

Accountability report for the Federal Assembly

On 4 March 2009, the Governing Board of the Swiss National Bank submitted its accountability report for 2008 to the Federal Assembly in accordance with art. 7 para. 2 of the National Bank Act. The following accountability report is submitted to the Federal Council and the General Meeting of Shareholders for information purposes only and does not require their approval.

Summary

In accordance with art. 7 para. 2 of the National Bank Act (NBA), the Swiss National Bank (SNB) submits an annual accountability report to the Federal Assembly in which it outlines how it has fulfilled its mandate. This report on the year 2008 is structured in line with art. 5 NBA, with a separate section devoted to each of the eight tasks listed there.

(1) Monetary policy must serve the interests of the country as a whole. It must ensure price stability, while taking due account of economic developments. Monetary policy affects production and prices with a considerable time lag. Consequently, monetary policy is directed at future rather than current inflation. The monetary policy strategy consists of three elements: the definition of price stability, a medium-term inflation forecast and an operational target range for the targeted money market rate.

Monetary policy

Global economic growth weakened considerably in 2008. The US and European economies were particularly affected by the downturn, and both slipped into recession in the second half of the year. This was due in part to the price of oil, which had risen sharply in the first half-year, and to the financial crisis, which hit the US in summer 2007. US and European banks came under intense pressure, and financing conditions for companies and households tightened. This, coupled with high asset losses, had a noticeable dampening effect on demand for goods and services. The effect of the economic slowdown in the US and Europe was being increasingly felt in other parts of the world, particularly in emerging markets in Asia. The crisis in the financial markets escalated dangerously in autumn 2008. In an attempt to prevent the financial system from collapse, governments and central banks took comprehensive support measures.

Having risen sharply up to mid-year, inflation around the world dropped back considerably in the following months. In addition to the economic slowdown, the rapid decrease in the price of oil was the main contributing factor to the fall in inflation.

The Swiss economy, too, increasingly felt the negative impact of the financial crisis and the downturn in global trade. Economic growth came to a halt in the second half of 2008, and unemployment rose for the first time in five years. Two of the most seriously affected areas were the financial sector and the export industry, with the latter seeing a major slump in demand in the fourth quarter. Owing to rising incomes, household consumption, meanwhile, continued to underpin economic activity.

The SNB's monetary policy was faced with major challenges in 2008. As a result of the price spike in the commodities markets and the high level of capacity utilisation in the economy, inflation climbed steadily until August. Indeed, it had already been over 2% since the beginning of the year and was thus above the bound which the SNB equates with price stability. Despite the considerable inflationary pressure, the National Bank decided to leave its target range for the three-month Libor unchanged at 2.25–3.25% at its quarterly assessments in March, June and September. A tightening of monetary policy would have further intensified the dampening effect of the high oil price; yet easing it while economic activity was still strong was not considered appropriate. The SNB did make clear reference, however, to the considerable uncertainties arising from the developments in the financial markets and the global economy.

The escalation of the international financial crisis in mid-September and the rapidly deteriorating global economic situation prompted the National Bank to reassess the situation. In early October, it joined with other central banks in a coordinated move to relax monetary policy. It decided to bring the three-month Libor, which had been in the upper end of the target range, back down to 2.5% and, to this end, to lower the target range to 2.0–3.0%. In the subsequent weeks, it became apparent that the global economic outlook was deteriorating more severely than anticipated and that the threat of recession in Switzerland was rising. The National Bank therefore decided to further relax its monetary policy and lowered the target range for the three-month Libor at the beginning of November by 50 basis points to 1.5–2.5%. The next interest rate adjustment came less than two weeks later, when the SNB lowered the target range by 100 basis points to 0.5–1.5%. The continued easing of monetary policy was prompted, on the one hand, by the growing risk of a slowdown in economic activity and, on the other, by the unexpectedly fast decline in inflation as a result of the collapse in oil prices. At its last ordinary quarterly assessment in December, the National Bank saw the necessity for further adjustment and lowered the target range for the three-month Libor by 50 basis points to 0.0–1.0%.

(2) The SNB provides the money market with liquidity. In this way, it implements monetary policy and, when necessary, acts as lender of last resort. In 2008, international money markets were in the grip of the financial crisis. The SNB reacted decisively to the tense situation in the money market and, where necessary, provided the banking system with generous amount of liquidity at different maturities. Excess liquidity was absorbed via fine-tuning operations or via the SNB's own debt certificates (SNB Bills), which it had previously introduced. In order that the target range for the three-month Libor might be reached, the repo rate for monetary policy operations was adjusted accordingly. In addition, the National Bank also took a series of coordinated liquidity measures together with leading central banks. As part of this concerted approach, it regularly provided banks with US dollar liquidity. Together with the European Central Bank (ECB) and the Polish central bank, it conducted coordinated auctions for EUR/CHF foreign exchange swaps.

Owing to the various measures taken to ensure a generous supply of liquidity, the SNB's assets grew considerably, both in terms of range and volume. Claims from Swiss franc and US dollar repo transactions rose appreciably. Balances from swap transactions against Swiss francs also saw a marked increase.

(3) The National Bank is entrusted with the note-issuing privilege. Through the banks and the postal service, it supplies the economy with banknotes and coins, the latter on behalf of the Confederation. In 2008, it again focused on maintaining the quality of banknotes and of cash transactions, on further developing security features and on precautionary measures to prevent counterfeiting. In August, the Bank Council gave the green light for the production-related implementation of the new CHF 50 banknote, which is to be the first denomination of the new banknote series to be released in autumn 2010.

Payment systems

(4) In the area of cashless payments, the SNB is mandated to facilitate and secure the functioning of the appropriate systems. It maintains accounts for the banks, steers the SIC interbank payment system, participates in the relevant payment system bodies and oversees payment and securities settlement systems. In 2008, the payment and securities settlement systems proved to be well placed to deal with the crisis and helped ensure that the financial markets were not burdened by this area of business. The National Bank assessed the system operators' compliance with the system-related requirements and found it to be high.

Asset management

(5) The National Bank manages Switzerland's currency reserves. Asset management is governed by the primacy of monetary policy and is carried out according to the criteria of security, liquidity and return. The level of currency reserves declined slightly year-on-year. This was due primarily to the depreciation both of the major investment currencies and of gold against the Swiss franc. In order to guarantee the ability to act in the crisis, the share of government bonds in the foreign currency reserves was increased. The gold sales being conducted within the context of the second Central Bank Gold Agreement were concluded in September.

Financial system stability

(6) The SNB is charged with helping to secure the stability of the financial system. It endeavours to identify risks to the system at an early stage and works to create an environment conducive to stability. The National Bank's activities in the area of financial stability in 2008 were largely shaped by the financial crisis. The SNB followed developments in the banking system with close attention and growing concern. It had been clear since summer 2007 that the Swiss big banks would be hit hard by the financial crisis as a result of their exposure to the market for mortgage-backed securities and their commitments in the area of leveraged finance. This applied in particular to UBS, which had to take extensive measures to strengthen its capital base. In spite of the steps taken in this regard, the bank came under intense pressure in autumn 2008. Consequently, the Federal Council, the Swiss Federal Banking Commission (SFBC) and the SNB adopted a package of measures in mid-October to strengthen the Swiss financial system.

(7) The SNB participates in international monetary cooperation activities. Important bodies are the International Monetary Fund (IMF), the Group of Ten (G10), the Bank for International Settlements (BIS), the Financial Stability Forum (FSF) and the Organisation for Economic Co-operation and Development (OECD). As a result of the financial crisis, the IMF was faced with a growing demand for loans and, in autumn 2008, negotiated several Stand-By Arrangements. In addition, it created a new facility (Short-Term Liquidity for Market Access Countries) for all emerging economies that had hitherto been able to finance themselves without problems on the financial markets. The BIS committees in which the SNB participated were largely concerned with the impact of the financial crisis on regulatory issues, payment transactions, the global financial system and the functioning of financial markets. In 2008, SNB technical assistance was once again primarily granted to the countries belonging to its IMF constituency.

(8) The SNB provides the Swiss Confederation with banking services in the areas of payment transactions as well as liquidity and securities management. In 2008, the SNB issued money market debt register claims and bonds for a total value of CHF 37.9 billion and carried out roughly 118,000 payment transactions on behalf of the Confederation.

1 Monetary policy

Summary

Although the financial crisis became increasingly severe as the year progressed, economic activity in Switzerland remained buoyant in 2008. In order to ensure that the healthy economic conditions would not jeopardise price stability in the medium and long term, the Swiss National Bank (SNB) maintained a constant target range for the three-month Swiss franc Libor until October. Inflation temporarily breached the ceiling of 2% which the SNB defines as the upper bound of price stability, and reached a maximum of 3.1% in July before falling below 2% again in November.

In the final quarter, the deterioration in the financial crisis, the slow-down in the economy and the fall in the prices of oil and commodities substantially improved the inflation outlook in the medium and long term, allowing the SNB to considerably relax its monetary policy. Although inflation was only 1.6% in the final quarter, the figure for the year as a whole was 2.4%.

1.1 Monetary policy strategy

Constitutional and legal mandate

Article 99 of the Federal Constitution entrusts the SNB, as an independent central bank, with the conduct of monetary policy in the interests of the country as a whole. The mandate is explained in detail in the National Bank Act (art. 5 para. 1 NBA) which requires the National Bank to ensure price stability and, in so doing, to take due account of economic developments.

The SNB is thus charged with resolving in the best general interests any conflicts arising between the objective of price stability and business cycle considerations, giving priority to price stability. The requirement to act in the interests of the country as a whole means that the SNB must gear its policy to the needs of the Swiss economy as a whole rather than the interests of individual regions or industries.

Significance of price stability

Price stability contributes to economic growth. Stable prices are an important prerequisite for the smooth functioning of the economy, as both inflation and deflation impede decision-making by consumers and producers, and generate high costs.

The aim of the SNB's monetary policy is to ensure price stability in the medium and long term; in other words, it strives to prevent both sustained inflation and deflation. Short-term price fluctuations, however, cannot be counteracted by monetary policy. By keeping prices stable, the National Bank creates an environment in which the economy can fully exploit its production potential.

To secure price stability, the SNB must provide appropriate monetary conditions. If interest rates remain too low for a lengthy period, the supply of money and credit to the economy will be too high, thus triggering an inordinate demand for goods and services. Although this boosts production initially, bottlenecks occur in the course of time and overall production capacity is stretched, thus causing a rise in the level of prices. Conversely, if interest rates are too high for a lengthy period, this will reduce the supply of money and credit to the economy and, consequently, lead to a shortage of aggregate demand. This will have a dampening effect on the prices of goods and services.

The economy is subject to numerous domestic and foreign shocks. These cause fluctuations in the business cycle which generate pressures on prices that are more or less pronounced. Such fluctuations are inevitable. Although monetary policy is medium and long term in nature, it can help to limit these fluctuations.

The SNB faces highly diverse situations. The most common cause of inflationary or deflationary phases is when aggregate demand for goods and services does not develop in line with the economy's production capacity. Such situations can arise, for example, as a result of unforeseen developments in the international economy, major fluctuations in exchange rates, serious government budget problems or inappropriate money supply levels in the past. Inflationary pressures increase in phases of economic overheating and decrease when production capacity is not fully utilised. Thus, the National Bank must gradually restore price stability by tightening monetary policy in the first case and easing it in the latter. Consequently, monetary policy that is geared to price stability has a corrective influence on aggregate demand and thus helps to smooth economic activity.

**Taking economic activity
into account ...**

The situation is more complex when prices rise owing to shocks that increase corporate costs and cause companies to curb production. A continuous rise in the oil price is an example of such a shock. In such circumstances, monetary policy must, on the one hand, make sure that the higher production costs do not give rise to an inflationary spiral, while, on the other, ensuring that the companies affected by the shocks are not excessively disadvantaged. An overhasty restoration of price stability might have adverse effects on the business cycle and employment.

... despite numerous uncertainties

Even though the SNB considers economic developments when taking monetary policy decisions, it cannot be expected to fine-tune the economy. There are too many uncertainties with respect to the cause and duration of the shocks that impair economic performance, as well as with respect to the transmission mechanisms, the time lag that elapses before monetary policy measures impact on the business cycle and prices, and the extent of their impact.

Monetary policy strategy

The monetary policy strategy in force since 2000 consists of the following three elements: a definition of price stability, a medium-term inflation forecast and – at operational level – a target range for a reference interest rate, the three-month Libor for Swiss francs.

Definition of price stability

The SNB equates price stability with a rise in the national consumer price index (CPI) of less than 2% per annum. In so doing, it factors in the consideration that not every price increase is necessarily inflationary. Furthermore, it takes account of the fact that inflation cannot be measured accurately. Measurement problems arise, for example, when the quality of goods and services improves. Such changes are not properly accounted for in the CPI; as a result, measured inflation tends to be slightly overstated.

Functions of inflation forecast

The inflation forecast performs a dual function in the SNB's monetary policy strategy. While, on the one hand, it serves as the main indicator for the interest rate decision, on the other, it is also an important element in the National Bank's communication policy.

Quarterly publication of inflation forecast

The SNB reviews its monetary policy on a regular basis to ensure that it is appropriate for the maintenance of price stability. With this in mind, it publishes a quarterly forecast on the development of inflation over the three subsequent years. The period of three years corresponds more or less to the time required for the transmission of monetary policy stimuli to the economy. Forecasts over such a long time horizon, however, involve considerable uncertainties. By publishing a medium to long-term forecast, the SNB emphasises the need to adopt a forward-looking stance and to react at an early stage to any inflationary or deflationary threats.

The SNB's inflation forecast is based on a scenario for global economic developments and on the assumption that the Libor determined at the time of publication of the forecast will remain constant over the entire forecasting period. The forecast published by the SNB thus maps the future development of prices based on a specific world economic scenario and an unchanged monetary policy in Switzerland. For this reason, it is not directly comparable with other forecasts which incorporate anticipated monetary policy decisions.

In the medium and long term, the price trend depends essentially upon the supply of money, with the monetary aggregates and loans holding an important position among the many indicators employed in the various quantitative models used for forecasting inflation. For the shorter term, other indicators relating, for instance, to economic activity, exchange rates or oil prices, generally have the greatest weight in calculations of expected inflation.

The SNB regularly issues statements on the development of the principal indicators factored into its inflation forecast. It provides details of the models it uses in several of its publications.

In view of the fact that the inflation forecast published by the SNB takes account of the last interest rate decision taken by the Governing Board, the shape of the curve makes it possible for economic agents to deduce the probable course of future monetary policy.

If the inflation forecast indicates a deviation from the range of price stability, an adjustment of monetary policy could prove necessary. Should inflation threaten to exceed 2% on a longer-term basis, the SNB would thus consider tightening its monetary policy. Conversely, it would tend towards relaxation if there were a threat of deflation.

The SNB does not, however, respond mechanically to its inflation forecast; it takes account of the general economic situation when determining the nature and extent of its reaction. If inflation temporarily exceeds the 2% ceiling in extraordinary circumstances, for example following a sudden massive rise in oil prices or strong exchange rate fluctuations, monetary policy does not necessarily need to be adjusted. The same applies to short-term deflationary pressures.

**Indicators upon which
inflation forecast is based**

**Communicating through
inflation forecast**

**Review of monetary policy
based on inflation forecast**

Libor target range

The SNB implements its monetary policy by fixing a target range for the three-month Swiss franc Libor. The Libor is a reference interest rate in the interbank market for unsecured funds. It is a trimmed mean of the rates charged by twelve leading banks and is published daily by the British Bankers' Association. The National Bank publishes its target range regularly. As a rule, this range extends over one percentage point, and the SNB generally aims to keep the Libor in the middle of the range.

The SNB undertakes quarterly economic and monetary assessments at which it reviews its monetary policy. If circumstances so require, it will also adjust the Libor target range in between these quarterly assessments. It sets out the reasons for its decisions in press releases.

Considerable slowdown in international growth

1.2 International economic developments

After four years of expanding strongly at about 5% a year, the world economy slowed in 2008, recording growth of 3.4% over the year as a whole. The dip was perceptible in almost all parts of the world. The advanced countries recorded a modest increase in the first half of the year followed by a considerable decrease in the second half.

The economic downturn over the course of the year was attributable, first, to the crisis affecting the banking sector in the US and Europe and, second, to the delayed impact of the rise in energy prices on household and corporate expenditure.

Brittle financial situation

The negative trend in the financial markets, which had begun in 2007, continued throughout 2008. The rise in the number of foreclosures and defaults in the US sub-prime mortgage market gave rise to a radical correction in the value of these assets and their derivatives. Due to the uncertainty regarding the extent and distribution of losses, certain segments of the credit market dried up, and this greatly increased the cost of interbank lending.

The main stock market indices also retreated in the wake of this credit market turmoil – dragged down by the substantial fall in the shares of financial institutions. Moreover, stock market volatility attained an unprecedented level. Finally, investors' risk aversion was reflected in a decline in yields on government bonds and an increase in risk premiums on corporate bonds.

In mid-September, international financial markets were again heavily destabilised by the bankruptcy of the Lehman Brothers investment bank. This was reflected in an exceptional increase in interest rates on money and inter-bank markets, the shortening of maturities as well as the disappearance of certain market segments. In the process, most stock markets lost considerable ground, indicating increasingly pessimistic expectations on the outlook for the global economy.

In 2008, oil prices experienced extreme price variations. The barrel price stood at USD 93 at the beginning of the year and reached USD 148 in July, only to tumble to USD 35 at the end of December. The combination of strong demand in the emerging economies, weak production growth in non-OPEC countries and insufficient excess capacity in the Persian Gulf all contributed to the rapid increase in oil prices at the beginning of the year. Consequently, petrol prices at service stations, in inflation-adjusted terms, attained a new peak slightly in excess of that recorded in the 1979 oil shock. In the second part of the year, the substantial slowdown in the global economy triggered a major correction in the price per barrel, which OPEC failed to counter by its reduction in production.

Enormous increase in oil prices

The economic situation in the US continued deteriorating over the course of 2008. After recording modest growth in the first half of the year, attributable, first, to stimulus from tax rebates for households and, second, to an exceptionally good foreign trade result, GDP declined strongly at the end of the year. For the year as a whole, GDP rose by 1.3%, compared to 2% in 2007. Thus, growth was below potential for the second year running.

Recession in the US

The drop in activity at the end of the year resulted mainly from the decline in consumption. Faced with losses in the value of their property and financial assets, the rise in the price of energy (until the summer), the tightening of credit conditions and the deterioration in employment prospects, US households radically restructured their expenditure. This affected consumer durables such as cars, in particular.

Investment declined in the second half of the year. Unlike in the 2001 recession, the US economy was not producing above capacity at the beginning of the crisis, since companies had invested cautiously during the upturn of the business cycle. This considerably alleviated the situation during the downturn. Moreover, the export sector was in a relatively favourable position, supported by the decline in the dollar and the rise in the emerging economies. As a result, foreign trade made a substantial net contribution in 2008 as a whole.

The slowdown and subsequent decline in the economy triggered a sharp deterioration in the employment market. Over the course of the year, the rate of unemployment increased by 2.3 percentage points to reach 7.2% in December, a level not seen since January 1993. The manufacturing industry and retailing, in particular, recorded sharp cutbacks in employment.

The European economy weakened at a surprising speed and to an unexpected extent in 2008. Following robust growth of 2.6% in 2007, the countries in the euro area only saw a 0.8% increase in GDP in 2008 (forecast). Growth was even negative for three consecutive quarters. This had not occurred since the beginning of the 1990s.

The decline in investment and the slowdown in export growth were particularly striking, reflecting the weakening of international demand – especially for capital goods – and the correction in the real estate markets of many EU countries. In addition, companies in both Europe and the US suffered from the general tightening in financial conditions.

Consumption, however, rose slightly throughout the year, thereby helping to stabilise the economy. During the upturn in the business cycle, growth in consumption had remained weak, since it was held back by the modest increase in salaries and the advance in energy and food prices. The moderate growth in pay packages subsequently allowed for some degree of stabilisation in the outlook for employment – and thus for consumption – during the slowdown period. In addition, the substantial drop in the price of commodities in the second half of the year supported household purchasing power.

Japan felt the effects of the slowdown in world trade, with GDP declining by 0.4% in 2008 (forecast). The weakening in foreign demand, accentuated by the substantial increase in the value of the yen, led to a sharp decline in investment in the second part of the year. However, this correction remained moderate compared to that witnessed in previous years, due to the fact that large companies have consolidated their finances and invested cautiously in recent years.

Europe affected as well

Slightly weaker growth in Japan

Growth in consumption remained weak but stable, supported by a favourable situation in the employment market. Given the low exposure of the Japanese banking system to the US mortgage market, household and corporate expenditure was less strongly affected by the credit crisis than in the US or Europe.

Growth in most newly industrialised countries of Asia dropped substantially during the course of 2008, following more than two years of sustained growth. Manufacturing production was negatively affected by the slowdown in demand from the advanced economies and the increase in energy prices, and recorded a decline in the second half of the year. By contrast, domestic demand held up well, thanks to a particularly low and stable rate of unemployment.

**Emerging Asian countries
slowing**

China made a large contribution to supporting the economies in the region. The slowdown in the Chinese economy in 2008 was moderate, with GDP growth amounting to 9%, as against 13% in 2007. The slowdown was mostly due to a decline in the growth of exports and residential investment. The earthquakes in the first half of the year and the production restrictions during the Olympic Games also had a negative impact. By contrast, the rapid fall in inflation, mainly reflecting the normalisation of food prices, helped to support consumption. In addition, the world financial crisis prompted the Chinese government to bring forward certain infrastructural expenditure.

In 2008, inflation in the advanced countries reacted strongly to fluctuations in energy prices. At the beginning of the year, inflation was markedly above the levels targeted by most central banks and it continued to rise until summer. In July, the year-on-year increase in consumer prices reached 4.6% in the US and 3.4% in the euro area. In Japan, this figure amounted to 2.3%, the highest level in ten years. Subsequently, inflation dropped rapidly, falling to 0.1% in the US, 1.6% in the euro area and 0.4% in Japan in December 2008.

