

Swiss National Bank Quarterly Bulletin

September 3/2010 Volume 28

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Sectional breakdown of bulletin Q3/2010

Monetary policy report (p. 6)

Swiss economic growth remained strong in the second quarter and is likely to have clearly exceeded the increase in potential output, as has also been the case in the previous three quarters. Consequently, GDP more or less returned to its pre-crisis level. The robust growth is mainly attributable to the steadily increasing added value generated in manufacturing, banking and business-related services.

The SNB anticipates that GDP will grow by roughly 2.5% in 2010, following a decline of 1.9% in 2009. The upward adjustment, compared to the last monetary policy report, is not based on a more optimistic assessment of the current situation, it is rather the effect of the stronger recovery observed in the past four quarters. For the second half of 2010 and early 2011, the SNB expects a marked slowdown in growth.

At its quarterly monetary policy assessment on 16 September, the SNB decided to leave the target range for the three-month Libor unchanged at 0.00–0.75%, and to adhere to its objective of holding the Libor within the lower end of this range, at around 0.25%.

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

The talks conducted by the SNB delegates for regional economic relations in July and August with 206 representatives from all parts of the economy showed that the favourable economic trend had continued in the third quarter. Expectations for the next few months point, on the whole, to positive turnover growth, although momentum is likely to slow somewhat. The under-utilisation of technical production capacity looks set to decrease further.

Many respondents expressed concern over the sustainability of the international economic recovery. Opinions regarding the impact of the strong Swiss franc varied considerably, depending on the industry in question.

SNB Working Papers (p. 50)

Summaries of four *SNB Working Papers*: Martin Brown, Steven Ongena, Alexander Popov and Pinar Yeşin, 'Who needs credit and who gets credit in Eastern Europe?', *SNB Working Paper* 2010-9; Jean-Pierre Danthine and André Kurmann, 'The business cycle implications of reciprocity in labor relations', *SNB Working Paper* 2010-10; Thomas Nitschka, 'Momentum in stock market returns: Implications for risk premia on foreign currencies', *SNB Working Paper* 2010-11; Petra Gerlach-Kristen and Barbara Rudolf, 'Macroeconomic and interest rate volatility and alternative monetary procedures', *SNB Working Paper* 2010-12.

Monetary policy report

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

This report is based primarily on the data and information available as at
16 September 2010.

Monetary policy report

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About this report

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

It is a particular concern of the SNB that its monetary policy be understood by a wider public. Moreover, it is obliged by law to inform regularly of its policy and to make its intentions known. This monetary policy report performs both of these tasks. It describes economic and monetary developments in Switzerland and explains the inflation forecast. It shows how the SNB views the economic situation and the implications for monetary policy it draws from this assessment.

Sections 1–3 of the present report were drawn up for the Governing Board's assessment of September 2010. The sections entitled 'Monetary policy decision' and 'SNB inflation forecast' (Section 4) take due account of the Governing Board's monetary policy decision of 16 September 2010.

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

Monetary policy decision

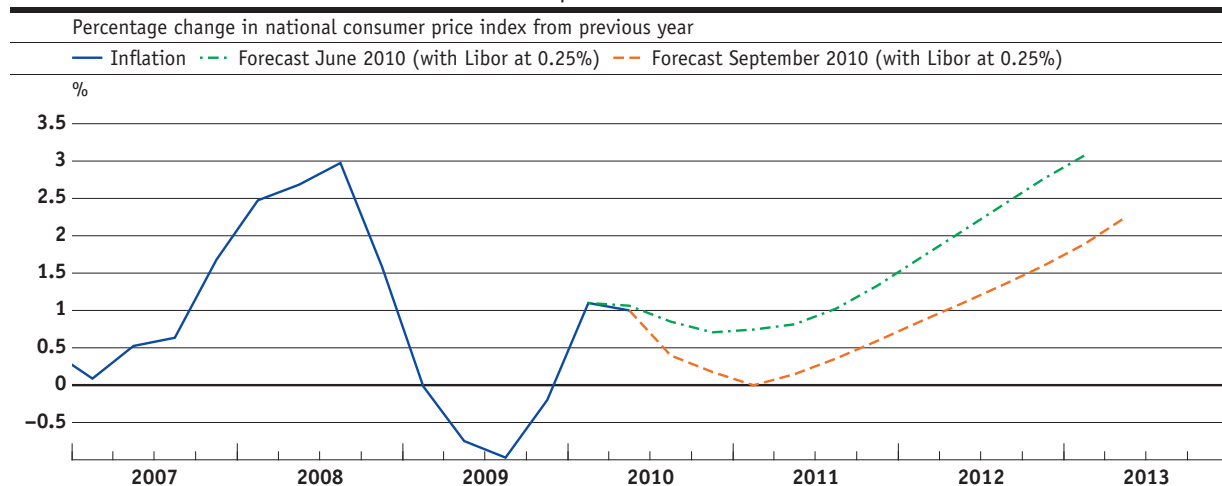
At its monetary policy assessment of 16 September 2010, the Swiss National Bank (SNB) decided to maintain its expansionary monetary policy. It left the target range for the three-month Libor unchanged at 0.00–0.75% and announced that it intended to keep the Libor within the lower part of the target range, at around 0.25%.

Since mid-2009, the Swiss economy has developed more dynamically than previously expected. For 2010, the SNB now expects real GDP to grow at a rate of approximately 2.5%. For the second half of the year, and in particular for 2011, however, the SNB expects a marked slowdown in growth.

This reflects the strong appreciation of the Swiss franc and the declining momentum of the global economy. Uncertainty about the future outlook for the global economy remains high, however, and downside risks predominate. Should they materialise and result in a renewed threat of deflation, the SNB would take the measures necessary to ensure price stability.

Over the entire three-year forecasting horizon, the path of the conditional inflation forecast – which is based on the assumption of the three-month Libor remaining constant – is lower than that of June 2010. The forecast indicates that the expansionary monetary policy is currently appropriate, although it poses long-term risks to price stability.

Conditional inflation forecast of June 2010 and September 2010



Source: SNB

Inflation forecast of June 2010 and September 2010

Average annual inflation in percent	2010	2011	2012
Inflation forecast of June 2010, Libor 0.25%	0.9	1.0	2.2
Inflation forecast of September 2010, Libor 0.25%	0.7	0.3	1.2

Source: SNB

1 Developments in the global economy

In the spring of 2009, the global economy bottomed out and has since been experiencing an upturn. So far, however, the pace of recovery has varied widely depending on the region. Manufacturing output in the industrialised countries is still below pre-recession levels. By contrast, the corresponding level in the emerging economies has already been clearly surpassed.

In the second quarter, economic growth in the euro area gained momentum, while the US and Japan experienced a slowdown. Developments in most emerging economies remained very dynamic.

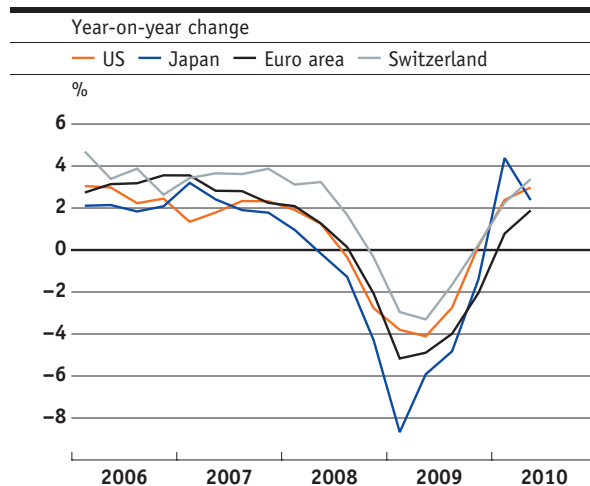
The economic recovery is likely to continue in the second half of 2010. Stimuli from inventory movements and various fiscal measures are subsidising, however. What is more, China's efforts to curb the investment boom and the rapid increase in house prices are starting to produce results. The SNB has therefore made a downward revision in its economic growth assumptions for the US, Japan and China. For the euro area, based on the surprisingly strong economic growth in the second quarter, the SNB now expects that growth will be higher than it did at its June assessment.

Weaker economic growth in the US

The recovery in the US economy slowed in the second quarter. GDP grew by 1.6%, compared with 3.7% in the previous quarter. While inventories continued to be built up, their contribution to growth was considerably smaller than in the previous period. In addition, a sharp rise in imports dampened GDP growth. Consumer spending by private households continued to rise at a moderate rate. The low level of interest rates also supported the further recovery of investment, with residential construction benefiting from tax credits to house purchasers. The labour market situation remains difficult. While the number of people in employment – which had fallen by 8.4 million during the crisis – has picked up again since the beginning of the year, the pace of recovery is very slow (barely 100,000 on average per month). At 9.6%, the unemployment rate remains high.

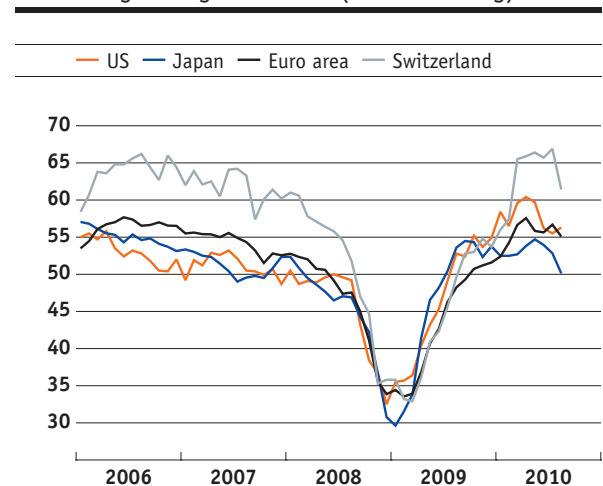
The economic outlook for the second half of the year is somewhat less favourable compared with the June assessment. Business surveys, and in particular figures for new orders in manufacturing, suggest a less rapid expansion in activity. Cost-cutting efforts by private households and the continued tension in the labour market are still weighing on consumption. What is more, given the govern-

Chart 1.1
Real GDP



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

Chart 1.2
Purchasing managers' indices (manufacturing)



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

ment's efforts to limit the budget deficit, government spending is unlikely to provide any further growth stimuli over the next few quarters.

The SNB is now forecasting that US GDP will grow by 2.7% in 2010, compared with a forecast of 3.2% at the June assessment. In contrast to previous expansionary phases, this represents only a moderate recovery.

Recovery in the euro area more vigorous

The recovery in the euro area gained momentum in the second quarter. Growth in GDP came to 3.9%, compared with 1.3% in the previous quarter. With the exception of inventories, all GDP components contributed to higher growth. However, the quarterly result benefited from one-off factors. First, there was a spike in construction investment as a result of first-quarter investments held over due to the weather. Second, VAT increases as of 1 July created an incentive for consumers to make purchases earlier than planned.

Economic growth in the second quarter varied quite substantially from country to country. Germany, the largest economy in the euro area, recorded the highest growth rate (9.0%) of any member state. It was also the highest growth rate the German economy had registered since the reunifica-

tion. By contrast, GDP in the southern economies expanded at a below-average rate, and the recession in Greece deepened.

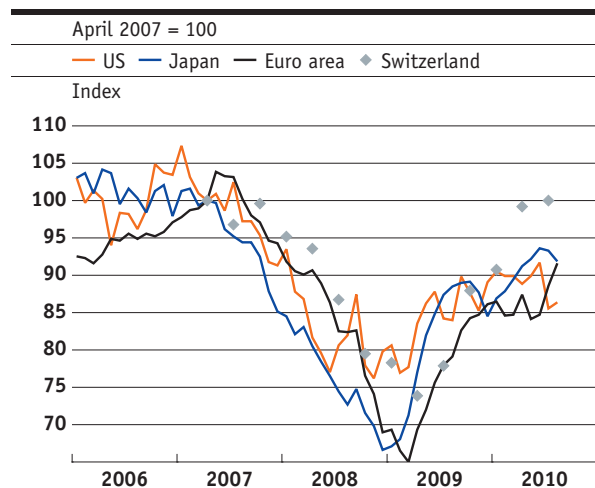
The preconditions for continued economic recovery in the euro area are still in place. Economic growth is nevertheless likely to slow down somewhat in the second half of the year. High unemployment and the fiscal consolidation efforts of several member states are having a dampening effect on demand. Moreover, the sustainability of the recovery in investment remains uncertain, especially since an ECB survey shows that banks tightened their lending conditions further in the second quarter.

As a result of the surprisingly vigorous economic growth in the second quarter, the SNB expects GDP in the euro area to grow by 1.7%, compared with 1.2% in June.

Slowdown in growth in Japan ...

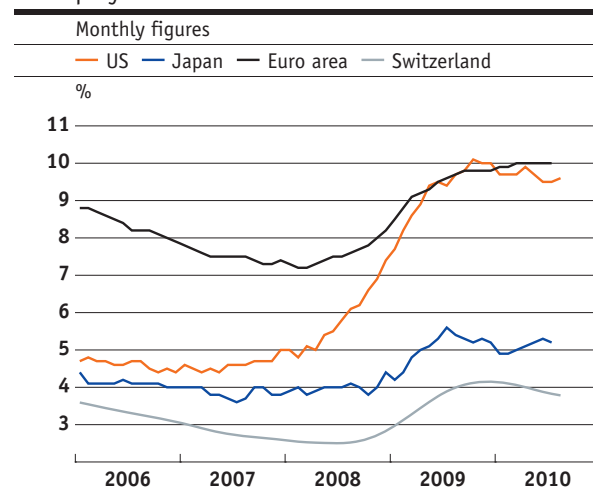
After having registered robust growth in the first quarter, Japanese GDP only expanded by 1.5% in the second quarter. Thus, since the start of the recovery a year ago, the Japanese economy has only recouped half the GDP loss suffered during the recession. All major demand components contributed to the slowdown in growth in the second

Chart 1.3
Consumer confidence index



Sources: SECO, Thomson Financial Datastream

Chart 1.4
Unemployment rates



Sources: SECO, Thomson Financial Datastream

quarter. Exports, which have since made up three-quarters of their recession loss, continued to make the largest contribution to growth.

With the slowdown in the global manufacturing industry and the continued appreciation of the yen, Japanese export growth is likely to weaken in the second half of the year. However, the high need for replacement investment, robust corporate earnings and favourable credit conditions suggest that companies will further increase their investment activity. The considerably higher summer bonuses paid out as result of the favourable earnings situation, the gradual recovery in the labour market and the fiscal policy measures taking effect in the second half of the year are also likely to bolster private consumption.

Given the weak second-quarter growth, the SNB has revised its expectations for the Japanese economy slightly downwards. It now expects growth of 3.0%, compared to 3.1% in June.

... and in emerging Asia

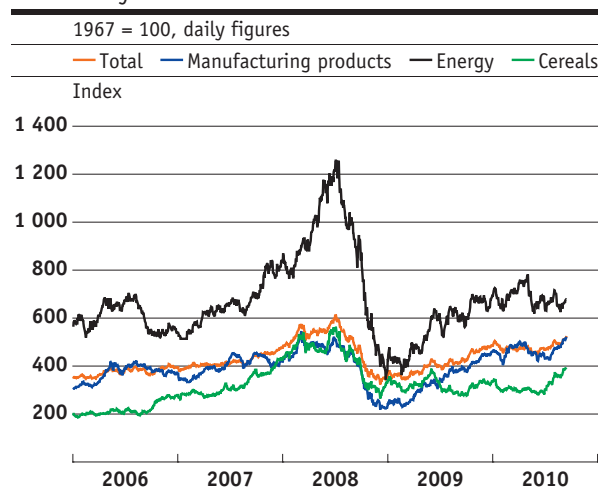
The emerging economies of Asia are also seeing first signs of a gradual slowdown in growth. In China, the normalisation of monetary conditions and the measures introduced in April to cool the real estate market are apparently beginning to have

an impact. In the second quarter, China's economic performance was still 10.3% above the year-back level, having risen by 11.9% in the first quarter. First signs of a slowdown were particularly evident in the coastal regions of the economy. This is because government infrastructure projects are now being scaled back, following a huge increase last year. With manufacturing activity slowing down, the previously strong demand for commodities declined. Government incentives and transfer payments as well as a robust labour market facilitated a shift in domestic demand from investment to private consumption. Favourable competitive conditions, by contrast, contributed to a strong growth in exports.

