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Overview

Monetary policy report (p. 6)

At its quarterly assessment of 18 March 2004, the Swiss National Bank decided to leave the target range for the three-month Libor unchanged at 0%–0.75%. For the time being, the three-month Libor is to be kept at around 0.25%.

The economic recovery in Switzerland is increasingly broad-based. The upswing is not yet assured, though. At the same time, the inflation potential is modest within the short term. The SNB is therefore adhering to its expansionary monetary policy. In order to ensure price stability also in the medium term, the SNB will have to tighten its monetary stance at a later point in time. The National Bank anticipates economic growth of 1.5%–2% for 2004. Average annual inflation is likely to amount to 0.4% this year, to 1.0% in 2005 and to 2.3% in 2006.

From mid-2006 onwards, forecast inflation will no longer lie within the range that the SNB equates with price stability. It must, however, be noted that, as always, the forecast is based on an unchanged three-month Libor rate, i.e. on the assumption that monetary policy will remain as expansive as now during the next three years. It is also important to understand that the uncertainty of the forecast increases with the length of the forecasting horizon.

The National Bank has been conducting a highly expansionary monetary policy for over two years now. It has reacted rapidly and unequivocally to the deterioration in the economic situation and the upward pressure on the Swiss franc. This expansionary policy was possible because inflation prospects showed a very moderate trend during that time.

Owing to favourable monetary conditions and the improved world economy, Swiss economic activity is gradually beginning to gain momentum again. There is still a certain degree of risk, however, as to the sustainability of the economic recovery. The National Bank does not wish to threaten the upswing by increasing interest rates too soon. It therefore adheres to its expansionary monetary policy.

However, the National Bank cannot continue this policy for an indefinite period without jeopardising price stability. While the strong expansion of monetary aggregates can be partly explained by special effects, liquidity in the economy has risen significantly. The National Bank will keep a close watch on this development. It will have to adjust its policy once the signs of an economic recovery are fully confirmed.

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

The business situation of the enterprises brightened in the past few months, and corporate sentiment became more upbeat. Upward trends predominated clearly, although some enterprises considered the recovery to be hesitant and the pickup has not yet benefited all industries. The companies were guardedly optimistic in their outlook for the economy. Many anticipate an actual upswing – albeit a moderate one – to emerge only in the second half of the year.

Swiss National Bank Working Papers (p. 48)

Abstract of the paper by Samuel Reynard, “Financial Market Participation and the Apparent Instability of Money Demand”, Swiss National Bank Working Paper no. 1, 2004.

Monetary policy report

Report to the attention of the Governing Board of the Swiss National Bank for its quarterly assessment of 18 March 2004

Unless otherwise indicated, rates of change compared with the previous period are based on seasonally adjusted data and are annualised.

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The monetary policy concept

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

The SNB has laid down the details of the exercise of this mandate in a three-part monetary policy concept. First, the SNB regards prices as stable when the national consumer price index (CPI) rises by less than 2% per annum. It thus takes account of the fact that the CPI slightly overstates actual inflation. At the same time, it allows inflation to fluctuate somewhat during 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 the CPI development expected by the SNB over the next three years. The period of three years corresponds to the medium time lag with which monetary policy stimuli influence the CPI. Third, the SNB sets its operational goal in the form of a target range for the three-month Swiss franc Libor rate. 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 market without having to change its basic monetary policy course.

It is a particular concern of the SNB that its monetary policy be understood by the public. It is, however, also obliged by law to inform the public regularly of its policy and to make its intentions known. It does so in the Monetary Policy Report, which is drawn up for each quarterly assessment. The report shows how the SNB assesses the economic situation and what conclusions it draws from this assessment. It describes the economic and monetary development and specifies the main assumptions on which the inflation forecast is based. The report ends by elaborating on the inflation forecast and the monetary policy decision resulting therefrom.

Survey

At its quarterly assessment of 18 March 2004, the SNB decided to leave the target range for the three-month Libor rate unchanged at 0.0%–0.75%. For the time being, the three-month Libor is to be kept at around 0.25%. The economic recovery in Switzerland is increasingly broad-based. The upswing is not yet assured, though. At the same time, the inflation potential is modest within the short term. The SNB is therefore adhering to its expansionary monetary policy. In order to ensure price stability also in the medium term, the SNB will again have to tighten its monetary stance at a later point in time. The National Bank anticipates economic growth of 1.5%–2% for 2004. If monetary policy remains unchanged, average annual inflation is likely to amount to 0.4% this year, to 1.0% in 2005 and to 2.3% in 2006.

A turnaround in economic development, which had already become discernible in the third quarter of 2003, was confirmed in the fourth quarter. The growth of real gross domestic product (GDP) strengthened from the previous quarter. The pickup of the global economy and low interest rates are having a positive impact on the Swiss economy. At the same time, upward pressure on the Swiss franc – with the exception of the exchange rate against the US dollar – has abated. Growth dynamism is currently mostly due to strong export demand and a robust increase in equipment investment.

The economic recovery in Switzerland will probably continue to strengthen in the next few months, and growth should become more broad-based. In addition to a robust increase in exports and in equipment investment, private consumption, too, should accelerate further. An improvement in the labour market, which is expected to set in from the middle of 2004, will help to bring this about. Overall, the SNB anticipates economic growth of 1.5%–2% in 2004. In line with this development, production capacities are likely to be utilised better.

Even though the prospects for an economic upswing in Switzerland have improved in recent months, certain risks still exist. A deceleration in the global economy or an unfavourable development on the financial markets is liable to interfere with the revival in economic activity.

Since the monetary policy assessment in December 2003 monetary conditions in Switzerland have, on the whole, become slightly more relaxed. The three-month Libor rate remained unchanged around the targeted level of 0.25%. At the same time, however, the nominal external value of the Swiss franc continued to decline, while the monetary aggregates grew vigorously, as before. Credit business, however, remained weak due to the still subdued economic growth. Low interest rates, by contrast, have favourably influenced the continued price rise in the Swiss equity and bond markets. Yields on the capital market dropped, which points to a decline in inflationary expectations in the long term. Interest expectations in the money market diminished in the last half-year. Currently, the markets are not anticipating any interest rate changes in the next three months.

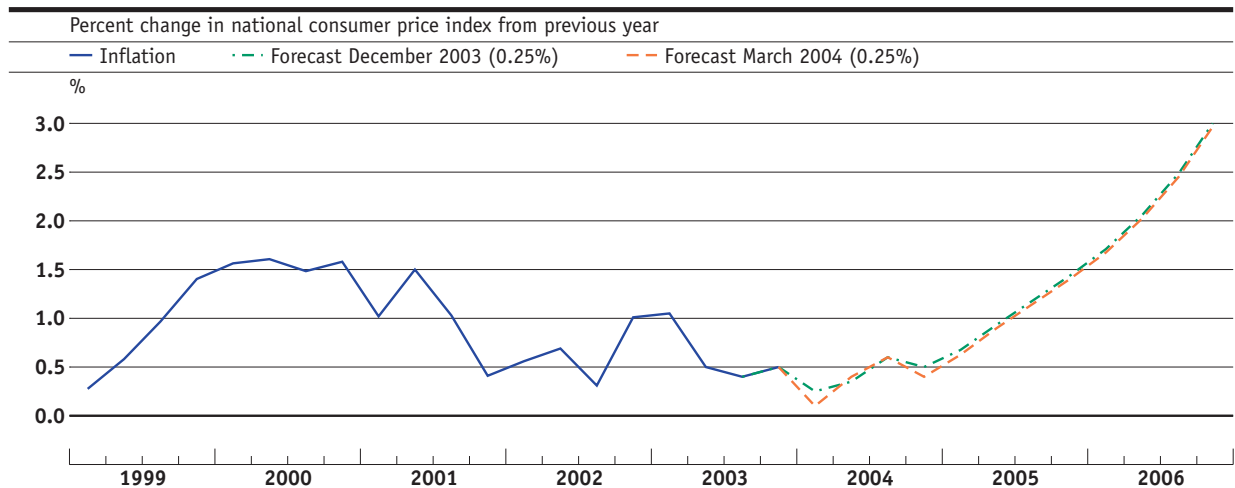
Annual inflation measured by the national consumer price index (CPI) was very stable in the second half of 2003 and averaged 0.5%. In January and February 2004, it fell to 0.2% and 0.1% respectively, due in particular to the statistical effect in the price development of oil products. At 0.5%, the core inflation rate calculated by the SNB was only slightly lower than the average in the fourth quarter.

The graph on page 10 shows the inflation forecast of December 2003 (the dash-dotted green curve in the graph) as well as the new forecast of March 2004 (dashed red curve). The assumptions on which the new forecast is based differ only negligibly from those of the December forecast, as the global economy has developed in line with expectations. Even though the effects of fiscal policy stimuli on growth are petering out, a fairly solid economic development is expected in the US in the next few years. In Europe, compared with the December forecast, a slightly earlier-than-expected economic recovery is assumed. Given the strength of the euro, however, the growth dynamism is likely to be limited. Inflationary pressure from abroad will remain weak. Moreover, the forecast rests on the assumption that the oil price will again fall below USD 30 per barrel in the course of 2004.

The new inflation forecast for a three-month Libor, unchanged at 0.25% for the next three years, deviates only in minor respects from the December forecast. The differences apply exclusively to the short term. These are attributable to statistical effects and somewhat lower-than-expected inflation, which is likely to remain at approximately 0.5% until the end of 2004. It is, however, possible that inflation will turn slightly negative in some months. The forecast shows that – assuming there is no change in monetary policy – inflation threatens to rise from mid-2005 onwards. It will reach 1% in mid-2005, 2% in mid-2006 and 3% near the end of 2006.

From mid-2006 onwards, forecast inflation will no longer lie within the range that the SNB equates with price stability. It must, however, be noted that, as always, the forecast is based on an unchanged three-month Libor rate, i.e. on the assumption that monetary policy will remain as expansive as now during the next three years. It is also important to understand that the uncertainty of the forecast increases with the length of the forecasting horizon.

Inflation forecast of December 2003 with Libor at 0.25% and of March 2004 with Libor at 0.25%



Inflation forecast March 2004 with Libor at 0.25%

| | 2004 | 2005 | 2006 |
|-------------------------------|------|------|------|
| Annual average inflation in % | 0.4 | 1.0 | 2.3 |

1 International economic environment

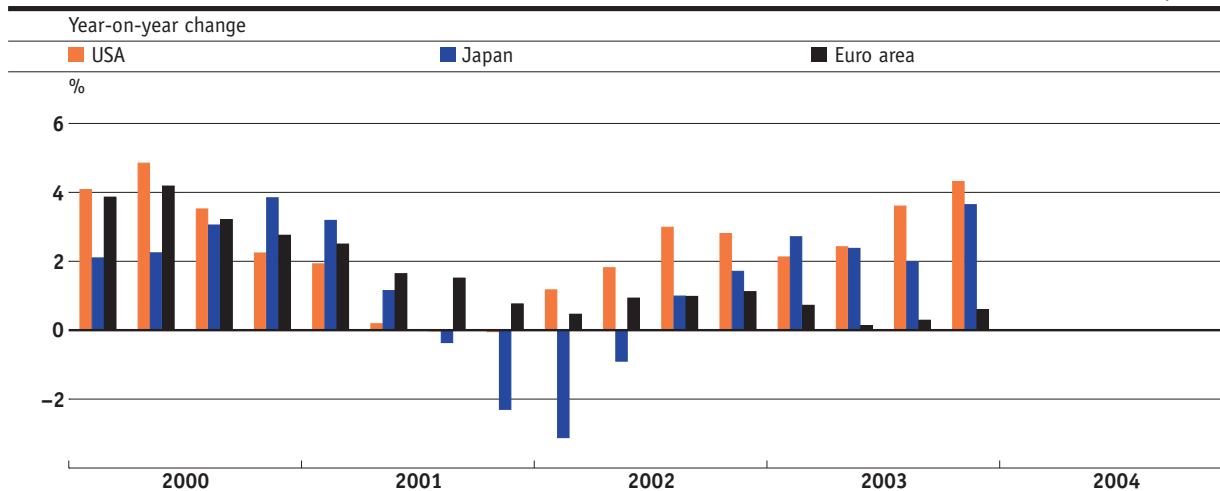
Further recovery of the international economy

In the second half of 2003, the global economic situation brightened. Considerable differences, however, continued to exist between the major economic areas. While growth in the euro area was still subdued, the US, the UK and Japan already saw a vigorous and broad-based expansion. A monetary environment that was in most cases extremely favourable and expansionary fiscal policies contributed to the recovery.

At the beginning of the year, the economic uptrend continued. In most industrial countries, the business situation of companies improved once more. Consumer sentiment, however, remained low-key, particularly in the euro area. Given the favourable inflation prospects, the central banks of most industrial countries adhered to their expansionary monetary policies.

Real GDP

Graph 1.1



Source: Bank for International Settlements (BIS)

Robust growth in the US and in Japan

In the US, the growth of real gross domestic product (GDP) in the third and fourth quarters, at an annualised rate of 8.2% and 4.1% respectively, exceeded the long-term trend of approximately 3%. Private consumption, which was underpinned by the tax relief measures that entered into force in mid-year, remained strong also in the second half-year. Investment and exports gained momentum, with exports benefiting from the dollar's decline against most currencies. Vigorous economic growth went hand in hand with a marked increase in productivity, and consequently the employment situation improved less rapidly than had been expected.

In Japan, real GDP expanded in the fourth quarter; at an annualised rate of 7%, it achieved the highest growth since 1990. This was largely due to strong demand from China, Asia's newly industrialised economies and the US. Spurred by brisk foreign demand, investment activity also increased.

Weak economic growth in the euro area

The recovery in the euro area was distinctly weaker. Real GDP rose by an annualised 1.2% in the fourth quarter. While investment activity picked up

markedly and stocks were replenished, private consumption and exports only expanded moderately. Considerable differences in growth persisted within the euro area. On the whole, real GDP increased more rapidly in the small countries and in Spain than in the large countries, notably in Germany and Italy.

