

Swiss National Bank

Quarterly Bulletin

December 4/2008 Volume 26

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Sectional breakdown of bulletin Q4/2008

Monetary policy report (p. 6)

In an environment of intensified financial market turmoil, the international economy deteriorated sharply in the second half of 2008. In the third quarter, economic output (in terms of real GDP) dropped in all three major economic regions (US, euro area, Japan), while the emerging economies also lost momentum. In the fourth quarter, confidence in manufacturing and service companies dropped further and consumers became increasingly pessimistic in view of the anticipated deterioration in the employment situation. Accordingly, the SNB has made sharp downward adjustments to its growth forecasts for the world economy in 2009 and 2010.

In Switzerland, too, the economic downturn continued in the third quarter. However, unlike the situation in the US and the euro area, negative growth figures were not recorded for GDP. From September, the crisis of confidence clearly became more acute. In early November, the deterioration in the economic outlook prompted the Confederation to adopt a package of measures totalling CHF 1.5 billion designed to support the economy.

In the short term, the SNB expects GDP to decline. For 2009 as a whole, it forecasts a drop in GDP of between 0.5% and 1%. Exports are likely to suffer in the unfavourable global environment and this will have a negative impact on both investment expenditure and the demand for labour.

At its quarterly assessment in December, the SNB decided to lower the target range for the three-month Libor by 50 basis points to 0.0–1.0%.

The economic situation from the vantage point of the delegates for regional economic relations (p. 46)

The 180 or so representatives of various economic sectors and industries interviewed by the SNB's delegates for regional economic relations between September and November indicated a noticeable deterioration in the business outlook. The export industry, in particular, reported a sharp decline in new orders from mid-September. Respondents from construction, retailing and hospitality, by contrast, reported that demand was (still) strong. Nevertheless, they too are anticipating a difficult year in 2009.

SNB Working Papers (p. 50)

Summaries of five papers: Barbara Rudolf and Mathias Zurlinden, 'Measuring capital stocks and capital services in Switzerland', *SNB Working Paper* 2008-11; Philip Sauré, 'How to use industrial policy to sustain trade agreements', *SNB Working Paper* 2008-12; Thomas Bolli and Mathias Zurlinden, 'Measuring growth of labour quality and the quality-adjusted unemployment rate in Switzerland', *SNB Working Paper* 2008-13; Samuel Reynard, 'What drives the Swiss franc?', *SNB Working Paper* 2008-14; Daniel Kaufmann, 'Price-setting behaviour in Switzerland – evidence from CPI micro data', *SNB Working Paper* 2008-15.

Monetary policy report

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

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

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

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 11 December 2008, the Swiss National Bank (SNB) decided to lower the three-month Libor target range by 50 basis points to 0.0–1.0% with immediate effect. It will continue to provide the Swiss franc money market with a generous and flexible supply of liquidity, and will take all necessary steps to gradually bring the Libor down to the middle of the target range.

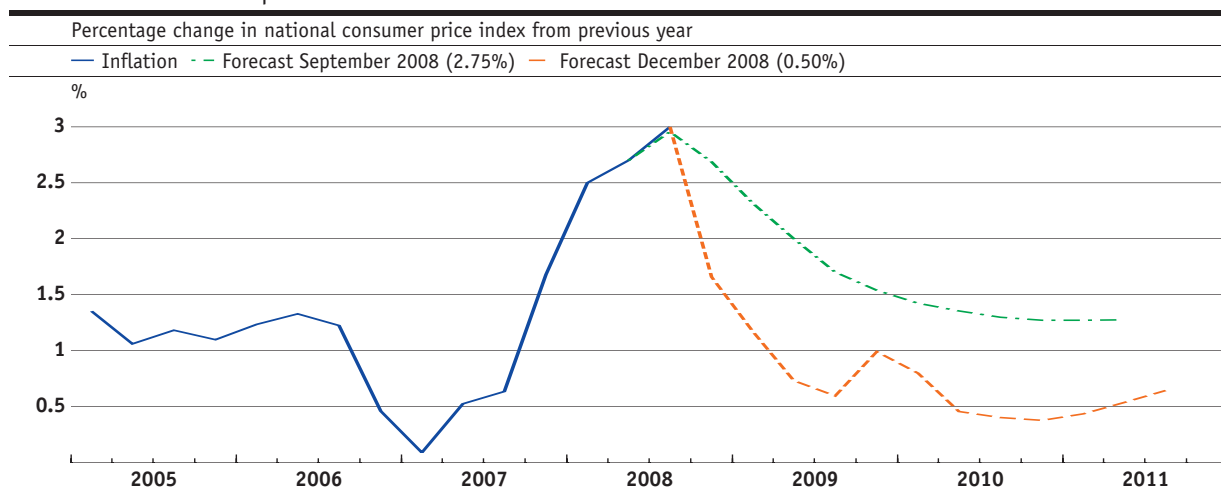
The global economic environment has sharply deteriorated over the past few months. Economic activity has declined in both the US and Europe, and has slowed considerably in Asia. The situation on international financial markets has worsened further since September. The Swiss economy will be heavily affected by these developments. The SNB projects that GDP growth will be negative next year, between –0.5% and –1%.

The unfavourable economic outlook and the falling oil price have prompted a radical adjustment of the inflation forecast. Inflation will undergo a substantial decline over the course of next year, and will remain low thereafter. Assuming a constant rate of 0.5% for the three-month Libor, the SNB is now forecasting average annual inflation of 0.9% in 2009 and 0.5% in 2010.

The improvement in the inflation outlook has provided room for manoeuvre which the SNB is decisively using. By further lowering the Libor target range, the SNB aims to reduce the risk of a deterioration in the situation, and is thus supporting economic activity.

The SNB will continue to closely monitor developments in the global economy, in financial markets and in foreign exchange markets. It will implement further measures should the situation so require.

Inflation forecast of September 2008 with Libor at 2.75% and of December 2008 with Libor at 0.50%



Source: SNB

Inflation forecast of September 2008 and of December 2008

Average annual inflation in percent

	2008	2009	2010
Forecast September 2008, Libor at 2.75%	2.7	1.9	1.3
Forecast December 2008, Libor at 0.50%	2.5	0.9	0.5

Source: SNB

1 Developments in the global economy

The international economy deteriorated sharply during the second half of 2008. In the third quarter, economic output (in terms of GDP) dropped in all three major economic regions (US, euro area, Japan), while the emerging economies also lost momentum. Purchasing manager indices show a sharp decline in confidence in manufacturing and service companies due to a major fall-off in new orders and a drop in capacity utilisation. Consumers also became increasingly pessimistic in view of the expected worsening of the labour market situation.

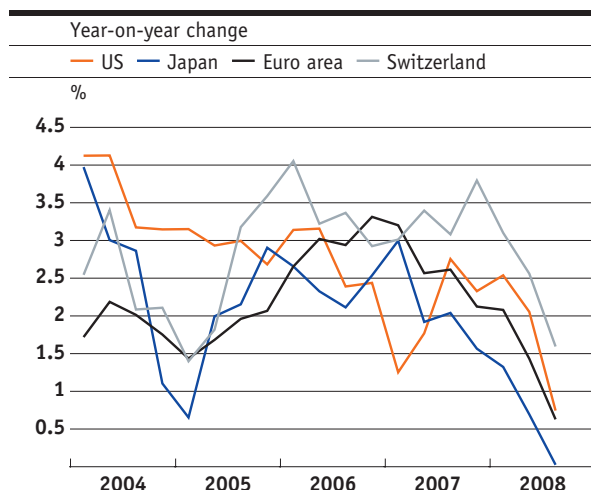
The economic slowdown occurred amid increased financial market turmoil. Following the bankruptcy of US investment bank Lehman Brothers in mid-September, the crisis spread across the world. Credit risk premia shot up to the highest levels attained since the beginning of the financial crisis. In view of the uncertain balance sheet position of banks and the massive loss of trust among money market participants, central banks decided on a range of measures designed to increase liquidity. The plummeting share prices are evidence of the magnitude of the financial crisis. In October, the global MSCI index dropped by over 20%. In November, it continued falling. Exchange rates have also become considerably more volatile. Although growth in credit volume remained robust into the fourth quarter, it is to be feared that the financial crisis will affect commercial bank lending, thereby reinforcing the negative impact on the economy.

Since the last quarter, the economic outlook has worsened considerably. The OECD's leading indicators point to a global recession. However, downside risks are likely to be limited by the sharp fall in commodity prices, in particular oil prices, as well as by the measures taken by governments and central banks to support the economy. The SNB has made sharp downward adjustments to its growth forecasts for the world economy in 2009 and 2010. Given the fact that financial intermediation is functioning poorly at present, and in view of the high level of US household indebtedness, the SNB assumes that recovery will be very slow in the medium term.

Change of course for monetary policy

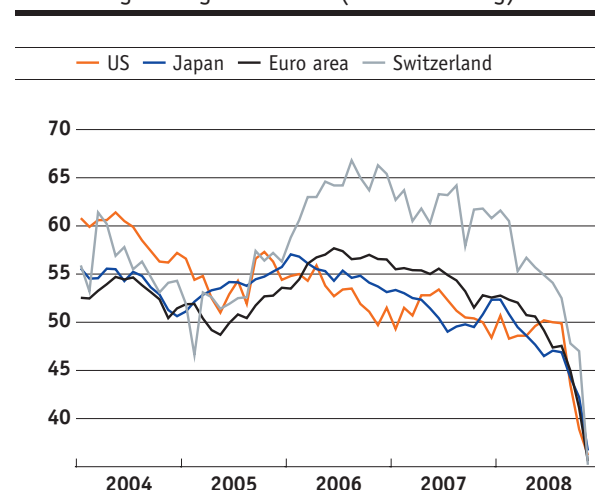
The increased financial market turmoil and the negative economic data in October prompted a number of central banks – the Bank of Canada, the Bank of England, the European Central Bank (ECB), the Federal Reserve (Fed), the Swedish Riksbank and the Swiss National Bank (SNB) – to undertake a coordinated reduction in the interest rates of key importance for their monetary policy – by 50 basis points in each case. In the same month, the Fed reduced its key rate further, and then in December cut it virtually to zero (target range of 0.0–0.25%). The Fed also extended its liquidity-promotion measures by creating new financing facilities. For the ECB, the coordinated measures at the beginning of October marked a change of course. In November, it reduced its main refinancing rate by 50 basis points and in December by

Chart 1.1
Real GDP



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

Chart 1.2
Purchasing managers' indices (manufacturing)



Source: Thomson Datastream

75 basis points to reach a final level of 2.5%. The ECB justified the change of course by citing the diminished risk of inflation and the increased growth risks. It also conducted fixed rate tenders in order to stabilise the money markets, narrowed the range between the rates for marginal lending facilities and deposit facilities by 100 basis points and increased the range of eligible securities. Although the Japanese central bank did not participate in the coordinated interest rate reduction, it expressed its firm support for these monetary policy measures. Soon afterwards (at the end of October), it reduced the call money rate from 0.5% to 0.3% and revised its growth and inflation forecasts sharply downwards. Monetary policy was also relaxed in most other Asian countries, after having been tightened in most cases until the middle of the year. The Chinese central bank changed course markedly, lowering its key rates and minimum reserve rate in several steps.

Supporting measures from governments as well

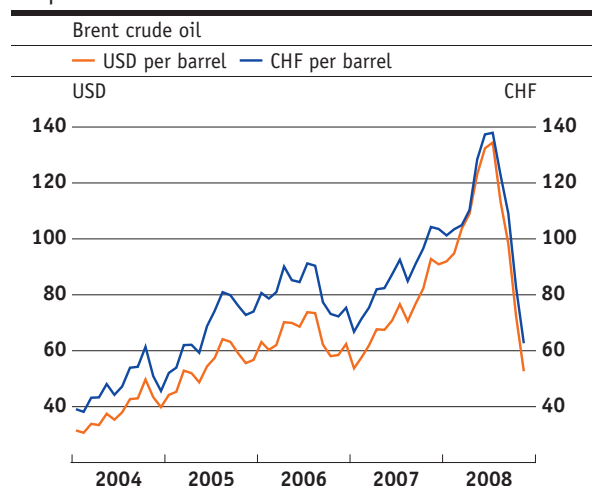
The monetary policy stimuli were supported by fiscal measures in a large number of countries. At the end of September, the US Treasury announced the Paulson plan, a USD 700 billion package of measures designed to support the financial sector, mainly through capital injections for banks. In addition, from early 2009, the new administration and Congress are expected to introduce a major fiscal package to support the economy (about USD 500 billion, or 4% of GDP). The European Commission is

proposing an economic programme amounting to EUR 200 billion (1.5% of GDP) for 2009 and 2010. This is to contain, on the one hand, measures to stimulate demand and employment, and on the other, plans to reinforce competitiveness and promote forward-looking investment. Many EU countries, including Germany, the UK, the Netherlands and Spain, have already drawn up details of fiscal plans. Japan has adopted an economic stimulus package totalling JPY 5 trillion (1% of GDP), which includes capital injections for the banking sector and tax relief for private households. In other Asian countries, particularly China and the Asian tiger states, a clear change in the course of fiscal policy has also occurred. Due to their healthy government financial situation, these countries have the necessary leeway for expansionary fiscal policies. The Chinese government increased the fiscal package foreseen in the five-year plan for the next two years to RMB 4 trillion (about 16% of GDP), with part of the additional budget being brought forward to the end of 2008. A significant part of this additional budget comprises expenditure on infrastructure.

Sharp drop in US consumption

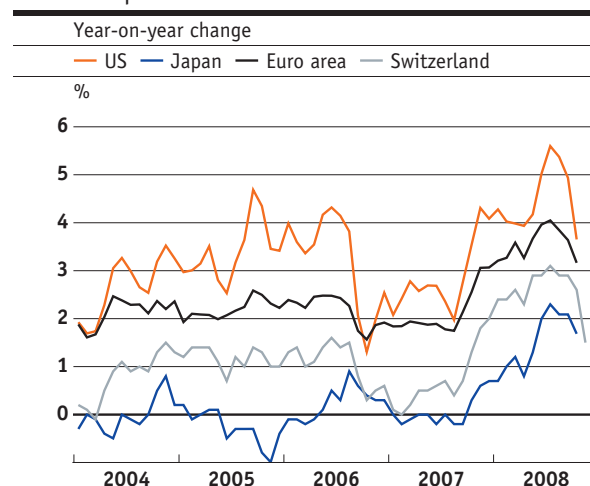
In the US, third quarter GDP fell by 0.5%, following surprisingly robust growth in the previous quarter (2.8%). The decline mainly reflected weak domestic demand. Private consumption, which had clearly been supported by the tax rebates to households in the second quarter, fell for the first time since the end of 1991. The drop in equipment and residential building investment continued,

Chart 1.3
Oil prices



Sources: Reuters, SNB

Chart 1.4
Consumer prices



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

while commercial construction remained surprisingly robust and, together with lively export activity, supported overall economic growth. The situation on the labour market worsened further. In November, the unemployment rate rose to 6.7%, the highest level since March 1994.

Further drops in GDP may be expected in the quarters to come. In view of falling house and share prices, tighter credit conditions and rising unemployment, future developments in consumption are likely to be very weak, despite the support to purchasing power provided by sinking petrol prices. In addition, the impetus from abroad will recede. As opposed to the 2001 recession, the negative momentum from investment will be limited this time, since corporate investment in the most recent expansionary phase was cautious. Moreover, there are initial signs of a stabilisation of demand on the real estate market (stabilisation of house sales and of the excessive supply of apartments). Consequently, the negative growth momentum from construction investment is likely to recede gradually. For 2009, the SNB expects GDP to decline by 0.8%. This compares to the September expectation of 1.3% growth.

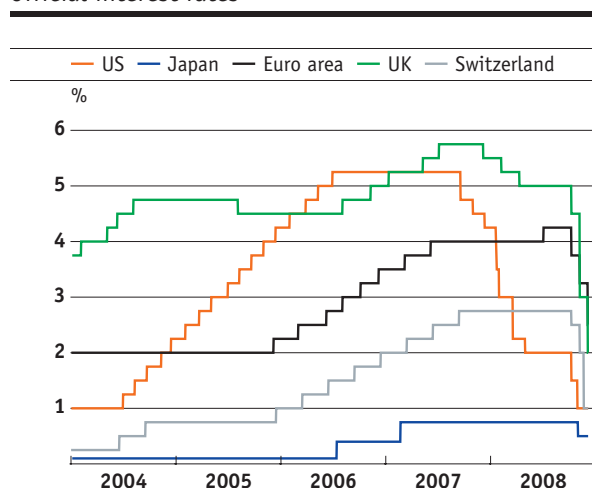
Euro area in recession

In the euro area, GDP declined by 0.8% in the third quarter, following a previous drop of 0.7% in the second quarter. Capital expenditure declined again, due to the poor economic outlook, and the year-back growth in exports lost momentum.