The 2010 government budget provides for a deficit of 3% of GDP, and includes a broad range of measures aimed at shoring up domestic demand in the second half of the year, too. In mid-April, to reduce the risk of a price bubble in the real estate market, the government tightened mortgage lending conditions, particularly in large cities, where prices had risen most rapidly. According to the house price index compiled for 70 major cities in China, in June prices started to fall compared with the previous month.

In the export-oriented economies of South Korea, Taiwan, Hong Kong and Singapore, there was

Chart 1.5
Commodity indices



Sources: Reuters, Thomson Financial Datastream

a further strong and broad-based expansion of GDP in the second quarter. Output potential, therefore, is likely to have been surpassed. At mid-year, industrial activity lost some momentum. While business confidence remained upbeat, declining stimuli from China will probably translate into a slowdown in GDP growth.

Inflation subdued

In the period from April to July, consumer price inflation remained low in almost all countries. Annual inflation in the US dropped from 2.2% in April to 1.2% in July. This drop was largely attributable to falling petrol prices and base effects from energy prices. Core inflation remained unchanged at 0.9%. In the euro area, the weak euro prompted a further increase in annual inflation, to 1.7%. With the exception of energy, all major goods categories made a contribution to this rise. Core inflation climbed from 0.8% in April to 1.0% in July. In Japan, annual inflation remained in negative territory, but the decline in prices slowed from -1.2% to -0.9%. In July, core inflation stood at -1.5%, after registering a historical low of -1.6% in April. By contrast, base effects and rising energy prices led to a renewed rise in annual inflation in the emerging economies of Asia. In China, annual

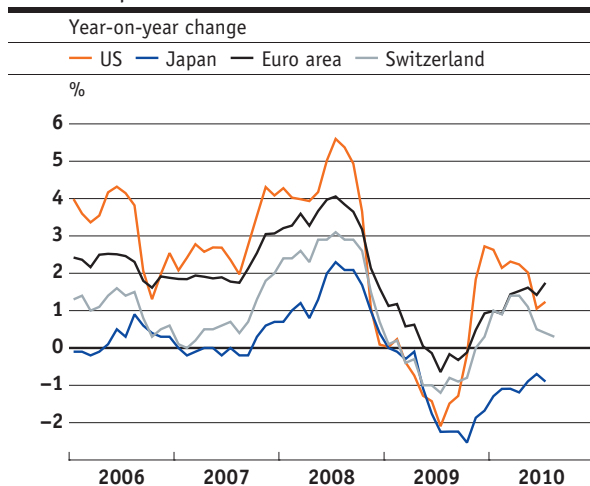
inflation was up by half a percentage point to 3.3%, while core inflation registered a 1.1% increase.

No change in expansionary monetary policy in major industrialised countries

The central banks of the major industrialised countries have maintained their expansionary monetary policy (cf. chart 1.10). The Federal Reserve left the target range for the federal funds rate at 0.00–0.25%. In its most recent statement, the Fed still expects inflationary pressure to be weak, and the economic upturn to be more modest than previously assumed. In order to maintain the current level of expansion, it announced that it would reinvest principal payments from maturing mortgage-backed securities in longer-term treasury securities and stabilise its total securities holdings at approximately USD 2 trillion.

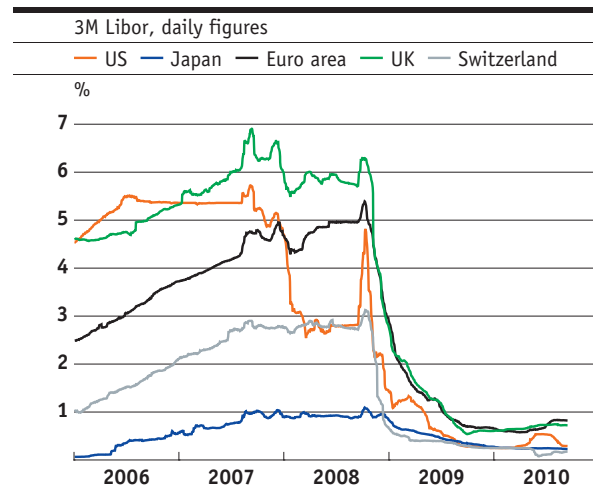
The European Central Bank (ECB) left its main refinancing rate unchanged at 1.0% and continued to offer banks unlimited liquidity. As planned, the one-year programme to acquire euro-denominated covered bonds was completed at the end of June. In addition, the ECB scaled back the securities purchases it had initiated in May as part of its Securities Markets Programme.

Chart 1.6
Consumer prices



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

Chart 1.7
International short-term interest rates



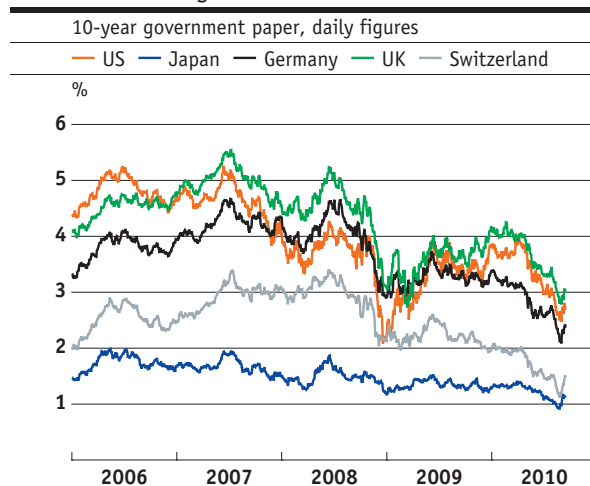
Source: Thomson Financial Datastream

The Bank of Japan left its overnight call money rate unchanged at 0.1%. At the end of August, it began implementing credit policy measures which are limited to JPY 3 trillion (roughly 1% of total Japanese bank loans). These measures are aimed at promoting promising investment projects. In addition, it expanded its liquidity measures with the goal of lowering market interest rates.

The People's Bank of China continued the normalisation of its expansionary monetary policy. It increased its reserve rate, limited credit growth and reduced the liquidity it had made available by stepping up its issuance of bonds. In addition, at the end of June, it decided to return to the managed floating exchange rate regime which it had already used from mid-2005 to mid-2008. The Chinese currency has since appreciated by approximately 1% against the US dollar.

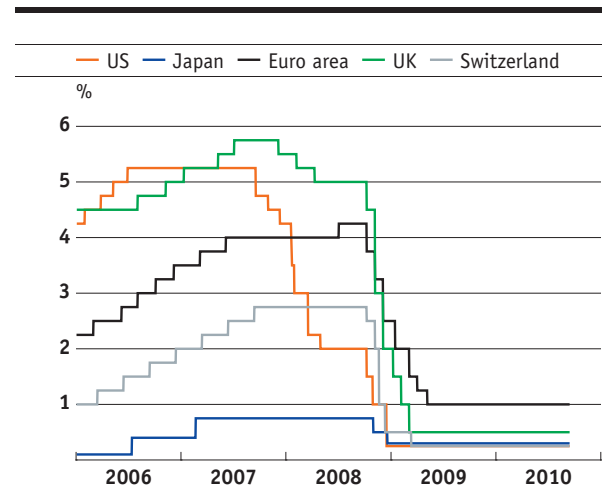
As a result of the rapid economic recovery and rising prices in the real estate markets, central banks in several of Asia's emerging economies decided to begin raising their key interest rates.

Chart 1.8
International long-term interest rates



Sources: SNB, Thomson Financial Datastream

Chart 1.9
Official interest rates



Sources: SNB, Thomson Financial Datastream

2 Developments in the Swiss economy

The revised quarterly GDP estimates published by the State Secretariat for Economic Affairs (SECO) show that the Swiss economy contracted more sharply during the recent crisis than originally assumed. It did, however, also recover faster after the crisis. This recovery continued during the second quarter, albeit at a slightly reduced pace. Economic performance has now returned to the pre-crisis level.

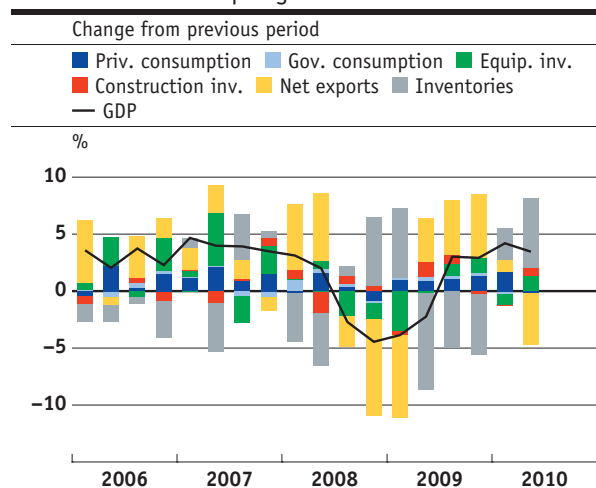
The robust growth since the beginning of the year is mainly attributable to the steadily increasing added value generated in manufacturing, banking and business-related services. Final demand, however, decreased somewhat towards the end of the quarter.

The gradual improvement in the situation on the labour market continued in the second quarter, with a further rise in employment and a decline in the rate of unemployment. In addition to the

unemployment rate, the output gap also continues to suggest the existence of capacity under-utilisation in the economy. There was thus little inflationary pressure exerted by the real economy. The decline in year-on-year inflation, as measured by the national consumer price index, to 0.3% in August, was primarily due to lower prices for imported goods and services, in particular for oil products.

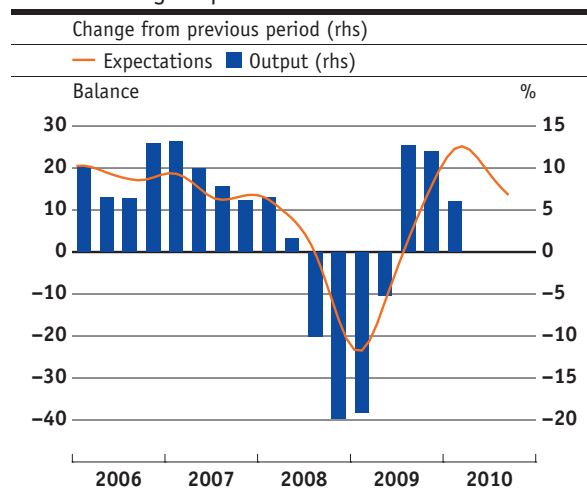
Overall, economic growth is likely to be distinctly lower in the second half of 2010, especially owing to the weakening of exports as a result of the appreciation of the Swiss franc.

Chart 2.1
Contributions to output growth



Source: SECO

Chart 2.2
Manufacturing output



Sources: KOF Swiss Economic Institute, SFSO

2.1 Gross domestic product (GDP)

Strong economic growth in the second quarter

Economic growth remained strong in the second quarter and is likely to have again clearly exceeded the increase in potential output. According to the provisional SECO estimate, GDP rose by 3.5%, compared to 4.2% in the previous quarter. Over a 12-month period, GDP advanced by 3.4%.

A breakdown by industry shows that the economic growth in the second quarter was driven mainly by manufacturing, banking and business-related services. Added value in these three industries rose by 8.8%, 13.5% and 5.5%, respectively, in the period under review. The construction industry also registered an increase in added value (3.3%). Only trade reported lower added value than in the previous quarter.

The increase in aggregate demand is the result of growth in all its components except consumer spending. The weakness of consumption is surprising, particularly since a number of important consumption indicators gave no sign of any stagna-

tion. By contrast, equipment investment and exports recorded robust growth. The advance in exports was, however, surpassed by the rise in imports. Consequently, the external contribution to the growth in final demand (3%) was negative. The difference between GDP growth calculated on the basis of output figures and the growth of final demand suggests that inventory movements made a positive contribution to GDP growth in the second quarter.

At the same time as SECO published the second quarter results, it adjusted its quarterly estimates for the past three years based on the annual GDP estimate of the Swiss Federal Statistical Office. According to the latest estimates, the recession from mid-2008 to mid-2009 led to a greater drop in GDP than previously assumed. The overall decline is now estimated to have been 3.3% (as against 2.4% before). However, the subsequent recovery was also more vigorous, with the average GDP growth rate amounting to 3.4% (previously 2.4%). In the second quarter of 2010, real GDP thus returned to the level of the second quarter of 2008. Since the Swiss population increased significantly during this

Real GDP and components

Growth rates on previous period, annualised

Table 2.1

	2006	2007	2008	2009	2008		2009				2010	
					3. Q.	4. Q.	1. Q.	2. Q.	3. Q.	4. Q.	1. Q.	2. Q.
Private consumption	1.6	2.3	1.3	1.0	0.6	-1.5	1.6	1.5	1.7	2.2	2.9	-0.2
Government consumption	0.3	0.3	1.7	1.6	2.0	-1.8	1.6	2.9	2.5	2.8	-1.6	-0.4
Investment in fixed assets	4.7	5.1	0.5	-4.9	-7.7	-4.6	-19.1	6.2	9.3	5.2	-5.6	9.9
Construction	-1.4	-2.3	0.0	3.0	8.1	5.0	-3.9	15.1	8.4	-2.0	-1.2	8.1
Equipment	10.1	11.1	0.8	-10.8	-17.4	-11.2	-29.8	-0.9	10.2	11.8	-9.2	11.6
Domestic final demand	2.1	2.7	1.2	-0.3	-1.3	-2.3	-3.5	2.7	3.5	2.9	0.3	2.0
Domestic demand	1.4	1.4	0.2	0.6	-2.5	6.2	6.9	-7.3	-2.4	-1.2	-0.5	8.6
Total exports	10.3	9.6	3.3	-8.7	-5.7	-27.7	-19.7	-5.8	23.2	13.1	15.7	7.1
Goods	11.1	8.4	2.6	-11.5	-2.9	-33.8	-25.2	-3.6	19.2	11.8	23.1	0.5
Excluding valuables ¹	11.2	8.3	2.1	-11.1	-7.9	-32.8	-23.8	-3.0	16.6	15.3	11.3	0.9
Services	8.4	12.8	4.8	-2.0	-12.0	-10.9	-5.6	-10.4	32.6	15.8	1.1	23.0
Aggregate demand	4.5	4.4	1.4	-3.0	-3.8	-8.5	-3.6	-6.8	6.2	3.9	5.5	8.0
Total imports	6.5	6.1	0.3	-5.4	-6.1	-16.8	-3.1	-16.5	14.1	6.3	8.7	19.7
Goods	7.8	5.1	-0.5	-8.3	-8.8	-23.7	-4.9	-21.6	18.4	3.4	19.6	17.2
Excluding valuables ¹	7.4	6.7	-1.0	-8.5	-8.4	-21.2	-8.3	-21.6	20.1	2.4	18.7	19.3
Services	0.6	11.2	3.9	8.1	7.5	21.4	5.7	7.0	-0.9	18.2	-24.9	30.6
GDP	3.6	3.6	1.9	-1.9	-2.7	-4.5	-3.9	-2.2	3.0	2.9	4.2	3.5

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

period, however, GDP per capita is still well below the former level.

Based on output, the recession in manufacturing and trade proved deeper than previously assumed. However, it was less marked in banking and business-related services. As far as demand was concerned, the extent of recovery was adjusted upwards for construction investment and downwards for equipment investment.

2.2 Foreign trade, consumption and investment

Upturn in exports loses momentum

The vigorous upturn in exports of goods that arose alongside the global economic recovery in mid-2009 slowed down markedly in the second quarter of 2010. Exports of services, by contrast, which in the first quarter were unchanged over the previous period, recorded a substantial increase. Overall, exports of goods and services (excluding valuables) each amounted to around 8% in the first and second quarters of the year.

In the goods exports category, exports of capital goods, in particular machines and precision instruments, continued to benefit from the global industrial cycle. Exports of commodities and semi-finished goods, by contrast, registered no further expansion, and growth in consumer goods exports, particularly pharmaceutical products and watches, was actually negative. A breakdown by sales market reveals that the weak growth was due to sluggish demand in Europe and Asia, whereas exports to the US and the oil-exporting countries expanded significantly.

