transparency: is more information always better?', *SNB Working Paper 2009-11*; Philip Sauré and Hosny Zoabi, 'Effects of trade on female labour force participation', *SNB Working Paper 2009-12*; Barbara Rudolf and Mathias Zurlinden, 'Productivity and economic growth in Switzerland 1991–2005', *SNB Working Paper 2009-13*.

Summaries of two SNB Economic Studies: Nicolas A. Cuche-Curti, Harris Dellas and Jean-Marc Natal, 'DSGE-CH: a dynamic stochastic general equilibrium model for Switzerland', *SNB Economic Study No. 5 2009*; Katrin Assenmacher-Wesche and M. Hashem Pesaran, 'A VECX* model of the Swiss economy', *SNB Economic Study No. 6 2009*.

Monetary policy report

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

This report is based primarily on the data and information available
as at 10 December 2009.

Monetary policy report

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About this report

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

It is a particular concern of the SNB that its monetary policy be understood by a wider public. 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 10 December 2009. The sections headed 'Monetary policy decision' and 'SNB inflation forecast' take due account of the Governing Board's monetary policy decision up to this date.

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

Monetary policy decision

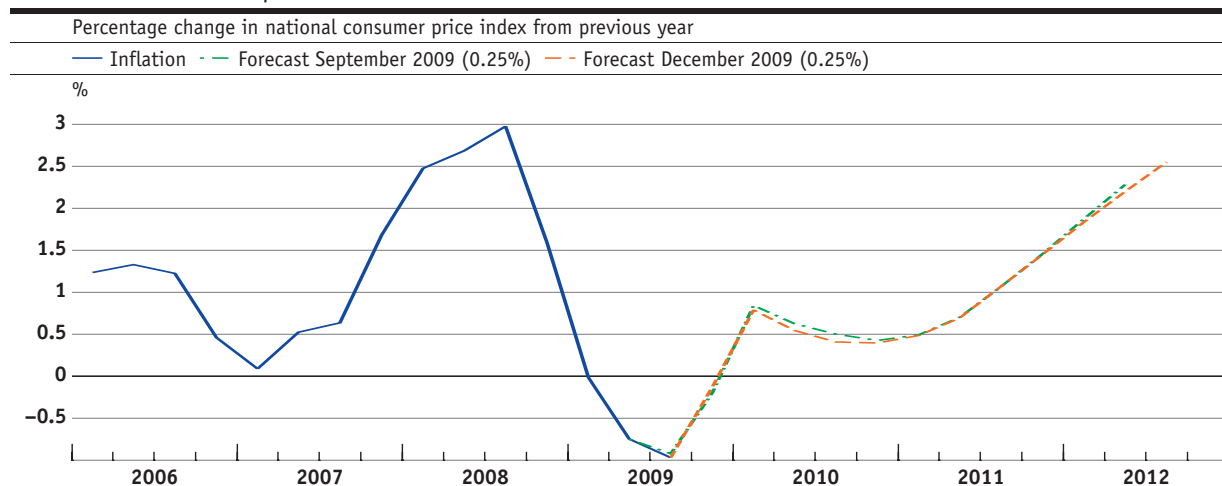
At its quarterly assessment on 10 December 2009, the Swiss National Bank (SNB) announced that it would maintain its expansionary monetary policy. Signs of a global economic recovery are gathering strength. The Swiss economy is also on the road to recovery and is developing as expected. However, the upturn remains fragile and there is still considerable insecurity with regard to future developments. Under these circumstances, the SNB has decided to leave its monetary policy unchanged until further notice.

It is therefore holding the target range for the three-month Libor at 0–0.75% and, as before, aim-

ing to keep the Libor in the lower end of this range at around 0.25%. It will still provide the economy with a generous supply of liquidity. The SNB will also continue to act decisively to prevent any excessive appreciation of the Swiss franc against the euro, but has decided to discontinue its purchases of Swiss franc bonds issued by private sector borrowers.

A correction in the monetary policy at this stage would be premature, since there are still downside risks attached to the inflation outlook. However, the inflation outlook also shows that the expansionary monetary policy cannot be maintained indefinitely without compromising medium and long-term price stability.

Inflation forecast of September 2009 with Libor at 0.25% and of December 2009 with Libor at 0.25%



Source: SNB

Inflation forecast of September and December 2009

| Average annual inflation in percent | 2009 | 2010 | 2011 |
|---|------|------|------|
| Forecast September 2009, Libor at 0.25% | -0.5 | 0.6 | 0.9 |
| Forecast December 2009, Libor at 0.25% | -0.5 | 0.5 | 0.9 |

Source: SNB

1 Developments in the global economy

Following a brightening of the economic situation in the second quarter, there has been further improvement in global economic activity over the last few months. For the first time in more than two years, GDP in the third quarter grew more strongly than the long-term average in many industrialised countries. The recovery was particularly marked in Asia, with some countries generating double-digit GDP growth rates.

The key drivers of this recovery were the government stimulus programmes and the relaxation in the finance and credit markets. Manufacturing output and international foreign trade were also buttressed by a turnaround in the inventory cycle and a strengthening of final demand. In addition, investment levels benefited from targeted measures in the construction sector, particularly in the US and China. However, overall economic activity was far below its potential level, and with the exception of Asia's emerging economies also remains below the previous year's level (cf. chart 1.1).

The latest results of company and consumer surveys suggest that economic performance has continued to pick up in the fourth quarter (cf. charts 1.2 and 1.3). In the medium term, however, a number of factors suggest that final demand will increase at only a modest rate. First, the positive inventory stimulus is likely to lose momentum in the course of 2010. Second, many of the current economic policy measures are only temporary. Third, household consumption is suffering from

huge financial losses and high levels of unemployment (cf. chart 1.4). Fourth, the more restrictive lending policies being applied by banks are having an impact on corporate investment activity, particularly where small companies are concerned. And fifth, the consolidation of government finances, which is inevitable in the long run, is likely to act as a brake on private consumption.

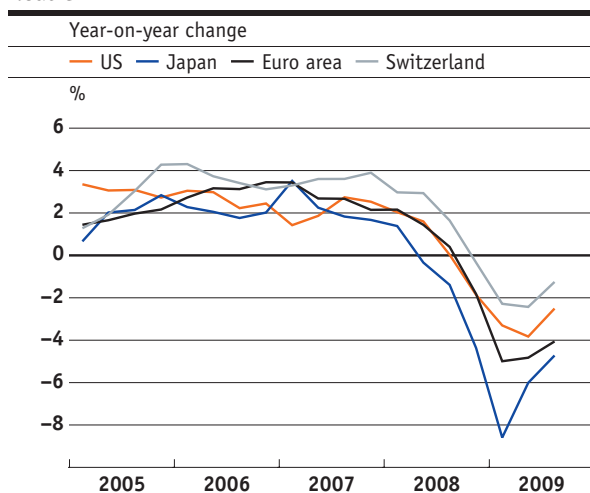
Since the last quarter, the SNB has left its global growth forecasts for 2009 and 2010 virtually unchanged. The degree of forecasting uncertainty remains high. Nonetheless, the sharp improvement in financial markets has significantly reduced the risks as compared to the middle of 2009.

The low level of global production capacity utilisation is keeping inflationary pressure in check. Towards the end of the year, marked base effects from oil prices and increasing commodity prices (cf. chart 1.5) will nudge annual consumer inflation higher in most countries, but core inflation looks set to recede further. Given this backdrop, the central banks of the world's leading industrialised nations have continued to pursue highly expansionary monetary policies.

Early signs of recovery in the US ...

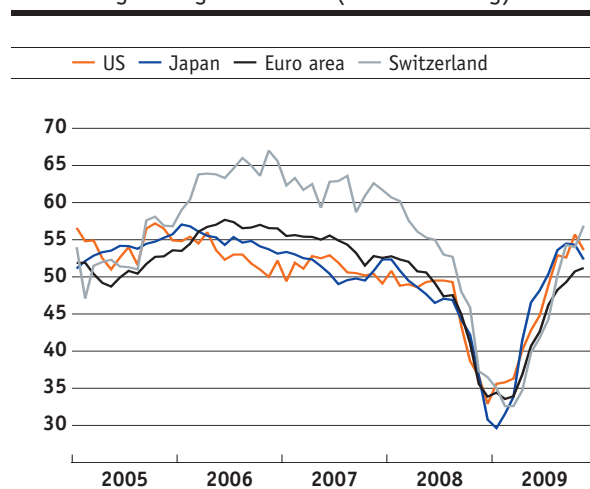
Third-quarter economic growth in the US amounted to 2.8%. The most prolonged recession since the Second World War therefore seems to have come to an end. Commercial construction aside, all the different components of demand supported growth in the third quarter, led by consumer spending and a less severe scaling down of inventories. In addition, the prolonged contraction of invest-

Chart 1.1
Real GDP



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

Chart 1.2
Purchasing managers' indices (manufacturing)

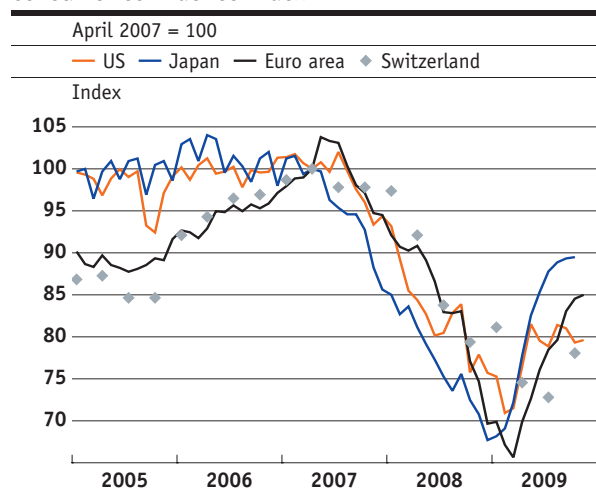


Source: Thomson Financial Datastream; copyright and database rights: Markit Economics Ltd 2009; all rights reserved

ment in residential construction and equipment came to an end. On the negative side, the labour market continued to deteriorate. The unemployment rate rose from 9.7% in August to 10.0% in November, which represents the highest level since the 1981 recession.

A further improvement in producer confidence and the optimistic production plans of car manufacturers suggest the recovery will continue, particularly in the manufacturing sector. However, a strong rise in corporate investment looks unlikely, as companies will be able to meet increasing demand by utilising free capacity. As inventories of finished products have been greatly scaled down, the rise in demand is likely to be reflected more strongly in production growth. A smaller growth contribution is expected on the consumer spending side, as this benefited in the previous quarter from government scrappage deals for purchases of more energy-efficient vehicles. In the medium term, the high unemployment rate and the financial losses suffered by households will continue to hamper private consumption. Thanks to government support, the situation in the housing market appears to have stabilised further. That said, it is difficult to evaluate whether the demand effect created by tax credits for first-time home buyers will prove sustainable. The decline in commercial construction activity is expected to persist over the next few quarters. In November, the US Congress approved additional funding to revive the housing and labour markets. This is likely to support residential construction investment and consumer spending in particular.

Chart 1.3
Consumer confidence index



Sources: SECO, Thomson Financial Datastream

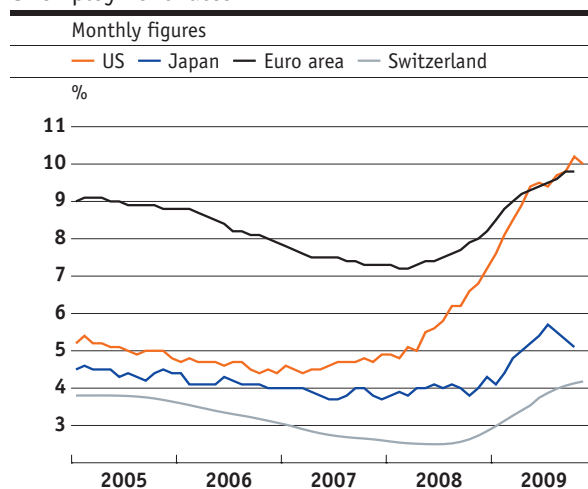
The SNB has left its estimate for US GDP growth in 2009 unchanged at -2.4%. Given the weakness of private consumption and the declining impact of fiscal stimuli, the forecast for growth in 2010 is a modest 2.4%.

... and in the euro area

The euro area also achieved positive GDP growth in the third quarter. After five successive quarters of recession, economic output in the third quarter rose by 1.5%. This has most likely brought to an end the longest and deepest phase of contraction since the Second World War. The recovery was evident in the majority of euro area countries. The key growth stimulus was external. Exports and industrial production recovered thanks to higher demand especially from Asia, but there was also an increase in trade between member states. By contrast, private consumption declined slightly. In particular, new car registrations – an area that had supported consumer spending in the second quarter – declined, while the fear of unemployment was a deterrent to making other major purchases. Unemployment continued to rise right up until the end of the quarter, with Spain being the country worst affected. In July, the number of people out of work exceeded 15 million for the first time.

Economic activity will probably continue to pick up in the euro area over the next few quarters. Positive stimuli are currently coming from exports, government stimulus programmes and the inventory cycle. The outlook of individual countries differs, however, depending on the state of the local real estate market and the size of the export economy.

Chart 1.4
Unemployment rates



Sources: SECO, Thomson Financial Datastream

Companies continue to suffer from low capacity utilisation and greater difficulty in obtaining bank credit, which suggests that a rapid recovery in investment is unlikely. The ongoing deleveraging of companies stands in contrast to growing public sector debt. A curbing of economic growth due to measures intended to consolidate government finances is, however, not expected before 2011.

The SNB has reduced its 2009 growth estimate for the euro area to -3.9%, as compared to -3.6% in September. The main reasons for this adjustment are the rather weak recovery in the third quarter and the sharp appreciation of the euro against the dollar. For 2010, the SNB is predicting growth of 1.3%.

Recovery maintained in Japan ...

The economic recovery continues in Japan under the influence of fiscal stimuli. GDP rose by 1.3% in the third quarter following a return to growth in the second quarter. Private consumption benefited from government incentives to purchase environmentally-friendly cars and household appliances, and expanded strongly despite high unemployment and huge reductions in bonuses. Exports also registered a further increase. Equipment investment in the private sector, by contrast, which had already sunk in recent quarters, contracted again. Given that imports, which had dropped in the past few quarters, rose again for the first time, the contribution from foreign trade was less favourable than in the previous quarter.

The economy should continue to recover. By October, industrial production had bounced back by more than 23% from the low-water mark reached at

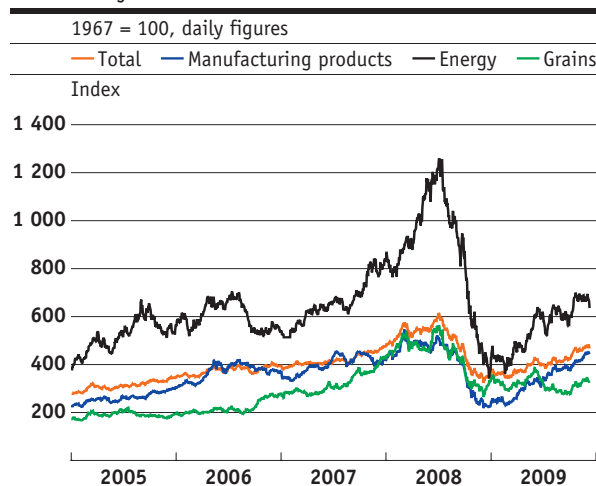
the beginning of the year. Surveys show that companies are planning to increase production further over the next few months. The recovery evident in the electronics sector has increasingly spread to other sectors. Capacity utilisation in manufacturing, however, remains very low despite the recovery. According to the Tankan survey conducted by the Japanese central bank, companies continue to register significant overcapacity in both capital and labour, and their investment plans for fiscal 2009 reveal ongoing caution. In the short term, therefore, virtually no stimuli are likely to come from the corporate investment side. However, the labour market situation appears to have stabilised earlier than anticipated; the unemployment rate fell from its all-time high of 5.7% in July to 5.1% in October. The overall prospects for the economy in 2010 remain uncertain, as it is difficult to evaluate whether the private sector can generate sufficient momentum by itself once the effects of fiscal stimuli wear off. For the first half of the year at least, therefore, a dip in growth cannot be ruled out.

The SNB has reduced its 2009 growth estimate for the Japanese economy to -5.2%, as compared to -4.9% in September. The correction is essentially due to a downward revision of GDP growth for the second quarter of 2009. Growth of 2.0% is expected for 2010.

... and a distinct revival in the emerging economies of Asia

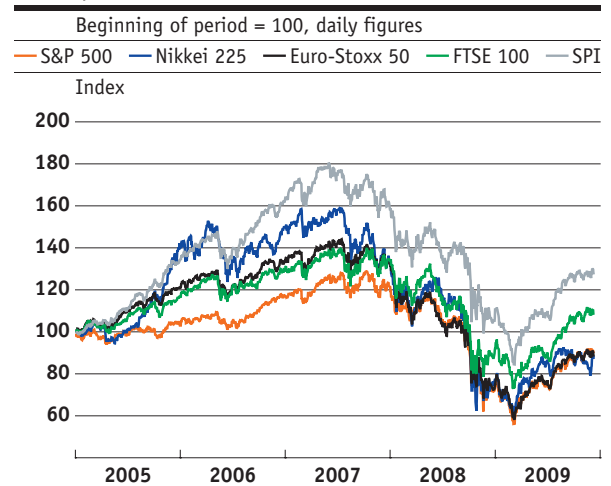
As a result of the huge stimulus package put together by the government, the Chinese economy continued to display strong self-generated growth

Chart 1.5
Commodity indices



Sources: Reuters, Thomson Financial Datastream

Chart 1.6
Share prices



Sources: Bloomberg, Thomson Financial Datastream

in the third quarter. The year-on-year rise in GDP amounted to 8.9%. While government expenditure on infrastructure remained an important prop, growth was also boosted by an increase in domestic private sector demand. Consumer spending benefited from government incentives to acquire small cars and electronic items, as well as from falling prices for consumer goods and rising share prices. Demand in the construction sector continued to grow and was accompanied by an increase in real estate sales. However, exports picked up only slightly – in contrast to imports, which rose strongly on the back of significant demand for commodities.