A sharper decline was only prevented by a solid increase in government consumption. Despite lower oil prices, private consumption stagnated, following two negative quarters. While the smaller economies proved resilient, Germany and Italy experienced the biggest drop in growth. Spain recorded the first decline in GDP since 1993. Employment plans in manufacturing have deteriorated markedly over the past few months. The contribution of manufacturing to overall added value is small but nevertheless important, because it is very cyclical. Since the middle of the year, this sector has been experiencing a period of cyclical weakness. Car production is particularly hard hit.

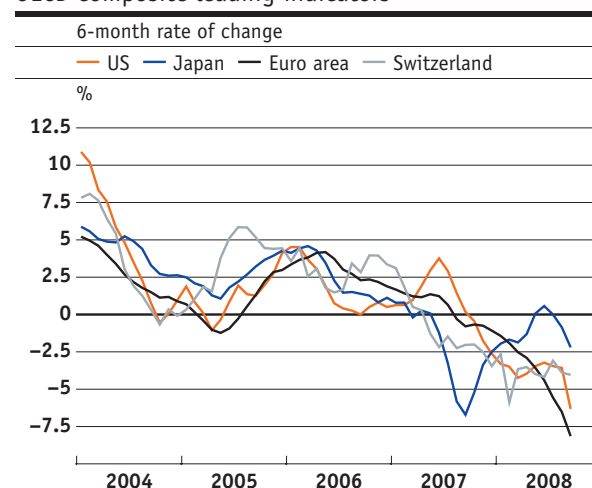
The euro area is facing a sharper downturn. The outlook for exports and investment in winter 2008/2009 has deteriorated. Consumer fears about the future labour market situation are also likely to slow momentum, although the substantial drop in unemployment during the previous recovery will probably support household consumption in the short term. The situation in the credit markets has remained tense. The extent to which the increasing tightness of credit conditions is affecting commercial bank lending is still unclear. Decreasing commodity prices, a weaker euro and the measures taken by a number of governments as well as the European Central Bank may stabilise the economic situation in the medium term. For 2009, the SNB expects GDP to decline by 0.8%. This compares to the September expectation of 0.9% growth.

Chart 1.5
Official interest rates



Sources: SNB, Thomson Datastream

Chart 1.6
OECD composite leading indicators



Source: OECD

Economy slows in Asia too

In Japan, GDP fell in the third quarter by 1.8%, following weak growth in the first half of the year. The decline was due to another drop in equipment investment and restrained growth in exports. Construction investment rose, but remained below the level of mid-2007, when more stringent construction regulations triggered a drop in construction expenditure.

The commodity price advances that continued into mid-year and sluggish consumer demand have made a substantial impact on the manufacturing sector. The fall in industrial production since the beginning of 2008 is evidence of this. The outlook has further deteriorated. Since the middle of the year foreign demand has slowed. Together with a substantial appreciation of the yen, this has dampened the profit outlook for the export industry and means that investment cutbacks may be expected in 2009. The recent decline in commodity prices is likely to provide positive momentum, as will the fiscal package. For 2009, the SNB expects GDP to fall by 0.4%. It was expecting GDP growth of 1.2% in September.

In China, too, growth slowed in the third quarter. GDP was up by 9.0% with respect to the previous quarter. This was the first such growth figure since the end of 2005 that had been below two digits. The slower growth of exports and construction investment had a dampening effect, as did the temporary production restrictions ordered by the government in connection with the Olympic Games. The substantial deterioration in producer confidence suggests that the economic slowdown in manufacturing may be sustained. So far, domestic demand has remained robust. State incentives for private households together with stable growth in income are likely to balance out the negative wealth effects upon consumption triggered by decreasing Chinese share and real estate prices. The substantial and broad-based fiscal package is likely to ensure that the slowdown in the growth of the Chinese economy remains slight.

South Korea, Taiwan, Hong Kong and Singapore also lost momentum in the third quarter. Their GDP rose by an average of only 1.7% year-on-year, compared with 4.4% in the previous quarter. The economic slowdown appears to be increasingly broad-based. Exports, in particular, have lost momentum since mid-year, leading to a slackening of pace in manufacturing.

Clear decline in consumer price inflation

Since July, annual inflation, measured in terms of consumer prices, has decreased in the industrialised countries. In the months prior to July, it attained the highest levels since the beginning of the 1990s. Falling energy prices as well as a lower rate of increase in food prices have both had a dampening effect, and will continue to push inflation rates down in the months to come. Although core inflation rates in many countries have again risen slightly, medium-term inflation risks are down in view of the severe global economic downturn. This is reflected in the fact that the inflation expectations of consumers and producers from all important industries have declined significantly.

In the US, annual inflation decreased from 5.6% in July to 3.7% in October. The core inflation rate, which excludes energy and food prices, slackened from 2.5% to 2.2% in the same period. In the euro area, consumer price inflation also declined substantially, falling from 4.0% in July to 3.2% in October (and further to 2.1% in November, according to the Eurostat flash estimate), while core inflation was up by 0.2 percentage points to 1.9%. In Japan, annual inflation was down somewhat less markedly, dropping by 0.6 percentage points to 1.7% in the period to October. The core inflation rate remained close to zero (0.2%). In the Asian tiger states the rate of inflation retreated by 2.2 percentage points to an average of 3.8%. In China, inflation for domestic foodstuffs had been easing since March, bringing overall inflation down further to 4%. To date, the inflation surge attributable to the gradual liberalisation of energy prices has been relatively minor.

2 Developments in the Swiss economy

The economic slowdown in the third quarter continued in Switzerland, too. Unlike in the US and the euro area, however, negative GDP growth was not observed. In particular, consumer spending was more dynamic than in other countries because the labour market is still in good shape.

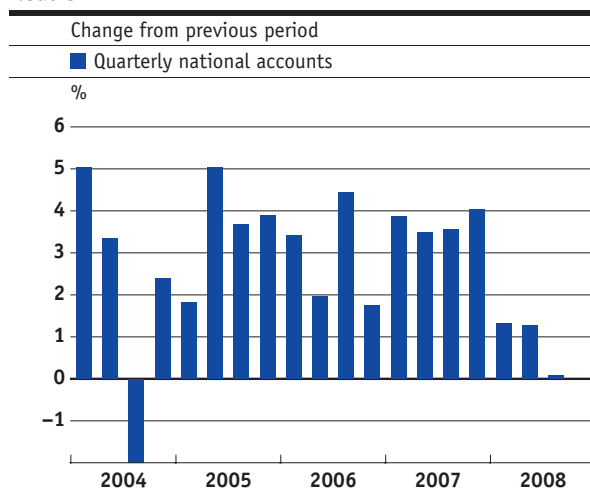
From September on, the worsening crisis of confidence increasingly made itself felt: both producer and consumer sentiment deteriorated substantially. In the coming quarters, exports are likely to suffer most from the unfavourable international situation. That could well have an adverse effect on both investment spending and demand for labour.

This picture is confirmed by the talks held by the SNB delegates for regional economic relations with around 180 representatives of various sectors between September and November. Although initial

signs of a slackening of demand had already been observed, the speed with which order intake dropped off from mid-September came as a surprise. Exports were particularly badly affected. By contrast, respondents from the construction sector and the retail and hospitality trades reported that demand was – for the time being – still robust. However, they expect 2009 to be a difficult year as well. Most of those interviewed predicted that capacity utilisation would be lower next year. This view was even shared by companies that are expecting to gain market share. From the talks it was also clear that many companies are scaling back advertising spending and reviewing investment plans, and have become more reluctant to take on staff.

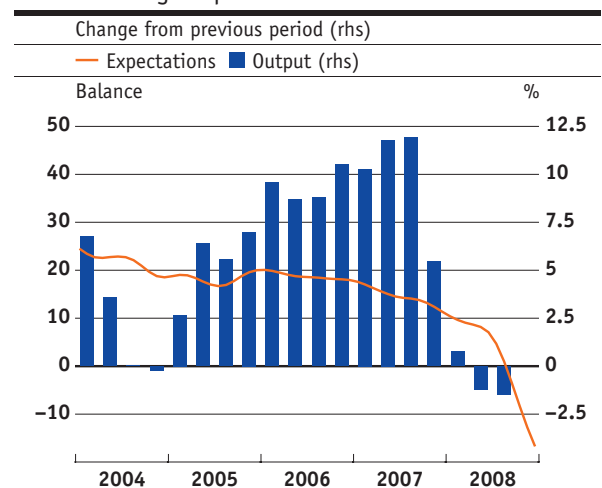
In view of the deterioration in the economic outlook, the Swiss Confederation adopted a package of measures in early November totalling CHF 1.5 billion (around 0.3% of GDP) to support the economy.

Chart 2.1
Real GDP



Source: SECO

Chart 2.2
Manufacturing output



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

Real GDP and components

Table 2.1

Growth rates on previous period, annualised

	2004	2005	2006	2007	2006	2007					2008	
					Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Private consumption	1.6	1.8	1.6	2.1	0.6	3.1	2.4	3.3	2.0	0.8	2.4	1.3
Government consumption	0.8	1.0	-0.9	-1.1	1.8	-0.6	-0.4	-5.5	-5.9	0.9	1.4	2.8
Investment in fixed assets	4.5	3.8	4.7	5.4	10.8	4.8	14.3	-9.7	2.3	1.9	-2.8	-5.5
Construction	3.9	3.5	-1.4	-1.5	3.5	0.3	-10.2	-3.3	3.9	-5.4	-1.9	-3.7
Equipment	5.0	4.0	10.0	10.9	16.6	8.5	36.2	-13.9	1.2	7.5	-3.4	-6.8
Domestic final demand	2.1	2.2	2.0	2.5	3.0	3.1	4.8	-1.1	1.1	1.1	1.0	-0.2
Domestic demand	1.9	1.9	1.4	1.1	7.0	-3.9	2.4	0.8	9.5	-6.5	-0.5	-4.4
Total exports	7.9	7.3	9.9	9.4	17.2	12.0	4.4	8.7	-0.4	2.1	15.5	4.9
Goods	7.3	5.8	11.1	8.4	16.9	12.9	-1.2	8.4	-2.8	3.5	19.1	4.1
Excluding valuables ¹	7.3	6.5	11.2	8.3	18.4	10.3	1.5	8.2	-1.6	-0.9	26.9	-2.5
Services	9.7	11.3	6.8	12.1	17.9	9.7	20.9	9.5	6.2	-1.2	6.8	7.2
Aggregate demand	3.8	3.7	4.3	4.1	10.6	1.8	3.2	3.8	5.6	-3.3	5.5	-0.8
Total imports	7.3	6.6	6.5	5.9	33.9	-2.9	2.5	4.2	9.1	-12.6	15.2	-2.6
Goods	5.8	5.6	7.8	5.1	44.8	-5.2	0.3	2.1	5.6	-9.0	18.8	-3.3
Excluding valuables ¹	5.9	5.3	7.4	6.7	30.1	6.8	-0.8	4.3	2.2	-9.1	18.3	-4.6
Services	14.7	11.3	0.5	10.0	-7.8	9.4	14.0	14.6	26.3	-26.9	-0.8	1.0
GDP	2.5	2.5	3.4	3.3	1.8	3.9	3.5	3.6	4.0	1.3	1.3	0.1

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

2.1 GDP growth

According to estimates published by SECO, in the third quarter real GDP only grew by 0.1% compared with the previous quarter. Year-on-year GDP growth was 1.6%. This was essentially in line with the SNB's prediction in the last *Quarterly Bulletin* (3/2008) that economic momentum would slow further in the second half of 2008.

On the demand side, GDP growth was primarily driven by private consumption and public sector spending. Consumer spending was 1.3% higher than in the second quarter, while public sector spending rose by 2.8%. Investment in construction and equipment were both down, falling by 3.7% and 6.8% respectively. Inventories also made a negative contribution to growth. Slacker domestic demand resulted in a drop in imports (−3.7%), whereas exports stagnated.

On the production side, the GDP trend was again held back by a sharp contraction in value added in the banking sector (−9.8%). A clear downward trend was also reported by the real estate and IT sector (−6.8%), whereas support came from consumer-related industries (wholesaling, retailing, hospitality, transport and communications).

2.2 Foreign trade, consumption and investment

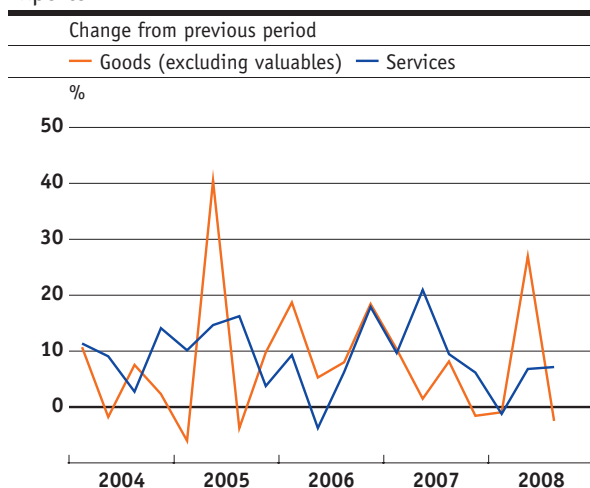
Declining export momentum

The deterioration in global economic conditions hampered exports, but they remained at the high prior-quarter level in the third quarter. This was principally attributable to a further sharp rise in exports of services. Above all, there was a renewed strong rise in merchandising and in licensing and patent fees, while tourism exports lost considerable momentum as a result of the worsening financial position of foreign households and the appreciation of the franc. Similarly, the financial crisis continued to strain banks' commission business with foreign clients.

Exports of goods also declined. Many foreign companies reduced investment plans in response to the heightening uncertainty, and the more restrictive lending in some cases. This adversely affected exports of industrial machinery and metal goods, which tend to react comparatively early to a downturn. In addition, exports of base chemicals and chemical intermediaries also registered a further downturn. By contrast, exports of clocks and watches, jewellery and precision instruments continued their upward trend.

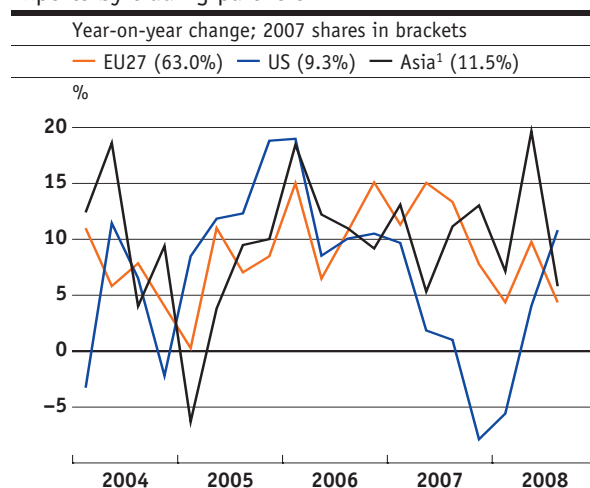
The downward trend in goods exports continued in October. A regional breakdown showed that alongside a drop in exports to Asia, there was an especially

Chart 2.3
Exports



Source: SECO

Chart 2.4
Exports by trading partners



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

pronounced reduction in exports to EU countries. This included a particularly broadly based decline in deliveries to Eastern Europe as well as to established EU member states including Germany. However, demand from oil-exporting countries, especially for capital goods, continued to provide support.

The latest drop in orders has led to a major worsening in expectations at most export-oriented industrial companies.

Support from rising consumer spending

Despite the deterioration in consumer sentiment in July, consumer spending made a strong positive contribution to growth in the third quarter as expected, thanks to robust employment and income trends.

Retail sales rose 5.6% in the third quarter as a result of higher spending on food and beverages, electronics, and health and personal care products. Consumers' increased caution was mainly visible in lower demand for durable goods, as evidenced by the drop in new car registrations. Domestic tourism receded as well.