As regards exports of services, net revenues from merchanting, in particular, registered a substantial increase in the wake of further oil price hikes. Higher receipts were also registered in the licences and patents field and in the tourism industry.

According to KOF Swiss Economic Institute surveys, manufacturing companies were somewhat more cautious in July regarding economic prospects than they had been in previous months. Indeed, the upward trend in exports of goods came to a halt in July and August. Overall, the development of exports is likely to remain weak in the further course of the year given the strong appreciation of the Swiss franc.

Construction investment at a high level

Construction investment rose by 5.2% in the second quarter of 2010 after recording a dip in the winter half-year, partly due to weather conditions.

Chart 2.3
Contributions to export growth

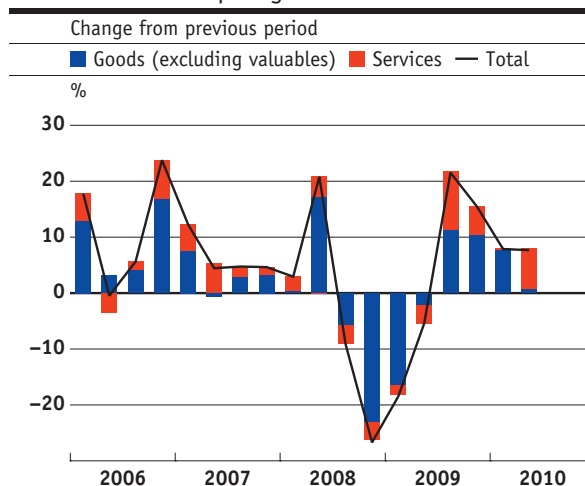


Chart 2.4
Expected new orders

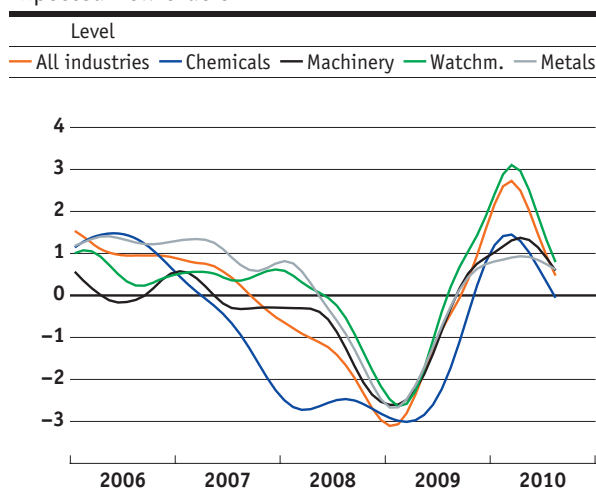


Chart 2.5
Goods exports, regional growth contributions

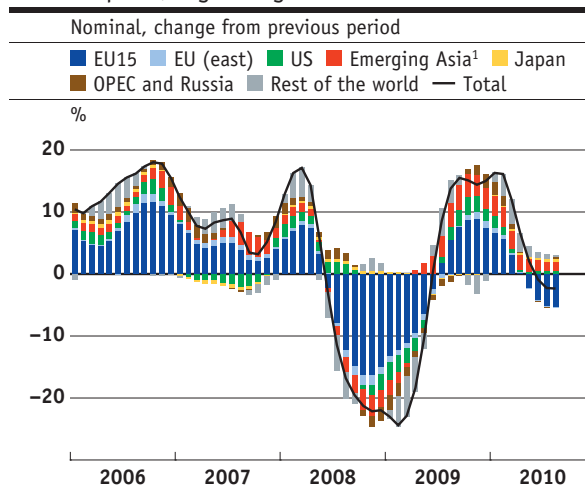


Chart 2.3:
Source: SECO

Chart 2.4:
Source: KOF Swiss Economic Institute

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

Year-on-year, construction investment has remained practically unchanged.

According to a survey by the *Schweizerischer Baumeisterverband/Société Suisse des Entrepreneurs* (Swiss Federation of Master Builders), residential construction activity remained buoyant throughout the second quarter. Civil engineering, too, proved fairly robust. Commercial construction, by contrast, again developed less strongly than either of the other two segments.

Latest data on new orders and orders in hand suggest a moderate increase in construction investment for the quarters to come.

Rise in equipment investment

Equipment investment advanced by 11.6% in the second quarter after receding by almost the same percentage in the previous quarter. Thanks to the increase registered in the second half of 2009, equipment investment clearly exceeded the year-back total, but is still nearly 11% below its pre-recession level.

The increase in capacity utilisation in the manufacturing industry – driven by the economic recovery – will continue to boost demand for capital goods.

Private consumption unchanged

Consumer spending remained virtually unchanged compared to the previous quarter. In some areas, however, private consumption figures were up in the second quarter, too. Retail sales, for example, continued to rise, as did the number of new car registrations, which points to growing demand for consumer durables.

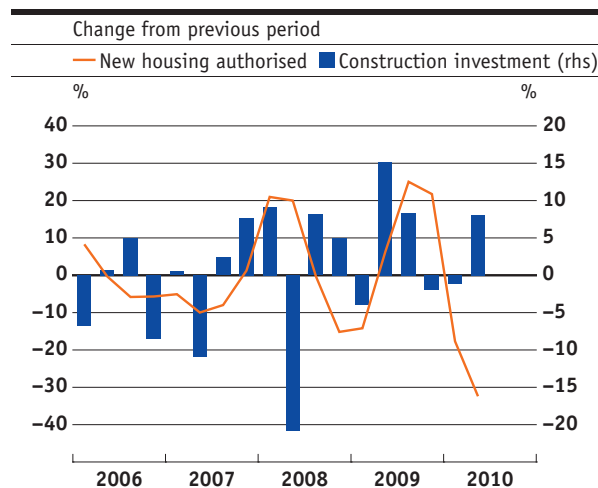
Positive consumer confidence

Consumer confidence has improved further in the past few months. The SECO index, which is comparable with similar indices in other countries, had reached its pre-recession level already in April and was somewhat higher again in July. Expectations regarding economic developments in the coming twelve months proved a little less optimistic than in April. However, respondents rated the likelihood of being able to put aside more savings as somewhat higher. As regards labour market developments and the financial situation of private households, expectations stayed largely unchanged.

Import growth bloated by one-off effect

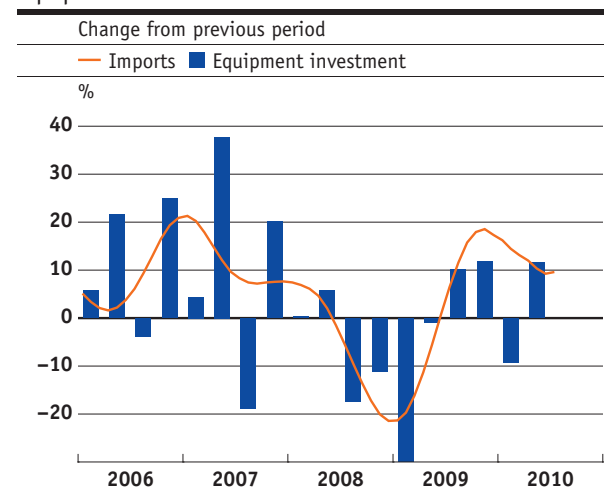
Driven by a one-off effect in the goods imports category (exceptionally high import of gold jewellery from Vietnam), imports of goods and services

Chart 2.6
Construction



Sources: SECO, SFSO

Chart 2.7
Equipment



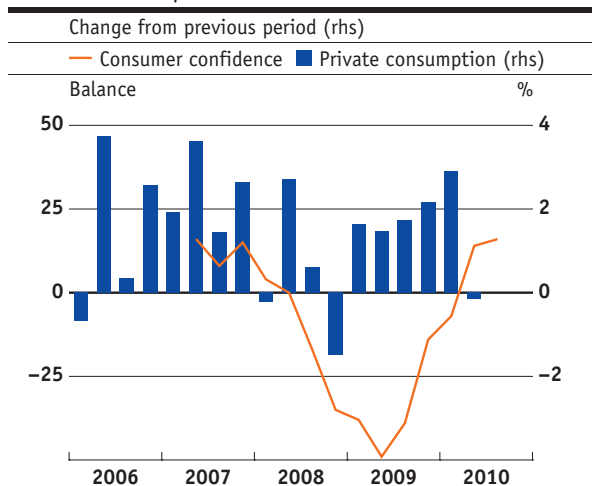
Sources: FCA, SECO

(excluding valuables) climbed by 21.6% in the second quarter. Disregarding this one-off effect, the growth rate in goods imports declined by almost half. Imports of production-related capital goods such as machines and precision instruments continued to recover, but the upward trend in imports of commodities and semi-finished goods lost momentum. Imports of consumer goods showed mixed developments, with imports by the watchmaking industry growing strongly, while imports of chemicals (predominantly pharmaceuticals), which had made a major contribution to import growth in the first quarter, receded somewhat.

Imports of services recorded vigorous growth in the second quarter, driven by spending on licences and patents, which is by tradition volatile. Foreign travel – recorded under tourism imports – benefited from the strength of the Swiss franc and again rose slightly.

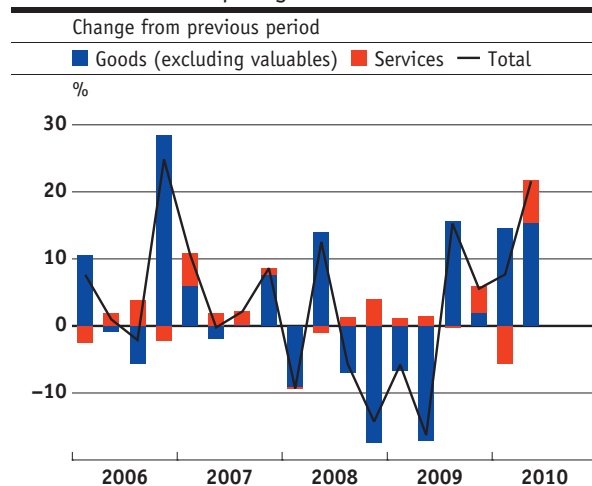
The survey data compiled by KOF Swiss Economic Institute indicate that, in July, companies were a little less optimistic than before regarding purchases of preliminary products. This sentiment is borne out by the fact that imports of commodities and semi-finished goods trended downwards in July and August for the first time in a year.

Chart 2.8
Private consumption



Source: SECO

Chart 2.9
Contributions to import growth



Source: SECO

2.3 Employment and labour market

Moderate rise in employment ...

Employment continued to increase moderately in the second quarter. The volume of work as measured by full-time equivalents was up by 0.9% and the number of employed people advanced by the same 0.7% as in the two previous quarters. Unlike the number of people in employment, the volume of work has still not quite returned to the pre-crisis level.

However, developments in employment varied from one industry to another. Employment figures in manufacturing – expressed as full-time equivalents – have stabilised, whereas job cuts continued among lending institutions and insurance compan-

ies. All other industries recorded an increase in employment. The growth rate slowed slightly in public administration, healthcare and business-related services, yet accelerated in construction, trade and transport.

... and slightly improved employment outlook

The leading employment indicators rose slightly in the second quarter, suggesting that the moderately positive growth in employment registered since the beginning of January would continue in the second half of the year. Broken down by industry, the employment outlook improved across the board, although in some cases this progress remained weak. Manufacturing and trade, for instance, are expected to be mainstays of employ-

Chart 2.10
Employment

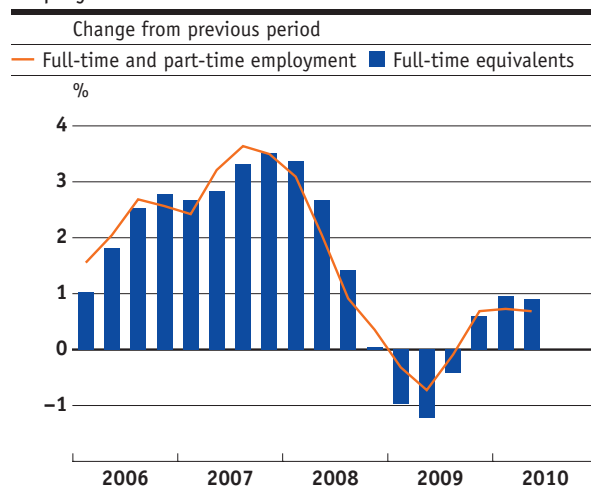


Chart 2.11
Employment outlook indicator

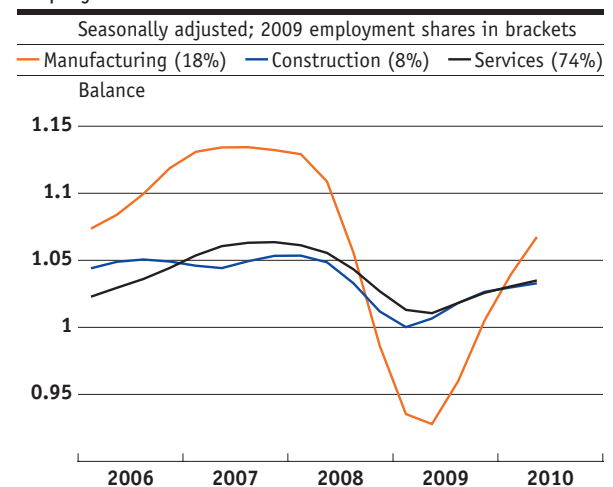


Chart 2.12
Unemployment and job seeker rates

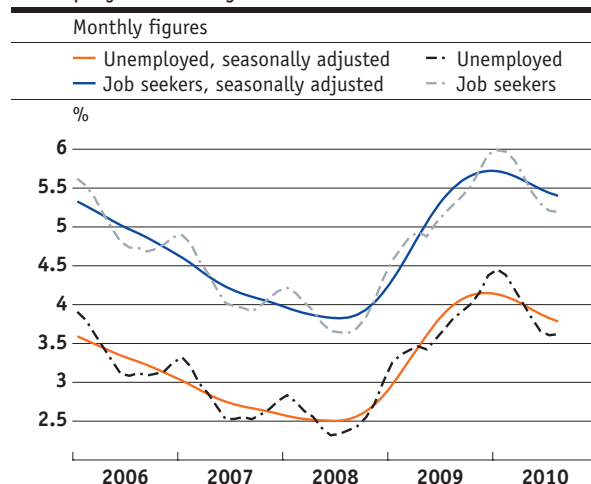


Chart 2.13
Short-time working

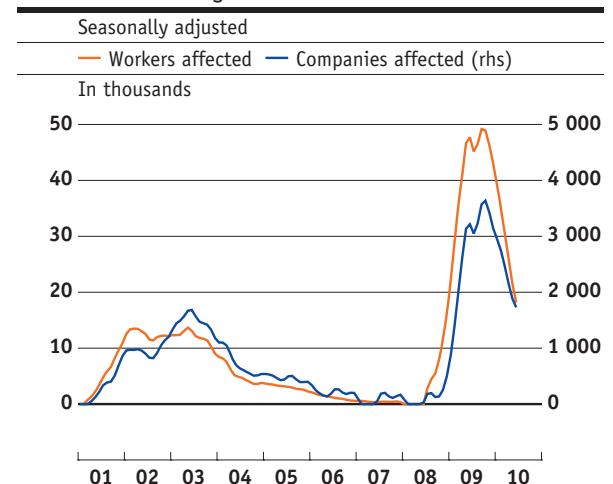


Chart 2.10:
Source: SFSO; seasonal adjustment: SNB

Chart 2.12:
Source: SFSO; seasonal adjustment: SNB

Chart 2.12:
Unemployed and job seekers registered with the regional employment offices, as a percentage of the labour force according to the 2000 census (labour force: 3,946,988 persons).
Source: SECO

Chart 2.14:
Source: SFSO; seasonal adjustment: SNB

ment growth, while growth in public administration jobs will probably slow further.

Further fall in unemployment

Seasonally adjusted unemployment continued to decrease between May and August. The number of unemployed people registered with the regional employment offices fell by 6,100, resulting in a 0.1 percentage point drop in the unemployment rate to 3.8%. The percentage of job seekers, a category that includes people who are on training or employment programmes or have accepted an interim position, as well as the registered unemployed, also receded slightly to 5.4%.