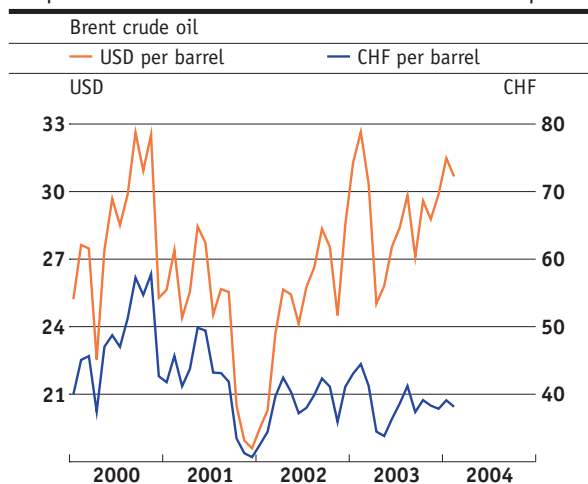
Recovery in the United Kingdom

Unlike on the Continent, economic activity picked up perceptibly in the United Kingdom in the second half of 2003 supported mainly by private consumption and investment. The unbroken marked rise in real estate prices and rapidly rising mortgage borrowing gave rise to fears of economic overheating.

Continuing rise in the oil price

Oil prices, which are measured in US dollars, exhibited an upward trend from November 2003 to February 2004; at the beginning of March – at USD 34 per barrel – they topped the year-earlier level (USD 33). Since the dollar depreciated considerably against most currencies during the same period, the oil price measured in local currencies moved up less markedly than in the US in numerous countries, notably in the euro area and in Switzerland.

Oil prices Graph 1.2



Source: SNB

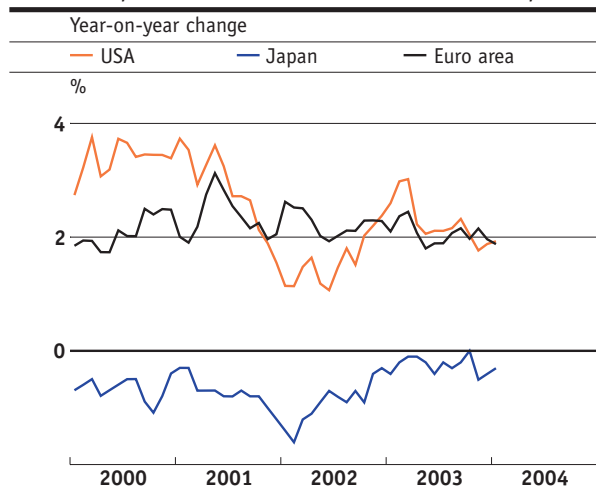
Continuously low inflation

Despite the upward trend in the oil price, inflation in the US and in the euro area remained low. In the US, inflation at the consumer level amounted to 2.0% in January, while in the euro area, at 1.9%, it returned to the range of price stability as defined by the European Central Bank (ECB). In Japan, a slightly deflationary trend took hold again near the end of the year (January: -0.3%) after it had come to a virtual standstill in the second half-year. Core inflation rates in most industrial countries were stable or still on the decline. This reflected the relentlessly weak capacity utilisation and – outside the US – receding import inflation in the wake of the depreciation of the dollar.

Expansionary monetary policy continues

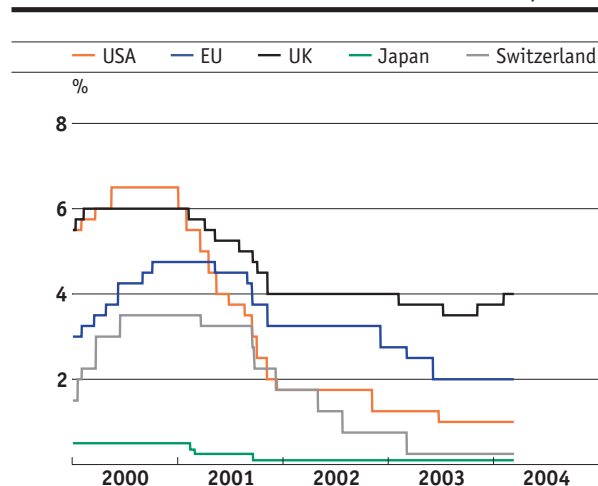
The Fed and the ECB left their key rates unchanged until February at 1% and 2% respectively, the level prevailing since June 2003. The Bank of Japan, too, continued to conduct an expansionary monetary policy. Conversely, the Bank of England raised the key rates in two steps to 4% in early November and early February in order to achieve its medium-term inflation target. Since December 2003, the inflation target has been set at 2% and has been based on the Harmonised Index of Consumer Prices. Previously, the inflation target – higher by 0.5 percentage points – had been based on the Retail Price Index excluding mortgage interest payments.

Consumer prices Graph 1.3



Source: BIS

Official interest rates Graph 1.4



Sources: BIS, BNS

2 Economic development in Switzerland

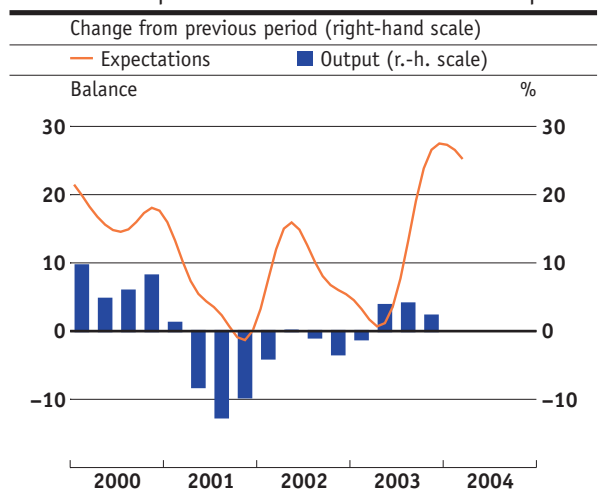
As in other countries, the economic recovery also continued in Switzerland in the fourth quarter 2003. Real gross domestic product increased at an annualised rate of 1.8%, thus expanding at a similar rate as in the previous period according to the revised data. The main stimuli emanated from exports, though domestic demand also picked up. While the revival of investment activity had been expected, the growth of private consumption turned out to be surprisingly substantial. The vigorous increase in aggregate demand was accompanied by steeply rising imports, which weakened the positive impact on real GDP.

The recovery in the manufacturing sector, which began to be discernible in summer 2003, continued until January. Orders received increased, and the order books filled up. Once the previously excessive stocks of semi-manufactures and finished goods had

been reduced to an appropriate level, increasing demand led to rising production. In the fourth quarter, output of the manufacturing industry expanded further. It rose by 1.9% year-on-year, following an increase of 0.5% in the third quarter.

After a marked decline in the first half of 2003, an economic turnaround set in during the second half-year, with GDP growth rates slightly exceeding the estimated growth potential. Accordingly, the negative production gap diminished. In the talks held between the delegates for regional economic relations and enterprises from various industries, it also became clear that an economic recovery was under way. Capacities, however, were not yet fully utilised, and no significant turnaround has taken place in the labour market as yet. A number of indicators, however, suggested that the economic recovery would become more broad-based in the next few quarters and the utilisation of overall economic capacities would rise.

Industrial output Graph 2.1



Sources: KOF/FIT, SFSO

Real GDP and components
Year-on-year growth rates

Table 2.1

| | 2000 | 2001 | 2002 | 2003 | 2002 | | | | 2003 | | | |
|------------------------------------|------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|
| | | | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Private consumption | 2.5 | 2.0 | 0.7 | 0.9 | 1.3 | 0.6 | 0.6 | 0.4 | 0.2 | 0.8 | 0.9 | 1.7 |
| Government consumption | 2.4 | 4.0 | 0.8 | 0.9 | -0.7 | 1.3 | 1.6 | 1.2 | 1.0 | 1.1 | 0.5 | 0.8 |
| Investment in fixed assets | 4.4 | -3.1 | -4.8 | 0.1 | -8.9 | -6.1 | -2.7 | -2.1 | 0.1 | -3.5 | -1.3 | 4.9 |
| - Construction | 2.7 | -3.4 | 2.2 | 0.9 | -0.7 | 4.2 | 2.6 | 1.8 | 0.7 | 0.0 | 1.1 | 1.8 |
| - Capital goods | 5.6 | -3.0 | -10.1 | -0.7 | -14.3 | -14.5 | -7.3 | -4.9 | -0.3 | -7.1 | -3.8 | 7.5 |
| Domestic final demand | 2.9 | 1.0 | -0.6 | 0.7 | -1.3 | -1.0 | 0.0 | -0.1 | 0.3 | -0.2 | 0.2 | 2.4 |
| Domestic demand¹ | 2.1 | 1.9 | -0.9 | -0.1 | -3.8 | 1.0 | -1.1 | 0.2 | 1.2 | -3.7 | 0.7 | 1.6 |
| Total exports ¹ | 12.2 | 0.2 | -0.5 | -1.4 | -4.4 | -2.8 | 3.4 | 2.2 | -2.4 | -2.3 | -3.5 | 2.5 |
| - Goods ² | 11.9 | 3.7 | 0.3 | -1.1 | -4.7 | -0.5 | 3.7 | 3.1 | -1.8 | -3.1 | -2.1 | 2.4 |
| - Services | 13.6 | -3.2 | -4.9 | 1.2 | 0.1 | -12.3 | -1.4 | -6.3 | -3.6 | 2.0 | -0.4 | 8.2 |
| Aggregate demand | 5.2 | 1.4 | -0.8 | -0.5 | -3.9 | -0.1 | 0.2 | 0.8 | 0.1 | -3.2 | -0.6 | 1.9 |
| Total imports ¹ | 9.5 | 2.2 | -3.1 | -0.1 | -10.1 | -0.3 | -1.5 | 0.1 | 1.7 | -6.3 | -0.5 | 5.1 |
| - Goods ² | 9.7 | 1.6 | -2.8 | 0.3 | -5.4 | -1.1 | -2.4 | -2.2 | 1.5 | -7.4 | 0.1 | 7.1 |
| - Services | 5.3 | 4.3 | -0.1 | 1.2 | 1.4 | -0.6 | -0.4 | -0.5 | 2.9 | 2.3 | 0.4 | -0.4 |
| GDP | 3.7 | 1.0 | 0.2 | -0.5 | -0.7 | -0.4 | 0.7 | 0.9 | -0.6 | -1.0 | -0.6 | 0.0 |

1 Including precious metals, precious stones and gems as well as objets d'art and antiques

2 Excluding the above under FN1

2.1 Exports

In the fourth quarter, real exports exceeded the year-earlier level by 2.5% following a decline of 3.5% in the previous period. Both exports of goods and exports of services contributed to this marked improvement.

Higher exports of services

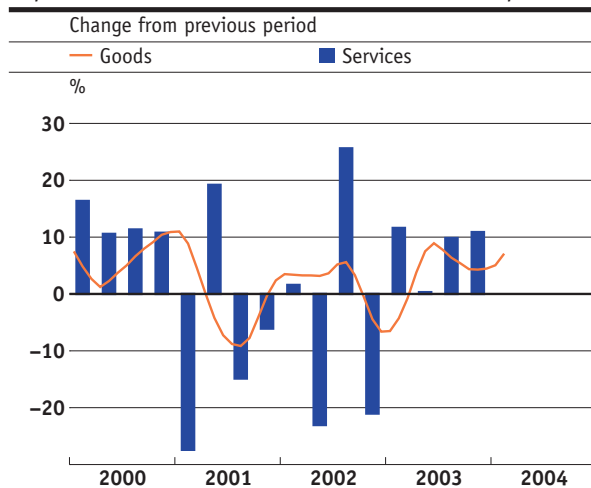
Exports of services continued to increase in the fourth quarter owing to higher earnings from insurance and financial services, exceeding the year-earlier level by 8.2%. As a result of the recovery on the international financial markets, notably income from bank commissions increased substantially.

Exports of goods again above year-earlier level

Real exports of goods rose compared with the previous period at an annualised rate of 11.4% and topped the year-earlier level by 2.4% (third quarter: -2.1%).¹ The rate of expansion was high, notably at the beginning of the quarter. Around the end of the year, it tapered off due to the slightly slower rise in exports of consumer goods and of raw materials and semi-manufactures. By contrast, exports of capital goods, primarily of precision instruments, industrial machines and electrical goods and appliances, saw a marked increase.

In January, goods exports lost some momentum. Particularly affected were exports to the US. Sharply rising incoming orders, increasingly full order books and the optimistic expectations of exporters, however, point to sustained robust growth of exports.

Exports Graph 2.1.1



Sources: Swiss Federal Customs Administration (FCA), seco

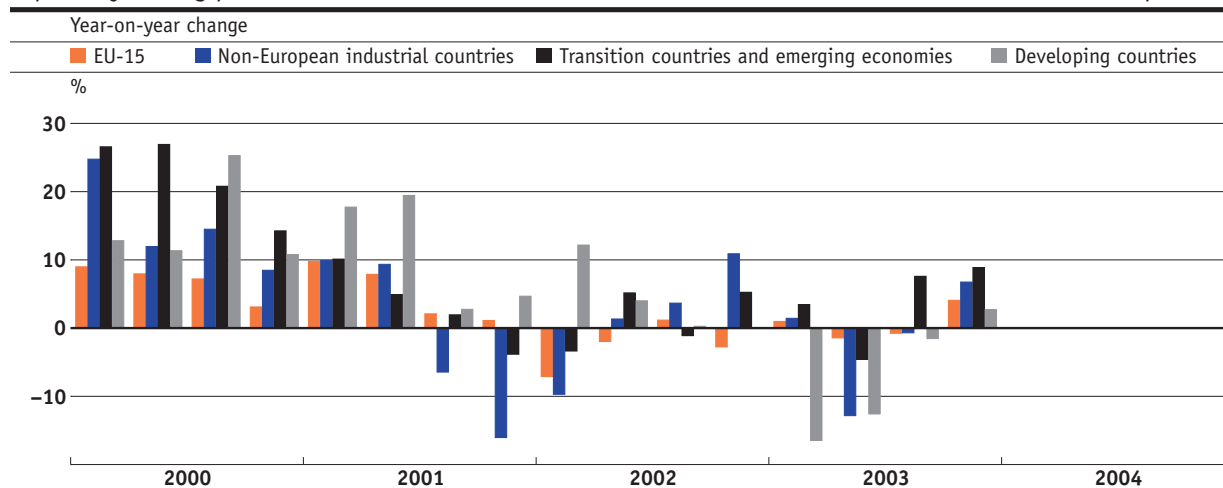
1 Excluding precious metals, precious stones and gems, objets d'art and antiques

Chief stimuli from the US, Central Europe and Asia

Nominal exports of goods to the US, the United Kingdom and the OPEC countries saw above-average expansion.² By contrast, exports to Asia, Japan and Central Europe lost momentum, though shipments, for the most part, still exceeded the previous year's level. A bright spot was the revival in demand from the euro area. During the quarter under review, notably exports to Germany and France, which had been weak until then, picked up.