**Impact of oil prices
on inflation**

The rate of increase in the consumer price index excluding food and energy products remained relatively high (except in Japan) until the final quarter of 2008. Together with the slowdown in demand, the drop in commodity prices, which had a lagged effect on production prices, placed core inflation on a downward path by the end of the year.

Relaxation of monetary reins

The persistent tensions in the financial markets, the rapid deterioration in the economy and the fall in inflation prompted most central banks to lower short-term interest rates in 2008. The US Federal Reserve decreased the target for its federal funds rate by a total of 400 basis points, bringing it down to 0.25% at the end of December. The European Central Bank lowered its reference rate to 2.5% (a reduction of 150 basis points). The 40 basis point reduction to 0.1% decided on by the Bank of Japan was more limited, given the extremely low level of interest rates.

Exceptional liquidity provision measures

Central banks took exceptional measures in order to provide the banking system with liquidity and thus reduce tensions in money and inter-bank markets. In particular, they increased the volume of credits granted to banks, lengthened the terms of these credits and extended the list of securities accepted as collateral. Central banks also conducted swaps between one another so they would be able to offer foreign currency refinancing to their own markets.

GDPs of advanced countries to contract in 2009

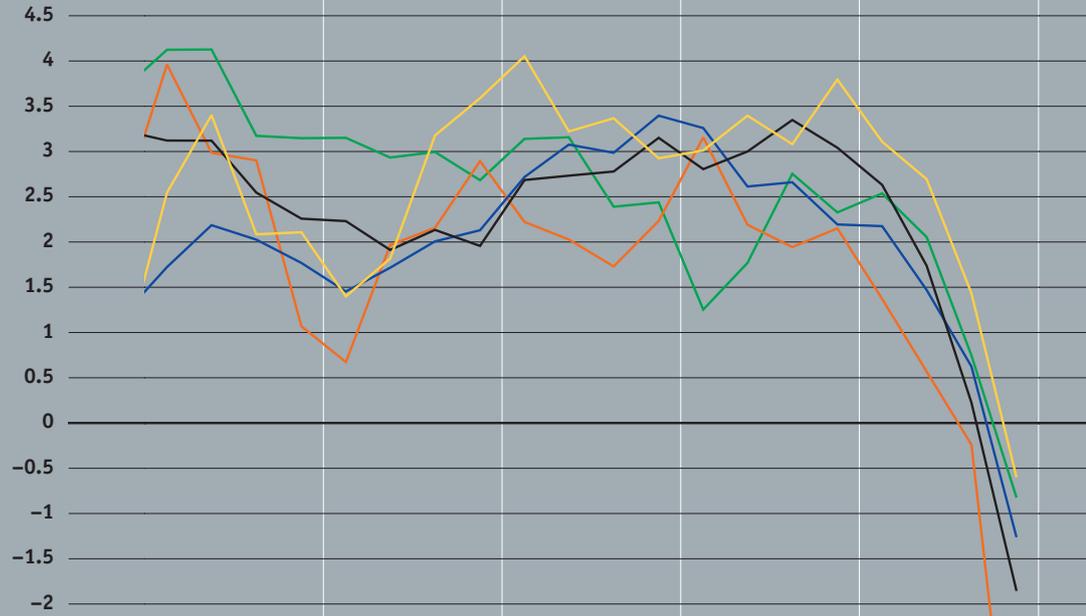
In the wake of the sharp downturn in global activity at the end of 2008 and the worsening in most household and corporate confidence indices, it seems likely that recessionary trends in the advanced countries will persist in 2009. The rapid and decisive implementation of economic policy measures, together with the correction in oil and food prices, should help consumption and investment to pick up again in the second half of 2009. However, in view of the correction in the value of property and financial assets of households as well as the more stringent lending conditions, it is likely that the pace of recovery will be relatively slow compared to that experienced in the past. This could be true for the US, in particular, where the high level of household indebtedness means that savings will need to be rebuilt. This will weigh on consumer demand.

Several governments have announced budget measures designed to support household and corporate demand. The new US administration has announced a comprehensive package of measures for 2009. The European Commission has proposed the implementation of coordinated measures by EU member states. In Japan, a tax break amounting to 1% of GDP has been resolved. Chinese government has strengthened measures contained in its five-year plan.

Gross domestic product

- United States
- Japan
- Euro area
- United Kingdom
- Switzerland

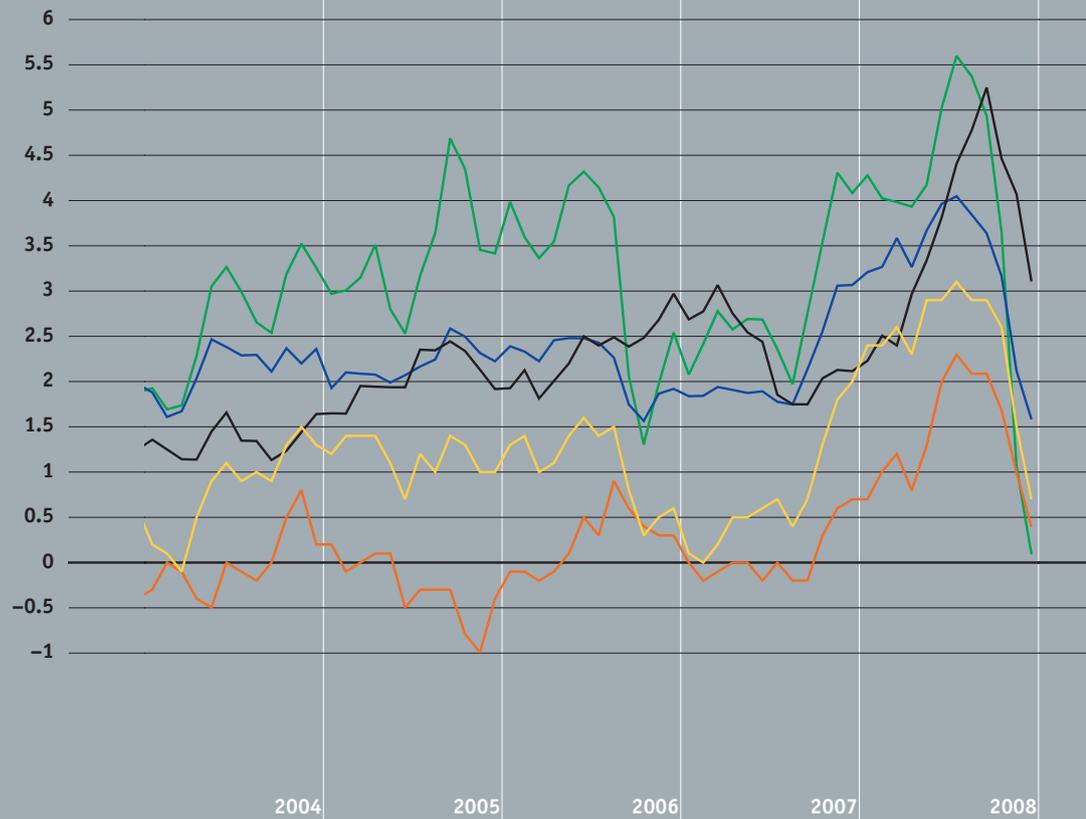
Year-on-year change
in percent, in real terms
Sources: SECO, Thomson Datastream



Inflation

- United States
- Japan
- Euro area
- United Kingdom
- Switzerland

In percent
Sources: SFSO, Thomson Datastream



Climate of great uncertainty

In view of the considerable uncertainty about future developments in financial markets and the impact this uncertainty has on the economy, the aforementioned economic forecasts for 2009 were particularly difficult to draw up. The tightening of credit conditions and the substantial decline in share prices suggest that growth risks are skewed downwards. Nevertheless, given the strength of the fiscal and monetary reaction as well as the considerable easing in oil and food prices, it is not impossible that there will be a more substantial recovery than has been forecast.

1.3 Economic developments in Switzerland

Slowdown in Swiss economy in 2008

While the initial turmoil in the financial markets hardly affected the Swiss economy in 2007, the year under review saw a slowing in economic activity.

Contraction of financial sector in first half of year

In the first half of 2008, the decline in economic growth was mainly attributable to the fall in added value in the financial sector. In particular, the uncertainty affecting financial markets led to a substantial decrease in the volume of securities transactions and thus also in the income from bank commissions.

Slowdown in economic activity in second half of year

In the second half of the year, the persisting financial crisis continued weighing heavily on the financial sector. In addition, the deterioration in the world economy began to affect the real economy, in particular the export-oriented manufacturing industry. By contrast, industries focused on consumption benefited from the fact that domestic demand was still buoyant. For 2008 as a whole, GDP growth came to 1.6%, compared to 3.3% in 2007.

Real gross domestic product

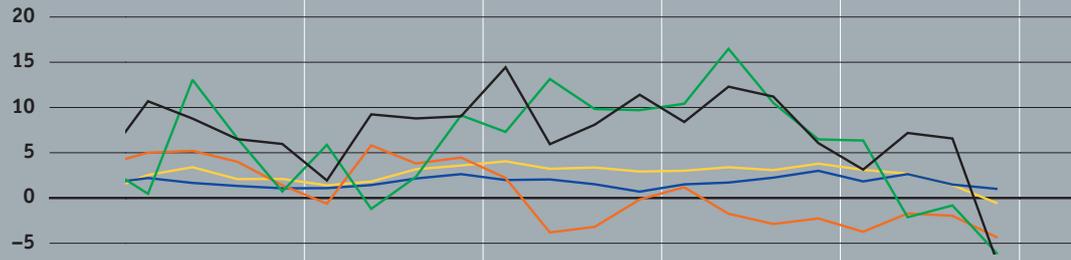
Year-on-year change in percent

	2004	2005	2006	2007	2008
Private consumption	1.6	1.8	1.6	2.1	1.7
Consumption by government and social security schemes	0.8	1.0	-0.9	-1.1	0.0
Investment	4.5	3.8	4.7	5.4	-1.7
Construction	3.9	3.5	-1.4	-1.5	-2.9
Equipment	5.0	4.0	10.0	10.9	-0.8
Domestic demand	1.9	1.9	1.4	1.1	0.2
Exports of goods and services	7.9	7.3	9.9	9.4	2.3
Aggregate demand	3.8	3.7	4.3	4.1	1.0
Imports of goods and services	7.3	6.6	6.5	5.9	-0.2
Gross domestic product	2.5	2.5	3.4	3.3	1.6

Sources: SECO, SFSO, SNB

Gross domestic product and components

— GDP
— Private consumption
— Investment in construction
— Investment in equipment
— Exports
 Year-on-year change in percent, in real terms
 Source: SECO



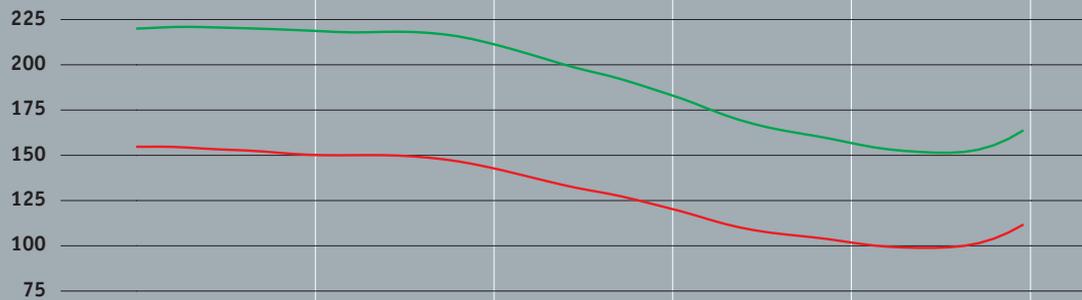
Foreign trade

— Imports of goods and services
— Exports of goods and services
 In CHF billions, in real terms, seasonally adjusted
 Source: SECO



Labour market

— Unemployed persons
— Job seekers
 In thousands, seasonally adjusted and smoothed
 Source: SECO



Closing of positive output gap

According to SNB estimates, the output gap attained its maximum level in the fourth quarter of 2007. During the course of 2008, it shrank continually, closing completely by the end of the year. The shrinkage in the output gap – and, consequently, the drop in inflationary pressure at the end of the year – is attributable to the fall in the level of capacity utilisation and the easing in the labour market throughout the year.

Healthy exports in first half of year

Despite the deterioration in the world economy, exports of goods and services advanced in the first six months of 2008. Goods exports, particularly precision instruments and watches, recorded firm growth due to robust demand from European, Asian and oil-producing countries. However, exports of services were negatively affected by a decline in bank commissions earned on transactions carried out for foreign customers.

Decline in second half of year

In the second half of 2008, export momentum was sharply affected by the weakening in European and Asian demand as well as the appreciation in the Swiss franc. Goods exports, particularly of products such as machines that are strongly exposed to cyclical fluctuations, declined substantially. Moreover, receipts from exports of services in tourism trended weaker.

Loss of import momentum

A slowdown in imports of goods and services was recorded from the beginning of the year under review. While imports of capital goods were curbed by corporate unwillingness to engage in new investment, a drop in the level of imports of commodities and semi-finished goods was recorded. By contrast, imports of consumption goods remained strong during the first half of the year, before weakening in the second half.

Slower growth in equipment investment

Following particularly robust growth in 2006, 2007 and the first quarter of 2008, equipment investment began to decrease in the second quarter of 2008. Nevertheless, taking into consideration the inadequacy of the stock of capital with respect to the level of production, the contraction in investment remained relatively moderate. This situation was reflected in the rate of capacity utilisation which, although dropping back somewhat, still remained above its long-term average until the third quarter.

Continued decline in construction

In 2008, construction investment continued to trend downwards. While construction of commercial premises and public works stagnated, investment in residential real estate declined compared to 2007.

Despite the uncertainty on the economic outlook, the labour market remained lively into summer 2008. For the first seven months of the year, seasonally-adjusted unemployment held at 2.5%. At the same time, despite a slight slowdown compared to 2007, employment growth in terms of full-time equivalents remained strong by historical standards. The manufacturing and service sectors both contributed to the creation of new jobs.

In the second part of the year, the weakening in economic activity was being increasingly felt in the labour market. Seasonally-adjusted unemployment climbed from 2.5% in August to 2.8% in December. Employment growth in terms of full-time equivalents began slowing. At the end of the year, the deterioration in the main indicators of the employment outlook signalled zero or even negative growth in the volume of employment. Mainly affected by the loss of momentum in the labour market were manufacturing, financial intermediaries and insurance companies as well as service providers to companies and the public sector.

Substantial growth in employment in first half of year

Slowdown in second half of year

Labour market

	2004	2005	2006	2007	2008
Employment in terms of full-time equivalents ^{1, 2}	0.0	0.2	1.4	2.8	2.8
Unemployment rate in percent	3.9	3.8	3.3	2.8	2.6
Number of job seekers in percent	5.6	5.5	5.0	4.2	3.9
Swiss nominal wage index ^{1, 2}	0.9	1.0	1.2	1.6	2.0
Compensation of employees, nominal ^{1, 2}	0.1	3.7	5.3	5.3	6.0

1 Year-on-year change in percent.
2 2008: Forecast.
Sources: SECO, SFSO

While the Swiss wage index showed a clear wage increase in nominal terms in 2008, the substantial rise in the CPI meant that, expressed in real terms, wages actually dropped by some 0.4%. The Swiss wage index fails to take account of changes in the composition of employment, mobility between sectors or bonus payments. This shortcoming can be avoided by using the figures on salary payments derived from the national accounts, which make it possible to better evaluate movements in salaries. In 2008, these figures increased in real terms by an estimated 3.6%. If one takes into account the 2.8% growth in employment, real salaries rose by 0.8%. This increase is attributable, on the one hand, to the recruitment of highly qualified staff and, on the other, to the excellent state of the labour market up until the first quarter, which allowed many employees to switch jobs and thereby obtain better-paid positions.

Modest increase in real salaries

**Consumption as driver
of growth**

Consumption grew robustly as a result of the good health of the labour market and the positive trend in salary payments. Retail trading derived the greatest benefit from this growth. By contrast, demand for consumer durables, in particular new car sales, and the number of overnight stays in the hospitality trade (which is an important indicator for consumption of services) had clearly lost momentum. Growth in public spending stagnated.

**Gloomy economic
outlook for 2009**

The SNB expects that real GDP will decrease by around 0.5% to 1% in 2009. The contraction of economic activity will likely be due to a negative contribution from foreign demand. Investment in residential real estate will begin growing again as a result of the favourable level of interest rates. Consumption will continue increasing, although at a slower pace. Public spending will react anticyclically, thereby supporting growth. Public sector construction, in particular, is expected to recover as a result of economic policy measures resolved by the Federal Council.

National consumer price index and components

Year-on-year change in percent

	2007	2008	2008 Q1	Q2	Q3	Q4
Overall CPI	0.7	2.4	2.5	2.7	3.0	1.6
Domestic goods and services	1.0	1.7	1.3	1.6	1.9	2.1
Goods	0.0	1.7	1.5	1.6	1.6	1.9
Services	1.2	1.7	1.2	1.5	2.0	2.1
Private services (excluding rents)	0.5	1.4	0.8	1.3	1.8	1.9
Rents	2.3	2.4	1.9	2.1	2.7	3.0
Public services	1.3	0.9	1.0	0.8	0.8	0.8
Imported goods and services	0.1	4.3	5.6	5.6	5.8	0.3
Excluding oil products	-0.4	1.6	1.9	1.7	1.6	1.3
Oil products	2.4	17.8	25.0	26.2	27.8	-5.0
Core inflation						
Trimmed mean	1.0	1.8	1.5	1.7	2.0	1.9
Dynamic factor inflation	1.2	1.2	1.2	1.2	1.2	1.0

Sources: SFSO, SNB

Consumer prices

— Consumer prices
— Domestic goods
— Imported goods
 Year-on-year change in percent
 Source: SFSO



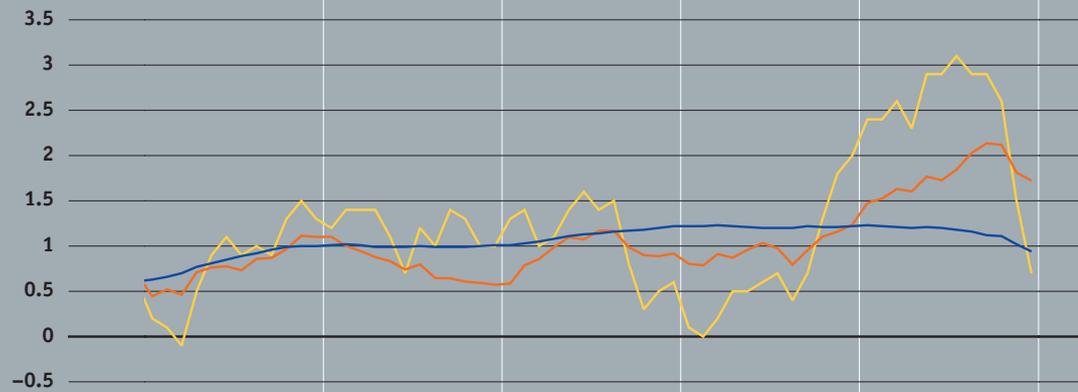
Producer and import prices

— Producer and import prices
— Producer prices
— Import prices
 Year-on-year change in percent
 Source: SFSO



Core inflation

— Consumer prices
— Trimmed mean
— Dynamic factor inflation
 Year-on-year change in percent
 Sources: SFSO, SNB



**Producer and import prices
influenced by energy prices**

From January to July, movements in producer and import prices were dominated by the sudden rise in oil and commodity prices. Thus, the annual rise in import prices surged from 4.1% in January to 5.4% in July, while that for producer prices advanced from 3.7% to 4.9% in the same period. Apart from the rise in energy prices, the strong growth in prices of intermediate goods and consumption goods also contributed to the increase in producer and import prices. After August, plunging oil prices resulted in a clear downturn in these prices. Inflation at the end of the year amounted to -2.3% in the case of import prices and 1.9% for producer prices.

**Inflation temporarily
above 2%**

The sharp increase in petrol and heating oil prices in the first half of the year strongly affected inflation measured in terms of the CPI, which rose from 2.4% in January to 3.1% in July. In the second half of the year, the abrupt decline in oil prices had a moderating impact on inflation. Moreover, movements in the prices of imported goods significantly influenced the rate of inflation applying to domestic goods and services, which rose from 1.2% in January to 2.1% in September, thereafter declining again to 2% in December. As a result, inflation measured by the CPI fell to 0.7% in December.

For the whole of 2008, inflation in terms of the CPI amounted to 2.4%. This represents an increase of 1.7 percentage points over the figure for 2007. About half of this increase can be directly attributed to oil price developments.

Numerous short-term fluctuations may have a significant impact on inflation, as measured by the CPI. The use of a core inflation rate makes it possible to carry out an analysis of inflationary trends. The SNB calculates core inflation by use of an average that excludes, for each month, all goods whose prices have recorded the greatest fluctuations (trimmed mean). This rate rose gradually from 1.5% in January to 2.1% in September. From October, core inflation declined again to reach 1.7% in December, thereby reflecting a downward trend in inflationary pressure.

Dynamic factor inflation – a measure of core inflation that takes account of information contained in real and monetary variables and financial indicators in addition to price developments – remained relatively stable at around 1.2% from January to August, before receding to 1% at the end of the year. The decline observed in the second part of the year can be attributed mainly to the moderating effect of the economic slowdown on demand.