Short-time working figures again decreased significantly between March and June. Compared to the peak values registered in October 2009, the number of people and the number of companies affected have both halved. The proportion of persons working short-time had, by June, declined to around 0.4% of the working population.

2.4 Capacity utilisation

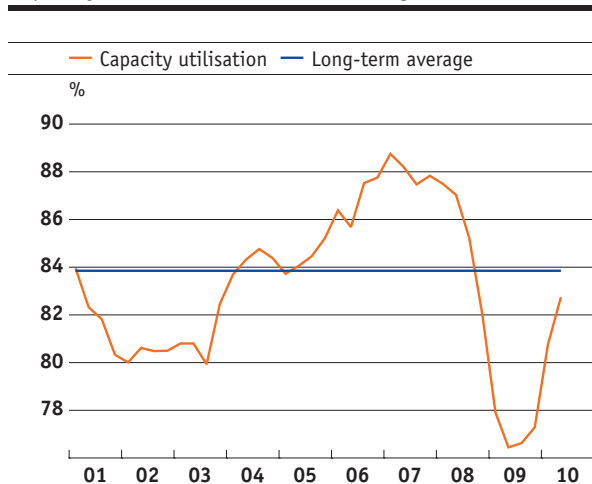
Capacity utilisation in manufacturing continues to improve

According to survey data from KOF Swiss Economic Institute, capacity utilisation in manufacturing continued to improve in the second quarter. While the rate of utilisation had been 80.7% in the first quarter, it increased by 2 percentage points to 82.7% in the second quarter. However, compared to the long-term average (83.9%), there is still some capacity under-utilisation in manufacturing. In the construction industry, capacity utilisation also increased markedly. In the second quarter, it amounted to 76.3%, which is well above the long-term average (71.6%).

Output gap remains negative

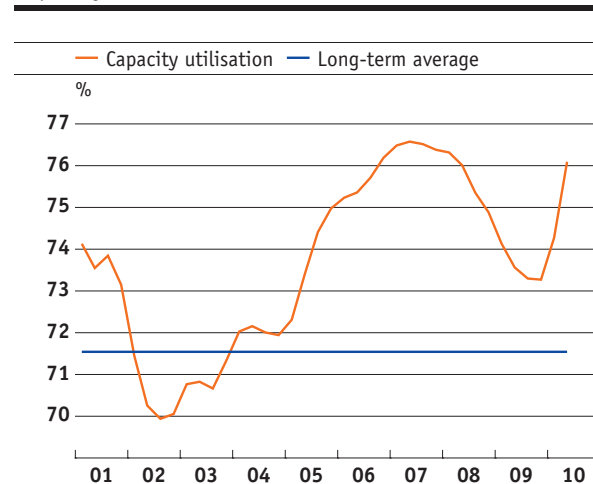
The output gap, which is defined as the percentage deviation of GDP from estimated aggregate potential output, is a useful source of information

Chart 2.14
Capacity utilisation in manufacturing



Source: KOF Swiss Economic Institute

Chart 2.15
Capacity utilisation in construction

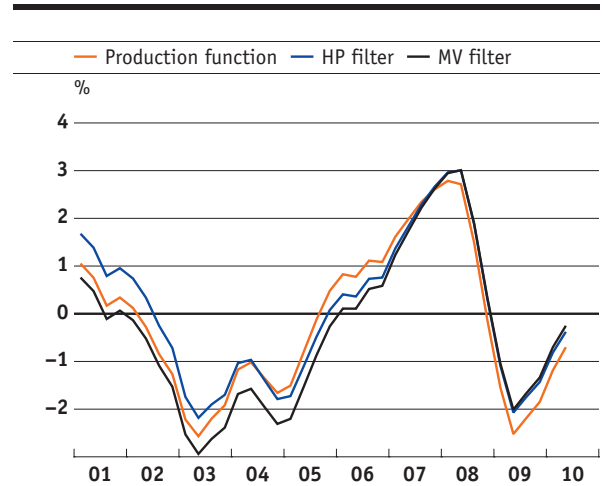


Source: KOF Swiss Economic Institute

on inflationary pressure. If GDP exceeds (falls below) potential output for an extended period of time, this points to excess demand (excess supply) and, consequently, to greater (less) inflationary pressure.

Estimates of potential output using different methods all suggest that GDP remained below production potential in the second quarter. They also indicate, however, that the output gap has narrowed further compared to the previous quarter. Depending on the method used to estimate production potential, the output gap amounted to -0.7% (production function), -0.4% (Hodrick-Prescott filter) or -0.3% (multivariate filter). The fact that the output gap is narrowing mainly reflects an improvement in the utilisation of technical capacity.

Chart 2.16
Output gap



Source: SNB

2.5 Prices and inflation expectations

Producer and import prices under pressure

Producer and import prices have fallen substantially since May. This development was mainly attributable to two factors: the corrections in the commodities markets in May, which led to lower prices for intermediate goods and energy products, and the appreciation of the Swiss franc on the currency markets, which increased the pressure on import prices. As a result, the rise in prices over the past 12 months – the annual inflation rate – slowed from 1.4% in May to 0.5% in August. Consequently, it is still the case that no inflationary pressure is being exerted by producer and import prices on downstream consumer prices.

Lower CPI inflation

Annual inflation, as measured by the national consumer price index (CPI), decreased significantly from 1.1% to 0.3% between May and August. This was mainly a reflection of lower prices for oil products. The annual inflation rate for other imported goods and services was –1.3% in August, as it had been in May. Annual inflation for domestic goods and services also remained relatively stable. Prices of domestic goods declined by 0.1% (May: –0.2%) year-on-year, while prices of domestic services rose by 0.6% (May: 0.7%) in the same period.

Core inflation rates below 1%

Inflation, as measured by the CPI, is subject to numerous short-term fluctuations that may distort perceptions of the general price trend. To counter this, core inflation rates are calculated with the aim of capturing the underlying trend in price movements. The SNB computes two measures of core inflation (cf. chart 2.20): the trimmed means method (TM15) excludes from the consumer price index, for any given month, those 15% of goods prices with the highest annual rates of change and those 15% with the lowest annual rates of change. The broader-based dynamic factor inflation (DFI), by contrast, extracts underlying inflation using a wide range of prices, data on the real economy, financial market indicators and monetary variables. For their part, the two core inflation rates calculated by the SFSO always exclude the same goods from the basket of goods in each period (cf. chart 2.21). In the case of core inflation 1 (SFSO1), these are food, beverages, tobacco, sea-

Chart 2.17
Producer and import prices

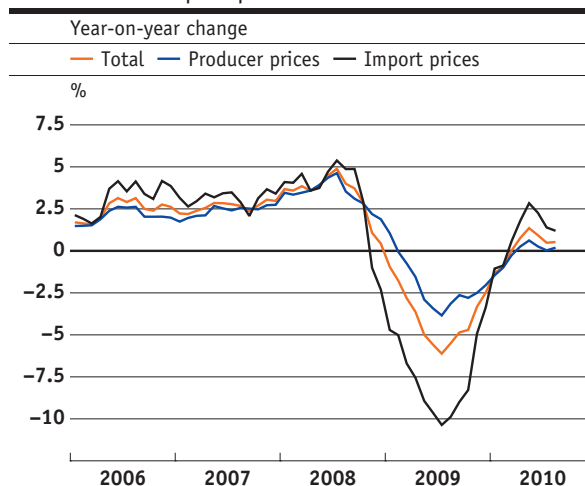


Chart 2.18
CPI: domestic and imported goods and services

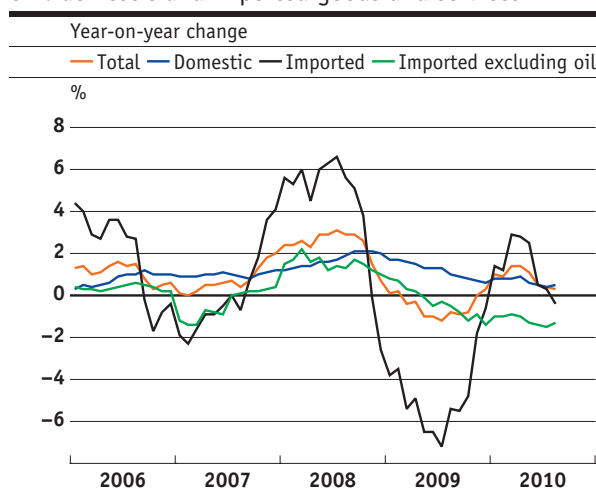


Chart 2.19
CPI: domestic goods and services

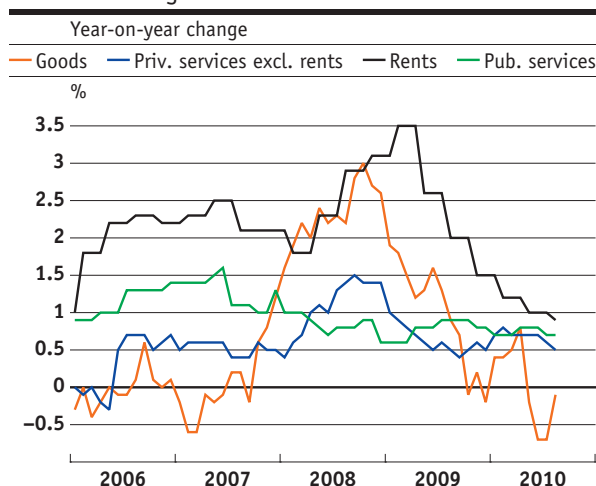


Chart 2.17:
Source: SFSO

Charts 2.18 and 2.19:
Sources: SFSO, SNB

sonal products, energy and fuel. Core inflation 2 (SFS02) additionally factors out products with administered prices.

The strong appreciation of the Swiss franc led to a decrease in traditional core inflation rates. In August, the inflation rate calculated by the SNB according to the trimmed means method was 0.5%, while the two inflation rates calculated by the SFSO only amounted to 0.1%. However, the DFI, which normally has a lead on the traditional core inflation

rates, has risen continuously since October last year. The August figure was 0.8%, which was higher than the traditional core inflation rates. The increase in the DFI suggests that the movements in the factors indicating the inflation trend have been robust.

Slightly lower inflation expectations

Inflation expectations are appraised on the basis of various surveys of companies and households. Overall, the surveys suggests that inflation

National consumer price index and components

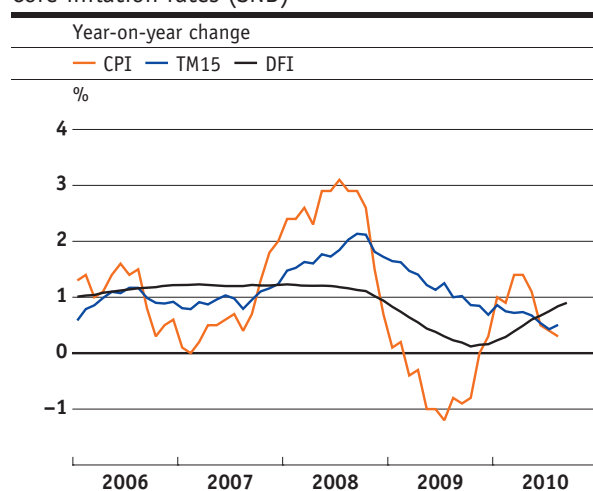
Year-on-year change in percent

Table 2.2

	2009	2009	2010	2010	2010	2010	2010	2010
		Q4	Q1	Q2	May	June	July	August
Overall CPI	-0.5	-0.2	1.1	1.0	1.1	0.5	0.4	0.3
Domestic goods and services	1.2	0.7	0.8	0.6	0.6	0.5	0.4	0.5
Goods	1.0	-0.0	0.4	-0.0	-0.2	-0.7	-0.7	-0.1
Services	1.3	0.9	0.9	0.7	0.7	0.8	0.7	0.6
Private services excluding rents	0.6	0.5	0.8	0.7	0.7	0.7	0.6	0.5
Rents	2.5	1.6	1.3	1.1	1.0	1.0	1.0	0.9
Public services	0.8	0.8	0.7	0.8	0.8	0.8	0.7	0.7
Imported goods and services	-4.7	-2.4	1.8	1.9	2.5	0.5	0.3	-0.4
Excluding oil products	-0.3	-1.2	-0.9	-1.2	-1.3	-1.4	-1.5	-1.3
Oil products	-25.9	-10.9	18.3	21.0	25.9	12.0	11.5	6.3

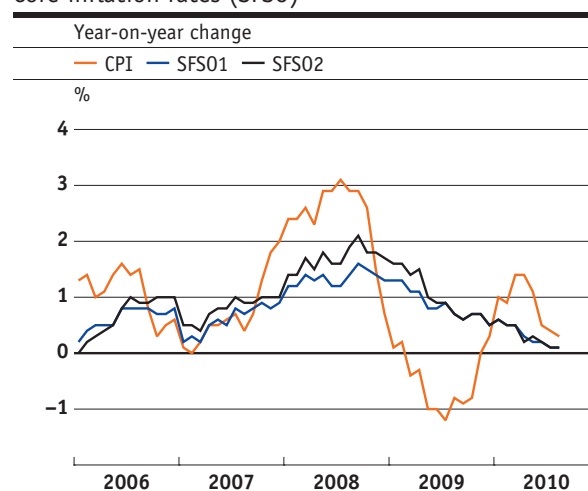
Sources: SFSO, SNB

Chart 2.20
Core inflation rates (SNB)



Sources: SFSO, SNB

Chart 2.21
Core inflation rates (SFSO)



Source: SFSO

expectations are slightly lower, but remain well anchored.

The quarterly survey by KOF Swiss Economic Institute relies on a survey of senior employees from companies active in Switzerland. Among other things, they are asked how they expect purchase and sale prices to develop over the coming three months. The results of the survey were published in August. They indicate that the companies surveyed expect stable sale prices and slightly increasing purchase prices for the third quarter. Inflation expectations in both the wholesaling and manufacturing industries were somewhat lower than reported in the previous survey.

As part of the Credit Suisse ZEW Financial Market Report, every month 70 analysts are surveyed on their CPI inflation expectations (higher, lower, unchanged) for the coming six months. The results of the August survey suggest that inflation expectations are slightly lower than revealed by the May survey. The share of analysts who anticipated that inflation rates would increase declined from 29% to 18%. Two-thirds of those surveyed in August expected inflation rates to remain unchanged over the coming six months.

The quarterly SECO survey of Swiss households measures the expected price trend over the coming 12 months from the viewpoint of consumers. In July, the share of households anticipating lower prices in the following 12 months rose slightly to 10%. However, more than 80% of households still expected prices to remain unchanged or increase somewhat.