Exports by trading partners

Graph 2.1.2



Developing countries incl. OPEC countries
Source: FCA

² Only nominal values are available for a breakdown by export destinations.

2.2 Investment

Investment in equipment continues to vary widely from investment in construction. Whereas equipment investment rose sharply in the fourth quarter, construction investment continued to grow only modestly. Overall, equipment investment was 4.9% above the year-back level, thus making a positive contribution to economic growth for the first time in over two years.

Residential construction continues to drive growth

Driven mainly by house-building, investment in construction advanced by 1.8% from the previous year. The results of a survey by the Swiss contractors' association point to a continued decline in commercial and industrial building activity and to a stagnating civil engineering segment.

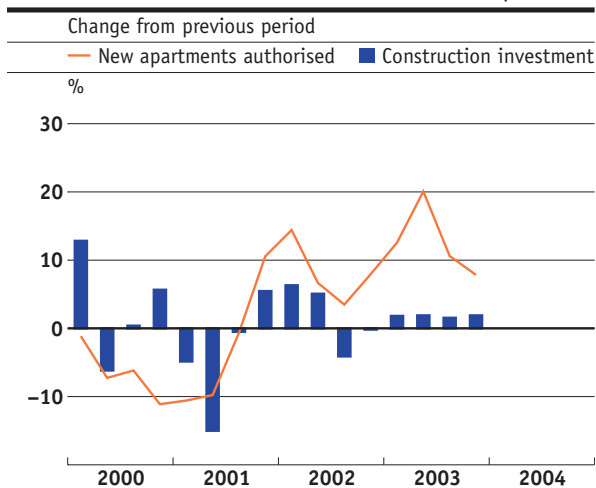
The sharp fourth-quarter rise in the number of apartments for which building permits were granted reflects the persistently high demand for living space. The uptrend in rents for newly let apartments¹ and the very low vacancy rate also point in this direction. By contrast, falling rents and high vacancy rates for office space suggest that the supply overhang in the commercial segment remains high. As the economy recovers, however, conditions in this cyclically sensitive market segment are likely to change. Consequently, a gradual revival in commercial building activity could set in towards the end of the year.

Equipment investment picking up

In the fourth quarter, equipment investment was 7.5% above its year-back level. Imports of capital goods, and especially of office equipment, rose particularly sharply, whereas the quarterly survey conducted in the Swiss mechanical and electrical engineering industries (Swissmem) indicated a continuing decline in domestic sales.

In the next few months, an upturn in output and growing capacity utilisation should further boost investment in equipment. Improved corporate earnings prospects coupled with low interest rates should also be conducive to this expansion.

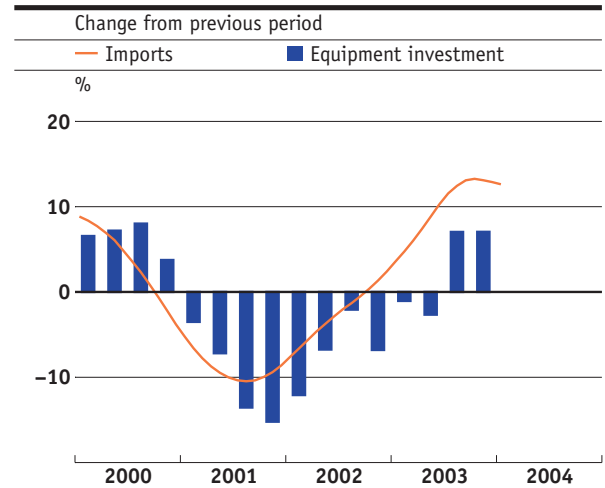
Construction Graph 2.2.1



Sources: SFSO, seco

¹ According to the Wüest & Partner rentals index

Capital goods Graph 2.2.2



Sources: FCA, seco

2.3 Consumption

Private consumption surprisingly buoyant

Private consumption was surprisingly buoyant in the fourth quarter. It grew by over 3% on an annualised basis, or by 1.7% year-on-year. It is still too early, however, to assume a sustained upswing in private consumption. The major impulses continued to emanate from the (mostly fixed) outlays on housing and health expenses. In addition, the picture was distorted by extraordinary factors. The cold weather in October resulted in unusually high energy consumption, and there was a backlog of demand for clothing and footwear following a downturn in the preceding months.

During the fourth quarter as a whole, retail sales declined by 0.3% against the previous year after a slight rise in the preceding quarter. The number of new car registrations was still below the year-back level (-3.8%) but the fall was less pronounced than it had been in the preceding quarters (Q3: -5.2%). Demand in the domestic tourism segment was also weak: the number of overnight stays by domestic guests was 1.8% down from the year-earlier level, whereas in the previous quarter there had been no change year-on-year.

Slight improvement in the consumer climate

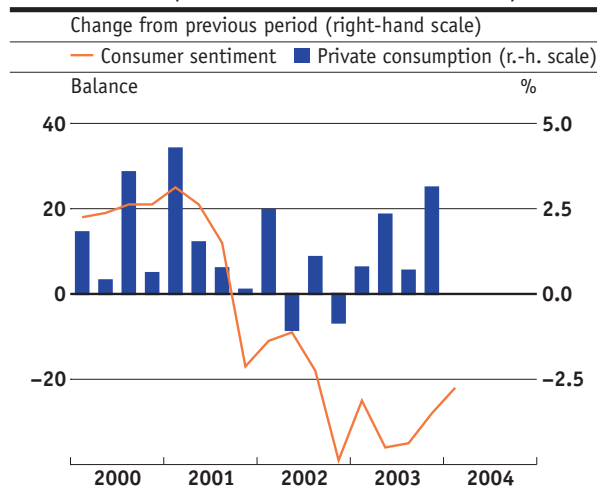
The consumer sentiment index, which rose slightly in January for the second month running, provided a ray of hope. In particular, households took a rather more confident view of the future economic situation and their personal financial situation than they had done in the previous survey in October 2003. Job security was also rated more highly. The surveys of the Swiss Institute for Business Cycle Research at the Federal Institute of Technology (KOF/FIT) also reflected the rise in consumer confidence. The retail trade considered that the level of business had further improved in January, and took a more optimistic view of future sales growth than it had in autumn 2003. In catering, and especially in the hotel trade, expectations also brightened a little.

In addition to these sentiment indicators, rising demand for the replacement of durable consumer goods and growth in income also point to a gradual stimulation of private consumption. The nominal income of wage and salary earners, calculated on the basis of the number of persons in employment and the average pay, is set to rise by 1.4% in 2004 as opposed to a rise of 0.8% in the past year. This increase is due to the more favourable employment situation, which more than offsets the slower rise in pay levels. With consumer prices expected to rise by 0.4%, the purchasing power of wages and salaries is thus set to improve by about 1% in real terms. The equivalent figure for the previous year was just 0.2%.

Slightly higher public-sector spending

Fiscal policy provided a slight stimulus to the economy in 2003. Public-sector spending (including social security payments) rose by 0.9%, much the same as in the previous year. Expenditure on personnel as well as on goods and services mounted. As the 2004 budgets of the federal, cantonal and municipal governments anticipate a slowing-down in real growth in expenditure, this factor is set to diminish as a stimulus to the economy.

Private consumption Graph 2.3.1



Sources: SFSO, seco

2.4 Capacity utilisation

Stabilisation of the output gap

In assessing utilisation of production capacity in the economy as a whole, the SNB relies on the concept of potential output or the “output gap”. Potential output indicates the estimated level of output that is attainable when utilisation of production factors is at a normal level. The percentage deviation of actual from potential output – i. e. the output gap – is a useful measure for evaluating the state of the economy and the inflationary or deflationary risks.

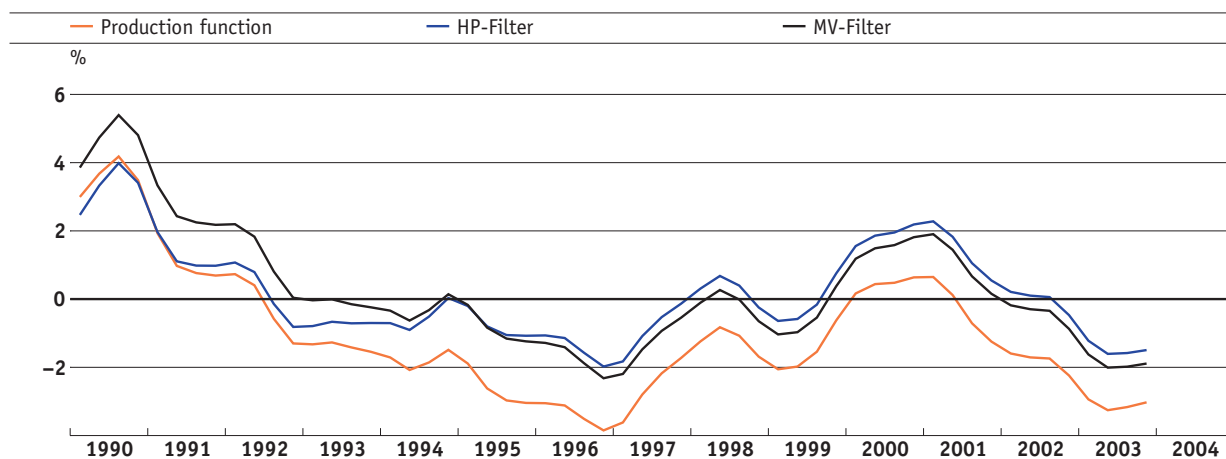
Since potential output cannot be observed, it has to be estimated using econometric methods. Three approaches are possible: (1) the Hodrick-Prescott (HP) filter is one of the univariate methods which infer potential output solely on the basis of time-series data for observed production. With this method, the observed output (in terms of real GDP) is broken down into a trend component and a cyclical component. The trend component reflects the potential output while the output gap corresponds to the cyclical component of observed output. (2) The multivariate (MV) filter is an HP filter where – alongside the breakdown of real GDP into its trend and cyclical components – information on the correlation be-

tween output and inflation is additionally used (Philips curve). (3) In the production function approach, potential output is estimated on the basis of an economic production function covering the economy as a whole, which describes the correlation between potential output and its determining factors (long-term development of the production factors labour and capital as well as technological progress).

Graph 2.4.1 shows the estimates of the output gap. The three methods produce similar results: between the second quarter of 2001 and the second quarter of 2003, utilisation of capacity in the economy as a whole decreased steadily. In the third and fourth quarters, the output gap stabilised at a level which, in all three estimation methods, points to under-utilisation of the production factors. The uncertainty associated with estimating the output gap is reflected in the considerable bandwidth spanned by the three gaps. Whereas the HP filter put under-utilisation of economic capacity in the fourth quarter of 2003 at –1.5%, the production function approach put this figure at –3.0%. Altogether, the economic situation presents a similar picture to the beginning of 1997.

Output gap

Graph 2.4.1



Sources: seco, SNB

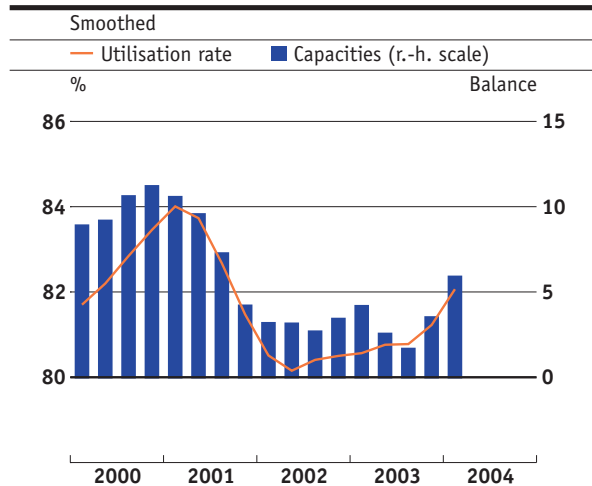
Slightly higher industrial capacity utilisation

The results of the quarterly KOF/FIT survey provide further information on capacity utilisation. These figures, however, no longer refer to the economy as a whole but to the manufacturing sector only. According to the survey, the majority of companies queried did not report any change in their technical capacity in the fourth quarter. There was, however, a small increase in the positive balance between those companies reporting an increase in technical capacity and those reporting a decrease.

Capacity utilisation rose to 82.4% after having stagnated at around 80%–81% in the last two years. However, it was still below the long-term average of 84%, indicating that technical capacity continued to be under-utilised.

At the beginning of the year, a number of production indicators were still moving upwards. In particular, these included the fast-growing imports of primary products (iron, steel, metal products). Both corporate plans (as surveyed by KOF/FIT) and the purchasing managers' index continued to improve, though at a slightly slower pace. Overall, this suggests that growth in industrial output will not strengthen any further in the first quarter and that industrial capacity utilisation will continue to increase only gradually.

Industrial capacity Graph 2.4.2



Source: KOF/FIT

2.5 Labour market

Employment level stable

The situation on the labour market stabilised in the fourth quarter. Employment was slightly higher than in the preceding quarter (up by an annualised 0.4%) so that it stood only 0.2% below the year-back level. The slight quarter-on-quarter rise can be ascribed to higher employment in the service sector and construction (up 1.0% and 3.3% respectively). In manufacturing, jobs continued to be lost (-2.4%).

Changes in employment levels within the service sector were mixed. The biggest rises were in the public sector, which accounts for about 30% of service-sector jobs (administration: +4.2%; education: +2.8%; health and social work: +3.0%). Employment levels also rose slightly in retailing (+0.7%) and in company-related services (+2.7%), which together make up 25% of service-sector employment. By contrast, the banks (-2.9%) and insurance companies (-5.1%) shed jobs again.

In terms of full-time equivalents, employment declined again slightly (-0.5%), as the increase in part-time positions failed to offset the decrease in full-time jobs.