The various indicators point to a continuation of the positive overall development of the Chinese economy in the fourth quarter. Manufacturing output rose in October and November, and the latest survey results paint a picture of growing optimism. Exports are likely to strengthen GDP growth further. An additional growth stimulus could also come from the replenishing of low inventory levels. Overall, growth is therefore likely to be broader based in the fourth quarter. The country's massive fiscal package, which also includes stimulus measures for the economy in 2010, together with the positive effects of the expansionary monetary policy, suggest that the Chinese economy will enjoy robust growth next year.

Ongoing recovery was also evident in the East Asian tiger economies of South Korea, Taiwan, Singapore and Hong Kong. Overall economic activity picked up once again in the third quarter under the influence of the expansionary policy mix, coming close to pre-crisis levels. In some countries, manu-

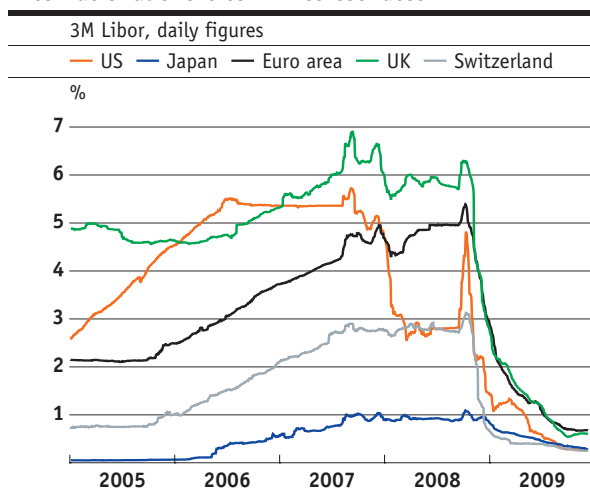
facturing output actually hit new highs, and capacities in manufacturing were again stretched. The driving forces were the electronics sector and, in South Korea, also the automotive industry, which – as in many other countries – benefited from government incentives. Inventories were scaled down further, above all to meet the strong demand from China, and are currently at a low level. They are likely to be built back up in the fourth quarter, which will stimulate growth. However, a slowdown in growth rates is to be expected in view of the rapid recovery in mid-2009.

Annual inflation at its lowest in July

The annual rate of inflation in industrialised countries (as measured by consumer prices) hit a low in July, before rising again in the period to October, primarily as a result of base effects in the area of energy prices (cf. chart 1.9). Core inflation, which excludes energy and food prices, developed differently from one country to another over the same period, but with a broadly downward trend. The base effects resulting from energy prices will, in the coming months, continue to have an impact on annual inflation, which is thus likely to turn positive in many countries by the end of the year. Given the low capacity utilisation in the economy and the high employment rate, however, inflationary pressure should remain modest next year too.

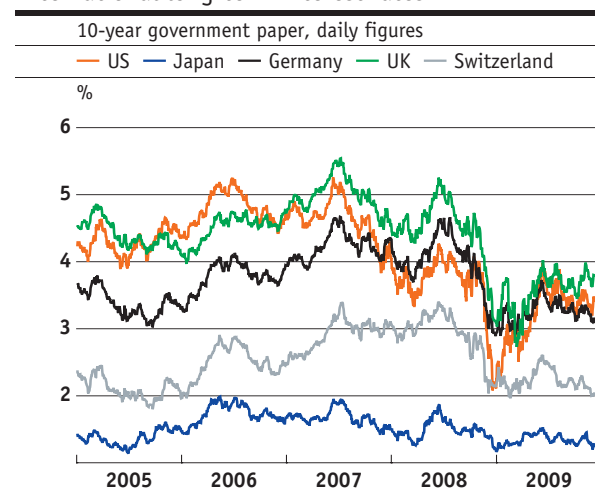
In the US, the annual rate of inflation rose from a low of -2.1% in July to -0.2% in October. Core inflation barely changed over the same period and amounted to 1.6% in October. The annual rate of inflation in the euro area rose from -0.7% to

Chart 1.7
International short-term interest rates



Source: Thomson Financial Datastream

Chart 1.8
International long-term interest rates



Sources: SNB, Thomson Financial Datastream

-0.1%, whereas core inflation receded from 1.3% to 1.2%. In contrast to the US and the euro area, annual inflation in Japan fell from -2.3% to -2.5% as a result of declining prices for fresh foods. But in Japan, too, the core rate of inflation also decreased further (-1.1%). In Asia's tiger economies, annual inflation bounced back from the negative zone in July and amounted to an average of 0.6% in October. Annual inflation in China increased, driven above all by rising food prices, but was still in negative territory (-0.5%) in October.

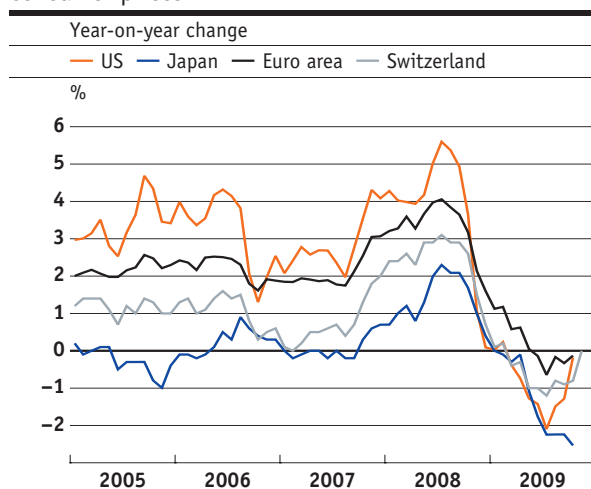
Still no change in central banks' stance

The central banks of most industrialised countries persisted with their expansionary monetary policy (cf. chart 1.10). The Federal Reserve has yet to signal an imminent change to this policy. The target range for the key rate remained unchanged at 0.0-0.25%. By contrast, it ended its purchases of government bonds at the end of October and announced that it would also be stopping purchases of mortgage-related securities amounting to USD 1.425 trillion in the first quarter of 2010. In addition, the Fed also decided to allow a number of exceptional liquidity programmes to lapse.

The ECB also left its main refinancing rate unchanged at 1.0%. As planned, it continued with its purchases of euro-denominated covered bonds. However, it announced that, in view of the improved financial market conditions, not all of the measures aimed at increasing liquidity levels would still be necessary to the same extent as previously. In particular, it is no longer planning any further refinancing operations with terms of twelve months for 2010.

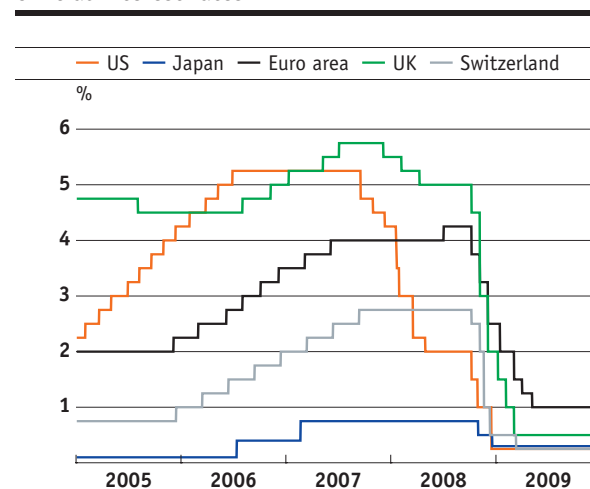
The Japanese central bank left its call money rate at 0.1% and continued its unconventional measures aimed at making short-term liquidity easier to obtain. In October, it confirmed that its securities purchase plan would run out at the end of December, whereas it extended an extraordinary liquidity programme to the end of March 2010. The growth and inflation forecasts for the Japanese economy reflect a gradual recovery and deflation, which is set to continue into fiscal 2011. The central banks of many Asian countries have adopted a wait-and-see approach, as there are still significant uncertainties surrounding the sustainability of the economic recovery.

Chart 1.9
Consumer prices



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

Chart 1.10
Official interest rates



Sources: SNB, Thomson Financial Datastream

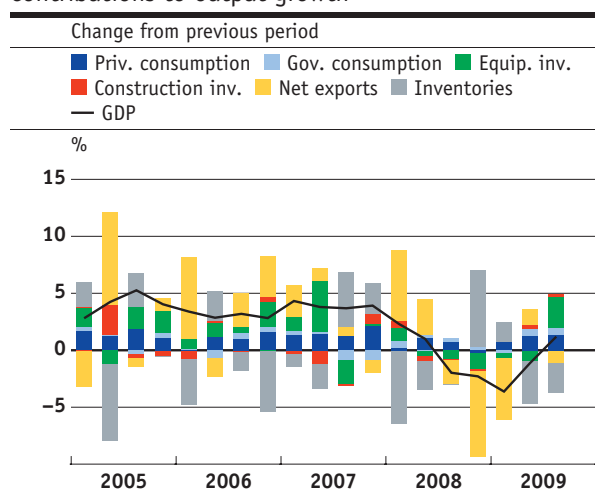
2 Developments in the Swiss economy

Real GDP grew over the summer months in Switzerland too. Owing to a more favourable international environment, exports recovered somewhat, while private consumption and investment in the construction sector continued to have a supporting effect. However, GDP growth overall was insufficiently strong to bring about a reduction in the existing under-utilisation of production capacity. As a result, the labour market situation deteriorated further.

Based on the discussions held by the SNB delegates for regional economic relations with around 180 representatives of various economic sectors, it appears that the moderate upturn continued in

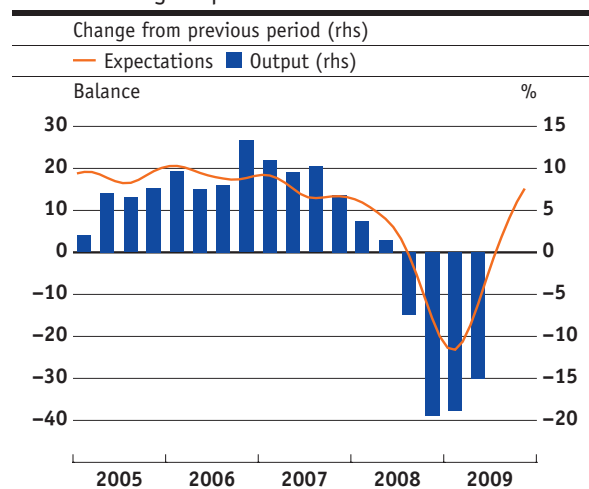
October and November. The recovery in the economy appears to be gaining a foothold, particularly in the area of exports and in the finance sector. The initial – and for the most part still weak – signals of a turnaround that were already evident from the previous round of discussions have been confirmed and have increased in number. However, a high level of under-utilisation of labour and technical capacity remains evident in many areas of the economy. Looking ahead to 2010, a majority of respondents continue to anticipate another difficult year. Although – for the first time in a long while – a greater number are expecting turnover to rise rather than decline over the next few months, the majority are expecting a further reduction in headcounts. Expectations were very subdued with regard to sales prices, too.

Chart 2.1
Contributions to output growth



Source: SECO

Chart 2.2
Manufacturing output



Sources: KOF Swiss Economic Institute, SFSO

2.1 GDP growth

According to provisional estimates by the State Secretariat for Economic Affairs (SECO), real GDP grew by 1.2% in the third quarter as compared to the previous quarter, after having previously fallen for four quarters in succession. Despite this increase, real GDP was still 1.3% below the previous year's level. Last year's growth rates for the second and third quarters were revised downwards slightly.

All components of final demand developed positively. There were strong growth contributions from both equipment investment and private con-

sumption. An increase was also evident in exports. Aggregate demand increased by 3.5% overall. However, a proportion of this growth was met by a significant rise in imports and a decline in inventories. (cf. chart 2.1)

On the output side, banks and insurance companies in particular posted double-digit growth rates, with the construction industry, wholesaling, retailing, transport, communications and the health sector also contributing positively to growth. By contrast, value added by the manufacturing, tourism and company-related services was clearly negative (cf. chart 2.2).

Real GDP and components

Growth rates on previous period, annualised

Table 2.1

| | 2005 | 2006 | 2007 | 2008 | 2007 | 2008 | | | | | 2009 | |
|----------------------------------|------------|------------|------------|------------|------------|-------------|------------|-------------|-------------|-------------|-------------|-------------|
| | | | | | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 |
| Private consumption | 1.7 | 1.6 | 2.4 | 1.7 | 3.7 | 0.3 | 1.8 | 1.2 | -0.4 | 1.2 | 2.2 | 2.3 |
| Government consumption | 1.2 | 0.3 | 0.5 | -0.1 | -7.8 | 5.4 | 2.7 | 3.2 | 2.2 | -2.0 | 5.1 | 5.3 |
| Investment in fixed assets | 3.8 | 4.7 | 5.2 | 0.4 | 5.0 | 8.3 | -4.5 | -3.9 | -7.7 | -1.8 | -2.5 | 14.1 |
| Construction | 3.5 | -1.4 | -2.3 | 0.9 | 9.6 | 6.5 | -5.3 | -1.0 | -2.4 | 0.1 | 4.8 | 3.0 |
| Equipment | 4.0 | 10.1 | 11.1 | 0.1 | 1.9 | 9.6 | -3.8 | -6.0 | -11.4 | -3.4 | -7.9 | 23.7 |
| Domestic final demand | 2.1 | 2.1 | 2.8 | 1.1 | 2.5 | 2.8 | 0.4 | 0.2 | -1.9 | 0.1 | 1.4 | 5.3 |
| Domestic demand | 1.8 | 1.4 | 1.3 | 0.4 | 8.3 | -6.4 | 0.2 | -3.2 | 7.6 | 5.8 | -4.0 | -0.3 |
| Total exports | 7.8 | 10.3 | 9.5 | 2.9 | 3.2 | 5.9 | 15.5 | -4.1 | -26.4 | -20.0 | -8.6 | 10.8 |
| Goods | 5.8 | 11.1 | 8.4 | 2.6 | 4.1 | 8.8 | 16.0 | -4.2 | -33.4 | -23.5 | -6.1 | 15.2 |
| Excluding valuables ¹ | 6.5 | 11.2 | 8.3 | 2.1 | 7.6 | 4.6 | 19.6 | -11.7 | -29.7 | -20.6 | -6.8 | 9.0 |
| Services | 13.2 | 8.4 | 12.5 | 3.4 | 1.0 | -0.8 | 14.4 | -3.7 | -6.9 | -11.2 | -13.8 | 1.1 |
| Aggregate demand | 3.8 | 4.5 | 4.3 | 1.4 | 6.3 | -1.8 | 6.0 | -3.6 | -7.1 | -4.4 | -5.6 | 3.5 |
| Total imports | 6.6 | 6.5 | 6.0 | 0.4 | 11.8 | -10.4 | 17.8 | -6.9 | -16.9 | -6.1 | -15.4 | 9.1 |
| Goods | 5.6 | 7.8 | 5.1 | -0.5 | 11.6 | -10.5 | 22.8 | -10.2 | -26.2 | -1.8 | -21.6 | 12.4 |
| Excluding valuables ¹ | 5.3 | 7.4 | 6.7 | -1.0 | 8.7 | -10.6 | 19.8 | -10.7 | -21.7 | -5.6 | -21.2 | 15.2 |
| Services | 11.3 | 0.6 | 10.3 | 4.8 | 13.1 | -10.0 | -3.0 | 10.8 | 38.0 | -21.3 | 16.3 | -3.1 |
| GDP | 2.6 | 3.6 | 3.6 | 1.8 | 3.9 | 2.3 | 1.0 | -2.0 | -2.3 | -3.6 | -1.1 | 1.2 |

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

2.2 Foreign trade, consumption and investment

Exports turn the corner

The recovery of the global economy had a positive impact on Swiss exports. For the first time since the beginning of the crisis, goods exports rose in the third quarter (cf. chart 2.3). The decline in exports of services also came to an end. Overall, exports of goods and services were up by 6.5% (excluding valuables). The increase was modest compared to the preceding slump, however, so export volumes remain far below the levels reached before the outbreak of the crisis.

Where goods are concerned, exports of commodities and semi-manufactured goods benefited from the upturn in Asian economies in particular. However, there was also a noticeable recovery in exports of consumer goods, particularly pharmaceuticals. By contrast, capital goods exports continued to drop in the face of persistently weak capacity utilisation abroad.

Where exports of services are concerned, merchanting suffered a sharp decline despite higher commodity prices, but this was compensated for by a sharp climb in volatile income in the licence and patent business. In addition, an increase in exchange trading volumes led to a rise in commission revenues for banks, while a return to positive growth in the number of overnight stays of foreign visitors also saw tourism exports rise.

In view of increasingly optimistic expectations in manufacturing, exports are likely to have now turned the corner (cf. chart 2.4). However, the upturn will probably prove only moderate when compared to the preceding slump. Thus, in October, growth in goods exports did not rise further (cf. chart 2.5).