Chart 2.22
Expected purchase prices

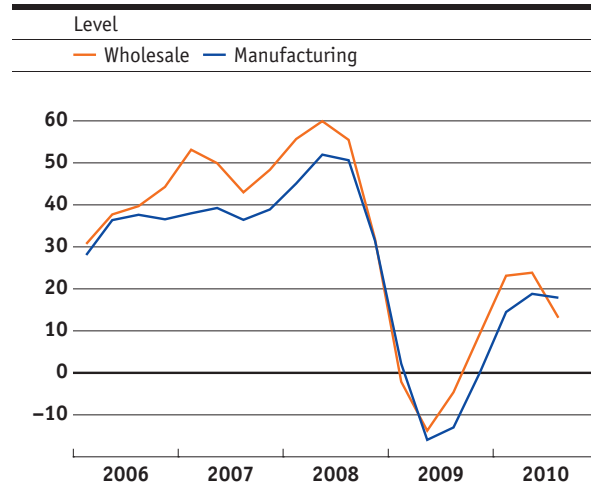


Chart 2.23
Expected sale prices

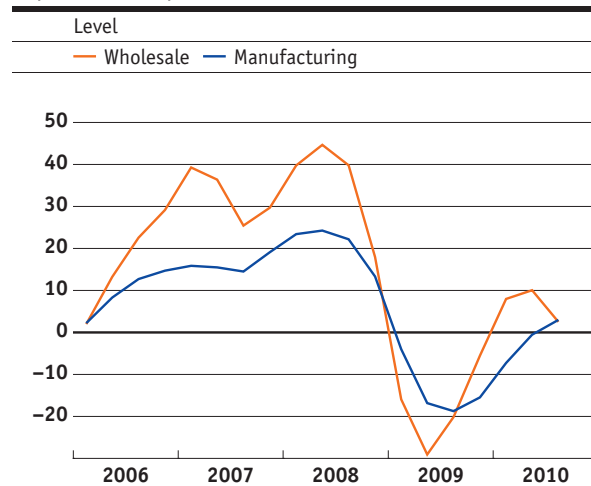
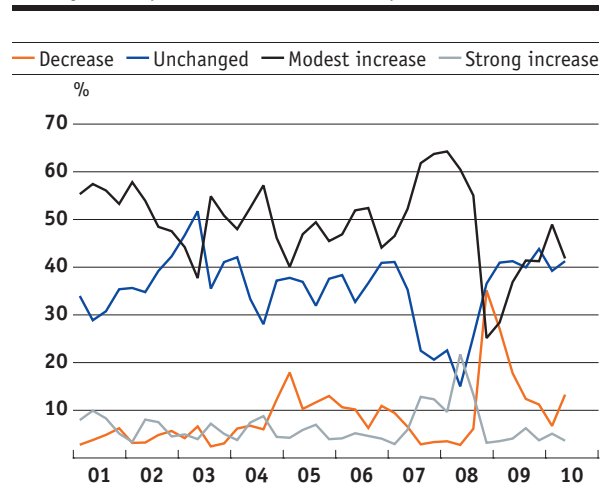


Chart 2.24
Survey on expected movements in prices



Charts 2.22 and 2.23:
Source: KOF Swiss Economic Institute

Chart 2.24:
Sources: SECO, SNB

2.6 Outlook for the real economy

Weakening economic environment

The SNB anticipates that Swiss GDP will grow by roughly 2.5% in 2010, following a decline of 1.9% in 2009. However, the upward adjustment compared to the last monetary policy report is not based on a more optimistic assessment of the current situation. It is rather the effect of a stronger recovery observed in the past four quarters. However, against the background of a lethargic recovery in the economies of some of Switzerland's major trading partners and the appreciation of the Swiss franc, the SNB expects a marked slowdown in growth in the second half of 2010 and early 2011.

Uncertainty about the future outlook for the global economy remains high. The after-effects of the financial and economic crisis are still being felt, since the situation of public sector budgets has deteriorated considerably in many industrialised countries as result of the government support programmes. This has not only led to uncertainty in the financial markets, but also limited the fiscal room for manoeuvre.

3 Monetary developments

3.1 Interest rates

Summary of monetary policy since the June assessment

At its monetary policy assessment of June 2010, the SNB decided to maintain its expansionary monetary policy. It left the target range for the three-month Libor unchanged at 0.00–0.75% and announced that it would aim for the lower part of the range, around 0.25%. It also drew attention to an increase in uncertainty and higher downside risks. It reiterated its intention of taking all measures necessary to ensure price stability should these downside risks materialise and lead to a renewed threat of deflation.

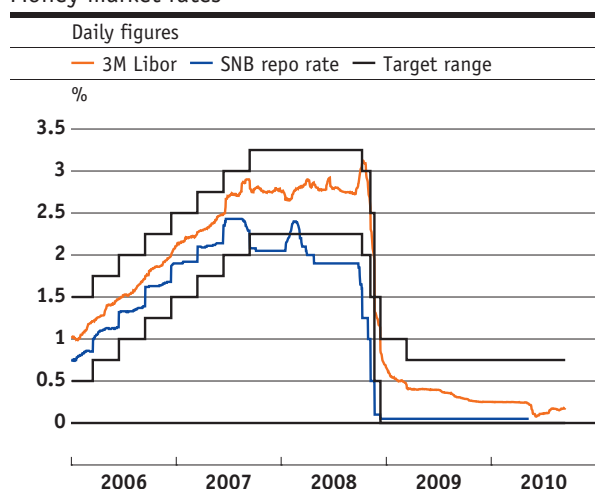
The creation of permanent Swiss franc liquidity altered the structural liquidity position of the financial system with respect to the SNB from a deficit into a surplus. In this new environment, interest rates are managed through liquidity-absorbing operations rather than liquidity creation operations. Most of the liquidity is absorbed by SNB Bills with varying terms of more than one month, at

the market rate. To manage interest rates, the remaining surplus liquidity is absorbed through daily auctions of one-week repos at a price determined by the SNB (SNB repo rate). The SNB is also able to reduce the volatility of the call money rate through fine-tuning operations.

Since October 2008, the SNB has been issuing SNB Bills in order to absorb large amounts of Swiss franc liquidity in a targeted manner. In previous quarters, such issues have been limited to one-week SNB Bills. Since May 2010, SNB Bills have been placed with terms of 28, 84, 168 and 336 days. In the period from June to the end of August, the bids at SNB Bills auctions ranged between about CHF 3 billion and CHF 32 billion. At the end of August, the outstanding volume amounted to approximately CHF 111 billion. By the end of August, the SNB's marginal yield on issues with 28-day terms had risen from 0.07% to 0.20%. The marginal yield on 84-day terms increased from 0.09% to 0.23%, for 168-day terms from 0.13% to 0.24% and for 336-day terms from 0.31% to 0.35%.

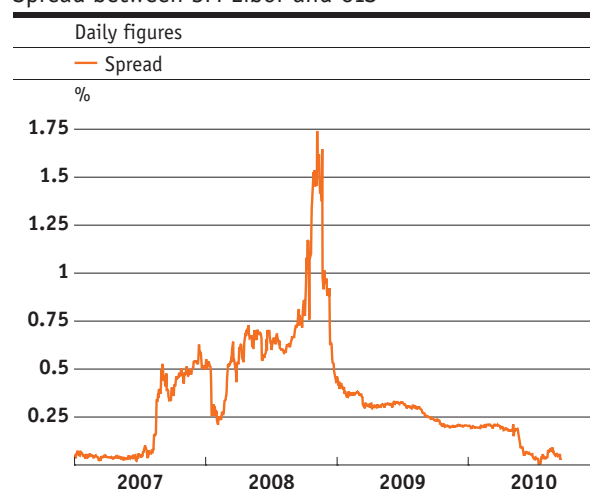
On 5 July 2010, the SNB introduced one-week liquidity-absorbing repo auctions (reverse repos) in order to manage the interest rate. At the liquidity-absorbing repo auctions, bank demand fluctuated between CHF 2 billion and CHF 23 billion, with the

Chart 3.1
Money market rates



Sources: Reuters, SNB

Chart 3.2
Spread between 3M Libor and OIS



Sources: Bloomberg, Reuters

allotment averaging 75%. At the end of August, the outstanding volume amounted to approximately CHF 22 billion. In the same period, the SNB repo rate for these repo auctions was increased from 0.09% to 0.12%.

Due to changed funding prospects, the SNB conducted the last auction of SNB USD Bills on 21 June 2010. As at the end of August 2010, USD 5 billion of SNB USD Bills were still outstanding.

Since the temporary swap facility with the Federal Reserve was reintroduced in May 2010, the SNB has not registered any demand in its US dollar repo auctions.

Money market interest rates edge up from a low level

The liquidity-absorbing measures outlined above led to slight upward pressure on Swiss money market interest rates. Over the past three months, the three-month Libor rose a little, to 0.18% in mid-September, after it had fallen below 0.10% in June. In the same period, the risk premium factored into the spread between the three-month Libor and the corresponding Overnight Index Swap (OIS) remained at a low level (cf. chart 3.2). During the financial crisis, this premium had risen sharply and did not return to its pre-crisis level until the second quarter of 2010. Chart 3.3 shows that the light upward pressure on money market rates also affected interest rates in the secured Swiss franc inter-bank market, despite unusually high volatility, and that it also led to a slight increase in the Swiss Reference Rates from the end of June. Between November 2009 and June 2010, weekly averages for the call money rate in this reference group – the Swiss Average Overnight Rate (SARON) – amounted to a little over 0.02%. Recently, however, SARON has increased as far as 0.08%.

Further flattening of the yield curve

Yields on secure Swiss bonds were further depressed by the flight to quality, partly as a result of concerns about public deficits in other countries. Over the past three months, yields on Swiss Confederation bonds with longer maturities retreated further. In mid-June, the yield on 10-year bonds still amounted to 1.55%. By the end of August, this yield had fallen to 1.07%, representing a long-term low. Since then it has picked up again and stood at 1.5% in mid-September. Since short-term money market interest rates rose marginally in the same period, the decline in bond yields resulted in a slight

Chart 3.3
Swiss Reference Rates

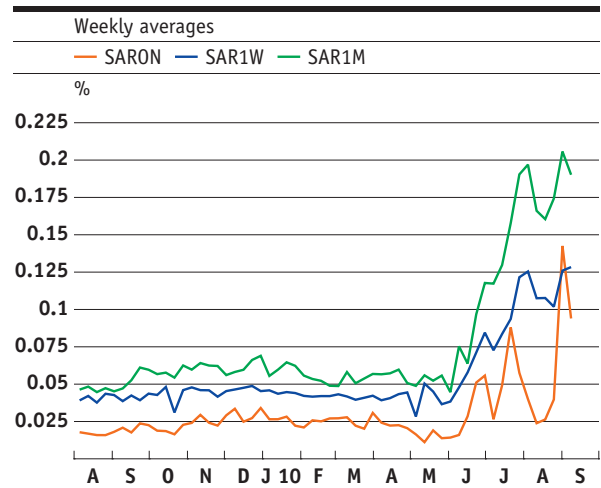


Chart 3.4
Term structure of Swiss Confederation bonds

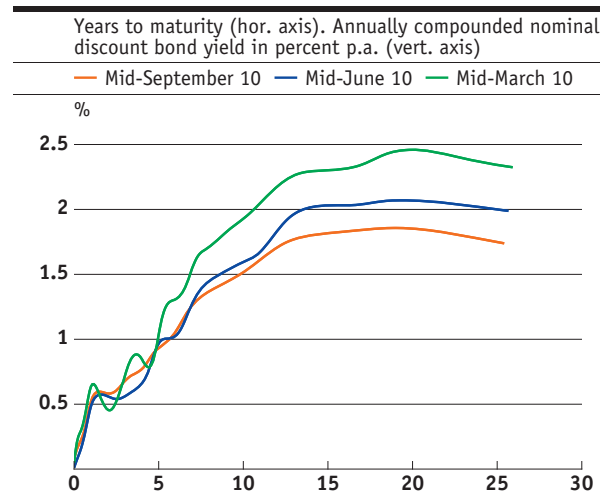


Chart 3.5
Spreads between international short-term interest rates

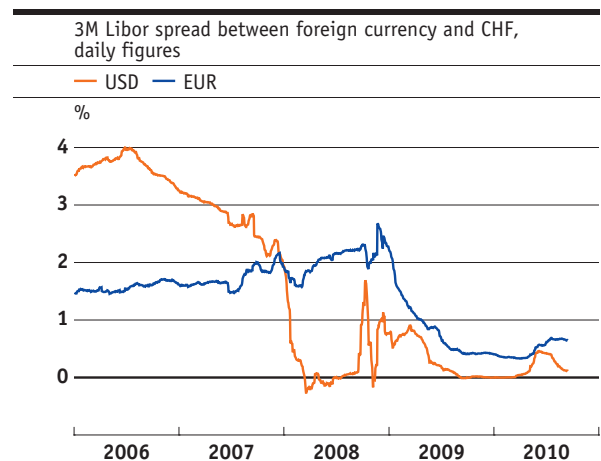


Chart 3.3:
Source: SIX Swiss Exchange Ltd

Chart 3.4:
Source: SNB

Chart 3.5:
Sources: Reuters, SNB

flattening of the yield curve (cf. chart 3.4). Thus the term spread, i.e. the difference between the yield on 10-year Swiss Confederation bonds and the three-month Libor, also narrowed somewhat. Chart 3.6 shows that the term spread contracted sharply in September 2008 after the Lehman Brothers bankruptcy. When monetary policy was substantially relaxed at the end of 2008 and beginning of 2009, this spread widened rapidly and reached levels that – in historical terms – were high. Since May 2009, the term spread in Switzerland has narrowed again and by mid-September it stood below the long-term average.

Narrowing international term spreads

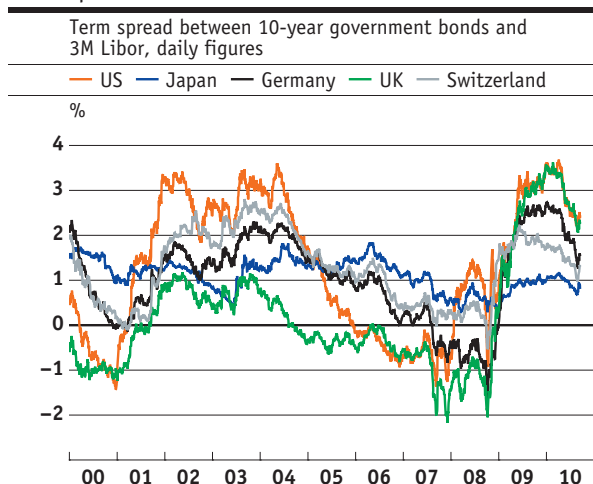
While the three-month dollar Libor declined over the past three months, the rise in the three-month euro Libor was somewhat stronger than that of the Swiss franc Libor. Consequently, the difference between short-term interest rates declined compared to the US dollar area, but increased compared to the euro area (cf. chart 3.5). At the longer end of the maturity spectrum, yields on 10-year

international benchmark government bonds again declined between mid-June and mid-September, so that foreign term spreads narrowed further. In addition, as can also be seen in chart 3.6, term spreads in the US, the UK and Germany – unlike Switzerland – are still relatively high in historical terms, despite the recent decline.

Real interest rates still low

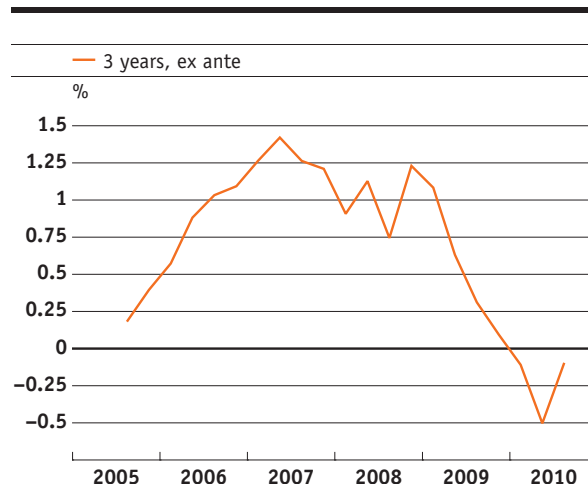
The real interest rate has an impact on household and corporate saving and investment behaviour. It is therefore an indicator of future economic developments. Chart 3.7 plots the three-year real interest rate. Inflation expectations for this period are derived from the forecasts of various SNB models. Since, in the third quarter of 2010, the decline in three-year nominal interest rates was slightly less than that of forecast inflation, the three-year real interest rate was a little higher in the third quarter than it had been in the previous quarter. Nevertheless, it remained in negative territory, at -0.1%. The historically low level of real interest rates will probably help to stimulate the economy.

Chart 3.6
Term spreads



Sources: SNB, Thomson Financial Datastream

Chart 3.7
Estimated real interest rate



Source: SNB

3.2 Exchange rates

Strong Swiss franc

From December 2009, the US dollar had continually gained in value against the euro. Between the assessment in June 2010 and mid-September, however, the dollar lost 5% of its value against the euro (cf. chart 3.8).

In the past three months, the US dollar has lost even more ground against the Swiss franc (11%). The depreciation of the euro against the Swiss franc has also continued, with the euro losing 6% of its value against the Swiss currency over the same period.