Consumer confidence still weak

There was another sharp dip in consumer sentiment in the autumn. The SECO index of consumer sentiment dropped to -27 points in October, compared with -17 in July. Consumers were far more sceptical about the economic trend over the past

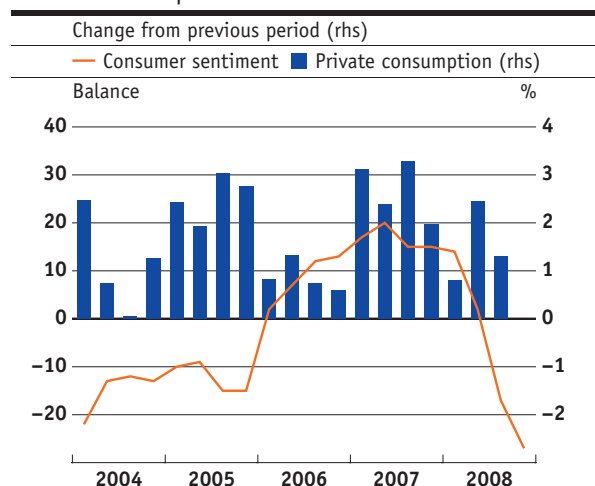
twelve months. Their assessment of their financial situation was adversely affected by higher-than-expected inflation. Moreover, most households regarded their jobs as less secure than previously. Levels of concern were not excessive, however. The reduction in inflation expectations for the coming twelve months should also be viewed as a positive development. In line with this, households were slightly more optimistic about future purchasing power trends. All in all, the results support the SNB's assessment that consumer spending growth will be lower but nevertheless positive in the coming months.

Construction investment still declining

Construction investment continued to decline in the third quarter. Despite the downturn, construction activity is still satisfactory overall – as shown by the high capacity utilisation and good order situation revealed by surveys.

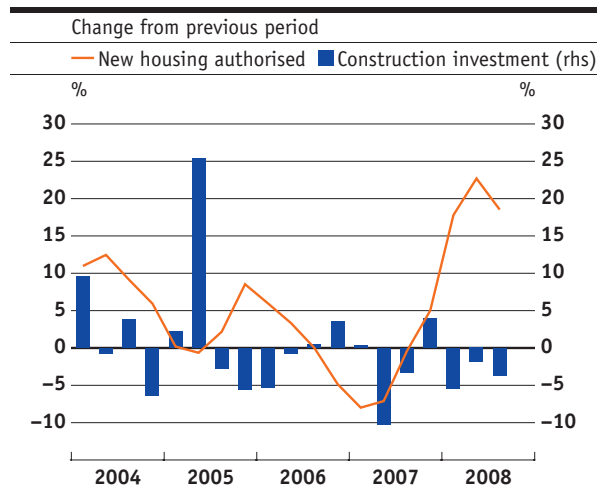
Construction spending is likely to develop differently in the various segments in the coming quarters. A sharp rise in construction permits since the start of 2008 and the continued uptrend in housing prices suggest that housing construction could pick up gradually from mid-2009. By contrast, commercial construction is likely to decline. The planned fiscal policy measures will probably not be able to prevent a slight reduction in overall construction spending in 2009.

Chart 2.5
Private consumption



Source: SECO

Chart 2.6
Construction



Sources: SECO, SFSO

Declining equipment investment

Equipment investment slipped 6.8% in the third quarter and was thus down slightly year-on-year. The downtrend is principally due to a sharp reduction in net imports of aircraft, while imports of other capital goods and purchases of domestic capital goods only dropped slightly.

Technical capacity was reduced in the third quarter in response to the lower demand. Firms have also become far more pessimistic about future sales, so they will have to be more cautious about investment in the months ahead. A broadly based fall-off in equipment investment is thus to be expected.

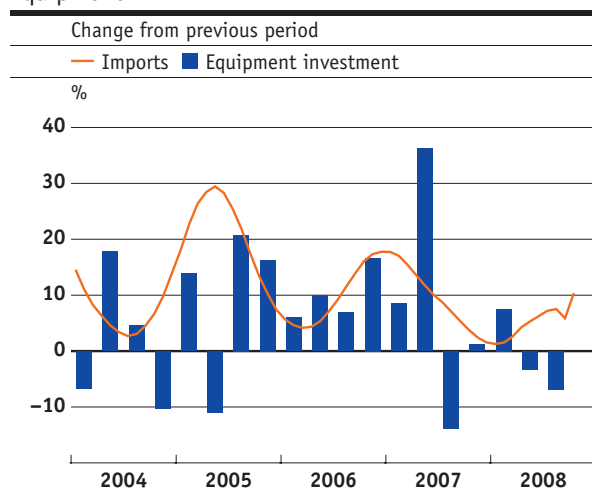
Imports dampened by lower demand from end-users

The lower growth in domestic demand held back imports of goods and services in the third quarter: they were down by 3.7% from the third quarter of 2007.

Imports of capital goods declined, mainly because of the sharp drop in imports of aircraft mentioned above. Growth in imports of machinery was also lower. The worsening prospects for exports also affected imports of raw materials and semi-finished goods (metals and chemical products) because many imported goods are used in the production of exports.

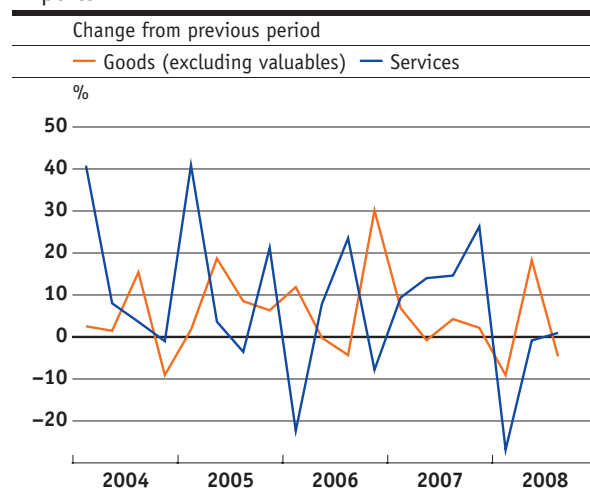
Higher spending for imports of services such as tourism and licensing and patents were offset by lower payments for private insurance and transport services. Imports are likely to remain weak in the coming quarters as domestic demand is expected to go on losing momentum.

Chart 2.7
Equipment



Sources: FCA, SECO

Chart 2.8
Imports



Source: SECO

2.3 Employment and labour market

Employment growth down, but still robust

The labour market remained dynamic in the third quarter even though economic activity slowed. Converted into full-time equivalents, the number of jobs rose 2.2% compared with the previous quarter, following growth of 2.5% in the second quarter. This was driven by an increase in full-time jobs and part-time jobs with working time of 50% or more. By contrast, there was a substantial decline in jobs with shorter working hours.

Employment trends varied considerably between sectors. There was a clear drop in momentum in the manufacturing industry (chemicals, watchmaking, precision instruments) and in the hospitality, transport and communications sectors. Employment declined in the insurance, banking and corporate service sectors.

Poorer outlook for employment

The economic slowdown is likely to have a more significant impact on the labour market in the coming quarters. While an abrupt reduction in unemployment in the short term is unlikely, as the number of vacancies has remained relatively high (cf. chart 2.10), the latest quarterly survey by the SFSO indicates a clear deterioration in the medium term, especially in manufacturing and at banks and insurance companies.

Initial rise in unemployment

There was a slight rise in seasonally adjusted unemployment between August and November: the unemployment rate rose from 2.5% to 2.7%. The number of persons seeking employment – which includes people who are on training and employment programmes or have accepted an interim placement, as well as those registered as unemployed – also increased slightly, but the job-seeker rate was unchanged at 3.9%.

The expected slowing of employment growth is likely to further push up unemployment in the coming quarters.

Chart 2.9
Employment

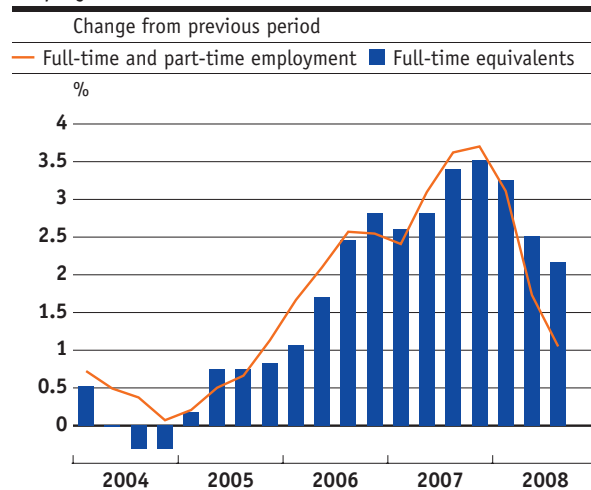


Chart 2.10
Vacancy index

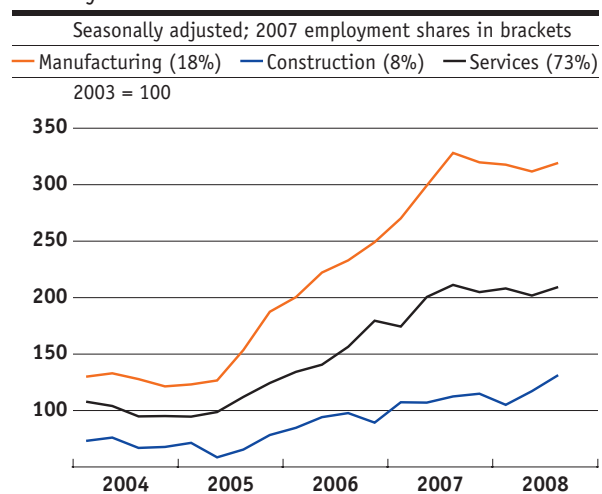
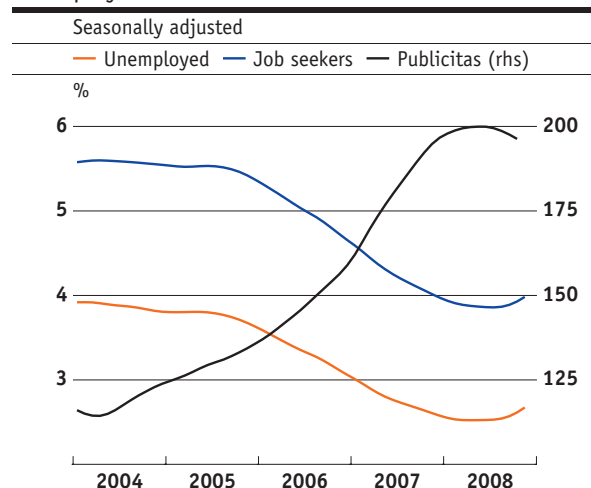


Chart 2.11
Unemployment rates and vacancies



Charts 2.9 and 2.10:
Source: SFSO

Chart 2.11:
Unemployed and job seekers registered with the regional employment offices, as a percentage of the labour force according to the 2000 census (labour force: 3,946,988 persons).
Sources: Publicitas, SECO

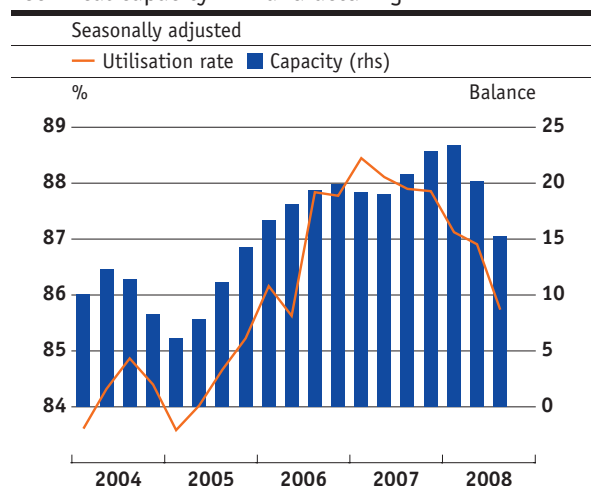
2.4 Capacity utilisation

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

Considerable reduction in capacity utilisation

Utilisation of technical capacity in manufacturing declined considerably in the third quarter. At less than 86%, it moved towards the long-term average of 84%. The indicators derived from the KOF/ETH survey show that capacity utilisation has dropped steeply of late (cf. chart 2.12). At the same time, there has been a dramatic reduction in the number of industrial companies reporting that they are hampered by insufficient technical capacity or staffing problems. Both indicators dropped to below the long-term average in the third quarter.

Chart 2.12
Technical capacity in manufacturing



Source: KOF/ETH

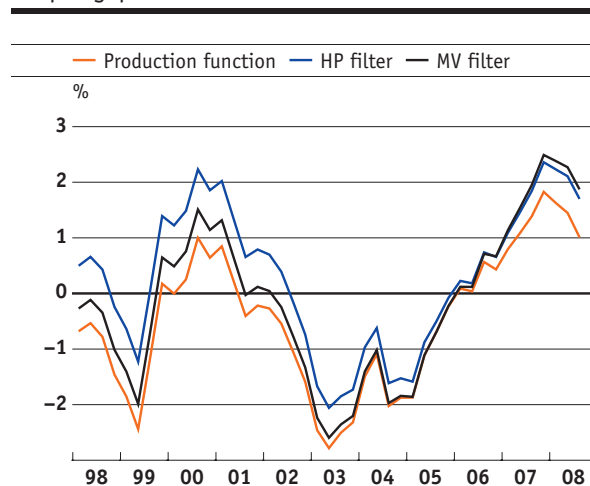
The picture in the other sectors was similar. In the construction sector, far fewer companies registered a shortage of labour. The assessment of the labour market situation in the insurance sector moved back into line with the long-term average, while in the hospitality trade there was also a sharp drop in reports of capacity problems. At the same time, the wholesale sector reduced delivery periods to an unproblematic level.

Positive output gap is narrowing quickly

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

Production potential is still increasing by around 2%, which is slightly above the long-term average (1.6%), while real GDP is no longer growing. As a result, the continued positive output gap will narrow rapidly. Chart 2.13 shows three estimates of the output gap based on different methods of estimating production potential: production function (PF), the Hodrick-Prescott filter (HP) and the multi-variate filter (MV). The production function shows that the production overhang was 1.0% in the third quarter, while using the two filter processes it came to 1.7% (HP) and 1.9% (MV).

Chart 2.13
Output gap



Source: SNB

The discrepancy between the three methods is not unusual for an economic downswing. It should, however, be noted that the cyclical momentum of the output gap measured by all three methods is very similar and points to a sharp decline. The output gap remained positive in the third quarter, principally because of slightly above-average utilisation of technical capacity. By contrast, since the high demand for labour was matched by corresponding labour resources, utilisation of the supply of labour was, by that stage, almost normal.

In view of a marked slowing of real GDP growth, the output gap should narrow rapidly. The SNB only expects it to be marginally positive in the fourth quarter.

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

Table 2.2

	2007	2008			2008			
		Q1	Q2	Q3	August	September	October	November
Overall CPI	0.7	2.5	2.7	3.0	2.9	2.9	2.6	1.5
Domestic goods and services	1.0	1.3	1.6	1.9	1.9	2.1	2.1	2.1
Goods	0.0	1.5	1.6	1.6	1.4	1.8	2.1	1.8
Services	1.2	1.2	1.5	2.0	2.0	2.1	2.1	2.1
Private services excluding rents	0.5	0.8	1.3	1.8	1.7	2.0	1.9	1.9
Rents	2.3	1.9	2.1	2.7	2.9	2.9	2.9	3.1
Public services	1.3	1.0	0.8	0.8	0.8	0.8	0.9	0.9
Imported goods and services	0.1	5.6	5.6	5.8	5.6	5.1	3.8	-0.1
Excluding oil products	-0.4	1.9	1.7	1.6	1.4	1.8	1.6	1.3
Oil products	2.4	25.0	26.2	27.8	27.5	22.4	15.0	-7.3

Sources: SF50, SNB

2.5 Prices

Pressure from producer and import prices easing

The inflationary pressure exerted by producer and import prices on downstream consumer prices has decreased since July. The annual inflation rate for producer prices declined from 4.6% in July to 2.8% in October. At the same time, the annual inflation rate for import prices registered an even steeper decline, dropping from 5.4% to 2.9%.

The price index for total supply, which is based on the indices for producer and import prices, was 2.9% higher in October 2008 than in October 2007. The highest price rises were still for energy goods and agricultural products. However, the rise in the price of energy goods has declined significantly in recent months as oil has become cheaper. A similar trend was observed for intermediate and consumer goods.