Unemployment rates unchanged

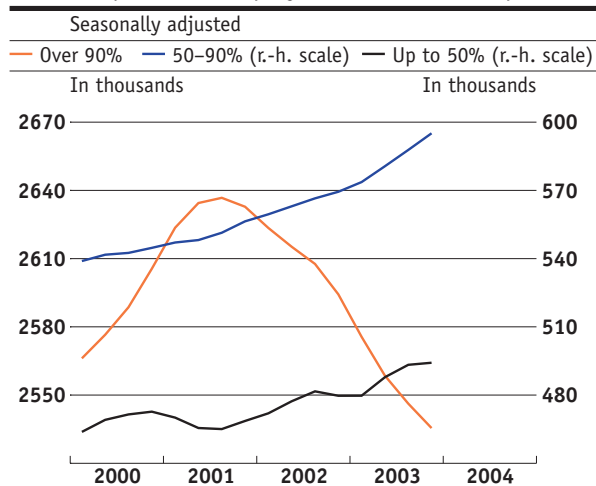
The seasonally adjusted unemployment rate remained unchanged at 3.9% between August 2003 and February 2004, while the percentage of job seekers held steady at its October level of 5.6%. In February, 154,800 persons were registered as unemployed; 219,700 persons were seeking employment.

Employment prospects improve

Demand for labour appears to be gradually picking up. The employment prospects gauged by the Swiss Federal Statistical Office improved once again in the fourth quarter. According to KOF/FIT surveys, the construction, retailing and catering sectors considered that staffing levels were no longer as excessive as they had been a few months previously. By contrast, the manufacturing sector still regarded the workforce as being too large.

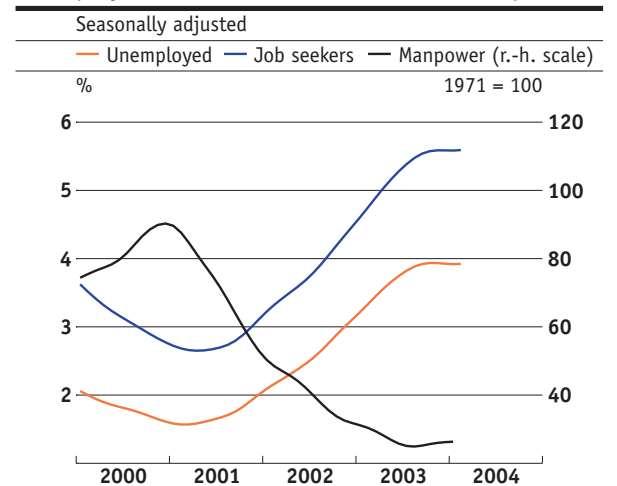
The improved outlook is gradually manifesting itself in an increase in the number of job vacancies. In February, the number of job vacancies reported by the regional employment offices showed another slight rise. Both the Manpower Index, which measures the area of job advertisements in newspapers, and the Jobpilot Index (January), which reflects the number of job ads in the Internet, increased slightly.

Full- and part-time employment Graph 2.5.1



Source: SFSO

Unemployment rates and vacancies Graph 2.5.2



Unemployed and job seekers registered with the regional employment offices in percent of the economically active population according to the 2000 census (3,946,988 economically active persons)

Sources: Manpower, seco

3 Monetary development

3.1 Interest rates

Money market

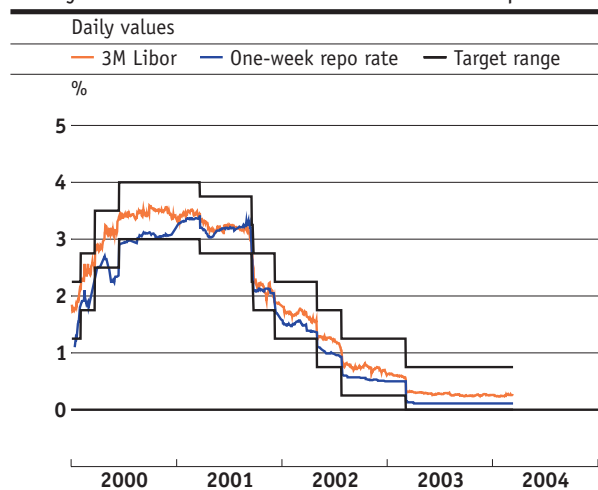
From mid-December 2003 to mid-March 2004, the SNB continued to pursue an expansionary monetary policy. The target range was unchanged at 0.0%–0.75%, and the three-month Libor remained at its target level of 0.25%. Since April 2003, the repo rates for all maturities have held steady at 11 basis points.

With both the ECB and the Fed pursuing unchanged monetary policies, three-month rates for the currencies in question have remained consistently low during the quarterly period under review. The United Kingdom was an exception: short-term rates in the UK stood at 4.22% on 1 March, compared with 2.05% in the euro area and 1.12% in the US. Three-month Swiss franc rates thus exhibited spreads of 1.8 percentage points against the equivalent euro rates and of just under 0.9 percentage points against the corresponding dollar rates.

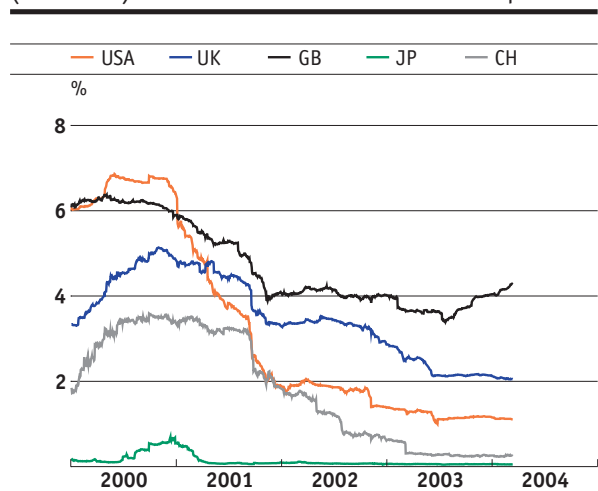
In the market, interest rate expectations for Swiss francs dropped steadily in the second half of 2003. Graph 3.1.3 shows the change in expectations for the three-month Libor on the futures market for mid-March 2004 maturities. These predictions for mid-March decreased from over 80 basis points last summer to about 50 basis points in December 2003. At the beginning of 2004, the market gradually swung round to the consensus of an unchanged three-month Libor by mid-March. By February, the March futures had settled at the level of the three-month Libor.

The expansionary monetary policy is also reflected in the development of estimated real Swiss franc interest rates with a maturity of one year (graph 3.1.4). The real interest rate results from the differential between the 12-month Libor and the inflation rate predicted for the next 12 months. Expected inflation rates in turn reflect the average assessment of 14 institutes published each quarter as a “Consensus Forecast”.

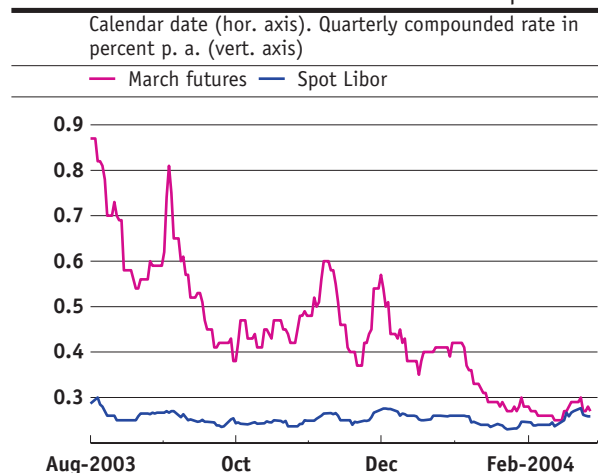
Money market rates Graph 3.1.1



International short-term interest rates (3 months) Graph 3.1.2



The three-month interest rate future Graph 3.1.3



Graphs 3.1.1, 3.1.2, 3.1.3:
Source: SNB

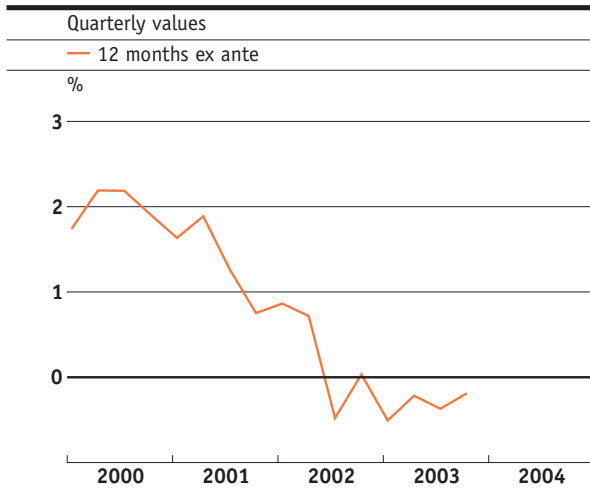
The ex ante real annual interest rate measured by this method has remained fairly stable in the last 18 months. In the last quarter of 2003, it was still in the negative zone (-0.2%). Therefore, it still does not provide any indication that borrowing in Switzerland is set to become more expensive in real terms in the near future.

For the next three months, the financial markets are expecting interest rates to move upwards only marginally. In Graph 3.1.5, the three following interest rates are compared against SNB computations of the three-month Libor: the development of the interest rate for a traded futures contract falling due in mid-June 2004, the forward rate implicitly contained in the interest structure of Libor rates with a maturity of 1–12 months, and the development of the spot rate for the three-month Libor. The three-

month Libor as at mid-June 2004 (the date of the next monetary policy assessment), computed in accordance with SNB model calculations on the basis of the information available on 9 February 2004, is 0.39%, which is 15 basis points above the spot rate for the three-month Libor. On the same date, the futures markets were also anticipating a spot rate of 0.39% for the same maturity date. The forward rate calculated at this date was 2 basis points above the expected spot rate.

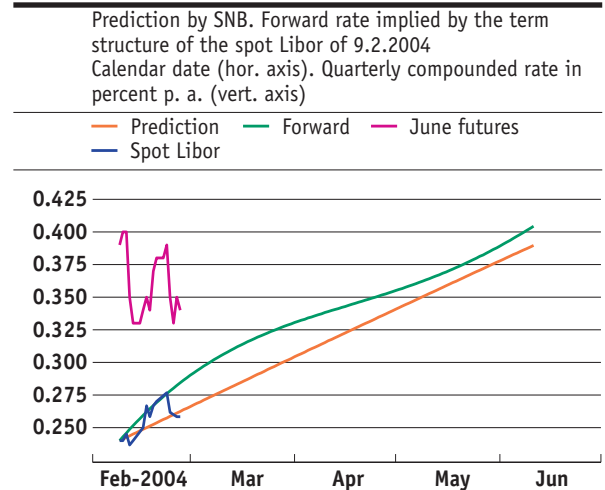
Since 9 February, the rate for June futures has oscillated slightly between 0.4% and 0.33%. The rate at 1 March was 0.35%. At the beginning of March, therefore, the futures markets were expecting the three-month Libor to rise only slightly up to the time of the monetary policy assessment at mid-year.

Estimated real interest rates Graph 3.1.4



Source: SNB

Anticipations of the Swiss three-month interest rate Graph 3.1.5



Source: SNB

Capital market

In February, the yield curve for Confederation bonds (other than the very short maturities) was well below its level in November and had practically dropped back to the August 2003 level.

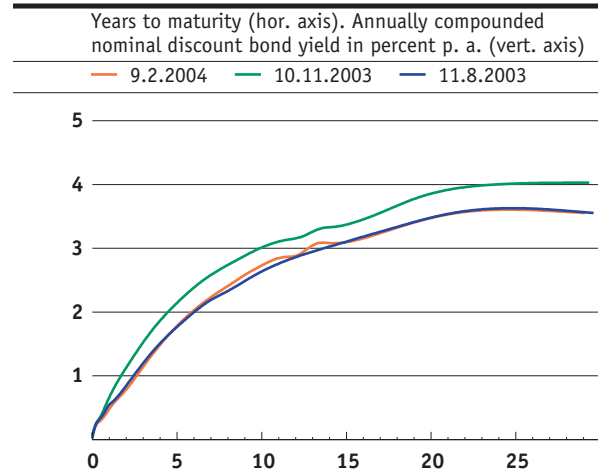
Graph 3.1.7 illustrates the steady decline in Swiss Confederation bond yields between 2000 and mid-2003. Although this trend experienced a temporary correction in mid-2003, this gave way to a renewed slide in the autumn. In February, the two ends of the yield curve were exhibiting contrasting trends. While rates for 15-year paper were rising slightly, short rates continued to decline.

The general downturn in Swiss yields, which began in autumn last year, may be explained on the one hand by declining inflation expectations or, on the other, by international trends (Graph 3.1.8). Interest rates on long-term government bonds abroad present a similar picture to those in Switzerland. After a steady decline between 2000 and mid-2003, they underwent a correction which proved especially pronounced in Japan. In recent months, however, they have again fallen sharply.

The term structure of

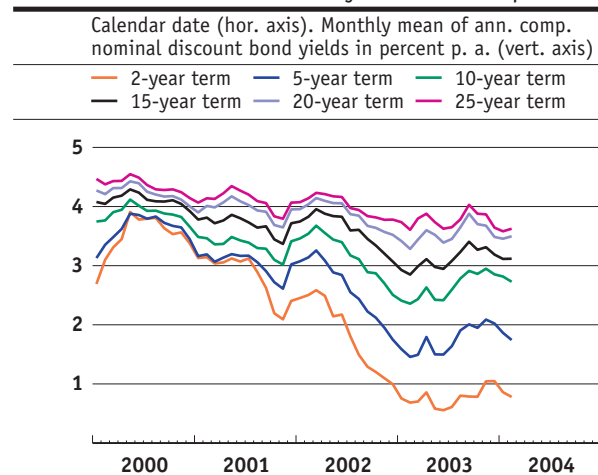
Swiss Confederation bond yields

Graph 3.1.6



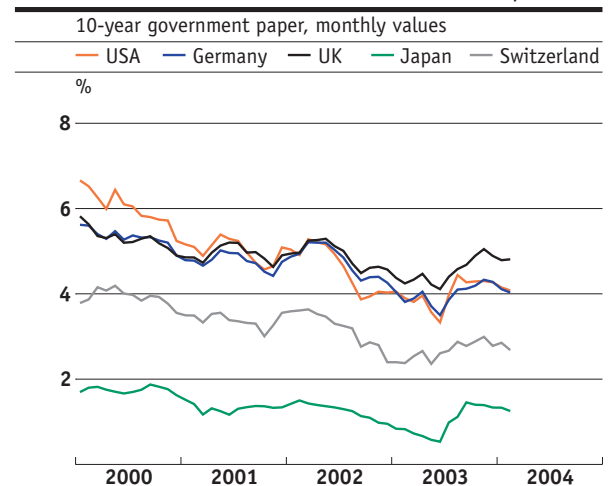
The Swiss Confederation bond yields

Graph 3.1.7



Interest rates abroad

Graph 3.1.8



Graphs 3.1.6, 3.1.7, 3.1.8:
Source: SNB

3.2 Exchange rates and Monetary Conditions Index (MCI)

Exchange rates

Between December 2003 and February 2004, the dollar depreciated from CHF 1.27 to CHF 1.24. At the same time, the euro edged up from CHF 1.56 to CHF 1.57.