2004

2005

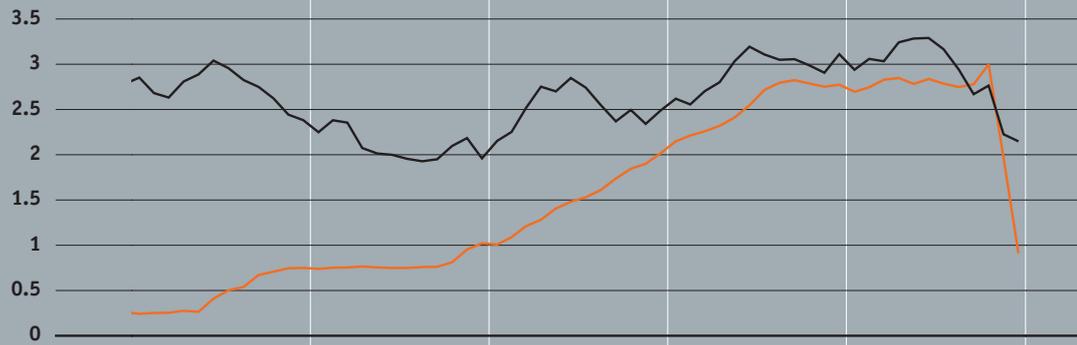
2006

2007

2008

Money and capital market rates

— Three-month Libor
— Yield on ten-year Swiss Confederation bonds (spot interest rate)
 In percent



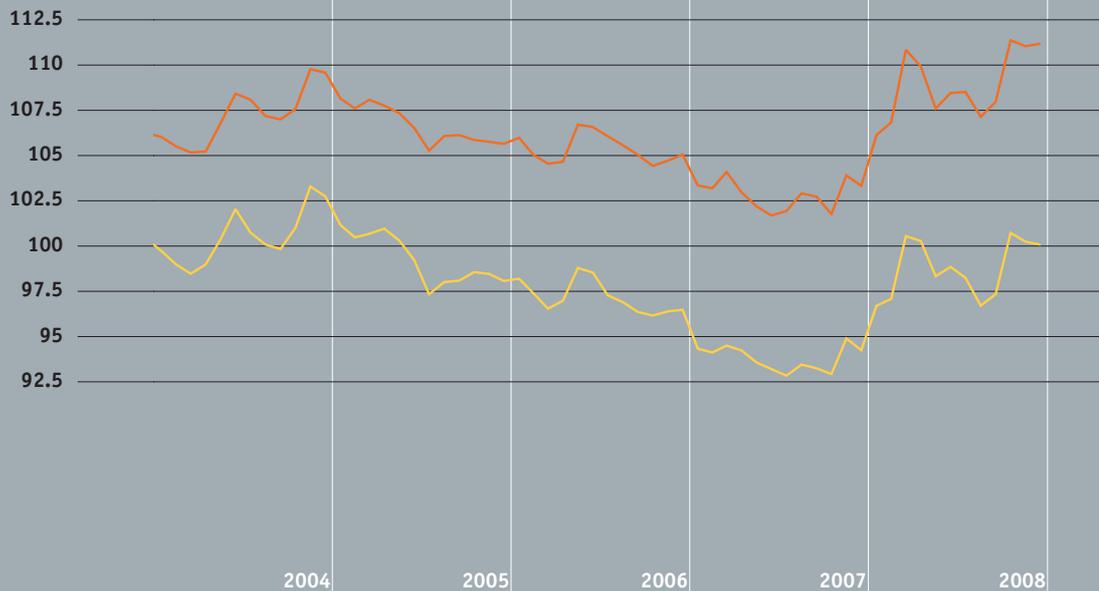
Exchange rates

— CHF/USD
— CHF/EUR
 Nominal



Export-weighted Swiss franc exchange rates

— Real
— Nominal
 24 trading partners
 Index: January 1999 = 100



2004

2005

2006

2007

2008

**Lowering of Libor
at year-end**

Over the first nine months of the year, the Libor fluctuated around 2.75%, in other words, the middle of the target range set by the Governing Board in September 2007. The tensions in the money market, provoking mounting risk premia, sharply increased the volatility of the Libor.

In the fourth quarter, the deterioration in the money market further intensified, pushing the Libor towards the upper limit of the target range; it slightly exceeded 3%. Three extraordinary monetary policy decisions taken by the SNB in October and November led to a major relaxation in conditions in the money market. Targeting a Libor of 1%, the SNB set the target range at 0.5–1.5% at the third extraordinary monetary policy meeting. In December, the National Bank lowered the target range to 0.0–1.0%. The Libor closed the year at 0.66%.

**Decrease in government
bond yields**

In the first half of the year, the yield on ten-year Confederation bonds, like other long-term interest rates, climbed roughly 40 basis points to reach a level of 3.4% in June. From then on, in the wake of the turmoil in the financial markets and the economic slowdown, major shifts in portfolios in favour of top-quality securities weighed on long-term interest rates. Consequently, ten-year Confederation bond yields plunged to 2.2% at the end of the year (December average).

**Swiss franc strengthens
against euro**

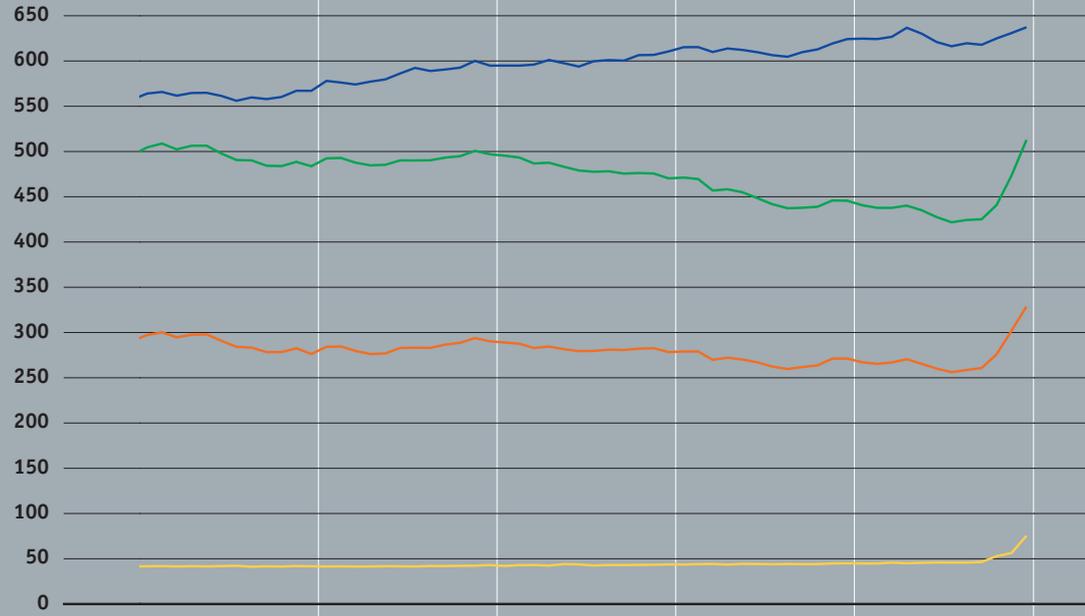
Until the end of September, the euro remained relatively stable against the Swiss franc. As the financial crisis worsened, the Swiss currency appreciated strongly, rising to 1.43 CHF/EUR at the end of October. Subsequently, the euro recovered, reaching 1.54 CHF/EUR at the end of the year (December average). Over the year as a whole, the volatility of the European currency against the Swiss franc was a little greater than in preceding years.

**Swiss franc very volatile
against US dollar**

The US dollar dropped sharply, falling from 1.14 CHF/USD (December average in 2007) to 0.98 CHF/USD in March 2008. In the second part of the year, the greenback recovered initially but then weakened again. The exchange rate finally stood at 1.15 CHF/USD (December average).

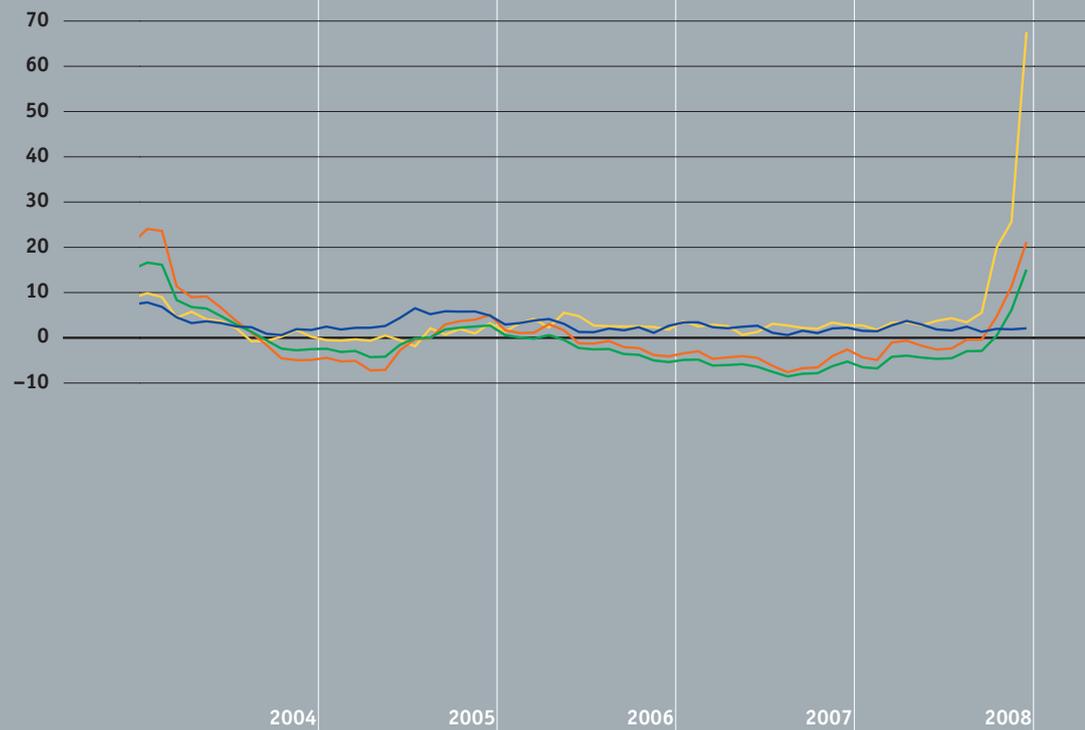
Level of monetary aggregates

— Monetary base
— M1
— M2
— M3
 In CHF billions



Growth in monetary aggregates

— Monetary base
— M1
— M2
— M3
 Year-on-year change in percent



**Rise in export-weighted
Swiss franc**

Both the nominal and the real export-weighted external value of the Swiss franc surged in the first quarter, decreased in the middle of the year and rose to a high level again at the end of the year. This development was also marked by several periods of increased volatility.

Generous supply of liquidity

The M1 and M2 monetary aggregates continued declining in the initial quarters of 2008, although at a lower rate. In the third quarter, they began growing again and by the end of the year were showing a strong rate of growth. Growth in M3 remained slightly positive and constant during the year; it was comparable to that of 2007. The movements in the aggregates were attributable to a growing preference for liquidity, which led to a reallocation from time deposits to sight deposits and banknotes.

In the wake of the financial turmoil, the banking system's demand for base money grew sharply in the second half of the year – mainly for precautionary reasons. The provision of liquidity was particularly flexible and generous, with growth in the monetary base approaching almost 70% at the end of the year.

1.4 Monetary policy decisions

The SNB's Governing Board conducts an assessment of the monetary policy situation in March, June, September and December. Each of these in-depth assessments results in an interest rate decision. If circumstances so require, the Governing Board may adjust the target range for the three-month Libor in Swiss francs between regular assessment dates. In 2008, this occurred three times.

**Monetary policy challenges
in 2008**

The extreme uncertainty on how the main macroeconomic and financial variables would develop was a challenge for monetary policy throughout the year. While the increasing price of energy and its impact on inflation and the economy held the attention of the National Bank in the first half of the year, it focused its efforts at the end of the year on the intensification of the financial crisis and its effects on the real economy.

Three-month Libor

— Three-month Libor
 Target range

Daily values in percent



Rise in oil prices

For the first time since the new monetary policy strategy was implemented in 2000, inflation – boosted by rising oil and commodity prices – exceeded the 2% ceiling, which the SNB defines as the upper bound of price stability. Inflation remained above this level during the first ten months of 2008. Nevertheless, the energy price developments did not require a response from the National Bank. On the one hand, it would have been inappropriate to take action against short-term inflationary pressure and, on the other, a tightening of the monetary reins could have exacerbated the moderating effects that high oil prices were already having on the economy.

Intensification of financial crisis

In the second half of the year, the financial crisis spread to the rest of the world, with Switzerland being affected to a lesser extent. This changed the situation fundamentally. Whereas oil prices and inflationary pressure no longer constituted a medium or long-term threat, precise evaluation of the effects of the financial crisis on the Swiss economy constituted the main difficulty for the SNB. The challenge was to create an environment that would alleviate the slowdown, while maintaining price stability in the medium and long term.

Quarterly assessment of 13 March

In the months prior to the first assessment of the year, the international economy had deteriorated further and the impact of the US mortgage crisis had become increasingly severe. At its March assessment, the SNB assumed that the economic slowdown would be stronger than previously anticipated in both the US (2008: 1.5%; 2009: 2.4%) and Europe (2008: 1.7%; 2009: 2.0%). Moreover, it forecast higher inflation in the advanced countries due to the fact that oil prices were withstanding the slowdown in the global economy.

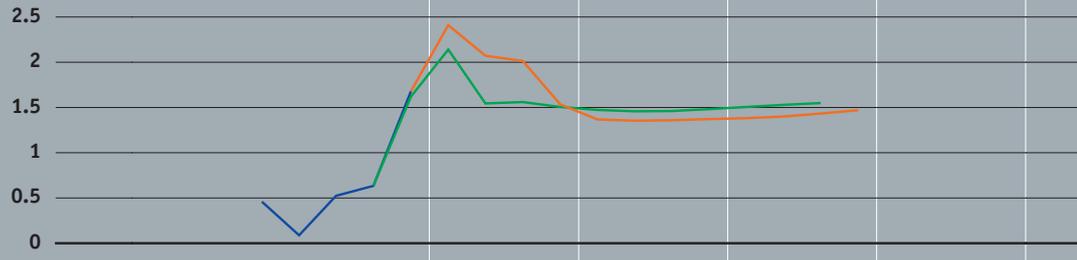
At the time of the March assessment, the Swiss economy was only slightly affected by the decline in growth in its main export markets. Supported by strong domestic demand, GDP had surged by an annualised 4.2% in the fourth quarter of 2007 on the previous period, taking annual growth in 2007 to more than 3%. Moreover, the labour market continued improving and unemployment fell to about 2.5%. The SNB expected that employment would continue to rise in the first half of 2008. However, it assumed that the Swiss economy would move into a slower phase as a result of the deterioration in the international economy. Consequently, it revised its GDP growth forecast downwards to between 1.5% and 2% for 2008.

Inflation forecast of 13 March 2008

Inflation
 December 2007 forecast:
 three-month Libor 2.75%

Inflation
 March 2008 forecast:
 three-month Libor 2.75%

Year-on-year change
 in national consumer
 price index in percent

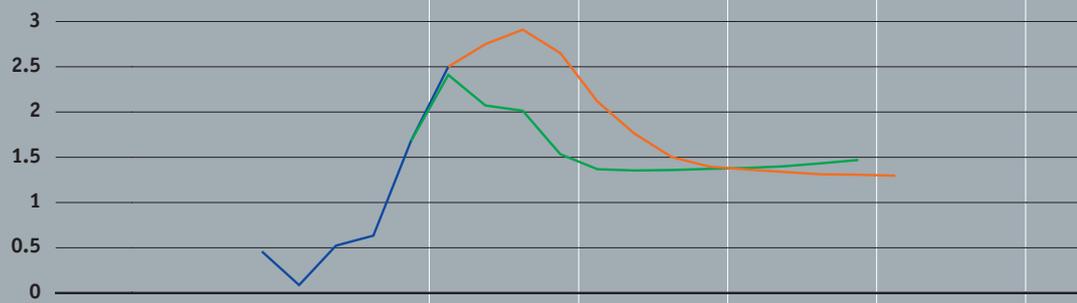


Inflation forecast of 19 June 2008

Inflation
 March 2008 forecast:
 three-month Libor 2.75%

Inflation
 June 2008 forecast:
 three-month Libor 2.75%

Year-on-year change
 in national consumer
 price index in percent

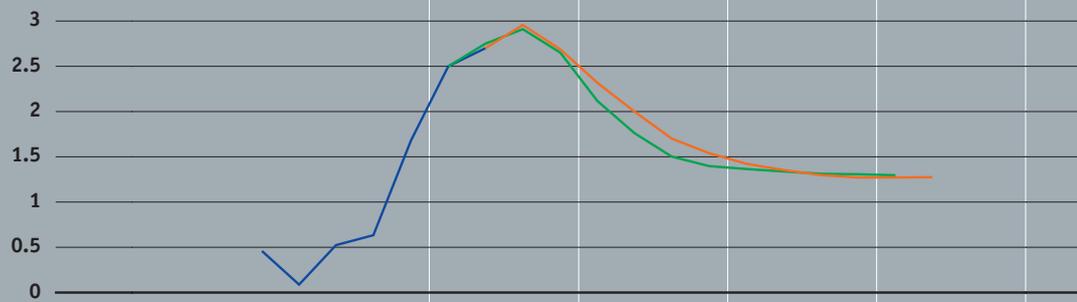


Inflation forecast of 18 September 2008

Inflation
 June 2008 forecast:
 three-month Libor 2.75%

Inflation
 September 2008 forecast:
 three-month Libor 2.75%

Year-on-year change
 in national consumer
 price index in percent



Inflation forecast of 11 December 2008

Inflation
 September 2008 forecast:
 three-month Libor 2.75%

Inflation
 December 2008 forecast:
 three-month Libor 0.5%

Year-on-year change
 in national consumer
 price index in percent



In the months prior to the assessment, the Swiss franc had appreciated. Taking into account the inflation differential between Switzerland and its trading partners, the real effective Swiss franc had recovered its level of 2006. Moreover, M3 had registered moderate growth, giving rise to monetary conditions compatible with a middling level of inflation in the medium and long term.

Thus, although inflation risks had been revised upwards for the year under review, they were more limited for the years that followed. On 13 March 2008, given the deterioration in the economic outlook and the expected reduction in inflation in the medium term, the Governing Board decided to leave the target range for the Libor unchanged at 2.25–3.25%.

The inflation forecast published at the time of the assessment was based on an unchanged Libor of 2.75%. With an inflation forecast of 2% for 2008, the path of the inflation forecast curve published in March was above that of the December forecast. However, for 2009 and 2010, the path of the new inflation forecast curve was slightly lower, reaching 1.4% by the end of the forecast period. The increase in the inflation forecast for 2008 was due, in particular, to the higher level of capacity utilisation, which made it easier to pass on costs, as well as to oil and commodity prices and the lagged effects of the Swiss franc weakness in 2007. The improvement in the medium and long-term inflation outlook was essentially due to the fact that the economy was now expected to weaken at a faster rate than had been anticipated in December.

At the time of the June assessment, growth in the international economy was varied but there was no major slowdown. The impact of the crisis in the financial sector on the rest of the economy had been felt less severely and more slowly than had been expected. Moreover, the healthy state of the world economy continued to fuel oil prices, and this pushed up global inflation. Against this background, the SNB made a slight downward revision to its growth forecasts for the US and Europe in 2008 and 2009.

In Switzerland, economic activity had slackened considerably in the early months of 2008. GDP had advanced by only 1.3%, in annualised terms, in the first quarter. The slowdown was partly attributable to after-effects of the monetary policy normalisation implemented over a period of several years. It was magnified by the weakening of exports and a drop in the volume of stock market transactions, curbing added value in the banking sector. It was likely that high oil prices and the uncertainties linked to the US real estate market would continue to hold back economic activity in the quarters ahead. Nevertheless, the SNB still forecast GDP growth of between 1.5% and 2% for 2008.

The Swiss franc had depreciated against the currencies of Switzerland's most important trading partners in the months prior to the June assessment, thereby partially reversing the appreciation that had occurred at the beginning of the year. M1 and M2, which had dropped in the previous quarters, were more or less stable at the time of the assessment. M3 continued growing moderately. With the financial crisis persisting, close attention was being paid to the state of the credit market. The rate of growth of mortgage lending was still declining, due to the normalisation of monetary policy, and amounted to 3.3% at the time of the assessment. Since banks had not tightened lending conditions to households or companies in the months preceding the assessment, the rate of growth of other lending remained high.

Although inflation had been above 2% since December 2007, the SNB regarded this situation as temporary and anticipated that the forecast downturn in the economy would have a moderating influence on inflationary pressures. Consequently, on 19 June 2008, the Governing Board decided to leave the target range for the Libor unchanged at 2.25–3.25%.

The inflation forecast published at the time of the assessment was based on an unchanged Libor of 2.75%. The level of inflation was expected to remain above 2% until the first quarter of 2009. What is more, the anticipated inflation exhibited a degree of tenaciousness attributable to the combination of rising oil prices and a robust economy. However, the forecast showed that the expected downturn in the economy, the decline in the rate of capacity utilisation and a base effect for oil prices would all contribute to a fall in future inflation. Inflation in 2008 was expected to amount to 2.7%. According to the forecast, it would fall back to 1.7% in 2009 and to 1.3% in 2010.

In its September evaluation of the situation, the SNB revised its forecast for the international economy for two reasons. First, it assumed that the economy would be weaker for the rest of 2008 in both the US (1.8%) and Europe (1.3%). Economic recovery would thus be delayed in the years ahead in the US (2009: 1.3%; 2010: 2.8%) and Europe (2009: 0.9%; 2010: 2.1%). Second, the National Bank expected a less substantial decline in US and European inflation in 2009 than it had anticipated.

**Quarterly assessment
of 18 September**

Although it had fallen off slightly, growth in the Swiss economy in the first half of the year was still relatively strong despite the deterioration in the world economy. However, the slowdown was likely to continue in the months ahead, particularly due to the decline in financial transactions, manufacturing and construction. In most cases, capacity utilisation had been above historical norms, and the downturn therefore represented a decline from a high level of activity. Thus, the SNB maintained its forecast of GDP growth between 1.5% and 2% for 2008.

Monetary conditions were almost unchanged from the situation at the June assessment. Despite the turmoil in the financial markets, the Swiss franc had remained relatively stable. The rate of growth of mortgage lending was comparable to that recorded at the previous assessment. The financial crisis had not had any impact on other lending. The monetary aggregates were growing at moderate or even negative rates, which meant that low inflation rates could be expected in the medium and long term.

Recorded inflation at the time of the assessment, which was above 2%, was expected to be only temporary in nature, since the forecast slowdown in the economy would have a moderating effect on prices. Consequently, medium and long-term price stability was not compromised. In this situation, the Governing Board decided, on 18 September 2008, to leave the target range for the Libor unchanged at 2.25–3.25%.