The price index for total supply can also be calculated for goods that are destined for the domestic market only. This indicator posted a year-on-year increase of 3.8%, which was above the rise in the overall index, suggesting that inflationary pressure on downstream consumer prices is slightly higher than the overall index indicates.

A sharp drop in consumer price inflation

Annual inflation, as measured by the national consumer price index (CPI), decreased from 2.9% to 1.5% between August and November. This mainly reflects a decline in the price of imported goods and services and a favourable base effect. By contrast, the inflation rate for domestic goods and services was higher than back in August.

Slight increase in domestic inflation

Inflation for domestic goods and services increased further to 2.1% in November (1.9% in August). In the case of goods, this rise was mainly attributable to higher prices of certain domestic food products. In the previous year, the increase in the price of goods increased from 1.4% in August to 1.8% in November. The annual inflation rate for services only rose by 0.1 percentage points from August, bringing it to 2.1% in November. Significant price rises were registered in air travel, for meals in restaurants and residential rents. However, these were almost entirely offset by price reductions for internet services and package holidays.

Chart 2.14

Prices of total supply

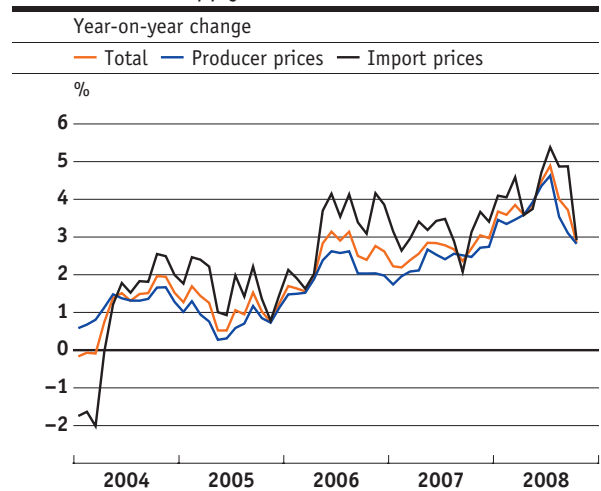


Chart 2.15

CPI: Domestic and imported goods and services

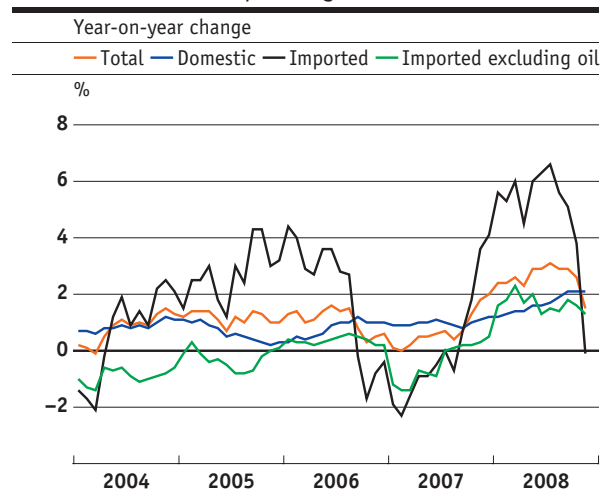


Chart 2.16

CPI: Domestic goods and services

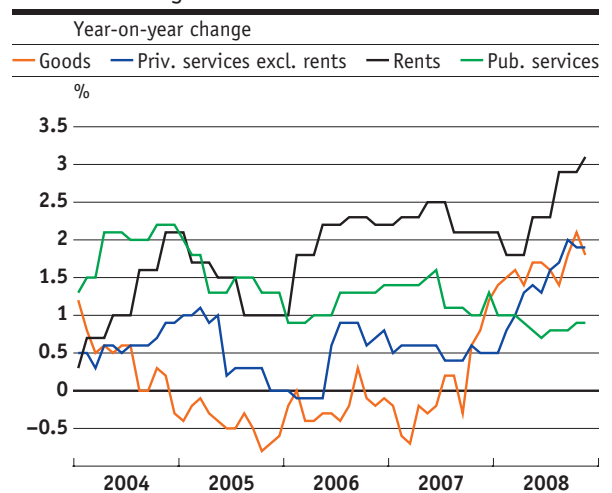


Chart 2.14:

Source: SFSO

Charts 2.15 and 2.16:

Sources: SFSO, SNB

Lower inflation for imported consumer goods

The oil price dropped from around USD 113 per barrel in August to USD 40 per barrel in early December. Experience suggests that fluctuations in oil prices are rapidly reflected in the price of heating oil and fuel. Accordingly, the annual inflation rate for the oil products included in the CPI dropped from 27.5% in August to -7.3% in November. This reduction in inflation was amplified by a favourable base effect. The inflation rate for other imported goods and services increased from 1.4% in August to 1.8% in September, but dropped back to 1.3% in November. A considerable rise in the price of gas was registered, but the price of some imported foods declined, as was to be expected given the global drop in commodity prices. Overall, the annual inflation rate for imported goods and services was -0.1% (5.6% in August).

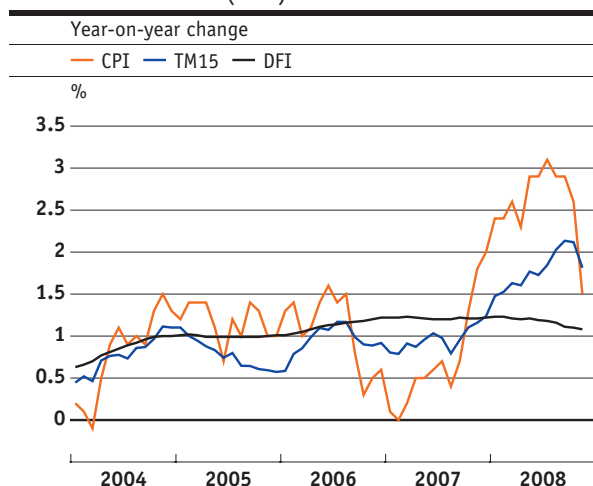
Core inflation declining slightly

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

chart 2.17. The trimmed means method (TM15) excludes from the consumer price index, for any given month, the 15% of goods prices with the highest annual rates of change and the 15% with the lowest annual rates of change. Dynamic factor inflation (DFI), by contrast, takes into account not only prices but also data on the real economy, financial market indicators and monetary variables. The two core inflation rates calculated by the SFSO always exclude the same goods from the commodities basket in each period (cf. chart 2.18). In the case of core inflation 1 (SFS01), these are food, beverages, tobacco, seasonal products, energy and fuel. Core inflation 2 (SFS02) also factors out products with administered prices.

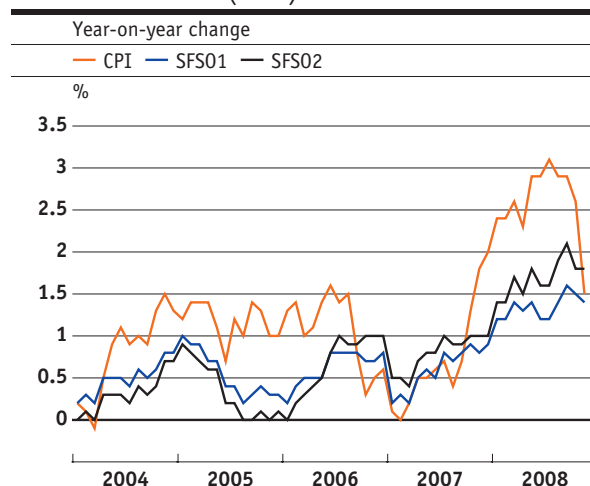
The core inflation rate calculated using the trimmed means method fell from 2.0% to 1.8% between August and November. At the same time, the SFSO 2 core inflation rate dropped 0.1 percentage points to 1.8%. The SFSO 1 core inflation rate rose in the period but dropped back to the August level in November (1.4%). This suggests that core inflation is declining slightly. However, unlike the DFI rate, the traditional core inflation rates do not reflect the clear deterioration in the global economic outlook. The DFI rate has been indicating for some months that the core inflation has declined.

Chart 2.17
Core inflation rates (SNB)



Sources: SFSO, SNB

Chart 2.18
Core inflation rates (SFSO)



Source: SFSO

2.6 Real economic outlook

Declining GDP and negative output gap expected

As already explained, the SNB is anticipating a clear economic downturn in foreign countries in the coming quarters. This is likely to weaken foreign demand for Swiss goods and services. On the one hand, the capital goods industry is likely to suffer from the financing problems of customers and resulting downswing in the investment cycle. On the other hand, the deterioration in the labour market and reduced receipts from commodities business will probably reduce disposable income in some countries and thus diminish exports of Swiss consumer goods and receipts from tourism.

This suggests that exports will decline in the coming quarters. Interviews with representatives of the manufacturing industry in October and November point to a sudden drop in activity, which is likely to prove negative for domestic investment spending. However, since Swiss companies increased technical capacity cautiously during the recent upswing, the reduction in equipment investment and commercial construction is likely to be moderate. Employment may also be expected to decline and this is likely to hold back consumer spending momentum.

A decline in GDP seems inevitable in the short term. However, the economic policy measures adopted by many countries should start to have an effect from the second half of 2009. Nevertheless, there is still considerable uncertainty since the banks' difficulties are impeding the transmission of monetary policy impetus. For 2009 as a whole, the SNB expects GDP to contract by between 0.5% and 1% in 2009. This would result in a clearly negative output gap.

Measures taken by the Confederation to boost the economy

In view of the anticipated economic downturn, the Federal Council has decided to adopt two types of measures to support the economy. Firstly, planned spending of CHF 1 billion will be brought forward to 2009. This mainly comprises authorising credits for projects that had been frozen and spending on various infrastructure projects (including transport, flood protection and education). Secondly, CHF 550 million will be released for measures to create employment. This will be spread among several hundred firms.

3 Monetary developments

3.1 Interest rates and inflation expectations

At its monetary policy assessment on 18 September 2008, the SNB decided to leave the target range for the three-month Libor unchanged at 2.25–3.25% and to aim for the middle of the target range as in the past. This decision was taken against the background of a slowdown in economic growth, with inflationary pressure high in the short term but easing off in the medium term.

Since the monetary policy assessment, the financial crisis has intensified and the economic outlook has considerably deteriorated. Consequently, the SNB lowered the target range by a total of 175 basis points at three extraordinary assessment meetings. On 8 October – in the context of measures coordinated with the Bank of Canada, the Bank of England, the ECB, the Fed and the Sveriges Riksbank – it decided to ease conditions in the Swiss franc money market by 50 basis points in a bid to bring the three-month Libor, which had risen to 3%, down to 2.5%. To this end, the SNB lowered the target range for the three-month Libor to 2–3%. The reason for making the reduction was the spread of the international financial crisis and its impact on the global economy.

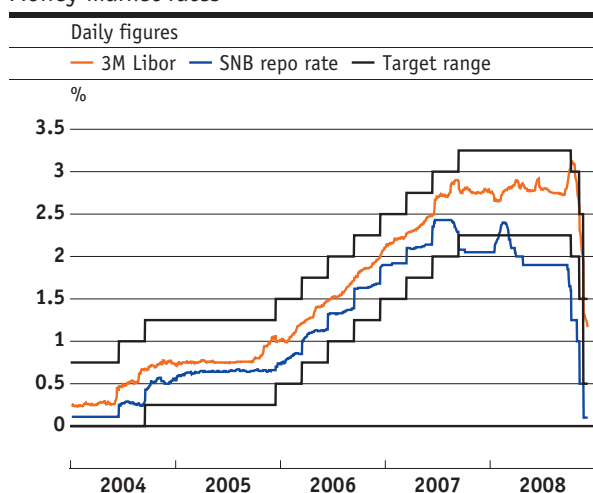
On 6 November 2008, the SNB lowered the target range for the three-month Libor by an additional 50 basis points to 1.5–2.5%. It decided to steer

the three-month Libor towards the middle of the target range. The reasons for this second reduction in interest rates were a further deterioration in the economic outlook and substantially lower inflation risks, which resulted from the drop in oil prices and the stronger Swiss franc.

The third extraordinary assessment meeting took place on 20 November. The SNB lowered the target range for the three-month Libor by 100 basis points to 0.5–1.5%. The SNB announced that it would provide the Swiss franc money market with a generous and flexible supply of liquidity to bring the three-month Libor down to the middle of the target range. This decision was justified on the basis of a further deterioration in the economic outlook and the expectation of a rapid drop in inflation due to falling energy and commodity prices.

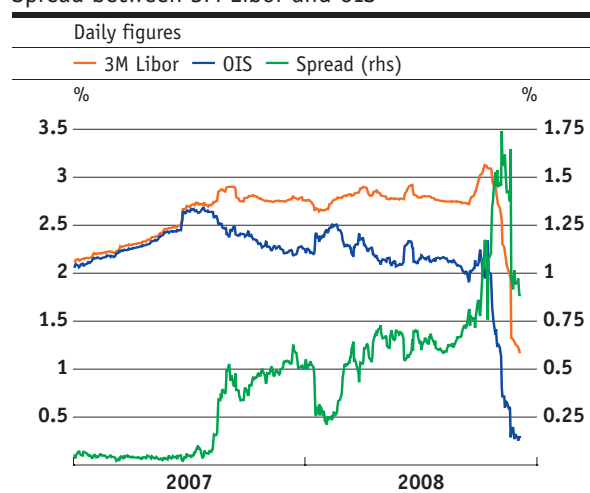
In line with its interest rate decisions, the SNB continued to supply the money market with generous liquidity in the fourth quarter. After having stood at 1.9% in the third quarter, the one-week repo rate was gradually lowered to 0.05%. By lowering repo rates, the SNB aimed to bring the three-month Libor down, which had moved outside the target range between 8 and 21 October. In addition, the SNB introduced new instruments to stabilise the money market (cf. 'New measures taken by the SNB to steer the money market', pp. 28–29). These new facilities made a major contribution to improving the steering of the Libor. However, the situation in the short-term credit market remained tense. Banks were still hesitant to grant loans to other banks. Risk premia even

Chart 3.1
Money market rates



Sources: SNB, Reuters

Chart 3.2
Spread between 3M Libor and OIS



Sources: Bloomberg, Reuters

increased. The difference between the rates for the three-month Libor and the related overnight index swap (OIS) is a measure for the size of risk premia (which mainly constitute credit and liquidity risks). The three-month Libor is the interest rate on unsecured credits between banks, while the OIS is an indicator for a risk-free interest rate. In the third quarter, the difference between these two interest rates was between 60 and 76 basis points. Between the monetary policy assessment of mid-September and the beginning of December, it widened to 93 basis points.

Significant decline in short-term interest rates

Apart from the SNB, other central banks also reacted decisively to the substantial deterioration in the global economic outlook. Several central banks relaxed their monetary policy, either in coordinated actions or on their own, and thus caused short-term interest rates to decline. From the monetary policy assessment of September to the beginning of December, the three-month Swiss franc, euro and US dollar Libor rates fell by 163, 156 and 104 basis points respectively. Interest rate differentials between the US dollar and the Swiss franc widened by 59 basis points, those between the euro and the Swiss franc by 47 basis points.

Lower long-term interest rates

Long-term interest rates also fell sharply, although not as severely as the short-term ones. The yield on ten-year US treasury bonds declined from 3.54% to 2.67% between mid-September and the beginning of December, that on ten-year German government bonds from 4.24% to 3.48%. The yield on Swiss Confederation bonds with maturities of ten years decreased to a similar extent, from 2.79% in mid-September to 2.16%. This interest rate drop in the capital market appears to be the result of three factors. First, oil and commodity prices have eased considerably, and thus inflation expectations have receded. Second, the decline in interest rates may be due to the global economic downturn. Third, in times of crisis, investors take refuge in government securities like Confederation bonds, which are regarded as particularly safe. Therefore, yields drop.