As a result, the nominal trade-weighted external value of the Swiss franc strengthened and the August figure was 8% above the average for 2009 (cf. chart 3.9). However, in the long run, movements in nominal exchange rates are largely offset by inflation differentials between different currency areas. Thus, for instance, the currencies of countries with relatively low rates of inflation tend to appreciate. Consequently, the trade-weighted real external value of the Swiss franc is more suitable for purposes of comparison because it does not display any long-term trend. In July, the real external value of the Swiss currency was well above the historical average.

Tighter monetary conditions

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

In mid-September 2010, the MCI showed that monetary conditions were significantly tighter (cf. chart 3.10). With the three-month Libor rising only marginally, this development was mainly attributable to the appreciation in the Swiss franc.

Chart 3.8
Exchange rates

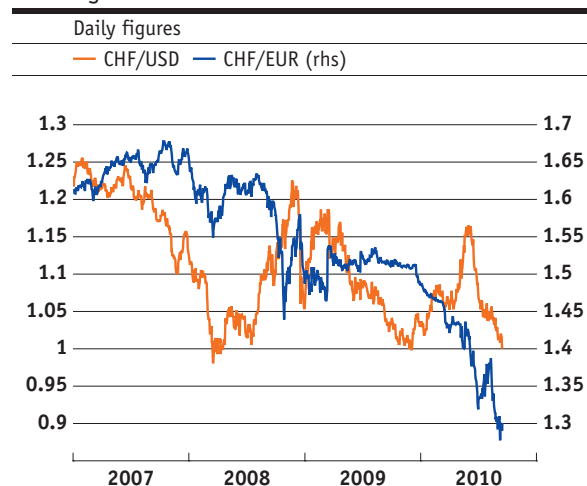


Chart 3.9
Trade-weighted external value of Swiss franc

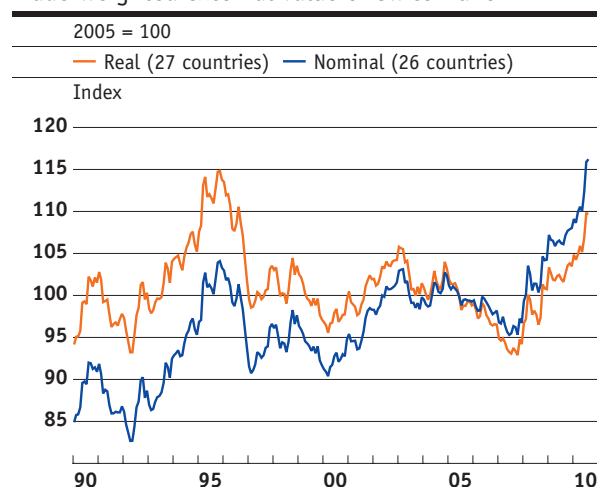
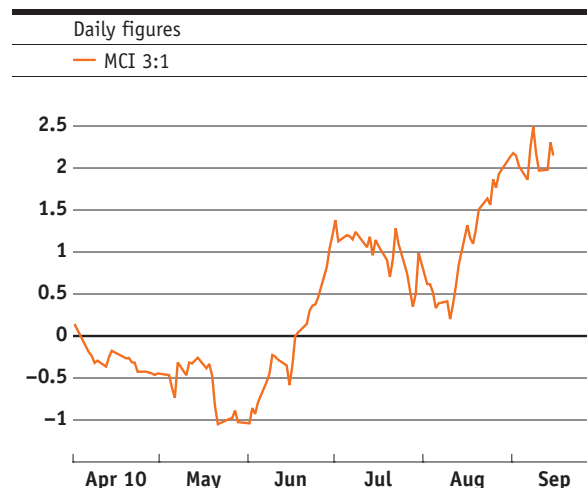


Chart 3.10
MCI nominal



Charts 3.8 and 3.10:
Source: SNB

Chart 3.9:
Source: Bank for International Settlements

3.3 Equity, commodity and real estate prices

Fluctuations in share markets

While the European Euro-Stoxx 50 rose 4% between mid-June and mid-September, the US S&P 500 and the Swiss Performance Index (SPI) moved sideways over the same period. However, movements in all these indices have been slightly negative since the beginning of the year.

The past three months have seen substantial fluctuations in prices. On the one hand, markets have been positively surprised by results in excess of expectations – from banks and also from other companies. European bank shares also benefited from the stress tests ordered by the EU supervisory authorities in order to examine the strength of the banking system in Europe. On the other hand, a number of macroeconomic indicators, such as the latest statistics on the US labour market, served as warnings of a slowdown in the economic recovery.

Volatility in the equity markets is a measure of market uncertainty. Chart 3.13 shows the expected volatility for the following 30 days based on the Chicago Board Options Exchange Volatility Index (VIX) and the actual volatility measured by the annualised standard deviation in monthly returns on the S&P 500. Both indices are still above their pre-crisis levels.

Mixed developments in commodity prices

When the US dollar gives ground, commodity prices generally rise. This phenomenon was again observed between mid-June and mid-August. In addition, specific events such as special weather conditions and other events that affect harvests impact on prices, particularly those of agricultural commodities. Recently, the fires in extensive parts of Russia and the floods in other parts of the world have driven up cereal prices, in particular. For a while, the oil price also increased, before declining again somewhat; in mid-September it stood just slightly above the mid-June price at around USD 78 per barrel. Gold retained its popularity as a safe haven investment, trading even higher in mid-September than it had in mid-June, at around USD 1,270 an ounce.

Higher real estate prices

Nominal rents and prices showed a year-on-year increase in the second quarter of 2010. The prices of owner-occupied apartments rose by 5.1%

Chart 3.11
Share prices

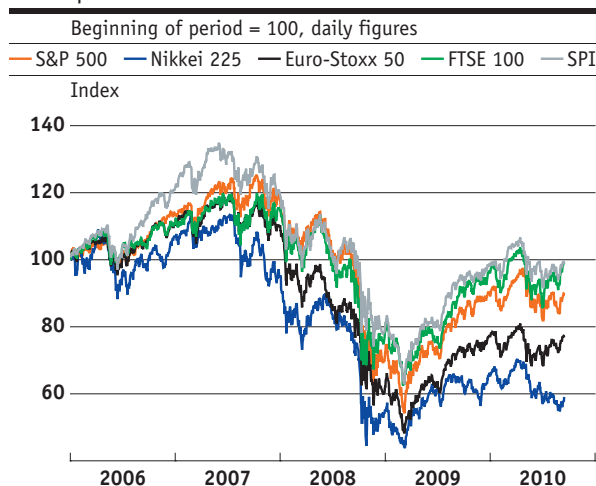


Chart 3.12
Selected SPI sectors

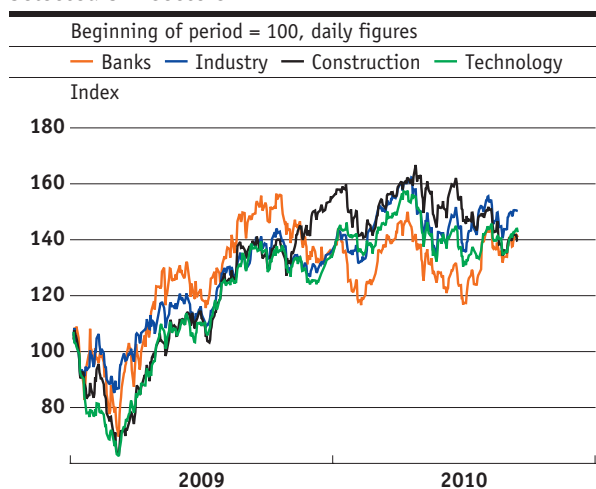


Chart 3.13
Volatility of equity returns

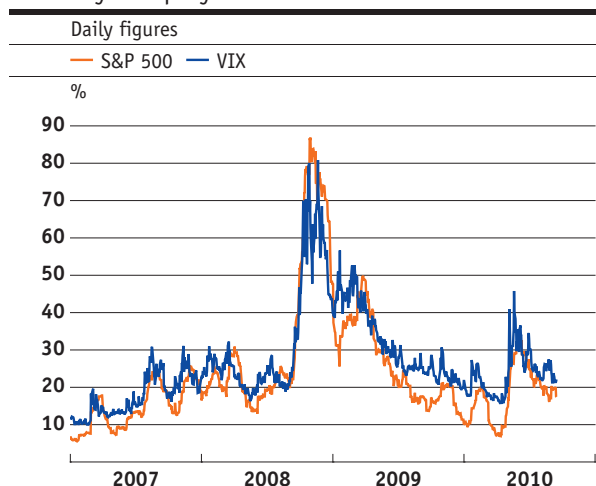


Chart 3.11:
Sources: Bloomberg, Thomson Financial Datastream

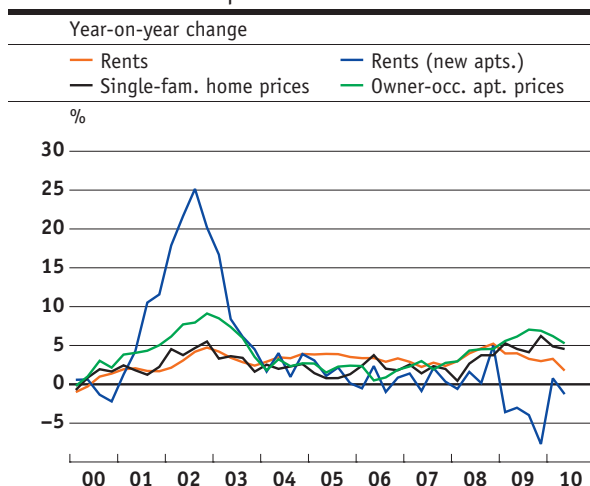
Chart 3.12:
Source: Thomson Financial Datastream

Chart 3.13:
Sources: SNB, Thomson Financial Datastream

while single-family homes were 4.4% more expensive. In the same period, residential rents climbed by 1.8%. However, the rents for new apartments, which are a better reflection of market forces, again receded somewhat (-1.3%). Rents for commercial property recovered, increasing by 6.2%, while office rents rose at a more moderate rate (0.8%).

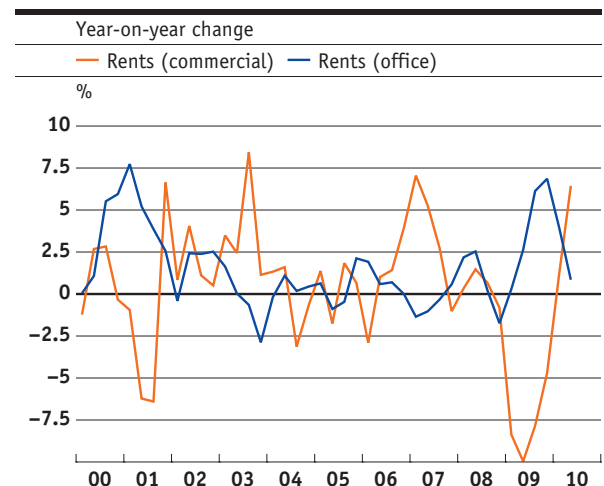
Growth rates in the residential property segment in recent quarters have been fairly high. Together with the historically low level of interest rates and the strong growth in mortgage lending, this can lead to a build-up of risk in the financial sector. An SNB survey of the most important mortgage banks in Switzerland showed that, in some cases, internal lending criteria cannot really be described as conservative, and that they are not always applied consistently. Tougher competition in the mortgage market can increase banks' risk appetite and encourage them to reduce interest margins and take on higher interest and credit risks. In the event of a future rise in interest rates, in particular, default rates for mortgages could rise significantly, and this would have a negative impact on the Swiss economy.

Chart 3.14
Nominal real estate prices and rents



Source: Wüest & Partner

Chart 3.15
Nominal commercial and office rents



Source: Wüest & Partner

3.4 Monetary aggregates

Persistently high monetary base

The monetary base, consisting of banks' sight deposits at the SNB plus banknotes in circulation, has increased substantially since the financial crisis. Before the crisis, the ratio of the monetary base to the more broadly defined monetary aggregates was very stable, as is clear from the movement in the M3 money multiplier (cf. chart 3.16). The M3 money multiplier is a quotient of the M3 aggregate and the monetary base (M0). It expresses the extent to which, on the basis of the liquid funds available to them, banks are able to multiply the amount of money available to the general public through lending. Since the outbreak of the financial crisis, banks have scaled down their interbank lending activity and are holding greater supplies of liquidity for precautionary reasons. This is reflected in a sharp decline in the money multiplier to a very low level, where it has remained for over a year. In May 2010, the monetary base rose sharply, and since then the SNB has been absorbing liquidity, thereby reducing the monetary base again. This has also been reflected in an increase in the multiplier.

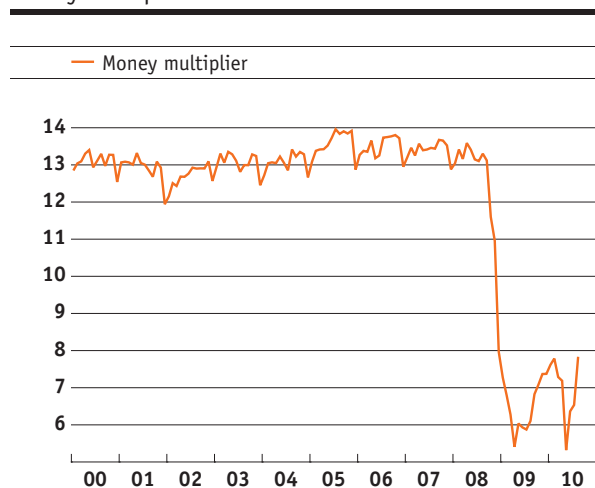
Expansion in broad monetary aggregates

The broad monetary aggregates (M1, M2 and M3) recently exceeded their trend levels (cf. chart 3.17); they are now well above trend and continue to rise. After strong growth, particularly in 2003, both M1 (notes and coins in circulation, sight deposits and transaction accounts) and M2 (M1 plus savings deposits) had been declining. Then, from autumn 2007, these two aggregates stabilised in line with relatively constant short-term interest rates. Following the recent interest rate reductions, however, M1 and M2 began growing strongly again. In August 2010, M1 was 11.6% above the previous year's level, while M2 was 10.4% higher. M3 (M2 plus time deposits), which is typically less volatile than the other aggregates, expanded by 6.6% (cf. table 3.1).