The Swiss franc's export-weighted nominal external value against Switzerland's 24 biggest trading partners receded by 0.7% between December and February, finishing 3.6% below its year-back value.

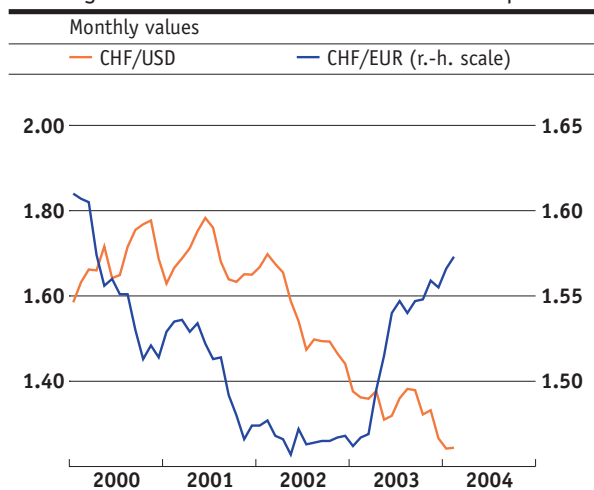
However, the franc's real (and not its nominal) external value is of crucial significance to the effect of the exchange rate on actual economic activities in Switzerland. This real figure reflects differences in inflationary developments in Switzerland versus those abroad. Since inflation in Switzerland tends to be lower than abroad, the nominal exchange rate overstates the effects of a rise in the Swiss franc and understates the effects of depreciation.

Between December and February, the export-weighted real external value of the Swiss franc receded by 1.0%. In year-on-year terms, the decline was 4.6%. This change conceals two contrary developments. In relation to the European countries accounting for the bulk of Swiss exports, the real value of the Swiss franc in February was 7.8% below its year-back level. In relation to the United States and Canada, however, the franc rose by 8.0% in real terms.

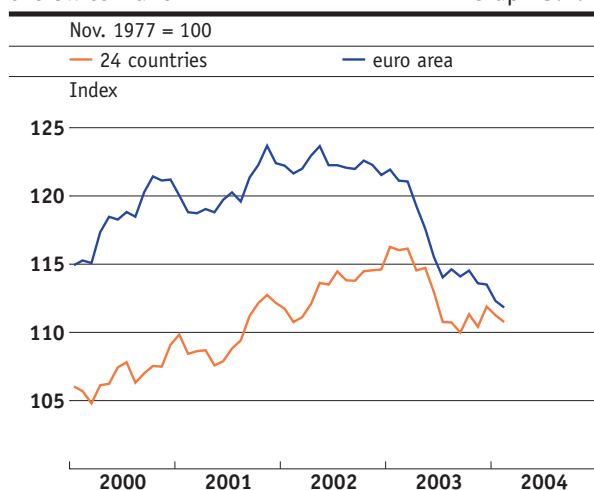
Monetary Conditions Index (MCI)

The Monetary Conditions Index (MCI) summarises the development of interest rates and of the exchange rate in a single indicator. The MCI currently points to a relaxation in the monetary environment. At the beginning of March it was 50 basis points (at a 5:1 weighting) or 80 basis points (at a 3:1 weighting) below its level on 12 December 2003, the date of the SNB's last quarterly assessment (see box). The reason for this decline was the fall in the Swiss franc's external nominal value which started after this date. In March, however, an upward correction set in. Since March last year, when the target for the three-month Libor was lowered to its current level of 0.25%, the MCI has been determined almost exclusively by the exchange rate.

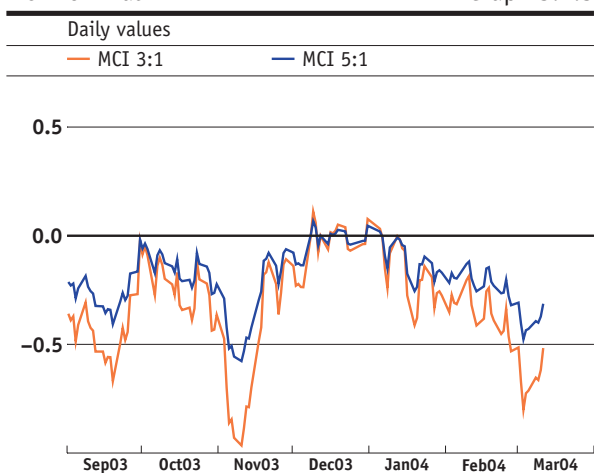
Exchange rates Graph 3.2.1



Export-weighted real exchange rate of the Swiss franc Graph 3.2.2



MCI nominal Graph 3.2.3



Graphs 3.2.1, 3.2.2, 3.2.3:
Source: SNB

Box: The Monetary Conditions Index (MCI)

The nominal Monetary Conditions Index (MCI) is the weighted sum of the three-month Libor and the percentage deviation of the nominal trade-weighted exchange rate versus 24 countries from a trend. The steepness of the trend line corresponds to the average annual appreciation of the Swiss franc in nominal terms, which has amounted to about 1.4% since 1977. The MCI is calculated with two different weights. The 3:1 and 5:1 weightings signify that an interest rate rise (interest rate reduction) of one percentage point is equivalent to an appreciation (depreciation) of the Swiss franc of 3% and 5% respectively.

The MCI – which is reset to zero on the day of an SNB interest rate decision – describes the changes in the monetary environment since this decision, expressed in basis points of the three-month Libor. A decrease in the MCI corresponds to a loosening of monetary conditions and a rise to a tightening. Owing to its use of nominal values, the MCI is only suitable for short-term observations.

3.3 Asset prices

Swiss Performance Index

In December and January, the Swiss equity market's rise – which started in March 2003 and was in step with that of the international stock exchanges – continued unabated. Technology and industrial stocks, which had been especially hard hit by the previous slump, made particularly large gains. At the end of February, the SPI (Swiss Performance Index) stood at 4,200 points, 7% above its position at the end of the previous year. Having risen continuously for almost a year, by the end of February the SPI had made good over half of the losses it had sustained between its peak in August 2000 and its trough in March 2003. The higher stock exchange prices are a reflection on the one hand of the worldwide downturn in interest rates, while on the other hand they may reflect companies' improved earnings prospects.

In February, however, the Swiss equity market underwent a consolidation. This was probably due to the disappointing nature of certain economic reports issued in Germany and the US.

Swiss Bond Index

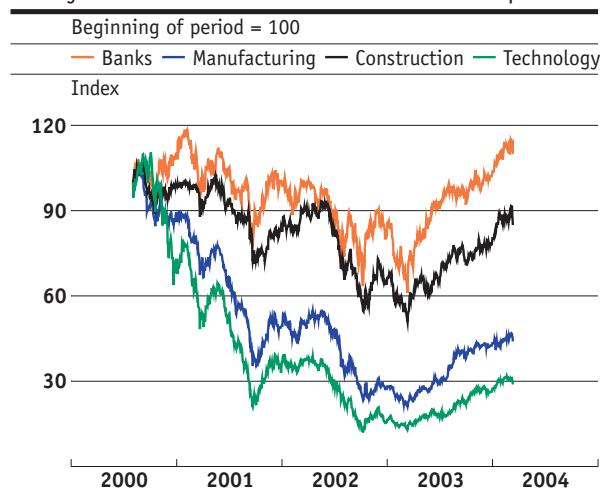
Bond prices moved in an opposite direction to long-term interest rates. Bond prices rose sharply until March 2003. When the mood on the stock markets improved, however, they underwent a downward correction which lasted until September. Since then, bond prices have been rising again: by the end of February 2004, the Swiss Bond Index had recouped almost half the losses it had sustained between March and September 2003.

Rents and real estate prices

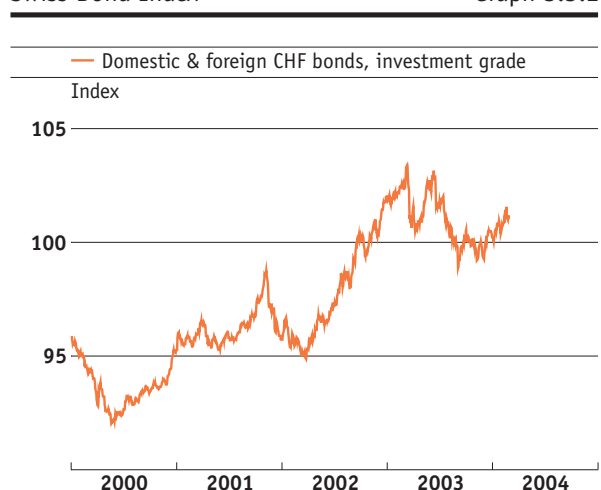
Trends on the Swiss property market have been mixed. While office rents declined in the fourth quarter of 2003, prices of single-family homes and owner-occupied apartments stabilised. Residential rents, however, continued to rise.

In the last three years, prices of single-family homes and owner-occupied apartments have risen by an average of 4.2% p.a. despite the economic slowdown. On average, residential rents have risen by 2.3%. These price rises reflect the tight supply situation and the persistently high demand for accommodation. The SNB's monetary policy, which has been expansionary for the last three years and has given rise to very reasonable financing opportunities, has contributed to the buoyant demand. In contrast, office rentals have suffered over the last three years from the slack economy, which has resulted in an average 0.6% p.a. decline in rents.

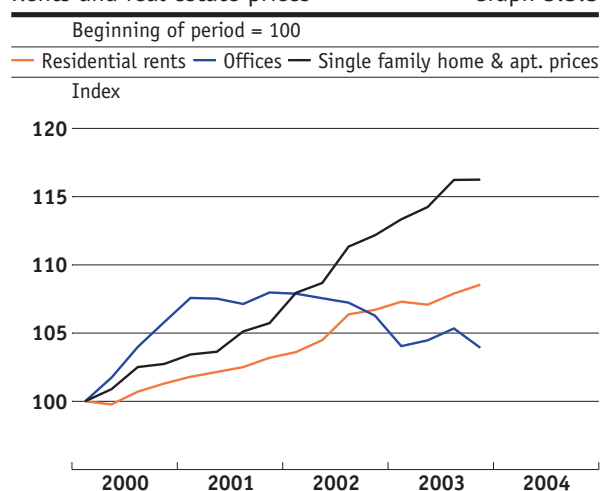
SPI by sectors Graph 3.3.1



Swiss Bond Index Graph 3.3.2



Rents and real estate prices Graph 3.3.3



Graphs 3.3.1, 3.3.2:
Source: Swiss Exchange (SWX)

Graph 3.3.3:
Source: Wüest & Partner

3.4 Monetary aggregates

The monetary base, which is made up of banknotes in circulation plus the domestic banks' sight deposits with the SNB, totalled CHF 41.5 billion in the fourth quarter of 2003. In the final quarter of 2003, it grew by 7.4% compared with the previous year.

The monetary aggregate M_3 , which comprises currency in circulation, sight and transaction accounts plus savings and time deposits, amounted to CHF 558.6 billion in the fourth quarter (Table 3.4.1). The M_2 monetary aggregate (M_3 minus time deposits) came to CHF 500 billion, while M_1 (M_2 minus savings deposits) amounted to CHF 293.6 billion. All the monetary aggregates expanded vigorously year-on-year in the fourth quarter: M_1 grew by 23.9%, M_2 by 18.1% and M_3 by 8.9%.

Long-term growth in money supply is a main determinant of the inflationary trend. The broadly defined monetary aggregates M_1 , M_2 and M_3 have been growing apace for a year now, due in large part to the SNB's expansionary monetary policy. The effect of money supply growth on inflation should, however, be put into proportion.

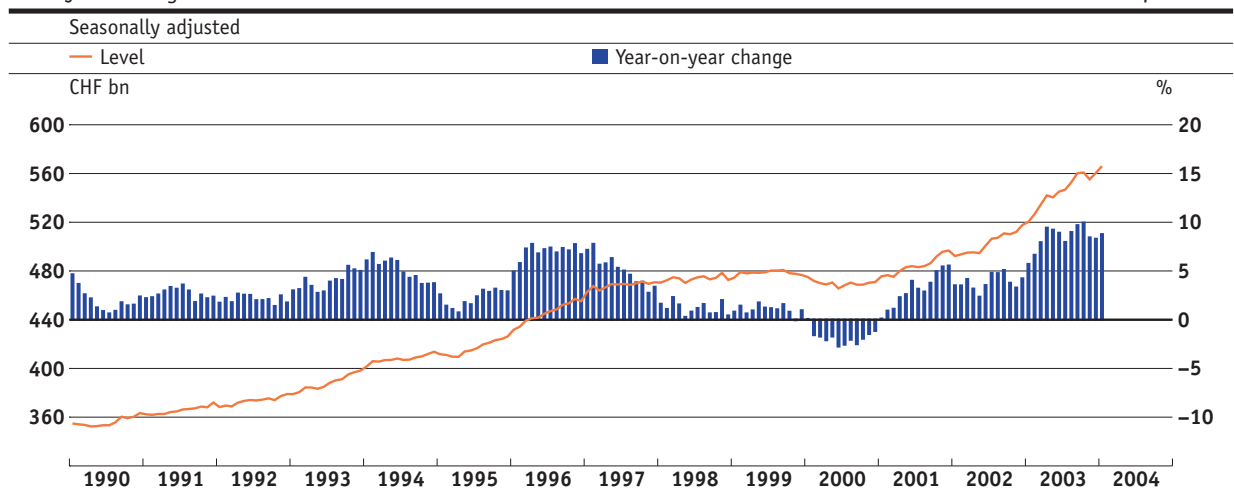
On the one hand, changes in monetary aggregates can be ascribed to "catching-up" effects. The level of the M_3 money stock in the period 2000–2002 was below its historical trend. During this time,

money supply was insufficient ("money gap"). Consequently, the high growth rates in 2001 and 2002 reflect a movement to close this gap. In a phase when money supply is moving back up to its long-term trend, the growth rate has to be higher than usual without this posing an inflationary risk.