In addition to inflation expectations and (risk-free) real interest rates, premia that compensate the liquidity and credit risk are also reflected in interest rates. For example, the credit risk premium

Chart 3.3

Spreads between international short-term interest rates

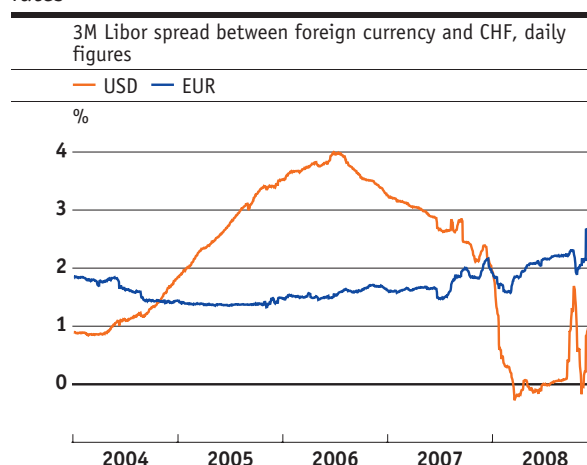


Chart 3.4

Term structure of Swiss Confederation bonds

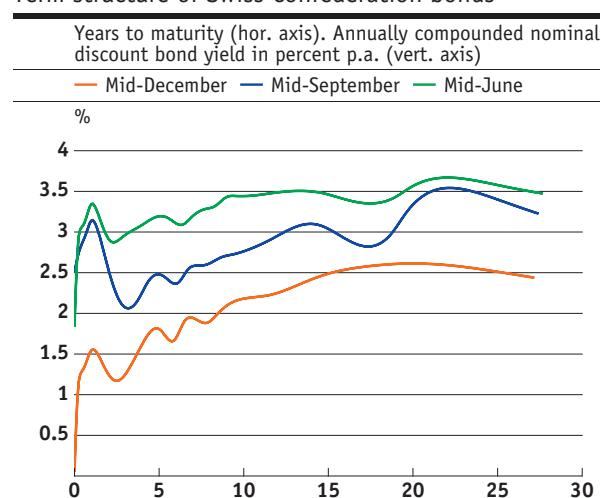


Chart 3.5

International interest rates

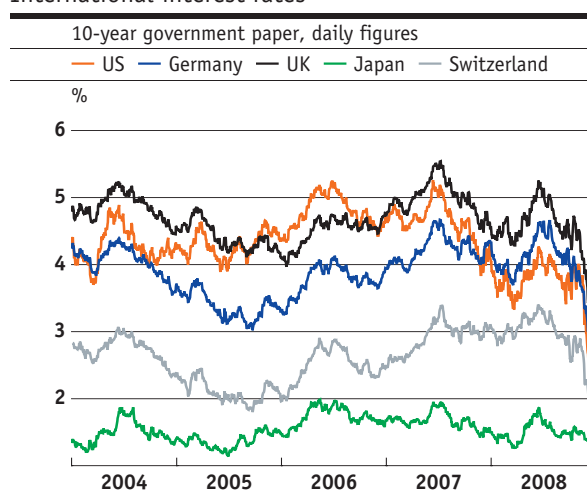


Chart 3.3:
Source: Reuters

Chart 3.4:
Source: SNB

Chart 3.5:
Sources: SNB, Thomson Datastream

on manufacturing bonds is generally ascertained by measuring the interest rate spread with respect to Swiss Confederation bonds. This spread compensates investors for the risk that the company might become insolvent during the term of the bond. Chart 3.6 shows the interest rate spread of five-year manufacturing bonds issued by first-class, second-class and third-class borrowers. It reflects a substantial rise in credit risk premia since September.

Continued reduction in the short-term real interest rate

The real interest rate is a key determinant in the savings and investment behaviour of companies and households and is thus extremely important for future business cycle developments. Chart 3.7 shows movements in the three-month real interest rate. This rate is defined as the difference between the three-month Libor and the expected rise in consumer prices during the period in question. These inflation expectations are an average of the forecasts obtained from various models. The real interest rate measured in this way stood at -0.2% in the third quarter of 2008 and was thus lower than in the previous quarter. This decline was attributable to the fact that inflation expectations were still elevated.

The results of SECO's household survey on consumer sentiment confirms this picture of only slightly lower short-term inflation expectations (chart 3.8). While there was a minor decrease from 60% to 55% in the proportion of respondents expecting prices to rise in the next twelve months, the proportion of those expecting prices to remain stable increased from 15% to 25%.

The real interest rate for medium-term maturities, however, rose due to a significant reduction in inflation expectations. Thus, the three-year real interest rate increased from 0.9% to 1.6%. Nevertheless, the level of real interest rates for medium-term maturities is also low by historical standards and has a stimulating effect on the economy.

Chart 3.6
Spread of five-year manufacturing bonds

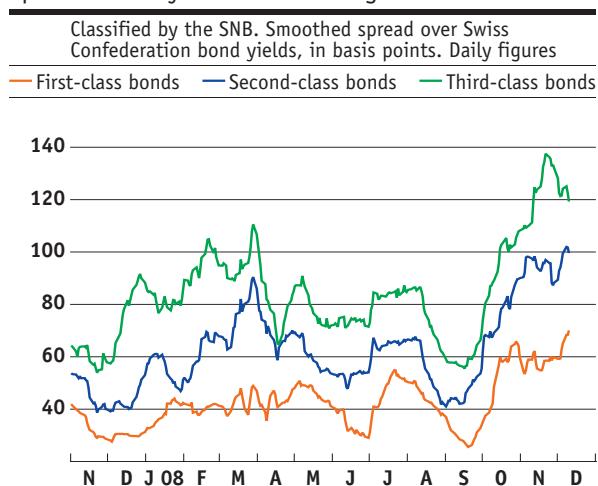


Chart 3.7
Estimated real interest rate

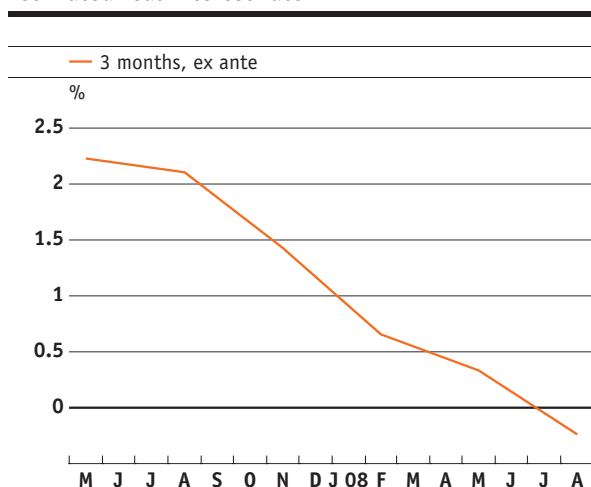
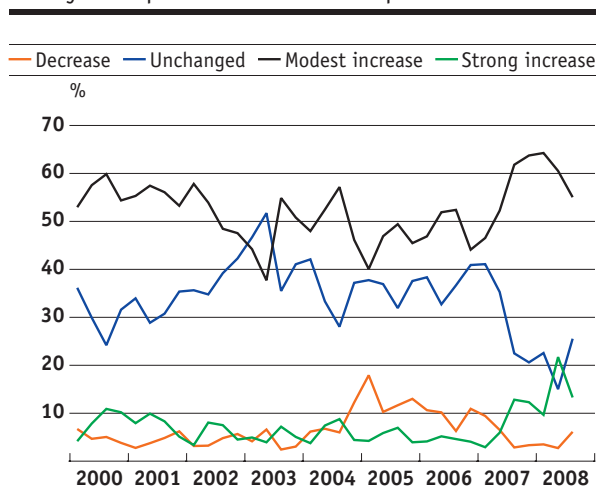


Chart 3.8
Survey on expected movements in prices



Charts 3.6 and 3.7:
Source: SNB

Chart 3.8:
Sources: SECO, SNB

New measures taken by the SNB to steer the money market

In addition to gradually reducing the target range for the three-month Libor and alongside its ordinary Swiss franc open market operations, the SNB has taken various measures since August 2007 to counter the heightened pressure on money markets. These measures have been coordinated with other central banks and fall into two groups: measures to facilitate access to US dollar liquidity and measures to facilitate access to Swiss franc liquidity.

Access to US dollar liquidity

On 12 December 2007, the SNB announced coordinated action with the Bank of Canada, Bank of England, the ECB and the Federal Reserve to facilitate banks' access to US dollar liquidity. It was also announced that the Fed would make US dollar liquidity available to the SNB in a reciprocal swap agreement. On 17 December 2007 and 14 January 2008, it thus offered 28-day US dollar repo transactions in return for SNB-eligible collateral for up to USD 4 billion on each occasion.

On 11 March 2008, following a break, the SNB announced that it had decided, in consultation with the Fed, to resume its US dollar repo auctions. On 25 March and 22 April, it therefore offered 28-day repo transactions for a maximum of USD 6 billion on each date.

On 2 May 2008, the SNB announced that, in consultation with the Fed, it would be stepping up US dollar repo auctions. It was decided that auctions would be held fortnightly. Since the term (28 days) and maximum amount of liquidity per auction (USD 6 billion) were left unchanged, the total liquidity made available therefore doubled from a maximum of USD 6 billion to a maximum of USD 12 billion. The SNB held auctions on the following dates: 6 May, 20 May, 3 June, 17 June, 1 July, 15 July and 29 July.

On 30 July 2008, the SNB decided, in consultation with the Fed, to also make longer-term USD liquidity available. From 12 August, it therefore offered 84-day liquidity. The 28-day repo auctions

were retained. The maximum outstanding total amount remained unchanged at USD 12 billion.

On 19 September 2008, the SNB decided, in consultation with the Fed, to conduct daily US dollar repo auctions for up to USD 10 billion of overnight liquidity. In addition, the amount made available in 28-day auctions was increased from USD 6 billion to USD 8 billion while the liquidity offered at 84-day auctions was raised from USD 6 billion to USD 9 billion. The maximum outstanding amount for all terms therefore increased from USD 12 billion to USD 27 billion.

On 26 September 2008, the SNB held a US dollar repo auction with a term of 7 days for up to USD 9 billion in order to make available to its counterparties additional US dollar liquidity extending beyond the end of the quarter. At the same time, it temporarily reduced the maximum volume of the daily overnight US dollar repo auctions from USD 10 billion to USD 7 billion.

On 29 September 2008, the SNB decided – in consultation with the Fed – to raise the limit on its swap line with the Fed from USD 30 billion to USD 60 billion. Concurrently, the term of the swap arrangement was extended until the end of 2009.

On 13 October 2008, the SNB announced jointly with the Bank of England, the ECB, the Fed and the Bank of Japan that it would in future be conducting auctions for US dollar liquidity with 7-day, 28-day and 84-day terms at fixed interest rates for full allocation. Since this meant that counterparties could borrow any amount in return for the appropriate collateral, the maximum amount of the swap arrangement with the Fed was unspecified. The SNB also announced that it would continue holding overnight US dollar auctions where necessary to accommodate market demand. The overnight auctions for US dollar liquidity that had been held every working day since 18 September were discontinued on 5 November due to the decline in demand.

Access to Swiss franc liquidity

On 15 October 2008, the SNB and the ECB decided on joint measures to provide Swiss franc funding to banks that do not have direct access to the SNB's market operations. The SNB announced that every Monday, starting on 20 October, it would conduct fixed-price currency swaps with a term of 7 days in collaboration with the Eurosystem. The SNB concluded a temporary swap arrangement with the ECB in order to offer the ECB access to Swiss franc liquidity for allocation to banks in its jurisdiction.

Also on 15 October, the SNB announced that it was planning to issue its own bills (SNB Bills) on a regular basis in the future. Through this liquidity-absorbing instrument, the SNB gains greater flexibility in ordinary liquidity-creation operations. In particular, it means that greater use can be made of repo transactions with longer terms.

On 29 October 2008, the SNB offered banks currency swaps with a three-month term for the first time. In line with the measures announced on 15 October, it provided Swiss francs in return for euros.

On 7 November 2008, the SNB concluded an EUR/CHF swap arrangement with the Polish central bank in order to offer it access to Swiss franc liquidity for allocation to the banks in its jurisdiction. On 17 November, for the first time, the Polish central bank took part in the weekly currency swap operation of the SNB and the Eurosystem.

3.2 Exchange rates

Appreciation of the dollar

On 10 December 2008, the euro was trading at 1.30 USD/EUR, which is 10.6% below the mid-September rate and 5.6% below the average rate for 2007. The most recent appreciation of the US dollar against the euro occurred after the latter's all-time high (1.60 USD/EUR) recorded on 15 July 2008. The Swiss franc also firmed against the euro, rising by 1.7%. However, after an all-time high on 27 October (1.43 CHF/EUR), a considerable depreciation of the Swiss franc occurred. The Swiss currency lost 8.9% against the US dollar. A possible reason for the strengthening of the dollar against continental European currencies might be the view, which has been gradually gaining ground since mid-July, that the financial crisis will have a stronger impact on the European economy and that the US will recover faster than had been assumed previously. A second explanation is that demand for US dollar liquidity rose, because positions and losses in connection with sub-prime investments had to be covered.

Stronger trade-weighted Swiss franc

In early December, the trade-weighted nominal Swiss franc exchange rate stood at almost the same level as in September. As compared to the average rate of the previous year, however, the Swiss franc traded 5.3% higher. Over the entire period since the beginning of 2005, the Swiss franc had remained weak. The months between autumn 2007 and May 2008 saw the first departure from this trend, with an increase in the trade-weighted Swiss franc exchange rate. This appreciation began at the time when financing conditions became more restrictive as a result of the financial crisis. A second upward trend of the Swiss franc set in at the end of August 2008, when the negative impact of the financial crisis on global economic growth became more apparent. As a traditional funding currency, the Swiss franc firmed against the background of excessive volatility and major losses in the financial markets, which led to the closing out of speculative positions.

Relative stability of real exchange rate over a longer period

The movement of the trade-weighted real exchange rate of the Swiss franc was similar to that of the nominal exchange rate. The trade-weighted real exchange rate has risen by 3.1% since September and by 6.8% compared with the average of the previous year. Thus, it has returned to a level which was last attained in 2005, before the onset of the extended downward trend. The real exchange rate of the Swiss franc is now 1.4% above the average measured since 1999. As chart 3.10 shows, the real exchange rate has been relatively stable over a longer period.

The real exchange rate of the Swiss franc takes account of the varying price developments in different currency areas. In the case of the trade-weighted real exchange rate, bilateral real exchange rates are weighted by the relevant shares of Swiss exports and imports.

More expansionary monetary conditions

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

The latest MCI figures suggest that monetary conditions are clearly more expansionary now. Before the end of October, there had been a tightening of conditions. The latest relaxation reflects, on the one hand, the three reductions of the target range for the three-month Libor by a total of 175 basis points since the last monetary policy assessment and, on the other hand, the depreciation of the Swiss franc since the end of October, when it reached an all-time high against the euro.

Chart 3.9
Exchange rates

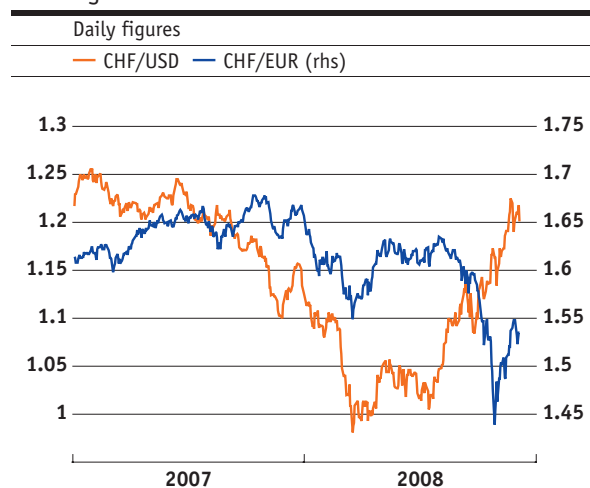


Chart 3.10
Trade-weighted real exchange rate of Swiss franc

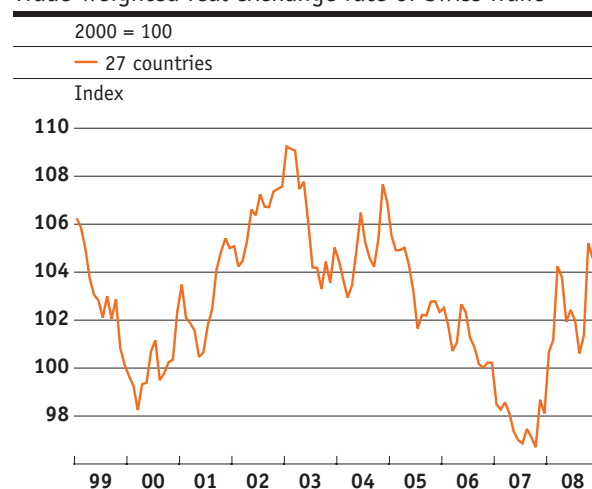
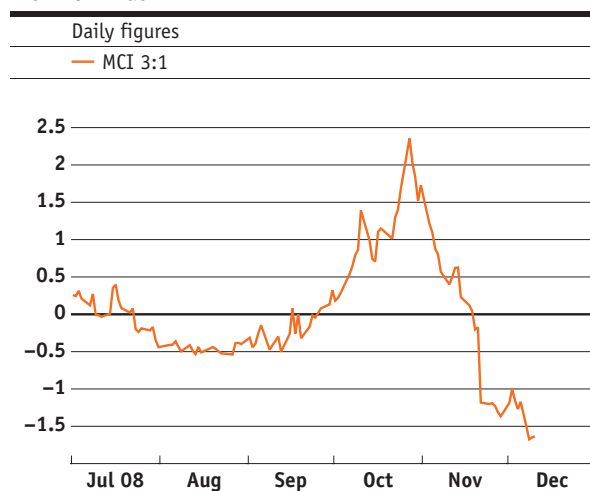


Chart 3.11
MCI nominal



Charts 3.9 and 3.11:
Source: SNB

Chart 3.10:
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 trigger changes in corporate and household wealth. This in turn has repercussions on the credit standing as well as the consumption and investment behaviour of households and companies. Second, changes in inflation expectations lead to equities, real estate and commodities being revalued. Price movements in these investments therefore allow conclusions to be drawn about inflation expectations and the economic outlook. 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.