Chart 2.3
Contributions to export growth

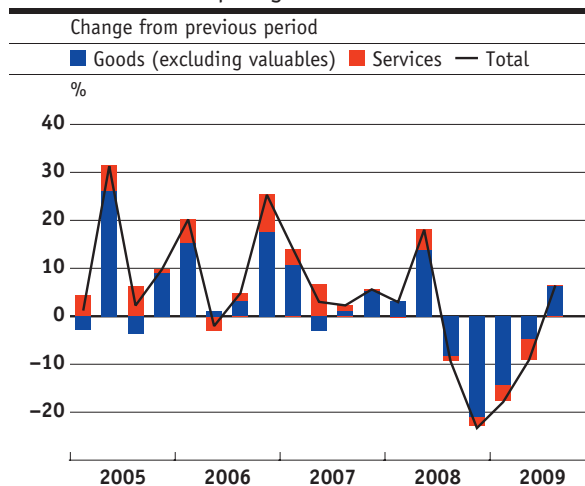


Chart 2.4
Expected new orders

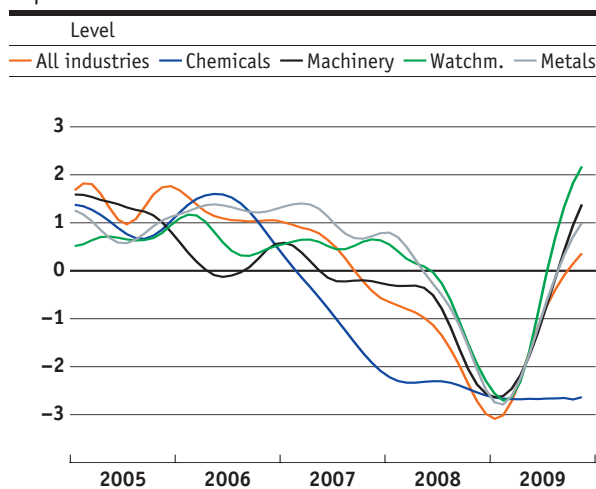


Chart 2.5
Goods exports, regional growth contributions

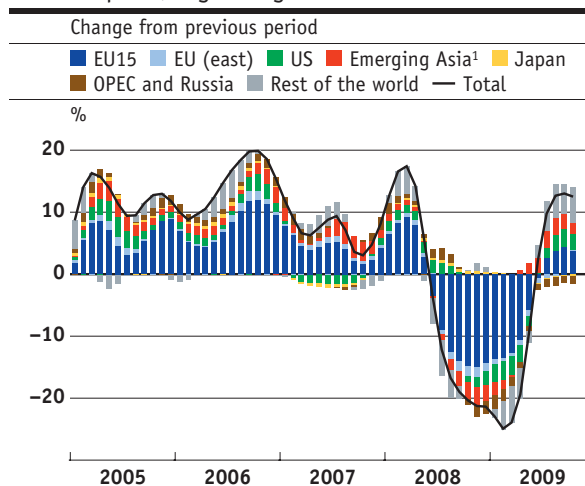


Chart 2.3:
Source: SECO

Chart 2.4:
Source: KOF Swiss Economic Institute

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

Residential construction buoyant

After a strong rise in the second quarter, construction investment once again rose in the third quarter (cf. chart 2.6). However, the growth rate was rather weaker than that of the previous quarter. Persistently very low mortgage interest rates and stable building costs are likely to have greatly supported residential construction in particular (cf. chart 2.7). Thanks to fiscal measures, activity in civil engineering also remained robust. By contrast, companies were once again very restrained in their investment in commercial property.

Rises in equipment investment

Equipment investment surged in the third quarter, following a period of decline that had lasted for several quarters (cf. chart 2.8). Net imports of capital goods also increased, due above all to a significant rise in the transport vehicles and telecommunications categories. By contrast, the growth in investment expenditure did little to boost domestic production of capital goods.

According to survey data collected by the KOF Swiss Economic Institute, capacity utilisation in manufacturing may not have fallen recently, but it still remains at a very low level. For this reason, the investment behaviour of companies over the next few months is likely to remain very cautious.

Robust growth in consumption

Private consumption rose by 2.3% in the third quarter as compared to the previous quarter. In a year-on-year comparison, growth amounts to 1.3% (cf. chart 2.9). Private consumption has therefore proved very crisis-resistant over the last few quarters. This is explained on the one hand by the healthy financial situation of Swiss households in an international comparison, and on the other by the supporting effect of immigration.

Last but not least, the third quarter result was also shaped by resurgent retail sales. On a seasonally adjusted basis these grew by 1.5% – following a 0.8% increase in the previous quarter. The area of food and beverages as well as health and personal hygiene products are recording particularly good results. By contrast, sales in the clothing and shoes area remained weak. New car registrations, an indicator of spending on consumer durables, recovered slightly. Domestic tourism demand remained strong in the summer months of July and August, resulting in a 5.3% increase in overnight hotel stays in the third quarter (seasonally adjusted).

Chart 2.6
Construction

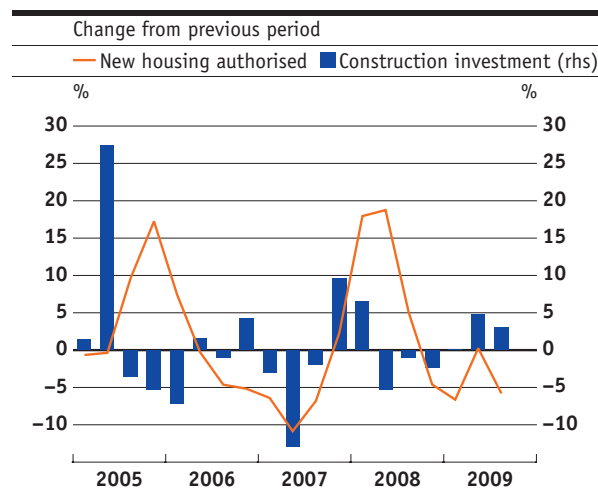


Chart 2.7
Mortgage rates and 3M Libor

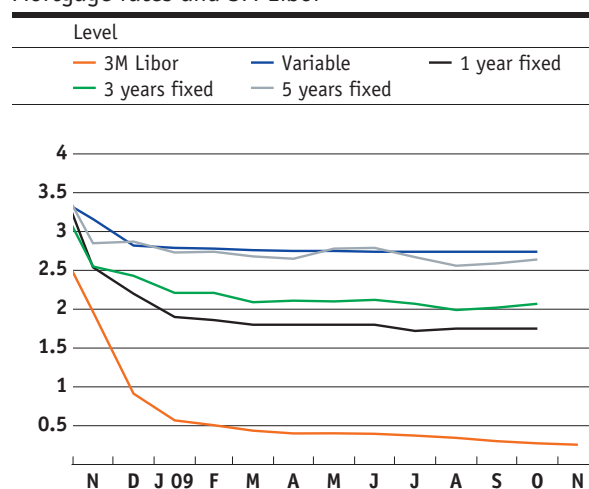


Chart 2.8
Equipment

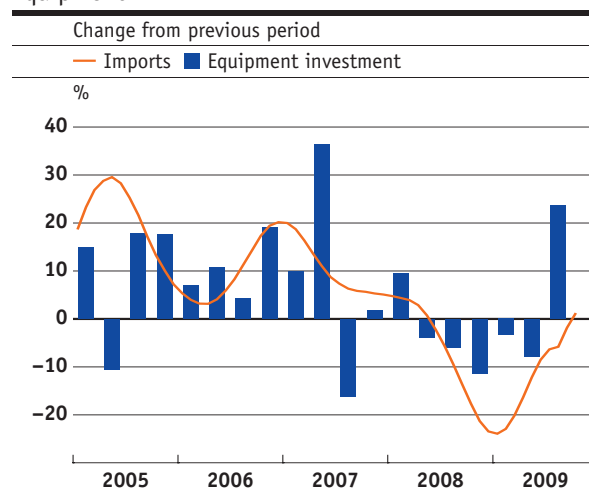


Chart 2.6:
Sources: SECO, SFSO

Chart 2.7:
Source: SNB

Chart 2.8:
Sources: FCA, SECO

Recovery in consumer confidence in the autumn

In the autumn, the survey of consumer confidence was carried out by SECO using a new revised format which is compatible with EU surveys. This survey showed that, although consumer confidence improved markedly between July and October, it remained below the historical average level. The improvement of the last few months is based above all on more optimistic expectations of future economic trends: consumers believe the worst of the crisis is now over. By contrast, concerns over job security remain acute, with expectations of an increase in the unemployment rate. The survey showed that the probability of consumers saving more in the next 12 months has increased slightly.

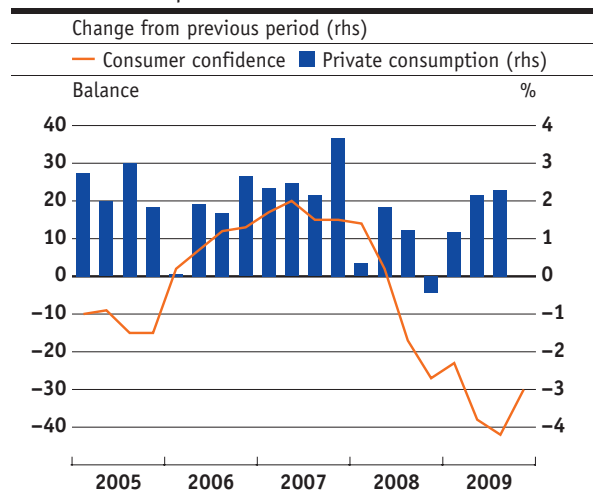
Strong rise in imports

Just like exports, imports were also up in the third quarter for the first time since the beginning of the crisis (cf. chart 2.10). The increase amounted to a high 11.1% (excluding valuables), with the rise relating solely to the import of goods. A high growth rate was seen above all in imports of commodities and semi-finished products, in keeping with the KOF Swiss Economic Institute survey that showed gradual improvement in the new orders situation in the metals, plastics and textile industries. In addition, there was a rise in the import of capital goods for the first time since the crisis broke, driven by higher deliveries of railway rolling stock. In the consumer goods segment, pharmaceutical imports continued to decline while imports in most other consumer goods categories increased. Despite the strong overall rise in the third quarter, goods imports are still far below their pre-crisis levels.

By contrast, imports of services showed a decline. In particular, spending on licences and patents was down sharply. However, spending on tourism services abroad remained high.

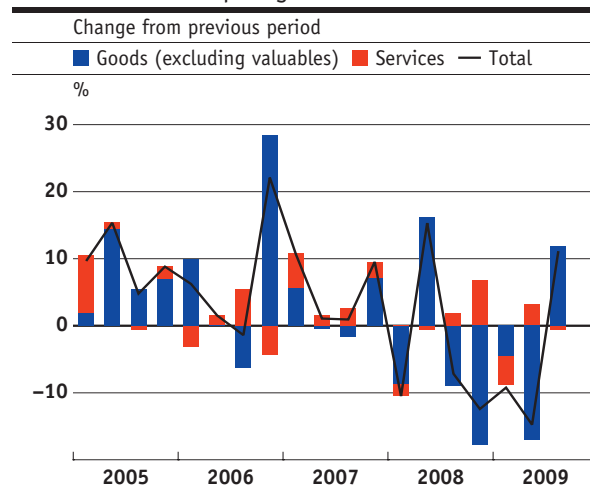
Given the background of consistently difficult parameters in manufacturing, the growth of imports is likely to slow somewhat after the third quarter. This assessment is borne out by the development of goods imports in October.

Chart 2.9
Private consumption



Source: SECO

Chart 2.10
Contributions to import growth



Source: SECO

2.3 Employment and labour market

Moderate fall in employment

The number of people in employment once again declined in the third quarter. Following a fall of 0.7% in the second quarter, the decline this time was 0.6% (cf. chart 2.11). This was primarily driven by a reduction in full-time positions. By contrast, there was actually a slight rise in part-time positions. Overall, full-time equivalent employment was down by 1.0%.

In an international comparison, the drop in employment in Switzerland registered since the beginning of the recession has been moderate. The most severely affected area is the manufacturing industry, where around 30,000 positions have been

lost within a year. In the services area, the only job cuts were recorded in the trade and repair categories and in the transport sector. The construction industry even saw employment increase.

Indicators of labour demand stabilise

The indicators of labour demand provided the first signals of stabilisation in the third quarter. The job vacancy index published by the Swiss Federal Statistical Office showed a halt in the downturn, while the employment outlook indicator even rose slightly. This development was widely supported across all sectors (cf. chart 2.12). However, the index is still at a low level, which suggests there will be further – if slower – declines in employment in the short term.

Chart 2.11
Employment

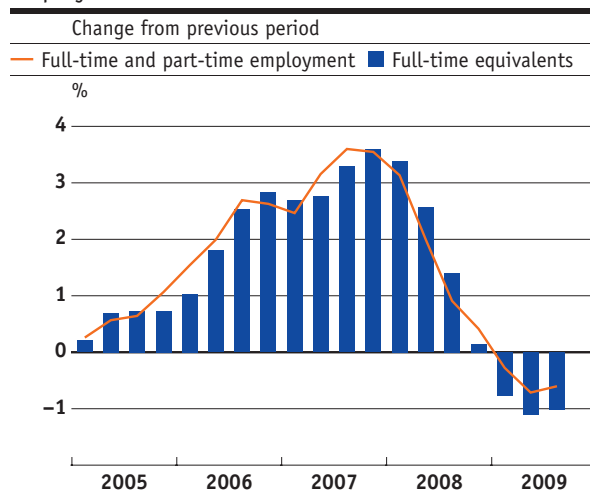


Chart 2.12
Employment outlook indicator

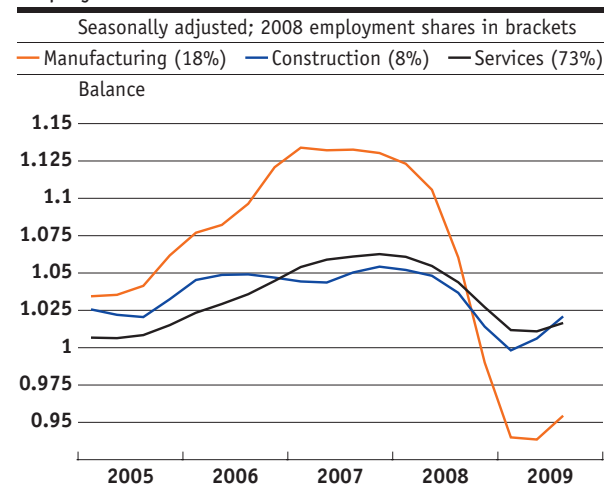


Chart 2.13
Unemployment and job seeker rates

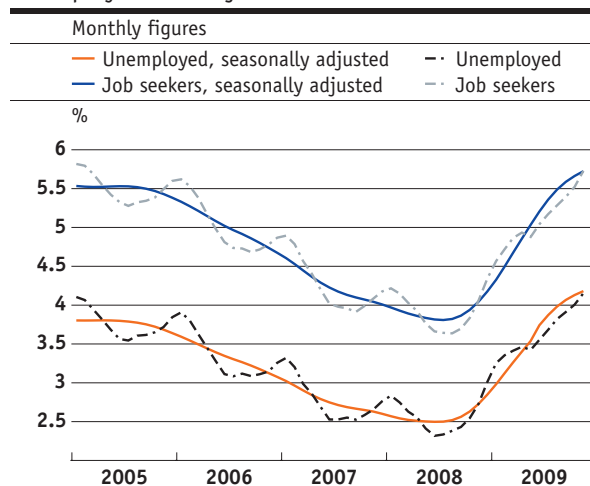


Chart 2.14
Short-time working

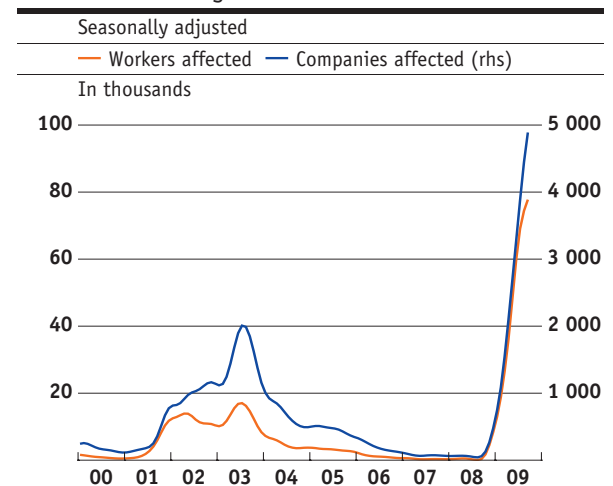


Chart 2.11:
Source: SFSO; seasonal adjustment: SNB

Chart 2.12:
Source: SFSO; seasonal adjustment: SNB

Chart 2.13:
Unemployed and job seekers registered with the regional employment offices, as a percentage of the labour force according to the 2000 census (labour force: 3,946,988 persons).
Source: SECO

Chart 2.14:
Source: SFSO; seasonal adjustment: SNB

Continued rise in unemployment and short-time working

Following strong growth in the numbers of unemployed until August, the increase continued over the next few months at a rather slower pace (cf. chart 2.13). On a seasonally adjusted basis, the unemployment rate reached 4.1% in November. The percentage of job seekers – which, in addition to the registered unemployed, also includes all people who are on training or employment programmes or have accepted an interim placement – also climbed. In November it amounted to 5.7%.

The official unemployment figures measure only one aspect of under-employment. Over the summer months there was a further rise in the number of people on short-time working. In September, this affected 4,900 companies and 77,700 employees on a seasonally adjusted basis (cf. chart 2.14).