On the other hand, strong money supply growth is also the consequence of interest rate-induced portfolio switches. As observable in the past, low interest rates abroad caused fiduciary investments (which are not contained in the M_3 money stock) to be liquidated and transferred to sight deposits in Switzerland, thus inflating M_3 money stock. M_3 growth attributable solely to portfolio switches is unlikely to have an inflationary effect.

The money gap observable in 2001 and 2002 gave way to a money overhang in 2003. A money overhang is a situation in which more money is available than is required for the current level of nominal GDP. The money overhang will continue this year. In the past, an M_3 overhang has had an inflationary effect in the long run. Seen from this angle, the money overhang in 2003 and 2004 points to a rise in inflationary pressure in the medium term. This is reflected in the SNB's current inflation forecast. A tightening of monetary policy at a later point in time should have the effect of reducing the money overhang again.

Money stock M_3 Graph 3.4.1



Source: SNB

Monetary aggregates¹

Table 3.4.1

| | 2002 | 2003 | 2002 | 2003 | | | | | 2004 | |
|----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | | | Q4 | Q1 | Q2 | Q3 | Q4 | December | January | February |
| Monetary base² | 38.4 | 40.4 | 38.7 | 39.2 | 39.9 | 41.0 | 41.5 | 43.3 | 43.1 | 42.0 |
| <i>Change³</i> | <i>5.7</i> | <i>5.3</i> | <i>2.2</i> | <i>0.7</i> | <i>4.6</i> | <i>8.6</i> | <i>7.4</i> | <i>8.3</i> | <i>9.6</i> | <i>8.9</i> |
| M₁² | 224.4 | 273.7 | 236.9 | 249.0 | 273.0 | 279.0 | 293.6 | 292.0 | 298.9 | 301.2 |
| <i>Change³</i> | <i>8.7</i> | <i>22.0</i> | <i>10.1</i> | <i>15.0</i> | <i>25.2</i> | <i>23.5</i> | <i>23.9</i> | <i>21.5</i> | <i>24.7</i> | <i>24.0</i> |
| M₂² | 404.8 | 475.6 | 423.2 | 444.8 | 475.0 | 482.5 | 500.0 | 501.9 | 510.3 | 514.2 |
| <i>Change³</i> | <i>8.1</i> | <i>17.5</i> | <i>10.2</i> | <i>13.4</i> | <i>19.6</i> | <i>18.6</i> | <i>18.1</i> | <i>16.4</i> | <i>17.9</i> | <i>17.4</i> |
| M₃² | 503.0 | 545.3 | 513.0 | 530.1 | 545.2 | 547.4 | 558.6 | 562.3 | 568.9 | 571.2 |
| <i>Change³</i> | <i>3.8</i> | <i>8.4</i> | <i>3.8</i> | <i>6.8</i> | <i>9.1</i> | <i>8.9</i> | <i>8.9</i> | <i>8.3</i> | <i>8.7</i> | <i>7.8</i> |

1 1995 definition

2 Level in CHF billions

3 Year-on-year change in percent

Source: SNB

3.5 Credit

Credit growth accelerated slightly during 2003. In December, domestic bank loans (as per monthly balance sheet statistics) were 2.5% above their year-back level. A year earlier, the corresponding growth figure was 1.4%.

Overall, however, credit growth remains weak – notably in comparison with the monetary aggregates, which shot up in the past year. This difference remains even if we only consider loans denominated in Swiss francs (2.3%). The main reason for the weak credit growth is the persistently low level of investment. In contrast to money supply growth, which leads the business cycle, credit growth changes more or less simultaneously with economic growth.

At present, however, credit growth is weak even compared to economic growth. As can be seen from Graph 3.5.1, the ratio between credit and nominal GDP, which was still rising in the 1980s, has eased slightly in recent years. By contrast, the ratio between credit and nominal investment has risen significantly. Such an increase, however, is typical for phases in the business cycle when investment is contracting.

If we break down credits into “mortgage loans” and “other loans”, we see that credit growth continues to be driven solely by mortgage loans. At the end of 2003, these were 5.3% above their year-back level.

By contrast, “other loans” contracted by 7.5% year-on-year. The divergent trend in growth of mortgage and other loans has thus continued. Moreover, the tempo of this scissors movement has changed very little.

The continuation of the previous year’s trend was also evident in the breakdown of “other loans” into secured and unsecured loans. While the unsecured “other loans” – which had seen the steepest fall in recent years – declined less sharply than the secured “other loans” in the first three quarters of 2003, in the fourth quarter they performed less strongly than the secured “other loans”. This pattern applies to all banking groups except the regional banks and savings banks – which, however, have only a very small share of the market for “other loans”.

Credit interest spreads

Graph 3.5.2 shows the credit ratings for bonds with two-year maturities from seven sectors. Credit ratings are measured in terms of the interest spread between discount bonds from one of these sectors versus the corresponding yields on Swiss Confederation bonds. The borrowers are assigned to different credit rating classes. The sectors chosen are the cantons, banks, mortgage bank institutions, industry and three groups of foreign borrowers rated AAA, AA or A by Standard & Poor’s.

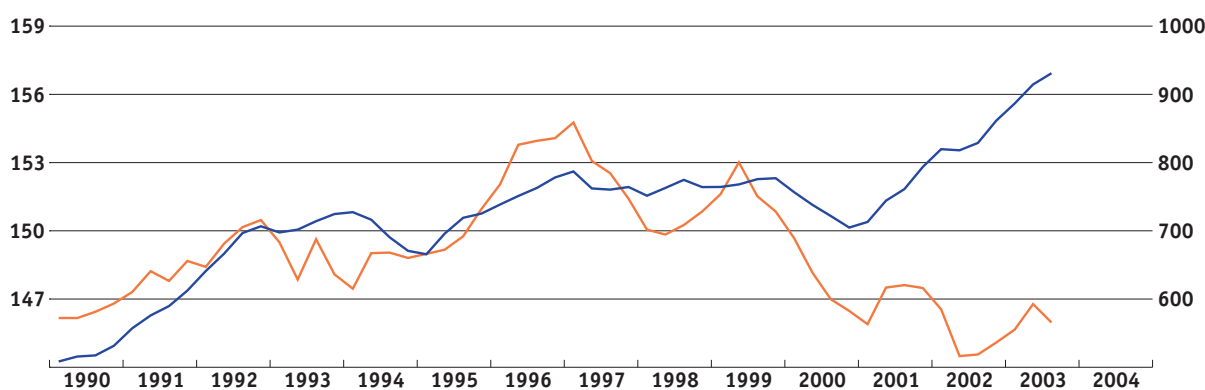
Bank loans

Graph 3.5.1

Quarterly figures, seasonally adjusted, all currencies, Switzerland; level of data collection: parent company

— in % of nominal GDP

— in % of nominal capital investments (r.-h. scale)



Source: SNB

The interest rate spread illustrates the change over time in credit ratings and hence also in the financing terms on the capital market for bond-issuers. It also gives an indication of future economic development. Generally speaking, the smaller the spread, the better the economic prospects.

We can see from the graph that in 2003 the interest rate spread in the top ratings class – which consists of the best borrowers in each sector – was particularly high in manufacturing but also, to a lesser extent, for A-rated foreign bonds. The spreads in

the other borrower categories were relatively close together and also fluctuated less (in absolute terms).

The graph also shows that the two-year spread for first-class bonds on the Swiss capital market receded from October 2003 on, and has remained stable since the beginning of this year. The bonds that received lower ratings by the financial markets managed to improve their ratings substantially in the course of 2003. The general narrowing in the interest rate spread reflects the more favourable economic outlook.

Bank loans¹

Year-on-year change in percent

Table 3.5.1

| | 2002 | 2003 | 2002 Q4 | 2003 Q1 | Q2 | Q3 | Q4 | December | 2004 January | February |
|--------------------|------------|------------|------------|------------|------------|------------|------------|------------|-----------------|------------|
| Total | 0.5 | 2.1 | 0.9 | 1.6 | 1.7 | 2.3 | 2.9 | 2.5 | 3.0 | 3.1 |
| Mortgage claims | 3.9 | 5.6 | 4.7 | 5.7 | 5.4 | 5.6 | 5.5 | 5.3 | 5.3 | 4.8 |
| Other loans | -9.3 | -8.7 | -10.4 | -10.6 | -9.7 | -8.3 | -6.1 | -7.5 | -4.9 | -2.8 |
| of which secured | -3.2 | -10.7 | -12.6 | -13.4 | -14.9 | -9.4 | -4.3 | 2.3 | 3.4 | 2.8 |
| of which unsecured | -12.9 | -7.4 | -9.0 | -8.7 | -6.1 | -7.6 | -7.3 | -10.8 | -5.8 | -6.9 |

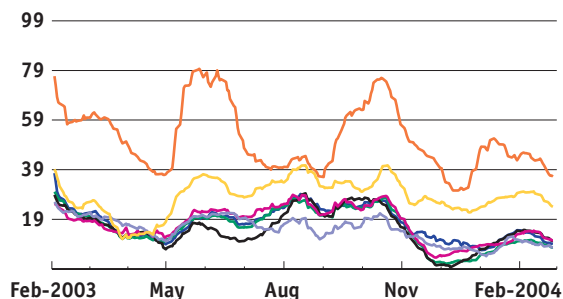
1 Bank balances, level of data collection: parent company, all currencies, Switzerland; yearly and quarterly values expressed as averages of month-end values

The 2-year spread of Swiss first-class bonds Graph 3.5.2

Classified by SNB

Calendar date (hor. axis). Smoothed spread over the Confederation bond yields in basis points (vert. axis)

— Cantons — Banks — Mortgage
— Industry — For. AAA — For. AA
— For. A



Source: SNB

Box: Assignment of bonds to ratings classes

The bonds in any given sector are heterogeneous in terms of credit ratings. As a result, it is not possible to construct a single yield curve for all bonds in a sector. Within each sector, therefore, yield curves need to be calculated individually for different ratings classes. The higher the class, the lower the credit rating. Four reasons can be given for the heterogeneity within a sector. First, the bonds in a sector may be given different credit ratings by the ratings agencies. Second, insufficient liquidity in the Swiss bond market can result in distortions or unwanted volatility in the interest rate spreads. Third, certain bonds may be more popular than others of the same borrower. The 30-year Swiss Confederation bond, for example, is considerably more popular than that with a 25-year maturity. And fourth, the market sometimes awards bonds different ratings than the ratings agencies.

As a rule, the sectors can be divided into several different classes. The homogeneous issues of the mortgage bond institutions are an exception, as they make up just one single class. This division into classes is stable when three conditions are met. First, as many bonds as possible in any given sector should be traded. Second, a class should be made up of bonds with as many different maturities as possible. If all bonds fell due on the same day, the class would “die out” upon maturity unless the respective borrowers had issued new bonds in the meantime. Third, the largest possible number of borrowers should be contained in any given class. Otherwise, a class containing only one borrower would be discontinued if the bonds of this borrower expire and the borrower does not issue any new bonds. As a result, the bonds in the next class up would move down into the next-lower class.

4 Goods prices

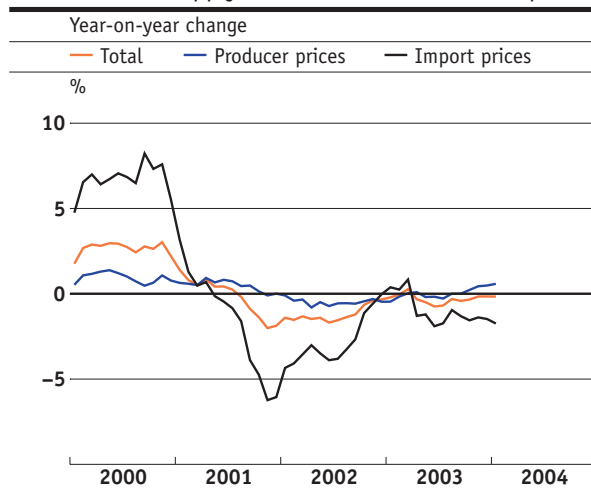
Producer prices slightly on the rise

Producer and import prices, which generate inflationary stimuli for the downstream consumer level, remained modest between October and January. Annual inflation of producer prices registered a slight increase as of October and reached 0.6% in January. Registering a 0.8% increase, the prices of goods destined for the domestic market rose at a somewhat faster pace than those of exported goods (+0.3%). Inflation of imported goods, by contrast, remained in the negative range. In January, imported goods became 1.7% cheaper year-on-year compared with a 1.6% decline in October. Above-average price falls were again registered by imports of capital goods, such as office and other IT equipment.

Sharp decline in inflation on the consumer level

After inflation measured by the national consumer price index (CPI) had ranged from 0.5% to 0.6% in the period from August to December, it dropped to 0.2% and 0.1% respectively in January and February. This trend did not come as a surprise, bearing in mind that the SNB forecast published in December 2003 had signalled an easing of inflation from an average of 0.5% in the fourth quarter to 0.3% in the first quarter. The downturn in inflation was due in particular to a sharper drop in prices for foreign consumer goods.

Prices of total supply Graph 4.1



Source: SFSO

Slight fall in domestic inflation

Annual inflation for domestic goods and services in January and February was slightly lower than in the fourth quarter (0.7% in each month). This decline was attributable to lower price increases for services, which make up three-quarters of the domestic commodities basket. Annual inflation in public services fell by 0.4 percentage points to 1.5% between November and February. Inflation in the private service sector, excluding apartment rentals, receded by 0.2 percentage points to 0.5%. The decline was particularly significant within the group "restaurants and hotels". By contrast, the quarterly rents survey mounted to 0.7% in February, surpassing the level of the previous survey in November by 0.4 percentage points. At 0.9%, inflation in the domestic goods segment was only insignificantly lower in February than in November. Prices for foodstuffs, beverages and tobacco again rose at an above-average rate.