Higher inflation rates in the medium term

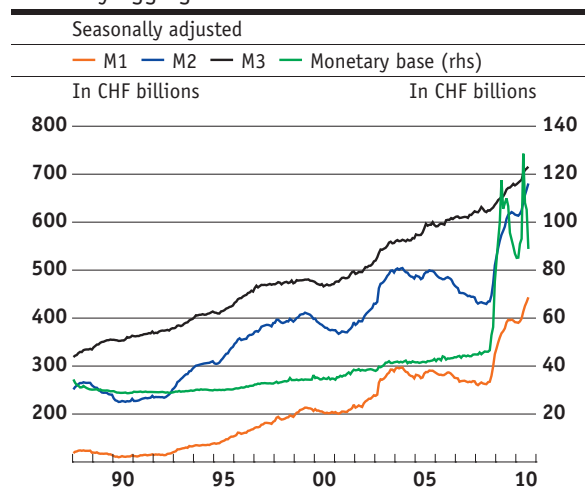
One way of assessing potential inflation or deflation risks resulting from an excessive or insufficient supply of liquidity to the economy is to calculate the money gap (or monetary overhang). This corresponds to the positive percentage deviation (monetary overhang) or negative percentage deviation

Chart 3.16
Money multiplier M3



Source: SNB

Chart 3.17
Monetary aggregates

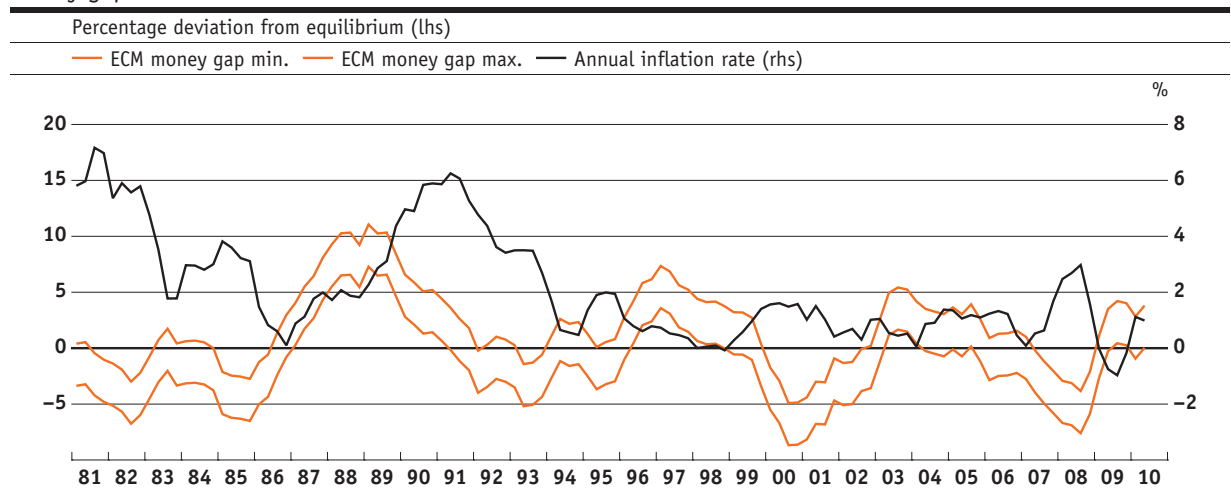


Source: SNB

	2008	2009	2009			2010		2010		
			Q2	Q3	Q4	Q1	Q2	June	July	August
Monetary base²	49.6	99.1	110.2	103.0	90.1	87.9	109.8	107.5	104.6	87.6
<i>Change³</i>	12.1	99.9	142.6	127.4	46.1	-5.4	-0.4	0.2	-4.3	-17.0
M1²	273.1	377.2	375.3	383.0	395.2	399.6	415.3	420.4	421.6	427.6
<i>Change³</i>	1.5	38.1	41.5	48.2	30.8	12.5	10.6	12.3	10.7	11.6
M2²	443.1	589.3	586.1	599.0	617.2	626.4	645.8	651.4	654.2	662.0
<i>Change³</i>	-1.6	33.0	35.0	41.4	29.7	12.9	10.2	11.1	10.0	10.4
M3²	626.0	662.0	657.9	664.6	677.2	685.8	702.3	706.5	706.0	709.3
<i>Change³</i>	2.2	5.8	4.5	7.5	7.3	5.8	6.8	7.4	6.5	6.6

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

Chart 3.18
 Money gap and annual inflation rate



Source: SNB

ation (money gap) of the M3 aggregate from an equilibrium value, which is calculated on the basis of the transaction volume in the economy and the opportunity cost of holding money (cf. box 'Money supply growth and inflation', Monetary policy report, *Quarterly Bulletin* 1/2005, p. 33). Chart 3.18 shows the calculated money gap in the form of a range that spans one standard deviation, thereby taking account of statistical uncertainty. According to this measure, the money gap closed in the second quarter of 2009. Currently there are signs of a monetary overhang, a situation which, according to this indicator, could lead to greater inflationary pressure in the medium term.

3.5 Credit

Higher growth in lending

In the second quarter of 2010, the pace of credit growth increased for the third successive quarter, amounting to 4.2% year-on-year. This figure is in line with the bank lending survey, which is a survey of lending conditions carried out quarterly by the SNB since the beginning of 2008 with 20 banks. It covers over 80% of the domestic lending market. Since the third quarter of 2009, the bank lending survey has not indicated any tightening in credit conditions.

With the level of interest rates remaining low, growth in mortgage lending was still high but stable at around 5%. Consequently, the higher level of credit growth overall was mainly attributable to other loans (cf. chart 3.19), which increased for the first time since the beginning of 2009. This increase was chiefly driven by other loans granted in foreign currencies – which correlates with import movements.

While total lending volume at the big banks has remained stable since the beginning of 2008, lending volume at cantonal banks has continued to grow. This is attributable, in particular, to a significant increase in mortgage lending at cantonal banks, compared to the big banks. Similar developments have been observed in past recessions, for instance, at the beginning of the decade (cf. chart 3.20).

Loans to households posted year-on-year growth of some CHF 26 billion (cf. chart 3.21), equivalent to a growth rate of 4.6%. Other household loans, in particular, increased for the first time since 2008.

Loans to private companies grew by CHF 7.5 billion in the same period. As in the previous quarter, the growth rate was 2.8%.

Chart 3.19
Growth in bank loans

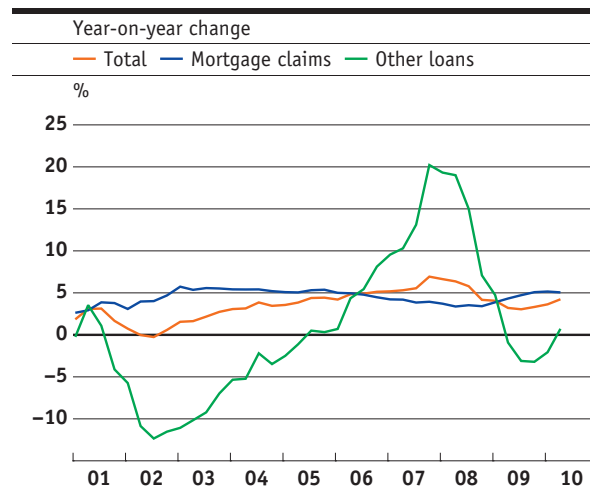


Chart 3.20
Bank loans by bank category

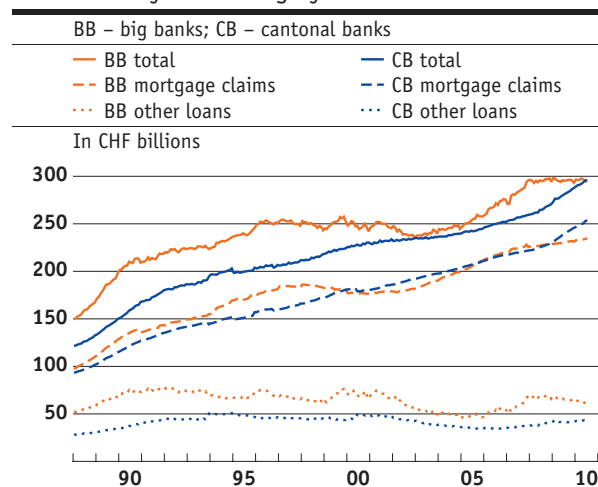
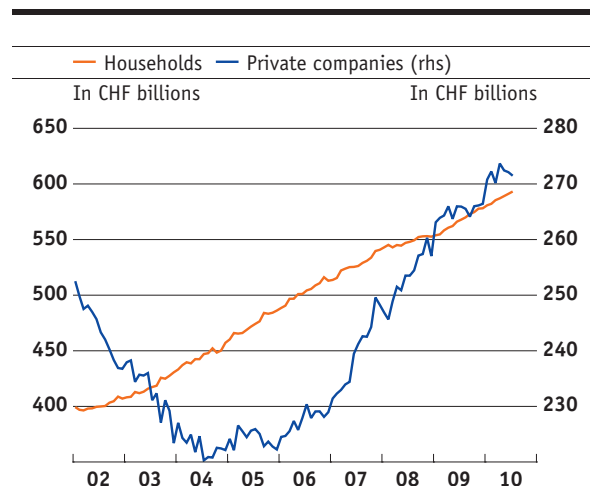


Chart 3.21
Bank loans



Charts 3.19, 3.20 and 3.21:
Source: SNB

Bank loans

Table 3.2

Year-on-year change in percent

	2008	2009	2009			2010		2010		
			Q2	Q3	Q4	Q1	Q2	May	June	July
Total¹	5.7	3.4	3.2	3.0	3.3	3.6	4.2	4.6	3.8	3.6
Mortgage claims ¹	3.5	4.5	4.3	4.7	5.1	5.2	5.1	5.1	5.0	4.9
of which households ²	3.3	4.7	4.6	5.0	5.4	5.3	4.9	5.0	4.8	4.7
of which private companies ²	3.8	5.8	5.8	6.2	6.1	5.7	5.3	5.0	5.4	5.1
Other loans ¹	14.8	-0.7	-0.9	-3.1	-3.2	-2.1	0.7	2.5	-1.3	-2.4
of which secured ¹	1.2	-5.4	-6.2	-7.2	-2.1	2.7	4.2	6.1	6.6	4.2
of which unsecured ¹	24.2	2.0	2.1	-0.8	-3.8	-4.4	-1.4	0.2	-6.1	-6.3
of which in CHF ¹	20.3	1.5	1.2	0.4	-1.7	-3.7	-2.1	-1.7	-3.4	-2.1
of which in other currencies ¹	-1.8	-10.0	-9.7	-16.5	-9.8	6.5	10.4	17.0	5.8	-3.3

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 the three-month Libor were to remain unchanged. The inflation forecast published four times a year is one of the three key elements of the SNB's monetary strategy, together with its definition of price stability and the target range for the three-month Libor. The inflation forecast is derived from the analysis of different indicators, model estimates and the assessment of any special factors. It maps the future development of prices on the assumption that the three-month Libor remains constant over the forecasting period.

4.1 Assumptions for global economic developments

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

an international economic setting. The assumptions with regard to the international economic scenario reflect what the SNB considers to be the most likely development in the global economy over the next three years. Table 4.1 shows the major assumptions for this scenario, as compared to those for the June 2010 forecast.

Recovery in global economy continues at moderate pace

The latest figures indicate that the recovery in the US and in Asia is losing momentum. For the US, an annual growth rate of 2.9% is now expected for 2010 and one of 2.6% for 2011. By contrast, growth in Europe was unexpectedly strong in the second quarter of 2010. Therefore, the 2010 growth forecast for Europe has been increased to 1.6%. The weaker performance in the US results in lower inflation expectations for 2010 and 2011. For Europe, too, the assumption of moderate inflation of less than 2% is being maintained. Now that the Fed has resumed its securities purchases, the normalisation of monetary policy in the US is likely to be delayed even further. Forecast uncertainties remain high and risks are still to the downside.

For crude oil, a price of USD 74 per barrel is assumed for the next few quarters, and thereafter USD 83 per barrel. The dollar/euro exchange rate of 1.30 USD/EUR is a reflection of the recent appreciation of the euro.

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

September 2010	2010	2011	2012
GDP US ¹	2.7	2.5	3.5
GDP EU15 ¹	1.7	2.2	2.9
		Short term	Long term
Exchange rate USD/EUR ²		1.30	1.30
Oil price in USD/barrel ²		74	83
Oil price in CHF/barrel ³		74	83

June 2010	2010	2011	2012
GDP US ¹	3.2	2.8	3.5
GDP EU15 ¹	1.1	2.2	2.9
		Short term	Long term
Exchange rate USD/EUR ²		1.25	1.25
Oil price in USD/barrel ²		72	83
Oil price in CHF/barrel ⁴		81	93

1 Change in percent

2 Level

3 Level, exchange rate on 16 September 2010

4 Level, exchange rate on 17 June 2010

Source: SNB

4.2 Inflation forecast and monetary policy decision

The Swiss National Bank (SNB) is maintaining its expansionary monetary policy. It is leaving the target range for the three-month Libor unchanged at 0.00–0.75%, and intends to keep the Libor within the lower part of the target range at around 0.25%.

The global economic recovery is continuing, albeit at a somewhat slower pace than the SNB had assumed at the time of the previous monetary policy assessment. Since mid-2009, the Swiss economy has developed more dynamically than previously expected. For 2010, the SNB expects real GDP to grow at a rate of approximately 2.5%. For the second half of the year, and in particular for 2011, however, the SNB now expects a marked slowdown in growth. This reflects the strong appreciation of the Swiss franc and the declining momentum of the global economy.

Uncertainty about the future outlook for the global economy remains high. Economic recovery is not yet sustainable. Downside risks predominate. Should they materialise and result in a renewed threat of deflation, the SNB would take the measures necessary to ensure price stability.

The SNB's new conditional inflation forecast is lower than the June forecast, over the entire forecast horizon. Assuming an unchanged three-month Libor of 0.25%, average inflation for 2010 is expected to amount to 0.7%, for 2011 to 0.3% and for 2012 to 1.2%. The possibility that inflation will temporarily turn slightly negative at the beginning of 2011 cannot be ruled out. The inflation forecast indicates that the expansionary monetary policy is currently appropriate, although it poses long-term risks to price stability.

Global economic outlook

The recovery of the global economy is continuing at a moderate pace. In the US and Asia, growth slowed in the second quarter of 2010. At the same time, the economy in the euro area firmed considerably, supported by vigorous foreign demand and a favourable exchange rate. The SNB still assumes there will be a further – albeit slightly slower – recovery, particularly in the industrialised countries. The SNB has revised its 2010 and 2011 growth assumptions for the US and the emerging economies of Asia slightly downwards, while its 2010 forecast for the euro area has been revised upwards. Forecast uncertainties remain high and risks are still to the downside.

Swiss economic outlook

According to the recent revision of figures for the national accounts, the recession was deeper than has been assumed to date. By contrast, the rise in Swiss real GDP between the third quarter of 2009 and the second quarter of 2010 was significantly stronger than potential output. The second quarter of 2010 saw a clear continuation of the recovery in manufacturing – the area which, in 2009, had been most seriously affected by the recession. However, momentum was vigorous in other sectors, too. The increase in activity had a favourable impact on the labour market. Both short-time work and unemployment have declined further. However, in the second half of the year and the beginning of next year, the SNB expects a marked slowdown in growth due to the strong appreciation of the Swiss franc and the declining momentum in the global economy. For 2010, real GDP is now expected to grow at a rate of approximately 2.5%. This higher growth forecast, compared to the last assessment, does not result from a reassessment of the economic outlook, but mainly because of the revision of the previous GDP figures.

Changes in monetary conditions

Monetary conditions are characterised by two opposing trends. Yields on Swiss Confederation bonds remain at a very low level. Yields on corporate bonds, credit risk premia and interest rates on bank loans declined further.

Since the June assessment, the three-month Libor has risen slightly. Liquidity in the banking sector is still high, and money stocks held by households and companies are rising. The growth rates for the broader monetary aggregates remain high. In August, for instance, the M2 aggregate rose by 10.4% year-on-year, while the M3 aggregate was up 6.6%. Since the last assessment, the Swiss franc has appreciated substantially against the euro and the US dollar.

Overall, monetary conditions have become somewhat less expansionary since the last assessment.

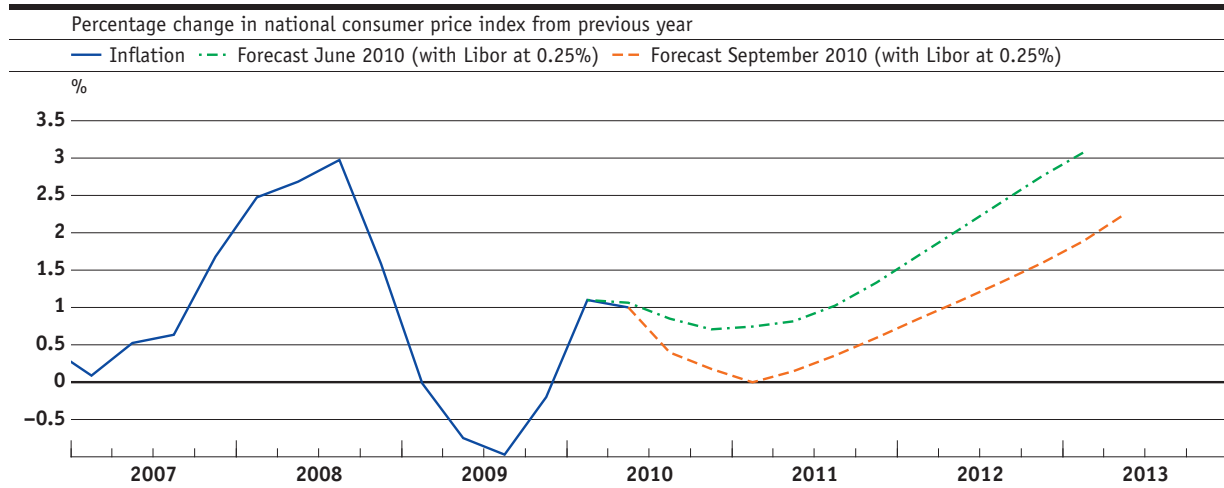
Lending business remained brisk. The SNB survey of lending operations showed that, in the second quarter of 2010, the slight tightening of lending conditions during the crisis for corporate loans was eased a little – a development that had already been observed in the previous quarter. As regards mortgage lending to households, most banks report unchanged lending conditions and a further increase in demand. The growth in mortgage lending and real estate prices has decelerated marginally, compared to the situation at the end of 2009. However, developments in the mortgage market still require the full attention of the SNB.