According to the published inflation forecast, assuming that the Libor remained unchanged at 2.75%, inflation would reach 2.7% in 2008 and then ease back to 1.9% in 2009 and 1.3% in 2010 as a result of the economic downturn and the stabilisation of oil prices. The forecast indicated that inflation would be slightly more tenacious in the short term and would exceed the 2% level until the second quarter of 2009. In the subsequent quarters, the anticipated inflation would return to a level compatible with medium-term price stability.

During the weeks following the September decision, the international financial crisis took on a greater order of magnitude. This was particularly visible in the rise in risk premia which led to a surge in the Libor from 2.75% to over 3%. Moreover, the financial turmoil had a considerable impact on the global economy. Consequently, the slowdown in economic activity in the US and Europe was more substantial than had been expected at the time of the September assessment.

**Extraordinary decision
of 8 October**

It was clear that the Swiss economy would be affected by these developments – particularly its export sector. The SNB therefore assumed that growth in 2009 would be below the level expected at the previous assessment. At the same time, however, given the economic deterioration and the substantial drop in oil prices, the improvement in the inflation outlook permitted an immediate relaxation of the monetary reins.

Consequently, on 8 October 2008, the SNB decided to relax its monetary policy in coordination with several other central banks (Bank of Canada, Bank of England, European Central Bank, US Federal Reserve and Swedish Riksbank, with the support of the Bank of Japan), and to bring about a fall in money market rates by initiating a 50 basis point decline in the Libor from 3% – which was about its level at the time of the decision – to 2.5%. In order to achieve this, the target range was set at 2.0–3.0%.

In early November, the international economic outlook was still worsening more dramatically than had been expected. At another monetary policy assessment, the SNB assumed that this deterioration would result in negative growth for Switzerland in the upcoming quarters. The slowdown in economic activity, falling oil prices and the appreciation of the Swiss franc at the time of the decision were accentuating the expected drop in inflation.

Consequently, on 6 November 2008, the Governing Board decided to lower the Libor target range by 50 basis points, setting it at 1.5–2.5%.

By the end of November, it was clear that price stability was being re-established more rapidly than expected, due to plunging oil and commodity prices. Moreover, the international economy had once again deteriorated sharply in the weeks preceding the decision, and this implied a high risk of substantial weakening in the Swiss economy in 2009.

In these circumstances, on 20 November 2008, the Governing Board decided to lower the Libor target range by 100 basis points, with the new range being set at 0.5–1.5%. With this drop of a magnitude unprecedented since the introduction of the new monetary policy strategy in 2000, the SNB clearly demonstrated its commitment to an easing in the money market. It also showed that, in the difficult situation facing the Swiss economy, monetary policy needed to be clearly expansionary.

**Extraordinary decision
of 6 November**

**Extraordinary decision
of 20 November**

At the time of the final assessment of the year, the international situation had altered radically as compared to the September assessment. The financial crisis had now spread to the rest of the economy and the advanced economies had all moved into recession more or less simultaneously. In addition, with the drop in global demand, prices of oil, commodities and food had collapsed. This gave rise to further worsening in the growth outlook for the US and Europe.

The SNB expected that the Swiss economy would be severely affected by these developments. In the upcoming quarters, all the components of demand apart from consumption were likely to fall. The slump in foreign demand would probably hit Swiss exports, and especially exports of capital goods. Investment, moreover, was likely to be the component of demand that would drop most markedly. Consumption, however, would probably continue advancing, although at a slower pace, supported by retreating inflation rates, in particular. Consequently, the SNB forecast GDP growth for 2009 of between -0.5% and -1% .

The rate of growth of mortgage lending remained at a level comparable to that recorded at the previous assessment. Other lending was not affected by the financial crisis at the time of the assessment. At that stage, there was therefore no reason to speak of a credit crunch. In the wake of the drop in interest rates, growth in the monetary aggregates had accelerated, but there had been no increase in the risk of inflation since the strong demand for liquidity was fundamentally attributable to precautionary measures.

Despite the three inflation rate reductions decided upon in October and November, inflation risks had largely dissipated as a result of the deterioration in the economic outlook and the slump in oil prices. It was even possible that negative rates of inflation would be experienced for some months of 2009. In these circumstances, on 11 December 2008, the Governing Board decided to lower the Libor target range by an additional 50 basis points, with the new range being set at $0.0-1.0\%$.

The inflation forecast published at the time of the assessment was based on a three-month Libor of 0.5% . It showed an inflation rate of less than 2% from the fourth quarter of 2008. The forecast inflation continued to drop back until the end of 2010, apart from a brief climb in the fourth quarter of 2009 due to a base effect triggered by oil price movements. The forecast showed an inflation rate of 0.9% in 2009 and 0.5% in 2010. The slight increase in inflation expected at the end of the forecast period can be explained by the fact that a Libor of 0.5% does not represent an equilibrium level which guarantees price stability in the medium and long term.

1.5 Statistics

The SNB collects the statistical data it requires to fulfil its statutory tasks on the basis of art. 14 NBA. It collects data for the conduct of monetary policy and the oversight of payment and securities settlement systems, for safeguarding the stability of the financial system and preparing both the balance of payments and the statistics on the international investment position. Statistical data compiled for purposes relating to international monetary cooperation are transmitted to international organisations.

Banks, stock exchanges, securities dealers, fund managers of Swiss investment funds and agents of foreign investment funds are required to provide the SNB with statistical data on their activities (art. 15 para. 1 NBA). Where necessary to analyse trends in the financial markets, obtain an overview of payment transactions or prepare the balance of payments or the statistics on Switzerland's international investment position, the National Bank may also collect statistical data on the business activities of other private individuals or legal entities. This applies in particular to insurance companies, occupational pension schemes, investment and holding companies, and operators of payment and securities settlement systems as well as Swiss Post (art. 15 para. 2 NBA).

The SNB limits the number and type of surveys to what is strictly necessary (art. 4 National Bank Ordinance (NBO)). It seeks in particular to minimise the demands placed on those required to provide information.

The National Bank is required to ensure the confidentiality of the data it collects and may only publish them in aggregated form. However, the data collected may be supplied to the relevant Swiss financial market supervisory authorities (art. 16 para. 4 NBA).

The SNB manages a database containing 4.2 million time series and publishes the results of its surveys in the form of statistics, which are made available primarily in the *Monthly Statistical Bulletin*, the *Monthly Bulletin of Banking Statistics* and *Banks in Switzerland*, which is published annually. These publications are supplemented by reports on the balance of payments, the international investment position, direct investment and the financial accounts. In addition, the SNB intermittently publishes historical statistics on topics of importance for the formulation and implementation of past and present monetary policy. All publications are available in German, French and English and are accessible on the SNB website along with other data series (www.snb.ch, *Publications*).

**Purpose of activities
in the field of statistics**

**Institutions required
to provide data**

**Survey activity kept
to a minimum**

**Confidentiality and
exchange of data**

Statistics and publications

**Supplementary survey
on bank lending**

If, in order to fulfil a statutory task, the SNB urgently requires additional data, it may conduct supplementary surveys, which must be limited to what is strictly necessary in terms of content and time (art. 6 NBO). On this legal basis, the National Bank has been collecting qualitative data on the lending policies of about 20 banks since the first quarter of 2008. This supplementary quarterly survey is conducted in order to gain information on the effects of the financial crisis on domestic lending. The results of the survey complement the quantitative data obtained from existing statistics.

Revised surveys

In 2008, the National Bank revised its collective capital investment statistics. It now only collects data on Swiss collective capital investment schemes; foreign schemes are thus no longer required to report data. Moreover, the SNB introduced a breakdown by economic sector to the balance sheet statistics, for which banks have to provide data on a monthly basis. This new breakdown provides the statistical basis for the calculation of sectoral monetary aggregates and also serves to fulfil IMF requirements.

Collaboration

In compiling statistical data, the National Bank cooperates with the relevant federal government bodies, notably the Swiss Federal Statistical Office (SFSO) and the Swiss Financial Market Supervisory Authority (FINMA), as well as the relevant authorities of other countries and international organisations (art. 14 para. 2 NBA). With regard to organisational and procedural issues, and when new surveys are introduced or existing ones modified, the reporting institutions – together with their associations – are given the opportunity to comment (art. 7 NBO).

... with FINMA

Under the agreement with FINMA on the reciprocal exchange of data in the financial sector, the SNB collects information, including data on the capital base of banks and securities dealers. In 2008, the changeover to the new capital adequacy reporting form, which is based on Basel II, was essentially finalised.

... with the FOH

Since June 2008, the National Bank has been collecting quarterly data for the Federal Office for Housing (FOH) on mortgage rates from about 80 banks. Based on these data, the FOH calculates the reference interest rate for tenancies. The sole responsibility for the contents of this survey lies with the FOH.

**... in the banking
statistics committee**

The National Bank is advised on the content of its banking surveys by the banking statistics committee (art. 7 NBO). This committee comprises representatives of the Swiss commercial banks, the Swiss Bankers Association and FINMA.

A group of experts under the direction of the SNB participates in the drawing up of the balance of payments. It comprises representatives from industry, banking, insurance, various federal agencies and the Swiss Institute for Business Cycle Research at ETH Zurich (KOF).

**... in the group of experts
on the balance of payments**

Since 2007, the SNB has conducted surveys of Liechtenstein-based companies when preparing its balance of payments figures and statistics on its international investment position. It has worked together with the relevant authorities in Liechtenstein (the Office of Economic Affairs and the financial market supervision authority).

**... with the Principality
of Liechtenstein**

In the field of statistics, the SNB works closely with the Bank for International Settlements (BIS), the Organisation for Economic Co-operation and Development (OECD), the Statistical Office of the European Communities (Eurostat) and the International Monetary Fund (IMF). This collaboration is aimed at harmonising statistical survey methods and analyses. The National Bank decided to participate in the IMF survey on international direct investment, which is scheduled for 2010.

... with foreign agencies

2 Supplying the money market with liquidity

Mandate

It is the task of the Swiss National Bank (SNB) to provide the Swiss franc money market with liquidity (art. 5 para. 2 (a) National Bank Act (NBA)). The framework within which the National Bank may conduct transactions in the financial market is defined in art. 9 NBA. As lender of last resort, the National Bank also provides emergency liquidity assistance (art. 9 para. 1 (e) NBA). By supplying the money market with liquidity, the SNB implements its monetary policy. To this end, it influences the interest rate level in the money market. The three-month Swiss franc Libor serves as its reference interest rate. The Libor is an interest rate for unsecured interbank loans. The SNB influences the three-month Libor indirectly via secured money market transactions.

Guidelines on monetary policy instruments

The *Guidelines of the Swiss National Bank (SNB) on Monetary Policy Instruments* contain more explicit information with regard to art. 9 NBA and describe the instruments and procedures used by the National Bank for the implementation of its monetary policy. They also define the conditions under which these transactions are concluded and what securities can be used as collateral for monetary policy operations. In principle, all banks domiciled in Switzerland as well as banks abroad that meet the conditions stipulated by the SNB are accepted as counterparties. The guidelines are supplemented by instruction sheets. These were revised with effect from 1 January 2009 (cf. chapter 2.9).

Open market operations and standing facilities

The SNB uses both open market operations and standing facilities for the implementation of its monetary policy. In the case of open market operations, the National Bank takes the initiative in the transaction. Where standing facilities are concerned, the SNB merely sets the conditions under which counterparties can obtain liquidity. Repo transactions are the main instrument used for open market operations. Since autumn 2008, the SNB has been issuing its own debt certificates in Swiss francs (SNB Bills) as an additional instrument. Standing facilities include the liquidity-shortage financing facility and the intraday facility. If necessary, the National Bank may also use additional monetary policy instruments, such as foreign exchange swaps.

Significance of liquidity for banks

In order for a bank to maintain its solvency, it must have sufficient liquidity at all times. The most liquid assets are sight deposits held at the SNB, since they can be used immediately for payment transactions and are deemed to be legal tender. In addition, banks hold sight deposits at the National Bank to satisfy minimum reserve requirements and as liquidity reserves.

The financial crisis that erupted at the beginning of August 2007 continued to impact on international money markets in 2008. The ripple effect of the problems in the US mortgage market and the sharp deterioration in financial markets had a negative impact on many financial institutions. This led to a severe loss of confidence in the interbank market. As a result, banks began hoarding liquidity and became very cautious about lending to one another. The impaired functioning of the interbank market was reflected by high and volatile risk premia. In March 2008, the situation deteriorated as a result of acute problems faced by individual international banks, including the major US investment bank Bear Stearns. After a period of temporary easing, the crisis in international money markets escalated in autumn 2008, and risk premia reached an all-time high. This development had been triggered by the bankruptcy of the US investment bank Lehman Brothers in mid-September. While the support measures subsequently announced by several governments and central banks led to a certain alleviation of the situation, a return to normal conditions was not observable by the end of the year. Meanwhile, the market for unsecured interbank loans did ease somewhat.

The loss of confidence between banks was also felt in the Swiss franc money market. Since the onset of the financial crisis, rising risk premia have widened the gap between interest rates of unsecured and secured money market transactions. This has made steering the three-month Libor, which is based on unsecured transactions, increasingly challenging. In the fourth quarter, steering the Libor was additionally hampered by the strong demand for Swiss francs abroad. In the past few years, substantial Swiss franc loans, refinanced through the Swiss banking system, were granted in several European countries. During the financial market turmoil in autumn 2008, many Swiss banks were no longer prepared to continue refinancing these loans to the same extent. This led to considerable tension in the international Swiss franc money market. To counter this, the SNB offered its national and international counterparties Swiss francs through EUR/CHF swaps and granted the European Central Bank (ECB) and the Polish central bank a foreign exchange swap facility within the framework of a mutual swap agreement.

2.1 Open market operations

The purpose of SNB open market operations is to provide the money market with liquidity. The National Bank is able to create liquidity and absorb it again. In a repo transaction, the principal monetary policy instrument in this area, the cash taker sells securities spot to the cash provider. At the same time, the cash taker enters into an agreement to repurchase securities of the same type and amount from the cash provider at a later point in time. The cash taker pays interest (repo rate) for the duration of the transaction. From an economic perspective, a repo is a secured loan. The SNB may conduct repo transactions in the form of auctions or in the interbank market. For repo transactions within the context of open market operations, collateral eligible for SNB repos must cover at least 100% of the funds obtained at all times. The repo rate, the size of the individual operations and their maturities depend on monetary policy requirements. The maturity of repo transactions varies from one day (overnight) to several months. The SNB generally sets the maturity of repo transactions in such a way that the commercial banks request liquidity on an almost daily basis so as to be able to meet minimum reserve requirements. To stabilise short-term money market rates, the SNB may influence price-setting in the money market at any time by means of other instruments than auctions. Such fine-tuning transactions can be used both for providing and withdrawing liquidity.

In 2008, the National Bank concluded repo transaction both through auctions and by placing or accepting offers in the electronic market for repo transactions. The auctions were conducted by fixed rate tender, in which the SNB's counterparties request a certain amount of liquidity at a fixed repo rate. Compared with the previous year, a greater volume of long-term repo transactions were concluded.

The National Bank may also issue its own interest-bearing debt certificates (SNB Bills). The issue of SNB Bills allows for the absorption of large volumes of liquidity and thus renders the SNB more flexible with regard to liquidity-creation operations. In particular, this means that it may offer repo transactions with longer maturities when supplying the money market with liquidity. SNB Bills may be issued publicly by auction or through private placement. They are included in the list of collateral eligible for SNB repos and may thus be used in SNB repo transactions. The first SNB Bills auction was held on 22 October 2008.

2.2 Standing facilities

To bridge unexpected liquidity bottlenecks, the SNB offers a liquidity-shortage financing facility. In order for a bank to obtain liquidity through this facility, the National Bank must grant a limit to be covered by collateral eligible for SNB repos at 110% at all times. Each counterparty has the right to obtain liquidity up to the limit granted until the following bank working day. This limit is drawn down in the form of a special-rate repo transaction.

**Liquidity-shortage
financing facility**

In 2008, banks requested that their limits under the liquidity-shortage financing facility be increased from a total amount of CHF 33.7 billion to CHF 34.5 billion. At the end of 2008, 74 banks had been granted a limit (2007: 72). The special rate for obtaining liquidity provided through this facility was 200 basis points above the call money rate, i.e. the SNB's repo overnight index of the previous bank working day. The special-rate surcharge was reduced to 50 basis points with effect from 1 January 2009 (cf. chapter 2.9).

During the day, the National Bank provides its counterparties with interest-free liquidity (intraday liquidity) through repo transactions so as to facilitate the settlement of payment transactions via Swiss Interbank Clearing (SIC system) and the settlement of foreign exchange transactions via Continuous Linked Settlement (CLS), the multilateral payment system. The cash amounts must be repaid by the end of the same bank working day at the latest. Intraday liquidity cannot be used when evaluating compliance with minimum reserve requirements or liquidity requirements under banking law.

Intraday facility

2.3 Other monetary policy instruments

In accordance with art. 9 para. 1 NBA, the National Bank has other instruments, such as spot and forward foreign exchange transactions and foreign exchange swaps, at its disposal; it can also purchase or sell securities in Swiss francs. In addition, it can create, purchase or sell derivatives on receivables, securities, precious metals and currency pairs. In 2008, the SNB concluded foreign exchange swaps. A foreign exchange swap is the purchase (sale) of foreign exchange at the current spot rate and the simultaneous sale (purchase) of the currency at a later date. The foreign exchange swaps were carried out by way of fixed rate auction.

Foreign exchange swaps

During 2008, the foreign exchange swap facility with the US Federal Reserve, which had been introduced in a concerted move in December 2007, was further expanded. This facility formed the basis for carrying out US dollar repo auctions with which the SNB made US dollar liquidity available to banks (cf. chapter 2.8).

**Swap facility with
US Federal Reserve**

In addition, the SNB took coordinated measures with other central banks to counter tensions in the international Swiss franc money market. By means of a swap agreement, it provided Swiss franc liquidity to the ECB and the Polish central bank, which these central banks were then able to allocate to banks in their jurisdictions in the form of auctions. This foreign exchange swap facility also enabled the National Bank to provide Swiss franc funding to banks with no direct access to the SNB's operations.

2.4 Liquidity supply

To secure the supply of liquidity to banks, the SNB conducted money market operations on an unprecedented scale in 2008. In so doing, it reacted decisively to the tensions in the money market and, where necessary, provided the banking system with generous amounts of liquidity at various maturities. This was particularly true from mid-September when the collapse of Lehman Brothers sparked a sharp rise in the liquidity preference of banks. In September and October, the European banks' growing difficulties to refinance themselves in Swiss francs resulted in a significant rise in short-term money market rates. Consequently, as of 20 October, the SNB regularly held concerted auctions of EUR/CHF swaps with domestic and foreign counterparties, the ECB and – as of November – the Polish central bank. To support call money rates, the SNB regularly held liquidity-absorbing fine-tuning operations. After it cut the weekly repo rate down to 0.05% in November and December, these operations were no longer necessary. As a result of the increased liquidity preference, the creation of liquidity by means of foreign exchange swaps and the restraint in conducting liquidity-absorbing operations, banks' sight deposits at the National Bank grew sharply from November on, reaching a record of CHF 45 billion on 30 December 2008.

Monetary policy instruments enable the SNB to normalise liquidity supply when needed. Until October, excess liquidity was being absorbed in the short term by means of repo transactions. As of 22 October, the National also issued SNB Bills for this purpose.

The volatile path of risk premia made steering the three-month Swiss franc Libor more difficult in 2008. Until mid-January, falling risk premia for unsecured money market transactions led to a decrease in the three-month Libor from 2.76% to 2.64%. In order to keep the Libor in the middle of the target range of 2.25–3.25%, the SNB gradually raised the rate for one-week repo transactions from 2.05% to 2.40% until mid-February.

In March, the escalation of the financial crisis in connection with the problems at Bear Stearns led to a rise in the three-month Libor. The SNB subsequently lowered its rate for one-week repo transactions to 1.90%. In so doing, it succeeded in keeping the three-month Libor in the middle of the target range until the end of September. The acute loss of confidence following the collapse of Lehman Brothers led to a sharp rise in risk premia, pushing up the three-month Libor to 3.13%. The National Bank responded to these developments by lowering the repo rate yet again, to 1.60%. After the target range for the three-month Libor had been lowered to 2.0–3.0% on 8 October 2008, the Libor briefly moved outside the range for the first time since the new monetary policy strategy was introduced in 2000. The SNB thus responded with a further cut in the rate for one-week repo transactions to 1.25%, at the same time offering repo transactions at terms of several months, as and when needed. The three subsequent reductions in the target range for the three-month Libor down to 0.0–1.0% again went hand in hand with a corresponding cut in the repo rates and the provision of longer-term funding. By the end of 2008, the repo rate for one-week transactions stood at 0.05%. This is the lowest price for SNB repo transactions since the instrument was introduced ten years ago.

Supplying the money market with liquidity in CHF billions

Open market operations and standing facilities Maturities	2007		2008	
	Outstanding Average	Turnover	Outstanding Average	Turnover
Liquidity-providing operations	21.73	1 071.99	41.04	1 621.83
Repo transactions				
Up to 3 days	0.18	29.67	0.26	69.27
4 to 11 days	18.69	986.81	21.74	1 139.85
12 to 35 days	1.62	50.51	1.50	40.81
36 days to 1 year	1.25	5.00	9.81	50.97
Foreign exchange swaps				
Up to 8 days			5.41	303.77
9 to 91 days			2.33	17.16
Liquidity-absorbing operations	0.13	38.58	5.44	545.28
Repo transactions				
Up to 3 days	0.13	38.58	1.48	383.68
SNB Bills				
Up to 8 days			2.33	134.03
9 to 28 days			1.64	27.57
Standing facilities				
Intraday facility	7.76	1 955.90	9.55	2 407.02
Liquidity-shortage financing facility	0.01	1.82	0.00	0.81

In 2008, the average volume of monetary policy operations still outstanding at the end of the day rose from approximately CHF 21.7 billion to CHF 41.0 billion. The turnover in repo transactions – in other words, the sum of all transactions – reached CHF 1,301 billion. Roughly 88% of total repo turnover was accounted for by transactions with a maturity of one week. Between 22 October and the end of the year, the average level of EUR/CHF swap transactions with central banks was CHF 22.5 billion, while turnover was CHF 224.3 billion. In the same period, EUR/CHF swaps with commercial banks amounted to CHF 17.4 billion and CHF 96.6 billion respectively. In the case of liquidity-absorbing operations by means of SNB Bills, the corresponding figures were CHF 20.5 billion and CHF 161.6 billion respectively.