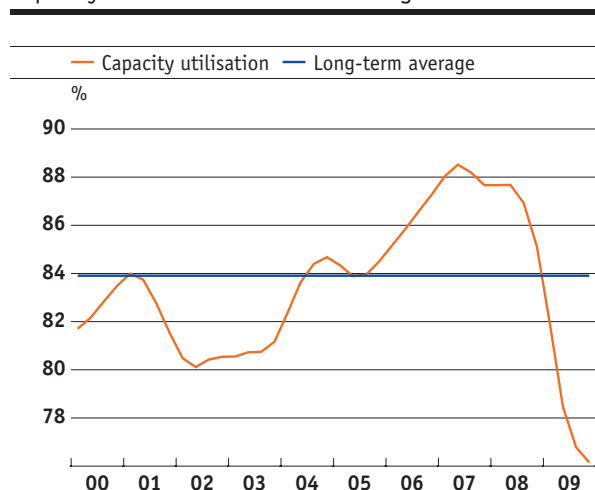
2.4 Capacity utilisation

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

Capacity utilisation varies considerably

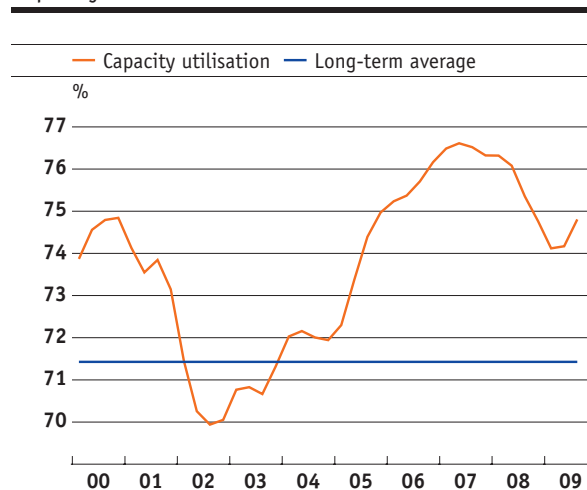
The recession has affected the production sectors in very different ways. The manufacturing industry has been worst hit. Survey data from the KOF Swiss Economic Institute show that capacity utilisation amounted to 76.5% in this sector in the third quarter, indicating stabilisation at a very low level (cf. chart 2.15). The utilisation rate of 72.1% in manufacture of machinery and equipment was once again particularly low: the average capacity rate in this segment is 86.1%. This has also been confirmed by a Swissmem survey indicating that companies in the machinery, electrical and metal industries continue to display significant under-utilisation of capacity. In the services sector, this under-utilisation has so far been much less marked

Chart 2.15
Capacity utilisation in manufacturing



Source: KOF Swiss Economic Institute

Chart 2.16
Capacity utilisation in construction



Source: KOF Swiss Economic Institute

than in manufacturing. Here the proportion of companies assessing their technical capacity levels as too high has now fallen back slightly. The situation could hardly be more different in the construction sector. Here capacity utilisation is clearly above-average and actually rose again in the third quarter (cf. chart 2.16).

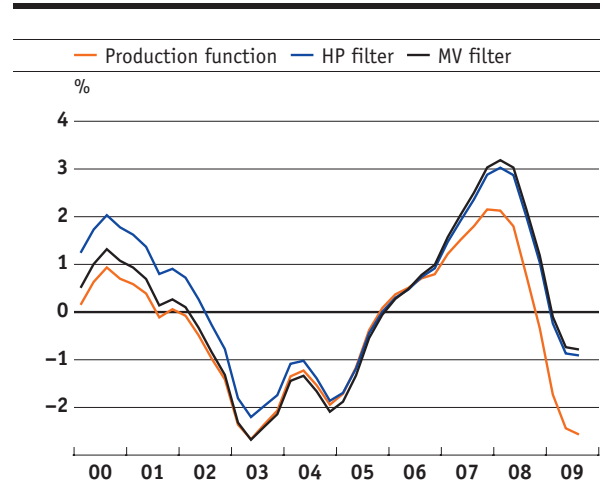
Output gap and potential growth

The output gap, which is calculated as the difference between real GDP and estimated potential output, serves as a measure of capacity utilisation in the economy and the associated inflationary pressure.

In the third quarter the output gap moved further into negative territory (cf. chart 2.17). The production function (PF) approach indicates a gap of -2.6% of potential output, versus -2.4% in the second quarter of 2009. With the Hodrick-Prescott (HP) filter, the output gap is -0.9%, as in the second quarter.

Potential growth has been declining over the last few quarters and is likely to continue weakening, even if at a slower pace. This is explained, first, by lower immigration and a lower participation rate, which has the effect of reducing the growth of job supply. Second, the slowdown in capital accumulation – caused in turn by reduced investment activity on the part of companies – results in a weakening of potential growth.

Chart 2.17
Output gap



Source: SNB

2.5 Prices and inflation expectations

Rising price index of aggregate supply

Producer and import prices fell slightly between July and November. This movement was driven primarily by lower prices for agricultural goods as well as consumption and investment goods. By contrast, the prices of energy and intermediate goods rose.

In a year-on-year comparison, prices may have been lower in all months, but a slowdown in the downward movement was evident (cf. chart 2.18). While the index slumped 6.1% in July on an annual basis, the decline was just 3.3% in November. The development of annual inflation rates primarily reflects the gradual disappearance of the statistical base effect that had stemmed mainly from the strong decline in commodity prices in the second half of 2008.

Consumer price inflation returns to year-earlier level

Annual inflation as measured by the national consumer price index (CPI) was 0.0% in November, as compared to August, when it was as low as -0.8%. This development is mainly a reflection of the waning base effect of oil price movements. The prices of crude oil products contained in the CPI were 27.9% below their previous year's level in August. In November, by contrast, the year-on-year decline amounted to just 8.8%. When crude oil products are excluded, annual inflation fell from 0.6% in August to 0.3% in November.

Decline in domestic inflation

Annualised inflation in domestic goods fell from 1.2% in August to 0.3% in November (cf. chart 2.20). Price falls for a number of foods, in particular, had a restraining effect. Inflation in services fell by 0.1 percentage points to 0.9%. The key factor here was a decline in rents by 0.5 percentage points. The overall rate of domestic inflation fell from 1.0% in August to 0.7% in November.

Chart 2.18
Prices of total supply

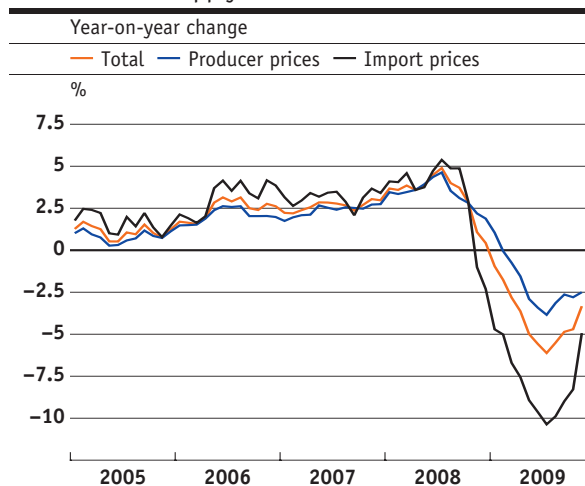


Chart 2.19
CPI: domestic and imported goods and services

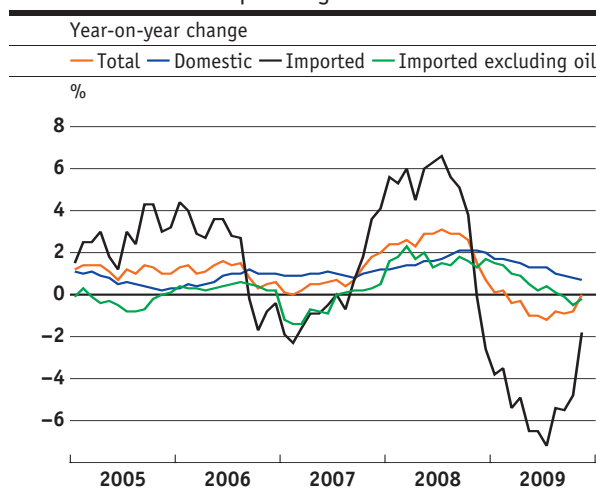


Chart 2.20
CPI: domestic goods and services

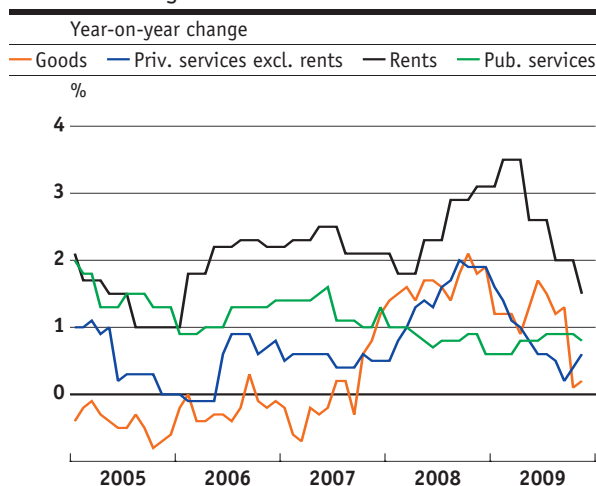


Chart 2.18:
Source: SFSO

Charts 2.19 and 2.20:
Sources: SFSO, SNB

Core rates of inflation fall slightly

Inflation, as measured by the CPI, is subject to numerous short-term fluctuations that may distort perceptions of the general price trend. To counter this, core inflation rates are calculated with the aim of capturing the longer-term price movements. The SNB computes two measures of core inflation (cf. chart 2.21): The trimmed means method (TM15) excludes from the consumer price index, for any given month, those 15% of goods prices with the highest and those 15% with the lowest annual rate of change. The broader-based

dynamic factor inflation (DFI), by contrast, extracts underlying inflation using a wide range of prices, data on the real economy, financial market indicators and monetary variables. The two core inflation rates calculated by the SFSO, in their turn, always exclude the same price-volatile goods from the basket of goods in each period (cf. chart 2.22). In the case of core inflation 1 (SFSO1), these are food, beverages, tobacco, seasonal products, energy and fuel; core inflation 2 (SFSO2) additionally factors out products with administered prices.

National consumer price index and components

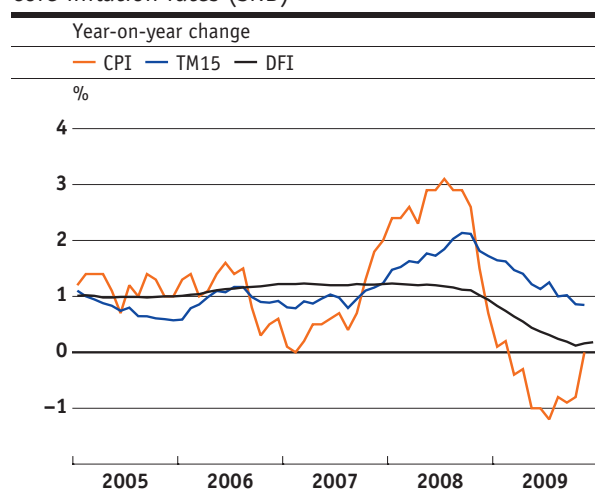
Table 2.2

Year-on-year change in percent

| | 2008 | | 2009 | | | 2009 | | | |
|----------------------------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|--|
| | | Q1 | Q2 | Q3 | August | September | October | November | |
| Overall CPI | 2.4 | -0.0 | -0.7 | -1.0 | -0.8 | -0.9 | -0.8 | 0.0 | |
| Domestic goods and services | 1.7 | 1.7 | 1.4 | 1.1 | 1.0 | 0.9 | 0.8 | 0.7 | |
| Goods | 1.7 | 1.2 | 1.3 | 1.3 | 1.2 | 1.3 | 0.1 | 0.2 | |
| Services | 1.7 | 1.8 | 1.4 | 1.0 | 1.0 | 0.8 | 0.9 | 0.9 | |
| Private services excluding rents | 1.4 | 1.3 | 0.8 | 0.5 | 0.5 | 0.2 | 0.4 | 0.6 | |
| Rents | 2.4 | 3.3 | 2.9 | 2.2 | 2.0 | 2.0 | 2.0 | 1.5 | |
| Public services | 0.9 | 0.6 | 0.8 | 0.9 | 0.9 | 0.9 | 0.9 | 0.8 | |
| Imported goods and services | 4.3 | -4.2 | -6.0 | -6.0 | -5.4 | -5.5 | -4.8 | -1.8 | |
| Excluding oil products | 1.7 | 1.3 | 0.6 | 0.1 | 0.1 | -0.1 | -0.5 | -0.2 | |
| Oil products | 17.8 | -27.2 | -32.1 | -30.5 | -27.9 | -27.7 | -23.3 | -8.8 | |

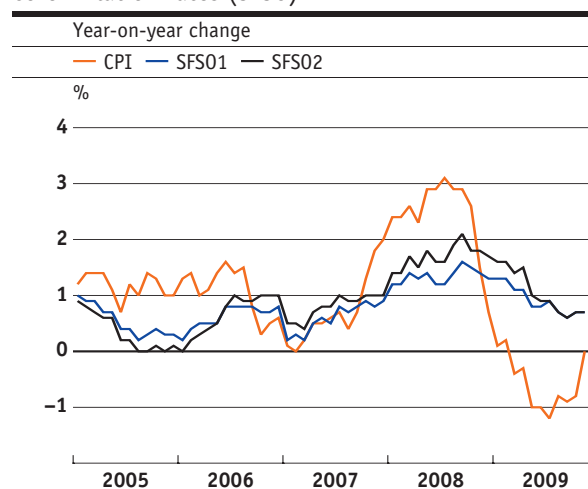
Sources: BFS, SNB

Chart 2.21
Core inflation rates (SNB)



Sources: SFSO, SNB

Chart 2.22
Core inflation rates (SFSO)



Source: SFSO

The different core rates of inflation have fallen slightly since August, and in November were between 0.7% and 1.0%. An exception to this is DFI, which was just 0.1%.

More balanced inflation expectations

Inflation expectations are appraised on the basis of various surveys involving different protagonists in the economy. The quarterly survey of the KOF Swiss Economic Institute relies on a survey of senior employees from companies active in Switzerland, as does the PMI. Accordingly, the results show how companies anticipate developments in purchase and sale prices over the coming three months. Both in wholesaling and in manufacturing, the proportion of companies expecting either rising or falling prices was broadly balanced (cf. charts 2.23 and 2.24). A similar picture is provided by the 'purchasing prices' component of the PMI, which indicates stable prices over the next few months.

The quarterly SECO survey of Swiss households measures the expected price trend over the coming 12 months from the viewpoint of consumers. The result of this survey in November clearly pointed to somewhat higher inflation expectations on the part of households as compared to the last survey conducted. This was primarily due to a decline in the proportion of survey participants expecting falling prices over the next 12 months. There was also a small increase in survey participants anticipating moderate price rises over the same period (cf. chart 2.25). The number of survey participants expecting significant price increases remained low, however. At the consumer price level, therefore, inflation expectations for the coming year are very moderate.

Chart 2.23
Expected purchase prices

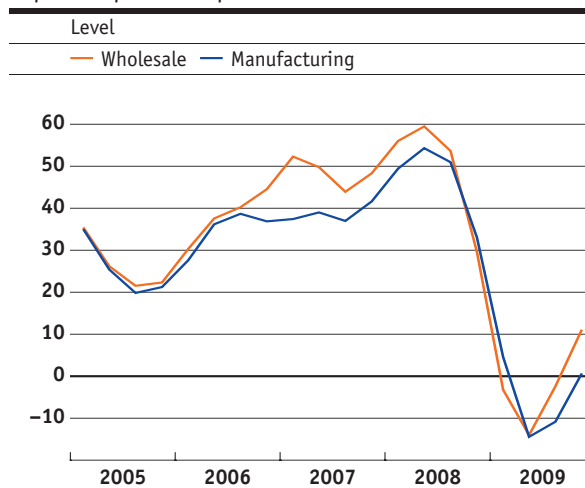


Chart 2.24
Expected sale prices

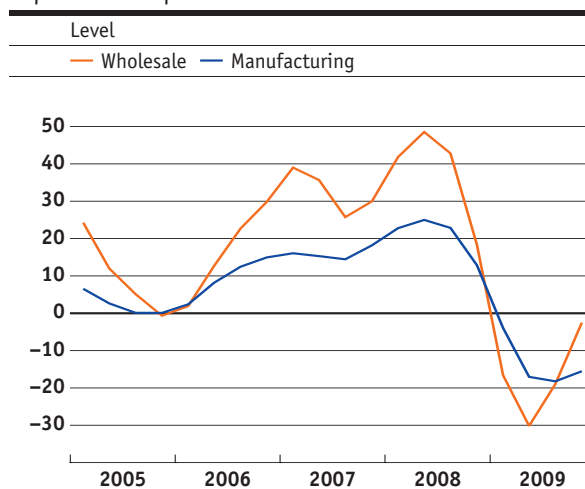
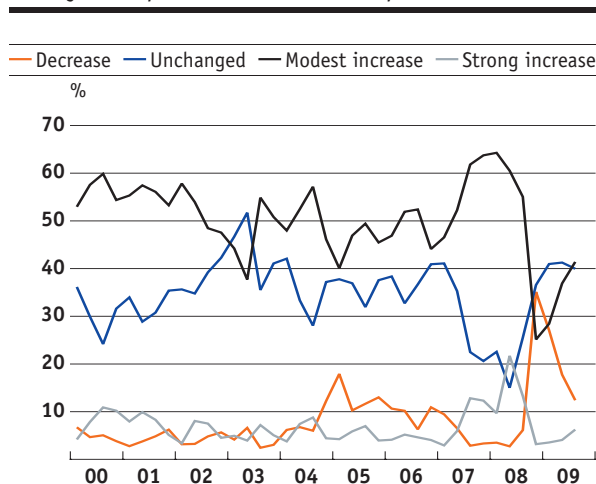


Chart 2.25
Survey on expected movements in prices



Charts 2.23 and 2.24:
Source: KOF Swiss Economic Institute

Chart 2.25:
Sources: SECO, SNB

2.6 Outlook for the real economy

Moderate recovery abroad ...