Chart of conditional inflation forecast

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

Over the entire forecasting horizon, the path of the new inflation forecast is lower than that of three months ago. The reason for this is the appreciation of the Swiss franc and the declining momentum in the global economy. The forecast sinks to 0% in the first quarter of 2011, reflecting the declining base effect from the movement of oil prices and the reduction in the price of imports resulting from exchange rate effects. The possibility that inflation will temporarily turn slightly negative at the beginning of 2011 cannot be ruled out. The inflation forecast indicates that the expansionary monetary policy is currently appropriate, although it poses long-term risks to price stability.

Chart 4.1
Conditional inflation forecast of June 2010 and September 2010



Source: SNB

Observed inflation in September 2010

Table 4.2

	2007				2008				2009				2010				2007	2008	2009	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Inflation	0.09	0.52	0.63	1.68	2.47	2.68	2.97	1.58	-0.02	-0.75	-0.97	-0.20	1.10	1.00				0.7	2.4	-0.5

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

	2010				2011				2012				2013				2010	2011	2012	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Forecast June 2010, Libor at 0.25%		1.06	0.85	0.71	0.74	0.81	1.02	1.33	1.69	2.04	2.40	2.76	3.07					0.9	1.0	2.2
Forecast September 2010, Libor at 0.25%			0.40	0.18	0.00	0.15	0.36	0.59	0.84	1.08	1.33	1.60	1.89	2.25				0.7	0.3	1.2

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 September 2010

Third quarter of 2010

The SNB's delegates for regional economic relations are constantly in touch with a large number of enterprises from different industries and economic sectors. Their reports, which contain subjective evaluations by these companies, are an important source of information for assessing the economic situation. The following pages contain a summary of the most important results of the talks held in July and August 2010 with some 206 company representatives on the current and future economic situation.

Summary

The favourable economic trend continued in the third quarter. Compared to the previous year, the recovery in manufacturing was strongest. However, broad-based growth was also apparent in the construction industry and services sector. As a result, the demand for labour also recovered. Companies are less hesitant about expanding their workforces than in the second quarter.

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

Despite the favourable development of business activity, however, there were lingering concerns over the sustainability of the international economic recovery. On the one hand, the state of public finances around the world and the potential impact on financial and foreign exchange markets, as well as on aggregate demand in the affected countries, have been a source of uncertainty. On the other hand, a number of representatives felt that the extremely expansionary monetary policy being pursued around the world carries inflation risks, giving rise to fears of sudden interest rate hikes.

Reactions to the appreciation of the Swiss franc varied considerably from one industry to another.

1 Business activity

Manufacturing

In the third quarter, the economic situation in manufacturing improved further, although in a quarter-on-quarter comparison it presented a slightly less positive picture than in the second quarter. Overall, turnover rose sharply year-on-year, with only a few companies posting turnover figures below last year's level. Although starting from very different levels, the textile and clothing industry, chemical industry, pharmaceutical industry, watchmaking industry, metals industry and automotive-related manufacturing industry have all experienced an above-average recovery within the last year. Strong growth impulses also affected the plastics and speciality chemicals industries.

Domestic demand remained an important driver of growth. Demand from emerging markets in Asia, but also in South America, was exceptionally vigorous. Demand impulses also came from the euro area, in particular from the German and French automotive industries.

Stocks of finished products were sharply scaled down over the last few months. As in the previous quarter, inventory levels in all industries were regarded as appropriate. Thus, future demand stimuli will probably continue to result in increased production.

Construction

Starting from a very good level, the upward momentum in the construction industry gathered pace. Compared to both the previous year and the preceding quarter, respondents reported a clear increase in turnover, with growth stimuli primarily coming from the residential and finishing segments. A growing number expressed concern over the real estate market risks that are inherent in low interest rate policies. However, they still did not discern any sign of a bubble.

Services

Turnover in the services sector increased significantly between the second and third quarters of 2010. As a result, it clearly surpassed the previous year's level. With a very strong quarter-on-quarter increase in turnover, the IT industry generated the strongest momentum. Robust sales growth was also observed for the hospitality industry, engineering and consultancy firms, and the wholesale and retail

industries. In border regions, however, the weakness of the euro resulted in a migration of spending to neighbouring countries. In the banking industry, turnover varied widely from bank to bank.

2 Capacity utilisation

The degree of technical capacity utilisation has improved for all industries since the second quarter, and is approaching normal levels. However, there are still sectoral differences.

The manufacturing industry reports that there is still a slight under-utilisation of capacity overall. However, the phenomenon remains particularly pronounced in the chemical and mechanical engineering industries, and for firms supplying inputs to the watchmaking industry, despite favourable recent business activity in these areas. The metals industry presented a very mixed picture. Capacity utilisation was at a normal level in the food industry.

In the construction industry the level of technical capacity utilisation has increased further, and is now regarded as 'high' – i.e. substantially above the normal full employment level. No companies reported unsatisfactory capacity utilisation.

In the services sector, the under-utilisation of capacity has decreased further, and capacity utilisation is approaching normal levels. For engineering and consultancy firms and real estate agents, capacity utilisation was good. Despite strong growth in turnover, capacity utilisation was still unsatisfactory in the retail and mail order industries, in certain areas of the hotel industry and for travel agents. This phenomenon was also evident in the recruitment industry, as well as for a few banks.

3 Demand for labour

In the manufacturing industry, the recovery in business activity once again went hand in hand with a noticeable revival in the demand for labour. More of the remaining short-time work measures were withdrawn, while some companies took on more temporary staff or imposed overtime. In a few cases, companies again began hiring new staff, resulting in a small increase in employment. Overall, staff levels appeared to meet company needs, unlike the second quarter, when companies had indicated that these levels were still somewhat too high. In some cases in the machine and machine tools industries, company representatives mentioned a certain shortage of labour. By contrast, respondents in the area of electrical appliances and equipment manufacturing tended to report that staff levels were too high.

In the construction industry, too, the demand for labour increased, and some companies resorted to stopgap measures such as the employment of temporary staff, in order to cover requirements. Although most of the companies surveyed said they were satisfied with current staff levels, a larger proportion of respondents than in the second quarter reported that these levels tended to be marginally on the low side.

In the services sector, staff levels were generally considered appropriate to a little too low. The IT and financial services segments both indicated a need to recruit, as did engineering firms.

In general, respondents again felt that it was less difficult than usual to recruit new staff. However, the construction industry and the financial industry continued to be exceptions to this general rule, and recruitment in the hospitality industry also appeared to be harder than would normally be the case. Highly qualified personnel still tended, in general, to be difficult to find.

In most areas of manufacturing, per capita labour costs remained very stable. Indeed, compared to the data for the previous quarter, wage pressure has fallen somewhat. One exception is the watchmaking industry, where real wages increased year-on-year. As in the second quarter, wages also trended slightly upwards in the construction industry and the services sector, particularly in the IT industry, transportation, and trade. In the construction industry, the trend strengthened. A number of companies are planning increases in real

wages for 2011, particularly in areas of manufacturing where there is a backlog.

4 Prices, margins and earnings situation

Certainly, higher production and sales volumes improved profit margins, as fixed costs were more fully absorbed. However, as in previous quarters, margins in manufacturing were regarded as significantly narrower than normal. In many cases, the only way to increase them was to launch new products. Margins are likely to remain under pressure in the short term. On the one hand, companies expect that purchase prices will only increase minimally, reflecting the anticipated cooling of the global economy. The appreciation of the Swiss franc will continue to dampen this effect somewhat. On the other hand, sale prices in Swiss francs will tend to remain stable or even decrease slightly as a result of intense competition and the exchange rate effect. Some companies from various sectors will try to push through price increases, although this may depend upon specific company and market conditions.

In the construction industry, profit margins are judged to be between close to normal and slightly unsatisfactory. Compared to the previous quarter, the assessment of the situation is less negative. The expectation of increasing purchase prices in the second quarter has given way to more stable price expectations. In addition, rather more companies have the impression that they can impose higher sale prices. Competition with foreign suppliers, particularly in Germany, has further intensified as a result of the depreciation of the euro.

Representatives of the services sector regard the level of their profit margins as normal to slightly unsatisfactory. The overall result was negatively influenced by the clearly unsatisfactory interest rate margins of banks; competition remains particularly fierce in mortgage business. Profit margins are also regarded as unsatisfactory by job recruitment offices, engineering firms, some retailers and wholesalers and the hotel industry.

5 Impact of Swiss franc appreciation

In the survey conducted in July and August 2010, companies were also asked about the exchange rate. When asked specifically about the impact of the appreciation of the Swiss franc on their business, more than half of the companies said they had not experienced any noticeable effects overall. Almost one-fifth of the companies reported positive effects. Slightly over one-quarter of the companies had experienced mildly or strongly negative effects.

However, these effects varied considerably, depending on the production sector in question. Manufacturing was most negatively affected by the strength of the Swiss franc. Some 60% of companies spoke of difficulties of this kind, particularly companies active in the manufacture of preliminary products (chemical products, plastics), in the capital goods industry (production of electrical equipment as well as large segments of the machine industry) and in the metal industry. The negative effects mainly took the form of greatly reduced profit margins and, to a lesser extent, a decline in sales volumes. By contrast, positive effects were derived mainly from lower import prices and – in some cases – lower investment costs.

In both the services sector and the construction industry, the great majority of companies were unaffected by the strength of the Swiss franc. Even in the hotel industry, only very limited negative effects were reported in the period through to summer.

6 Outlook

The revival in confidence in the manufacturing industry, which has been underway since the second half of 2009, continued. The majority of companies are anticipating growth in turnover and higher capacity utilisation. The employment outlook for the next six months is also cautiously optimistic, with companies expecting a slight rise in employment. At the beginning of the year, respondents were still anticipating no change in staff levels. A return to higher labour productivity remains a widespread goal.

In the construction industry, companies remain optimistic and are expecting further slight growth in turnover. In residential and finishing, companies are anticipating a stabilisation of capacity utilisation at the current high level. Only a few companies expect that capacity will increase further while no respondents expect capacity to decrease. Employment is likely to increase slightly.

In the services sector, expectations with regard to business activity over the next six months have improved. Particularly optimistic appraisals of turnover prospects were evident in the IT industry, in wholesale and retail, and in automotive sales. Providers of financial services and hospitality industry representatives were also confident. Consequently, representatives from the services sector anticipated a gradual increase in technical capacity utilisation and a slight rise in employment.

However, uncertainties persist regarding the prospects for the European economy, potential exchange rate movements, and the future interest rate situation. Rapid changes in these parameters, in particular, would significantly cloud the picture. The increasing number of media reports of a possible double dip originating in the US are also giving rise to uncertainty. Consequently, slightly more respondents now believe that a negative scenario could eventuate. Nevertheless, investment plans have been stepped up in all sectors, compared to the previous quarter. This applies to both equipment investment and construction investment. However, this more vigorous capital expenditure mainly reflects the need to carry out previously deferred replacement investment, rather than an intention to expand existing production capacity.

SNB Working Papers: Summaries

Who needs credit and who gets credit in Eastern Europe?

**Martin Brown, Steven Ongena,
Alexander Popov and Pinar Yesin
Working Paper 2010-9**

Based on survey data covering more than 8'000 firms in 20 countries this study compares credit demand and credit supply in Eastern Europe to that in Western Europe. The results show that firms in Eastern Europe are more likely to need credit than firms in Western Europe, but they are less likely to apply for a loan. The higher rate of discouraged firms in Eastern Europe is related to a stronger reluctance of small and financially opaque firms to apply for a loan. The higher rate of discouraged firms in Eastern Europe is driven by the presence of foreign banks. These findings suggest that the low incidence of bank credit among firms in Eastern Europe, compared to Western Europe, is not driven by less need for credit or banks' reluctance to extend loans. The main driver seems to be that many (creditworthy) firms are discouraged from applying for a loan. This suggests that more transparency about credit eligibility and conditions may improve credit access, particularly in countries with a high presence of foreign banks.

The business cycle implications of reciprocity in labor relations

**Jean-Pierre Danthine and André Kurmann
Working Paper 2010-10**

Dynamic stochastic general equilibrium (DSGE) models incorporating nominal price and wage contracts replicate key business cycle properties surprisingly well. They are, for that reason, increasingly used in monetary policy analysis. Nominal wage contracts are often found to be crucial for model performance. Yet standard nominal wage contract models deliver wage rigidity through a reduced-form process, assuming that a fraction of workers is prevented from re-optimising their wage demands in response to new information. By contrast, the present paper proposes a model of wage determination based on reciprocity in labour relations. It evaluates business cycle implications in a modern DSGE framework. Overall, the estimated model matches the empirical VAR dynamics surprisingly well. In particular, the presence of rent-sharing allows the model to simultaneously replicate the sluggish response of inflation after a monetary policy shock and the sharp drop in inflation resulting from a neutral technology shock. This stands in interesting contrast to models using nominal wage contracts. They typically fail to generate these distinct conditional responses of inflation, which are a commonly observed feature of US data.

Momentum in stock market returns: Implications for risk premia on foreign currencies

Thomas Nitschka
Working Paper 2010-11

High (low) stock market returns tend to predict high (low) stock market returns in the short term. Stock market returns are typically interpreted as a proxy for systematic risk. Hence, past stock market returns could signal not only future stock market returns, but also returns on other financial instruments. This working paper investigates this hypothesis by assembling foreign currency portfolios on the basis of past foreign stock market returns from the US investor's perspective. Investments in currencies of countries with high past stock market returns offer higher current returns than investments in currencies of countries with comparatively low past returns. Fluctuations in the returns on these currency portfolios over time can be attributed to the fact that investors face time-varying refinancing costs. Explaining the cross-sectional distribution of these returns is more difficult. Recently proposed currency risk factors fail in this regard, since there appears to be no link between these factors and those components of currency portfolio returns that are driven by macroeconomic risks.

Macroeconomic and interest rate volatility under alternative monetary procedures

Petra Gerlach-Kristen and Barbara Rudolf
Working Paper 2010-12

During the financial crisis of 2007/08 the level and volatility of interest rate spreads increased dramatically. This paper examines how the choice of the target interest rate for monetary policy affects the volatility of inflation, the output gap and the yield curve. It considers three monetary policy operating procedures with different target interest rates: two market rates with maturities of one and three months, respectively, and an essentially riskless one-month repo rate. The implementation tool is the one-month repo rate for all three operating procedures. In a highly stylised model it is shown that using a money market rate as a target rate generally yields lower variability of the macroeconomic variables. This holds under discretion as well as under commitment both in times of financial calm or turmoil. Whether the one month or three month rate procedure performs best depends on the maturity of the specific rate that enters the IS curve.

Chronicle of monetary events

Maintenance of expansionary monetary policy

Following its quarterly monetary policy assessment of 16 September 2010, the Swiss National Bank decided to maintain its expansionary monetary policy, to leave the target range for the three-month Libor unchanged at 0.00–0.75%, and to adhere to its objective of holding the Libor in the lower end of this range at around 0.25%. In addition, it announced that should downside risks materialise and result in a renewed threat of deflation, it would take the measures necessary to ensure price stability.

Published by

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

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Design

Weiersmüller Bosshard Grüniger WBG, Zurich

Composition

Neidhart + Schön AG, Zurich

Language versions

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

The Quarterly Bulletin can also be downloaded from the SNB website in the following language versions:

English:

www.snb.ch, *Publications, Quarterly Bulletin* (ISSN 1662-257X)

German:

www.snb.ch, *Publikationen, Quartalsheft* (ISSN 1662-2588)

French:

www.snb.ch, *Publications, Bulletin trimestriel* (ISSN 1662-2596)

Website

www.snb.ch