Banks' daily bids at the SNB's monetary policy repo auctions fluctuated between CHF 0.03 billion and CHF 70 billion, with the average being CHF 13.7 billion. The amount of liquidity allocated fluctuated between CHF 0.03 billion and CHF 10.2 billion, with the annual average amounting to CHF 4.4 billion. Of this amount, 46.26% was allotted to domestic banks; the remainder to international banks abroad. The allocation rate moved between 3.06% and 100%, with the average rate amounting to 31.92%. Banks' bids for EUR/CHF swaps with the SNB and foreign central banks climbed to CHF 23.7 billion. These bids were always fully satisfied. Demand for SNB Bills ranged from between CHF 0.5 billion and CHF 17.2 billion. An average of 75% of SNB Bills requested was allotted.

Average use of the intraday facility by banks rose from CHF 7.8 billion in 2007 to CHF 9.6 billion in the year under review. Banks made use of the liquidity-shortage financing facility only in individual cases and to a limited extent, with the annual average amounting to less than CHF 3 million.

2.5 Emergency liquidity assistance

Within the context of the emergency liquidity facility, the National Bank can provide liquidity assistance to domestic banks if they are no longer able to refinance their operations in the market (lending of last resort). The institutions requesting credit must be systemically important and solvent. In addition, the liquidity assistance must be fully covered by sufficient collateral at all times.

A bank or group of banks is considered to be of systemic importance if its inability to pay would seriously impair the functioning of the Swiss financial system or major parts thereof, and have a negative impact on the economy. To assess the solvency of a bank or group of banks, the National Bank obtains an opinion from the Swiss Financial Market Supervisory Authority (FINMA). The National Bank determines what securities it will accept as collateral for liquidity assistance.

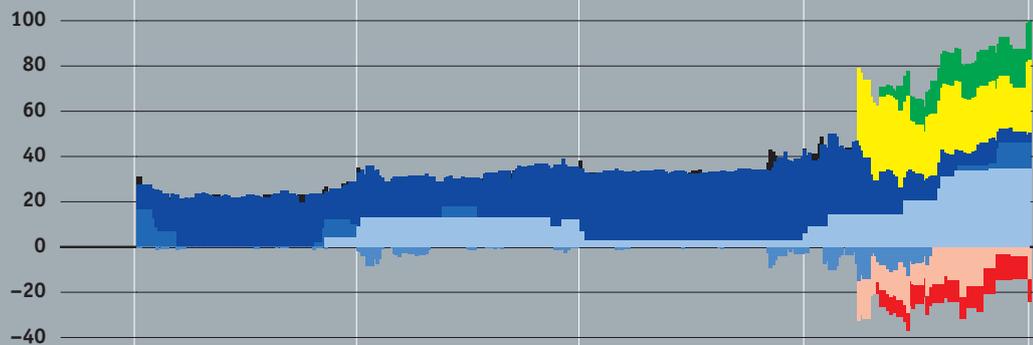
In 2008, the SNB did not provide any emergency assistance in the classical sense. However, it did participate in a package of measures to strengthen the Swiss financial system (cf. chapter 6.2).

Supplying the money market with liquidity

- Repos up to 3 days
- Repos 4 to 11 days
- Repos 12 to 35 days
- Repos 36 days to 1 year
- FX swaps up to 8 days
- FX swaps 9 to 91 days
- Repos up to 3 days
- SNB Bills up to 8 days
- SNB Bills 9 to 28 days

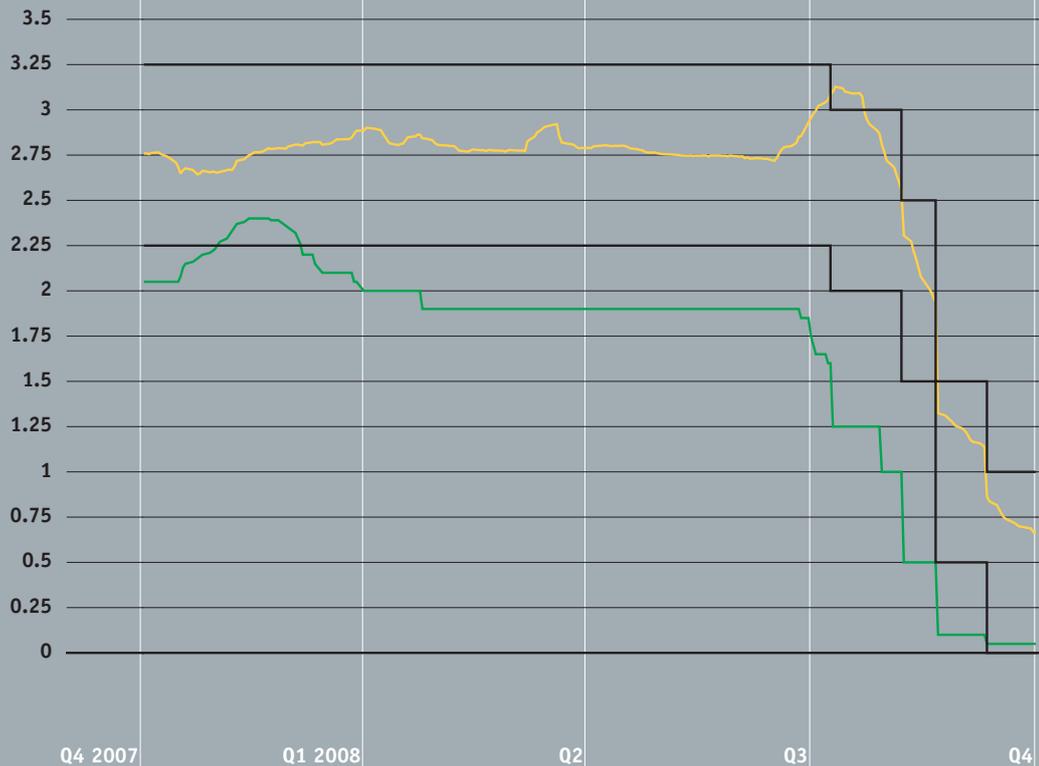
Volume of money market operations, in CHF billions

Positive values: Liquidity provision
Negative values: Liquidity absorption



Three-month Libor and one-week repo rate

- Three-month Libor
 - One-week repo rate
 - Target range
- Daily values in percent



2.6 Minimum reserves

The duty to hold minimum reserves (arts. 17, 18, 22 NBA) ensures that banks have a minimum demand for base money; it thus fulfils a monetary policy objective. Eligible assets in Swiss francs comprise coins in circulation, banknotes and sight deposits held at the National Bank. The minimum reserve requirement is 2.5% of the sum of short-term liabilities in Swiss francs (up to 90 days) and 20% of all liabilities vis-à-vis customers in the form of savings and investments.

If a bank fails to fulfil the minimum reserve requirement, it is required to pay interest to the National Bank for the number of days of the reporting period for which there was a shortfall. The interest rate is four percentage points higher than the average call money rate (SNB's repo overnight index) over the reporting period in question.

Minimum reserves

(20 December 2007 to 19 December 2008) in CHF millions

	2007 Outstanding Average	2008 Outstanding Average
Sight deposits at the SNB	5 261	7 214
Banknotes	4 850	5 801
Coins in circulation	97	104
Eligible assets	10 208	13 119
Requirement	8 650	9 148
Compliance in excess of requirement	1 558	3 972
Liquidity ratio in percent	118%	143%

In 2008 (from 20 December 2007 to 19 December 2008), the average minimum reserves required by law amounted to CHF 9.1 billion. This is a 5.8% increase year-on-year. Eligible assets amounted to an average of CHF 13.1 billion. As a result, banks exceeded the requirement by an annual average of roughly CHF 4 billion and the liquidity ratio was 143% on average over the year. In the previous year, the three corresponding values were CHF 10.2 billion, CHF 1.6 billion and 118%.

In 2008, most of the 300 or so banks fulfilled the statutory minimum reserve requirements, with very few exceptions. While five banks infringed the requirements for one reporting period, one bank did so for two reporting periods. At 0.013% of total required assets, the total amounts involved were negligible. The total amount in interest that the contravening banks were required to pay came to CHF 63,679.

2.7 Collateral eligible for SNB repos

To carry out its monetary policy operations, the SNB only accepts collateral that meets certain conditions. In so doing, the SNB protects itself against losses and ensures equal treatment of counterparties. Individual securities are subject to stringent requirements with regard to liquidity and credit rating.

To secure the liquidity of the internationally oriented Swiss banking system, a wide range of collateral eligible for SNB repos is of key importance. Banks with sufficient securities that qualify as eligible at the central bank may obtain liquidity, even in difficult conditions, since these securities can be transformed into liquid assets at central banks or in the interbank market through repo transactions.

The amount of collateral eligible for SNB repos declined from approximately CHF 11,000 billion at the end of 2007 to roughly CHF 9,000 billion a year later. Securities denominated in foreign currencies accounted for 95% of this total.

2.8 Repo auctions in US dollars

The SNB started conducting US dollar repo auctions in December 2007. The operations were carried out in concert with a number of other central banks. The US Federal Reserve supplied the SNB with US dollars on the basis of a swap agreement. The SNB's repo transactions in US dollars were covered by collateral eligible for SNB repos. While these measures have no effect on the supply of money in Swiss francs, they enable the SNB's counterparties to gain easier access to US dollar liquidity.

The intensification of the financial crisis necessitated a significant expansion of transaction volumes in 2008. The amount outstanding from US dollar repo transactions increased from USD 4 billion at the end of 2007 to USD 11 billion at the end of 2008. The highest amount outstanding – USD 31 billion – was reached on 28 October 2008. The terms of the transactions ranged from a day to 84 days. Banks covered their refinancing requirements in US dollars primarily via transactions with terms of 28 to 84 days, with the result that demand in overnight auctions and one-week auctions fell overall. This allowed the SNB to suspend its overnight auctions as of 5 November 2008.

**Easing access to
USD liquidity**

2.9 Amendments to monetary policy instruments

The challenges posed by the financial crisis prompted the National Bank to review its monetary policy instruments. This led to a number of amendments. The *Guidelines of the Swiss National Bank (SNB) on Monetary Policy Instruments* were revised accordingly and entered into effect on 1 January 2009. The most significant changes are summarised below.

SNB Bills as new instrument

The National Bank saw a need for action with regard to its measures to absorb central bank money. The issue of its own debt certificates (SNB Bills) as provided for in art. 9 NBA proved to be the most suitable means of supplementing its existing monetary policy instruments. Interest on SNB Bills is payable on a discount basis, i.e. on the redemption date of the nominal amount. The denomination is CHF 1 million.

Reduction of special-rate surcharge

Until the end of 2008, the special rate for utilising the liquidity-shortage financing facility was fixed at a level of 200 basis points above the call money rate, the SNB's repo overnight index. This was high by international standards. The interest premium was reduced to 50 basis points on 1 January 2009; a move which enhances the attractiveness of the facility.

Introduction of variable rate tender procedure

Until recently, the *Guidelines of the Swiss National Bank (SNB) on Monetary Policy Instruments* had only provided for the fixed rate tender auction procedure. The interest rate defined by the SNB in fixed rate tenders may be taken as an indicator of the National Bank's monetary policy stance. However, this may not be the desired outcome, especially for more long-term operations. In repo transactions, if the supply of liquidity takes precedence over the interest rate signal being given, the SNB must have the option of carrying out a variable rate tender. This procedure can be conducted in such a way that the result of the auction gives no indication of monetary policy intentions. There are two auction procedures for variable rate tenders: the American and the Dutch allocation systems. The American system allots liquidity at the rate stated in the offer, while the Dutch system consistently allots liquidity at the lowest rate considered.

Change in publication of important monetary policy data

Under art. 7 para. 4 NBA, the SNB is required to publish data relevant to monetary policy on a weekly basis. The *Guidelines of the Swiss National Bank (SNB) on Monetary Policy Instruments* (chapter 7) describe in detail which information the SNB is required to make available in this context. Some of the information contained in the publication *Important monetary policy data* was only of limited significance for monetary policy and could, in difficult times, lead to misinterpretation. It was therefore decided to streamline the data that was published. As of January 2009, data on monetary policy operations will no longer be published weekly, but rather monthly in the SNB's *Monthly Statistical Bulletin*.

3. Ensuring the supply of cash

3.1 Organisation of cash distribution

Pursuant to art. 5 para. 2 (b) of the National Bank Act, the Swiss National Bank (SNB) is responsible for ensuring the supply and distribution of cash (notes and coins) in Switzerland. In conjunction with the commercial banks and their jointly operated organisations, as well as Swiss Post and SBB, it works to ensure an efficient and secure cash payment system.

The National Bank offsets seasonal fluctuations in the demand for cash and replaces notes and coins that are unfit for circulation. The role of retailer, which includes the distribution and redemption of banknotes and coins, is assumed by commercial banks, Swiss Post and cash processing operators.

In 2008, the National Bank's offices registered currency turnover amounting to CHF 126.7 billion, as compared with CHF 127.4 billion a year earlier. They received a total of 436.8 million banknotes (2007: 426.1 million). The value of incoming coins stood at CHF 343.3 million (2007: CHF 317.5 million), their weight at 1,761 tonnes (2007: 1,600 tonnes). The SNB examined the quantity, quality and authenticity of the notes and coins.

The agencies' turnover (incoming and outgoing) amounted to CHF 14.3 billion in the year under review, compared with CHF 14.5 billion a year earlier. Agencies are cash distribution services operated by cantonal banks on behalf of the SNB. They are responsible for the distribution and redemption of cash in the regions. In order to do this, the agencies have access to cash belonging to the National Bank.

The SNB can grant banks the authority to act as correspondents in regions where it does not have its own operations. Together with the post offices, these banks perform local cash redistribution transactions. The domestic correspondents delivered 1.8 million banknotes (2007: 1.9 million) with a total value of CHF 296.0 million (2007: CHF 314.9 million) to the National Bank.

Mandate

Role of the SNB

Turnover at offices

Turnover at agencies

Deliveries by domestic correspondents

3.2 Banknotes

Pursuant to art. 7 of the Federal Act on Currency and Payment Instruments (CPIA), the SNB issues banknotes commensurate with demand for payment purposes and takes back any banknotes which are worn, damaged or surplus to requirements due to seasonal fluctuations. It also determines the denomination and design of the notes. Particular attention is paid to the security of the banknotes. Given the speed at which counterfeiting technology advances, the effectiveness of the security features on the banknotes must be continuously checked and, if necessary, adapted. In cooperation with third parties, the SNB develops new security features that make it possible to update the security features on current banknotes and to protect new ones.

Mandate

Sharp increase in banknote circulation

In 2008, banknote circulation averaged CHF 41.3 billion (2007: CHF 38.9 billion). This sharp increase is primarily attributable to the crisis in the financial markets, which substantially boosted demand for CHF 1,000 notes. Banknotes of this denomination are often held as a store of value. In 2008, the number of banknotes in circulation amounted to 303.4 million on average (2007: 292.0 million). The strongest percentage rise was recorded for the CHF 1,000 banknotes, which increased by 15.8% (2007: 1.4%); the number of banknotes of other denominations was up by around 2.4% on average (2007: 2.3%). Given the higher demand for banknotes, the National Bank reviewed its precautionary measures in the field of cash and took steps to prevent possible cash supply shortages.

Issue and disposal

In 2008, the SNB put 107.8 million (2007: 93.5 million) freshly printed banknotes with a face value of CHF 10.3 billion (2007: CHF 7.7 billion) into circulation, and destroyed 78.8 million (2007: 85.9 million) damaged or recalled notes with a nominal value of CHF 4.9 billion (2007: CHF 5.5 billion).

Counterfeits

Roughly 3,100 counterfeit banknotes were confiscated in Switzerland in 2008 as compared with 2,800 a year earlier. The National Bank's offices discovered 70 counterfeit notes (2007: 83). By international standards, 10 seized counterfeit notes per million Swiss franc notes in circulation (2007: 10) is a relatively low figure.

Development of a new banknote series

Manuela Pfrunder, a graphic artist, further developed the banknote drafts and completed the design of the CHF 50 banknote, taking the technical aspects of the security features into account. At the end of August 2008, the SNB's Bank Council approved the design of the CHF 50 banknote and gave the go-ahead for the implementation of the technical aspects of banknote production. The first denomination of the new banknote series is scheduled to be issued in autumn 2010.



Number of banknotes in circulation
In millions

- CHF 10s: 64
- CHF 20s: 69
- CHF 50s: 37
- CHF 100s: 79
- CHF 200s: 31
- CHF 1,000s: 23

Annual average for 2008

3.3 Coins

The SNB is entrusted by the Confederation with the task of coin circulation. Its role is defined in art. 5 CPIA. It takes over the coins minted by Swissmint and puts into circulation the number required for payment purposes. Coins that are surplus to requirements are taken back against reimbursement of their nominal value. The National Bank's coinage services are not remunerated, as they constitute part of the mandate to supply the country with cash.

In 2008, the average value of coins in circulation was CHF 2.6 billion (2007: CHF 2.5 billion), which corresponds to 4,535 million coins (2007: 4,407 million). The consistently strong demand for coins observed since spring 2006 thus continued. This is likely to be due to the persistently robust consumer demand, the lively tourist industry and special factors such as the 2008 European Football Championship.

Mandate

Coin circulation

4 Facilitating and securing cashless payment transactions

Mandate

In accordance with art. 5 para. 2 (c) of the National Bank Act (NBA), the Swiss National Bank (SNB) facilitates and secures the operation of cashless payment systems. Art. 9 NBA empowers the SNB to keep accounts (SNB sight deposit accounts) for banks and other financial market participants.

4.1 Facilitating cashless payment transactions

Banks and other selected financial market participants conduct a large proportion of their mutual payment transactions through the Swiss Interbank Clearing (SIC) system, which is steered by the SNB. Having an SNB sight deposit account is a prerequisite for participating in the SIC system.

SIC: A real-time gross settlement system

SIC is a real-time gross settlement system. Such systems settle payments individually – and only if there is sufficient cover for the transaction – through the accounts of the system participants. Once executed, transactions are irrevocable and final; they are comparable with cash payments. The SIC system is operated by SIX Interbank Clearing Ltd, a subsidiary of SIX Group Ltd, on behalf of the SNB.

SNB steers SIC

The National Bank steers the system. It transfers liquidity from the master accounts at the SNB to the settlement accounts in the SIC system at the start of each clearing day and transfers the balances from the settlement accounts back to the master accounts at the end of the clearing day. Legally, the two accounts form a unit. The clearing day in the SIC system starts at 5.00 p.m. and ends at 4.15 p.m. the following day. The SNB monitors operations and ensures that there is sufficient liquidity by granting, when necessary, intraday loans to banks against collateral. In addition, the National Bank is responsible for crisis management.

SIC agreements

The SIC agreement concluded between the SNB and SIX Interbank Clearing Ltd entrusts the latter with providing data processing services for the SIC system. The relationship between the SNB and the holders of sight deposit accounts is governed by the SIC giro agreement.

The SNB also influences the development of the SIC system on a conceptual level. Based on the SIC agreement, the National Bank authorises modifications and upgrades to the system. It made use of this power when it authorised the installation of a third data processing centre of SIX Group Ltd, one which is located outside the Zurich region. This new processing centre – which can be quickly put into operation should the two main processing centres fail at the same time – is scheduled to be operational in the course of 2009. The SNB also exerts its influence on the Board of Directors of SIX Interbank Clearing Ltd (on which it has a seat) and in a number of technical working groups.

At the end of 2008, 356 participants were connected to the SIC system, as compared with 347 the previous year. The SIX Interbank Clearing Ltd data processing centre settled approximately 1.5 million transactions each day amounting to CHF 229 billion. On peak days, up to 4.4 million transactions and volumes of up to CHF 343 billion were processed. The total number of transactions handled by the SIC system increased by 4.2% and turnover was up roughly 11%.

Key figures on SIC system

	2004	2005	2006	2007	2008
Transactions (in thousands)					
Daily average	816	1 009	1 264	1 421	1 468
Peak daily value for the year	2 215	2 690	3 844	4 167	4 350
Volume (in CHF billions)					
Daily average	163	161	179	208	229
Peak daily value for the year	273	247	318	337	343
Amount per transaction (in CHF thousands)					
	200	160	141	146	156
Average liquidity (in CHF millions)					
Sight deposits, end of day	5 339	4 856	5 217	5 470	8 522
Intraday liquidity	6 188	6 340	7 070	8 828	9 515

In addition to the banks, non-banks (i.e. other financial market participants) also have SNB sight deposit accounts and are thus able to participate in the SIC system. These participants include companies that operate commercially on the financial markets. Sight deposit account holders in this category currently include PostFinance, securities dealers and institutions that are of importance either for the implementation of monetary policy or for handling payment transactions (at present, five cash-processing institutions). Not all sight deposit account holders participate in the SIC system. SNB figures show a total of 466 sight deposit account holders as at 31 December 2008 (2007: 457). Of these, 308 were domiciled in Switzerland (2007: 306). Of the account holders, 10 were non-banks (2007: 10).

At the beginning of 2008, a new financial holding company was established in Switzerland – Swiss Financial Market Services (SFMS). SFMS was the result of a merger of the country's three leading financial market infrastructure companies, the SWX Swiss Exchange Association, SIS Swiss Financial Services Group AG and Telekurs Holding Ltd. Renamed as SIX Group Ltd in August 2008, the new holding company operates the Swiss financial market infrastructure. With approximately 3,600 staff in 23 countries, it provides a wide range of services, including securities trading and settlement, financial information and payment transactions. The SNB fulfils important tasks for different areas of SIX Group business. For instance, payment streams in the SIC system – a key element in the Swiss Value Chain – pass through SNB sight deposit accounts. With its money market transactions, the National Bank provides the liquidity required for the smooth functioning of the Swiss financial market infrastructure. In addition, it makes major contributions with respect to the design and planning of installations and processes.