The SNB is anticipating a continuation of the global economic recovery. The strength of this recovery is likely to remain limited due to a combination of factors, however. These include restricted credit lending on the part of banks, low capacity utilisation, a lack of stimuli from the construction industry, and a higher household savings rate. As a result, a dip in growth is to be expected following the expiry of fiscal measures during the course of 2010.

... and in Switzerland

Given this backdrop, the recovery in Switzerland is also likely to prove very modest. For 2010, the SNB is predicting GDP growth of around 0.5–1.0%, following a decline of roughly 1.5% in 2009. Growth should be driven primarily by the recovery in exports. The negative aggregate output gap will probably close only very slowly. As a result, investment in equipment is unlikely to provide any significant growth stimuli. Growth in private consumption will probably be held in check by the deteriorating labour market situation, weaker real wage development, and the increase in mandatory deductions. Activity in the construction industry looks set to stabilise at a high level.

3 Monetary developments

3.1 Interest rates

In its monetary policy assessment in September, the SNB left the target range for the three-month Libor unchanged at 0–0.75%, aiming for a three-month Libor of 0.25%. The SNB is therefore continuing to pursue an expansionary monetary policy. In addition, it reiterated its intention of acting decisively to prevent an appreciation of the Swiss franc against the euro. If necessary, it announced, it would also undertake further purchases of Swiss franc bonds to help reduce risk premia on the long-term bonds of private borrowers.

Between mid-September and mid-December the three-month Libor fell by 5 basis points to the desired level of 0.25%, driven in particular by a decline in risk premia. For example, the spread between the three-month Libor and the corresponding overnight index swap (OIS) narrowed to 0.22 percentage points. The Libor/OIS interest rate spread may be above its historical average of 0.06 percentage points, but it is significantly below the record level of 1.74 percentage points reached after the collapse of Lehman Brothers (cf. chart 3.2).

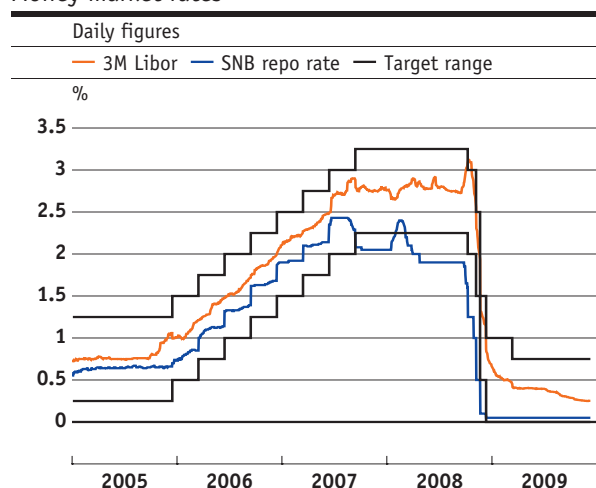
In August 2009, the SNB and SIX Swiss Exchange Ltd launched a new series of Swiss franc reference interest rates. Based on the secured money market, these new Swiss Reference Rates will allow

the SNB to monitor developments in the Swiss money market more easily, identify any increase in activity in the secured interbank market and optimise management of the interest rate level. Since the middle of September, the overnight rate of this reference rate series, the Swiss Average Overnight Rate (SARON), has remained virtually constant at 3 basis points. The one-week market rate, SAR1W, which typically fluctuates around the one-week repo rate of the SNB, has also been largely constant at 5 basis points. Overall, activity in the secured interbank market remains subdued, mainly as a result of the generous supply of liquidity from the SNB.

Central banks have continued to collaborate closely. On 24 September 2009, the SNB announced that it would continue to offer US dollar liquidity via repo transactions with terms of seven days until the end of 2010, in coordination with the European Central Bank (ECB) and the Bank of England. By contrast, following a further improvement in conditions on the money markets, the SNB discontinued its 84-day dollar repo operations after the auction of 6 October 2009.

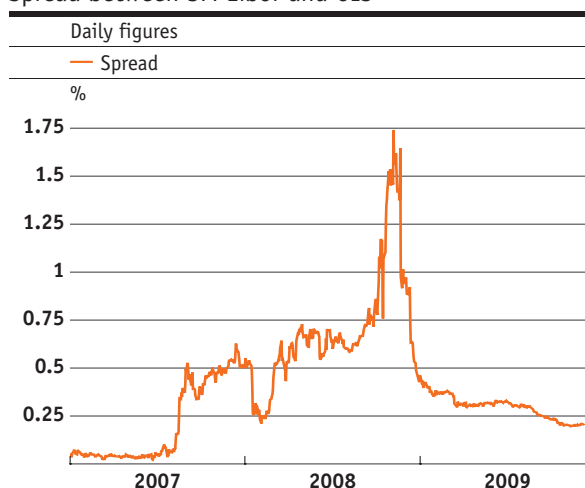
Also on 24 September 2009, the SNB, ECB, National Bank of Poland and Magyar Nemzeti Bank announced jointly that they would conduct further EUR/CHF currency swaps with terms of seven days until the end of January 2010, in order to ensure a supply of Swiss francs against euros. The aim of this measure is to support a further improvement in the situation on the short-term Swiss franc money market.

Chart 3.1
Money market rates



Sources: Reuters, SNB

Chart 3.2
Spread between 3M Libor and OIS



Sources: Bloomberg, Reuters

The SNB also issued SNB Bills in Swiss francs on a weekly basis, to absorb Swiss franc liquidity in a targeted manner. In the last few months, only SNB Bills with terms of seven days have been placed. On average, CHF 9 billion was absorbed through SNB Bill auctions in September and October 2009 (with bids amounting to CHF 13.5 billion). The volume-weighted average yield per auction fluctuated between 0.005% and 0.02%.

Finally, the SNB continued to issue its own debt securities in US dollars (SNB USD Bills). These securities were issued at fortnightly intervals and have terms of 28, 84 and 168 days. In mid-December, the outstanding volume amounted to around USD 19 billion. The SNB USD Bills' premium vis-à-vis the yield on the corresponding US Treasury bonds fell sharply in the third quarter. Since the monetary policy assessment in September it has risen marginally.

Slight flattening of the yield curve

While short-term interest rates in Switzerland barely changed, long-term rates fell slightly between mid-September and mid-December, resulting in a slight flattening of the yield curve (cf. chart 3.3). The yield on 10-year Swiss Confederation bonds varied over the reporting period, but declined overall by 21 basis points between mid-September and mid-December, ending up at 2.03%.

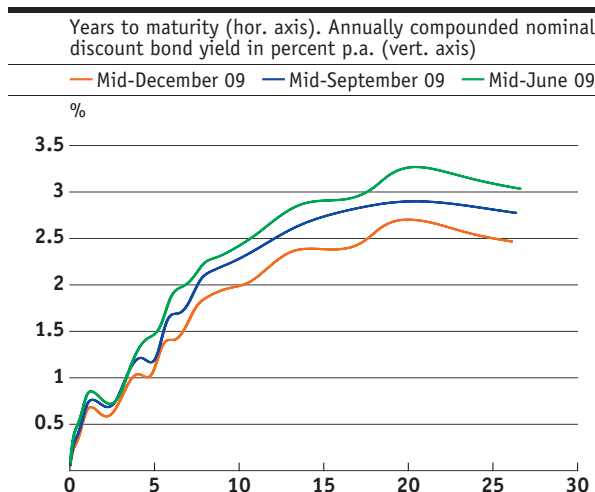
Almost no change in short-term interest rate spreads vis-à-vis the euro and dollar

At the international level too, short-term interest rates barely moved, with interest rate spreads vis-à-vis the euro and dollar remaining virtually unchanged. Long-term government bond yields showed a mixed picture, however. While the yield on both 10-year German government bonds and their Swiss counterparts declined by roughly the same amount, the fall in the yield on 10-year US Treasury bonds was less pronounced. This left the yield differential between German and Swiss bonds virtually unchanged, while that between US and Swiss bonds widened.

Corporate bonds virtually unchanged across all rating categories

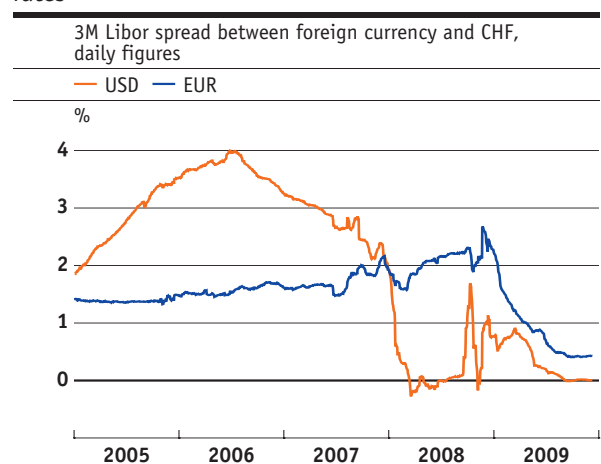
Over the previous few quarters, corporate bonds in all rating categories had benefited from improvements in credit conditions and corporate results. The SNB's purchases of Swiss franc bonds issued by private borrowers probably also contributed to this development. Since the last monetary policy assessment in September, however, the yields on corporate bonds have fluctuated only minimally.

Chart 3.3
Term structure of Swiss Confederation bonds



Source: SNB

Chart 3.4
Spreads between international short-term interest rates



Sources: Reuters, SNB

Further decline in real interest rates

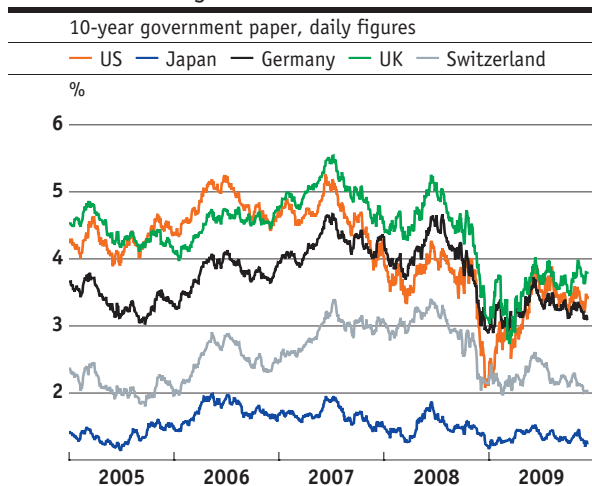
The real interest rate is a key determinant in the saving and investment behaviour of companies and households, and is thus extremely important for future business cycle developments. Chart 3.6 shows movements in the three-year real interest rate. This rate is defined as the difference between the three-year nominal interest rate and the expected rise in consumer prices over the same period. These inflation expectations are an average of the unconditional forecasts obtained from various SNB models. The real interest rate measured in this way amounted to 0.1% in the fourth quarter of 2009, which was slightly down on the previous quarter. By historical standards, real interest rates for medium-term maturities are very low, which is helping to stimulate economic activity.

3.2 Exchange rates

Slight depreciation of the dollar

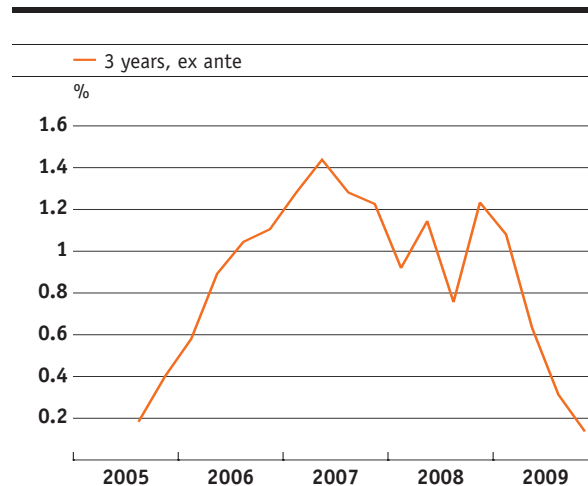
The fluctuations on the currency markets during the reporting period were relatively small compared to the three quarters that followed the collapse of Lehman Brothers, when double-digit percentage fluctuations were seen within individual quarters. Since mid-September 2009, the US dollar has depreciated by 1.1% against the euro. The USD/EUR exchange rate was 1.48 in mid-December, similar to the level in August 2008 just before the Lehman collapse, and well below the annual high of 1.60 reached in July 2008.

Chart 3.5
International long-term interest rates



Sources: SNB, Thomson Financial Datastream

Chart 3.6
Estimated real interest rate



Source: SNB

Since mid-September 2009, the Swiss franc has appreciated by 1.4% against the US dollar and by 0.3% against the euro. The franc began strengthening against the dollar back in March 2009, but has remained largely unchanged against the euro over the same time span. This development must also be viewed against the backdrop of the unconventional measures taken by the SNB, which were partly aimed at preventing the franc from appreciating further against the euro.

The trade-weighted nominal external value of the Swiss franc has increased further since mid-September. The rise since the beginning of the crisis in August 2007 has been almost 11%. Movements in nominal exchange rates tend to balance out inflation differentials between different economic areas, with the result that real foreign exchange relations remain stable. For example, the trade-weighted real external value of the Swiss franc had remained fairly stable since the middle of the 1990s. However, since August 2007, it has experienced a major increase (10%).

Monetary conditions virtually unchanged

The Monetary Conditions Index (MCI) combines the three-month Libor and the trade-weighted nominal value of the Swiss franc. It provides a measure of the monetary conditions that businesses in Switzerland have to contend with. The MCI is reset to zero immediately after each monetary policy assessment. An increase to positive values (decline to negative values) thus signifies a tightening (loosening) of monetary conditions (cf. box 'The Monetary Conditions Index (MCI)', *Quarterly Bulletin* Q1/2004, p. 27).

With a 3:1 ratio of changes in the three-month Libor to changes in the export-weighted nominal external value of the Swiss franc, monetary conditions in Switzerland in mid-December were virtually unchanged from the September assessment (cf. chart 3.9). A slight tightening of monetary conditions was observed periodically; this was largely due to a small appreciation of the Swiss franc as a result of dollar weakness.

Chart 3.7
Exchange rates

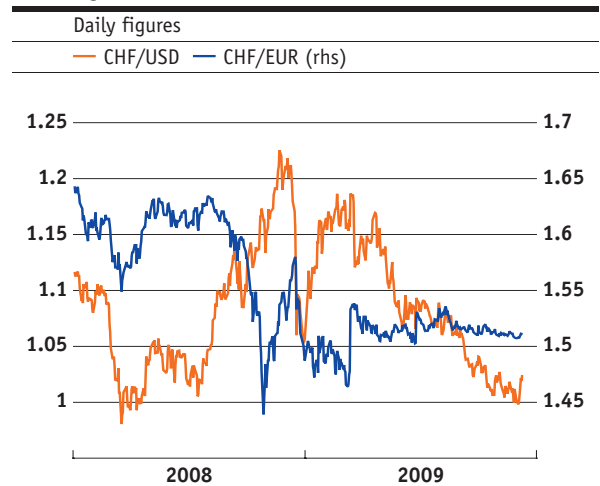


Chart 3.8
Trade-weighted external value of Swiss franc

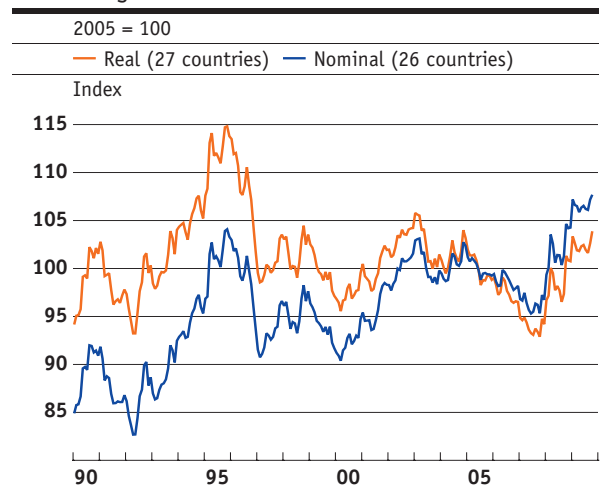
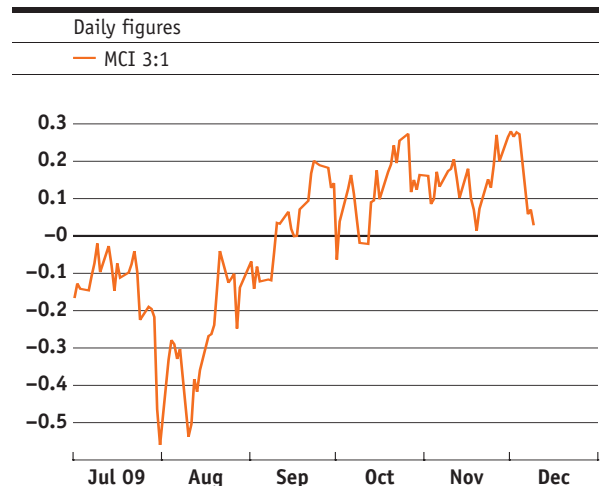


Chart 3.9
MCI nominal



Charts 3.7 and 3.9:
Source: SNB

Chart 3.8:
Source: Bank for International Settlements

3.3 Equity, commodity and real estate prices

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

Equity markets move sideways

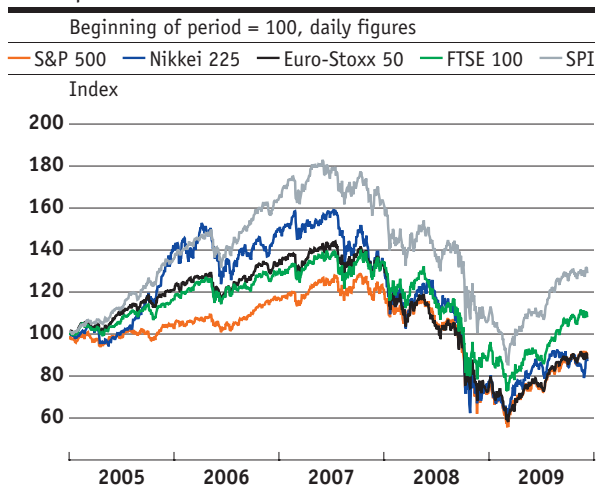
Prices on the main global equity markets showed few or no gains during the reporting period. The European Euro-STOXX 50 and the Swiss Performance Index (SPI) tended to move sideways between mid-September and mid-December, while the US S&P 500 advanced by 2.2% over the same

period. Uncertainties regarding the economic outlook, weak consumption and fears over unemployment are likely to have weighed on equity prices. Equities were also negatively affected by the uncertainty surrounding events in Dubai.