Sharper price drop for imported consumer goods

The price decline in commodities of foreign origin continued at an accelerated pace between November and February, amounting to -1.7% year-on-year in February compared with -0.4% in November. The price development of oil products (fuels and heating oil) again had a particularly marked effect. In February – due to changes in the baseline figures – oil product prices fell 3.9% short of their corresponding year-earlier level. Prices for other imported goods fell somewhat more sharply in February than in the previous three months (-1.3%). The sharper drop was due largely to the low clearance sales prices in the clothing and footwear group; 85% of the products in this group are imports. In addition, the price reductions in the consumer electronics industry were particularly striking: PCs were down 14.2%, software 3.7%, telephones 12.7% and TV sets and video recorders 7.5%.

National consumer price index
Changes from previous period in %

Table 4.1

| | 2002 | 2003 | | | | | 2004 | |
|----------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | | Q2 | Q3 | Q4 | November | December | January | February |
| Overall CPI | 0.6 | 0.5 | 0.4 | 0.5 | 0.5 | 0.6 | 0.2 | 0.1 |
| Domestic goods and services | 0.8 | 0.9 | 0.7 | 0.8 | 0.8 | 0.9 | 0.7 | 0.7 |
| Goods | 0.6 | 0.6 | 0.6 | 1.0 | 1.0 | 1.3 | 1.3 | 0.9 |
| Services | 0.9 | 0.9 | 0.7 | 0.7 | 0.7 | 0.8 | 0.6 | 0.7 |
| private services excluding rents | 1.0 | 1.1 | 0.6 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 |
| rents | 0.3 | 0.2 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.7 |
| public services | 2.1 | 2.1 | 2.1 | 1.9 | 1.9 | 1.9 | 1.3 | 1.5 |
| Foreign goods and services | 0.0 | -0.4 | -0.3 | -0.4 | -0.4 | -0.2 | -1.4 | -1.7 |
| excluding oil products | -0.5 | -0.3 | -0.6 | -0.6 | -0.7 | -0.6 | -1.0 | -1.3 |
| oil products | 3.2 | -1.0 | 1.5 | 1.0 | 1.0 | 1.7 | -3.5 | -3.9 |

Sources: SFSO, SNB

Slightly lower figures for core inflation

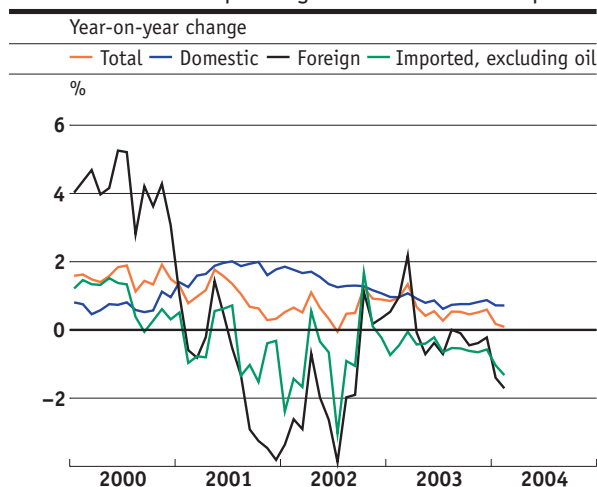
Inflation, as measured by the CPI, is subject to numerous short-term influences which may distort perceptions of the general price trend. The National Bank therefore calculates a core inflation rate. For any given period, this core inflation rate excludes the 15% of goods with the highest annual inflation rate and the 15% of goods with the lowest annual inflation rate from the CPI basket. In February – at 0.5% – core inflation was only marginally lower than in November and 0.4 percentage points higher than consumer inflation. This development shows that the special price-dampening factors were considerably stronger at the beginning of the year than the factors driving inflation. The low core inflation rate reflects the continued low inflationary trend.

Unlike the core inflation rate of the National Bank, the two core inflation rates calculated by the SFSO always exclude the same goods from the commodities basket. In the case of core inflation 1, these are foodstuffs, beverages, tobacco, seasonal products, energy and fuels. Core inflation 2 additionally excludes products with administered prices. The core inflation rates calculated by the SFSO fell by 0.1 percentage points each compared with November. In August, core inflation 1 stood at 0.3% and core inflation 2 at 0.1%.

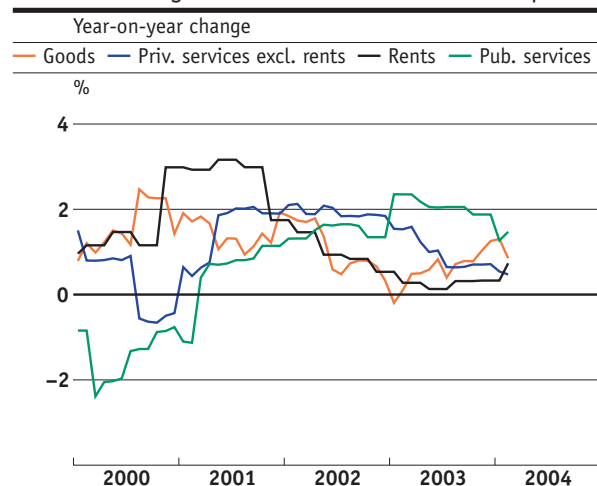
Salaries and wages and wage costs per unit

In accordance with the UBS wage survey conducted in October, nominal salaries and wages are likely to grow by 0.9% in 2004, rising at a slower pace than in 2003 (1.3%). Broken down by business segment, salary increases range from 0.4% in the printing and graphic design industry to 2.2% in telecommunications. As experience has shown that labour productivity rises at a faster-than-average rate during a recovery phase, unit wage costs are likely to recede this year.

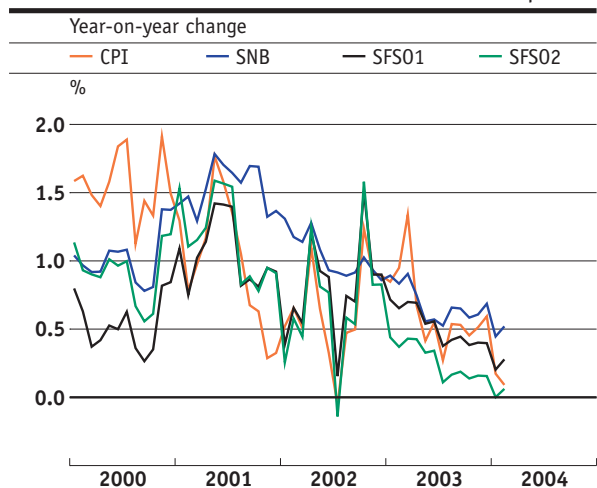
CPI: Domestic and imported goods and services Graph 4.2



CPI: Domestic goods and services Graph 4.3



Core inflation Graph 4.4



Graphs 4.2, 4.3:
National consumer price index,
2000 = 100
Sources: SFSO, SNB

Graph 4.4:
Sources: SFSO, SNB

5 Outlook

5.1 Global economy

The global economic recovery is likely to continue in the first half of 2004. The US and the United Kingdom will continue to see high growth rates, and the economy is likely to pick up speed in the euro area. In Japan, by contrast, economic momentum will be somewhat weaker than in the second half of 2003.

The OECD's leading economic indicators have trended higher since the beginning of 2003, albeit to varying degrees. Until recently, the increase in the US was significantly higher than in the euro area and in Japan. This is an indication that there is more uncertainty in these two areas than in the US with regard to the strength and the duration of the economic recovery.

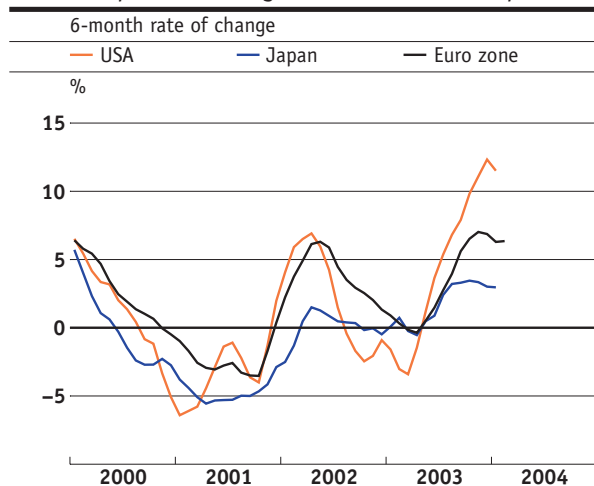
Based on the survey results in manufacturing, a robust increase in investment can be expected in the US, while private consumption is likely to lose momentum vis-à-vis the second half of the year. Growth of domestic demand in the euro area continues to be only muted. Additional investment activity and stockbuilding contrasts with weak consumption shaped by the uncertainty surrounding the development of the labour market. Consequently, the main impulses are likely to emanate from foreign demand.

Growth in the United Kingdom should clearly be stronger and more broad-based than in the euro area. In Japan, exports remain the most important support for the economy. Yet the buoyant export market also gives a boost to investment activity.

Inflation prospects remain favourable. In the US, high productivity growth is keeping inflation in check, while in the euro area and in Japan overcapacities persist, and the appreciation of the euro and the yen generally has an inflation-dampening effect. Due to changes in the baseline figures, inflation in the euro area will probably continue to recede in the first few months of 2004. The slight deflationary trend in Japan continues.

Despite the overall favourable economic development, potential problems have again come to the forefront since the beginning of the year. In the United States, where employment is improving only hesitantly and oil prices have been on the rise until recently, private household spending could be impacted more heavily than expected. A continued strong rise of the euro would severely restrict export growth in the euro area, thus jeopardising recovery in investment activity in particular. It therefore comes as no surprise that the latest survey results point to increased uncertainty among companies. However, the recovery in the euro area might turn out to be healthier than expected, if consumer spending – which is especially weak in Germany – gains unexpected momentum.

OECD Composite Leading Indicators Graph 5.1.1



Source: OECD

| | Economic growth ¹ | | | | Inflation ² | | | |
|----------------|------------------------------|------|------------------------|------|------------------------|------|------------------------|------|
| | IMF | | Consensus ³ | | IMF | | Consensus ³ | |
| | 2004 | 2005 | 2004 | 2005 | 2004 | 2005 | 2004 | 2005 |
| United States | 4.6 | 3.9 | 4.6 | 3.6 | 1.3 | 2.0 | 1.5 | 1.9 |
| Japan | 3.2 | 1.7 | 2.2 | 1.7 | -0.4 | -0.1 | -0.2 | -0.2 |
| Euro area | 1.9 | 2.5 | 1.8 | 2.2 | 1.7 | 1.6 | 1.7 | 1.7 |
| Germany | 1.7 | 2.1 | 1.7 | 1.8 | 1.0 | 0.9 | 1.1 | 1.2 |
| France | 2.0 | 2.6 | 1.7 | 2.1 | 1.8 | 1.6 | 1.8 | 1.7 |
| Italy | 1.4 | 2.2 | 1.6 | 2.0 | 2.1 | 2.0 | 2.2 | 2.1 |
| United Kingdom | 3.1 | 2.6 | 2.8 | 2.6 | 1.5 | 1.8 | 1.6 | 1.8 |

1 Real GDP, change from previous year

2 Consumer prices, change from previous year in percent

3 Consensus forecasts are monthly surveys conducted among approximately 200 leading companies and economic research institutes in some 20 countries, covering predictions for the expected development of GDP, prices, interest rates and other relevant economic indicators. The results are published by Consensus Economics Inc., London.

Sources: IMF: Economic Outlook April 2004; Consensus: February 2004 Survey

5.2 Switzerland

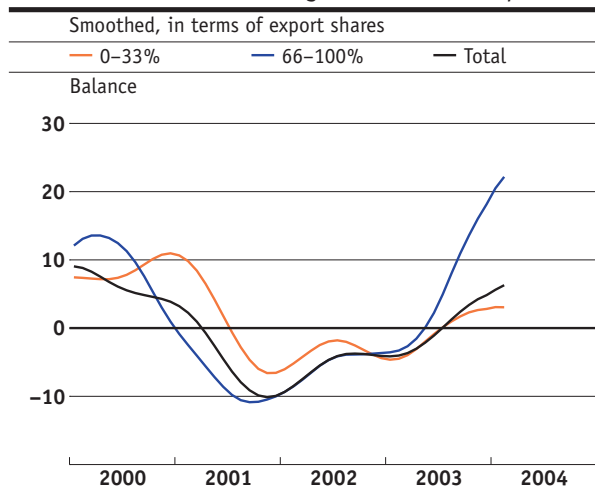
The future economic development in Switzerland is strongly predicated on global economic activity. Even though foreign demand at the turn of 2003/2004 remained robust, a certain levelling-off of demand stimuli from the US and Asia could not be overlooked. For the time being, however, the National Bank expects demand to pick up in the euro area. This will have a particularly beneficial effect on the capital goods industry in Switzerland, which is strongly oriented toward Europe.

The improved economic outlook, coupled with pronounced pent-up demand, led to an upturn in capital spending in the second half of 2003, a development that is likely to gain momentum during the next quarters. Owing to still favourable financing conditions, residential construction activity can also be expected to remain brisk. There should be a gradual pick-up in the demand for labour in the course of the year, and the number of unemployed persons is likely to decline. This in turn bolsters consumer confidence and underpins private consumption. Government consumption, on the other hand, is expected to

decline, given the public-sector spending cuts. On the whole, real gross domestic product in 2004 should rise by 1.5–2.0%, with the growth rate in the second half of the year likely to be more significant than in the first half of the year. The production gap, however, will close only gradually.

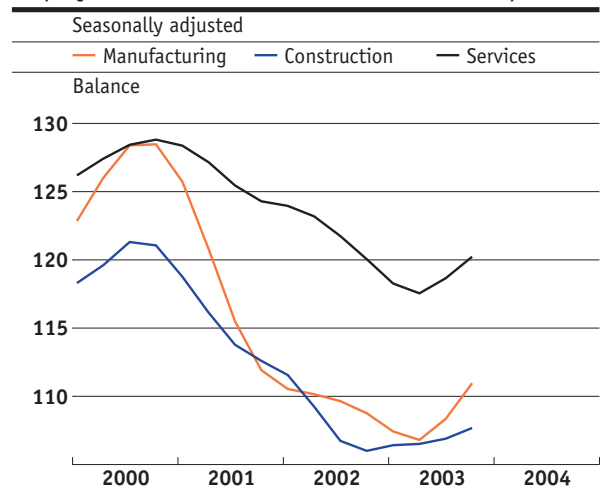
Inflation should remain at a low level in the months ahead and – due to a low-baseline effect – may even be at zero or slightly in the negative range in some months. Negative stimuli are expected to continue emanating from imported consumer goods. Against the backdrop of consistently underutilised production capacities, domestic inflationary pressure is likely to remain subdued as well. Prices for goods can be expected to rise at a slightly slower pace. By contrast, it can be assumed that rent increases will continue to accelerate in the short term. There is an accommodation shortage in many areas, which is likely to push up rents for new tenants or when an apartment is rented for the first time. Moreover, the price-dampening effects resulting from prior reductions of mortgage rates will not affect rents under existing leases during the current year.