4.2 Oversight of payment and securities settlement systems

The NBA (art. 5 para. 2 (c) and arts. 19–21 NBA) requires the SNB to oversee systems for the clearing and settlement of payments (payment systems) and transactions involving financial instruments, especially securities (securities settlement systems). It empowers the National Bank to impose minimum requirements on the operation of systems that might be a source of risk to the stability of the financial system. The National Bank Ordinance (NBO) lays down the details of system oversight (arts. 18–39 NBO).

2004

2005

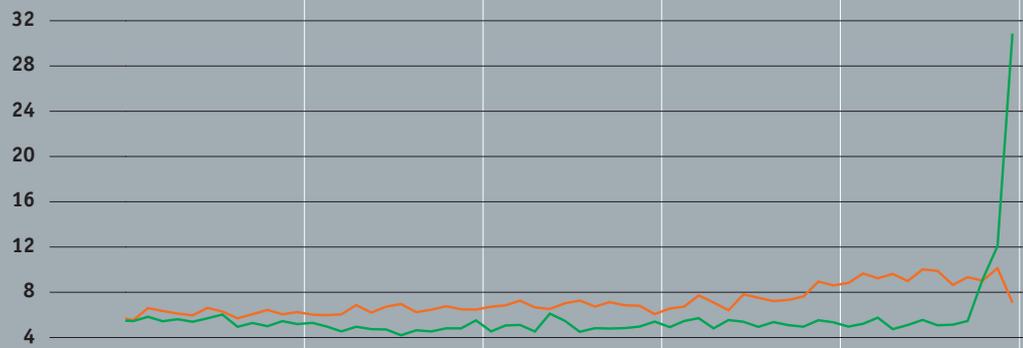
2006

2007

2008

Liquidity in SIC

— Intraday drawdowns by banks
— Sight deposits
 Monthly averages of daily figures, in CHF billions



Transactions and turnover in SIC

— Number of transactions (in millions)
— Turnover (in CHF 100 billions)
 Monthly averages of daily figures



2004

2005

2006

2007

2008

Focus on systemically important systems

At present, the systems that could harbour risks for the stability of the financial system include the SIC system, the SECOM securities settlement system and the central counterparty x-clear. The operators of these systems must meet the minimum requirements set out in arts. 22–34 NBO. The SNB has provided further details on these minimum requirements in its system-specific control objectives. Other systems that are important for the stability of the Swiss financial system are the Continuous Linked Settlement (CLS) foreign exchange settlement system, whose operator is based in the US, and the central counterparty LCH.Clearnet Ltd (LCH) domiciled in the UK. CLS and LCH are exempted from the obligation to meet the minimum requirements because they are already subject to adequate oversight by their local regulators and there is a smooth exchange of information with the SNB.

Cooperation with FINMA

SIX SIS Ltd and SIX x-clear Ltd, which operate the SECOM and x-clear systems respectively, both hold banking licences and are subject to prudential supervision by the Swiss Financial Market Supervisory Authority (FINMA) as well as to system oversight by the SNB. While prudential supervision aims primarily at protecting individual creditors, system oversight focuses on the functioning of the financial system and the risks to which it is exposed. Although FINMA and the SNB exercise their supervisory and oversight powers separately, they coordinate their activities as stipulated by law so as to avoid duplication (art. 21 para. 1 NBA and art. 23^{bis} para. 4 Banking Act). This applies in particular to the collection of information required for the supervision of institutions and the oversight of systems. When assessing whether a system operator complies with the minimum requirements, the SNB relies – as far as possible – on the information already gathered by FINMA.

Cooperation with authorities abroad

The SNB cooperates with authorities abroad in the oversight of cross-border payment and securities settlement systems. In the case of CLS, the Federal Reserve Bank of New York – which is the authority with primary responsibility for its oversight – works with all central banks whose currencies are settled through this system. In 2008, the SNB signed a protocol that governs the rights and obligations of the central banks involved in the coordinated oversight of CLS. As regards the central counterparties LCH and x-clear (the latter qualifies as a recognised overseas clearing house (ROCH) in the UK), the SNB and FINMA cooperate with the Financial Services Authority (FSA) and the Bank of England. The details of this cooperation between the British and Swiss authorities are set out in a memorandum of understanding.

Finally, the SNB participates – together with the other central banks in the Group of Ten (G10) and under the leadership of the Belgian central bank – in the oversight of the Belgium-based Society for Worldwide Interbank Financial Telecommunication (SWIFT), which operates a global network for the transmission of financial information. Oversight focuses on those activities of SWIFT that are of significance for financial stability in general and for the functioning of financial market infrastructures in particular.

In 2008, the SNB once again assessed compliance with its control objectives by the bodies operating the SIC, SECOM and x-clear systems. The assessment covered the operators' corporate governance, the management and monitoring of settlement risk, and the systems' IT and information security. The National Bank concluded that compliance with the control objectives was high in all areas assessed. In fact, the system operators had even improved on the previous year's results owing to the deployment of targeted measures.

Compliance with control objectives high

SIX Interbank Clearing Ltd, SIX SIS Ltd and SIX x-clear Ltd have been operating since the beginning of 2008 as SFMS and latterly as SIX Group Ltd. Following reviews of the system operators, the SNB concluded that, also after the merger, these companies continue to be well-structured and well-managed, with adequate internal systems of control.

Corporate governance

The SIC, SECOM and x-clear systems have rules and procedures in place which contribute to the reduction of settlement risk. The instruments they are using for the ongoing capture, limitation and monitoring of the credit and liquidity risks are adequate.

Risk management

To assess the systems' IT and information security, the SNB relies mainly on external auditors. In 2008, the audits focused on information security policies, security organisation, staff security, and system development and maintenance. The auditor's report concluded that compliance with the defined control objectives was high.

IT and information security

The importance of smoothly functioning and risk-minimising payment and securities settlement systems became particularly apparent in the difficult environment brought about by the financial crisis. The SIC, SECOM and x-clear systems proved to be effective and helped to ensure that the financial markets were not additionally burdened by this area of business. Despite the increased counterparty risk, it was still always possible to clear and settle volumes and turnover, which at times reached record levels, without difficulty. This was attributable in part to the various risk-reducing characteristics of the systems, such as the flexible supply of intraday liquidity for the settlement of interbank payment transactions as well as the settlement of securities transactions based on the delivery-versus-payment principle. In the case of the central counterparty x-clear, the increased market volatility manifested itself in particular through higher margin requirements being imposed on the participants; these requirements were always met in good time, however. The UK bank Lehman Brothers International (Europe), which had been a direct participant in x-clear until its bankruptcy in September 2008, was excluded by x-clear in accordance with the default rules and procedures. Neither x-clear nor the other participants suffered any financial damages or losses as a result.

System effectiveness in the financial crisis

Other principal areas of systems oversight

The SNB continued to support the system operators' plans to establish an additional national data processing centre. It also worked towards further improving the financial sector's provisions for a possible operational crisis. This project is being coordinated by the steering committee on business continuity planning in the Swiss financial centre, which includes representatives from the system operators, the larger banks, FINMA and the SNB.

4.3 TARGET2-Securities

T2S in the euro area

In July 2008, the European Central Bank (ECB) decided to launch the TARGET2-Securities (T2S) project, a new securities settlement system. T2S aims to replace the various national systems currently in operation, either totally or partially, and to drastically reduce the cost of settling cross-border securities transactions within the euro area. The service is due to be operational in 2013.

Participation of SIX SIS Ltd

Prior to the launch of the T2S project, SIX SIS Ltd communicated to the ECB its interest in adopting the services provided by T2S for euro-denominated securities. For Swiss financial market participants, this would facilitate a more cost-effective cross-border settlement of securities. The ECB welcomed the request and included SIX SIS Ltd as a member of its project team's advisory group. The SNB backs the participation on the condition that SIX SIS Ltd can continue to provide it with services of the same quality standards as at present.

No inclusion of Swiss franc

Although T2S is designed first and foremost to settle euro transactions, it can also accommodate settlement in other currencies. According to analyses conducted by SIX SIS Ltd and the banks, the advantages of participation for Swiss franc-denominated securities are limited. The SNB examined the monetary policy and operational aspects of a possible inclusion of securities settlement in Swiss francs and concluded that, also from this point of view, inclusion was not a priority. The ECB was informed to this effect in December 2008.

5 Asset management

5.1 Basic principles

Under art. 5 para. 2 of the National Bank Act (NBA), the SNB is responsible for managing the currency reserves. Asset management is governed by the primacy of monetary policy and is carried out in accordance with the criteria of security, liquidity and return. The SNB's own *Investment Policy Guidelines* define the scope for investments and for the investment and risk control process. Within this framework, investments are made in line with the principles of modern asset management. Investment diversification aims at achieving an appropriate risk/return profile. The guidelines were amended with effect from November 2008.

Mandate

The National Bank's assets essentially consist of foreign exchange reserves, gold and financial assets in Swiss francs (securities and claims from repo transactions). They fulfil important monetary policy functions. Their composition is determined mainly by the established monetary order and the requirements of monetary policy. Some of the assets, including claims from repo transactions, are used directly for the implementation of monetary policy. Using repo transactions, the SNB supplies commercial banks with liquidity in the form of base money by purchasing securities from them. The SNB holds currency reserves – in the form of foreign exchange and gold – in order to ensure it has room for manoeuvre in monetary policy at all times. These reserves also serve to build confidence and to prevent and overcome potential crises.

Function of assets

Both the range and volume of the SNB's assets increased sharply in 2008. This was a reflection of the special measures taken by the National Bank to ensure that generous amounts of liquidity were supplied. In addition to the claims from repo transactions in Swiss francs, claims from repo transactions in US dollars also registered an increase. EUR/CHF swaps that have been carried out since October as well as the loan to the stabilisation fund were reflected in two new balance sheet items, *balances from swap transactions against Swiss francs* and *loan to stabilisation fund* (cf. chapter 6.2).

Assets from special measures

5.2 Investment and risk control process

Responsibilities of Bank Council and Risk Committee

The NBA defines the SNB's responsibilities and describes in detail its mandate with regard to asset management. The Bank Council is charged with the integral oversight of the investment and risk control process. Its role is to assess the underlying principles and monitor compliance with them. The Risk Committee – which is composed of three members of the Bank Council – supports the Bank Council in this task. In particular, it monitors risk management. All internal risk management reporting is addressed directly to the Governing Board and the Risk Committee. To avoid conflicts of interest, operational responsibilities for monetary policy and investment policy operations are largely kept separate.

Responsibilities of Governing Board

The Governing Board defines the requirements with regard to the security, liquidity and return of investments, as well as the eligible currencies, investment categories, instruments and debtors. It decides on the composition of the currency reserves and other assets, and normally sets the investment strategy once a year. The investment strategy encompasses the allocation of total assets to the different portfolios and the guidelines for their management, in particular the allocation to different currencies and investment categories, and the leeway for active management at operational level.

Responsibilities of Investment Committee and Portfolio Management

An internal committee, the Investment Committee, determines the tactical allocation of the assets at operational level. Within the strategically prescribed range, it adjusts currency weightings, maturities and allocations to the different investment categories. The management of the individual portfolios is the responsibility of Portfolio Management. The majority of investments are managed by internal portfolio managers. External asset managers are used to obtain efficient access to special investment categories and to conduct performance comparisons with internal portfolio management.

The investment strategy is based on central bank-specific requirements and comprehensive risk/return analyses. Risk management and limitation are carried out by means of a system of reference portfolios, guidelines and limits. All relevant financial risks on investments are identified, assessed and monitored continuously. Risk measurement is based on standard risk indicators and procedures. In addition to these procedures, sensitivity analyses and stress tests are carried out on a regular basis. The National Bank's comparatively long-term investment horizon is taken into account in all of these risk analyses. To manage and assess credit risk, information from major rating agencies, market indicators and in-house analyses is used. Credit limits are set based on this information and adjusted whenever the assessment of counterparty risk changes. Concentration and reputation are also factored in when determining risk limits. Risk indicators are aggregated across all investments. Compliance with the guidelines and limits is monitored daily. Quarterly risk reports for the attention of the Governing Board and the Bank Council's Risk Committee document the results of risk management activities.

5.3 Breakdown of assets

The SNB's total assets registered a significant year-on-year rise as a result of the various special measures taken in the area of monetary policy. The SNB's currency reserves totalled CHF 78 billion at year-end 2008. Gold accounted for CHF 31 billion of this amount and foreign exchange reserves for CHF 47 billion. In addition, foreign exchange swaps (CHF/EUR) resulted in a euro balance worth around CHF 50 billion. In addition to foreign currency holdings, the SNB held roughly CHF 54 billion in Swiss franc assets in the form of claims from repo transactions and bond investments. Claims from repo transactions in US dollars amounted to approximately CHF 12 billion at year-end, at times significantly surpassing this figure during the course of the year. The loan to the stabilisation fund amounted to CHF 15 billion. Overall, the balance sheet total grew from CHF 127 billion to CHF 214 billion.

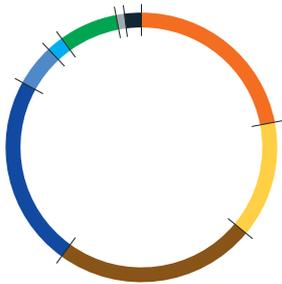
Gold holdings

On 14 June 2007, the SNB announced its intention to sell 250 tonnes of gold. The proceeds were used to increase the foreign exchange reserves. By rearranging its assets in this way, the SNB sought to attain a more balanced allocation of its currency reserves to foreign exchange and gold. The gold sales were being conducted in the context of the second Central Bank Gold Agreement of 8 March 2004. The National Bank concluded these sales in September 2008. Its gold holdings now total 1,040 tonnes.

Debtor categories and instruments

At the end of 2008, the foreign exchange bond portfolios and Swiss franc bonds comprised government and quasi-government bonds as well as bonds issued by international organisations, local authorities, financial institutions and other companies. In the case of foreign exchange reserves, a limited number of secured and unsecured money market investments were also made at banks. The equity portfolios were managed on a purely passive basis, with broad market indices in euros, US dollars, yen, pounds sterling and Canadian dollars being replicated. To avoid any conflicts of interest with monetary policy, only corporate bonds and equities issued by foreign companies were held. A small portion of gold holdings was used in the form of secured gold lending transactions at year-end.

In the case of foreign exchange reserves, exchange rate and interest rate risks were managed using derivative instruments, such as interest rate swaps, interest rate futures, forward foreign exchange transactions and foreign exchange options. In addition, futures on equity indices were used to manage the equity investments.



Breakdown of National Bank assets In percent

Foreign exchange reserves 22

Gold reserves 14

EUR/CHF swaps 24

Claims from Swiss franc
repo transactions 23

Claims from US dollar
repo transactions 5

Securities in Swiss francs 2

Loan to stabilisation fund 7

Monetary institutions 1

Other assets 2

Total: CHF 214 billion
At year-end 2008

Breakdown of foreign exchange reserves and Swiss franc bond investments

	2007		2008	
	Foreign exchange reserves	CHF bonds	Foreign exchange reserves	CHF bonds
Currency allocation incl. derivative positions				
CHF	–	100%	–	100%
USD	28%	–	29%	–
EUR	47%	–	50%	–
JPY	10%	–	9%	–
GBP	10%	–	10%	–
Other (CAD, DKK)	5%	–	2%	–
Investment categories				
Money market investments	2%	–	3%	–
Government bonds ¹	61%	44%	66%	40%
Other bonds ²	25%	56%	19%	60%
Equities	12%	–	12%	–
Risk indicators				
Duration of bonds (years)	4.1	5.0	4.1	4.9

1 Government bonds in their own currencies; in the case of CHF investments, also bonds issued by Swiss cantons and municipalities.

2 Government bonds in foreign currencies as well as bonds issued by foreign local authorities and supranational organisations, Pfandbriefe, corporate bonds, etc.

As part of fixed-income investments, the proportion of government bonds was increased at the expense of mortgage-backed bonds. This was achieved in that the US mortgage-backed securities portfolio was dissolved at the beginning of 2008, and – at a later point – Danish mortgage-backed securities were sold as well. The only change in the currency allocation of the foreign exchange reserves was that investments in Danish kroner were shifted into euros. The proportion invested in equities remained unchanged. Since gold was sold in favour of the foreign exchange reserves during the course of the year, the proportion of currency reserves held as gold was lower at the end of 2008 than in the previous year.

5.4 Investment risk profile

The main risk to investments is market risk, i.e. gold price, exchange rate, share price and interest rate risks. Market risk is managed primarily through diversification. The SNB counters liquidity risks by holding a considerable part of its investments in the world's most liquid currencies and investment markets. To a limited extent, it also enters into credit risk. The risk incurred in connection with the loan to the stabilisation fund is discussed in the section on financial information on the SNB StabFund Limited Partnership for Collective Investment from p. 158.

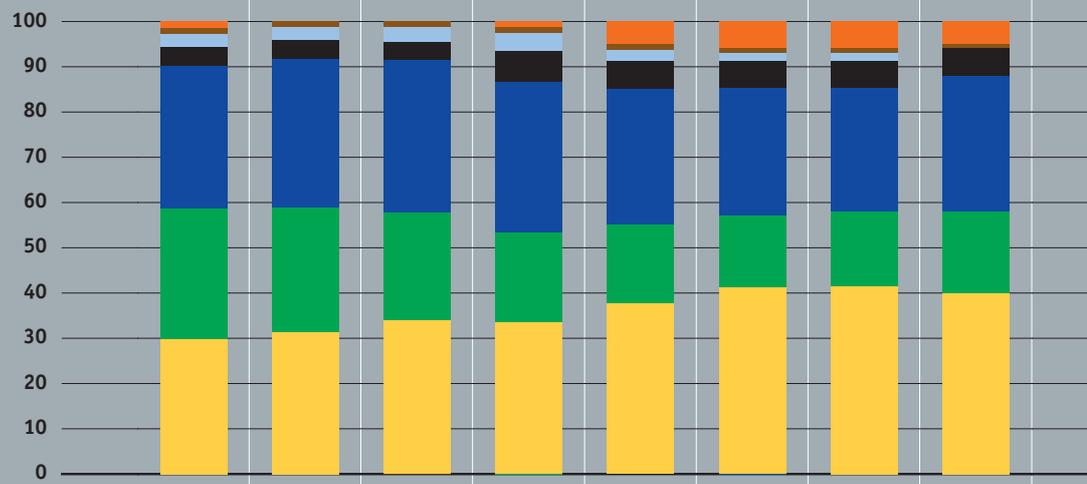
The allocation of foreign exchange reserves to several currencies and the diversification into several investment segments have contributed to an even risk/return profile of the currency reserves. The duration of fixed-income investments in 2008 was approximately four years. The SNB only entered into credit risk to a limited extent. The price of gold and exchange rates continued to be the dominant risk factors. Currency risk on foreign exchange reserves is, in principle, not hedged against Swiss francs. Changes in the valuation of the Swiss franc, therefore, have a direct impact on the value of the foreign exchange reserves. Consequently, the Swiss franc's appreciation in 2008 led to a corresponding loss in the value of foreign exchange reserves.

Breakdown of foreign exchange reserves

- Gold
- USD
- EUR
- GBP
- DKK
- CAD
- JPY

In percent

Excluding surplus gold and interim investment of the corresponding sales proceeds (formerly 'free assets')



... of monetary policy transactions

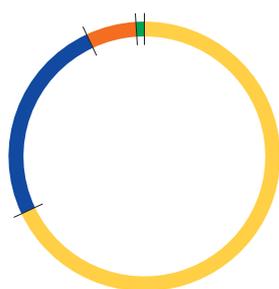
Monetary policy repo transactions posed virtually no risk. Given their very short maturities, they did not involve any interest rate risk. Moreover, credit risk was minimal, since the claims were secured by first-class collateral. The collateral was revalued twice daily and any shortfall had to be covered immediately. Repo transactions in US dollars were subject to the same collateral standards. Since dollar liquidity was provided by way of a swap agreement with the US Federal Reserve, there was no direct exchange rate or interest rate risk involved. In the case of swap transactions against euros for the provision of Swiss franc liquidity, the SNB did not incur any exchange rate and interest rate risk either, and practically no credit risk. Credit risk was limited by deducting a percentage haircut from the reference rate. Moreover, the SNB retains the right to request additional collateral, if the cover posted in euros falls below the CHF amount outstanding.

... of Swiss franc investments

The Swiss franc bonds were managed passively. Their structure in terms of maturities and credit ratings was largely in line with the Swiss Bond Index for rating categories AAA and AA across the entire maturity spectrum. The duration was five years.

Credit risk

The SNB was exposed to credit risk by purchasing bonds of various debtors and debtor categories. These include bonds of public and supranational issuers as well as mortgage bonds (Pfandbriefe) and similar instruments. In addition, corporate bond portfolios totalling roughly CHF 2 billion were held. Credit risk arising from non-tradable instruments was incurred towards banks in the form of fixed-term deposits (CHF 1.2 billion) and replacement values of derivatives of CHF 0.0 billion. Gold lending (CHF 3.3 billion) did not entail any significant credit risk, as these operations were secured by bonds with above-average credit ratings. Although credit risk tolerance has increased in recent years, the average rating of the SNB's investments was high. A total of 68% of the investments had a AAA rating. As in 2007, the lowest rating category still eligible for investment – BBB – accounted for approximately 1% of total investments at year-end.



Rating allocation of investments¹
In percent

AAA	68
AA	25
A	6
BBB	1

At year-end 2008
¹ Excluding shares and monetary policy transactions.

The SNB has high standards with regard to the liquidity of its investments. More than three-quarters of the foreign exchange reserves were denominated in the two major currencies, euro and US dollar, with highly liquid government bonds accounting for a large proportion of these.