An analysis of the SPI components on the basis of company size reveals clear differences. For example, large caps posted gains while small caps declined (by 4.8%). Financial services providers in particular experienced a substantial decrease (of 13%), while the shares of construction companies rose by 6%.

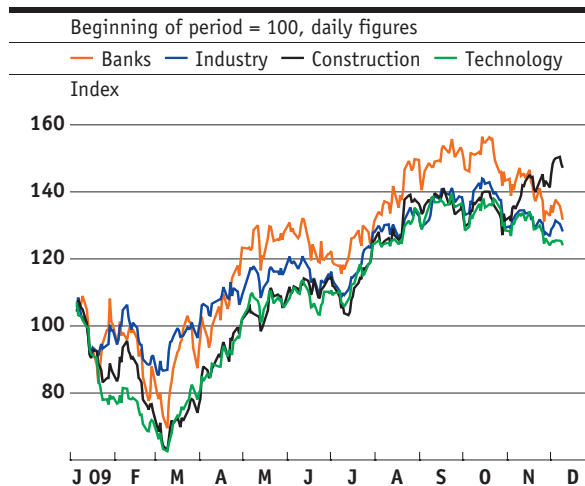
The equity market movements observed recently suggest that market prices are moving closer to fundamentals. The comprehensive revaluation of equities in the first half of 2009 was driven by the publication of better-than-expected company results as well as surprisingly positive economic indicators. Share prices benefited from positive adjustments to both actual and expected earnings and dividends. For example, the average price/earnings (P/E) ratio of Swiss shares had risen from 13 at the start of the current year to 17 by the end of November. The historical average (since 1980) is 15.5.

Chart 3.10
Share prices



Sources: Bloomberg, Thomson Financial Datastream

Chart 3.11
Selected SPI sectors



Source: Thomson Financial Datastream

Volatility in the equity markets represents a measure of market uncertainty. Chart 3.12 shows the expected volatility for the next 30 days based on the Chicago Board Options Exchange Volatility Index (VIX) and the actual volatility measured by the annualised standard deviation in monthly returns on the S&P 500. The level of equity market uncertainty as reflected in the VIX goes hand in hand with share price movements. The VIX declined until the end of the third quarter of 2009 and has since remained slightly above 20.

Higher commodity prices

Unlike equity prices, commodity prices have risen significantly since the monetary policy assessment of September. Energy prices in particular have surged. The oil price in dollars rose by 8% and in mid-December stood at USD 76 per barrel. Industrial goods (11%) and cereals (13%) also appreciated strongly. The gold price even soared to new record highs, and at mid-December came to USD 1,150 per ounce.

Mixed price trends for real estate

Real estate prices in Switzerland displayed mixed trends in the third quarter of 2009. Prices for owner-occupied apartments and single-family homes rose by 6.8% and 4% respectively, but Switzerland's housing market is for the most part made up of rental apartments, and the increase in rents was rather more modest (3.2%). However, rental costs for new apartments, which are a better reflection of market forces, fell by 4% in the third quarter, the third successive quarterly decline. Rents for commercial property likewise recorded their third successive decline, falling by 8.2%. By contrast, office rents rose sharply, by 6%.

Chart 3.12
Volatility of equity returns

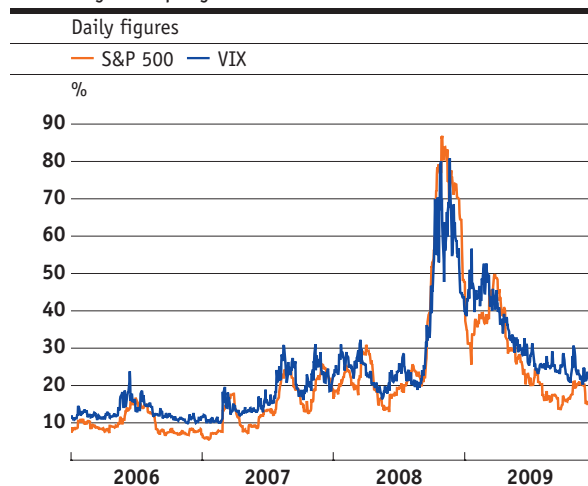


Chart 3.13
Nominal real estate prices and rents

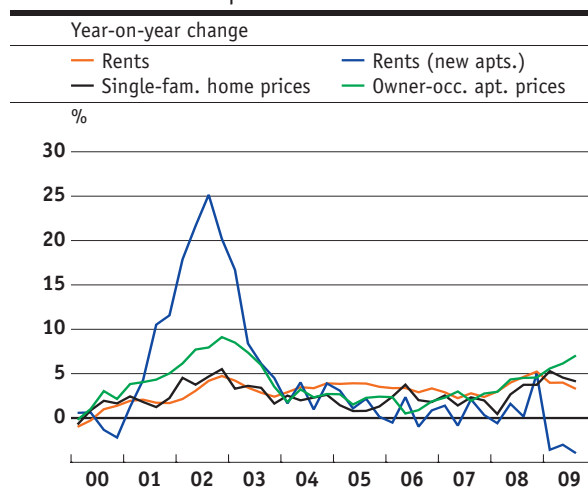


Chart 3.14
Nominal commercial and office rents

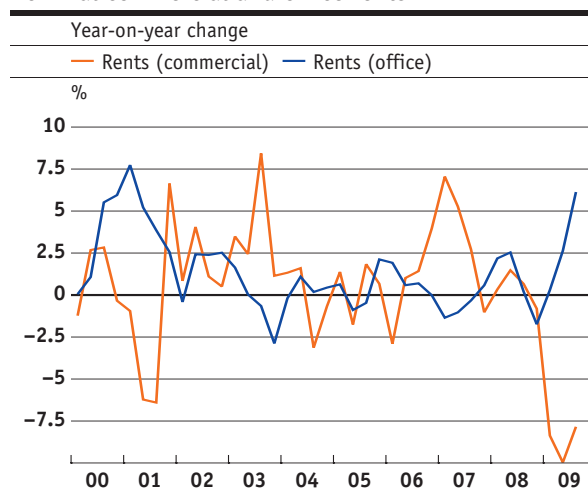


Chart 3.12:
Sources: SNB, Thomson Financial Datastream

Charts 3.13 and 3.14:
Source: Wüest & Partner

3.4 Monetary aggregates

Fall in demand for base money

Due to the ongoing uncertainty, both the banks and the economy generally continued to demand generous amounts of liquidity, which the SNB in turn continued to supply. The monetary base, consisting of banks' sight deposits at the SNB plus banknotes in circulation, is a measure of the liquidity in the interbank market. This measure of money supply has increased significantly since September 2008. However, it has been declining since peaking in April.

Before the crisis, the ratio of banks' sight deposits at the SNB to public deposits (sight, time and savings deposits) was very stable, as is clear from the path of the M3 money multiplier (cf. chart 3.15). The M3 money multiplier is a quotient of the M3 aggregate and the monetary base. This expresses the fact that, on the basis of the liquid funds available to them, banks are able to multiply the amount of money available to the general public through lending. Since the outbreak of the financial crisis, banks have scaled down their inter-bank lending activity and are holding greater supplies of liquidity for precautionary reasons. This is reflected in a sharp decline in the money multiplier.

Sooner or later, the multiplier will move back towards its normal value. Essentially, this can happen in one of two ways. The first, which is undesirable from the monetary policy perspective, would see the multiplier rise while the monetary base remains unchanged. The banks' high liquidity would thus be made available to the rest of the

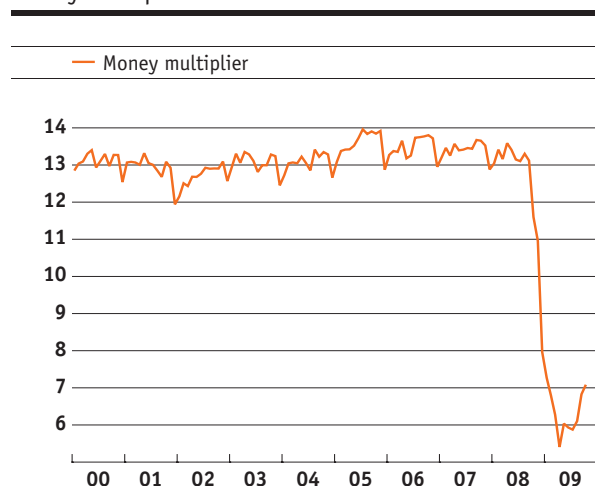
economy via lending. The associated rise in M3 could result in an inflationary effect. Alternatively, if the multiplier rises because the SNB is absorbing liquidity from the interbank market, thus reducing the banks' sight deposits, M3 growth and inflation will remain under control. Usually, however, the monetary base and M3 move in tandem. So what matters is which of the two variables undergoes the greater change. Against this background, the recent rise of the multiplier is not worrying from a monetary policy perspective, as it is caused primarily by a decline in the monetary base rather than by increased money creation on the part of banks.

Expansion of broad monetary aggregates

The broader monetary aggregates (M1, M2 and M3) did not exceed their trend levels until quite recently (cf. chart 3.16), but are now significantly above these levels.

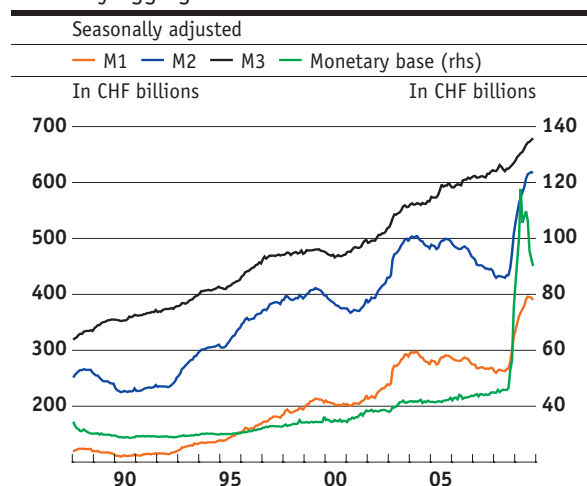
After strong growth in 2003–2005, both M1 (notes and coins in circulation, sight deposits and transaction accounts) and M2 (M1 plus savings deposits) declined until summer 2007 as a result of rising interest rates. From autumn 2007 onwards, both of these monetary aggregates stabilised in line with the flatter path of short-term interest rates. However, following the most recent interest rate reductions, M1 and M2 began to grow strongly again. In November, M1 and M3 were both 30.5% above the previous year's level. M3 (M2 plus time deposits), which is typically less volatile than the other aggregates, expanded by 7.6% (cf. table 3.1).

Chart 3.15
Money multiplier M3



Source: SNB

Chart 3.16
Monetary aggregates



Source: SNB

| | 2007 | 2008 | 2008 | | 2009 | | | 2009 | | |
|----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | | Q3 | Q4 | Q1 | Q2 | Q3 | September | October | November |
| Monetary base² | 44.2 | 49.6 | 45.3 | 61.7 | 92.9 | 110.2 | 103.0 | 94.3 | 91.9 | 89.4 |
| <i>Change³</i> | 2.5 | 12.1 | 4.4 | 37.8 | 102.9 | 142.6 | 127.4 | 107.5 | 76.6 | 60.6 |
| M1² | 268.9 | 273.1 | 258.4 | 302.2 | 355.2 | 375.4 | 383.0 | 385.1 | 388.0 | 393.0 |
| <i>Change³</i> | -4.8 | 1.5 | -1.1 | 12.5 | 33.3 | 41.5 | 48.2 | 47.7 | 40.7 | 30.2 |
| M2² | 450.5 | 443.1 | 423.8 | 475.8 | 554.9 | 586.4 | 599.5 | 603.2 | 608.9 | 616.5 |
| <i>Change³</i> | -6.4 | -1.6 | -3.5 | 7.3 | 26.5 | 35.0 | 41.5 | 41.9 | 38.1 | 30.2 |
| M3² | 612.8 | 626.0 | 618.1 | 631.3 | 648.3 | 657.9 | 664.7 | 665.6 | 672.8 | 678.9 |
| <i>Change³</i> | 2.1 | 2.2 | 1.8 | 2.0 | 3.7 | 4.5 | 7.5 | 7.7 | 7.6 | 7.6 |

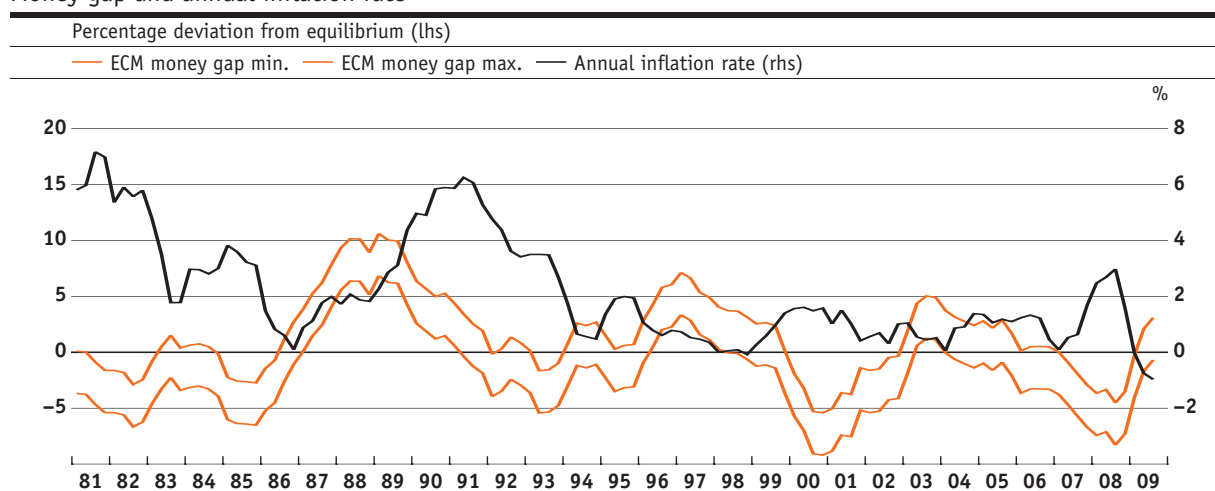
1 1995 definition

2 Level in CHF billions

3 Year-on-year change in percent

Source: SNB

Chart 3.17
Money gap and annual inflation rate



Source: SNB

Higher inflation rates in the medium term

One way of assessing potential inflationary or deflationary risks resulting from an excessive or insufficient supply of liquidity to the economy is to calculate the money gap. This corresponds to the positive (monetary overhang) or negative (money gap) percentage deviation of the 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* Q1/2005, p. 33). Chart 3.17 shows the calculated money gap in the form of a range that spans one standard deviation, thereby taking account of statistical uncertainty. According to this measure, the money gap closed in the second quarter of 2009. The zero line may still have been within the range during the third quarter, but the general picture is one of monetary overhang, indicating higher medium-term inflation.

3.5 Credit

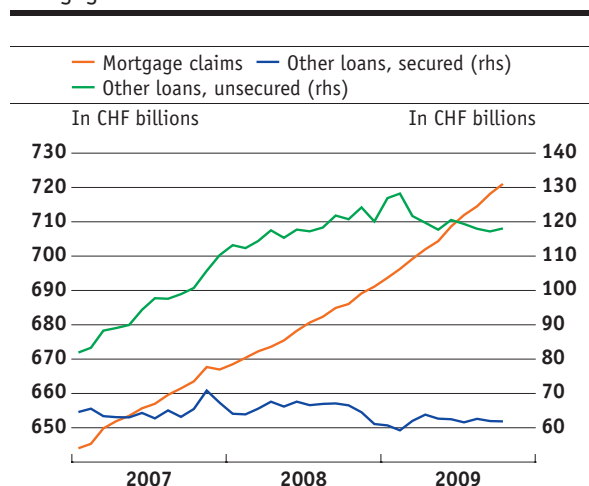
Credit growth slowed to 3.0% in the third quarter of 2009, down from 3.2% in the second quarter (cf. table 3.2). The slight slowdown is due in particular to the change in other loans, which decreased for a second successive quarter on the back of economic developments. The decline is mainly due to loans granted in foreign currencies, with other loans in Swiss francs remaining virtually stable. By contrast, mortgage loans, which account for four-fifths of all bank lending, increased strongly (4.7%), a development attributable to the low interest rate environment.

Loans to households posted year-on-year growth of more than CHF 20 billion (cf. chart 3.19), equivalent to a growth rate of 3.7%. Household mortgages in particular have continued to acquire growth momentum since the third quarter of 2008, and grew by 5.0% in the third quarter of 2009. By contrast, other household loans declined by 13%. This decline reflects the pattern of consumption. However, other loans represent less than 6% of all household loans.

Corporate lending grew by more than CHF 12 billion over the same period. The annual rate of growth slowed further in the third quarter of 2009 to 4.8%, due to a decline in the growth rate of other loans. Other loans account for 43% of all corporate loans. By contrast, mortgage claims in the third quarter grew at their strongest rate since 1997.