Continued downward trend in equity markets

Since the monetary policy assessment of September, share prices have again fallen substantially. The Swiss Performance Index (SPI) lost an additional 15%. This means the index has fallen by 37% since the beginning of 2008. The main international equity indices have lost even more. The Standard & Poor's 500 (S&P) share index has declined by more than 31% (50% since the beginning of the year). The Dow Jones EURO STOXX (DJ Euro) index fell by 17% in the same period (53%). The Nikkei 225 (Nikkei) index has plummeted by as much as 31% (60%). At the same time, stock market uncertainty grew across the major markets. For the US, for example, this can be measured by using the Chicago Board Options Exchange Volatility Index (VIX). According to the VIX, market participants expected an average S&P volatility of 55% in September and October, which was more than twice the long-term average measured since 1990. On 20 November 2008, the VIX reached an all-time high of 81% and was thus twice as high as it had been after the terrorist attacks of 11 September 2001.

The most recent negative developments in the financial markets further increased investors' risk aversion. Against this background, risk premia increased and thus contributed to the fall in equity prices. The bankruptcy of Lehman Brothers in mid-September played a major role in this development.¹ Authorities took several measures to support

¹ At the same time, Merrill Lynch was taken over by Bank of America and the two remaining major US investment banks, Goldman Sachs and Morgan Stanley, gave up their investment bank status to become bank holding companies. This means that they are now subject to regulation by the Fed and have access to its credit facilities, just like commercial banks and brokers.

Chart 3.12
Stock prices

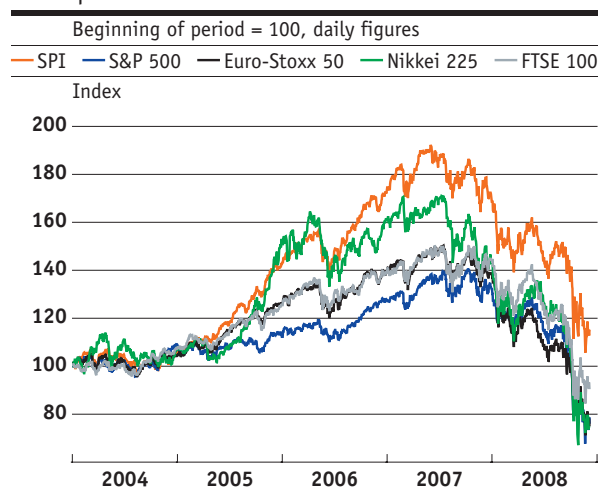


Chart 3.13
Selected SPI sectors

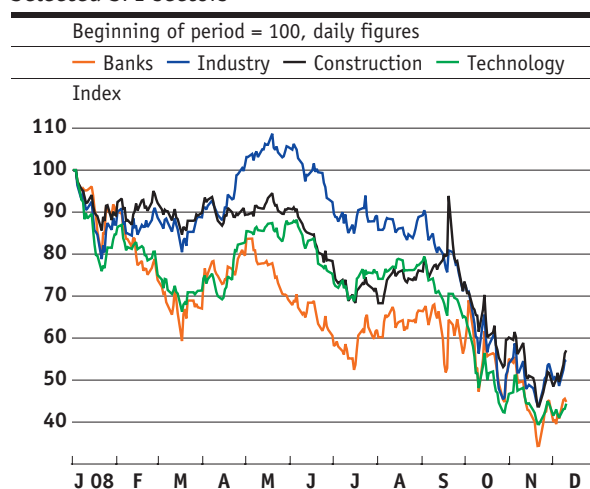


Chart 3.14
Volatility of equity returns

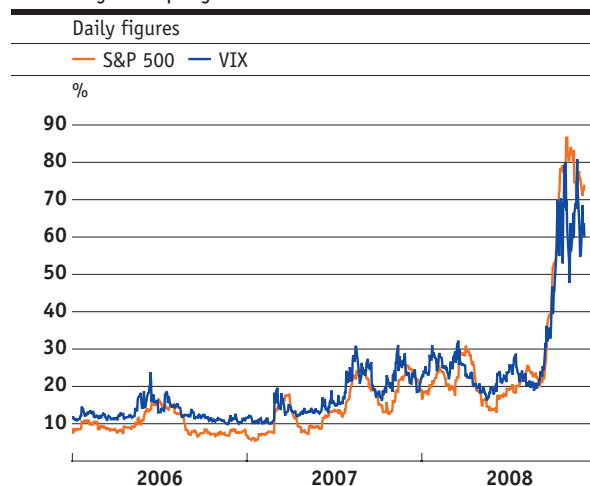


Chart 3.12:
Sources: Bloomberg, Thomson Datastream

Chart 3.13:
Source: Thomson Datastream

Chart 3.14:
Sources: SNB, Thomson Datastream

financial markets. In the US, the government took over the two mortgage lenders, Fannie Mae and Freddie Mac, while the Fed granted an extraordinary loan to the insurer, AIG. In addition, the US Treasury presented a proposal for the purchase of illiquid US mortgage-backed securities as well as possible capital injections for distressed financial institutions, for a total amount of up to USD 700 billion. On 13 October, the EU governments announced a financial rescue package which could total up to EUR 2,000 billion. Towards the end of November, the US government presented an additional assistance operation aimed at stabilising the financial system. This involved a state guarantee for Citigroup assets in the amount of USD 300 billion. In addition, the government injected a further USD 20 billion in capital into Citigroup. Stock markets worldwide responded with substantial gains. Moreover, the Fed announced that it would spend USD 600 billion on buying up mortgage-backed securities and USD 200 billion on supporting the consumer loans market. The main aim of these measures is to reduce the cost of loans to consumers and small enterprises.

On 16 October, the SNB and the Confederation announced extraordinary measures to support the Swiss financial system. On the one hand, the Confederation strengthened the capital base of UBS by subscribing to mandatory convertible notes in the amount of CHF 6 billion. On the other hand, the SNB granted a loan not exceeding USD 54 billion to a special purpose vehicle set up to take over illiquid assets currently held by UBS. A similar offer was also extended to CS Group, which refrained from making use of this possibility.

Breaking down the individual components of the SPI by size of company shows that small and medium-sized enterprises are most severely affected by the latest developments in the financial crisis. Since mid-September, their shares have fallen by 26% and 33% respectively, while large companies have lost 12% on average. While, at the beginning, the financial turmoil mainly had an impact on the financial sector, the rest of the economy has also been badly affected in the recent past. The increasing probability of a global recession was felt more strongly by small and medium-sized enterprises than by financial institutions or insurance companies.

The same applies for the performance of Swiss shares broken down by sector. Since mid-September, manufacturing, technology and construction

Chart 3.15

Commodity market indices

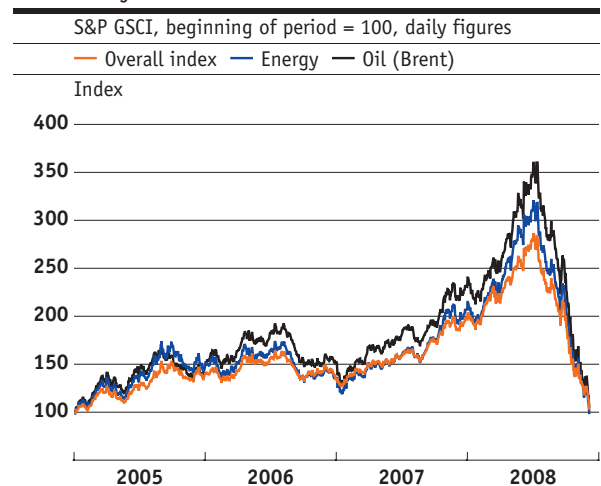


Chart 3.16

Nominal real estate prices and rents

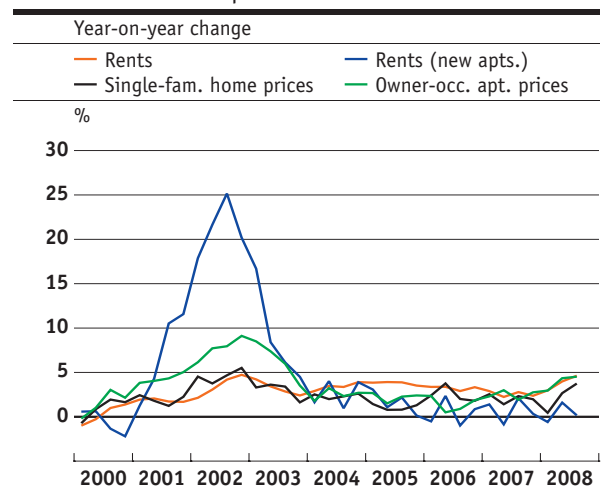


Chart 3.17

Nominal commercial and office rents

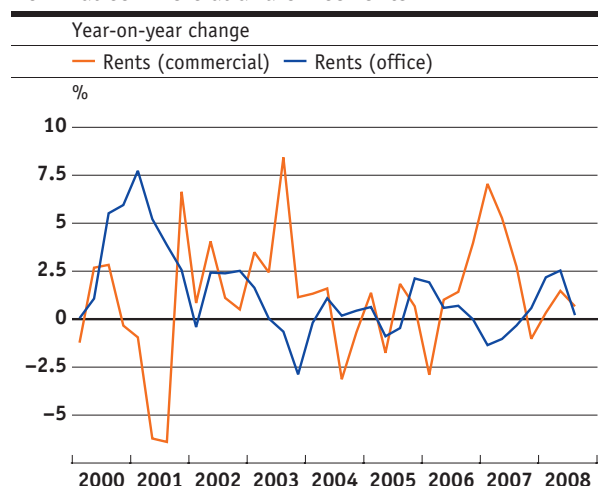


Chart 3.15:
Source: Bloomberg

Charts 3.16 and 3.17:
Source: Wüest & Partner

have suffered the heaviest share price losses. Construction companies lost 35% of their value. Industrial and technological companies' losses amounted to 33% and 41% respectively. The value of bank shares, however, declined by a mere 15%. This was partly due to the support measures taken by the government to strengthen the banking sector, which – at least partially – alleviated the risk of default which was priced into bank shares.

Sharp fall in commodity prices

Fears of a global economic slowdown had a negative impact on demand for commodities. Since mid-September, the Goldman-Sachs Commodity Index (GSCI) plunged by 62%. An examination of the main components of the GSCI shows that all commodity categories were affected by the decline. The GSCI energy spot index was most severely hit. At the beginning of December, the oil price in US dollars stood at USD 41 per barrel of Brent, which is half of the price it had reached in mid-May 2008.

Slight rise in real estate prices

In the third quarter, nominal prices in the real estate market rose year-on-year. Prices for owner-occupied apartments were up 4.4%, while those of single-family homes rose by 3.7%. The cost of rented apartments – which represent the largest segment in the Swiss residential market – rose by 3.9%. However, rental costs for new apartments, which are a better reflection of market forces, were up by a mere 0.2%. The cost of renting business property also increased only moderately. There are still no indications of a speculative bubble in the Swiss real estate market. Accordingly, there are no signs of a price correction, unlike in other European countries.

3.4 Monetary aggregates

Growth in monetary aggregates

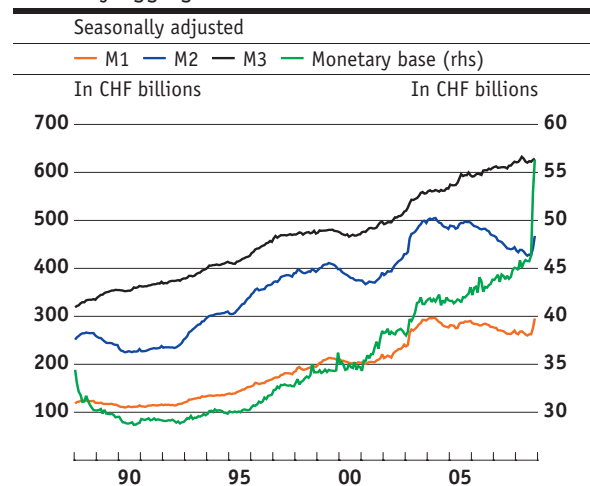
As shown in chart 3.18, both M1 (notes and coins in circulation, sight deposits and transaction accounts) and M2 (M1 plus savings deposits) declined for an extended period of time from early 2006, were then relatively stable and have started growing again following the most recent interest rate reductions. In November, M1 was 11.0% above the year-back level and M2 6.2% higher. M3 (M2 plus time deposits) continued to expand slightly, by 1.6% (cf. table 3.1).

In 2003–2005, growth rates of the monetary aggregates had been high; subsequently, the increase in interest rates led to a decline in the M1 and M2 aggregates. Both of these monetary aggregates have stabilised again recently, in line with the flatter path of short-term interest rates since autumn 2007. The latest increase in M1 and M2 reflects the typical substitutions that occur when short-term interest rates are reduced. One way of assessing potential inflation or deflation risks emanating from an excessive or insufficient supply of liquidity to the economy is to calculate a money gap or monetary overhang. This corresponds to the positive deviation (monetary overhang) or negative deviation (money gap) of the actual M3 aggregate from an equilibrium value which is calculated on the basis of the transaction volume in the economy and the opportunity cost of holding money (cf. box, 'Money supply growth and inflation', *Quarterly Bulletin* 1/2005, p. 33).

Chart 3.19 shows the percentage deviation of the M3 aggregate from the calculated equilibrium value. In order to take account of statistical uncertainty, the money gap or monetary overhang is presented as a range that spans one standard deviation. If the range is below the zero line, as is currently the case, this indicates an expectation of lower price pressure in the medium term. There has been a money gap for some months now. This can be compared to the situation at the beginning of 2000. At the time, the money gap resulted in a decline in inflation, which had risen at the end of the 1990s.

The SNB supplied the market with liquidity to meet the extraordinary liquidity demand by commercial banks as well as to stabilise the interbank money market and the Libor. In these times of uncertainty, demand for high-denomination banknotes has increased. Consequently, the fact that the monetary base had grown in November by 25.9% as compared to the previous year does not point to inflation risks. Furthermore, despite their most recent rise, the broader monetary aggregates remain at a relatively low level.