5.5 Implications of the financial crisis

In the wake of the financial crisis, risk premia rose and market liquidity dried up in several investment categories. Government bonds, however, were sought after. Given the dual structure of foreign exchange reserves – with roughly two-thirds invested in government bonds and the rest in other bonds and equities – the higher level of risk aversion had both a positive and negative effect on the investment portfolio. US government bonds in US dollars as well as bonds from Germany and France denominated in euros were liquid at all times, firming significantly as a result of the sharp drop in interest rates. By contrast, the financial crisis had a negative impact on the remaining proportion of the foreign exchange reserves. Risk premia on corporate bonds, covered bonds and similar instruments rose sharply, with their marketability being limited at times. The value of the equity portfolio registered a significant loss. On the whole, gains on bonds and losses on equities more or less balanced each other out.

With the exception of the yen, the Swiss franc appreciated markedly against all the major investment currencies, resulting in significant exchange rate losses on foreign exchange reserves. The value of the gold holdings declined as well.

5.6 Investment performance

As a result of the special measures taken in the area of monetary policy, the SNB's investment performance is only calculated across the currency reserves (foreign exchange reserves and gold) and Swiss franc bonds, while the return on monetary policy operations is excluded from the calculation of return. A return on monetary policy operations would only provide limited information, since a part of these transactions have corresponding interest-bearing liabilities.

Among the foreign exchange reserves, losses on equities were offset by gains on government bonds. In local currency terms – i.e. before taking the appreciation of the Swiss franc into account – a slightly positive total return was generated overall. As a result of the stronger Swiss franc, the foreign exchange reserves nevertheless recorded a 8.7% loss. The Swiss franc also firmed against gold, resulting in a drop in the value of gold holdings of 2.2%. Overall, the loss on currency reserves amounted to 6.0%. At 5.4%, the return on Swiss franc bonds was above average.

Return on investments¹

	Currency reserves		Foreign exchange reserves			CHF bonds
	Total	Gold	Total	Return on foreign exchange reserves	Return in local currency	Total
1999			9.7%	9.2%	0.4%	0.7%
2000	3.3%	-3.1%	5.8%	-2.0%	8.0%	3.3%
2001	5.2%	5.3%	5.2%	-1.2%	6.4%	4.3%
2002	1.4%	3.4%	0.5%	-9.1%	10.5%	10.0%
2003	5.0%	9.1%	3.0%	-0.4%	3.4%	1.4%
2004	0.5%	-3.1%	2.3%	-3.2%	5.7%	3.8%
2005	18.9%	35.0%	10.8%	5.2%	5.5%	3.1%
2006	6.9%	15.0%	1.9%	-1.1%	3.0%	0.0%
2007	10.1%	21.6%	3.0%	-1.3%	4.4%	-0.1%
2008	-6.0%	-2.2%	-8.7%	-8.9%	0.3%	5.4%

¹ Sum of direct income and realised and unrealised price changes on holdings.

6. Contribution to financial system stability

Pursuant to art. 5 para. 2 (e) of the National Bank Act (NBA), the Swiss National Bank (SNB) is obliged to contribute to the stability of the financial system. The SNB makes every effort to identify any potential risks to the stability of the financial system at an early stage. It also plays an active role in creating a regulatory environment that promotes stability. In so doing, it works in conjunction with the Swiss Financial Market Supervisory Authority (FINMA), which started its activities in January 2009 and comprises the following three former authorities which the SNB had worked with until then: the Federal Office of Private Insurance, the Anti-Money Laundering Control Authority and the Swiss Federal Banking Commission (SFBC).

Mandate

The SNB's activities in 2008 in the area of financial stability were shaped extensively by the financial crisis. Together with the SFBC, the SNB followed developments in the banking system with close attention and growing concern. After the crisis intensified in March 2008, the situation in the international financial system took a dramatic turn for the worse in the autumn. The international economic environment deteriorated rapidly, and an increasing number of financial institutions found themselves facing serious difficulties. In response, a number of governments began supporting their financial systems through wide-ranging recapitalisation measures and guarantees. The situation at UBS, the largest Swiss bank, which had already been among the banks hardest hit at the onset of the crisis, again worsened considerably. In the light of these events, the Federal Council, the SFBC and the SNB adopted a package of measures to strengthen the Swiss financial system.

Activity shaped by financial crisis

Already in the early stages of the crisis, the SNB began assessing what lessons had to be learned. It came to the conclusion that the big banks' capital base and liquidity needed to be substantially increased, and it actively supported the SFBC's efforts in this regard.

Lessons for the SNB from financial crisis

6.1 Monitoring the financial system

In June 2008, the SNB published its annual *Financial Stability Report*. The report focused primarily on the financial market turbulence and the deterioration in the international economic situation. What came as a surprise was the international dimension and the speed with which the problems on the US market for sub-prime mortgage loans spilled over into other credit markets. The fact that liquidity in some markets dwindled to almost nothing was also unexpected. This drying-up of international credit markets hampered banks' refinancing efforts and led to serious difficulties in liquidity provision. The crisis reached an initial peak in March 2008, when the collapse of the US investment bank Bear Stearns was prevented only owing to the merger with JPMorgan Chase which was supported by the US Federal Reserve.

Financial crisis and worsening economic environment

Varying impact on individual bank groups

It was also apparent from the *Financial Stability Report* that the financial market turbulence had affected individual Swiss bank groups to varying degrees. The big banks – especially UBS – suffered substantial losses on their trading portfolios. These losses were so heavy that UBS was forced to recapitalise twice in the first half of 2008. The cantonal, regional and Raiffeisen banks, by contrast, benefited from the still-favourable economic developments, with some reporting record earnings.

Worsening of crisis in autumn

Autumn 2008 saw a further escalation of the financial market crisis. The US real estate market continued to deteriorate, and risk premia for large international banks' debts reached historical peaks. The situation on the interbank market grew constantly worse, with risk premia, especially for unsecured loans, climbing to record levels. Moreover, interbank loans were granted for only the shortest terms. From September, a growing number of financial institutions began to experience difficulties. The most high-profile victims were the two US mortgage institutions, Freddie Mac and Fannie Mae, which were placed under federal control at the beginning of September.

State support

The nationalisation of Freddie Mac and Fannie Mae was followed, in the space of only a few days, by the takeover of the investment bank Merrill Lynch by Bank of America, the bankruptcy of another investment bank, Lehman Brothers, and the rescue of insurer AIG through a loan from the US Federal Reserve. The collapse of Lehman Brothers in mid-September led to an acute loss of confidence in the financial markets, prompting a number of governments to implement assistance packages. Action by the US government included a USD 700 billion relief package; by the end of 2008, around half of that amount had been used to recapitalise financial institutions. In addition, the US government guaranteed an estimated USD 2,250 billion worth of debt certificates. European countries also provided generous funding in order to strengthen banks' capital. In particular, Belgium, Germany, France, Ireland, the Netherlands and the UK provided capital injections of between EUR 10 billion and EUR 80 billion, part of which was already released to banks in 2008. Moreover, numerous countries, including Germany, France, Ireland, the United Kingdom and Spain, provided guarantees of up to EUR 500 billion for their banks' debt certificates.

6.2 Purchase of illiquid assets from UBS

In Switzerland, it has been clear since summer 2007 that the big banks would be hit hard by the financial crisis as a result of their exposure to the market for mortgage-backed securities and their commitments in the area of leveraged finance. This applied in particular to UBS, which had to take extensive measures to strengthen its capital base. In spite of the steps taken in this regard, the bank came under intense pressure in autumn 2008. Given the systemic importance of the big banks, the Federal Council, the SNB and the Swiss Federal Banking Commission (SFBC) adopted a package of measures in mid-October to strengthen the Swiss financial system. The central element of this package is the possibility to transfer illiquid assets of UBS not exceeding USD 60 billion to a special purpose vehicle (SPV) of the National Bank so as to facilitate an orderly liquidation. The Confederation, for its part, strengthened the UBS capital base by subscribing to mandatory convertible notes in the amount of CHF 6 billion. An offer to purchase illiquid assets was also extended to CS Group. However, it refrained from making use of it.

The National Bank had been intensifying its monitoring of the big banks since the onset of the financial crisis and, since autumn 2007, had started laying the groundwork for several support measures. When the collapse of Bear Stearns in spring 2008 triggered another financial crisis wave, the SNB also drew up a concept for the potential purchase of illiquid UBS assets. This occurred in close cooperation with the federal government and the SFBC. Following the Lehman Brothers bankruptcy in mid-September, UBS's problems deepened, prompting the National Bank to push ahead with its preparations and step up its dialogue with UBS.

On 14 October 2008, UBS asked the Federal Council, the SFBC and the SNB that the package of measures drawn up be initiated. On the same day, the SFBC informed the National Bank that the situation at UBS could potentially deteriorate in the coming days to such an extent that it jeopardised the bank's stability. It therefore recommended that the plan of action be implemented in its entirety and without delay. The SFBC also confirmed that UBS was solvent in accordance with the applicable supervisory provisions. On 15 October 2008, the Governing Board approved the package of measures. On the same day, the National Bank informed the Federal Council of its willingness to grant a loan to the SPV to purchase the illiquid assets of UBS provided that the federal government, for its part, would guarantee the planned recapitalisation of UBS. On 16 October 2008, the public was informed about the package of measures.

Overview

**Laying the
groundwork for ...**

**... and initiating the
package of measures**

Main transaction components

The main components of the transaction are laid down in a term sheet signed by UBS and the SNB on 15 October 2008 whose salient features are set out below.

Transfer of assets to SPV

UBS can transfer illiquid securities and other assets in the maximum amount of USD 60 billion to the SNB StabFund Limited Partnership for Collective Investment (stabilisation fund). The stabilisation fund will acquire the UBS assets to be transferred by the end of March 2009 at the prices as at 30 September 2008, either at UBS book value, or at the value the SNB determines on the basis of independent expert opinions. The lower value will apply. Assets transferred to the stabilisation fund after March 2009 (by the end of September 2010 at the latest) will be purchased on the basis of the same method, at each preceding end-of-quarter valuation.

Capitalisation of stabilisation fund

The stabilisation fund will be capitalised via two channels. First, the National Bank will sell a purchase option to UBS on the fund's equity at a price of 10% of the assets purchased, yet not exceeding USD 6 billion. Second, the SNB will grant a loan to the stabilisation fund in the amount of 90% of the assets purchased, yet not exceeding USD 54 billion.

UBS will pay the premium to exercise the purchase option to the stabilisation fund's two partners, LiPro (LP) AG and StabFund (GP) AG. The payment to LiPro (LP) AG amounts to a maximum of USD 5.998 billion and the one to StabFund (GP) AG, a maximum of USD 2 million. The contributions will be made in step with the transfer of assets.

Loss protection

The UBS equity contribution of 10% of the portfolio serves as primary loss protection. In addition, the SNB has a warrant for 100 million UBS shares (currently 3.41% of total UBS equity), should it incur a loss on its loan upon liquidation of the assets. This warrant serves as secondary loss protection.

Income generated by stabilisation fund

The income generated by the stabilisation fund from interest and capital repayments as well as from sales of assets – after expenses have been covered – will be primarily used for loan interest and loan repayment. The management compensation for UBS will only be paid after the loan has been repaid in full.

UBS purchase option

Once the SNB loan has been repaid in full, UBS may exercise its purchase option to repurchase the stabilisation fund for USD 1 billion, plus 50% of the fund's market value determined at the time of the transaction.

SNB sale of stabilisation fund

In the event of a change of control at UBS, the SNB has the right, but not the obligation, to request that UBS repurchase the stabilisation fund.

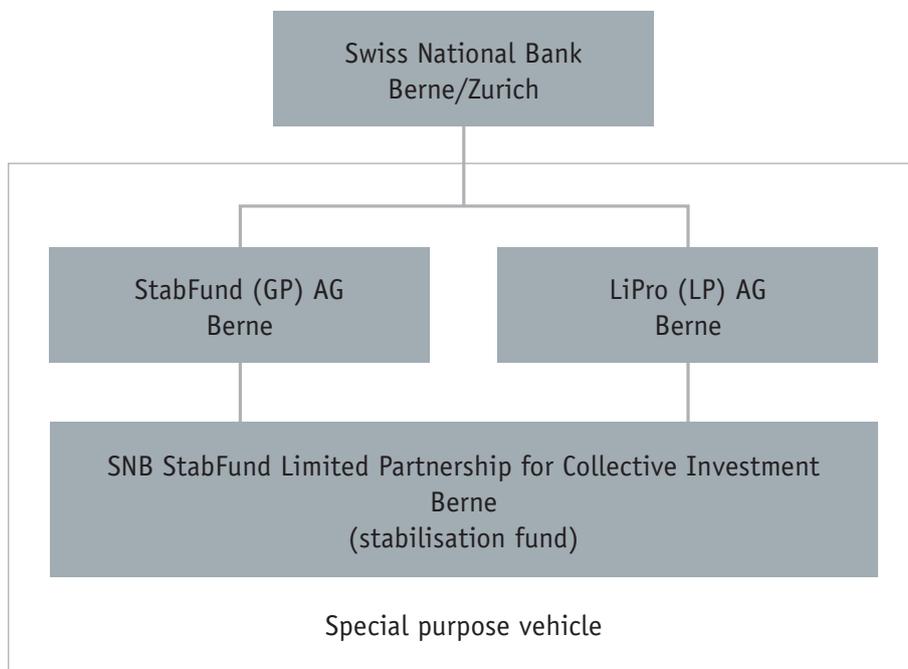
In consultation with the SFBC, the SNB stipulated that the purchase of assets was explicitly conditional on investors' commitment to provide UBS with additional tier 1 capital amounting to at least CHF 6 billion. At the same time, UBS committed to adhere to best practices for compensation schemes and policies to be laid down in consultation with the SFBC. Both of these conditions were set down in a memorandum of understanding, also dated 15 October 2008.

For company considerations and because of liability and tax law implications, the transaction was carried out via a special purpose vehicle. The agreement with UBS had stipulated that the SPV be established as a limited partnership under Cayman Islands law. The Cayman Islands limited partnership has been used for many comparable structures in the past. It is therefore tried and tested and can be implemented within a very short period of time. Consequently, this legal form provided a comprehensible and credible solution for international financial markets. This choice met with some criticism in the Swiss population, however. The National Bank therefore decided already before the end of October to investigate whether a corresponding structure could be set up in Switzerland.

The establishment of a limited partnership for collective investment proved to be an almost equally suitable solution. It is a corporate structure that was introduced in 2006, when the Federal Act on Collective Investment Schemes (CISA) came into effect, and is based on the limited partnership as defined in the Swiss Code of Obligations (CO). It provides sufficient flexibility. In particular, it completely satisfies any requirements as regards liability and taxation. The SNB StabFund Limited Partnership for Collective Investment (stabilisation fund) was licensed by the SFBC on 25 November 2008 and entered in the commercial register of the Canton of Berne on 27 November 2008.

Terms and conditions of transaction

Establishment of stabilisation fund



The stabilisation fund comprises two partners: StabFund (GP) AG, a general partner bearing unlimited liability, and LiPro (LP) AG, a limited partner bearing limited liability. Both partners have a share capital of CHF 100,000 each, and both are wholly owned by the SNB. The general partner is also responsible for the management of the company. The Board of Directors is composed of three representatives from the SNB and two representatives from UBS.

One question that was paramount for the SNB was how the transaction with UBS was anchored in central bank law. A legal opinion clarified this issue. The National Bank based the implementation of the transaction on arts. 5 and 9 NBA. Pursuant to art. 5 para. 2 (e) NBA, the National Bank shall contribute to the stability of the financial system. Within the context of this provision, it can provide emergency liquidity assistance if a bank is no longer able to refinance its operations in the market. Since this transaction involves a transfer of risk to the SNB-controlled stabilisation fund, it goes beyond the classic liquidity assistance as described in chapter 2.5. This notwithstanding, the liquidity aspect outweighs other considerations: on the one hand, UBS was given the possibility to exchange illiquid assets to the countervalue of USD 60 billion against liquid assets; on the other hand, the measure served to restore market participants' confidence in the bank, so that a swift and sustained improvement in the liquidity situation could be expected. The recapitalisation of UBS, a condition that the SNB stipulated in order for the transaction to be completed, was carried out by the Confederation. The transaction thus falls within the bounds of the SNB's statutory mandate to contribute to the stability of the Swiss financial system.

In addition, the SNB had to verify whether the transaction was in line with art. 9 para. 1 (e) NBA. In accordance with this article, the SNB may enter into credit transactions with banks and other financial market participants on condition that sufficient collateral is provided for the loans in order to fulfil its statutory tasks (art. 5 paras. 1–2 NBA). Within the context of an emergency liquidity supply facility, the National Bank – in its function of lender of last resort – can accept collateral which does not have the same level of liquidity as is required for regular monetary policy operations. This is explained by the nature of emergency liquidity assistance, which is intended for precisely those banks that do not have any or sufficient collateral eligible for SNB repos which would allow them to refinance their operations on the market at any time. If the National Bank were only to accept collateral required for its regular monetary policy operations to secure emergency liquidity assistance, it would not be able to fulfil its uncontested mandate of lender of last resort. With the revision of the NBA, the legislators granted the National Bank broad discretionary power as to which collateral it considers eligible. This discretionary power is ultimately exercised by the Governing Board.

The National Bank's loan to the stabilisation fund is backed by the SNB's security interest in all of the fund's assets. The equity contribution of UBS and the National Bank's warrant for UBS equity mentioned in *Main transaction components* above serve as protection against losses. It is not possible from a current perspective to gauge how well this arrangement will protect the SNB against losses. This will depend in particular on how the asset classes in the portfolio acquired will perform. Taking into account the considerable write-downs that were already made on the assets prior to purchasing them as well as the other elements of the security concept and the SNB's long-term investment horizon, the SNB's risk as to the systemic task at hand is limited to an acceptable level. The legal opinion on the UBS transaction is published on the SNB website (www.snb.ch, *Publications, Annual Report*).

Securing the loan

The decision to go ahead with the transaction with UBS was taken solely by the Governing Board of the SNB. It alone is responsible for the conduct of monetary policy (art. 46 NBA). It decides how to exercise its monetary policy powers and is not permitted to seek or accept instructions either from the Federal Council or from the Federal Assembly (art. 6 NBA). It is obliged to render account of the fulfilment of its monetary policy task to the Federal Assembly, although not to the Federal Council (art. 7 para. 2 NBA).

Decision-making and oversight responsibilities

The Bank Council has no powers or responsibilities in matters relating to monetary policy and thus has no oversight or monitoring functions. It is, however, responsible for overseeing and monitoring the conduct of business by the SNB (art. 42 para. 1 NBA), notably regarding accounting principles and risk management processes. It is within this context that the Bank Council oversees the implementation of the transaction with UBS.

The portfolio to be acquired by the stabilisation fund consists primarily of securities backed by US residential and commercial mortgages. It also includes other financial instruments that are backed by different types of assets from the US, Europe and Asia. The following table shows the composition of the maximum volume of assets to be transferred.

Composition of portfolio

Maximum size of stabilisation fund portfolio

In USD billions, pursuant to valuations of UBS
as at 30 September 2008

	Purchase of assets as originally planned	Transferred by end- 2008	Remaining assets (as at March 2009)
Assets to be transferred by 30 March 2009			
US residential mortgage-backed securities (RMBS)			
US sub-prime	5.9	2.8	2.8
US Alt-A	2.5	1.4	1.0
US prime	1.9	1.0	0.9
US reference-linked notes (RLN)	5.8	4.7	1.1
US commercial mortgage-backed securities (CMBS)			
Securities backed by student loans	8.4	0.5	0.0
Other asset-backed instruments	17.6	4.1	13.4
Assets to be transferred by 30 September 2010			
US auction rate securities (ARS)	5.0	0.0	0.0
Monoline wrapped assets	3.5	0.0	0.0
Difference between transfer price and valuations of UBS		-0.3	
Total	57.2	16.4	22.7

The assets listed in the first column, totalling USD 57.2 billion, represent the maximum volume of assets that were earmarked for transfer by the end of March 2009 and the end of September 2010 at the time the package of measures was announced on 16 October 2008. The assets listed in the second column, totalling USD 16.4 billion, were transferred to the stabilisation fund on 16 December 2008. The third column lists the assets – amounting to USD 22.7 billion – that are yet to be transferred to the stabilisation fund (in accordance with plans as of March 2009).

Portfolio size reduced to under USD 40 billion

In setting a ceiling for the asset transfer at a maximum of USD 60 billion, the package was specifically designed to be flexible. Following extensive analysis, the SNB and UBS agreed in January 2009 not to transfer a portion of the assets as originally planned. Developments since October 2008 have shown that, from a financial stability perspective, certain financial instruments will not need to be transferred to the fund. Owing in particular to amendments made in the meantime to international accounting standards, it is now possible for UBS to classify certain assets as loans and receivables, with the result that they no longer need to be valued at market price. It is thus no longer imperative that they be transferred to the stabilisation fund, which operates in accordance with comparable accounting standards.

A large part of these assets, which were to be transferred by 30 March 2009, comprise securities backed by student loans amounting to USD 7.9 billion. Another category to be excluded are the student loan auction-rate securities (SLARS) valuing USD 5.0 billion, which could have been transferred by 30 September 2010. In addition, assets that have been wrapped by mono-line insurers in the value of USD 3.5 billion will also not be transferred. On the whole, this means a reduction in the size of the overall portfolio to a maximum of USD 39.1 billion. After taking UBS's equity contribution to the stabilisation fund into consideration, the maximum risk assumed by the SNB decreases considerably to around USD 35 billion.

As described in *Main transaction components* above, the stabilisation fund is being financed by UBS's equity contribution of 10% and the SNB's loan of 90% of the assets purchased.

The loan from the SNB will be made in the same currencies as those of the assets being purchased, which are primarily denominated in US dollars, euros and pounds sterling. This measure reduces the currency risk. The term of the loan is eight to twelve years, with the interest being calculated on the basis of the one-month Libor of the relevant currency plus 250 basis points. The loan is backed by a security interest in all of the stabilisation fund's assets.

The purchase price of the illiquid assets will be determined by UBS's book value as at 30 September 2008 or by the value determined by the SNB on said reference date based on a valuation by independent expert opinions. The lower value will apply each time. The independent opinions will be conducted by specialised companies using different valuation methods so as to take account of as many price-related aspects as possible. The procedure will be coordinated by Northern Trust, the stabilisation fund's designated custodian.