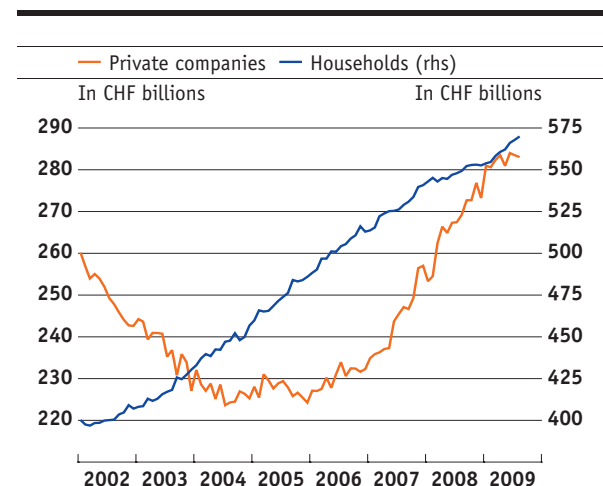
Although lending growth has slowed over the last few quarters, the data so far do not suggest a credit crunch. Indeed, credit volumes to households and companies are at all-time highs.

Chart 3.18
Mortgage claims and other loans



Source: SNB

Chart 3.19
Bank loans



Source: SNB

Bank loans

Table 3.2

Year-on-year change in percent

| | 2007 | 2008 | 2008 | | 2009 | | | 2009 | | |
|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | | | Q3 | Q4 | Q1 | Q2 | Q3 | August | September | October |
| Total¹ | 5.8 | 5.7 | 5.8 | 4.2 | 4.1 | 3.2 | 3.0 | 3.2 | 2.7 | 3.2 |
| Mortgage claims ¹ | 4.0 | 3.5 | 3.5 | 3.4 | 3.9 | 4.3 | 4.7 | 4.7 | 4.8 | 5.1 |
| of which households ² | 4.3 | 3.3 | 3.4 | 3.2 | 3.7 | 4.6 | 5.0 | 5.0 | 5.1 | 5.4 |
| of which private companies ² | 2.2 | 3.8 | 3.4 | 3.6 | 5.2 | 5.8 | 6.2 | 6.2 | 6.4 | 6.5 |
| Other loans ¹ | 13.4 | 14.8 | 15.0 | 7.1 | 4.7 | -0.9 | -3.1 | -2.5 | -5.2 | -3.9 |
| of which secured ¹ | 8.2 | 1.2 | 5.1 | -5.6 | -6.0 | -6.2 | -7.2 | -6.5 | -7.7 | -7.0 |
| of which unsecured ¹ | 17.2 | 24.2 | 21.4 | 15.3 | 10.9 | 2.1 | -0.8 | -0.3 | -3.8 | -2.2 |
| of which in CHF ¹ | 5.7 | 20.3 | 19.3 | 16.3 | 6.2 | 1.2 | 0.4 | 1.0 | -1.0 | -0.3 |
| of which in other currencies ¹ | 44.3 | -1.8 | 2.3 | -18.5 | -3.2 | -9.7 | -16.5 | -15.6 | -21.0 | -18.5 |

1 Monthly balance sheets

2 Credit volume statistics

Source: SNB

4 SNB inflation forecast

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

4.1 Assumptions for global economic developments

In addition to domestic factors, exogenous effects also have a major influence on Swiss inflation rates. Various models used in drawing up the SNB's inflation forecast take this into account by

embedding the expected outlook for Switzerland in an international economic setting. The assumptions with regard to the international economic scenario reflect what the SNB considers to be the most likely development in the global economy over the next three years. Table 4.1 shows the major assumptions for this scenario, as compared to those for the September forecast.

Recovery expected in the medium term

While, for the US, the growth assumptions for the current quarter are unchanged compared to the previous quarter, the forecast for Europe has been revised downwards slightly. For the current year, a 2.4% fall in GDP is assumed for the US and, for Europe, a 4.0% drop. For 2010, positive annual rates of growth are expected; however, at 1.1%, anticipated growth for Europe is modest compared to the US. In the longer term, growth is expected to approach the potential figure of approximately 3% (US) and 2% (EU).

For oil, a price of USD 77 per barrel is assumed for the next few quarters, edging down to USD 75 per barrel thereafter. Although consumer prices will continue to stagnate worldwide in 2009, inflation will pick up slightly in 2010 and 2011, to approximately 1%. The USD/EUR exchange rate for the forecast period is set at 1.47.

Inflation forecasting as part of the monetary policy concept

The SNB has a statutory mandate to ensure price stability while taking due account of economic developments.

The SNB has specified the way in which it exercises this mandate in a three-part monetary policy strategy. First, it regards prices as stable when the national consumer price index (CPI) rises by less than 2% per annum. This allows it to take account of the fact that the CPI slightly overstates actual inflation. At the same time, it allows inflation to fluctuate somewhat with the economic cycle. Second, the SNB summarises its assessment

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

Assumptions for inflation forecasts

Table 4.1

| December 2009 | 2009 | 2010 | 2011 |
|--------------------------------------|-------------|-------------------|------------------|
| GDP US ¹ | -2.4 | 2.4 | 2.5 |
| GDP EU15 ¹ | -4.0 | 1.1 | 2.1 |
| | | Short term | Long term |
| Exchange rate USD/EUR ² | | 1.47 | 1.47 |
| Oil price in USD/barrel ² | | 77 | 75 |
| Oil price in CHF/barrel ³ | | 79 | 77 |

| September 2009 | 2009 | 2010 | 2011 |
|--------------------------------------|-------------|-------------------|------------------|
| GDP US ¹ | -2.4 | 2.4 | 2.5 |
| GDP EU15 ¹ | -3.6 | 2.2 | 2.3 |
| | | Short term | Long term |
| Exchange rate USD/EUR ² | | 1.42 | 1.42 |
| Oil price in USD/barrel ² | | 72 | 70 |
| Oil price in CHF/barrel ⁴ | | 77 | 75 |

1 Change in percent

2 Level

3 Level, exchange rate on 10 December 2009

4 Level, exchange rate on 17 September 2009

Source: SNB

4.2 Inflation forecast and monetary policy decision

By and large, the assessment of the economic and monetary situation is the same as in September 2009, with economic and financial developments running according to the National Bank's expectations. Risks remain significant, and for this reason the SNB is maintaining its expansionary monetary policy.

Global economic outlook

Signs of a recovery in global economic activity gathered strength during the second half of 2009. The ongoing normalisation of conditions on the interbank and financial markets, together with the monetary and fiscal stimuli, supported a recovery in production, especially in the manufacturing industry.

However, the legacy of the crisis still weighs heavily. The economic rebound of the past few months is largely the result of public sector intervention, and is not yet anchored firmly enough. Except in emerging Asia, the rebound has only partly redressed the losses sustained in 2008 and early 2009. Capacity utilisation rates are still generally low, and access to bank lending remains difficult in some countries. Moreover, both the labour market situation and the need to restore savings levels are weighing on household consumer spending. Therefore, the SNB still holds the view that the return to global equilibrium will be slower and more uncertain than is usually the case at the end of a recession.

Swiss economic outlook

The Swiss economy is also on the road to recovery: Swiss GDP growth turned positive in the third quarter. However, value added continued to contract in the manufacturing industry. Overall, demand for labour is still falling and unemployment numbers are on the rise.

The SNB is projecting a moderate recovery for 2010. Private consumption growth will be held back by weak household income growth. Exports will benefit from a gradual return to strength of external demand. This should allow manufacturing production to recover, albeit unevenly across the different segments. In particular, new orders in the equipment goods segment will probably continue to suffer from the excess capacity at the international level. In Switzerland, too, the increase in manufacturing production will not be enough to allow excess produc-

tion capacity to be reabsorbed. Consequently, equipment investment is unlikely to see any improvement for several quarters, and there could be a fall in the number of manufacturing jobs. In the construction industry, on the other hand, where the degree of resource utilisation is more than satisfactory, demand should stabilise.

For 2010 as a whole, the SNB expects real GDP growth of between 0.5% and 1%, following a decline of around 1.5% in 2009.

Changes in monetary and financial conditions

Overall, monetary conditions are a reflection of the National Bank's expansionary policy, especially with respect to interest rates and the monetary aggregates.

The Libor is currently at the level targeted since March this year, i. e. 25 basis points, a level which can be regarded as a floor. The fact that it was impossible to bring the rate down any lower than this led the SNB, in March, to introduce other instruments in order to make its monetary policy as expansionary as the circumstances demanded.

Monetary conditions have become more expansionary via the interest rate channel in particular. Indeed, credit premia on the capital markets have declined steadily since the beginning of the year. As yields on Confederation bonds have remained low, other long-term yields have also trended downwards. It has thus become cheaper for companies to raise funds by borrowing on the capital market. In addition, the SNB's figures show that financing in the form of bank loans has also become more attractive following the decline in the Libor. In real terms – i. e. after factoring in expected inflation – interest rates are even lower.

The Swiss franc has appreciated slightly in trade-weighted terms, as a result of the recent weakening of the dollar. However, it has remained stable against the euro, which shows that the monetary policy followed since March has been effective. An appreciation of the Swiss franc against the euro would run counter to the relaxation in monetary conditions brought about through the interest rate channel. This is why the SNB will continue to act decisively to prevent any excessive appreciation of the Swiss franc against the euro.

An assessment of monetary conditions can be misleading if it is based on prices which have reached their limit, as is currently the case with the

Libor. For this reason, an assessment based on quantities – money and credit – is particularly important in the current circumstances.

The monetary base has increased substantially since October 2008, when the financial crisis entered a new phase following the collapse of Lehman Brothers. The SNB supplied the interbank market with sufficient liquidity to meet burgeoning demand in a climate of uncertainty, in order to prevent any increase in money market rates. Since then, precautionary base money demand has declined and the SNB has reabsorbed liquidity accordingly. The monetary base has thus fallen by 28% compared to the peak recorded in April 2009. The level of sight deposits is, however, still almost ten times higher than before the crisis. There is thus a risk of excessive money creation once confidence is restored.

Monetary conditions should not only be judged in terms of banking sector liquidity, but also on the basis of the liquidity available to households and firms – i.e. the monetary aggregates. M3 growth, which had been modest for a long time, has accelerated. In October, it reached an annual rate of 7.7%. M1 and M2 have shown strong growth. The significance of these growth rates is limited because the uncertainty linked to the crisis reinforced the general public's preference for liquidity, and because interest rates are at extremely low levels. It is therefore useful to analyse the transmission of monetary stimuli through the lending channel as well.

Mortgage loans provide a particularly good reflection of the effects of monetary policy. Why? Essentially, mortgage loans are used to finance real estate projects. But the yields on these investments, which are by their very nature long-term, are heavily dependent on the level of interest rates. This relationship has been confirmed once again: no sooner did the SNB cut interest rates than the growth rate of mortgage loans began to increase more strongly. Having hit a low of 3.2% in November 2008, the growth rate then began to accelerate steadily, reaching 5.1% in October 2009. In the same month, other lending in Swiss francs declined at a rate of -0.3%, which is normal during a period of weak economic activity. All in all, lending to households and firms, both large and small, has continued to grow over the past few months, as the growth in mortgage lending has largely offset the drop in other lending.

According to the latest SNB bank lending survey, the phase of tightening lending conditions could be coming to an end. The share of banks

reporting a further slight tightening of conditions for corporate lending has fallen considerably, from 40% at the time of the previous quarterly survey to 3% for this quarter. Households appear to be benefiting from a similar trend, as no banks have announced a tightening of their lending conditions for households, whereas in the previous quarter 50% of banks reported a further slight tightening of lending conditions for non-mortgage loans and 20% for mortgage loans to households.

The survey also suggests that demand for loans has stabilised. The share of banks experiencing increased household demand for mortgages has fallen from 40% at the beginning of this year to 10%.

The situation in Switzerland is thus very different to that observed in other economies. Not only is there no credit crunch, but the country has also witnessed a substantial increase in the volume of mortgages. There are also signs of a relaxation in lending conditions for mortgage loans. The SNB would like to sound a note of caution, both to banks and to firms and households, as regards the risks inherent in a relaxation of discipline in real estate financing.

Inflation outlook

Monetary policy influences the medium and long-term inflation outlook. By contrast, it has very little effect on short-term developments. The past two years have been a perfect illustration of this. Inflation peaked at 3.1% in July 2008, before plummeting to -1.2% in July this year. This reflects extreme movements in oil prices, which reached USD 145 a barrel in July 2008, only to fall to USD 35 in December of the same year. The temporary nature of fluctuations in inflation was correctly anticipated, as evidenced in the SNB's previous inflation forecasts. Since it takes time for the impact of monetary policy to feed through, it would have been futile to attempt to counter these movements.

The path of inflation in the near term will be largely dictated by recent movements in oil prices and the associated base effects. Inflation will already return to positive figures from the end of this year. This is mainly due to the base effect linked to the USD 35 low reached by oil prices in December 2008. Inflation will tend to decline thereafter, despite the recovery in growth. In fact, economic activity will remain subdued and will return only gradually to normal. Inflation will nevertheless remain positive throughout 2010. Assuming that the SNB's monetary policy remains unchanged, the new

forecast shows that inflation will begin to increase again from the beginning of 2011, to reach 2% in the first half of 2012. The SNB's expansionary monetary policy cannot be maintained indefinitely without incurring inflation risks.

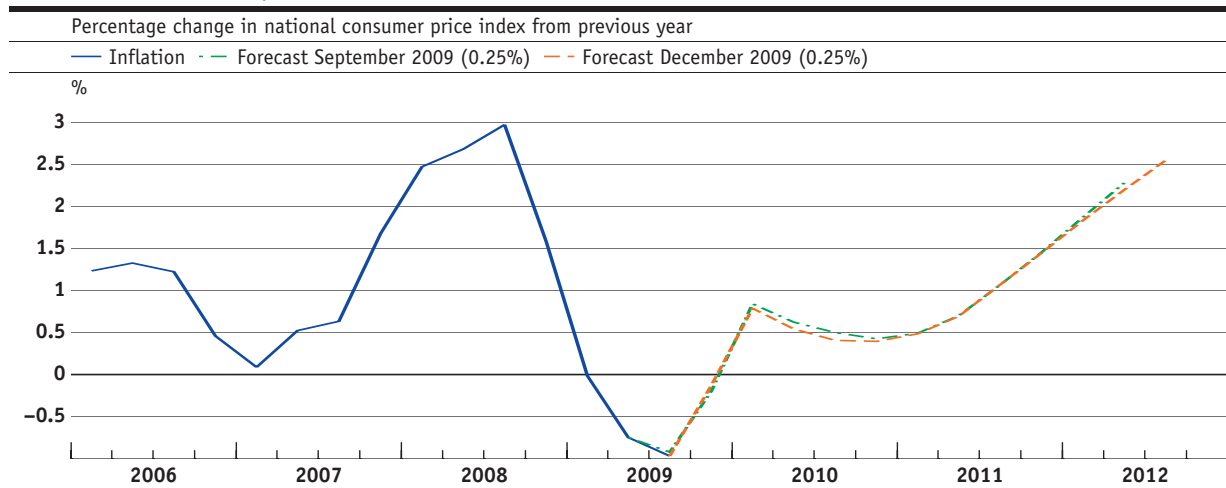
Considerable uncertainty remains attached to this inflation forecast. Global economic developments could be less favourable than described in the first section. The financial crisis could reappear.

Monetary policy decision

The inflation outlook has not changed since the September assessment. It confirms that the expansionary monetary policy cannot be maintained for the next three years because price stability will be compromised in the long term. However, a swift correction in monetary policy would be precipitate since the inflation outlook is still associated with downside risks. If these risks materialised, the threat of deflation could re-emerge. The uncertainties relate to the global economy and to the level of recovery within the financial industry. These factors have persuaded the SNB to opt for a cautious stance, and it is leaving its monetary policy course unchanged for the time being.

Chart 4.1

Inflation forecast of September 2009 with Libor at 0.25% and of December 2009 with Libor at 0.25%



Source: SNB

Observed inflation in December 2009

Table 4.2

| | 2006 | | | | 2007 | | | | 2008 | | | | 2009 | | | | 2006 | 2007 | 2008 |
|-----------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|----|------|------|------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | | | |
| Inflation | 1.23 | 1.33 | 1.22 | 0.46 | 0.09 | 0.52 | 0.63 | 1.68 | 2.47 | 2.68 | 2.97 | 1.58 | -0.02 | -0.75 | -0.97 | | 1.1 | 0.7 | 2.4 |

Inflation forecast of September 2009 with Libor at 0.25% and of December 2009 with Libor at 0.25%

| | 2009 | | | | 2010 | | | | 2011 | | | | 2012 | | | | 2009 | 2010 | 2011 |
|--------------------------------------|------|----|-------|-------|------|------|------|------|------|------|------|------|------|------|----|------|------|------|------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | | | |
| Forecast September 2009, Libor 0.25% | | | -0.92 | -0.20 | 0.84 | 0.63 | 0.50 | 0.43 | 0.49 | 0.70 | 1.07 | 1.46 | 1.87 | 2.28 | | -0.5 | 0.6 | 0.9 | |
| Forecast December 2009, Libor 0.25% | | | -0.13 | 0.79 | 0.54 | 0.41 | 0.40 | 0.48 | 0.69 | 1.07 | 1.45 | 1.84 | 2.20 | 2.55 | | -0.5 | 0.5 | 0.9 | |

Source: SNB

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

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

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

Summary

In the talks held by the SNB delegates for regional economic relations with around 180 representatives of various economic sectors and industries in October and November, the consensus was that the economy is gradually regaining momentum. Initial – and mostly still weak – signals of a trend reversal in parts of the export industry had already been recognisable in the previous round of talks. These were now confirmed and shown to be more pronounced. Moreover, the expectations expressed the last time were, for the most part, exceeded. Despite these positive developments, however, euphoria would be inappropriate. Unemployment is still on the rise and capacities in numerous sectors of the economy remain under-utilised, in some cases massively so.