Chart 3.18
Monetary aggregates



Source: SNB

	2006	2007	2007		2008			2008		
			Q3	Q4	Q1	Q2	Q3	September	October	November
Monetary base²	43.1	44.2	43.4	44.8	45.8	45.4	45.3	45.5	52.0	55.6
<i>Change³</i>	3.0	2.5	2.7	2.7	2.6	3.3	4.4	5.5	20.0	25.9
M1²	282.4	268.9	261.3	268.7	266.4	265.3	258.5	260.8	275.9	301.0
<i>Change³</i>	-0.6	-4.8	-6.8	-4.4	-3.4	-1.7	-1.1	-0.4	4.7	11.0
M2²	481.6	450.5	439.0	443.5	438.7	434.3	423.7	425.1	440.9	473.5
<i>Change³</i>	-2.0	-6.4	-8.0	-6.5	-5.8	-4.3	-3.5	-2.9	0.4	6.2
M3²	600.3	612.8	607.0	618.8	625.2	629.3	617.9	617.9	624.9	629.5
<i>Change³</i>	2.5	2.1	1.1	1.8	1.9	2.8	1.8	1.3	2.0	1.6

1 1995 definition

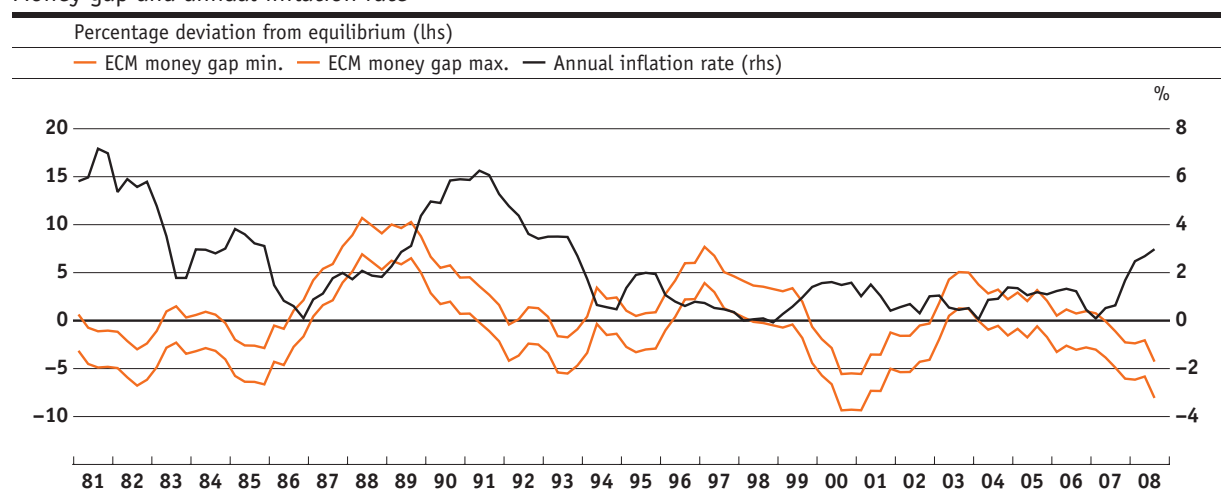
2 Level in CHF billions

3 Year-on-year change in percent

Source: SNB

Chart 3.19

Money gap and annual inflation rate



Source: SNB

3.5 Credit

Slowdown in credit growth

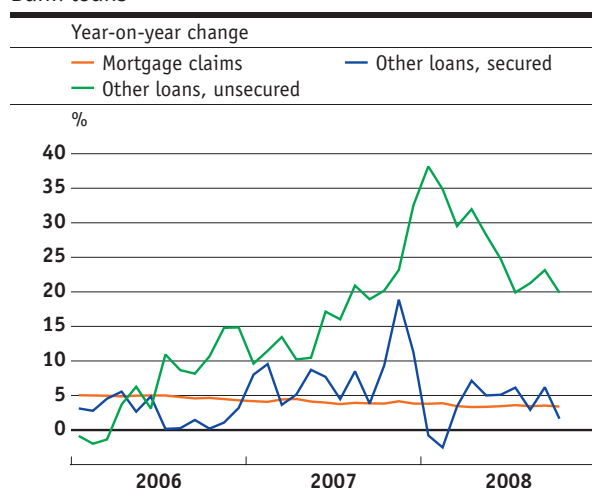
Credit growth has slowed slightly. In the third quarter of 2008, the annual growth rate fell to 5.8%, after having amounted to 6.4% in the second quarter. Graph 3.20 shows that this deceleration is mainly attributable to a reduction in the growth of other unsecured loans. As can be seen in table 3.2, these loans expanded by an annualised 21.4% in the third quarter, while they had grown by 28.2% in the previous quarter. The growth rate of other secured loans also expanded less strongly as com-

pared to the previous quarter (5.1% as against 5.7%). Mortgage loans, however, grew at almost the same rate as in the second quarter (3.5% as compared to 3.4%).

Breaking down loans by companies and households shows that loans to households grew at a slower pace, while the growth rate of loans to companies stabilised.

These figures are in line with the results of the Bank Lending Survey, which does not detect any broad-based tightening in credit conditions for the third quarter. A mere 15% of banks surveyed reported a slight tightening in their credit conditions.

Chart 3.20
Bank loans



Source: SNB

Bank loans

Year-on-year change in percent

Table 3.2

	2006	2007	2007		2008			2008		
			Q3	Q4	Q1	Q2	Q3	August	September	October
Total¹	4.8	5.8	5.5	6.9	6.6	6.4	5.8	5.5	6.1	5.3
Households ²	6.1	4.6	4.4	4.0	3.0	2.2	2.0	1.7	1.9	1.5
Companies ²	1.6	6.7	6.6	11.6	13.9	14.9	13.5	13.1	14.7	13.0
Mortgage claims ¹	4.8	4.0	3.8	3.9	3.7	3.4	3.5	3.4	3.5	3.4
of which households ²	5.5	4.3	4.0	3.7	3.6	3.0	3.5	3.4	3.4	3.2
of which companies ²	1.2	2.3	3.0	4.3	3.7	4.2	3.5	3.4	3.6	3.7
Other loans ¹	4.6	13.4	13.1	20.2	19.3	19.0	15.0	13.9	16.5	12.7
of which secured ¹	2.5	8.2	5.6	13.1	0.0	5.7	5.1	2.9	6.2	1.6
of which unsecured ¹	6.3	17.2	18.6	25.3	34.1	28.2	21.4	21.3	23.1	19.9

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 policy 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

Alongside domestic factors, exogenous effects 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 inter-

national 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.

Significant downturn in growth

The global economic scenario is characterised by a significant downturn in growth and a substantial fall in oil prices. The real economy will be strongly affected by the continuing turmoil on international financial markets. In contrast to the September forecast, the scenario now assumes that both the US and Europe will experience recessions in the coming year. For 2010, a recovery is expected, but the annual growth rates are likely to remain low. In the long term, i.e. beyond the forecast horizon, both economic regions are expected to grow at a rate approaching their potential, which is about 3% for the US and 2% for the EU.

The price of oil is estimated at USD 48 a barrel for the coming quarters, and thereafter at USD 60. Lower international inflation rates are forecast for 2009 and 2010, as a result of movements in energy prices. The USD/EUR exchange rate is set at 1.30 USD/EUR for the forecast period, as compared to 1.49 USD/EUR in the previous forecast.

Inflation forecasting as part of the monetary policy strategy

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

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

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

Assumptions for inflation forecasts

Table 4.1

December 2008	2008	2009	2010
GDP US ¹	1.4	-0.8	1.1
GDP EU15 ¹	0.9	-1.0	0.7
		Short term	Long term
Exchange rate USD/EUR ²		1.30	1.30
Oil price in USD/barrel ²		48	60
Oil price in CHF/barrel ³		58	72

September 2008	2008	2009	2010
GDP US ¹	1.8	1.3	2.8
GDP EU15 ¹	1.3	0.9	2.1
		Short term	Long term
Exchange rate USD/EUR ²		1.49	1.49
Oil price in USD/barrel ²		113	115
Oil price in CHF/barrel ⁴		126	128

1 Change in percent

2 Level

3 Level, exchange rate on 10 December 2008

4 Level, exchange rate on 3 September 2008

Source: SNB

4.2 Inflation forecast and monetary policy decision²

The assessment of the economic and monetary situation has changed considerably since the last assessment of 18 September 2008. Already back then, the SNB had emphasised that there were substantial risks attached to developments in the global economy, in financial markets and in energy prices. It had also stressed that its forecasts for economic activity and inflation in Switzerland involved considerable uncertainties. It had announced its intention to monitor developments closely, in order to react swiftly should the need arise. This eventuality did indeed materialise, which led the SNB to relax monetary policy decisively as the uncertainties faded and the deterioration in the economic situation became more concrete. It first lowered the Libor target range on 8 October, by 25 basis points; then on 6 November, by 50 points; and a third time on 20 November, by 100 points. With the new cut announced on 11 December, the Libor target range now lies between 0% and 1%, reflecting a firmly expansionary monetary policy.

Since the assessment of 18 September, the situation has changed in three key areas. First, the international economic outlook has deteriorated markedly, impacting heavily on forecasts for the Swiss economy. Second, the financial market crisis has intensified since mid-September. Finally, prices for raw materials and oil have plummeted and this, combined with the worsening of the economic outlook, has led to a marked improvement in the inflation outlook. These three points will be dealt with in turn.

Global economic outlook

In September, the SNB's main focus was the possibility of sharply contracting growth in the most advanced economies. It has since become certain that economic activity will decline simultaneously in the US and Europe, while it will slow appreciably in emerging economies. Whether this can be called a recession or not depends on the definition used, and is now merely a question of semantics.

In the US, GDP is likely to decline substantially during the current quarter, following its slight contraction in the third quarter. Industrial production,

which had hitherto been remarkably stable, fell sharply by 4% between July and October. Moreover, unemployment, which had also been stable for some time, rose rapidly, reaching 6.7% in November – a level not seen since 1994.

The sudden worsening of the situation is above all due to the fall in household spending. Households saw their financial situation deteriorate sharply due to the loss in value of their real estate and financial assets, while also suffering – until recently – a progressive erosion of their purchasing power through the continuous rise in fuel prices. Although fuel prices have since receded, the effects of the price correction in the real estate sector – the root cause of the financial crisis – as well as the fall in stock market prices continue to be felt.

In Europe in the third quarter, GDP recorded a second successive fall. Despite the recent depreciation of the euro, exports have been hit by the slowdown in global demand. This is especially true of Germany, which is highly export-dependent. By prompting a revision of plans to expand production capacity, first in the export industry and then in the upstream production chain, the fall in exports has led to a downturn in demand for equipment investment. Moreover, in some countries, for instance Spain and Ireland, construction activity has been affected by a significant correction in property prices.

The picture is more mixed in Asia. Japan and some emerging economies in the region will probably not be able to escape a brief recession, but on the whole, economic activity should continue to advance, albeit less strongly than previously expected. In addition, the emerging economies in Latin America and Eastern Europe, which until now have been heavily dependent on capital inflows, could experience a marked slowdown in growth.

Thus, what was merely a risk scenario at the September assessment is now becoming reality. The advanced economies have more or less moved into recession simultaneously. The crisis in the financial sector has finally spread to the rest of the economy. With the decline in global demand, prices for food, raw materials and oil have fallen sharply. This is the positive flipside of the coin, since this development will boost real incomes and consumption in most countries.

² This section gives an account of the rationale behind the monetary policy decision of 11 December 2008.

Swiss economic outlook

The Swiss economy is of course also affected by this worsening of the international environment. At its September assessment, the SNB was still projecting a marked slowdown in activity, but with growth remaining positive in 2009. It is now forecasting that GDP growth will be negative, not only during the first two quarters of next year, but also on average for 2009 as a whole. With the probable exception of consumption, all demand components should decline.

Exports of equipment goods, demand for which is known to be cyclical, will be affected. In most countries, difficulties in sales and distribution, on the one hand, and restrictions on lending conditions, on the other hand, have prompted a downward revision of investment plans. The US and Europe are cases in point, but a loss of momentum is also being observed in emerging markets. These developments will weigh heavily on Switzerland's exports of equipment and intermediate goods. The substantial decline in demand for vehicles made by US and European manufacturers will also impact on their Swiss-based suppliers. The metals, machinery and electronics industry was the first to experience a sharp correction in new orders.

The worsening outlook for sales will lead to an adjustment of investment plans in Switzerland as well. Domestic demand for equipment goods could even turn out to be the most severely affected component of final demand. Developments have been slightly different for the construction sector and its most important component, residential investment. Housing construction has been in decline for the past few years, although the cut in interest rates could now halt this trend.

All these factors have brought about a sharp deterioration in business confidence, which should put a damper on job creation in Switzerland. Unemployment will start to rise again.

Consumption should continue to grow, but at a considerably slower pace. The household sentiment indicator was sharply down at the beginning of the fourth quarter, reflecting expectations of greater job insecurity. In contrast, the unexpected fall in inflation will contribute to an increase in real income, which will support consumption.

For 2009 as a whole, the SNB is projecting that GDP growth will be negative next year, between -0.5% and -1%.

Changes in monetary and financial conditions

As previously mentioned, the target range for the three-month Libor has already been cut by 175 basis points in three steps since the SNB's September assessment. These successive cuts were rendered necessary by a number of factors that contributed to a tightening of monetary conditions, whereas the deteriorating general economic environment called for relaxation. One need only mention, in this regard, the brief but rapid ascent of the Swiss franc in October, or the surge in credit risk premia on the bond markets. These movements have since been partly reversed, but tensions remain. These remarks serve to illustrate a more general observation: unfavourable economic developments combined with a financial crisis can impair the transmission of monetary policy, and hence compromise its effectiveness. The expansionary effect of an interest rate cut can be diluted. When confronted with such a risk, monetary authorities have to take rapid and decisive action in order to exert the desired influence on final demand. This is what the SNB has done over the past few months.

In order to monitor lending conditions since the outbreak of the financial crisis, the SNB has been conducting regular surveys of the 20 major Swiss banks. By providing the SNB with information on these banks' intentions and expectations, the survey complements the analysis of lending volumes. In the vast majority of the institutions surveyed, no lending restrictions were announced in the third quarter. Only 15% of the banks reported that their lending practice had become slightly more restrictive.

Data for October on lending volumes in Switzerland confirm this picture. Mortgage lending is growing steadily, most recently at a rate of 3.4%. Growth in other lending remains strong, albeit advancing at a slightly slower pace. Large companies have increasingly drawn down their lines of credit, owing to difficulties in sourcing financing on the capital markets. All in all, there is, at pres-

ent, no reason to speak of a credit crunch. However, this favourable situation could soon worsen, as has been observed in other countries.

Having declined until recently, monetary aggregates are now rising again. Following the interest rate cuts, growth in monetary aggregates is expected to gather pace over the coming months. Given the current heavy demand for liquidity, higher money growth does not, of itself, indicate an increase in inflation risks. Only if money growth were to become excessive over a longer period would this pose a threat to price stability in the medium term.

Inflation outlook

In addition to the rapid worsening of the global economy and the financial crisis, the third factor behind the policy of successive rate cuts since October is the radical change in the inflation outlook. Inflation risks have largely dissipated since the last quarterly assessment on 18 September, leaving the SNB considerable room for manoeuvre in monetary policy, which it has firmly exploited.

Last December, inflation breached the 2% ceiling above which the SNB considers that the conditions for price stability are no longer met. The rapid rise in inflation – indeed, at the beginning of 2007, Switzerland still had zero inflation – was due to the combined effect of a virtually unbroken rise in oil prices and the healthy state of the economy. In July this year, inflation reached 3.1%, a level not seen for 15 years. This was a matter for concern, as there was a risk that such a level would alter households' inflation expectations, potentially leading to a sharp rise in nominal wages at year-end and resulting in a certain stickiness of inflation.

However, these two elements behind the recent rise in inflation have since reversed. First, oil prices collapsed, falling below the USD 50 mark in mid-November after peaking at USD 145 in early July. The plummeting oil price can be explained both by a drop in global demand as a result of the economic slowdown we have just described, and by the unwinding of speculative positions. Second, the Swiss economy will soon be operating below potential, and the country will see a renewed rise in unemployment. This situation will have a moderating effect on both price and wage-setting behaviour.

Thus, the SNB is now forecasting that inflation will decline almost continuously throughout 2009. Despite the interest rate cuts made since October and the cut announced today, inflation will remain low in 2010 and 2011. As of now, and for the current forecast horizon, upside and downside inflation risks have become symmetrical.

Monetary policy decision

Once again, the rationale behind the SNB's recent monetary policy is as follows: first, the global economic situation has worsened, which will hit the Swiss economy as from this quarter, and in particular next year. By contrast, the inflation outlook has improved appreciably. This has increased the SNB's room for manoeuvre. Finally, there is a risk that the financial crisis will cause a deterioration in financing conditions for the economy as a whole. These are the considerations that have prompted the SNB's decision to cut the three-month Libor target range by another 50 basis points. Given the expected deterioration in the Swiss economy and the imponderables linked to the long and variable monetary policy transmission lags, a further rate cut appears appropriate. With this action, the SNB is reducing, to the extent possible, the risk of an even more pronounced economic downturn.