New orders in manufacturing Graph 5.2.1



Source: KOF/FIT

Employment outlook Graph 5.2.2



Source: SFSO

6 Inflation forecast of the SNB

6.1 Assumptions for the global economic development

The inflation forecast of the SNB is interconnected with a worldwide economic scenario. According to the SNB's assessment, this scenario represents the most likely development. The assumptions on which this scenario is based are described below. The assumptions refer to the economic outlook in the US and in Europe, the oil price and exchange rate developments. The forecasting horizon is three years. These assumptions are shown in table 6.1.1. They are annual averages which served as a basis for the current inflation forecast and the forecast published in December. Overall, the prospects for the global economy are somewhat better than expected only three months ago.

Fiscal policy measures in the US had a clear impact on the GDP growth rate of 8.2% in the third quarter. In line with expectations, the effects of these measures were weakened in the fourth quarter of 2003, resulting in a growth rate which was only half of that figure. Investment activity, which was extremely restrained for a long time, is beginning to pick up momentum, however. An annual growth rate of just over 4.5% instead of just under 4% is therefore expected for 2004. Subsequently, the annual growth rate will slide back to roughly 3.5% in 2006.

In Europe, growth in 2003 slightly exceeded the December forecast. The annual EU-15 growth rate for 2003 nevertheless remained under 1%. Economic recovery in Europe, too, set in a little earlier than had been assumed in December. The annual growth rate for 2004 should increase to just over 2.0%. Even though a further expansion cannot be ruled out, it is not considered to be the most likely scenario for the time being given the strong euro. As a result of the persistent structural problems, it is assumed that economic growth will only slightly surpass the potential level of 2.1% in the medium term. The output gap will therefore only narrow in small increments.

As a result of demand, the price of oil per barrel in the fourth quarter of 2003 was slightly higher than assumed in the December forecast and should reach an average of 30 dollars in the first quarter of 2004. The forecast assumes that the oil price will drop by mid-2005 and will subsequently rise in line with average inflation. The dollar depreciated a little more vis-à-vis the euro in the fourth quarter than had been assumed in the last forecast. The exchange rate is always kept at the current level – in rounded figures – for the entire applicable forecasting horizon. For the current forecast, this means a dollar/euro exchange rate of 1.25 as of the first quarter of 2004.

Global assumptions

Table 6.1.1

| | 2003 | 2004 | 2005 | 2006 |
|--------------------------------------|------|------|------|------|
| Inflation forecast of March 2004 | | | | |
| GDP USA ¹ | 3.1 | 4.7 | 4.0 | 3.6 |
| GDP EU-15 ¹ | 0.7 | 2.1 | 2.4 | 2.3 |
| Exchange rate USD/EUR ² | 1.13 | 1.25 | 1.25 | 1.25 |
| Oil price in USD/barrel ² | 28.8 | 28.1 | 26.1 | 26.4 |
| Inflation forecast of December 2003 | | | | |
| GDP USA ¹ | 3.0 | 4.0 | 3.3 | 3.7 |
| GDP EU-15 ¹ | 0.6 | 1.7 | 2.3 | 2.5 |
| Exchange rate USD/EUR ² | 1.13 | 1.18 | 1.18 | 1.18 |
| Oil price in USD/barrel ² | 28.7 | 25.9 | 24.7 | 25.4 |

1 Change in %

2 Level

6.2 Inflation forecast 1st quarter 2004 to 4th quarter 2006

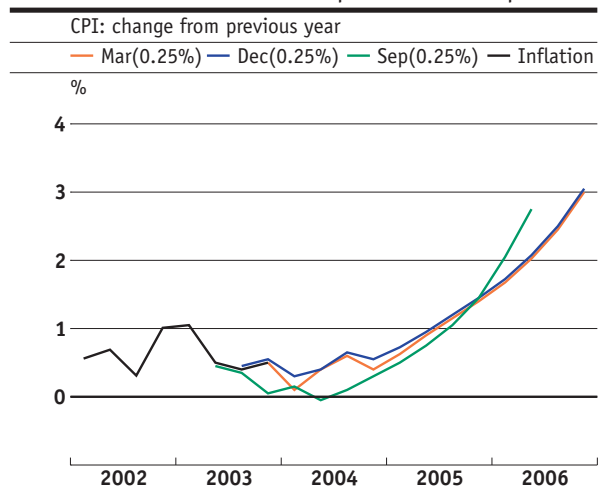
Graph 6.2.1 shows the current (March 2004) and the last two inflation forecasts (December and September 2003) for three consecutive years. All three are based on a fixed 3M Libor rate of 0.25% throughout the entire forecasting horizon. The forecast made in December assumed a higher rate of inflation until the second half of 2005 than the September forecast. For the second half of the forecasting horizon, however, inflationary pressure was predicted to be weaker. Medium-term inflation, which was projected to be higher in December than in September, was due to price increases in the OECD area, an improved economic outlook and further weakening of the Swiss franc vis-à-vis the euro. Among other factors, the slightly lower inflationary pressure predicted for the longer-term forecasting horizon was attributable to statistical data revisions.

As described in section 6.1, the global economic assumptions on which the current inflation forecast is based did not change significantly in the last three months. Since other relevant information for

making the forecast (indicators, special factors) remained basically unchanged, the current forecast is almost identical with that of the previous quarter. Compared with the December forecast, a sharper decline in the CPI is predicted only for the beginning and the end of this year. This is due to a statistical effect of baseline figures. The deviation vis-à-vis December does not, however, result in a change in the inflation forecast for the 2004 annual average compared with the previous quarter. As three months ago, an average rate of inflation of 0.4% is forecast for the current year. At the beginning of next year, an upward inflation trend will set in, resulting in an annual average inflation rate of 1.0%. In 2006, inflation will settle at 2.3%. In mid-2006, the upper end of the range which the National Bank equates with price stability (2%) will be surpassed. The forecast inflation will reach 3.0% by the end of 2006.

According to this forecast, price stability would no longer be guaranteed toward the end of the forecasting period. This course of inflation, however, must be seen in the context of the technical assumption of an unchanged 3M Libor of 0.25% in the next three years.

SNB inflation forecasts: a comparison Graph 6.2.1



7 Monetary policy decision and outlook

Expansionary monetary policy continues

The National Bank has been pursuing a highly expansionary monetary policy for over two years now. It has reacted rapidly and unequivocally to the deterioration in the economic situation and the upward pressure on the Swiss franc. This expansionary policy was possible because inflation prospects showed a very moderate trend during this time.

Owing to favourable monetary conditions and the improved world economy, Swiss economic activity is gradually beginning to gain momentum again. There is still a certain degree of risk, however, as to

the sustainability of the economic recovery. The National Bank does not wish to threaten the upswing in Switzerland by increasing interest rates too soon. It will therefore adhere to its expansionary monetary policy.

However, the National Bank cannot continue this policy for an indefinite period without jeopardising price stability. While the strong expansion of monetary aggregates can be partly explained by special effects, liquidity in the economy has risen significantly. The National Bank will keep a close watch on this development. It will have to adjust its policy once the signs of an economic recovery are fully confirmed.

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

Summary report to the attention of the Governing Board of the Swiss National Bank for its quarterly assessment of 18 March 2004

The Swiss National Bank's delegates for regional economic relations are in contact with a large number of enterprises from the different industries and economic sectors. Their reports, which contain the subjective evaluations of the enterprises, are an important additional source of information for assessing the economic situation. The key results of the talks held between November 2003 and February 2004 on the current and future economic situation are summarised in the following.

Summary

The business situation of the enterprises brightened in the past few months, and corporate sentiment became more upbeat. Upward trends were clearly predominant, although some enterprises still considered the recovery to be hesitant and the pick-up has not yet benefited all industries.

Exports were the main driving force, with demand from Asia still displaying particularly dynamic growth. Orders from the US, by contrast, were rather disappointing as the weak dollar placed a burden on many exporters. Demand from the euro area was still muted; however, there were occasional positive reports again on Germany. The electronics and communications technology industries staged a significant recovery. In the service sector, signs of a turnaround emerged – notably in tourism. Retail trade continued to be affected by customer restraint; pent-up demand for consumer durables was evident here and there.

Corporate investment activity remained subdued but investment confidence is gradually recovering. Also, there was hardly any mention of job cuts anymore. Companies were not yet willing, though, to increase staff numbers significantly. The large majority of enterprises surveyed saw no scope for price increases. This was particularly true for those industries that export to the dollar area and suffer from severely squeezed margins.

The companies were guardedly optimistic in their outlook for the economy. Many anticipate an actual upswing – albeit a moderate one – to emerge only in the second half of the year.

1 1. Production

Manufacturing

Most export-oriented industries reported a pick-up in activity. They assessed the economic situation much more positively than did the companies with a domestic focus, particularly suppliers. However, there was no mention yet of a marked upturn in the export industry either; frequently, the volume of orders is still considered to be too small and the earnings situation unsatisfactory. For many companies, orders from the US in particular have been disappointing so far. The low exchange rate of the US dollar and, in some instances, the stiffer competition from Asia (notably China) proved to be a challenge. Exports to Central and Southern Europe as well as to some parts of South America (Brazil) were gratifying, whereas demand from Switzerland's neighbouring countries picked up only hesitantly. At least positive reports are now coming in again – mainly from the Basel region – on business with Germany and France.

The mechanical engineering industry and its suppliers have not yet felt much of a rebound in investment on the major markets. Some companies were adversely affected by US industrial companies shifting production facilities to Asia. The electronics and semiconductor industries as well as telecommunications are on an upswing again, albeit from a low level. In the consumer-related industries and, particularly, in the pharmaceutical and medical technology sectors, business activity remained pleasing. In other lines of business, such as household appliances, the situation is gradually starting to improve. Business activity in the food industry was between satisfactory and good, and the watchmaking industry registered a revival in demand. Inventories, which were extremely high until recently, are also declining gradually.

Given the still considerable amount of free capacity, investment continued to be restrained, but investment confidence is already stronger than half a year ago. Enterprises with production facilities outside Switzerland increasingly considered investing abroad. The main production centre is Asia, and China in particular.

Services

Retail trade recorded a satisfactory Christmas and clearance sales season overall and most retailers have since seen sales rebounding somewhat. This upswing is more pronounced for major retail chains than for smaller businesses. Consumers continue to be very price-conscious and selective. In Switzerland's border regions, retail trade benefited from the softening of the Swiss franc against the euro and the higher inflation abroad. Demand for consumer durables remained subdued, but pent-up demand made itself felt gradually. By contrast, sales of luxury items (watches and jewellery) seem to have emerged from their low, not least thanks to the pickup in international tourism. Sales of consumer electronics products also developed favourably.

Tourism experienced a good start to the winter season, and sentiment became more upbeat. The enterprises surveyed reported stronger tourism activity, particularly from Asia, and noticed that the visitors are also spending more. The weak US dollar is an inhibiting factor. In comparison, the exchange rate against the euro is favourable, but demand from Europe has risen only modestly so far. The situation for the tourist industry in Ticino remained difficult but seems to have reached its trough now.

Activity in company-related services also showed some signs of recovery. This includes business travel, which benefited from the favourable exchange rate against the euro. Brisker demand was also registered by consulting firms and the transport industry.

Construction

As usual, the construction industry gave off extremely mixed signals, depending on the region and line of business; in general, however, the situation does not seem to have worsened any further. Construction of single-family homes and owner-occupied apartments continued its dynamic growth along the main population corridors whereas activity in the industrial and commercial construction industries as well as in civil engineering was sluggish. This also had an impact on many construction-related industries and suppliers. Construction activity in Ticino was comparatively healthy. Generally, the finishing industry was in a better position than the construction industry proper.

2 Labour market

Some of the companies surveyed still considered staff numbers to be excessive. As the majority of companies expect the order books to improve, they are trying to avoid further layoffs if possible. New staff were hired mainly by industries experiencing very buoyant business, such as the medical technology segment.

3 Prices and margins

The large majority of enterprises queried still felt the high pressure on prices and did not see any scope for price increases. This was particularly true for companies exporting to the dollar area. They had to make price concessions, which reduced their margins critically. Some companies were also affected by fiercer import competition from the dollar area (which includes Asia), forcing them to implement further rationalisation measures. With the depreciation of the Swiss franc against the euro, however, the price competitiveness vis-à-vis European competitors improved significantly. Unlike the export industry, hotels and restaurants increased their prices slightly, and the strong pressure on prices in the construction industry seems to be subsiding somewhat. On the cost side, the sharp rise in steel prices affects some industries while the construction sector has to contend with the additional costs associated with the new retirement rules.

Swiss National Bank Working Papers and Economic Studies: Summaries

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Financial Market Participation and the Apparent Instability of Money Demand

In the past two decades, money demand has usually been considered as unstable, and monetary aggregates have been downgraded in monetary policy discussions and economic studies. Using U.S. data, Samuel Reynard shows that the apparent instability of money demand is due to the fact that an increasing fraction of the population participates in financial markets ("Financial Market Participation and the Apparent Instability of Money Demand", Swiss National Bank Working Paper No. 1, 2004). This paper also shows that the methodology used so far to analyse money demand is not appropriate to detect and account for those changes in financial market participation, which explains why many studies have incorrectly concluded that money demand is unstable. The paper proposes an approach for correctly measuring the demand for money. When correctly measured, money demand is stable and thus useful for monetary analysis.

Chronicle of monetary events

Target range for the three-month Libor left unchanged

At its quarterly assessment of 18 March 2004, the National Bank decided to leave the target range for the three-month Libor unchanged at 0%–0.75%.

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