Most of the respondents anticipate another difficult year ahead. For the first time in a long while, a slight majority of the respondents expect an increase rather than a decrease in turnover. As far as staff numbers are concerned, however, most anticipate further cuts. Selling prices are also expected to tend downwards.

Weak demand remains the principal concern. Pressure on margins and earnings were also frequently mentioned. The weak dollar was brought up more often than before when the topic of exchange rates was raised. The banks' lending policy, by contrast, was less of a talking point. Obviously, the credit crunch that was widely feared would result from the financial crisis has not come to pass.

1 Production

Manufacturing

Compared to the talks in August, distinctly more representatives from the manufacturing sector now spoke of an upturn in demand. The main reasons mentioned were the partial rebuilding of inventories following their massive depletion and the economic stimulus packages implemented by governments in various countries. Demand from Asia, particularly China, developed dynamically, but Latin America, especially Brazil and Mexico, also warranted mention. Demand from the US and Europe, by contrast, remained weak. In the case of the US, one of the reasons was the weakness of the dollar, which rendered Swiss exports more expensive.

There are, in part, major differences from one manufacturing sector to another. Various companies from sectors that benefit early from a recovery, especially in the chemical and plastics industries, had already expressed confidence in August. They now confirmed the turnaround and spoke of a positive trend growth rate in October and November in terms of both output and turnover. Positive signals came from other industries, too, including the energy technology and supply industry and parts of the machinery industry. Although the overall picture has become brighter, the mood in many areas of manufacturing remained gloomy. Order volumes particularly in the machinery and watchmaking industries are, in certain cases, substantially below their year-earlier level. Despite capacity reductions, capacity utilisation reached a new low-water mark in numerous companies.

Respondents from the manufacturing industries are generally counting on a slow recovery. Companies benefiting late from an economic recovery, such as those operating in plant engineering, will probably achieve a turnaround only in 2010. Nor are representatives of other lines of manufacturing, for the most part, expecting to see production figures approach values reached before the recession any time soon. Various respondents, moreover, expressed doubts with regard to the durability of the latest revival in demand. On the one hand, the inventory cycle and the government stimulus programmes will come to an end in the foreseeable future. On the other, the revival of demand in numerous areas was deemed too weak to allow companies to take a long-term view, and plan and invest accordingly based on the secure knowledge of a coming economic upturn.

Services

Hotels and restaurants mostly reported figures exceeding the expectations that had been adjusted downwards after a restrained trend in early summer. Demand was still well below the year-earlier level, but by less than many had feared. In most regions, it was the Swiss clients who, to a certain extent, made up for the drop in the numbers of foreign visitors. Hotels catering for business travellers and providing venues for seminars and congresses generally registered low occupancy rates in spite of some encouraging signals. The same applied, in general, to upmarket hotels, whereas those in the middle class range benefited from clients' cost awareness and thus, in many cases, recorded only slight declines in revenue. Reservations for the coming winter season were still on a low level at the time of the survey, but respondents from the ski resorts did point out that guests nowadays tended to plan and book at short notice.

Most of the respondents from the retail sector spoke of stagnation, however with some significant differences from one line of business to another. The main reason was said to be the growing price awareness among consumers inducing them, in certain cases, to switch to providers and products of different price segments. Demand remained good especially for sports items and leisure activity goods in general, as well as in the food sector, which is resistant to cyclical fluctuation. By contrast, demand was down in the clothing, shoes, furniture and electronic devices sectors. Expectations for the Christmas season are subdued and retailers look ahead to 2010 with a certain unease. The principal fear is that the anticipated further rise in unemployment will have a negative impact on consumer confidence.

The information gained from talks with representatives of other service providers from the consumer and business segments – including IT, tourism and transportation – was mixed. Turnover was generally lower than a year before, albeit to highly varying degrees. Most surveyed companies from these segments, however, anticipate stagnating or slightly increasing sales over the coming months.

Already in August, respondents from the banking sector had been more upbeat than in spring, and the tenor of this survey was similar. Banks are benefiting especially from the positive stock market developments. In the lending business, private demand for mortgages remained strong, whereas demand for corporate loans slackened. Banking representatives almost unanimously spoke of extremely fierce competition in the lending business, which took its toll on margins. Expectations for the coming year are, for the most part, restrained. Banks are preparing for increasing loan defaults and have therefore raised their provisions. Bankers in asset management, too, expect uneasy times ahead.

Construction

The construction companies surveyed were mostly upbeat about the course of business. This is due especially to the order volume, which was largely deemed to be satisfactory. The weak trend in commercial and industrial construction continued despite certain encouraging signals, whereas the situation in residential construction and civil engineering remains good. Most respondents expect turnover to stay largely unchanged over the coming months. Overall, the construction industry continues to benefit from the low interest rates, the government stimulus packages for the economy, a migration balance that is positive – albeit to a lesser extent than the year before – and the willingness of many home owners to invest in environment protection and energy-saving measures.

2 Labour market

Most of the companies surveyed reacted to the recession by taking steps to save costs. From the start, natural turnover was used as a means to reduce staff. A large number of companies – predominantly in the manufacturing sector, less so in services – introduced short-time work. The number of lay-offs has risen since spring. Over the past two to three months, the situation has changed insofar as numerous firms that had resorted to short-time work retracted this measure or at least reduced its extent. The consensus in a large number of discussions was, however, that the turning point in the job market has not yet been reached. Most respondents consider the recovery to be fragile and are unlikely to employ more people in the foreseeable future. In addition, most of them plan to maintain their policy of using natural turnover to reduce their workforce. Many are also rethinking their strategy and trying to find the most appropriate medium-term production level. In some cases, this is likely to lead to resizing and thus a reduction in the number of employees.

3 Lending conditions

The credit crunch that was widely feared would result from the financial crisis has not materialised. During the talks held in October and November, respondents from the non-banking sectors again made hardly any mention of a shortage of credit. Banks are obviously being flexible in general and passing on the benefit of more favourable refinancing costs. However, risk premia for bank loans have apparently gone up in reaction to the worsening of key financial indicators.

Bank representatives have confirmed this impression. Risk premia are indeed being raised and, in particular, being related more closely to the situation of the company concerned. The banks surveyed consider the fact that corporate loans are barely growing or, in some cases, even receding to be an expression of the reduced corporate investment level. Based on the lower earnings recorded by numerous companies, banks also anticipate an increase in credit defaults in the coming year.

4 Prices, margins and earnings situation

Respondents from all industries pointed to the, in part, considerable pressure on margins and a deterioration in their earnings position. In general, the reason cited was the under-utilisation of capacities in their company and their industry in general. On the one hand, the decline in demand can lead to an increase in average production costs owing to large blocks of fixed costs. On the other, the global economy's excess capacity makes it difficult or even impossible for individual companies to factor higher costs into their prices. The number of respondents preparing for lower selling prices exceeds the number of those planning price increases. This holds true not only for manufacturing and construction, but also for the services sector. As a result, the tightening of margins is mostly expected to continue. The anticipation of smaller margins has added to companies' liquidity concerns and to their general sense of unease.

Companies reacted very swiftly to the decline in earnings by tightening cost management. The discussions with representatives of all industries revealed that firms were determined to keep the cost-cutting measures in place. However, they saw little scope for further cost savings without resorting to job cuts or pay reductions.

Asked about pay developments, most respondents mentioned changes in the bandwidth of 0–1%. With staff numbers declining, this should lead to a stagnation or even a slight decline in the nominal total wage bill. Some stated that their companies had actually considered pay cuts, but most had dismissed the idea because they feared the negative impact on morale.

On the subject of exchange rates, a majority of respondents from the export sector were satisfied with a Swiss franc exchange rate against the euro of just over 1.50. The current Swiss franc rates against the US dollar and the pound sterling were a greater reason for concern and were deemed by many to be too low.

SNB Working Papers and SNB Economic Studies: Summaries

Explaining house price fluctuations

Christian Hott
Working Paper 2009-5

The paper develops a model to calculate the fundamental value of houses and calibrates the model for the housing markets of six different countries. The results indicate that actual house prices in these countries fluctuate more than fundamentally justified. This fact is very hard to explain with standard rational agent models. Therefore, the paper incorporates various kinds of agents' expectations into the basic house price model. In this framework the author shows that the consideration of behavioural aspects like herding behaviour, speculation and momentum trading can help to explain actual house price fluctuations. The best explanation for the price bubbles around 1990 in Switzerland and the UK seems to be herding behaviour. Speculation, on the other hand, seems to be a reason for the 1990 bubble in Japan as well as the recent house price increases in the UK and the US.

Capacity utilisation, constraints and price adjustments under the microscope

Sarah M. Lein¹ and Eva Köberl
Working Paper 2009-6

This paper analyses the interplay of capacity utilisation, capacity constraints, and price adjustments, employing a unique firm-level data set for Swiss manufacturing firms. Theoretically, capacity constraints may limit the ability of firms to expand production in the short run in response to a demand shock and thus lead to an increase in prices. The empirical results confirm this prediction. According to the authors' estimates, a firm with constrained capacities has a six to ten percent higher probability of increasing prices, compared to a firm that does not face a constraint. On the other hand, there is also evidence that firms are not reluctant to reduce prices in response to demand constraints. At the macro level, the implied capacity-utilisation Phillips curve has a convex shape during periods of excess demand and a concave shape during periods of excess supply.

¹ For this study, Sarah M. Lein was accorded the SSES Young Economist Award 2009 by the Swiss Society of Economics and Statistics.

Optimal central counterparty risk management

Philipp Haene and Andy Sturm
Working Paper 2009-7

Central counterparties (CCPs) are a critical element in the infrastructure of financial markets. A CCP is an entity that interposes itself between trading partners to become the buyer to every seller and the seller to every buyer, thereby ensuring settlement, even if one of the original trading partners fails to meet its obligations. In order to protect themselves against potential losses in the event that a participant defaults and to contain systemic risk, CCPs need to maintain sufficient financial resources. Typically, these financial resources consist of margin requirements and contributions to a collective default fund.

The authors study the main factors affecting the trade-off between margins and the default fund. The optimal balance between these two risk management instruments is found to depend on collateral costs, participants' default probability, and the extent to which margin requirements are associated with risk-mitigating incentives. Given the increasing importance of CCPs in financial markets in general and for financial stability in particular, these considerations are not only important for CCPs themselves, but also for financial market regulators.

Banks and real estate prices

Christian Hott
Working Paper 2009-8

The willingness of banks to provide funding for real estate purchases depends on the creditworthiness of their borrowers. Beside other factors, the creditworthiness of borrowers depends on the development of real estate prices. Real estate prices, in turn, depend on the demand for homes, which is influenced by the willingness of banks to provide funding for real estate purchases. This paper develops a theoretical model, describing and explaining this circular relationship. Using this model, the author illustrates how credit and real estate cycles can be produced by the irrational expectations of banks. More precisely, he examines the effects of three different kinds of expectation formation on the lending behaviour of banks, on real estate prices, and on mortgage losses of banks. Furthermore, the paper shows that banks make above-average profits in the upswing phase of the real estate cycle, but suffer high losses when the market turns.

Bank capital buffer and risk adjustment decisions

Terhi Jokipii and Alistair Milne
Working Paper 2009-9

This paper builds an unbalanced panel of balance sheet data of publically traded US bank holding companies and commercial banks from 1986 to 2008 in order to examine the relationship between short-run capital and risk adjustments. Acknowledging the fact that banks tend to manage their capital buffers by accounting primarily for the risk of default, and that, similarly, risk taking tends to depend on how close the capital buffer is to the required minimum, the authors uncover a positive two-way relationship. They also show that the management of short-term adjustments to capital and risk, as well as the speed at which banks adjust towards their internally defined optimal capital level, depends on the amount of capital these banks hold in excess of the required minimum. The paper additionally investigates the way in which the relationship between capital and risk adjustments varies over time, which appears to be cyclical nature: negative after the 1991/1992 crisis, and positive before 1991 and after 1997.

Bounded love of variety and patterns of trade

Philip Sauré
Working Paper 2009-10

Recent trade data exhibit the following four strong regularities: (i) Countries import only a small fraction of tradable varieties of goods, (ii) per capita income and the number of imported varieties correlate positively, (iii) per capita income and trade shares correlate positively and, finally, (iv) overall trade shares have increased substantially. Existing theories fail to provide a comprehensive explanation of these patterns. The present paper shows that the standard “New Trade Theory” does indeed offer such an explanation, provided that consumers’ marginal utility from varieties is bounded. This change in demand structure implies that only the cheaper share of varieties is consumed and, owing to high transport costs, foreign varieties are not. Technological progress increases per capita income and consumption of those varieties already consumed, so that marginal utility derived from them decreases. Consequently, consumers extend consumption to more expensive varieties produced at distant locations, thereby increasing trade shares. Productivity growth thus jointly drives per capita income, trade shares, and the number of imported varieties.

Banking and transparency: is more information always better?

Nicole Allenspach
Working Paper 2009-11

The recent financial turmoil has reignited an interest in bank transparency. Throughout the crisis, institutions were repeatedly criticised for not disclosing all relevant information. However, the actual impact of transparency on the banking system may be less evident than is often claimed. This paper contributes to the discussion by showing that transparency can indeed have harmful effects. According to the model used, enhancing transparency above a certain level may lead to the inefficient liquidation of a bank. The reason lies in the nature of the standard deposit contract: In contrast to the bank's payoff scheme, the depositors' payoff scheme has limited upside gains (fixed interest payments). If confronted with the downside risk (loss of deposits), depositors will therefore not take into account the bank's possible future gains when deciding whether or not to withdraw their deposits. The result points towards a trade-off the regulator faces: While enhancing transparency may be useful to reduce incentives for excessive risk-taking (moral hazard), it may also increase the risk of an inefficient run on the bank.

Effects of trade on female labour force participation

Philip Sauré and Hosny Zoabi
Working Paper 2009-12

Expansions or contractions in sectors that use female labour intensively must affect overall female labour force participation (FLFP). The authors develop a model which suggests that whenever trade and international specialisation expand sectors which are intensive users of female labour, FLFP actually drops and vice versa. This effect arises because expansions in such sectors are accompanied by contractions in others. These contractions, in turn, induce male workers to move to the expanding sectors, thus driving female workers out of formal employment. In this way, a country that is exporting female labour content is actually substituting male labour for female. The authors further show that a similar mechanism applies whenever technological change is biased towards female labour-intensive sectors. Finally, building on the North American Free Trade Agreement (NAFTA) between the US and Mexico, the paper provides empirical evidence that supports its theoretical argument.

Productivity and economic growth in Switzerland 1991–2005

Barbara Rudolf and Mathias Zurlinden

Working Paper 2009-13

This paper analyses the sources of economic growth in Switzerland during the period 1991–2005. The results suggest that labour input and capital input contribute 0.57 and 0.45 percentage points, respectively, to the average annual GDP growth of 1.28%. The remaining 0.25 percentage points represent growth in multi-factor productivity. The decomposition of capital input shows that 84% of capital input growth can be attributed to growth in the capital stock, and 16% to changes in capital quality (i.e. changes in the composition of the capital stock). The decomposition of labour input, in turn, shows that 13% of labour input growth is attributable to changes in labour hours, and no less than 87% to changes in labour quality. The estimate of growth in multi-factor productivity is lower than in previous studies because the measure of labour input used in this paper takes changes in labour quality (i.e. human capital) into account. Results are robust to open economy considerations.

DSGE-CH: a dynamic stochastic general equilibrium model for Switzerland

**Nicolas A. Cuche-Curti, Harris Dellas
and Jean-Marc Natal**
Economic Study No. 5 2009

This paper presents a DSGE (dynamic stochastic general equilibrium) model of the Swiss economy used since 2007 in the monetary policy decision process at the Swiss National Bank. In addition to forecasting the likely course of main macro variables under various scenarios for the Swiss economy, the model DSGE-CH serves as a laboratory for studying business cycles and examining the effects of actual and hypothetical monetary policies. The microfounded model DSGE-CH represents Switzerland as a small open economy with optimising economic agents facing several real and nominal rigidities and exogenous foreign and domestic shocks. The comparison of the model's implications with the real world indicates that DSGE-CH performs well along standard dimensions. It captures the overall stochastic structure of the Swiss economy as represented by the moments of its key macroeconomic variables; furthermore, it has appropriate dynamic properties, as judged by its impulse response functions. Finally, it quite accurately replicates the historical path of major Swiss variables.

A VECX* model of the Swiss economy

**Katrin Assenmacher-Wesche
and M. Hashem Pesaran**
Economic Study No. 6 2009

This paper applies the modelling strategy of Garratt, Lee, Pesaran and Shin (2003) to the estimation of a structural cointegrated VAR model that relates the core macroeconomic variables of the Swiss economy to the current and lagged values of a number of key foreign variables. It identifies and tests a long-run structure between the variables. Moreover, it analyses the dynamic properties of the model using generalised impulse response functions. In its current form, the model can be used to produce forecasts for the endogenous variables, either under the alternative specifications of the marginal model for the exogenous variables, or conditional on some pre-specified path of those variables (for scenario forecasting). In due course, the Swiss VECX* model can also be integrated into a global VAR (GVAR) model, where the foreign variables of the model are determined endogenously.

Chronicle of monetary events

Current monetary policy maintained

Following its quarterly monetary policy assessment of 10 December 2009, the SNB decided to maintain its expansionary monetary policy, to leave the target range for the three-month Libor unchanged at 0–0.75% and to adhere to its objective of keeping the Libor in the lower end of this range at around 0.25%. Furthermore, the SNB announced that it would still provide the economy with a generous supply of liquidity, but discontinue its purchases of Swiss franc bonds issued by private sector borrowers. The SNB also said it would continue to act decisively to prevent any excessive appreciation of the Swiss franc against the euro.

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