Funding details

Determination of asset value

Transfer of first tranche

The first tranche of illiquid assets was transferred to the stabilisation fund on 16 December 2008. It comprised a total of 2,042 securities valuing USD 16.4 billion, which were transferred to the fund's securities account with its custodian, Northern Trust. Broken down by currency, 83% of the assets were denominated in US dollars; the rest were in euros and pounds sterling. The difference between the purchase price and the book value of the assets at UBS on the reference date at the end of September 2008 was approximately USD 300 million.

Owing to the fact that the majority of the assets are denominated in US dollars, the SNB procured the funds required for the transfer from the US Federal Reserve by means of a USD/CHF swap. Those assets denominated in euros and pounds sterling were funded through foreign exchange swaps on the market. The SNB's currency reserves were not used.

Investment and risk control process

In principle, the stabilisation fund intends to pursue a hold-to-maturity strategy with the assets purchased. Operational decisions are taken by a steering committee set up by the SNB's Governing Board. Three of the five committee members are also on the stabilisation fund's Board of Directors. A project team under the supervision of the steering committee reports on a quarterly basis on the asset management to the Governing Board and the Bank Council. The Bank Council's Risk Committee monitors the effectiveness and adequacy of the investment and risk control process, while the Audit Committee monitors compliance with the accounting principles as well as the operational risk connected with the stabilisation fund.

The purchased assets will continue to be managed by the New York branch of UBS. The stabilisation fund is entitled to select a new investment manager at any time.

Accounting and auditing

In accordance with the law, the stabilisation fund compiles its accounts pursuant to the International Financial Reporting Standards (IFRS). In line with the long-term nature of the transaction, the purchased assets will be recorded in the balance sheet at amortised cost rather than at market value, insofar as this is permitted by the IFRS standards. Impairment tests will be conducted periodically, however, to determine the recoverable value of the assets, thereby ensuring that unrecoverable losses in value are taken into consideration.

Impairment tests were carried out on the acquired portfolio at the end of 2008. For this purpose, the assets were valued at year-end at amortised cost. These valuations were then compared to the fair values of 31 December 2008. In the case of major deviations, the recoverable value of the assets was checked in accordance with recognised accounting principles and, where necessary, adjusted.

PricewaterhouseCoopers Ltd (PwC), which has also served as auditor of the SNB since 2004, has been appointed auditor of the stabilisation fund. It audited the interim results for the year ended 31 December 2008 and will audit the fund's first financial statement for the year ending 31 December 2009.

For the year ended 31 December 2008, the stabilisation fund reported a loss of USD 1.69 billion. After taking UBS's equity contribution into account, the resulting deficit came to USD 50.1 million.

Impairment tests conducted for the assets already transferred revealed that valuation adjustments of roughly USD 1 billion were necessary. In addition, significant valuation losses were recorded on the assets not yet transferred. These were stated at current fair value. It should be borne in mind that, as a result of the illiquid markets, fair value has considerably lost its relevance as an important indicator. Overall, the value of the portfolio amounted to USD 14.6 billion at year-end.

Investment performance

6.3 Promoting liquidity redistribution between banks

During the financial crisis, there were substantial withdrawals of deposits from one of the big banks, and corresponding flows of funds towards other banks. It became increasingly clear that the mechanism for liquidity redistribution between banks, which normally operates through unsecured money market operations, was no longer functioning properly. Banks with liquidity inflows were extremely reluctant to place their surplus in the unsecured money market, and some even avoided secured money market investments. As a result, the domestic interbank money market increasingly dried up and the big banks were unable to find anything other than very short-term refinancing. The SNB drew the banks' attention to the risks this unsatisfactory situation posed for the Swiss financial sector and for financial stability. Through SNB intermediation, a solution to defuse the situation was worked out before the end of the year. This solution involves the big banks pledging top-rated Swiss Pfandbrief bonds to the Pfandbriefbank der schweizerischen Hypothekarinstitution (Pfandbrief institution acting for all other Swiss mortgage lenders) in return for liquidity in the form of a Pfandbrief loan. The Pfandbrief institution then refinances itself by issuing Pfandbriefe, which are bought by banks with surplus liquidity. This instrument made it possible to alleviate the growing refinancing difficulties experienced by the big banks.

SNB as intermediary

6.4 Revision of capital adequacy and liquidity regulations for big banks

Initial lessons from financial crisis

In its June 2008 *Financial Stability Report*, the SNB presented the initial lessons drawn from the financial crisis. One of the key conclusions was that the Swiss financial sector needs to become more resilient. In this regard, the SNB advocated substantially higher requirements for the big banks in terms of capital and liquidity. In addition, it felt that banks should be more transparent about their risk positions, and should improve their risk management.

Higher capital adequacy requirements

The SNB supported the SFBC in its efforts to tighten capital adequacy requirements for the big banks. This involved two main measures. First, the risk-weighted capital adequacy requirement was raised. Both big banks must now, in good times, have surplus capital amounting to at least 100% above the minimum stipulated in the Banking Ordinance. The second, and complementary, measure was the introduction of a leverage ratio for the big banks. The new regulations stipulate that capital must never fall below 3% of the consolidated balance sheet total. Domestic lending by the two big banks is excluded from the leverage ratio. In good times, the ratio of capital to the consolidated balance sheet total must be substantially higher. In November, the SFBC issued the relevant ruling. The big banks have until 2013 to implement the new regulations.

Liquidity regulations geared towards crisis situations

Work on the new liquidity regulations for the two big banks continued in 2008. The turmoil on the financial markets has highlighted the urgency of this initiative. The new concept focuses on crisis situations and is based on scenarios drawn up by FINMA and the SNB. The banks estimate the impact of these scenarios on their liquidity and profits. The authorities then check the estimates and, where necessary, implement corrective measures. The reform initiative is being carried out by FINMA and the SNB together with the big banks, and should be implemented in 2009.

6.5 Measures to improve the international financial system's resilience to crises

The financial crisis revealed a need for action on a number of regulatory aspects. The Basel Committee on Banking Supervision looked into potential improvements to Basel II during the year under review, and initiated a series of measures aimed at improving the identification of risks as part of capital adequacy regulation, and at correcting false risk incentives.

An important lesson from the crisis is that the capital requirement to cover risks in banks' trading books was insufficient, leading to an extremely high degree of leverage. The Basel Committee therefore wants to improve the regulation for the trading book, which uses the Value-at-Risk (VaR) approach, by adding a capital requirement for risks not previously covered (credit default, migration, share price and spread risks). According to the Committee, introducing this supplementary capital requirement should reduce incentives for regulatory arbitrage between the banking and trading books, and increase capital coverage in the trading book. For the longer term, the Committee is planning a comprehensive review of the VaR approach to risks in the trading book. In addition, off-balance-sheet activities under Basel II must also have capital backing in future. This applies, in particular, to off-balance-sheet entities (conduits and special investment vehicles), which had, unchecked, built up large positions in the US sub-prime market prior to the financial crisis.

Since the measures described above will probably not suffice, on their own, to increase financial system resilience to stress, the Basel Committee also wants to examine ways to further increase capital cushions in the system. The debate centres around two approaches: raising risk-weighted capital requirements in general; or adding a simple yardstick that is not linked to risk weightings, such as a leverage ratio.

In order that banks can cope with extended periods of stress, the Basel Committee considers that liquidity cushions in the system should also be increased. In 2008, the Committee published a report on *Principles for Sound Liquidity Risk Management*, which significantly raises the bar for a robust, state-of-the-art liquidity management compared with current practice. The Committee will closely monitor the implementation of these requirements in participating countries.

Improvements to Basel II

Additional capital requirement for risks not previously covered

Increasing capital cushions

Improved liquidity management

FSF recommendations

The SNB played an active part in the preparation of a report by the Financial Stability Forum (FSF) on the lessons to be drawn from the crisis. In April 2008, the FSF published a report containing 67 recommendations. The recommendations' aim is threefold. First, the financial systems should be made more immune to misplaced incentives. Second, the degree of leverage should be reduced in the financial system as a whole. And third, risks should be better identified and addressed. Both the capital increase for big banks ordered by the SFBC and the planned revision of liquidity regulations are in line with the FSF's recommendations.

6.6 Survey on bank lending

New quarterly survey on lending

In order to better gauge the effects of the financial crisis on domestic lending, the SNB began to conduct a series of quarterly, comprehensive surveys at twenty domestic banks in March 2008. The surveys are qualitative in nature and act as a complement to the quantitative data on credit volumes provided by existing statistics. While the results of the first two surveys did not indicate any discernible tightening of lending conditions, results for the third quarter revealed first signs of greater restraint in banks' lending policies. The survey for the fourth quarter confirmed this trend.

7 Involvement in international monetary cooperation

7.1 International Monetary Fund

The International Monetary Fund (IMF) works to promote stable monetary conditions worldwide and support free trade and international payment flows. As an open economy with an internationally important financial sector, Switzerland is particularly committed to these aims.

The Chairman of the Governing Board of the Swiss National Bank (SNB) sits on the Board of Governors of the IMF, the Fund's highest decision-making body, while the Head of the Federal Department of Finance (FDF) leads the Swiss delegation that takes part in the IMF meetings. Switzerland is part of a voting constituency whose other members are Azerbaijan, the Kyrgyz Republic, Poland, Serbia, Tajikistan, Turkmenistan and Uzbekistan. As the constituency member with the most votes, Switzerland appoints an executive director, who holds one of the 24 seats on the Executive Board, the IMF's most important operational body, thereby actively participating in the formulation of IMF policy. The Swiss seat on the Executive Board is held alternately by a representative of the SNB and of the FDF. The SNB and the FDF determine Switzerland's policy in the IMF and support the Swiss executive director in his or her activities..

The financial crisis also left its mark on the IMF. In the context of its global monitoring activities, the IMF had to adjust downwards its growth projections for the world economy on a number of occasions, while simultaneously increasing its estimates of banks' and insurance companies' write-offs. As the financial crisis escalated in autumn 2008, the demand for IMF loans, which had been declining steadily in recent years, rose sharply. Towards the end of the year, the IMF negotiated Stand-By Arrangements with Iceland, Latvia, Pakistan, Ukraine and Hungary. The associated loans amount to anything up to ten times the country's quota. Iceland was the first industrialised country for over three decades to receive a loan from the IMF.

In response to the financial crisis, a new facility was set up in autumn 2008: the Short-Term Liquidity Facility for Market Access Countries. This allows access to three-month IMF loans amounting to up to 500% of a country's quota, with the possibility of two extensions. The facility is open to all emerging economies that were hitherto able to finance themselves without problems on the financial markets and which have a sustainable economic policy.

Swiss interests

Responsibilities

Increased lending activity

New liquidity facility for emerging markets

**Modification of the
Exogenous Shocks Facility**

The Exogenous Shocks Facility (ESF) introduced in 2006 can be used in the event of balance-of-payments problems in developing countries, when such problems are the result of exogenous and temporary shocks. In order to support the affected countries even more effectively, the IMF modified certain aspects of the ESF. Loans can now be drawn down more quickly, the maximum amount has been increased, and the associated conditionality has been simplified.

Focus on surveillance

In October 2008, as part of its regular review of its surveillance, the IMF set its priorities for the next three years. The focus is to be on managing the current financial crisis, strengthening the global financial system over the longer term, adjusting to sharp fluctuations in commodity prices and ensuring the orderly reduction of global imbalances. In particular, plans are to strengthen risk analysis, financial sector monitoring and the understanding of the interaction between the financial sector and other economic sectors.

End of OFC Program

Last year, the IMF's Offshore Financial Centers Program (OFC Program) was integrated into the Financial Sector Assessment Program (FSAP). This will allow better identification of risks to financial stability and enable demands for standardised treatment of member states to be better taken into account. The IMF distinction between OFC and non-OFC member states lapses with the integration of the OFC Program into the FSAP. Switzerland is thus no longer classified as an OFC.

**Approval of quota and voice
reforms**

During the year under review, the member states gave final approval for the long-discussed quota and voice (voting rights) reform. In particular, the reform introduces a new formula for calculating the quotas, as well as an 11.5% quota increase, which will benefit emerging markets first and foremost. In addition, basic votes were trebled in order to ensure the voting representation of low-income countries. Finally, it was agreed that the share of basic votes in the overall voting rights would be left unchanged in any future quota increase. The quota and voice reform has already been ratified by Switzerland. It will reduce Switzerland's quota from 1.59% to 1.45%, and its share of voting rights from 1.57% to 1.40%.

Securing the IMF's financing

A number of measures were adopted to secure the long-term financing of the IMF. An important innovation is that the member states now allow the IMF to diversify its investment activities in order to achieve higher returns. Moreover, expenditure cuts of 10% are foreseen in the IMF's budget up to 2010.

In spring 2008, the annual Article IV consultation with Switzerland was held and concluded by the Executive Board. The IMF emphasised the risks to Switzerland arising out of the global financial crisis; risks to which it is particularly exposed owing to the openness and size of its financial sector. The action taken by the authorities, especially the monetary policy measures and the exceptional injection of liquidity into the interbank market by the SNB, were applauded. The IMF also noted that the SNB's monetary policy strategy had stood up well in the crisis.

Article IV Consultation

The IMF's equity consists of the quotas of its member states. In terms of Special Drawing Rights (SDRs), total quotas in the IMF amount to SDR 217 billion (CHF 356 billion), with Switzerland's quota coming to SDR 3,458.5 million (CHF 5,666 million). The Swiss quota is financed by the SNB. The portion of this quota that is used by the Fund corresponds to Switzerland's reserve position in the IMF. For the SNB, this represents a currency reserve that it can draw down at any time. At the end of 2008, Switzerland's reserve position amounted to SDR 441.8 million, compared with SDR 227.3 million at the end of 2007. At the end of 2008, one SDR was equivalent to CHF 1.64. The figure is calculated on the basis of weighted exchange rates for the US dollar, euro, yen and pound sterling.

Switzerland's reserve position

In February 2008, the IMF cancelled Liberia's debts. As the SNB had financed the Swiss quota, it was repaid with the Swiss share of outstanding fees, reimbursements and reserves set aside but no longer needed, totalling SDR 6.3 million.

Liberia: Debt cancellation and reimbursement of the SNB

In addition to the IMF quota, the SNB finances three other credit facilities for IMF member states. For example, it regularly commits up to SDR 400 million to the Two-Way Arrangements. It also pays the Swiss contribution to the credit lines available in crisis situations under the IMF's General and New Arrangements to Borrow (maximum SNB contribution: SDR 1.54 billion). Finally, it finances the Swiss contribution to the loan account of the Poverty Reduction and Growth Facility (PRGF). The Swiss Confederation guarantees the timely repayment of the PRGF loans, including interest payments.

Other financing by the SNB

7.2 Group of Ten

The annual meeting of finance ministers and central bank governors of the Group of Ten (G10), which had been scheduled for October alongside the annual meeting of the Bretton Woods institutions, had to be cancelled at short notice, owing to scheduling conflicts for the G7 finance ministers.

No meeting of the Group of Ten

7.3 Bank for International Settlements

Since spring 2006, the SNB has held the chairmanship of the BIS's Board of Directors. The central bank governors of advanced and emerging industrialised countries meet every two months at the BIS for an exchange of information. In addition, the SNB participates in four standing committees of the BIS: the Basel Committee on Banking Supervision, the Committee on Payment and Settlement Systems, the Committee on the Global Financial System and the Markets Committee.

Basel Committee

The Basel Committee on Banking Supervision serves as a platform for regular cooperation in matters of banking supervision. Its activities are described in more detail in chapter 6.5.

Committee on Payment and Settlement Systems

The Committee on Payment and Settlement Systems (CPSS) monitors and analyses the developments in national and international payment and securities settlement systems. It issued two reports in 2008. The first described the progress achieved in reducing settlement risk in foreign exchange transactions. The second report analysed the various interdependencies between individual payment and settlement systems, and the associated risk management challenges. In addition, the CPSS focused its attention on the functioning of payment and settlement systems during the financial crisis, and the operational arrangements for cross-border liquidity provision in times of crisis.

Committee on the Global Financial System

The Committee on the Global Financial System (CGFS) monitors and assesses developments in international financial markets and draws up recommendations which support central banks in their responsibilities with regard to the stability of the financial system. In 2008, the CGFS published three reports. The first analysed private equity and leveraged finance markets, and discussed the reasons for the boom in these markets prior to early 2007. It also asks what risks have surfaced since mid-2007 and what lessons can be drawn for financial system stability. The second report investigated how central banks adapted their liquidity operations in response to the financial crisis, and how effective those responses were in easing market tensions. The third report looked at the development of ratings for structured financial products during the financial crisis, and explores ways to improve the credibility of ratings.

The Markets Committee serves as a discussion forum for G10 central bank officials responsible for financial market operations. It deals with developments in the foreign exchange markets and other financial markets and the impact of individual events on the overall functioning of these markets. In 2008, the financial crisis was once again the main topic of discussion. In particular, the G10 central bank representatives coordinated the measures to improve liquidity in the short-term US dollar money market. The Markets Committee also discussed a report on commodity markets prepared by a working group drawn from central banks of member states.

Markets Committee

7.4 Financial Stability Forum

Switzerland has been a member of the Financial Stability Forum (FSF) since 2007. The Federal Department of Finance has delegated the task of representing Switzerland in the FSF to the National Bank. The forum brings together the national authorities responsible for financial stability, international financial institutions, international groups representing regulatory and oversight authorities, and the central banks' committees of experts. Membership in the FSF enables Switzerland to strengthen cooperation and coordination in the oversight of the international financial system, and to contribute to reducing systemic risks. It also gives Switzerland the opportunity to actively participate in the international dialogue on the early identification of issues relevant to stability, in particular in the areas of financial market regulation and supervision, and international financial systems.

Membership of FSF

In 2008, the FSF focused its attention on the financial crisis (cf. chapter 6.5) and, in April, published a report on the lessons to be drawn. The SNB played an active part in preparing the report. After the publication of its report, the FSF embarked on a number of follow-up activities. In this connection, the SNB headed a working group to draw up principles for appropriate remuneration systems.

Report on lessons from the financial crisis

7.5 OECD

OECD membership

Switzerland is a member of the OECD. On the organisation's inter-governmental committees, it works to promote the development of economic relations between the thirty member states. Together with the federal government, the SNB represents Switzerland on the Economic Policy Committee (EPC), the Committee on Financial Markets (CFM) and the Statistics Committee (CSTAT). The EPC and its working parties deal with structural policy, as well as with developments in the global economy on a political and scientific level; the CFM analyses ongoing developments as well as structural and regulatory issues in international financial markets; CSTAT drafts standards for the national accounts in association with other supranational organisations.

Dealing with the financial crisis

In 2008, the OECD continued its institutional outreach to major emerging markets. It also closely monitored the financial crisis and its impact on economic development, government finances and social security systems. It drew up a plan of action, in which the financial market architecture and strategies to promote economic growth took centre stage. In particular, the plan contained proposals for a coherent regulatory, competition and tax policy for financial markets, as well as long-term measures to render OECD member economies more flexible and robust.

7.6 Technical assistance

Technical assistance

The National Bank maintains good relations with the central banks of those countries that Switzerland works with in the International Monetary Fund (IMF). With their support, Switzerland is able to head a constituency in the IMF and claim one of the 24 seats on the Executive Board. The National Bank primarily provides the central banks of these countries with technical assistance, with a particular focus on the transfer of knowledge specific to central banks. The SNB provides no financial support.

... to countries in its IMF constituency

In 2008, the bulk of the SNB's technical assistance was provided to the National Bank of the Kyrgyz Republic. At the beginning of the year, the Kyrgyz central bank issued its first coins, a project for which the SNB had been providing expert advice since 2006. In addition, the SNB advised the bank's management in monetary policy matters, and continued to provide support in the areas of IT security, financial market operations, risk management, internal audit and payment systems.

Existing projects with other central banks were also continued. This includes assisting the National Bank of Azerbaijan in matters relating to cash provision and internal auditing, providing support to Serbia's central bank in the investment of currency reserves, and advising the National Bank of Tajikistan in the area of monetary policy. In addition, relations with the State Central Bank of Turkmenistan were strengthened. For instance, the SNB acted as advisor towards the planned denomination of the Turkmen currency and the associated introduction of new banknotes.

For the third time, the SNB organised a seminar on cash provision, which was attended by currency specialists from the central banks of various countries in transition. The topic of this year's seminar was the introduction of new banknotes.

For the fifth time, the SNB – together with the Polish central bank – organised a seminar for central banks in the Swiss IMF constituency as well as other countries from the former Soviet Union and South-Eastern Europe. The seminar, on monetary policy in a changing monetary environment, was held in Cracow.

Outside its IMF constituency, the SNB provided support on payment systems to the central banks of Brazil, Peru and the Russian Federation. It also advised the South African Reserve Bank on asset management.

... and to other countries

8 Banking services for the Confederation

Mandate

Based on art. 5 para. 4 and art. 11 of the National Bank Act, the Swiss National Bank (SNB) provides banking services to the Swiss Confederation.

Remuneration for banking services

These services are provided in return for adequate compensation. However, they are provided free of charge if they facilitate the implementation of monetary policy. Services subject to remuneration comprise: payment transactions, liquidity management, the custody of securities and the issue of money market debt register claims (MMDRCs) and Confederation bonds. The details of the services to be provided and the remuneration are laid down in an agreement concluded between the Swiss Confederation and the National Bank.

Issuing activities

In 2008, the SNB issued both MMDRCs and Confederation bonds on behalf of and for the account of the Confederation. MMDRCs amounting to CHF 56.6 billion were subscribed, of which CHF 36.2 billion was allocated. The corresponding figures for Confederation bonds were CHF 3.0 billion and CHF 1.7 billion respectively. The auction procedure was used for these issues. In autumn 2008, for the very first time, an auction yield of 0% was attained in an auction of MMDRCs.

Payments

In the area of payment transactions, the SNB carried out roughly 104,000 payments in Swiss francs on behalf of the Swiss Confederation and approximately 14,000 payments in foreign currencies.