Inflation forecast chart

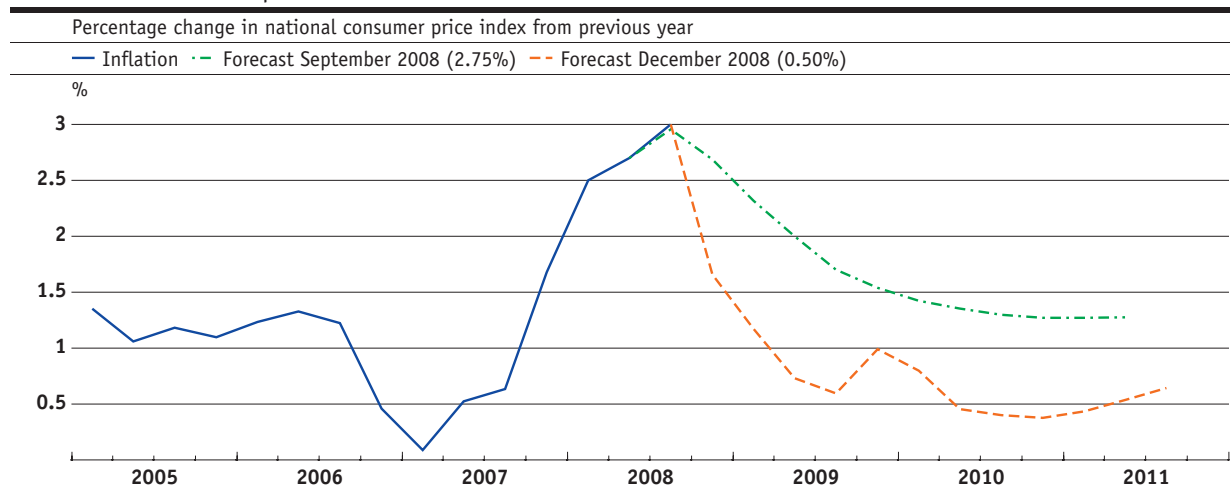
How has the inflation forecast been revised? The dashed red curve on the chart represents the December forecast. It covers the period from the fourth quarter of 2008 to the third quarter of 2011, and maps the future development of inflation on the assumption that the three-month Libor remains unchanged at 0.5% over the forecasting period. For purposes of comparison, the dash-dotted green curve shows the inflation forecast of the September monetary assessment, based on a three-month Libor of 2.75%.

The new forecast shows a rapid fall in inflation over the next few quarters. It drops back below the 2% mark as from the fourth quarter of this year. In the light of economic developments, it will continue to decline until the end of the third quarter of 2009, and will then rise slightly over the next two quarters as a result of the base effect caused by oil price movements. Inflation will subsequently fall

even further, to lie around 0.5% in 2010, before increasing somewhat over the course of 2011. This slight uptick in inflation at the end of 2011 is explained by the fact that a Libor of 0.5% does not represent an equilibrium level capable of guaranteeing price stability in the long term.

Chart 4.1

Inflation forecast of September 2008 with Libor at 2.75% and of December 2008 with Libor at 0.50%



Source: SNB

Observed inflation in December 2008

Table 4.2

	2005				2006				2007				2008				2005	2006	2007
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Inflation	1.35	1.06	1.18	1.10	1.23	1.33	1.22	0.46	0.09	0.52	0.63	1.68	2.50	2.70	3.00		1.2	1.1	0.7

Inflation forecast of September 2008 with Libor at 2.75% and of December 2008 with Libor at 0.50%

	2008				2009				2010				2011				2008	2009	2010
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Forecast Sept. 2008, Libor at 2.75%					2.96	2.69	2.32	2.00	1.70	1.54	1.42	1.35	1.30	1.27	1.27	1.28	2.7	1.9	1.3
Forecast Dec. 2008, Libor at 0.50%					1.66	1.17	0.73	0.59	0.99	0.80	0.45	0.40	0.38	0.43	0.54	0.64	2.5	0.9	0.5

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 2008

The SNB's delegates for regional economic relations are constantly in touch with a large number of enterprises from the different industries and economic sectors. Their reports, which contain the subjective evaluations of these companies, are an important additional source of information for assessing the economic situation. On the following pages, the most important results of the talks held from September to November 2008 on the current and future economic situation are summarised.

Summary

The 180 or so representatives of various economic sectors and industries interviewed by the SNB's delegates for regional economic relations between September and November indicated that sentiment with regard to the economic situation was considerably worse than it had been three months previously. Although initial signs of a slackening of demand had already been observed, the speed with which orders dropped off from the end of September, at the latest, came as a surprise. Most of those interviewed now expect business to deteriorate in 2009. However, there is considerable uncertainty about the extent of the downtrend.

The most significant change of sentiment was in the export sector. By contrast, large parts of the domestic economy have proven relatively resilient

so far. In response to the deteriorating outlook, many export-based enterprises are reviewing their budgets and cutting growth in expenditures. Advertising is being scaled back, investments postponed and companies are becoming more cautious about filling vacancies.

Complaints about labour shortages and procurement price trends were less common than in the spring and summer. Moreover, fears that banks could tighten financing and lending conditions significantly and thus hold back investment plans have not been borne out. By contrast, many companies expressed concern about the high volatility of exchange rates and the Swiss franc's appreciation against the euro in October. The rise in electricity prices announced by utilities for the start of 2009 was also more of an issue.

1 Production

Manufacturing

The decline in new orders hit industry at a time when most companies had high to very high levels of capacity utilisation and well-filled order books. Although business has flattened since the spring in some sectors – machinery, for example – the majority of companies reported good to very good half-year results. Since mid-September, many of those interviewed – especially in the export sector – have been reporting an order downturn, which has been substantial in some cases. While demand from the US market declined some time ago, Europe and even the Chinese market are now increasingly showing signs of a slowdown. Although orders on hand are still high in many sectors, a rapidly rising number of exporting companies seem to be cutting back production.

This has affected suppliers to the textile, electronics and automotive industries most heavily. However, with a few exceptions, companies in the watchmaking and jewellery sector, which has had an extremely successful year, are now expecting business to dip next year. A few niche suppliers (e.g. energy technology) and the food sector, which is traditionally non-cyclical, have observed little or no change. Overall, sectors focused principally on the domestic market seem to be less affected than exporters. Most representatives of these sectors reported that business had remained good although they too forecast a downturn in the coming quarters. Virtually all respondents, including companies that expect to gain market share, predict that capacity utilisation will be lower in 2009.

The economic slowdown and mounting insecurity among consumers and investors is mainly affecting investment spending. Many of those interviewed indicated that the willingness to invest had declined substantially in recent months and that plans are increasingly being reviewed. Many pointed to the cancellation of investment plans, while others talked about phased investment or focusing on essentials.

Services

Consumer spending has proven resilient so far. Although the indicators point to a drop in consumer confidence, this has not yet been reflected in retail sales. However, the interviews with representatives of the retail trade indicated a drop in demand for consumer durables. Apart from that, the main impact has been felt in the mid-price segment, with demand shifting to lower priced goods. Reports from the upper price segment are contradictory, but there are growing signs that demand for luxury goods is losing momentum. Forecasts for the Christmas period are mixed. The consensus view seems to be that the season will be good as unemployment is still low, but most companies do not expect to top last year's very good performance.

The majority of the representatives of the tourism and hospitality sectors were still very satisfied with the situation, but regional differences are increasing. Although there was a decline in the number of foreign visitors (especially from the US and the UK), overnight stays by domestic visitors remained unchanged. Spending cut-backs by the corporate sector (business entertaining, business trips) are clearly already having an impact. It was also noted that guests are becoming more reluctant to spend money on additional services. Bookings for the winter season are judged to be satisfactory. The main source of uncertainty with regard to the winter season – apart from snow conditions – is the euro exchange rate.

In the banking sector, commission and service income has been clipped most severely by the financial crisis. Representatives of this sector also pointed out that the interest margin had narrowed. By contrast, lending had continued unchanged. There had not been any tightening of lending terms although this could not be ruled out, given the deterioration in the economic outlook. This ties in with comments from other sectors, the majority of which had not observed any deterioration in borrowing conditions. However, some companies reported more careful scrutiny of business plans than had been common a few months ago. Increasing difficulties were also becoming evident in the export credit sector as a result of the higher risks.

Construction and real estate

Construction activity remains robust. Although order intake was down year-on-year at most firms, the level of orders on hand remains high. Consequently, the crisis is unlikely to feed through to output until the second half of 2009. The majority of industry representatives expected commercial and industrial construction to suffer more than residential construction. Already, there were signs that a rising number of projects in the commercial and industrial sectors were being cancelled. By contrast, housing construction is expected to remain buoyant because vacancy rates are low. Civil engineering could be least affected but the order situation in this segment varies greatly.

Representatives of the real estate sector felt that the recession would eliminate the housing shortage. However, they did not anticipate a sharp rise in vacancy rates. A bigger impact is expected on office vacancies, and price trends in this sector have already flattened in recent months.

2 Labour market

As yet, the economic slowdown has had little effect on the labour market. Companies have been making use of natural fluctuation, in other words, not all employees leaving have been replaced. Moreover, employees at many companies have been forced to take vacation entitlements and time off to compensate for overtime worked. Some companies (textiles, suppliers to the automotive industry) have already announced short-time working or are planning to do so. Dismissals have been observed at a few firms. Generally speaking, companies have become more cautious and are no longer endeavouring to fill all vacancies.

Complaints about difficulties recruiting skilled staff have declined but have not disappeared altogether. Most respondents foresee pay increases of around 2.5% next year and plan to adhere to this level, despite the events of the past three months.

3 Prices, margins and earnings situation

Many companies have raised prices this year as a result of the good order situation and higher prices for food, oil and other commodities. Some companies, especially in industry, have increased margins thanks to the good economic situation. However, the outlook for next year is subdued. Some of the margin increases have already been trimmed by the appreciation of the Swiss franc against the euro since September. Pay increases and the sharp hike in electricity prices scheduled for the start of 2009 are also likely to put pressure on margins. Overall, it is expected that weaker demand will make it more difficult to raise prices. Nevertheless, a significant proportion of the companies interviewed are planning (modest) price increases in 2009.

Measuring capital stocks and capital services in Switzerland

Barbara Rudolf and Mathias Zurlinden
Working Paper 2008-11

The paper presents estimates of the net capital stock and the flow of services generated by this stock for Switzerland. Due to changes in data availability, the time series cover the period 1970–2005 for a 2-asset breakdown (equipment and structures) and 1990–2005 for a 12-asset breakdown (nine equipment and three structure categories). The sensitivity of the results is examined by varying the assumptions on the initial capital stocks, the length of asset lives, the method for calculating service prices, and the choice of ICT deflators. The results suggest that the dynamics of capital services calculated from the 12-asset data breakdown are picked up reasonably well by the capital services from the 2-asset breakdown, and even the capital stock from either the 12-asset or 2-asset breakdowns. The differences are not negligible, however, suggesting that a series of capital services calculated from the 12-asset breakdown should be used as a measure of capital input, as long as the issue at hand does not require capital data starting earlier than 1990.

How to use industrial policy to sustain trade agreements

Philip Sauré
Working Paper 2008-12

Industrial policy often obstructs international trade flows and constitutes a major stumbling block in trade talks. Despite its practical relevance, however, the role of industrial policy has long been neglected in the theoretical literature on trade agreements. This study analyses the optimal use of industrial policy in self-enforcing trade agreements. Given a set of standard assumptions, the optimal self-enforcing trade agreement is shown to include subsidies to import-competing sectors. Moreover, when comparative advantage deepens as the result of an exogenous or endogenous force, declining industries are subsidised. These results run counter to conventional wisdom about the inefficiency of this kind of policy intervention. For this reason, the robustness of these findings is analysed. Most notably, it is shown that the results are particularly dependent upon a flexible industrial structure. In particular, if the industrial structure develops slowly, i.e. if it is inflexible, optimal trade agreements will ban industrial policy.

Measuring growth of labour quality and the quality-adjusted unemployment rate in Switzerland

Thomas Bolli and Mathias Zurlinden
Working Paper 2008-13

This paper presents results on human capital accumulation for the Swiss economy. Based on the assumption that wage rates equal the marginal product of labour, an index of labour quality is derived. Such indices are often used in calculating multi-factor productivity. The authors find that the index of labour quality grew at an average rate of 0.5% per year from 1991 to 2006. The main sources are the growth in average levels of education and the passage of the baby boom cohort through the age structure of the workforce. Projections over the period 2006–2050 suggest that labour quality growth will slow down with time. The paper also presents calculations of the quality-adjusted unemployment rate. The authors find that the unemployment rate is reduced by about 0.3 percentage points when human capital accumulation is taken into account.

What drives the Swiss franc?

Samuel Reynard
Working Paper 2008-14

This paper analyses the behaviour of the Swiss franc over the past 35 years. The long-term appreciation of the Swiss franc against the euro, the Deutsche mark and the weighted currencies of Swiss trading partners can be related to the Balassa-Samuelson effect, i.e. to a Swiss export sector that is more productive than the export sectors of Switzerland's trading partners. Other factors can explain medium-term exchange rate fluctuations. For example, a rise (fall) in oil prices tends to be associated with a depreciation (appreciation) of the Swiss franc. The introduction of the euro also influenced Swiss franc fluctuations. The Swiss franc reacted against the euro by offsetting dollar movements. Relative to the Swiss franc, the euro has depreciated (appreciated) when the US dollar has appreciated (depreciated), which has had a stabilising effect on the overall trade-weighted Swiss franc exchange rate. The factors identified as potential sources of the Swiss franc weakness relative to the euro over the past few years were thus a high oil price and a weak dollar. Moreover, the evidence shows that productivity in the Swiss domestic sector has increased faster since the beginning of this decade than in the euro area, which could have attenuated or even reversed the Balassa-Samuelson effect and could thus explain a break in the long-term appreciation of the Swiss franc. Over the past 35 years, however, similar to what has been reported in the empirical exchange rates literature in general, there have frequently been substantial and persistent exchange rate movements not explained by economic fundamentals.

Price-setting behaviour in Switzerland – evidence from CPI micro data

Daniel Kaufmann

Working Paper 2008-15

In recent years, the assumption of rigid prices has been extensively used in micro-founded macro-economic models. Researchers working with these models must have an idea of how long the time spells between price adjustments actually are. This paper investigates the price-setting behaviour of firms based on the individual price quotes underlying the Swiss consumer price index. Six main findings emerge from the analysis. (i) Prices are sticky; the median duration amounts to 4.6 quarters. (ii) Price-setting behaviour is heterogeneous, with differences from one sector to another and also according to outlet characteristics. (iii) Price changes are sizeable; the median absolute size amounts to 9.4%. (iv) There is no indication of general downward price stickiness; even in the case of positive inflation, 41.3% of all price adjustments are reductions and the distribution of price changes does not show substantial asymmetries. (v) Firms respond to expected cost shocks, like changes in the rate of value added tax, when they take effect. (vi) There is some evidence that firms facing higher rates of inflation adjust their prices more frequently.

Chronicle of monetary events

Repeated cuts in the target range for the three-month Libor

On 8 October 2008, following an extraordinary monetary policy assessment, the Swiss National Bank decided to lower the target range for the three-month Libor by 25 basis points to 2–3%.

On 8 November 2008, following a second extraordinary monetary policy assessment, the Swiss National Bank decided to lower the target range for the three-month Libor with immediate effect by 50 basis points to 1.5–2.5%. It intended to hold the rate in the middle of the target range for the time being.

On 20 November 2008, at a third extraordinary monetary policy assessment, the Swiss National Bank decided to lower the target range for the three-month Libor with immediate effect by 100 basis points to 0.5–1.5%. It announced that it would provide the Swiss franc money market with a generous and flexible supply of liquidity in order to bring the three-month Libor down to the middle of the target range.

On 11 December 2008, following its quarterly monetary policy assessment, the Swiss National Bank decided to lower the target range for the three-month Libor with immediate effect by 50 basis points to 0.0–1.0%. It announced that it would continue to provide the Swiss franc money market with a generous and flexible supply of liquidity and would take all necessary steps to gradually bring the Libor down to the middle of the target range.

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